WARNING > USE OF HEAT DURING REPAIR

WARNING:

FCA US LLC engineering's position on the use of heat during collision repair is as follows:

- ***Any body panel or frame component damaged which is to be repaired and reused, must be repaired using the "cold straightening" method. No heat may be used during the straightening process.***
- ***During rough straightening prior to panel replacement, damaged panels or frame components may be heated to assist in body/frame realignment. The application of heat must be constrained to the parts which will be replaced and not allowed to affect any other components.***

This "no heat" recommendation is due to the extensive use of high strength and advanced high strength steels in FCA US LLC products. High-strength materials can be substantially and negatively affected from heat input which will not be obviously known to the repairer or consumer.

Ignoring these recommendations may lead to serious compromises in the ability to protect occupants in a future collision event, reduce the engineered qualities and attributes, or decrease the durability and reliability of the vehicle.

This statement supersedes any previously released information by the FCA US LLC.

Failure to follow these instructions may result in serious or fatal injury.

WARNING > WARNINGS

WARNING:

Use an Occupational Safety and Health Administration (OSHA) approved breathing filter, when spraying paint or solvents in a confined area. Failure to follow these instructions may result in possible serious or fatal injury.

- *avoid prolonged skin contact with petroleum or alcohol based cleaning solvents.*
- *do not stand under a hoisted vehicle that is not properly supported on safety stands. Failure to follow these instructions may result in possible serious or fatal injury.*

CAUTION:

When holes are drilled or punched in an inner body panel, verify the depth of space to the

outer body panel, electrical wiring or other components. Damage to the vehicle can result.

- *do not weld exterior panels unless combustible material on the interior of vehicle is removed from the repair area. Fire or hazardous conditions, can result.*
- *always have a fire extinguisher ready for use when welding.*
- *disconnect the negative (-) cable clamp from the battery when servicing electrical components that are live when the ignition is off. Damage to electrical system can result.*
- *do not use abrasive chemicals or compounds on painted surfaces. Damage to finish can result.*
- *do not use harsh alkaline based cleaning solvents on painted or upholstered surfaces. Damage to finish or color can result.*
- *do not hammer or pound on plastic trim panel when servicing interior trim. Plastic panels can break.*

WARNING > WARNINGS > RESTRAINT WARNINGS

WARNING:

To avoid serious or fatal injury on vehicles equipped with the Supplemental Restraint System (SRS), never attempt to repair the electrically conductive circuits or wiring components related to the SRS for which there is no MOPAR wiring repair kit. It is important to use ONLY the recommended splicing kit and procedure. For applicable and available MOPAR wiring repair kits, please visit the MOPAR Connector Web Site at the following address on the internet: (http://dto.vftis.com/mopar/disclaimer.asp). Inappropriate repairs can compromise the conductivity and current carrying capacity of those critical electrical circuits, which may cause SRS components not to deploy when required, or to deploy when not required. Only minor cuts or abrasions of wire and terminal insulation where the conductive material has not been damaged, or connector insulators where the integrity of the latching and locking mechanisms have not been compromised may be repaired using appropriate methods.

WARNING:

To avoid serious or fatal injury during and following any seat belt or child restraint anchor service, carefully inspect all seat belts, buckles, mounting hardware, retractors, tether straps, and anchors for proper installation, operation, or damage. Replace any belt that is cut, frayed, or torn. Straighten any belt that is twisted. Tighten any loose fasteners. Replace any belt that has a damaged or ineffective buckle or retractor. Replace any belt that has a bent or damaged latch plate or anchor plate. Replace any child restraint anchor or the unit to which the anchor is integral that has been bent or damaged. Never attempt to repair a seat belt or child restraint component. Always replace damaged or ineffective seat belt and child

restraint components with the correct, new and unused replacement parts listed in the Mopar® Parts Catalog. Failure to follow these instructions may result in possible serious or fatal injury.

WARNING:

To avoid serious or fatal injury on vehicles equipped with airbags, disable the Supplemental Restraint System (SRS) before attempting any steering wheel, steering column, airbag, Occupant Classification System (OCS), seat belt tensioner, impact sensor or instrument panel component diagnosis or service. Refer to WARNING . Disconnect and isolate the battery negative (ground) cable, then wait two minutes for the system capacitor to discharge before performing further diagnosis or service. This is the only sure way to disable the SRS. Failure to follow these instructions may result in accidental airbag deployment.

WARNING:

To avoid potential physical injury or damage to sensitive electronic circuits and systems, always disconnect and isolate the battery negative (ground) cable and the positive cable, then ground the positive cable to discharge the Occupant Restraint Controller (ORC) capacitor before performing any welding operations on the vehicle. Failure to take the proper precautions could result in accidental airbag deployment, possible damage to the Supplemental Restraint System (SRS) circuits and components, and possible damage to other electronic circuits and components. Whenever a welding process is being performed within 12 inches (30 centimeters) of an electronic module or wiring harness, then that module or harness should be relocated out of the way, or disconnected. Always protect against component or vehicle damage from weld spatter by using weld blankets and screens.

WARNING:

To avoid serious or fatal injury, do not attempt to dismantle an airbag unit or tamper with its inflator. Do not puncture, incinerate or bring into contact with electricity. Do not store at temperatures exceeding 93° C (200° F). An airbag inflator unit may contain sodium azide and potassium nitrate. These materials are poisonous and extremely flammable. Contact with acid, water, or heavy metals may produce harmful and irritating gases (sodium hydroxide is formed in the presence of moisture) or combustible compounds. An airbag inflator unit may also contain a gas canister pressurized to over 17.24 kPa (2500 psi). Failure to follow these instructions may result in possible serious or fatal injury.

WARNING:

To avoid serious or fatal injury when handling a seat belt tensioner retractor. Exercise proper care to keep fingers out from under the retractor cover and away from the seat belt webbing where it exits from the retractor cover. Failure to follow these instructions may result in

possible serious or fatal injury.

WARNING:

To avoid serious or fatal injury, replace all Supplemental Restraint System (SRS) components only with parts specified in the Mopar® Parts Catalog. Substitute parts may appear interchangeable, but internal differences may result in inferior occupant protection.

WARNING:

To avoid serious or fatal injury, the fasteners, screws, and bolts originally used for the Supplemental Restraint System (SRS) components must never be replaced with any substitutes. These fasteners have special coatings and are specifically designed for the SRS. Anytime a new fastener is needed, replace it with the correct fasteners provided in the service package or specified in the Mopar® Parts Catalog.

WARNING:

To avoid serious or fatal injury when a steering column has an airbag unit attached, never place the column on the floor or any other surface with the steering wheel or airbag unit face down. Failure to follow these instructions may result in possible serious or fatal injury.

DIAGNOSIS AND TESTING > FRONT DOOR LOCK TESTING > FAILED RECOGNITION OF THE PASSIVE ENTRY KEY

STEP	WHAT TO DO	OK (no problem found)	PROBLEM FOUND	CORRECTION
1	**EMERGENCY DOOR UNLOCKING KEY CONDITION CHECK** Check the condition of the mechanical code encrypted track	Go to step 2	The track is damaged	Replace the Passive Entry key
2	**SECOND EMERGENCY DOOR UNLOCKING KEY CONDITION CHECK**	End of diagnosis	Also the second key is not mechanically recognized	Replace the second passive entry key

	Check for the mechanical recognition of the second key			

DIAGNOSIS AND TESTING > FRONT DOOR LOCK TESTING > FAILED RETENTION OF THE EMERGENCY UNLOCKING MECHANICAL INSERT IN THE PASSIVE ENTRY KEY

STEP	WHAT TO DO	OK (no problem found)	PROBLEM FOUND	CORRECTION
1	**PASSIVE ENTRY KEY CONDITION CHECK** Check the condition of the key tooth of the emergency door unlocking key built into the Passive Entry key	End of diagnosis	The key tooth is damaged	Replace the Passive Entry key

DIAGNOSIS AND TESTING > FRONT DOOR LOCK TESTING > KEY DOES NOT AUTOMATICALLY RETURN TO POSITION

STEP	WHAT TO DO	OK (no problem found)	PROBLEM FOUND	CORRECTION
1	**DOOR MECHANISM OPERATION CHECK** The device is not equipped with a realignment spring. Remove the device from the vehicle and check whether the idling activation torque is higher the 0.3 N.m	End of diagnosis	The device is working; continue searching for the cause of the problem by checking the other components of the vehicle	Replace the door lock cylinder.

DIAGNOSIS AND TESTING > FRONT DOOR LOCK TESTING > KEY WILL NOT OR IS HARD TO TURN

STEP	WHAT TO DO	OK (no problem found)	PROBLEM FOUND	CORRECTION
1	**DOOR MECHANISM**	End of diagnosis	Torque higher than	Go to step 2

	OPERATION CHECK Remove the device from the vehicle and check whether the idling activation torque is higher than 0.3 N.m		0.3 N.m	
2	**DOOR LOCK CYLINDER CONDITION CHECK** Apply rust remover and then lubricate through the key hole Try again to activate the mechanism; do not exceed the torque of 2 N.m in order to not damage the key	End of diagnosis	Torque higher than 0.3 N.m	Replace the front door lock cylinder.

DIAGNOSIS AND TESTING > FRONT DOOR LOCK TESTING > KEY TURNS / POWER AND MECHANICAL UNLOCKING AND LOCKING DOES NOT WORK

STEP	WHAT TO DO	OK (no problem found)	PROBLEM FOUND	CORRECTION
1	**DOOR MECHANISM OPERATION CHECK** Remove the handle from the vehicle and check the condition of the coupling shank in the handle component	End of diagnosis	The coupling shank is damaged	Replace the front door exterior handle. Refer to HANDLE, EXTERIOR, REMOVAL AND INSTALLATION .

DIAGNOSIS AND TESTING > FRONT DOOR LOCK TESTING > KEY TURNS / POWER UNLOCKING AND LOCKING DOES NOT WORK BUT MECHANICAL UNLOCKING AND LOCKING WORKS PROPERLY

STEP	WHAT TO DO	OK (no problem found)	PROBLEM FOUND	CORRECTION
1	**POWER UNLOCKING OPERATION CHECK** Check that the door power unlocking/locking mechanism is working	End of diagnosis	Only the mechanical operation is working	Go to step 2

	correctly			
2	**CHECK USING DIAGNOSTIC TOOL** Connect the diagnostic equipment to the body control module and check that the door unlocking/locking system is operating correctly	End of diagnosis	Door unlocking/locking system not working correctly	Replace the body control module. Refer to MODULE, BODY CONTROL, REMOVAL AND INSTALLATION .

DIAGNOSIS AND TESTING > FRONT DOOR LOCK TESTING > LOCK CYLINDER LOOSE

STEP	WHAT TO DO	OK (no problem found)	PROBLEM FOUND	CORRECTION
1	**DOOR LOCK CYLINDER CHECK** Check for the presence of signs of a break-in on the side of the door lock cylinder	Continue to Step 2	Presence of signs of a break-in on the side of the door lock cylinder	Replace the door lock cylinder. Refer to CYLINDER, DOOR LOCK, REMOVAL AND INSTALLATION .
2	**UNDER HEAD GASKET CONDITION CHECK** Check for the presence of the under-head gasket	Continue to Step 3	Under-head gasket missing	Install a new gasket, if missing
3	**MOUNTING FORK CHECK** Check for the fixing fork	Proceed to Step 4	Mounting fork missing	Install a new fork and remove the old fork from the bottom of the door
4	**MOUNTING FORK CHECK INSTALLATION CHECK** Check that the mounting fork is positioned correctly	End of diagnosis	Fork not installed/secured correctly	Replace and install the fork

DIAGNOSIS AND TESTING > GLOVE BOX LOCK TESTING > KEY CANNOT BE INSERTED

STEP	WHAT TO DO	OK (no problem found)	PROBLEM FOUND	CORRECTION

1	**CHECK FUNCTIONALITY OF THE LOCK CYLINDER** Check for signs of tampering on the glove box lock cylinder.	Continue to Step 2	If any signs of forced entry on the lock cylinder	Replace the lock cylinder
2	**VERIFICATION OF LOCK CYLINDER OPENING** Check that the lock cylinder opening is free of foreign objects	Continue to Step 3	Foreign objects found	Replace the lock cylinder
3	**CHECK FUNCTIONALITY OF THE LOCK CYLINDER** Through the opening of the lock cylinder, spray a small amount of lubricant (avoid contact with the aesthetic parts). Try to re-insert the key.	End of diagnosis	The key continues to fail to be inserted into the lock cylinder	Proceed to Step 4
4	**CHECK FUNCTIONALITY OF THE LOCK CYLINDER** Pull the lock cylinder from the door; verify the integrity and functionality of the lock cylinder itself. Try to re-insert the key in the cylinder only.	End of diagnosis	The key continues to fail to be inserted into the lock cylinder even once removed from the board	Replace the lock cylinder

DIAGNOSIS AND TESTING > GLOVE BOX LOCK TESTING > KEY CANNOT BE TURNED IN LOW TEMPERATURES

STEP	WHAT TO DO	OK (no problem found)	PROBLEM FOUND	CORRECTION
1	**STATUS CHECK GLOVE BOX LOCK CYLINDER ASSEMBLY** Through the opening of the lock cylinder, spray a small amount of lubricant (avoid contact with the aesthetic parts).	End of diagnosis	The key continues to fail to the lock cylinder	Replace the lock cylinder

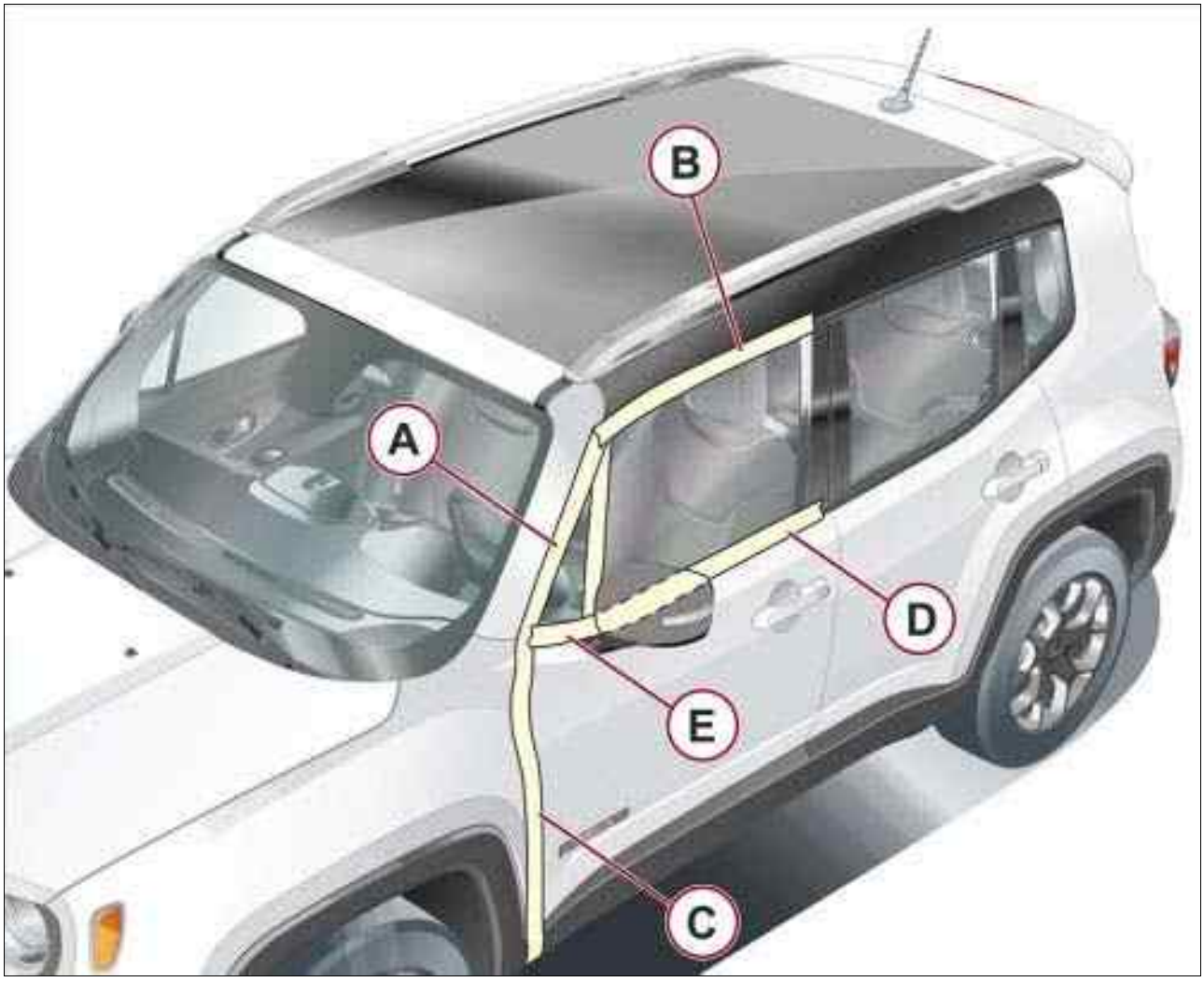
	Try to operate the lock mechanism; it is recommended not to exceed a torque of 2 N.m to avoid damaging the key.			

DIAGNOSIS AND TESTING > GLOVE BOX LOCK TESTING > KEY IS HARD TO TURN

STEP	WHAT TO DO	OK (no problem found)	PROBLEM FOUND	CORRECTION
1	**CHECK FUNCTIONALITY OF THE LOCK CYLINDER WITH SECOND KEY** Verify the correct operation of the lock cylinder, using the second key in the cylinder	Continue to Step 2	The movement is still restricted	Replace the lock cylinder
2	**CHECK FUNCTIONALITY OF THE LOCK CYLINDER** Check for signs of tampering on the glove box lock cylinder.	Continue to Step 3	If any signs of forced entry on the lock cylinder	Replace the lock cylinder
3	**CHECK FUNCTIONALITY OF THE LOCK CYLINDER** Through the opening of the lock cylinder, spray a small amount of lubricant (avoid contact with the aesthetic parts). Try to operate the lock mechanism; it is recommended not to exceed a torque of 2 N.m to avoid damaging the key.	Proceed to Step 4	Turning torque more than 0.3 N.m	Replace the lock cylinder
4	**CHECK ALIGNMENT slats OF THE LOCK CYLINDER** Pull the lock and, after inserting the key, verify the complete alignment of the slats	Late diagnosis	Slats are not aligned properly	Replace the lock cylinder

DIAGNOSIS AND TESTING > ROAD TESTING > ROAD TESTING WIND NOISE-FRONT FLOOR

Fig 1: Tape On Front Door Seams

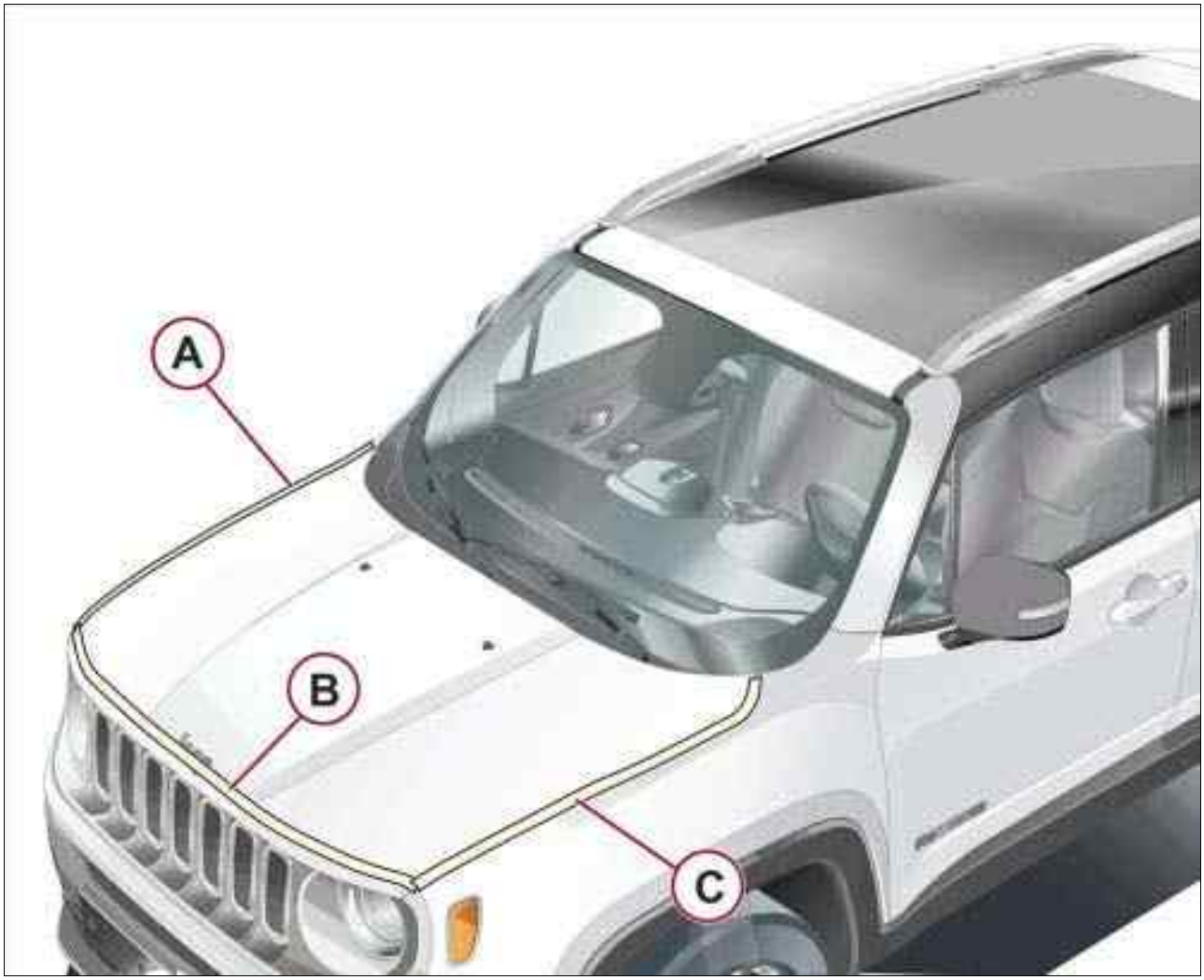


Courtesy of CHRYSLER GROUP, LLC

1. Apply tape to the various areas shown in the illustration.
2. Apply 50 mm (2 in.) masking tape in 150 mm (6 in.) lengths along weatherstrips, weld seams or moldings. After each length is applied, drive the vehicle. If noise goes away after a piece of tape is applied, remove tape, locate, and repair defect.

DIAGNOSIS AND TESTING > ROAD TESTING > ROAD TESTING WIND NOISE-HOOD

Fig 1: Tape On Hood Seams

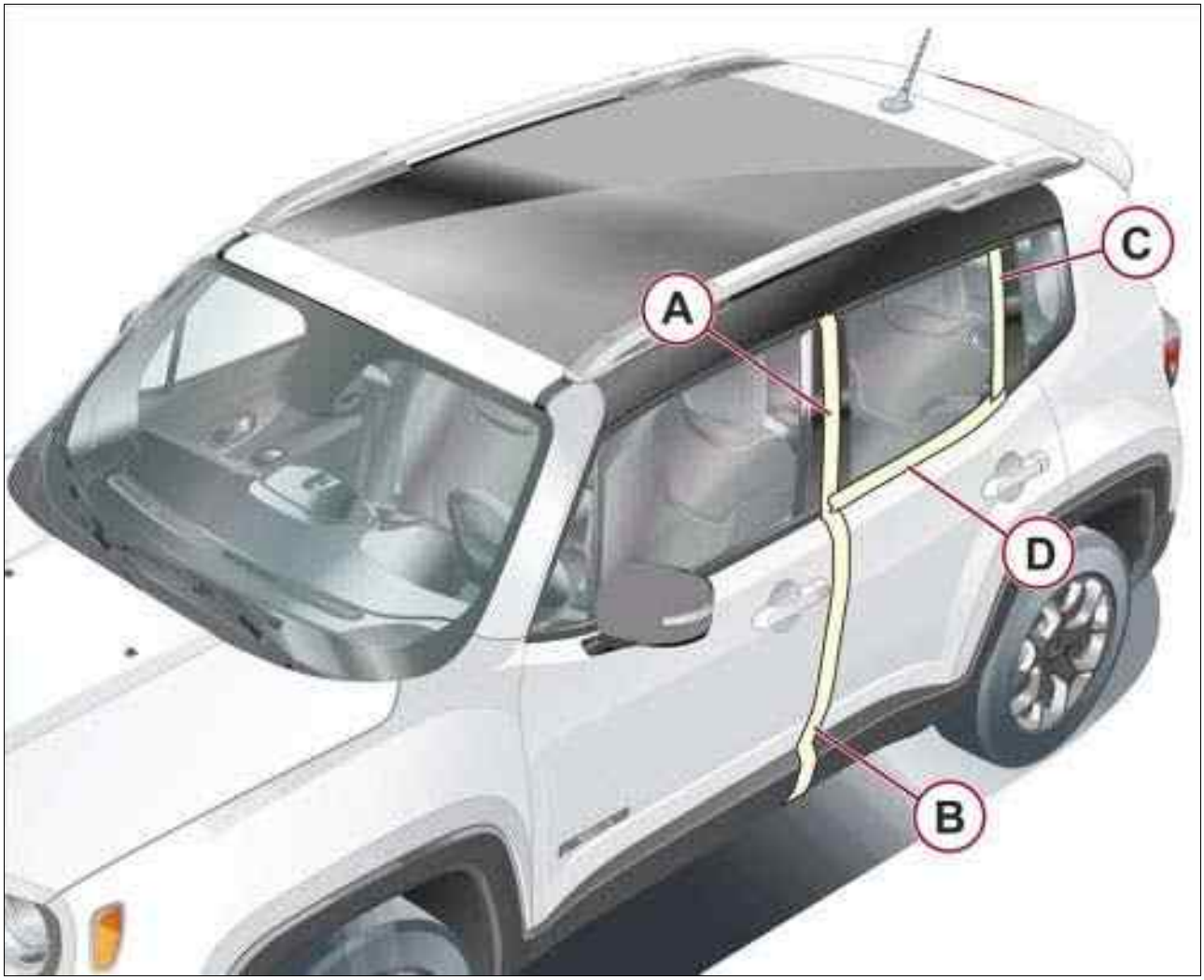


Courtesy of CHRYSLER GROUP, LLC

1. Apply tape to the various areas shown in the illustration.
2. Apply 50 mm (2 in.) masking tape in 150 mm (6 in.) lengths along weatherstrips, weld seams or moldings. After each length is applied, drive the vehicle. If noise goes away after a piece of tape is applied, remove tape, locate, and repair defect.

DIAGNOSIS AND TESTING > ROAD TESTING > ROAD TESTING WIND NOISE-REAR DOOR

Fig 1: Tape On Rear Door Seams

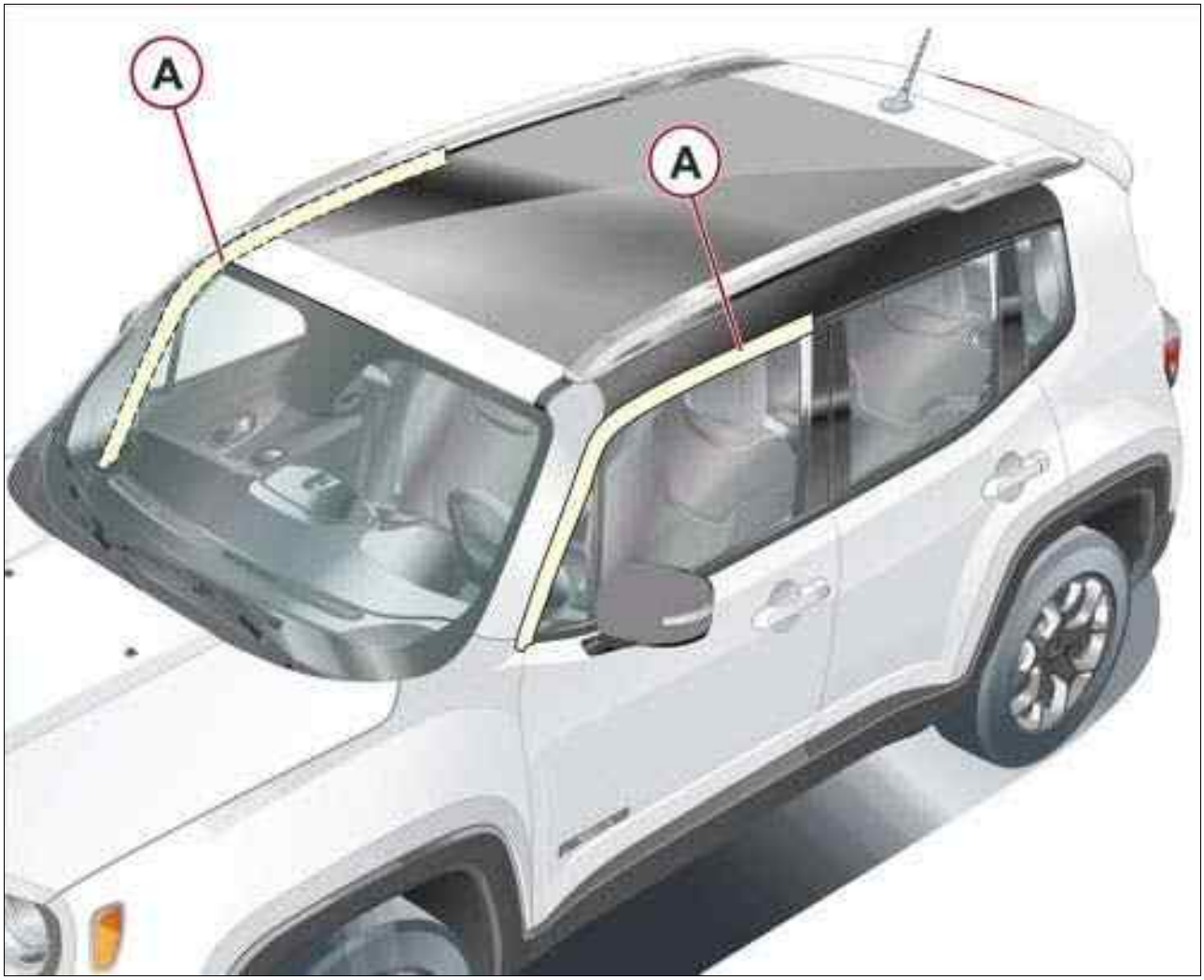


Courtesy of CHRYSLER GROUP, LLC

1. Apply tape to the various areas shown in the illustration.
2. Apply 50 mm (2 in.) masking tape in 150 mm (6 in.) lengths along weatherstrips, weld seams or moldings. After each length is applied, drive the vehicle. If noise goes away after a piece of tape is applied, remove tape, locate, and repair defect.

DIAGNOSIS AND TESTING > ROAD TESTING > ROAD TESTING WIND NOISE-WINDSHIELD

Fig 1: Tape On Front Door



Courtesy of CHRYSLER GROUP, LLC

1. Apply tape to the various areas shown in the illustration.
2. Apply 50 mm (2 in.) masking tape in 150 mm (6 in.) lengths along weatherstrips, weld seams or moldings. After each length is applied, drive the vehicle. If noise goes away after a piece of tape is applied, remove tape, locate, and repair defect.

DIAGNOSIS AND TESTING > ROAD TESTING > ROAD TESTING WIND-WINDSHIELD-REAR WINDOW

1. Apply a soapy water solution to the perimeter of the glass.
2. From inside the vehicle, blow with compressed air along the whole perimeter and visually check for air bubbles.
3. If a leak is located on the vertical uprights, it is possible to repair by removing the pillar trim and injecting sealant from the inside.
4. If a leak is located at the top, it is possible to repair by injecting sealant from the inside.

5. If a leak is located at the bottom, it is possible to repair by removing the necessary trim panels and injecting sealant from the inside.
6. If a leak is widespread around the perimeter, it is recommended to remove the glass and install with complete new sealant.

DIAGNOSIS AND TESTING > WATER LEAKS

Water leaks can be caused by poor sealing, improper body component alignment, body seam porosity, missing plugs, or blocked drain holes. Centrifugal and gravitational force can cause water to drip from a location away from the actual leak point, making leak detection difficult. All body sealing points should be water tight in normal wet-driving conditions. Water flowing downward from the front of the vehicle should not enter the passenger or luggage compartment. Moving sealing surfaces will not always seal water tight under all conditions. At times, side glass or door seals will allow water to enter the passenger compartment during high pressure washing or hard driving rain (severe) conditions. Overcompensating on door or glass adjustments to stop a water leak that occurs under severe conditions can cause premature seal wear and excessive closing or latching effort. After completing a repair, water test vehicle to verify leak has stopped before returning vehicle to use.

DIAGNOSIS AND TESTING > WATER LEAKS > WATER LEAK TESTS

WARNING:

Do not use electric shop lights or tools in water test area. Personal injury can result.

When the conditions causing a water leak have been determined, simulate the conditions as closely as possible.

- If a leak occurs with the vehicle parked in a steady light rain, flood the leak area with an open-ended garden hose.
- If a leak occurs while driving at highway speeds in a steady rain, test the leak area with a reasonable velocity stream or fan spray of water. Direct the spray in a direction comparable to actual conditions.
- If a leak occurs when the vehicle is parked on an incline, hoist the end or side of the vehicle to simulate this condition. This method can be used when the leak occurs when the vehicle accelerates, stops or turns. If the leak occurs on acceleration, hoist the front of the vehicle. If the leak occurs when braking, hoist the back of the vehicle. If the leak occurs on left turns, hoist the left side of the vehicle. If the leak occurs on right turns, hoist the right side of the vehicle. For hoisting recommendations, refer to HOISTING, STANDARD PROCEDURE .

DIAGNOSIS AND TESTING > WATER LEAKS > WATER LEAK DETECTION

To detect a water leak point-of-entry, do a water test and watch for water tracks or droplets forming on the inside of the vehicle. If necessary, remove interior trim covers or panels to gain visual access to the

leak area. If the hose cannot be positioned without being held, have someone help do the water test.

Some water leaks must be tested for a considerable length of time to become apparent. When a leak appears, find the highest point of the water track or drop. The highest point usually will show the point of entry. After leak point has been found, repair the leak and water test to verify that the leak has stopped.

Locating the entry point of water that is leaking into a cavity between panels can be difficult. The trapped water may splash or run from the cavity, often at a distance from the entry point. Most water leaks of this type become apparent after accelerating, stopping, turning, or when on an incline.

DIAGNOSIS AND TESTING > WATER LEAKS > WATER LEAK DETECTION > MIRROR INSPECTION METHOD

When a leak point area is visually obstructed, use a suitable mirror to gain visual access. A mirror can also be used to deflect light to a limited-access area to assist in locating a leak point.

DIAGNOSIS AND TESTING > WATER LEAKS > WATER LEAK DETECTION > BRIGHT LIGHT LEAK TEST METHOD

Some water leaks in the luggage compartment can be detected without water testing. Position the vehicle in a brightly lit area. From inside the darkened luggage compartment inspect around seals and body seams. If necessary, have a helper direct a drop light over the suspected leak areas around the luggage compartment. If light is visible through a normally sealed location, water could enter through the opening.

DIAGNOSIS AND TESTING > WATER LEAKS > WATER LEAK DETECTION > PRESSURIZED LEAK TEST METHOD

When a water leak into the passenger compartment cannot be detected by water testing, pressurize the passenger compartment and soap test exterior of the vehicle. To pressurize the passenger compartment, close all doors and windows, start engine, and set heater control to high blower in HEAT position. If engine can not be started, connect a charger to the battery to make sure adequate voltage is supplied to the blower. With interior pressurized, apply dish detergent solution to suspected leak area on the exterior of the vehicle. Apply detergent solution with spray device or soft bristle brush. If soap bubbles occur at a body seam, joint, seal or gasket, the leak entry point could be at that location.

DIAGNOSIS AND TESTING > WATER LEAKS > WATER LEAK-FRONT COMPARTMENT

1	CHECK FOR FRONT WINDSHIELD LEAK	Result OK	Result Not OK	Action
	Check the front windshield seal.	Continue to Step 2	Lack of sealant	Repair the seal

2	CHECK WINDSHIELD	Result OK	Result Not OK	Action
	Visually inspect for: • Cracks in windshield • Corrosion of surrounding body panels	Continue to Step 3	Crack in windshield or body corrosion	Replace the windshield or restore body panel
3	CHECK COWL DRAINAGE	Result OK	Result Not OK	Action
	Check for proper drainage. check for dirt, leaves, etc.	Continue to Step 4	Drain passage obstructed	Clear the obstruction and verify proper drainage
4	CHECK DASH PANEL	Result OK	Result Not OK	Action
	Visually inspect for: • Check for missing or loose plugs • Check for damaged or loose grommets • Check body sealant • Check seals of fastened components	Diagnostic complete	Missing plug, damaged grommet, damaged component seal, missing body sealant	Repair the damage found

DIAGNOSIS AND TESTING > WATER LEAKS > WATER LEAK-FRONT DOOR

1	CHECK DOOR SEAL	Result OK	Result Not OK	Action
	Check the door seal for: • Correct fit of the door seal • Deterioration or damage	Continue to Step 2	Door seal not fitted properly or damaged	Repair or replace the door seal
2	CHECK DOOR ALIGNMENT	Result OK	Result Not OK	Action
	Check the door for: • Proper alignment	Continue to Step 3	Alignment out of specification Door seal damaged	Align the door Repair or replace the door seal

	• Correct fit of the door seal			
3	CHECK GLASS SEALING	Result OK	Result Not OK	Action
	Check the glass sealing for: • Check that glass closes properly • Check positioning of glass channel • Check glass seals	Continue to Step 4	Glass not closing properly Glass channel out of position or damaged Glass seal damaged	Adjust glass Adjust or replace the glass channel Repair or replace the glass seal
4	CHECK DOOR DRAINAGE	Result OK	Result Not OK	Action
	Check the drains at the bottom of the doors. Check for dirt, leaves, etc.	Diagnostic complete	Drains obstructed	Clear the obstruction and verify proper drainage

DIAGNOSIS AND TESTING > WATER LEAKS > WATER LEAK-REAR COMPARTMENT

1	CHECK FOR REAR WINDOW LEAK	Result OK	Result Not OK	Action
	Check the rear window seal.	Continue to Step 2	Lack of sealant	Repair the seal
2	CHECK REAR WINDOW	Result OK	Result Not OK	Action
	Visually inspect for: • Cracks in window • Corrosion of surrounding body panels	Diagnostic complete	Crack in window or body corrosion	Replace the window or restore body panel

DIAGNOSIS AND TESTING > WATER LEAKS > WATER LEAK-REAR DOOR

1	CHECK DOOR SEAL	Result OK	Result Not OK	Action
	Check the door seal for: • Correct fit of the door seal	Continue to Step 2	Door seal not fitted properly or damaged	Repair or replace the door seal

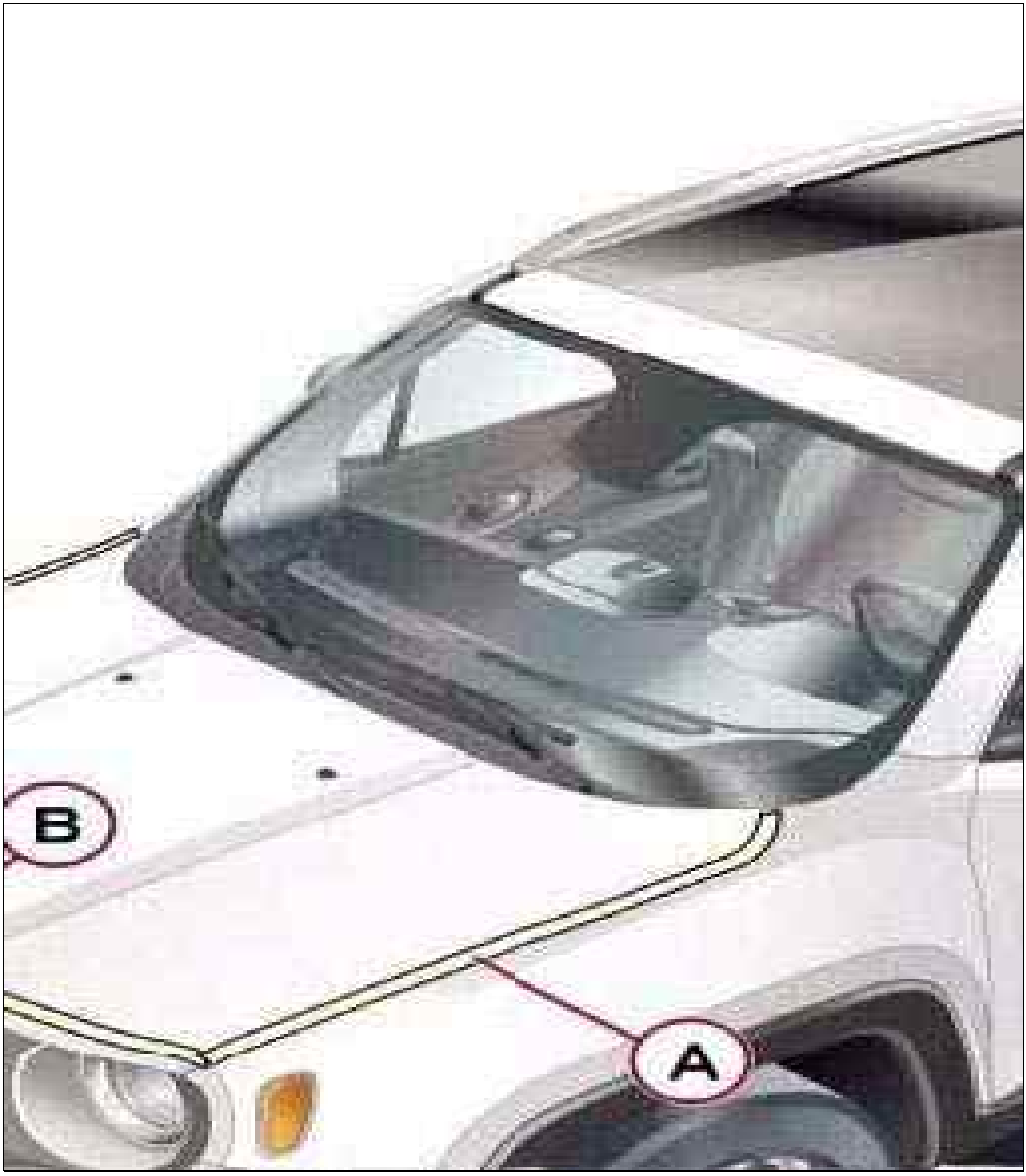
	• Deterioration or damage			
2	CHECK DOOR ALIGNMENT	Result OK	Result Not OK	Action
	Check the door for: • Proper alignment • Correct fit of the door seal	Continue to Step 3	Alignment out of specification Door seal damaged	Align the door Repair or replace the door seal
3	CHECK GLASS SEALING	Result OK	Result Not OK	Action
	Check the glass sealing for: • Check that glass closes properly • Check positioning of glass channel • Check glass seals	Continue to Step 4	Glass not closing properly Glass channel out of position or damaged Glass seal damaged	Adjust glass Adjust or replace the glass channel Repair or replace the glass seal
4	CHECK DOOR DRAINAGE	Result OK	Result Not OK	Action
	Check the drains at the bottom of the doors. Check for dirt, leaves, etc.	Diagnostic complete	Drains obstructed	Clear the obstruction and verify proper drainage

DIAGNOSIS AND TESTING > WIND NOISE

Wind noise is the result of most air leaks. Air leaks can be caused by poor sealing, improper body component alignment, body seam porosity, or missing plugs in the engine compartment or door hinge pillar areas. All body sealing points should be airtight in normal driving conditions. Moving sealing surfaces will not always seal airtight under all conditions. At times, side glass or door seals will allow wind noise to be noticed in the passenger compartment during high cross winds. Over compensating door or glass adjustments to stop wind noise that occurs under severe conditions can cause premature seal wear and excessive closing or latching effort. After a repair procedure has been performed, test vehicle to verify noise has stopped before returning vehicle to use.

DIAGNOSIS AND TESTING > WIND NOISE > WIND NOISE-ENGINE COMPARTMENT

Fig 1: Tape On Hood Seams



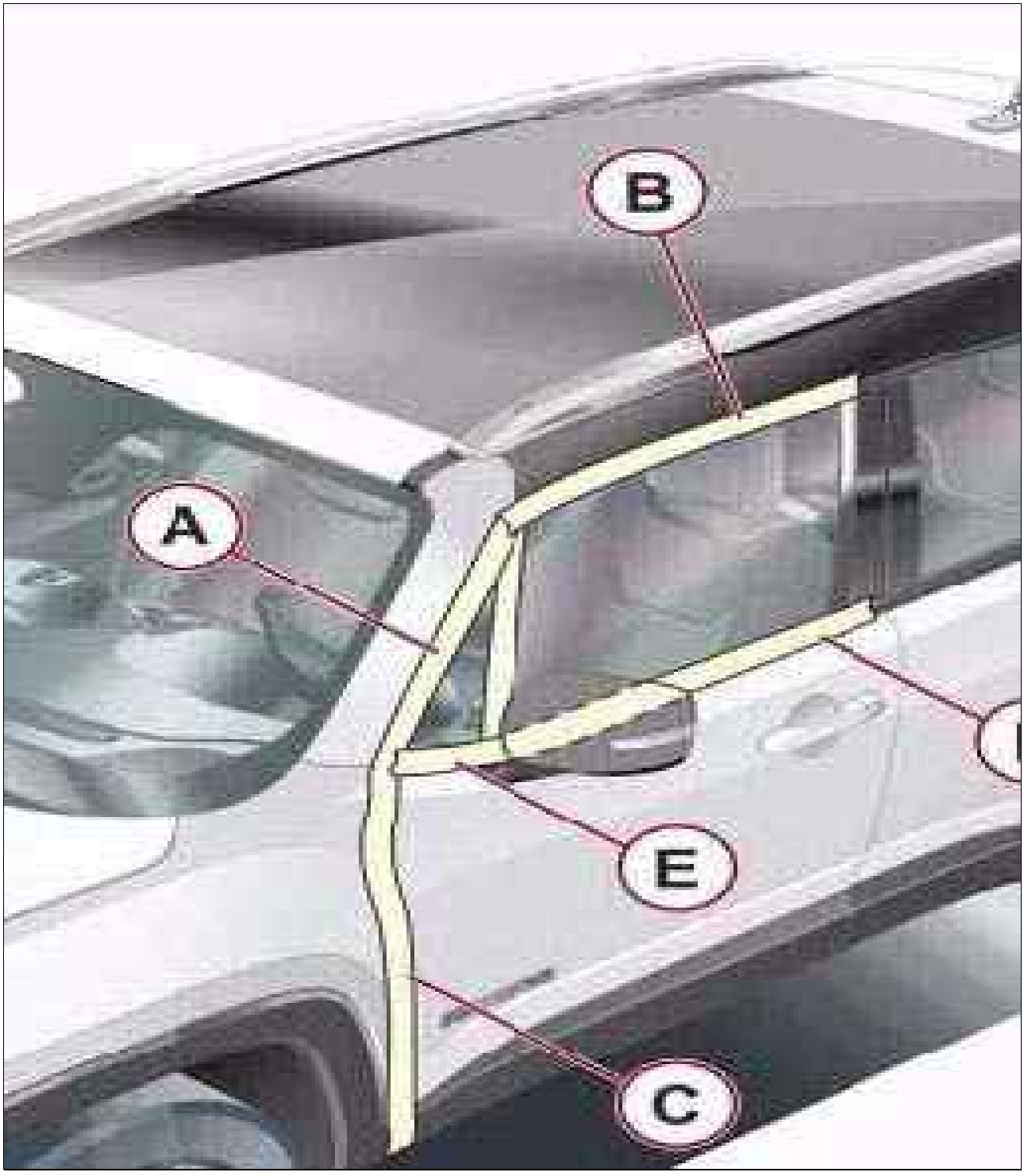
Courtesy of CHRYSLER GROUP, LLC

1. Carry out a road test, letting the vehicle gradually reach the speeds where the noise starts: if the wind noise persists, check that the plugs are present and that the bulkhead coupling rubber seals in the dash panel are correctly fitted.
2. Remove the gummed paper from the area (A) and repeat the road test: if the wind noise persists, check the buffers where the bonnet and the wings couple at the rear.

3. Remove the gummed paper from the area (B) and repeat the road test: if the wind noise persists, check the condition of the front weatherstrip and make sure it is correctly fitted (it should adhere perfectly to the crossmember when the bonnet is closed).

DIAGNOSIS AND TESTING > WIND NOISE > WIND NOISE-FRONT DOOR

Fig 1: Tape On Front Door Seams



Courtesy of CHRYSLER GROUP, LLC

1. Tape the various areas illustrated in the diagram using bodywork gummed paper.
2. Carry out a road test, letting the vehicle gradually reach the speeds where the noise starts. If the wind noise persists, check for sealant between the wing and the pillar in the lower area.
3. Remove the gummed paper from the area (A) and repeat the road test. If the wind noise persists, check the condition of the door housing seal in that area and make sure it adheres to the body correctly. Also check the condition of the bonnet hinge buffer block.
4. Remove the gummed paper from the area (B) and repeat the road test. If the wind noise persists, check the condition of the door housing seal in that area and make sure it adheres to the body correctly.
5. Adjust the door hinges.
6. Remove the shims from the upper hinges or add some to the lower hinges so that the door and the seal fit together better.
7. Remove the gummed paper from area (C) and repeat the road test, if the wind noise persists, check the condition of the door housing seal in that area and make sure it adheres to the body correctly.
8. Remove or add shims from/to the two hinges so that the door and the seal fit together better. Remove the gummed paper from the area (D) and repeat the road test: if the wind noise persists, check the condition of the glass scraper
9. Remove the gummed paper from the area (E) and repeat the road test: if the wind noise persists, check the condition of the window seal.

DIAGNOSIS AND TESTING > WIND NOISE > WIND NOISE-REAR DOOR

Fig 1: Tape On Rear Door Seams

Courtesy of CHRYSLER GROUP, LLC

1. Tape the various areas illustrated in the diagram using bodywork gummed paper.
2. Carry out a road test, letting the vehicle gradually reach the speeds where the noise starts: if the wind noise persists, check for sealant between the wing and the pillar in the lower area.
3. Remove the gummed paper from area (A) and repeat the road test: if the wind noise persists, adjust the door hinges.

4. Remove or add shims from/to the two hinges so that the door and the seal fit together better.
5. Remove the gummed paper from area (B) and repeat the road test: if the wind noise persists, adjust the door hinges.
6. Remove or add shims from/to the two hinges so that the door and the seal fit together better.
7. Remove the gummed paper from area (C) and repeat the road test, if the wind noise persists, check the condition of the door housing seal in that area and make sure it adheres to the body shell correctly.
8. Remove the gummed paper from the area (D) and repeat the road test: if the wind noise persists, check the condition of the glass scraper.

DIAGNOSIS AND TESTING > WIND NOISE > WIND NOISE-UNDERBODY

1	CHECK ENGINE BELLY PAN	Result OK	Result Not OK	Action
	Check that belly pan is installed properly	Continue to Step 2	Belly pan not secured properly	Fasten properly and securely
2	CHECK UNDERBODY	Result OK	Result Not OK	Action
	Visually inspect for: • Check for missing or loose plugs • Check for damaged or loose grommets • Check body sealant	Diagnostic complete	Missing plug, damaged grommet, damaged component seal, missing body sealant	Repair the damage found

DIAGNOSIS AND TESTING > WIND NOISE > WIND NOISE-WINDSHIELD

Fig 1: Tape On Front Door

Courtesy of CHRYSLER GROUP, LLC

1. Carry out a road test, letting the vehicle gradually reach the speeds where the noise starts: if the wind noise persists, check that the windscreen has been correctly taped and also check whether the wind noise might be coming from the sunroof area.
2. Remove the gummed paper from area (A) and repeat the road test: if the wind noise persists, locate the noise in the front door area. Refer to WIND NOISE-FRONT DOOR .

STANDARD PROCEDURE > BUZZ, SQUEAKS AND RATTLES

Buzz, Squeaks and Rattles (BSRs) may be caused by any one or more of the following and may be corrected as indicated:

- Loose fasteners should be tightened to specifications.
- Damaged or missing clips should be replaced.
- Damaged trim panels should be replaced.
- Incorrectly installed trim panels should be reinstalled properly.

Many BSR complaints such as loose trim, can be serviced using various tapes or lubricants. Tapes including foam, flock and anti-squeak, can be used to eliminate noises caused by metal, plastic and vinyl components. Long life lubricants and greases can also be used on a variety of components. Refer to BUZZ, SQUEAKS AND RATTLES .

BUZZ, SQUEAKS AND RATTLES

ITEM	FEATURES	APPLICATIONS	SERVICE TEMP
ITCH AND SQUEAK TAPE	An abrasion resistant material thin enough to conform to most irregular surfaces. Stops most itches and squeaks.	Between metal and metal, metal and plastic, metal and vinyl, vinyl and plastic. Interior. Examples: Trim panels and bezels.	-40° to 107°C (-40° to 225°F)
BLACK NYLON FLOCK	Nylon Flock with an aggressive acrylic adhesive. Provides for cushioning and compression fit, also isolates components. Water-resistant.	Between metal and metal, metal and plastic, vinyl and plastic. Examples: Pull cups, bezels, clips, ducts, top cover to glass, cowl panel.	-40° to 82°C (-40° to 180°F)
HIGH DENSITY URETHANE FOAM	Tear resistant, highly resilient and durable.	Between metal and metal, metal and plastic. Water-resistant. Examples: I/P, heavy metal rattles, isolating brackets.	-40° to 82°C (-40° to 180°F)
OPEN CELL FOAM TAPE	Soft foam conforms to irregular surfaces.	Wire harness and connector wrap. Examples: Seals, gasket, wiring, heat ducts.	-40° to 82°C (-40° to 180°F)
CLOSED CELL LOW DENSITY FOAM TAPE	Soft, conformable. Water-resistant.	Wherever bulk is needed. Prevents closing flutters and rattles when applied to door watershield. Examples: Door, I/P.	-40° to 82°C (-40° to 180°F)

NYE® GREASE 880	Long life.	Suspensions. Examples: Strut bushings, sway bars.	-40° to 200°C (-40° to 390°F)
KRYTOX® OIL	Long life. Will not dry out or harm plastics or rubber.	When access is not possible, oil will migrate to condition. Vinyl, rubber, plastic, metal. Examples: Convertible top bushings, pull cups trim panel inserts.	-34° to 205°C (-30° to 400°F)
KRYTOX® GREASE	Long life. Will not dry out or harm plastics or rubber.	Vinyl, rubber, plastic, metal, glass. Examples: Weather-strips, backlite and windshield moldings.	-34° to 205°C (-30° to 400°F)

STANDARD PROCEDURE > HEAT STAKING

1. Remove the trim panel.
2. Bend or move the trim panel components at the heat staked joints. Observe the heat staked locations and component seams for looseness.
3. Heat stake the components.
    a. If the heat staked or component seam location is loose, hold the two components tightly together and using a soldering gun with a flat tip, melt the material securing the components together. Do not over heat the affected area, damage to the exterior of the trim panel may occur.
    b. If the heat staked material is broken or missing, use a hot glue gun to apply new material to the area to be repaired. The panels that are being heat staked must be held together while the applying the glue. Once the new material is in place, it may be necessary to use a soldering gun to melt the newly applied material. Do not over heat the affected area, damage to the exterior of the trim panel may occur.
4. Allow the repaired area to cool and verify the repair.
5. Install the trim panel.

STANDARD PROCEDURE > NET, FORM AND PIERCE REPAIR

⚠ *CAUTION:*

Failure to follow these recommendations could result in damage or failure to the part and the related parts.

Net, form and pierce is a manufacturing process which takes place during the original build of the vehicle. The original part will have a beveled platform that will decrease toward the fastener location mounting hole. Replacement parts in these areas may not include bevel (form) or fastener hole (pierce) and will need to be adapted for proper fit and finish.

The primary locations which may utilize net, form and pierce are:

- fender reinforcement (at front end module mount)
- fender tower mounts
- hood hinge (lower half)
- rear body header (liftgate hinge mounts)
- strut tower (at upper control arm mount)

> *NOTE:*
>
> *Shock tower is net, pierce only.*

> *NOTE:*
>
> *The thickness of shims is not to exceed the original thickness of the factory bevel. If more shims are needed damage is still present and must be repaired properly.*

If the replacement part did not come with a fastener hole, one of equal size and location will have to be drilled. Body shims should be used in the fender reinforcement to front end module. The hood hinge area, fender tower mounts, and rear body header will utilize washers as spacers where a specific spacer does not exist. The shims and spacers should be sealed between each other and to the stationary surface. Care should be taken when smoothing sealer around washers to give an undetectable repair. Refinish the repair area per the paint manufacturer's recommendations for corrosion resistance and appearance purposes.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR

There are many different types of plastics used in today's automotive environment. We group plastics in three different categories: Rigid, Semi-Rigid, and Flexible. Any of these plastics may require the use of an adhesion promoter for repair. These types of plastic are used extensively on FCA US LLC vehicles. Always follow repair material manufacturer's plastic identification and repair procedures.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > SAFETY PRECAUTION AND WARNINGS

WARNING:

Eye protection should be used when servicing components. Personal injury can result.

Use an OSHA approved breathing mask when mixing epoxy, grinding, and spraying paint or solvents in a confined area. Personal injury can result.

Avoid prolonged skin contact with resin, petroleum, or alcohol based solvents. Personal injury can result.

Do not venture under a hoisted vehicle that is not properly supported on safety stands. Personal injury can result.

CAUTION:

When holes must be drilled or cut in body panels, verify locations of internal body components and electrical wiring. Damage to vehicle can result.

Do not use abrasive chemicals or compounds on undamaged painted surfaces around repair areas. Damage to finish can result.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > RIGID PLASTICS

Examples of rigid plastic use: fascias, hoods, doors, and other body panels, which include SMC, ABS, and polycarbonates.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > SEMI-RIGID PLASTICS

Examples of semi-rigid plastic use: interior panels, under hood panels, and other body trim panels.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > FLEXIBLE PLASTICS

Examples of flexible plastic use: fascias, body moldings, and upper and lower fascia covers.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > REPAIR PROCEDURE

The repair procedure for all three categories of plastics is basically the same. The one difference is the material used for the repair. The materials must be specific for each substrate, rigid repair material for rigid plastic repair, semi-rigid repair material for semi-rigid plastic repair and flexible repair material for flexible plastic repair.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > ADHESION PROMOTER/SURFACE MODIFIER

Adhesion promoters/surface modifiers are required for certain plastics. All three categories may have plastics that require the use of adhesion promoter/surface modifiers. Always follow repair material manufacturer's plastic identification and repair procedures.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > RIGID, SEMI-RIGID, AND FLEXIBLE PLASTIC PARTS TYPES

CODE	FAMILY NAME	COMMON TRADE NAME	TYPICAL APPLICATION
ASA	Acrylonitrile Styrene Acrylite	Lurans	Consoles, Grilles
ABS	Acrylonitrile Butadiene Styrene	Terluran	A-pillars, Consoles, Grilles
ABS/PC	ABS/PC Alloy	Pulse, Proloy, Bayblend	Doors, Instrument Panels
ABS/PVC	ABS/PV Alloy	Proloy, Pulse, Lustran, Cyclovin	Door Panels, Grilles, Trim
BMC	Bulk Molding Compound	BMC	Fender Extensions
EMA	Ehtylene Methyl Acrylate/Ionomer	Surlyn, EMA, Ionomer	Bumper Guards, Pads
METTON	Metton	Metton	Grilles, Kick Panels, Running Boards
MPPO	Modified Polyphenylene Oxide	MPPO	Spoiler Assembly
PA	Polyamid	Zytel, Vydyne, PA, Minlon	Fenders, Quarter Panels
PET	Thermoplastic Polyester	Rynite	Trim
PBT/PPO	PBT/PPO Alloy	Germax	Claddings
PBTP	Polybutylene Therepthalate	PBT, PBTP, Pocan, Valox	Wheel Covers, Fenders, Grilles
PBTP/EEBC	Polybutylene Therepthalate/EEBC Alloy	Bexloy, "M", PBTP/EEBC	Fascias, Rocker Panel, Moldings
PC	Polycarbonate	Lexan, Merlon, Calibre, Makrolon PC	Tail Light Lenses, I/P Trim, Valance Panels
PC/ABS	PC/ABS Alloy	Germax, Bay Blends, Pulse	Doors, Instrument Panels
PPO	Polyphenylene Oxide	Azdel, Hostalen, Marlex, Prfax, Noryl, GTX, PPO	Interior Trim, Door Panels, Splash Shields, Steering Column Shroud
PPO/PA	Polyphenylene/Polyamid	PPO/PA, GTX 910	Fenders, Quarter Panels

PR/FV	Fiberglass Reinforced Plastic	Fiberglass, FV, PR/FV	Body Panels
PS	Polystyrene	Lustrex, Styron, PS	Door Panels, Dash Panels
RTM	Resin Transfer Molding Compound	RTM	Body Panels
SMC	Sheet Molded Compound	SMC	Body Panels
TMC	Transfer Molding Compound	TMC	Grilles
UP	Unsaturated Polyester (Thermosetting)	SMC, BMC, TMC, ZMC, IMC, XSMC, UP	Grille Opening Panel, Liftgates, Flareside Fenders, Fender Extensions
EEBC	Ether/Ester Blocked Co-Polymer	EEBC	Bumpers
EEBC/PBTP	EEBC/Polybutylene Terepthalate	EEBC, PBTP, BEXLOY	Bumper, Rocker Panels
EMPP	Ethylene Modified Polypropylene	EMPP	Bumper Covers
EPDM	Ethylene/Propropylene Diene Monomer	EPDM, Nordel, Vistalon	Bumpers
EPM	Ethylene/Propropylene Co-Polymer	EPM	Fenders
MPU	Foam Polyurethane	MPU	Spoilers
PE	Polyethylene	Alathon, Dylan, Lupolen, Marlex	-
PP	Polypropylene (Blends)	Noryl, Azdel, Marlox, Dylon, Pravex	Inner Fender, Spoilers, Kick Panels, A-Pillars, Door Panels, B-Pillars, Quarter Panels, Sport Bar Trim, Liftgate Trim, Decklid Trim Scuff Plates, Kick Panels, Consoles
PP/EPDM	PP/EPDM Alloy	PP/EPDM	Spoilers, Grilles
PUR	Polyurethane	Colonels, PUR, PU	Fascias, Bumpers
PUR/PC	PUR/PC Alloy	Texin	Bumpers
PVC	Polyvinyl Chloride	Apex, Geon, Vinylite	Body Moldings, Wire Insulation, Steering Wheels
RIM	Reaction Injected Molded Polyurethane	RIM, Bayflex	Front Fascias, Modular Windows
RRIM	Reinforced Reaction Injected Molded	PUR, RRIM	Fascias, Body Panels, Body Trims
TPE	Thermo Polyethylene	TPE, Hytrel, Bexloy-V	Fascias, Bumpers, Claddings

TPO	Thermopolyolefin	Polytrope, Renflex, Santoprene, Visaflex, ETA, Apex, TPO, Shields, Claddings	Bumpers, End Caps, Telcar, Rubber, Strips, Sight, Interior B-Pillar
TPP	Thermo-Polypropylene	TPP	Bumpers
TPU	Thermopolyurethane, Polyester	TPU, Hytrel, Texin, Estane	Bumpers, Body Side, Moldings, Fenders, Fascias

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > PANEL SECTIONING

If it is required to section a large panel for a plastic repair, it will be necessary to reinforce the panel. To bond two plastic panels together, a reinforcement must overlap both panels. The panels must be beveled at a 20 degree angle. The area to be reinforced should be washed, then sanded. Be sure to wipe off any excess soap and water when finished. Lightly sand or abrade the plastic with an abrasive pad or sandpaper. Blow off any dust with compressed air or wipe with a clean dry rag.

When bonding plastic panels, follow repair material manufacturers recommendations. Be sure that enough adhesive has been applied to allow squeeze out and to fill the full bond line. Once the pieces have been brought together, do not move them until the adhesive is cured. The assembly can be held together with clamps, rivets, etc. A faster cure can be obtained by heating with a heat lamp or heat gun. After the parts have been bonded and have had time to cure, rough sand the seam and apply the final adhesive filler to the area being repaired. Smooth the filler with a spreader, wooden tongue depressor, or squeegee. For fine texturing, a small amount of water can be applied to the filler surface while smoothing. The cured filler can be sanded as necessary and, as a final step, cleanup can be done with soapy water. Wipe the surface clean with a dry cloth allowing time for the panel to dry before moving on with the repair.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > PANEL REINFORCEMENT

Structural repair procedures for rigid panels with large cracks and holes will require a reinforcement backing. Reinforcements can be made with several applications of glass cloth saturated with structural adhesive. Semi-rigid or flexible repair materials should be used for semi-rigid or flexible backing reinforcement. Open meshed fiberglass drywall tape can be used to form a reinforcement. The drywall tape allows the resin to penetrate through and make a good bond between the panel and the adhesive. Structurally, the more drywall tape used, the stronger the repair.

Another kind of repair that can be done to repair large cracks and holes is to use a scrap piece of similar plastic and bond with structural adhesive. The reinforcement should cover the entire break and should have a generous amount of overlap on either side of the cracked or broken area.

When repairing plastic, the damaged area is first "V'd" out, or beveled. Large bonding areas are desirable when repairing plastic because small repairs are less likely to hold permanently. Beveling the area around a crack at a 20 degree angle will increase the bonding surface for a repair. It is recommended that sharp edges be avoided because the joint may show through after the panel is refinished.

- Panel repair for both flexible and rigid panels are basically the same. The primary difference between flexible panel repair and rigid panel repair is in the adhesive materials used.
- The technician should first decide what needs to be done when working on any type of body panel. One should determine if it is possible to return the damaged part to its original strength and appearance without exceeding the value of the replacement part.
- When plastic repairs are required, it is recommended that the part be left on the vehicle whenever possible. That will save time, and the panel will remain stationary during the repair. Misalignment can cause stress in the repair areas and can result in future failure.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > VISUAL INSPECTION

Composite materials can mask the severity of an accident. Adhesive bond lines, interior structure of the doors, and steel structures need to be inspected carefully to get a true damage assessment. Close inspection may require partial removal of interior trim or inner panels.

Identify the type of repair: Puncture or Crack - Damage that has penetrated completely through the panel. Damage is confined to one general area; a panel section is not required. However, a backer panel, open fiberglass tape, or matted material must be bonded from behind.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > PANEL SURFACE PREPARATION

If a body panel has been punctured, cracked, or crushed, the damaged area must be removed from the panel to achieve a successful repair. All spider web cracks leading away from a damaged area must be stopped or removed. To stop a running crack in a panel, drill a 6 mm (0.250 in.) hole at the end of the crack farthest away from the damage. If spider web cracks can not be stopped, the panel will require replacement. The surfaces around the damaged area should be stripped of paint and freed from wax and oil. Scuff surfaces around repair area with 360 grit wet/dry sandpaper, or equivalent, to insure adhesion of repair materials.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > PATCHING PANELS

An panel that has extensive puncture type damage can be repaired by cutting out the damaged material. Use a suitable reciprocating saw or cut off wheel to remove the section of the panel that is damaged. The piece cut out can be used as a template to shape the new patch. It is not necessary to have access to the back of the panel to install a patch. Bevel edges of cutout at 20 degrees to expose a larger bonding area on the outer side. This will allow for an increased reinforcement area.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > PANEL PATCH FABRICATIONS

A patch can be fabricated from any rigid fiberglass panel that has comparable contour with the repair area. Liftgates and fenders can be used to supply patch material. If existing material is not available or

compatible, a patch can be constructed with adhesive and reinforcement mesh (drywall tape). Perform the following operation if required:

1. Cover waxed paper or plastic with adhesive backed nylon mesh (drywall tape) larger than the patch required.
2. Tape waxed paper or plastic sheet with mesh to a surface that has a compatible contour to the repair area.
3. Apply a liberal coat of adhesive over the reinforcement mesh. If necessary apply a second or third coat of adhesive and mesh after first coat has cured. The thickness of the patch should be the same as the repair area.
4. After patch has cured, peel waxed paper or plastic from the back of the patch.
5. If desired, a thin film coat of adhesive can be applied to the back of the patch to cover mesh for added strength.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > PANEL PATCH INSTALLATION

1. Make a paper or cardboard pattern the size and shape of the cutout hole in the panel.
2. Trim 3 mm (0.125 in.) from edges of pattern so patch will have a gap between connecting surfaces.
3. Using the pattern as a guide, cut the patch to size.
4. Cut scrap pieces of patch material into 50 mm (2 in.) squares to use as patch supports to sustain the patch in the cutout.
5. Drill 4 mm (0.160 in.) holes 13 mm (0.5 in.) in from edge of cutout hole.
6. Drill 4 mm (0.160 in.) holes 13 mm (0.5 in.) away from edge of patch across from holes drilled around cutout.
7. Drill 3 mm (0.125 in.) holes in the support squares 13 mm (0.5 in.) from the edge in the center of one side.
8. Scuff the backside of the body panel around the cutout hole with a scuff pad or sandpaper.
9. Mix enough adhesive to cover one side of all support squares.
10. Apply adhesive to cover one side of all support squares.
11. Using number 8 sheet metal screws, secure support squares to back side of body panel with adhesive sandwiched between the panel and squares.
12. Position patch in cutout against support squares and adjust patch until the gap is equal along all sides.
13. Drill 3 mm (0.125 in.) holes in the support squares through the pre-drilled holes in the patch.
14. Apply a coat of adhesive to the exposed ends of the support squares.

15. Install screws to hold the patch to support squares. Tighten screws until patch surface is flush with panel surface.
16. Allow adhesive to cure, and remove all screws.
17. Using a 125 mm (5 in.) 24 grit disc grinder, grind a 50 mm (2 in.) to 75 mm (3 in.) wide and 2 mm (0.080 in.) deep path across the gaps around the patch. With compressed air, blow dust from around patch.
18. Apply adhesive backed nylon mesh (drywall tape) over gaps around patch.
19. Mix enough adhesive to cover the entire patch area.
20. Apply adhesive over the mesh around patch, and smooth epoxy with a wide spreader to reduce finish grinding. Use two to three layers of mesh and adhesive to create a stronger repair.

STANDARD PROCEDURE > PLASTIC BODY PANEL REPAIR > PATCHED PANEL SURFACING

After patched panel is installed, the patch area can be finished using the same methods as finishing other types of body panels. If mesh material is exposed in the patched area, grind surface down, and apply a coat of high quality rigid plastic body filler. Prime, block sand, and paint as required.

SPECIFICATIONS > BODY LUBRICATION > LUBRICATION REQUIREMENTS

Body mechanisms and linkages should be inspected, cleaned, and lubricated, as required, to maintain ease of operation and to provide protection against rust and wear. When performing other under hood services, the hood latch release mechanism and safety catch should be inspected, cleaned, and lubricated. During the winter season, external door lock cylinders should be lubricated to help with proper operation when exposed to water and ice.

Prior to the application of any lubricant, the parts concerned should be wiped clean to remove dust and grit. If necessary, a suitable solvent can be used to clean the item to be lubricated. After lubricating a component, any excess oil or grease should be removed.

SPECIFICATIONS > BODY LUBRICATION > LUBRICANT APPLICATION > DOOR LOCK CYLINDERS

1. Apply a small amount of lubricant directly into the lock cylinder.
2. Apply a small amount of lubricant to the key.
3. Insert key into lock cylinder and cycle the mechanism from the locked to the unlocked position.

NOTE:

Do not add more lubricant.

4. Cycle the lock cylinder mechanism several times to allow the lubricant to flow throughout the cylinder.
5. Wipe all lubricant from exterior of lock cylinder and key.

SPECIFICATIONS > BODY LUBRICATION > LUBRICANT APPLICATION > ALL OTHER BODY MECHANISMS

1. Clean component as described above.
2. Apply specified lubricant to all pivoting and sliding contact areas of component.

SPECIFICATIONS > BODY LUBRICATION > LUBRICANT USAGE

ENGINE OIL

- door hinges - hinge pin and pivot contact areas
- hood hinges - pivot points
- liftgate hinges

MOPAR® SPRAY WHITE LUBE OR EQUIVALENT

- door check straps
- liftgate latches
- liftgate prop pivots
- ash receiver
- fuel filler door remote control latch mechanism
- parking brake mechanism
- sliding seat tracks
- liftgate latch

MOPAR® MULTIPURPOSE GREASE OR EQUIVALENT

- all other hood mechanisms

MOPAR® LOCK CYLINDER LUBRICANT OR EQUIVALENT

- door lock cylinders
- liftgate lock cylinder

SPECIFICATIONS > LOADS AND REINFORCEMENTS

The table contains the names and symbols for the fillers and reinforcements in the recyclable materials used on the vehicle.

NAME	ISO SYMBOL
GLASS BALLS	GB
GLASS FIBRE	GF
GLASS MATTING	GM
MINERAL DUST FILLERS	MD
TALC DUST	TD
WOOD CHIPPINGS (SAWDUST)	WD
TEXTILE FIBRES (SYNTHETIC OR NATURAL)	SF
CALCIUM CARBONATE	KD

The table contains the names and symbols for the thermoplastic elastomers with heat ratings used on the vehicle.

NAME	ISO SYMBOL
POLYOLEFIN	PP + EPDM
POLYOLEFIN	PP + NBR
POLYOLEFIN	PP + NR
OLEFIN	TECEA
POLYESTER - POLYETHER	TEEE
BLOCK STYRENE COPOLYMERS	S / B / S
BLOCK STYRENE COPOLYMERS	S / E / S
BLOCK STYRENE COPOLYMERS	S / EB / S

SPECIFICATIONS > THERMOPLASTIC RECYCLABLE MATERIALS

The table contains the names and symbols for the main thermoplastic materials used on the vehicle.

NAME	ISO SYMBOL

ACRYLONITRILE BUTADIENE STYRENE, ABS	ABS
CELLULOSE	CA
AROMATIC POLYAMIDES	PA
- with 6 C atoms in a monomer structure	PA 6
- with 2 monomer structures each with 6 C atoms	PA66
- with 11 C atoms in a monomer structure	PA11
- with 12 C atoms in a monomer structure	PA 12
AROMATIC POLYAMIDES + ABS	PA + ABS
POLYCARBONATES	PC
POLYCARBONATE ALLOYS / ABS	PC + ABS
POLYETHYLENES	PE
METACRYLICS	PMMA
ACETALS	POM
POLYPROPYLENES	PP
MODIFIED POLYPHENYL OXIDES	PPE
THERMOPLASTIC ALLOYS (POLYPHENYLOXIDES/POLYAMIDES)	PPE + PA
FLEXIBLE VINYLS	PVC - P
RIGID VINYLS	PVC

SPECIFICATIONS > THERMOSETTING ELASTOMERS

The table contains the names and symbols for the thermosetting elastomer materials with heat ratings used on the vehicle.

NAME	ISO SYMBOL
CHLOROETHYL VINYL ETHER ACRYLATE	ACM
CHLORINATED POLYETHYLENE	CM
CHLOROSULPHANATED POLYETHYLENE	CSM
ETHYLENE PROPYLENE DIENE MONOMER	EPDM
ETHYLENE PROPYLENE COPOLYMER	EPM
FLUORO ELASTOMER	FPM
POLYISOBUTENE	IM
ETHYLENE ACRYLATE	AEM

EPICHLOROHYDRIN HOMOPOLYMER	CO
EPICHLOROHYDRIN COPOLYMER	ECO
PROPYLENE OXIDE	GPO
BUTADIENE	BR
CHLOROPRENE	CR
ISOBUTENE- ISOPRENE (BUTYL)	IIR
BROMOBUTYL	BIIR
CHLORO BUTYL	CIIR
SYNTHETIC ISOPRENE	IR
NITRILE BUTADIENE	NBR
HYDROGENATED NITRILE	HNBR
CARBOXYLASED NITRILE	XNBR
ISOPRENE	NR
STYRENE BUTADIENE	SBR
FLUORO SILICON	MFQ
METHYL PHENYL SILICON	MPQ
METHYL PHENYL VINYL SILICON	MPVQ
METHYL SILICON	MQ
METHYL VINYL SILICON	MVQ
POLYURETHANE	AU
POLYURETHANE POLYETHER	EU
MICROCELLULAR POLYURETHANE	PUM

The table contains the names and symbols of the special fibres with heat ratings used on the vehicle.

NAME	ISO SYMBOL
LIGNOTOCK - CEKAZELL	>PF - WD 85<
FIBRIT MASONITE	>PF - WD 99<
EVERSTIFF	> PP + S/B - SF50 <
WOODSTOCK	>PP - WD 50<
Resined textile fibres for roof linings	> PF - SF60 <
Resined textile fibres for sound insulation	> PF - SF70 <
Glass fibre matting + resined textile fibres for roof lining	> GM, PF - SF60 <

GLASUTEC	>GM, PUR, GM
GLASUTHERM	> GM, PUR, GM <
GLASS - FOAM	> PUR - GF30 <

SPECIFICATIONS > THERMOSETTING RECYCLABLE MATERIALS

The table contains the names and symbols of the main thermosetting materials used on the vehicle.

NAME	ISO SYMBOL
PHENOLIC	PF
POLYURETHANE	PUR
UNSATURATED THERMOSETTING POLYESTERS	
- For compression stamping (SMC)	UP
- For injection stamping (BMC)	UP

SPECIFICATIONS > TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS

DESCRIPTION	N.m	Ft. Lbs.	In. Lbs.	NEW FASTENER*
Front door check to body bolts	27	20	-	
Front door exterior handle nuts	9	7	80	
Front door hinge pivot bolts	25	18	-	
Front door hinge to body bolts	45	33	-	
Front door hinge to door bolts	45	33	-	
Front door latch bolts	26	19	-	
Front door rear glass guide nuts	9	7	80	
Front door regulator nuts	10	-	89	
Front door striker bolts	27	20	-	
Front fender bolts	9	-	80	
Front seat back bolts	35	26	-	
Front seat bolts	35	26	-	
Hood hinge to body bolts	25	18	-	
Hood hinge to hood bolts	25	18	-	

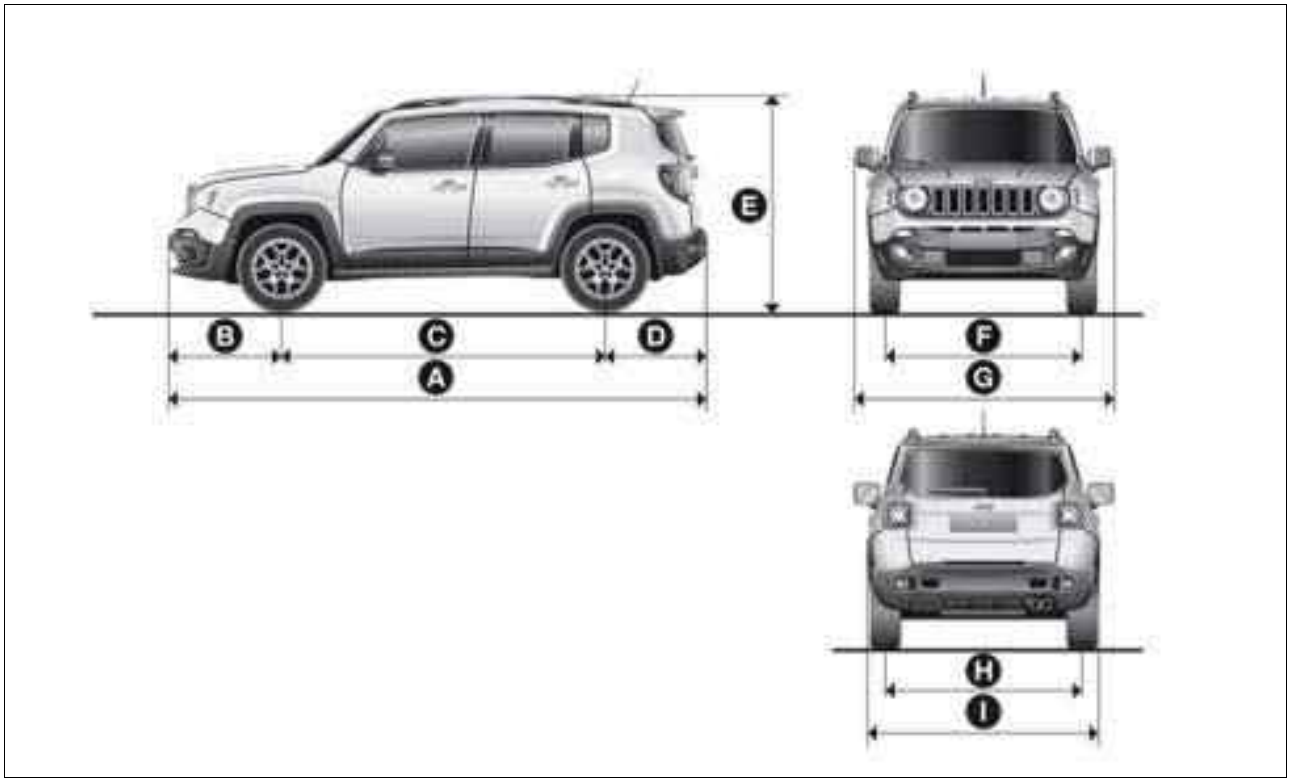
Hood latch bolts	24	18	-	
Instrument panel carrier bolts	20	15	-	
Liftgate hinge to body bolts	30	22	-	
Liftgate hinge to liftgate bolts	30	22	-	
Liftgate latch bolts	Securely	-	-	
Liftgate striker bolts	25	18	-	
Rear door exterior handle nuts	8	-	71	
Rear door hinge pivot bolts	25	18	-	
Rear door hinge to body bolts	45	33	-	
Rear door hinge to door bolts	45	33	-	
Rear door interior handle bolt	9	-	80	
Rear door latch bolts	26	19	-	
Rear door striker bolts	19	14	-	
Rear seat nuts	25	18	-	
Rear seat pivot bracket bolt	25	18	-	
Seat track bolts	Securely	-	-	
***NEW FASTENER:** Do not reuse these fasteners. If removed, a new fastener must be installed and tightened to specifications.				

SPECIFICATIONS > VEHICLE DIMENSIONS

The dimensions are given in millimeters and refer to the vehicle equipped with standard tires.

The height refers to the vehicle unloaded.

Fig 1: Vehicle Dimensions



Courtesy of CHRYSLER GROUP, LLC

A	B	C	D	E	F	G	H	I
4255	892	2570	793	1667/1697*	1551	2023	1552	1805

NOTE:

(*) With luggage rack

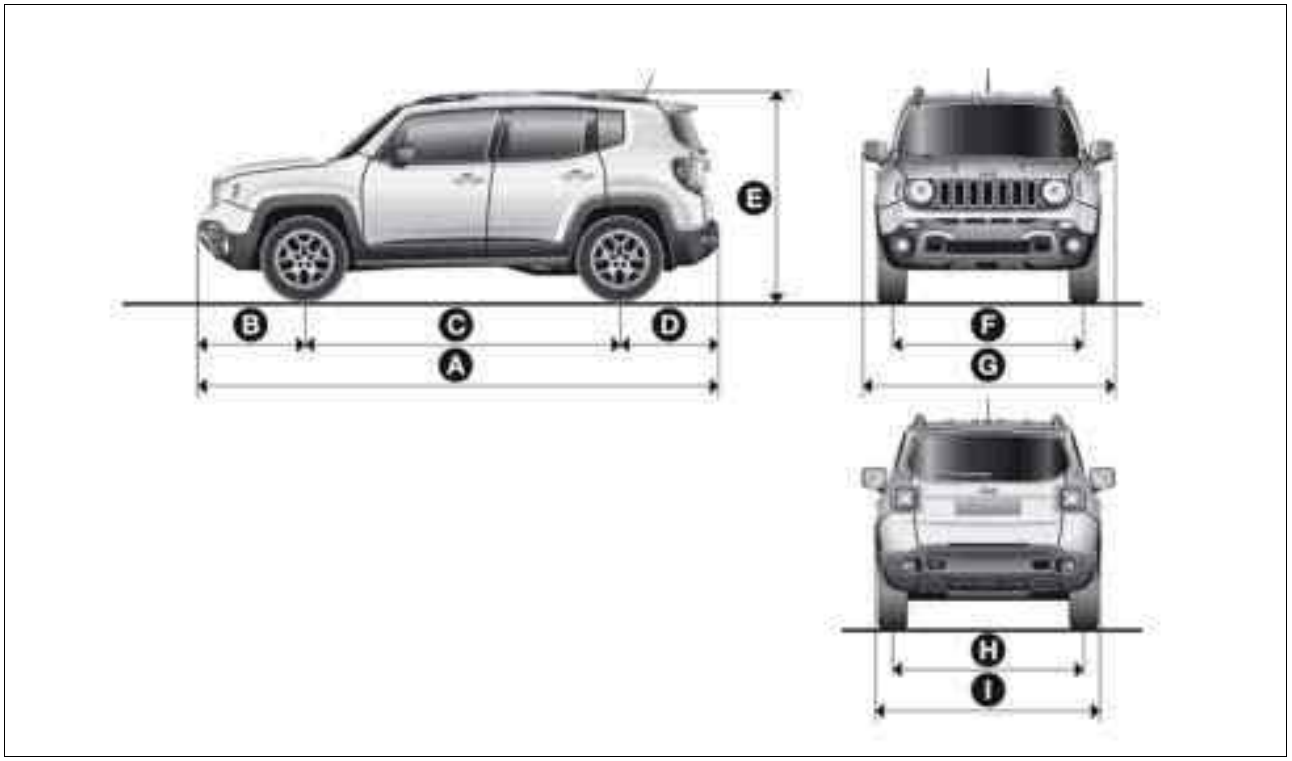
According to the size of the wheel a slight variations are possible compared to the supplied information.

SPECIFICATIONS > VEHICLE DIMENSIONS > TRAILHAWK VERSION

The dimensions are given in millimeters and refer to the vehicle equipped with standard tires.

The height refers to the vehicle unloaded.

Fig 1: Vehicle Dimensions - Trailhawk



Courtesy of CHRYSLER GROUP, LLC

A	B	C	D	E	F	G	H	I
4259	892	2570	797	1697/1727*	1541	2023	1541	1805

NOTE:

(*) With luggage rack

According to the size of the wheel a slight variations are possible compared to the supplied information.

SPECIFICATIONS > VEHICLE DIMENSIONS > LUGGAGE COMPARTMENT

CAPACITY (V.D.A NORMS)

Rear seats folded down (capacity measured at the parcel shelf)

Vehicle download and reconfigurable cargo floor in "position 0" (all lower floor): 351 liters

Vehicle download and reconfigurable cargo floor in "position 1" (all upper floor): 341 liters

Vehicle download and reconfigurable cargo floor in "position 1" (all upper floor) and spare tire (215/65 /R17): 256 liters

Vehicle download and reconfigurable cargo floor in "position 1" (all upper floor) and spare tire (145/90 /R16): 297 liters

Rear seats folded down (capacity measured at the roof)

Vehicle download and reconfigurable cargo floor in "position 0" (all lower floor): 530 liters

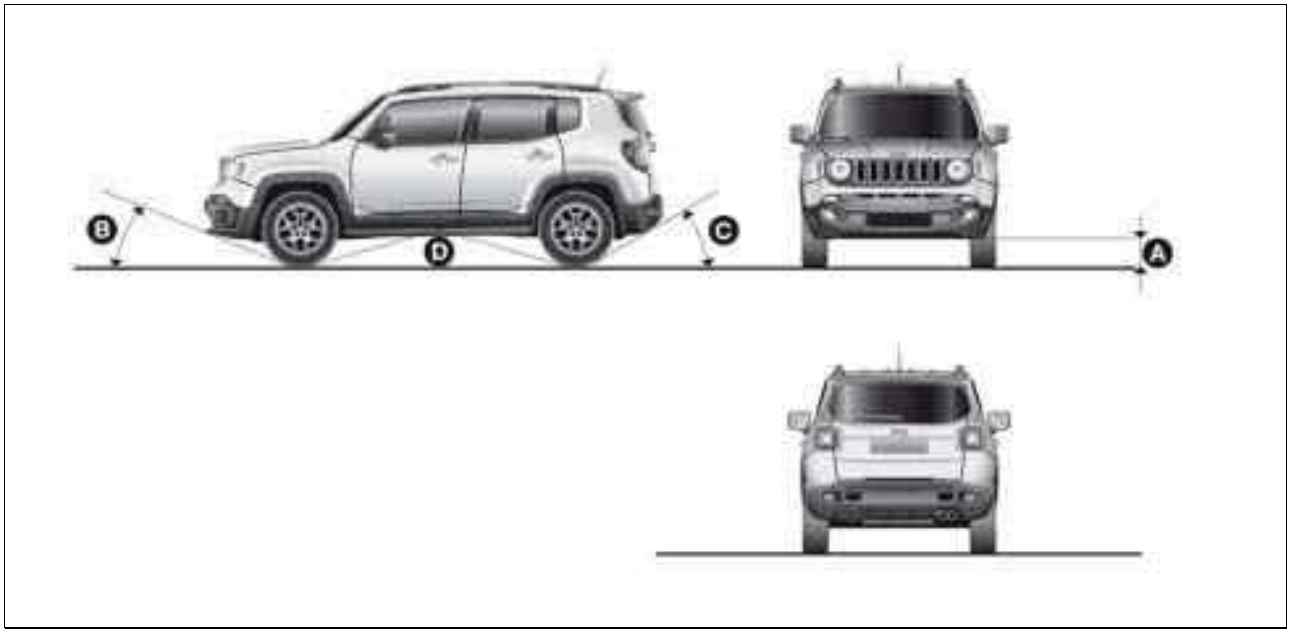
Vehicle download and reconfigurable cargo floor in "position 1" (all upper floor): 513 liters

Vehicle download and reconfigurable cargo floor in "position 1" (all upper floor) and spare tire (215/65 /R17): 428liters

Vehicle download and reconfigurable cargo floor in "position 1" (all upper floor) and spare tire (145/90 /R16): 469 liters

SPECIFICATIONS > VEHICLE DIMENSIONS > MINIMAL HEIGHT FROM THE GROUND/ANGLE CHARACTERISTICS

Fig 1: Minimal Height Vehicle Dimensions



Courtesy of CHRYSLER GROUP, LLC

"MINIMUM HEIGHT FLOOR" (Reference A)

The value of the height is measured in near the bottom of the differential. It also determines those relating to "angle of attack", "Departure angle" and to "Ramp Angle".

Dimensions are in mm and refer to the vehicle fitted with standard tires.

Versions with front wheel drive (FWD): 171 mm

Versions with all-wheel drive (4WD): 201 mm

Trailhawk versions with all-wheel drive (4WD LOW): 225 mm

"ANGLE OF ATTACK" (reference B)

The angle of attack is determined by the horizontal line of the road surface and the tangent line passing between the front wheel and the lower point of greatest projection of the car.

The greater the angle, the smaller the possibility of bumping, with the bodywork or the chassis, during a steep slope or in a passage of the obstacle.

Versions with front wheel drive (FWD): 17.9°

Versions with all-wheel drive (4WD): 21°

Trailhawk versions with all-wheel drive (4WD LOW): 30.5°

"OUTPUT ANGLE" (reference C)

The output angle is determined by the same lines of the "angle of attack" and refers to the rear of the vehicle.

Versions with front wheel drive (FWD): 29.7°

Versions with all-wheel drive (4WD): 32.1°

Trailhawk versions with all-wheel drive (4WD LOW): 34.3°

"BACK ANGLE" (reference D)

The value of "Ramp Angle" is related to the height from the floor of the vehicle and the vehicle's ability to overcome a hump, more or less accentuated without the vehicle, touching off the same with its lower parts more prominent (normally the underbody), remains resting on the ground with the frame or with the body, which would cause the loss of wheel grip.

These, not having a proper grip on the ground, they will not have enough grip to advance the vehicle and will end up going around in circles.

The greater the height, the greater the angle off. Keep in mind that the greater the height, the lower its stability due to rising center of gravity, thus reducing the angle of lateral tipping.

Versions with front wheel drive (FWD): 21.2°

Versions with all-wheel drive (4WD): 24°

Trailhawk versions with all-wheel drive (4WD LOW): 25.7°

SPECIFICATIONS > VEHICLE WEIGHT

	1.4 MultiAir Turbo	1.6 16V Multijet	2.0 16V Multijet 140CV	2.0 16V Multijet 170CV
Empty weight (with all fluids, fuel tank filled to 90% and no optional equipment) (kg)	1320	1390	1430/1530 (*)	1535

NOTE:

(*) Versions with automatic transmission

SPECIAL TOOLS > SPECIAL TOOLS

Tool (EMEA)	Tool (NAFTA)	Name	Function
1823015000	C-4829A	Trim Stick	Trim Removal
1878077000	C-4755	Trim Stick	Trim Separation
1878017001	*	Staple Pliers	Install Seat Cover
1878086000	*	Tool	Remove outer belt seal
*Tool not available for NAFTA. Use a commercially available tool or contact Mopar Essential Tools to order the custom EMEA tool.			

BODY STRUCTURE > DESCRIPTION > GENERAL PANELS AND FRAMEWORK > VEHICLE IDENTIFICATION DATA

The vehicle is equipped with the following identification plates:

- V.I.N. plate.
- Body paintwork color identification plate.
- Body marking.
- Engine marking.

For further details, refer to VEHICLE INFORMATION .

NOTE:

After a repair operation, it may be necessary to replace the panel components that have the vehicle identification number on them or the number may be damaged.

NOTE:

In that case, you must follow the laws in force in the country in which the vehicle is registered to carry out the restoration of that marking.

NOTE:

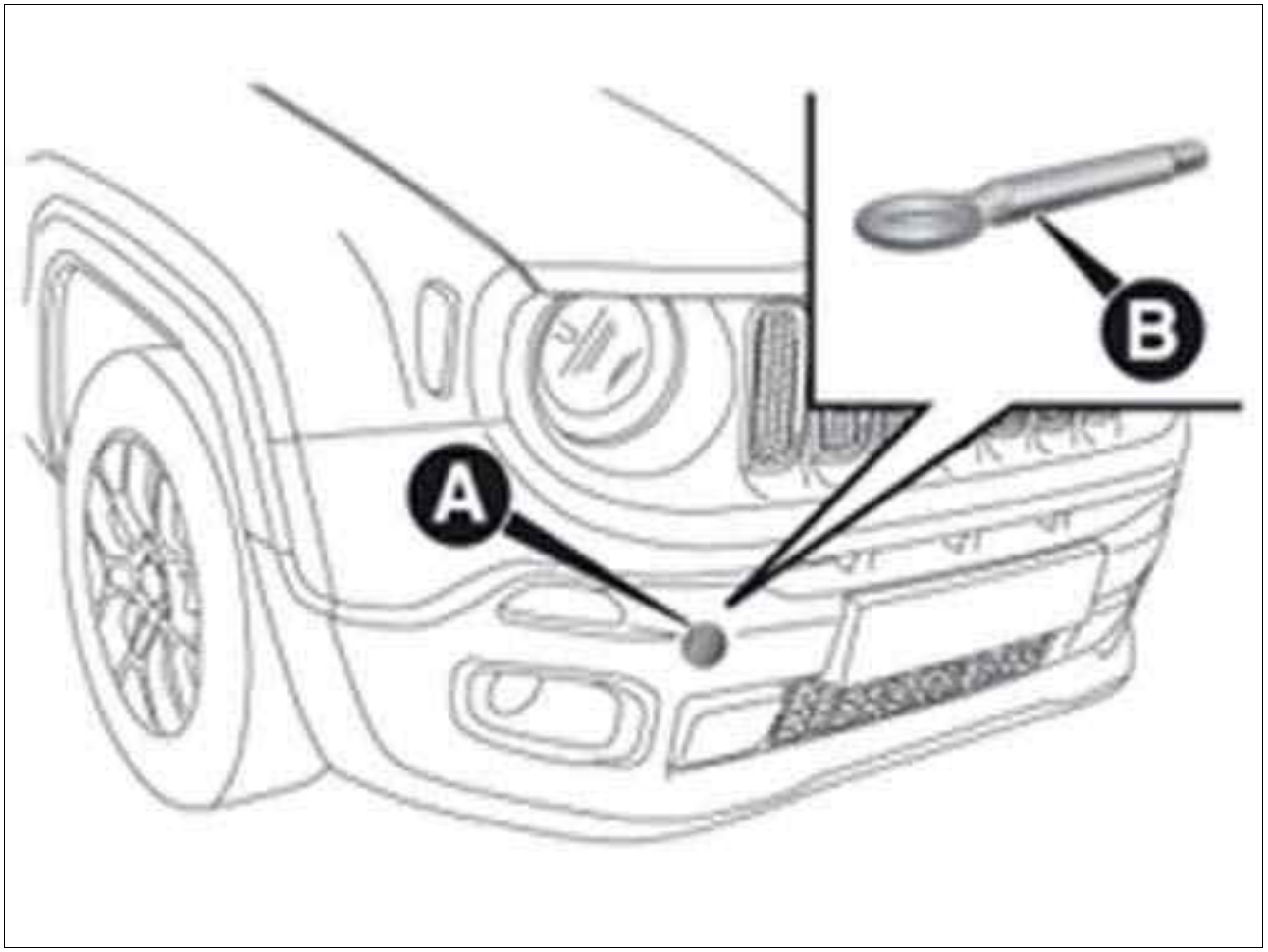
A similar procedure should be carried out if the plate containing the vehicle identification number is damaged or removed.

BODY STRUCTURE > DESCRIPTION > GENERAL PANELS AND FRAMEWORK > VEHICLE TOWING POINTS

WARNING:

When towing the vehicle you must comply with the specific traffic regulations, relating to the tow hook and the actions to take towing on the road. Thoroughly clean the threaded holes before screwing the hook. Before starting to tow, be sure to screw down the tow hook tightly. Make sure the ignition key is inserted into the relative ignition switch and that the steering lock is not engaged. With the engine off you do not have the help of the brake booster and power steering, so you need to exert more effort on both the brake pedal and on the steering wheel.

Fig 1: Towing Eye Location - Front



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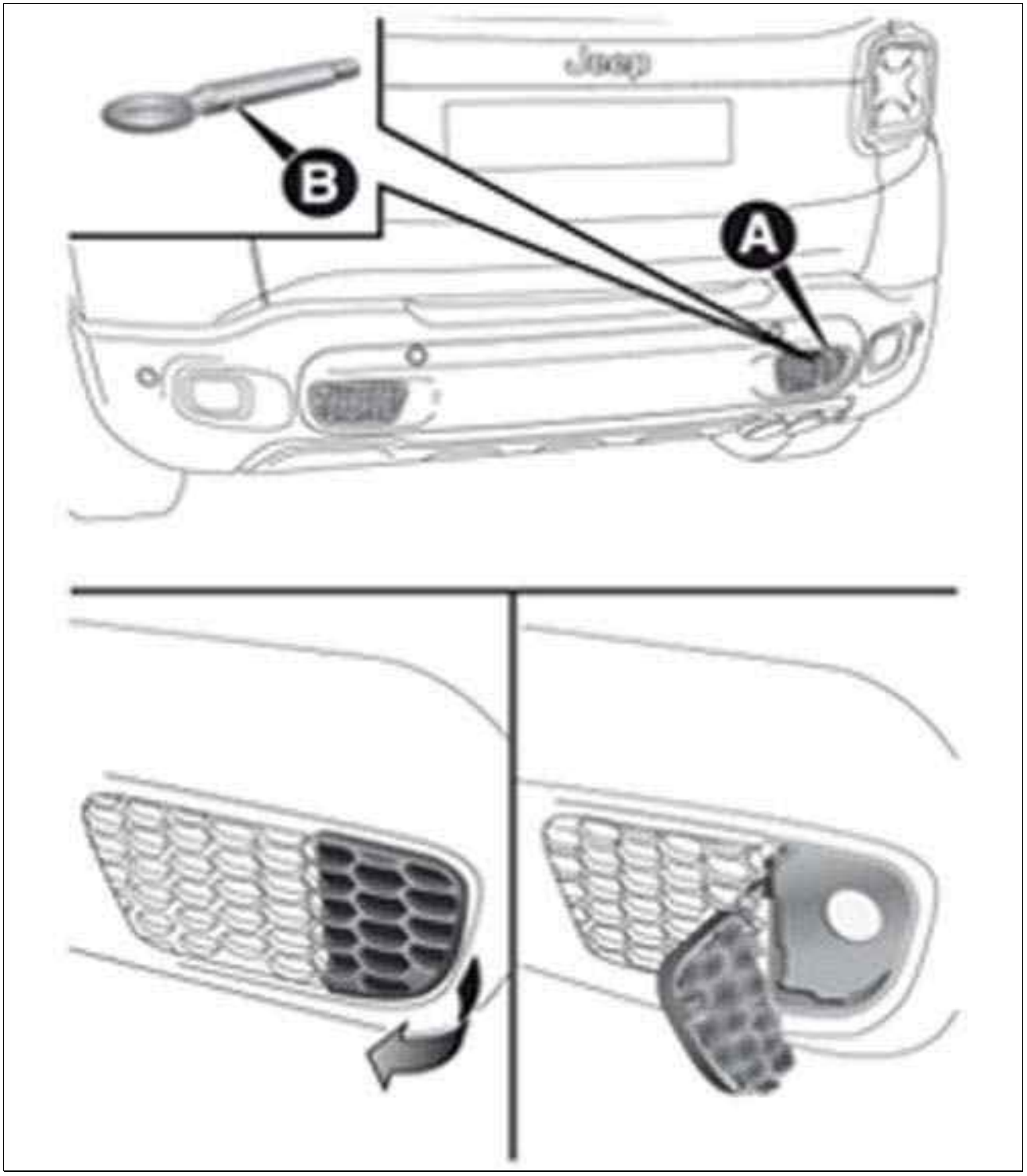
The vehicle is equipped with a threaded seat at the front and rear (A) for the installation of towing eye (B). The tow ring is located in the tool kit provided with the vehicle, located in the tool kit inside the trunk.

Fig 2: Towing Eye Location - Rear



Courtesy of CHRYSLER GROUP, LLC

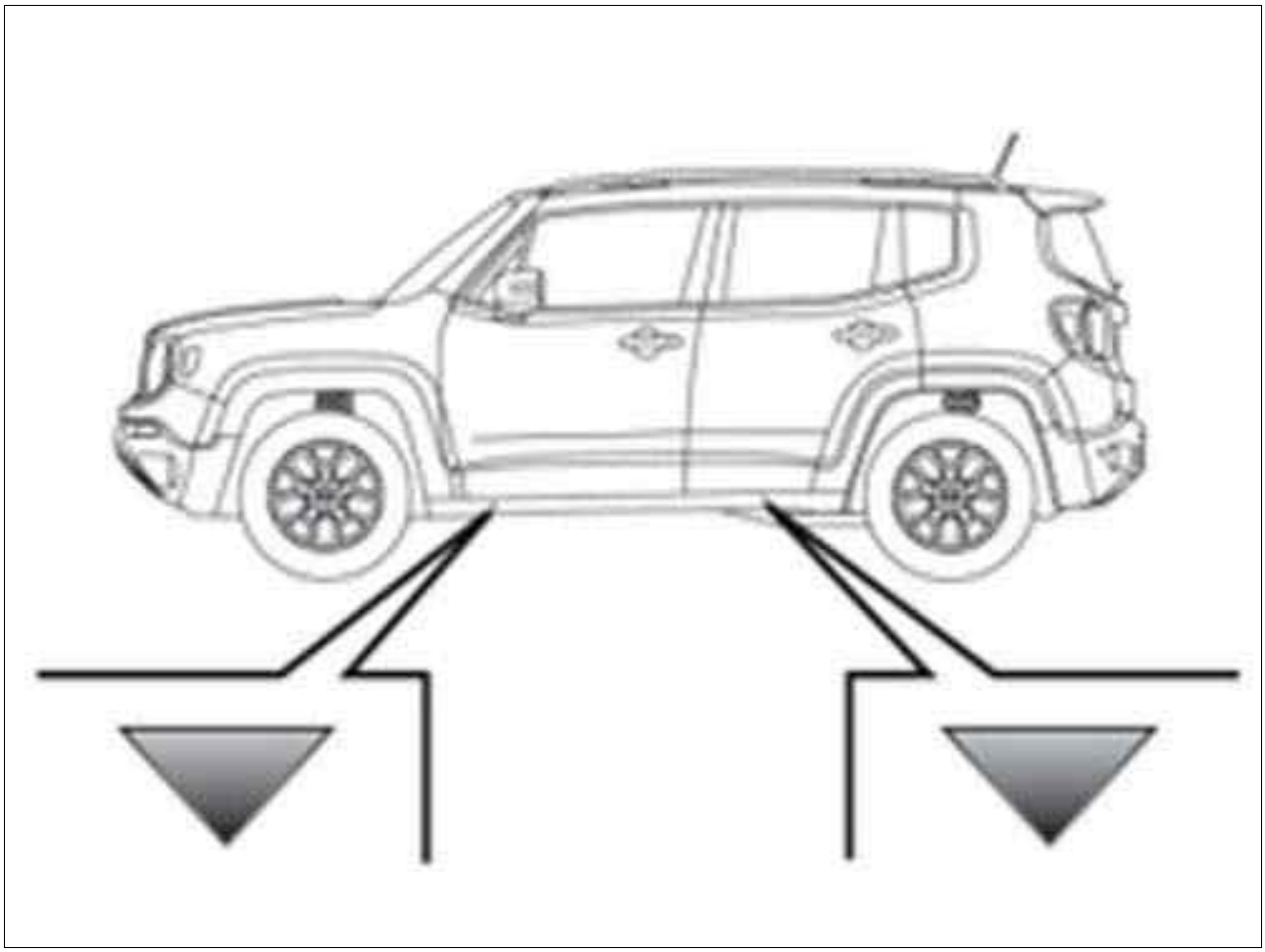
TRAILHAWK VERSION

In these versions the towing hook is a fixed type and is anchored to the body of the car.

BODY STRUCTURE > DESCRIPTION > GENERAL PANELS AND FRAMEWORK >

VEHICLE LIFTING POINTS

Fig 1: Vehicle Lifting Points



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To raise the vehicle using lifting arms or with a workshop lift, place the ends of the arms or the lift only in the areas indicated in the illustration.

> *WARNING:*
>
> *Before raising the vehicle with the portable lifts, engage the hand brake and block the wheels by placing wedges in front of the front wheels and behind the rear wheels. After lifting the vehicle, support it with suitable safety stands.*

BODY STRUCTURE > DESCRIPTION > GENERAL PANELS AND FRAMEWORK > GENERAL SAFETY INSTRUCTIONS

The activities related to the repair of the body involve the use of specialty equipment and work tools as well as the handling of substances and chemicals to be treated in accordance with the suppliers recommendations.

Special attention should be paid to:

- The proper use of materials, tools and equipment: Before performing any operation, carefully read the instruction manuals and carefully follow the instructions and the safety regulations prescribed.
- Regarding the areas equipped for work, which must be equipped with a ventilation system that guarantees legally admissible levels relative to fresh air exchange, filtration of harmful substances (solvents) and dust suppression.
- Handling of hazardous substances are to be used according to the instructions and recommendations of the supplier.
- The collection and disposal of waste is to be carried out in accordance with current regulations.

When working with and handling dangerous and hazardous substances it is imperative that appropriate accident prevention measures must be taken (wearing protective clothing, masks, gloves, goggles etc.).

BODY STRUCTURE > DESCRIPTION > GENERAL PANELS AND FRAMEWORK > VEHICLE REPAIR PROCEDURES STAGES

The vehicle repair procedures stages usually consist of the following stages:

- Checking vehicle measurements
- Cutting/removing damaged elements and preparing the body for welding
- Welding replacement parts
- Preparing for painting
- Painting
- Restoring anti corrosion conditions
- Sound insulation, sealants

Check and restore specified vehicle measurements-

This is the first stage of the repair operation during which the distortion suffered by the body is measured and evaluated and the elements involved are identified.

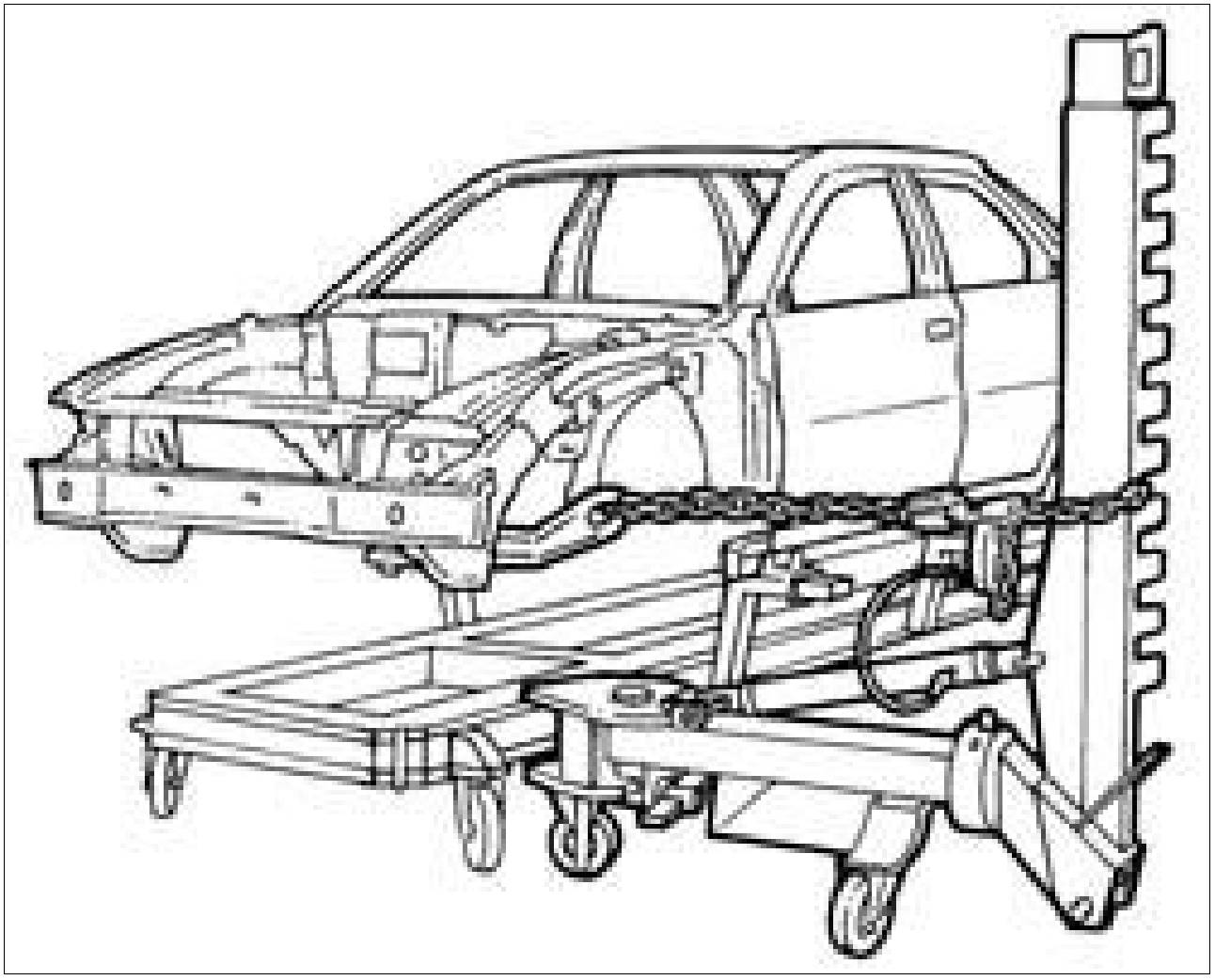
The first actual repair operation is also carried out during this stage: pulling the body to restore the correct dimensions before cutting and removing the damaged elements.

Pulling the body-

Pulling the body to restore its dimensions is carried out on the alignment bench (frame rack), where it is possible to secure the body using clamps and connections to be fitted in accordance with the specific instructions for each vehicle, which come with the bench (rack).

Templates, positioned in the recommended places, are used to check the body measurements either using the measurements given by the manufacturer of the template for each model or, alternatively, those for the vehicle given in SPECIFICATIONS .

Fig 1: Frame Rack



Courtesy of CHRYSLER GROUP, LLC

Example of a possible alignment bench (frame rack).

BODY STRUCTURE > DESCRIPTION > GENERAL PANELS AND FRAMEWORK > GENERAL REPAIR INSTRUCTIONS

> ⚠ *CAUTION:*
>
> *Before performing any work on the car disconnect the battery terminals.*

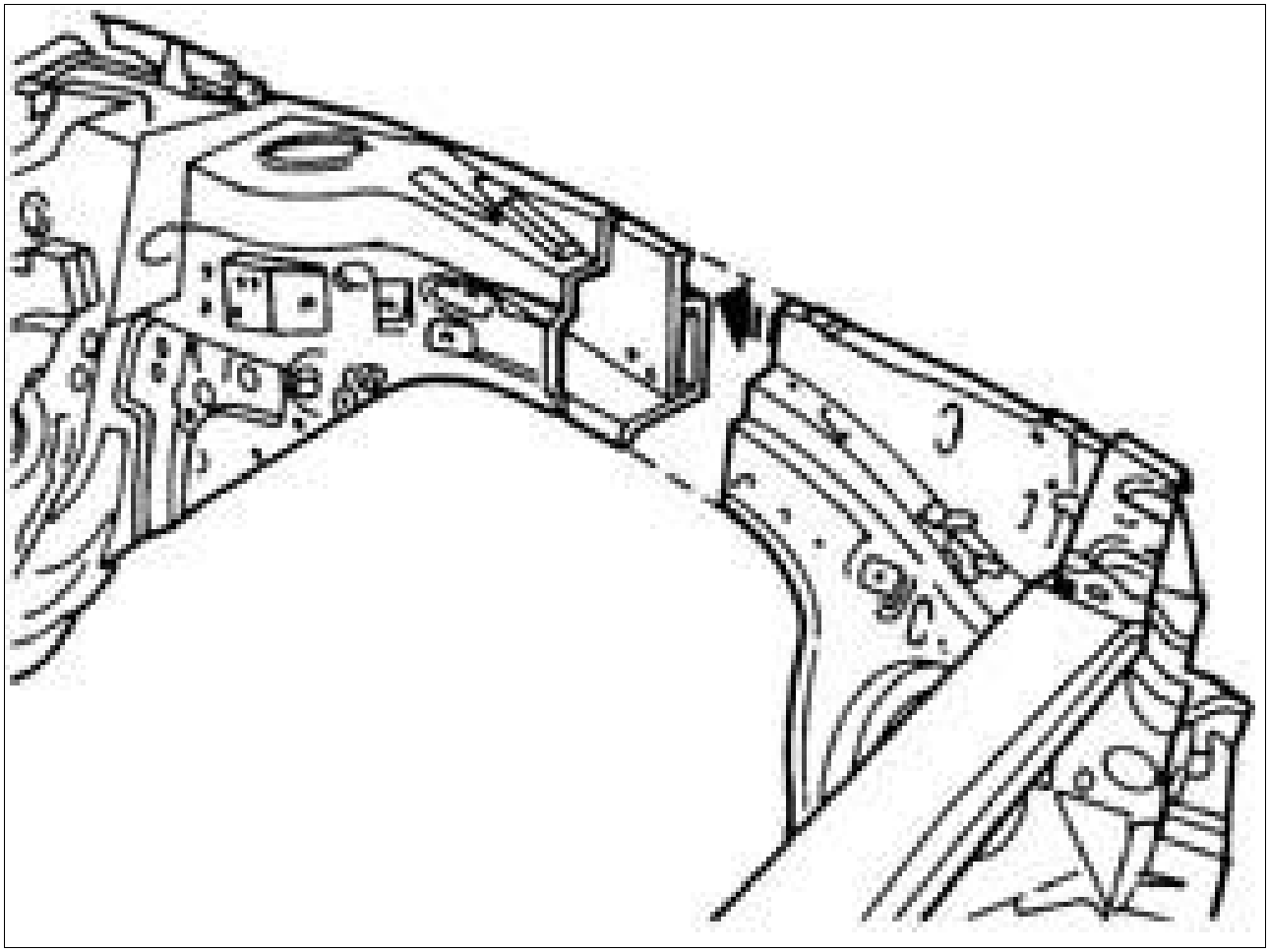
For safety reasons and for a better quality repair, IT IS FORBIDDEN TO:

- Replace the structural parts of the body without using a repair bench. The use of the bench makes it possible to guarantee the restructuring of the vehicle with the original manufacturing measurements, ensuring the correct positioning of the components that make up the front and the rear part of the vehicle.

- Heat the structural parts of the body to straighten them.
- Cut and weld any bodywork component and reinforcement, edge to edge, on the same line.

Remove the damaged components by cutting them along the joints, following the cutting lines given in the Service Information. Correctly carried out, this operation involves a difference of several centimeters between the two cutting lines in order to distribute the fusion spots created by the welding.

Fig 1: Frame Implementation



Courtesy of CHRYSLER GROUP, LLC

The diagram illustrates a possible implementation.

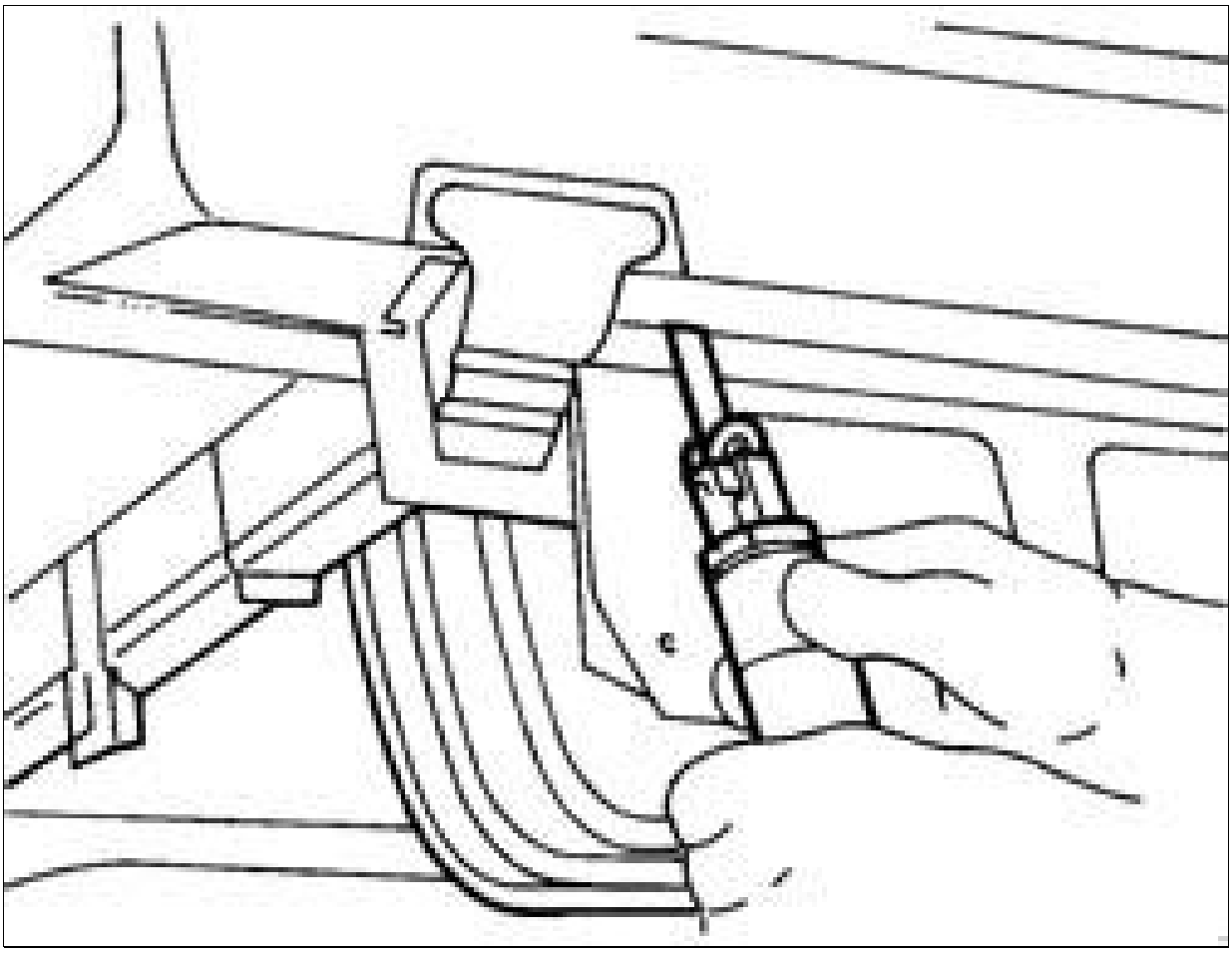
> *WARNING:*
>
> *Removing the damaged components is the repair stage during which the most potentially dangerous equipment is used. Before carrying out any operation, carefully read the instruction manual and the safety instructions and warnings given by the manufacturer together with the equipment, and strictly follow all safety precautions.*

The use of the following is required for removing damaged panels:

- Power jig saws

- Circular saws
- Power chisels (only if necessary)
- Plasma cutting systems
- Electric drills
- Milling machines for spot weld removal
- Grinders
- Hammers and dolly blocks
- Disc grinders
- Air extractor fans

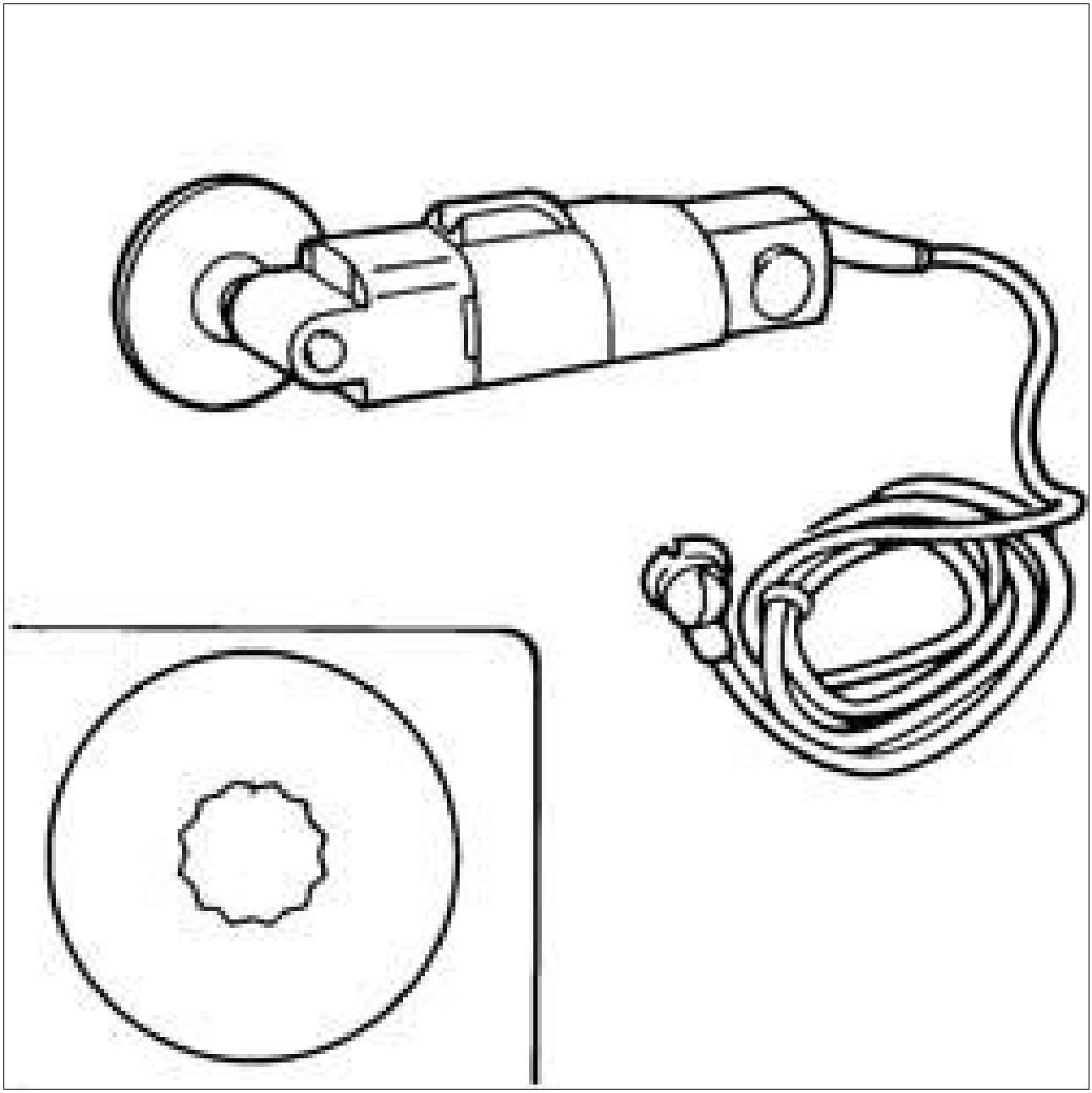
Fig 2: Using Power Jig Saw



Courtesy of CHRYSLER GROUP, LLC

Power jig saw- This type of saw makes it possible to make fast, precision cuts with the possibility of regulating the speed of the blade so that it can be adapted to suit different situations.

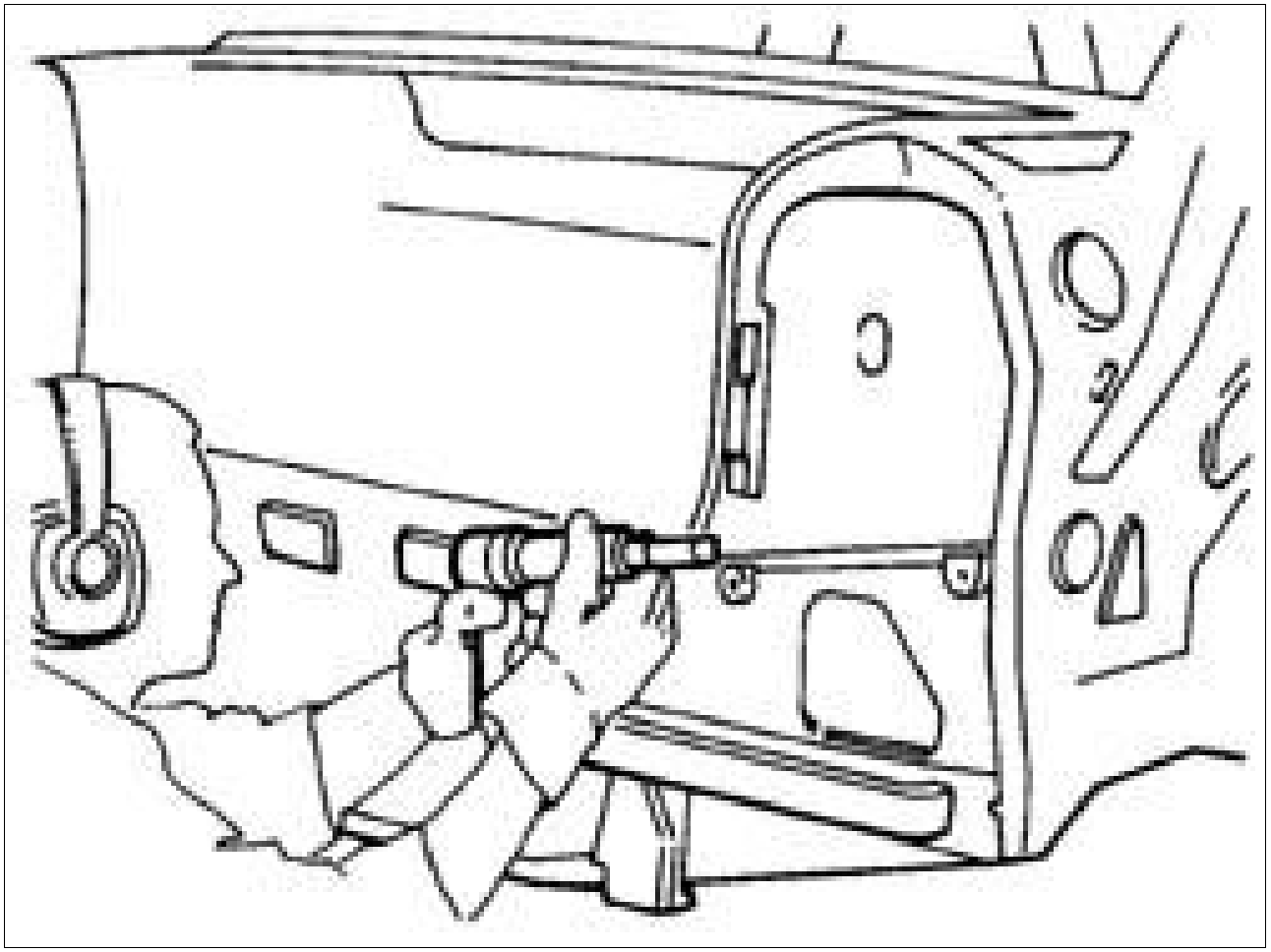
Fig 3: Vibrating Circular Saw



Courtesy of CHRYSLER GROUP, LLC

Vibrating circular saw- A vibrating saw is used in situations which require high precision cutting; for example, the panel in a box section is to be replaced, overlapping on the panel that should not be damaged. By adjusting the speed and the number of oscillations it is possible to achieve the precision required, according to the usage conditions. The high safety level for this instrument means that it is advisable to use it as an alternative to other types of saws.

Fig 4: Using Pneumatic Chisel



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Pneumatic chisel-

The pneumatic chisel is used to remove pieces of sheet metal, its use is indicated when:

- It is not possible to use the power saw, the milling machine or the drill (for example, when behind the sheet metal to be cut there is another that must not be damaged)
- It is possible to separate the welded panel directly by inserting the chisel tip between the two panels along the join, in order to leave no edges to be removed at a later stage.

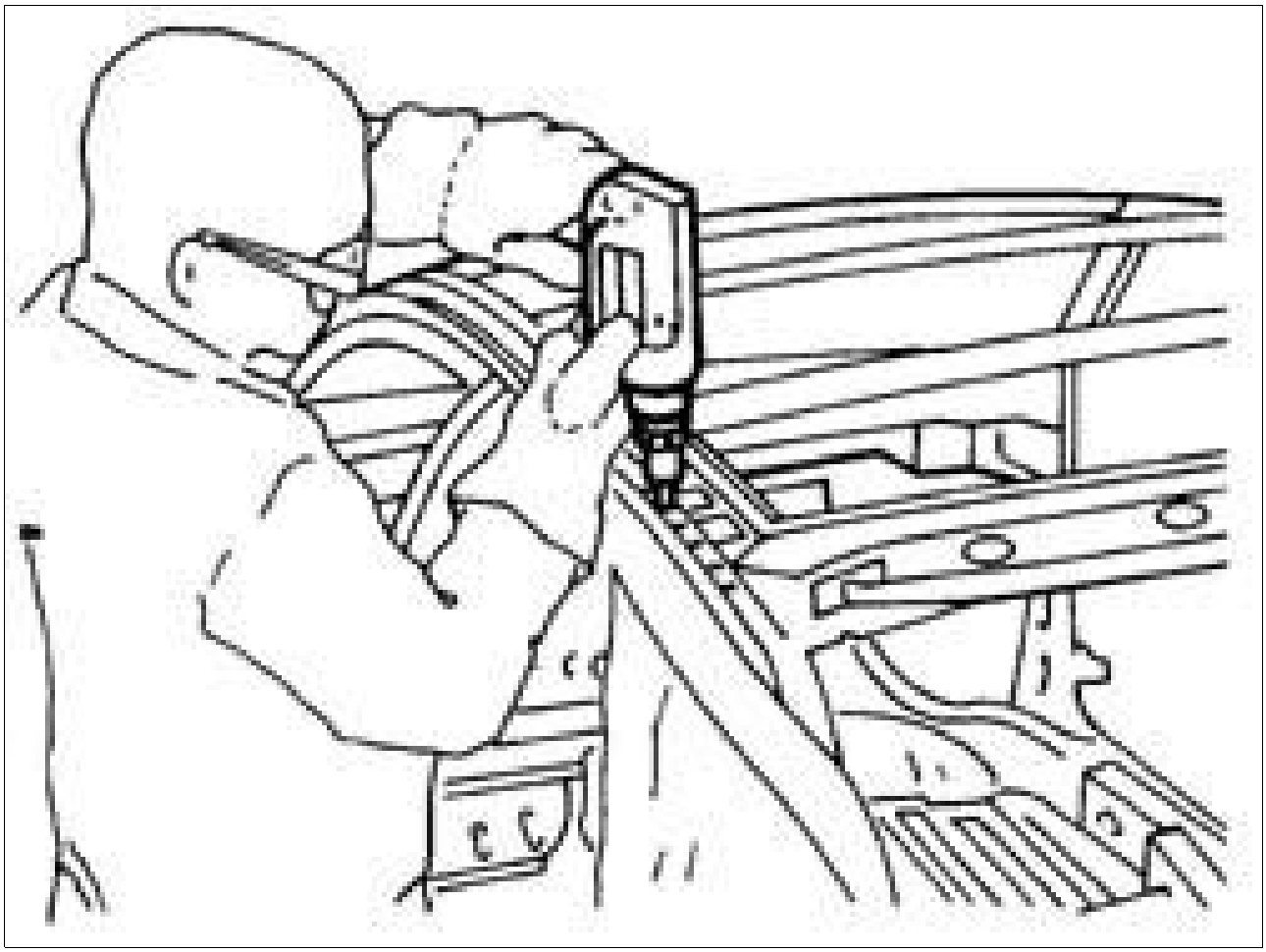
The different tips which can be fitted increase its versatility of use.

Plasma cutting system- This cutting system, produced through the combined effect of an electrical arc and gas or a gas mixture, is used if very large panels have to be removed. Depending on the thickness of the panel and the depth of the cut, the value of the current and flow of gas can be adjusted in accordance with the instruction manual supplied by the manufacturer.

WARNING:

The use of plasma cutting systems requires the use of an extraction system to remove harmful gases and fumes.

Fig 5: Using Electric Drill



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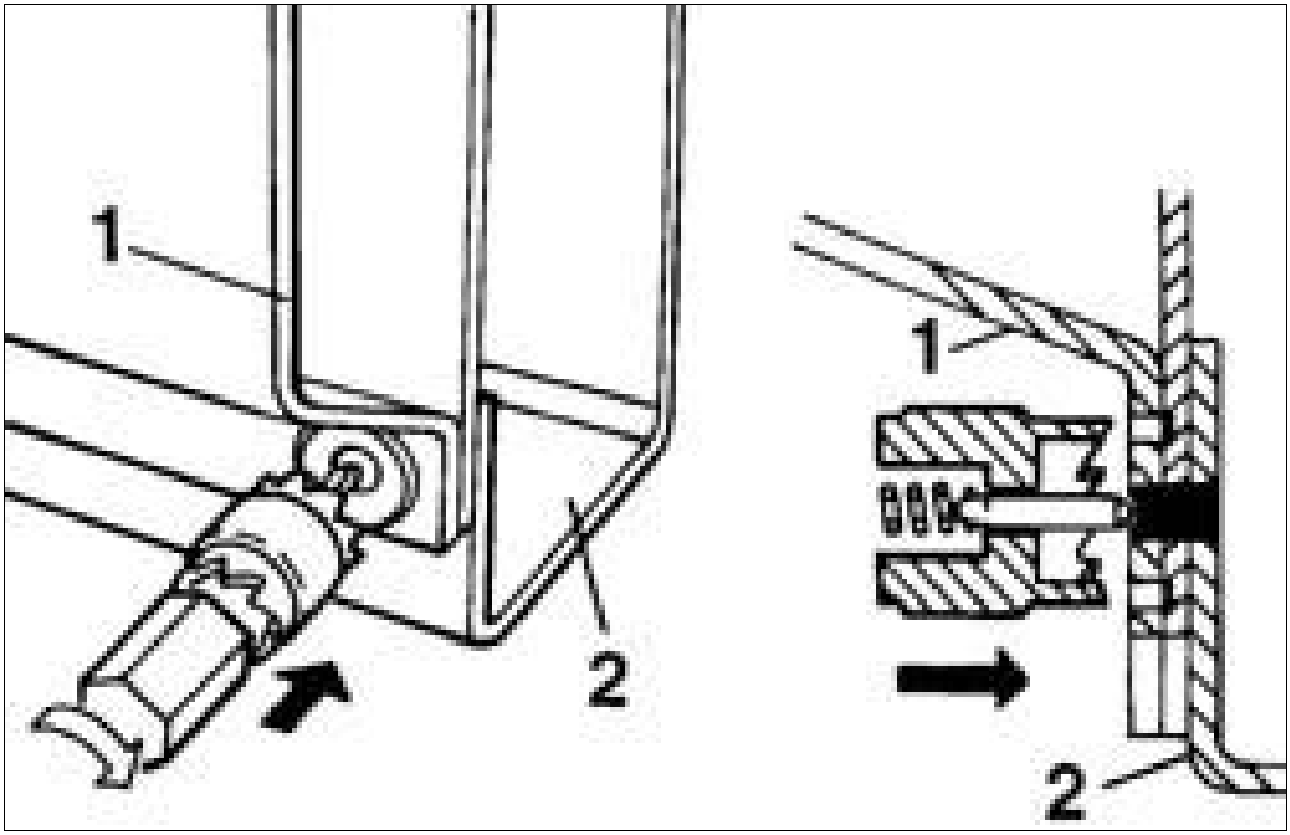
Electric drill- Electric drills are normally used in cases where a milling machine cannot be used. The correct use of the drill for removing spot welds, where panels are overlapping is illustrated below. The tip to be used for these operations is identical to the one fitted on the milling machine. The weld spot must be marked using a drift punch, in order to provide support for the centering point, thereby preventing the cutter from slipping and damaging the surrounding area; the cutter should then be pushed until it reaches slightly deeper than the thickness of the panel to be removed (see illustration below).

Fig 6: Using Milling Tip

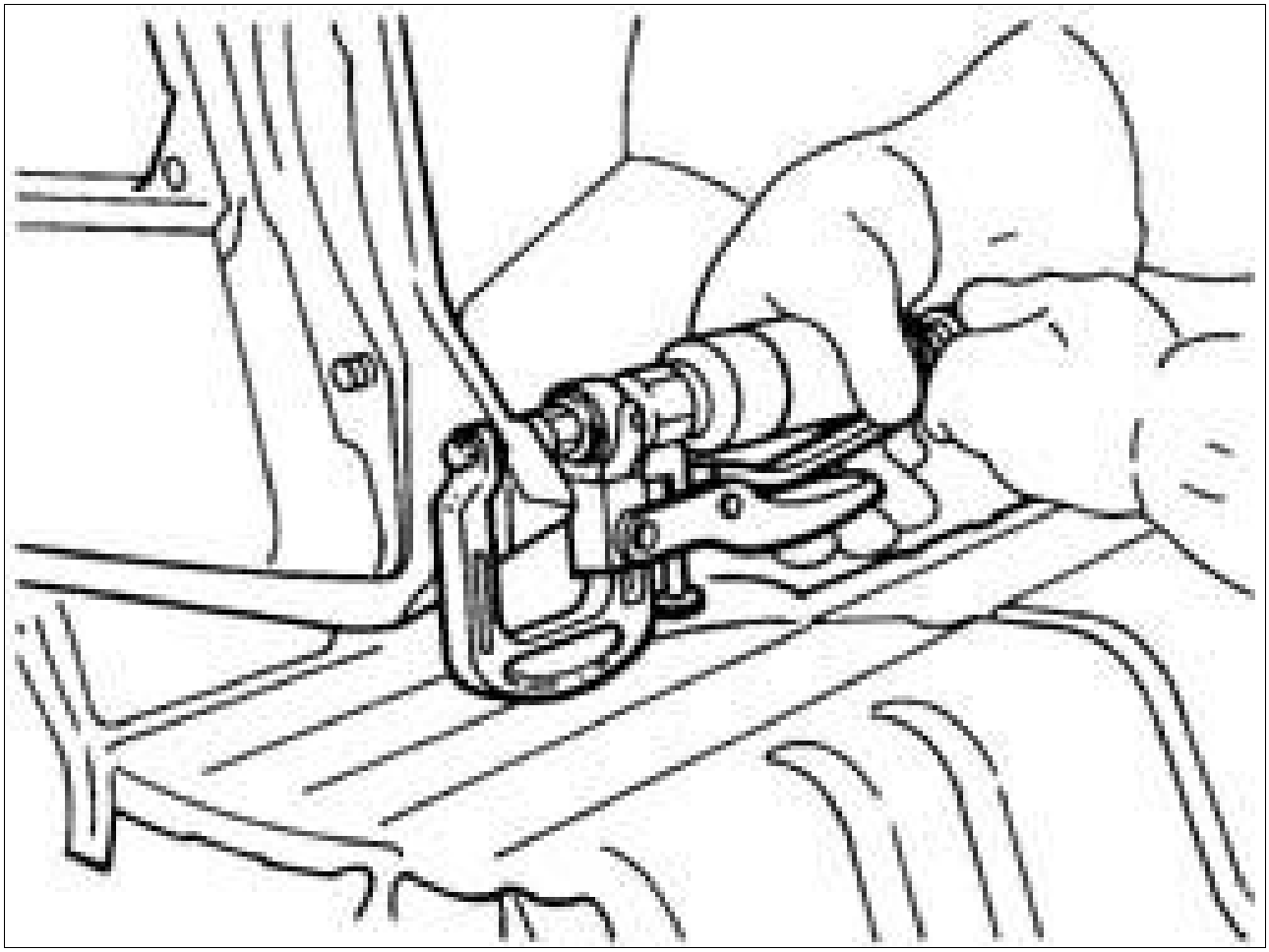


Courtesy of CHRYSLER GROUP, LLC

1- Panel to be detached.
2- Box section panel preventing the use of the milling wheel.

Example of the correct use of a milling tip.

Fig 7: Using Milling Machine



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Milling machine (for spot weld removal)-

A milling machine for removing spot welds is used after the panel to be replaced has been cut to allow the removal of the metal off-cuts remaining on the edges of the body.

The milling machine works on the panel, cutting it as far as the panel underneath and insulating the spot weld.

After removing all the spot welds, the piece cut off can be removed using pliers.

A cutting speed of around 1000 RPM should be used to perform the operation.

Adjust the milling depth using the special screw.

> ⚠ *CAUTION:*
>
> *Do not drill matching components. If holes have been made accidentally, close them using (MIG) welding. The presence of holes decreases the resistance of the component involved and can also increase penetration by water and corrosive agents.*

Lever and dolly block- These tools are used when panels need to be hammered straight in order to provide a reaction point supporting the panel. The dolly blocks are designed so that they can be adapted to suit the different shapes of the panel and, when the work area permits, they can replace the hammer.

The levers have the same usage instructions as the dolly blocks, however they are designed so that they can be introduced through openings and restricted spaces into areas that are difficult to reach.

Dolly blocks and levers are also used to remove distortions from the edge of panels that are not removed, thereby allowing them to be matched with replaced panels, preventing the structure from being weakened.

BODY STRUCTURE > DESCRIPTION > GENERAL PANELS AND FRAMEWORK > WELDING REPLACEMENT PARTS

> ⚠ *CAUTION:*
>
> *If you need to carry out any welding or machining that could trigger flames near the fuel system components, fuel or other flammable parts of the vehicle, remove the component from the vehicle and plug the open lines connections. Disconnect the electrical connections of the control units (IE, ABS, Air Bag, Air Conditioner, Body Computer, etc.) that could be damaged during processing.*

The welding of the body elements can be carried out, depending on the requirements, with different methods:

- Spot welding
- Wire welding (MIG)
- Brazing

Equipment-

The equipment used for these operations are:

- Welding machines with clamps (spot welding)
- Continuous wire welding (MIG)
- Oxy-acetylene torches (brazing)

General information on electric spot welding-

During spot welding the heat required to melt the metal is provided by the resistance to the flow of current which the metal opposes.

Spot welding is carried out on panels where the join edges are overlapping and takes place through localized fusion of the metal that makes up the panel so no weld metal is required for this type of welding. In areas where three or more panels are overlapping, the spot welding must be repeated a second time.

The type of join that is produced is discontinuous; the weld spots must be correctly spaced in order to

confer good mechanical resistance, in accordance with the precise instructions (see the tables below).

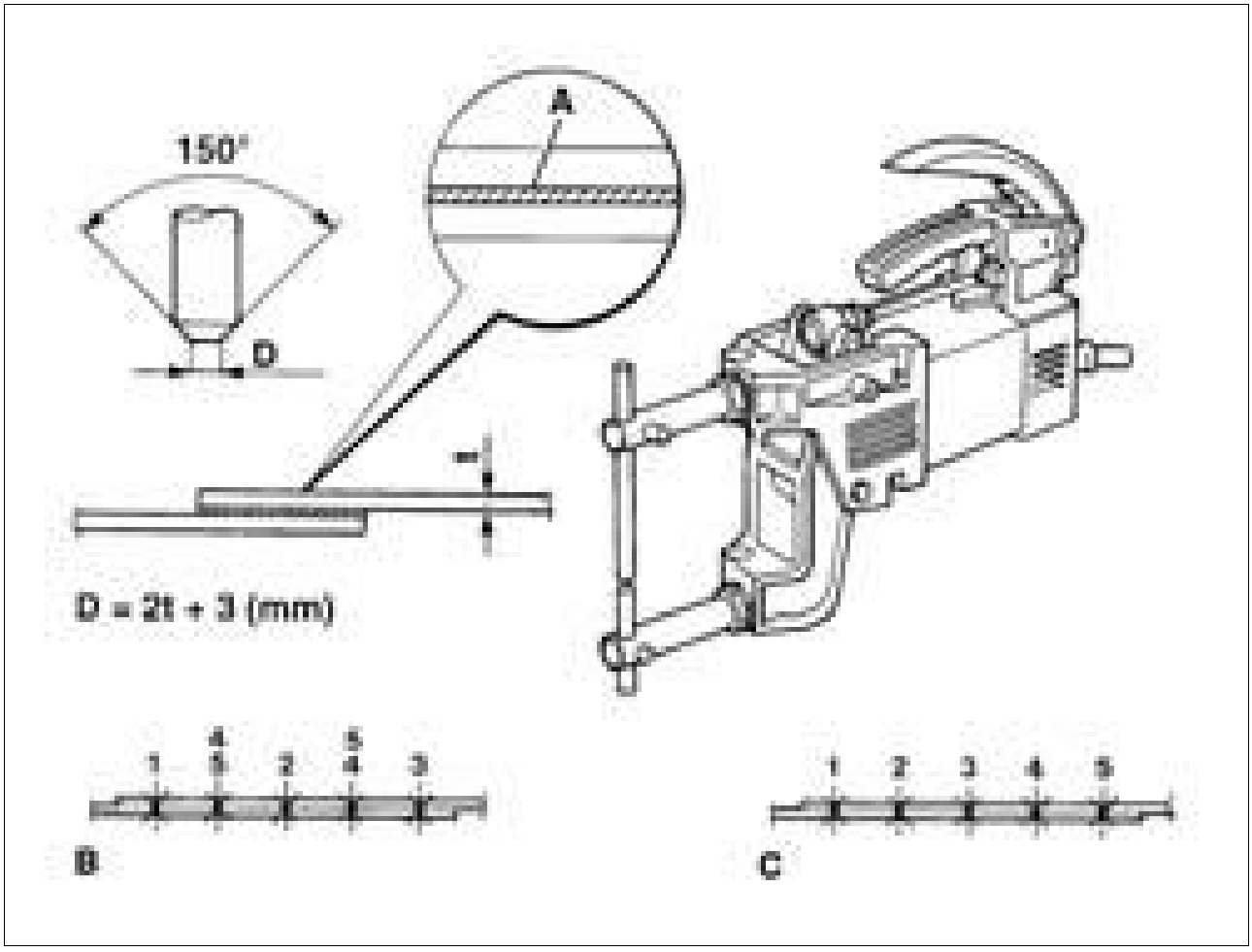
Spot welding-

In the case of spot welding, check:

- That the arms are correctly aligned
- That the diameter of the ends of the electrodes are correct
- The flatness and correct matching of the edges of the weld
- The correct welding sequence.

> ⚠ *CAUTION:*
>
> *Before welding, apply electro-weldable galvanized coating/weld through primer to the edges of the join in order to protect the box sections from corrosion.*

Fig 1: Spot Welding Sequence



Courtesy of CHRYSLER GROUP, LLC

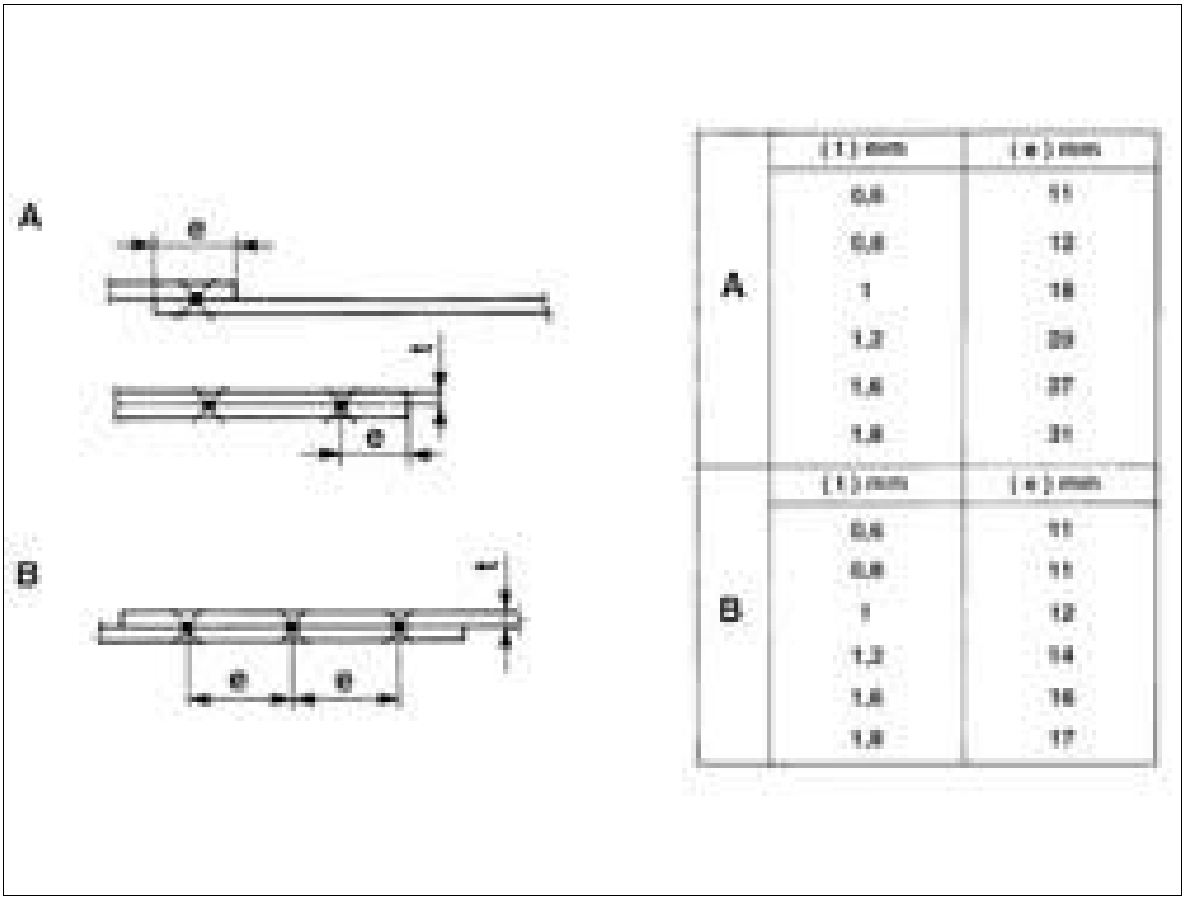
A. Electro-weldable galvanized coating

B. Correct welding sequence

C. Incorrect welding sequence

D. Size of the electrode

Fig 2: Reference Values For Spot Welding



A		
	0,6	11
	0,8	12
	1	16
	1,2	20
	1,6	27
	1,8	31
B		
	0,6	11
	0,8	11
	1	12
	1,2	14
	1,6	16
	1,8	17

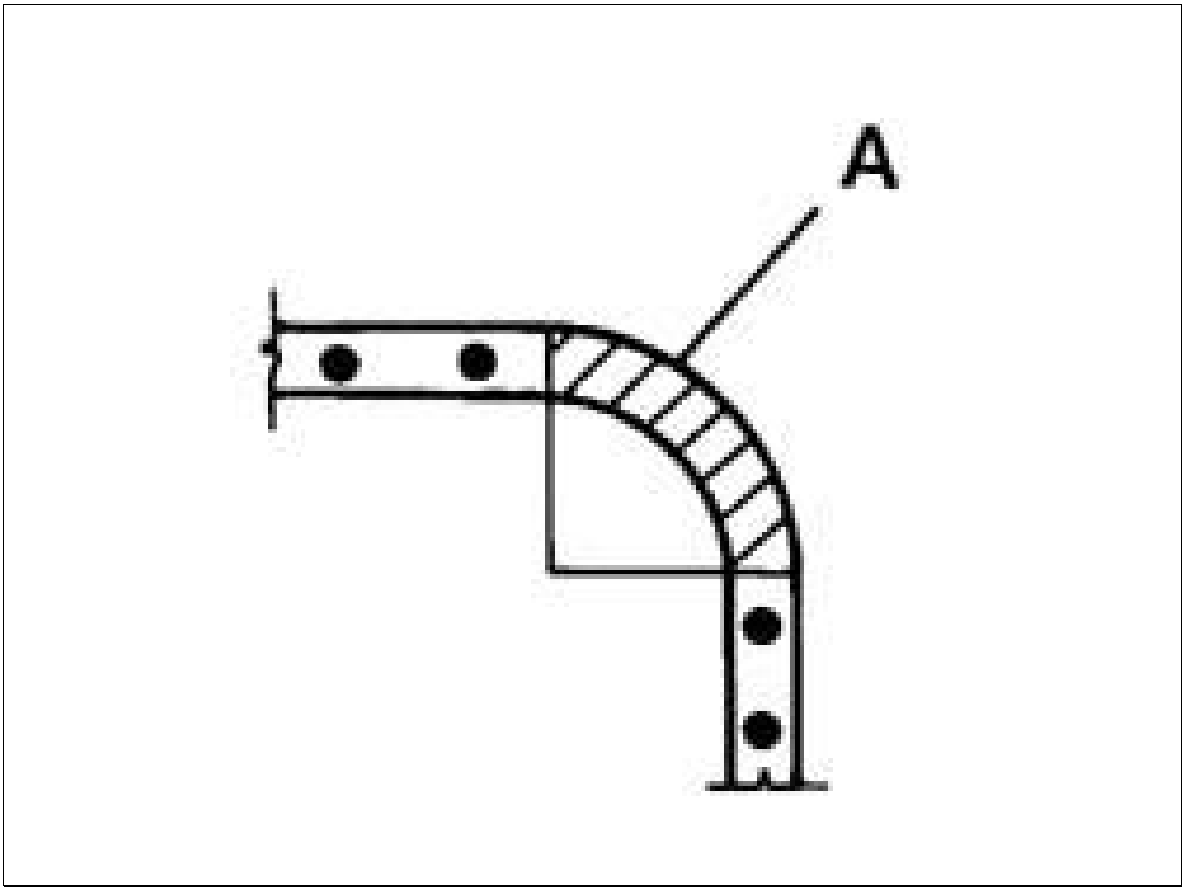
Courtesy of CHRYSLER GROUP, LLC

Spot welder, geometric specifications of the electrode depending on the thickness of the panel and the welding sequence.

A. Table for determining the distance of the spot welds from the edges of the panels according to their thickness.

B. Table of reference values for the correct spacing of spot welds depending on the thickness of the panel.

Fig 3: Spot Welding At Corners



Courtesy of CHRYSLER GROUP, LLC

NOTE:

Do not weld corner shaped surfaces. If welds are made on this type of surface it produces a concentration of tension that causes it to break.

A. Area where welding should not be carried out

Seam welding (MIG)-

NOTE:

MIG welding should be used for parts where spot welding cannot be used.

When seam (MIG) welding, check:

- The speed of the wire
- The correct execution of the seam welding beads (alternation of welding sections)

In this welding system the electrode (an automatic advance continuous wire) is protected by an

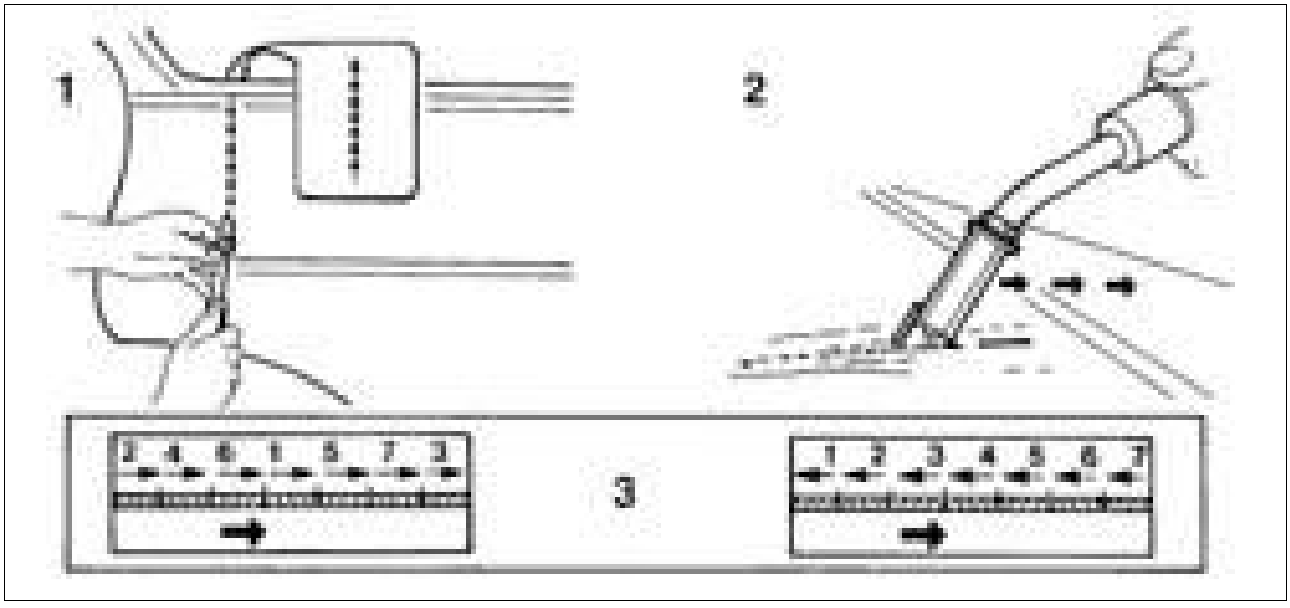
atmosphere of inert gases (this is where the initials MIG come from - Metal Inert Gas). - The continuous advance of the wire (which constitutes both the electrode and the weld metal), allows long welds to be made with no interruptions. The flow of inert gases sent to the welding area eliminates the air surrounding the fusion bath, preventing the oxidation of the metal. It also carries out the function of a protective coating for coated electrode welding. For these reasons, MIG welding differs from welding carried out with a coated electrode due to the absence of slag on the weld bead. Neither is it affected by the porosity that may be seen with normal arc welding.

> *WARNING:*
>
> *The use of MIG welding systems requires use of an extraction system to remove the harmful gases and fumes.*

Operating methods-

In order to butt weld two panels correctly using a MIG welder: grind or dress the panel thoroughly, position the equipment so that when carrying out the welding the torch outer casing does not become twisted or folded in such a way that could obstruct the advance of the wire, wear protective clothing and a suitable mask with an anti-glare visor (standard no. 8 glass for currents of 40-60A and no. 9 for currents of 80-200A). Be certain to have good electrical contact. Regulate the flow of gas in accordance with the instructions from the equipment's manufacturer. Make two tack welds at the ends of the join line and one in the middle, then make tack welds in between the two sections defined in this way. The spot welds should be 25 - 30 mm apart.

Fig 4: Correct Welding



Courtesy of CHRYSLER GROUP, LLC

The illustration shows the correct application of the welding (1).

NOTE:

The correct gap is about 1 mm.

Carrying out welding (2) using an inert gas electrode (MIG) to join adjacent panels.

It is not advisable to seam weld initially because, in addition to being difficult in practical terms, it may cause the panel to become distorted as a result of the build up of heat involved.

The difficulty in carrying out a single seam weld is that the torch must be moved fairly slowly to produce good penetration of the weld but sufficiently quickly so as not to run the risk of "burning" the panel.

Moving the torch too quickly also leads to a poor seal of the weld seam because, after grinding the seam, an insufficient layer of filler material remains to guarantee the strength of the joint.

After initially welding the panel, use a rigid disc grinder to grind the weld spots level with the panel.

At this point the alignment of the panels must be checked and, if necessary, corrected using a hammer and steel punch.

Then proceed with filling the gaps between the various spot welds through alternating welding sections, keeping the torch at an angle of about 60° (see previous illustration).

1. Tack welding the joint. The tack welds at the back of the panel are illustrated. Grinding the joint tack welds.
2. Welding.
3. The illustration shows two alternatives for the correct welding sequence in order to prevent the distortion of the panel.

The advantage of the welding operation is confirmed by the appearance of the rear of the weld seam which must show a series of spherical caps side by side for the entire length of the joint.

The MIG welder can also be used for joining overlapping panels where only one side is accessible.

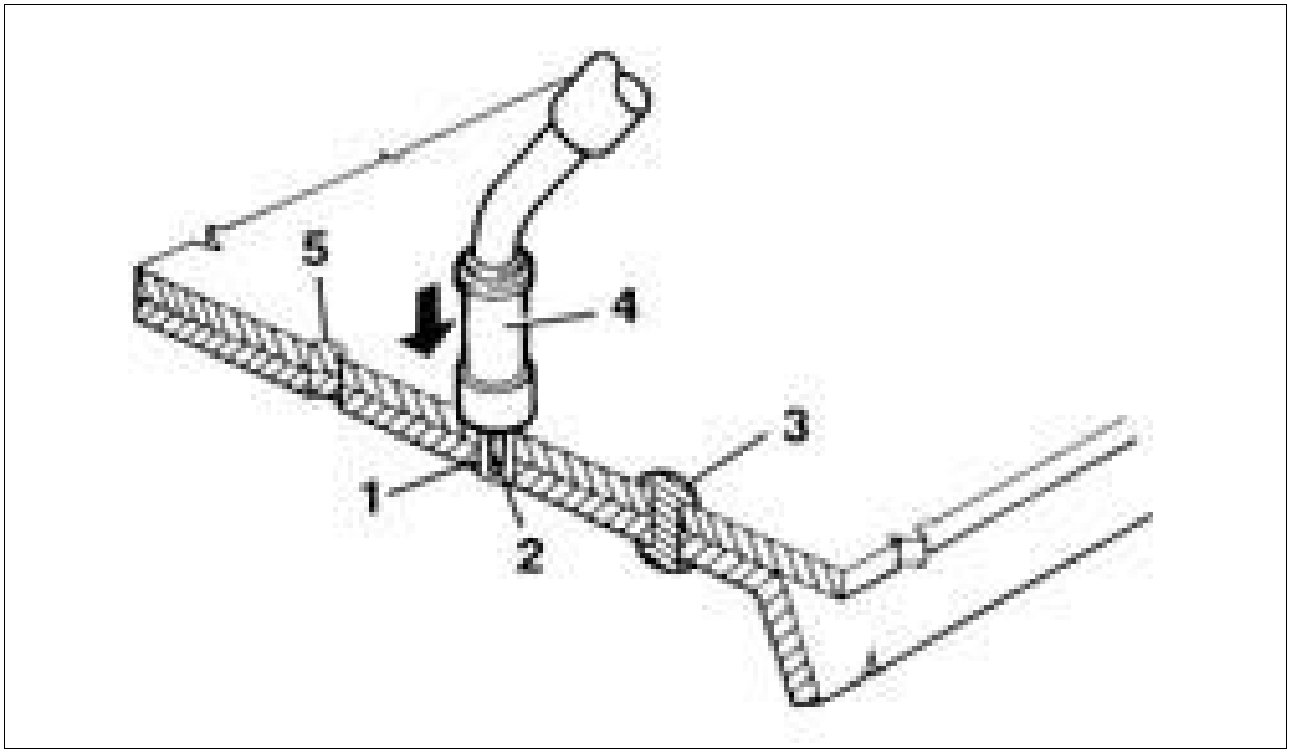
To carry out spot welding, the panels must adhere perfectly and the torch must be perpendicular to the surface.

In this way the action of the electrode initially melts the first panel, then the second, where a crater is produced which is filled by the advance of the electrode.

In order to carry out this operation correctly, the welding machine must be regulated to current values that are suitable for the thickness of the panels being worked on with the torch resting on its supports and pressure on the surface to facilitate the panels being brought close together.

If the panels are thicker than 1.5 - 2.5 mm, make an initial 0.6 mm hole at the sites of the plug welds.

Fig 5: Overlap Welding

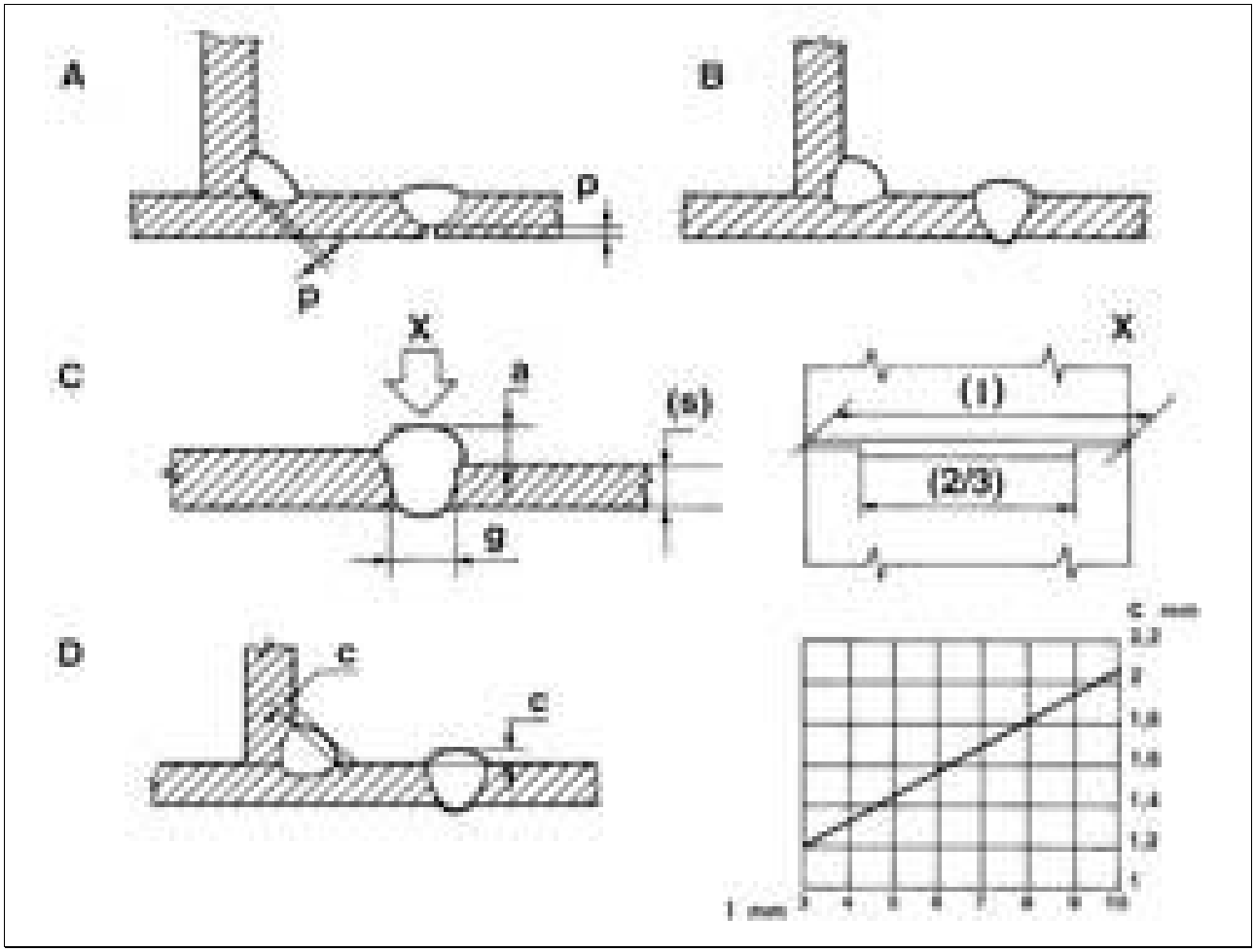


Courtesy of CHRYSLER GROUP, LLC

1. Panel join area
2. Electrode
3. Plug weld
4. Torch
5. Hole (only for thick panels)

General rules for visible welding-

Fig 6: Welding Examples



Courtesy of CHRYSLER GROUP, LLC

The following are important rules to be reckoned with:

- Incomplete penetration (p) should be 15-30% of the thickness of the panel (see illustration - point A incorrect welding, point B correct welding).
- The height of the seam (a) should be 60% of the thinnest thickness (s), the clearance (g) between the panels before welding should be 20% of the thinnest thickness for at least two thirds of the length (l) of the seam (see illustration, point C and detail X). the diagram illustrates the value of the convexity (c) of the seam depending on the length (l) of the weld section.
- The convexity (e) of the shape of the weld seam section should depend on the length of the actual seam (see illustration, point D).

Brazing-

Welding using brazing applies only if it is necessary to replace sheet metal that was previously welded with this type of welding and should only be carried out at the points recommended by the manufacturer.

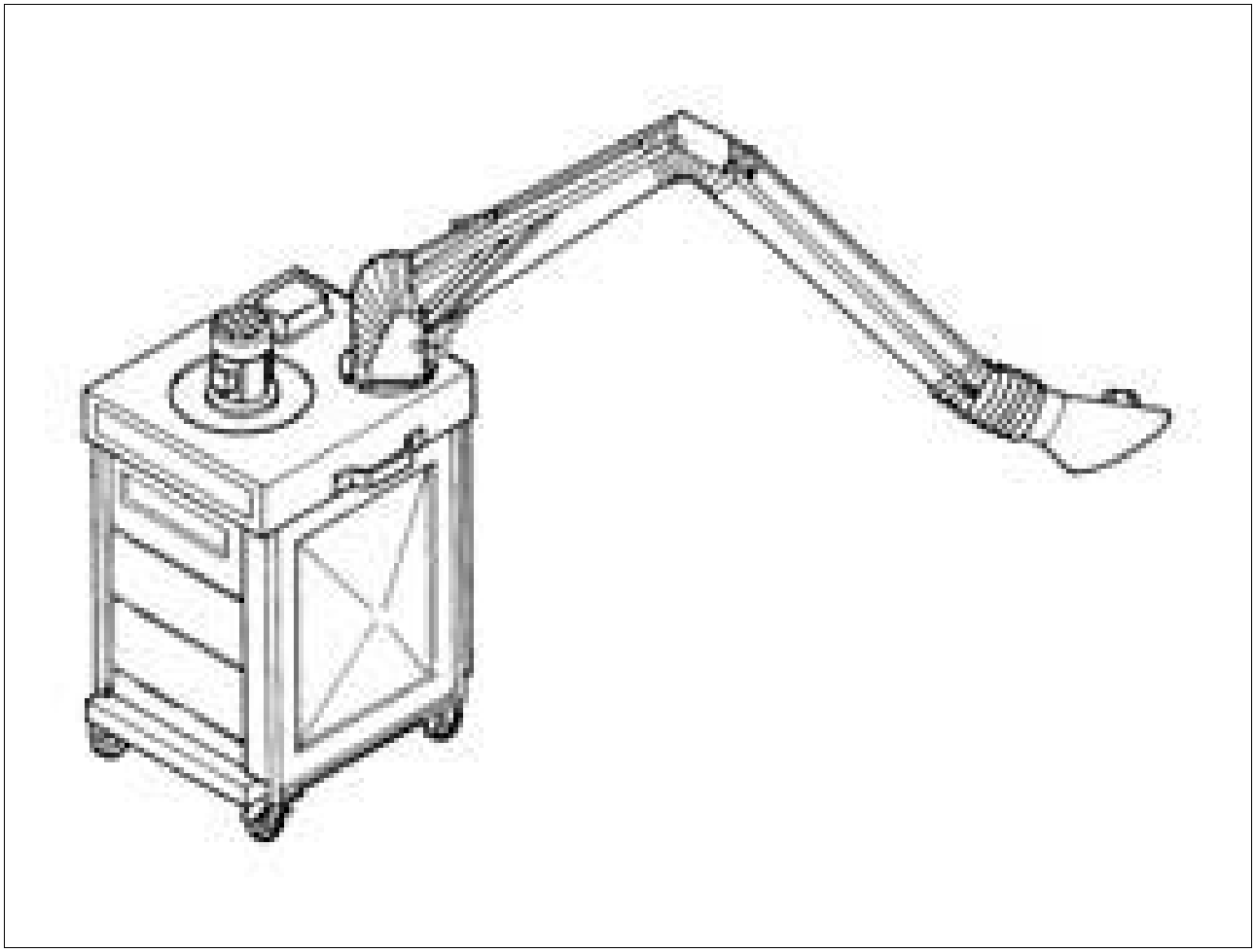
This type of welding does not guarantee mechanical properties that are comparable with the other systems described previously and therefore does not apply to the joining structural components.

WARNING:

When using oxy-acetylene torches for brazing observe the safety rules on their use and be certain that they operate safely. The use of this welding system requires the use of an air extraction system for the elimination of smoke and noxious gases.

Air filtration and purification systems-

Fig 7: Mobile Air Filtration And Purification System



Courtesy of CHRYSLER GROUP, LLC

When carrying out work that produces fumes, gases and dusts which are dangerous to the mechanic, air filtration and purification systems must be used.

These systems are designed for the various requirements to handle different volumes of air that require purification. The operation of these systems is usually based on the combined action of mechanical and electro-static filtration and purification using activated charcoal.

Filtration takes place in two stages: mechanical elimination, using mesh filters, of the largest particles of dust, then ionization of the air flow, which statically charges the particles of dust. These are then eliminated from the flow through an electrostatic process.

The flow of air is then purified by passing through activated charcoal filters. In these systems, in addition to the specific efficiency, the ease of handling and noise levels have been improved and are never exceeds a level of discomfort.

BODY STRUCTURE > DESCRIPTION > GENERAL PANELS AND FRAMEWORK > PAINTING

General information-

Painting the body has two basic objectives: protecting the surfaces of the panels from the elements and an aesthetic function of providing color and shine.

The large number of chemical products used in painting operations require that special care must be taken over their handling and usage.

These painting operations involve the emission of paint fumes and solvent vapors which, if inhaled by the technician, could seriously affect the health and should only be performed in specialty spray booths.

The technician should always wear a mask and protective clothing.

For operations that do not take very long, filtration masks can be used. For longer operations, pressurized masks must be used for total protection.

Equipment-

The following equipment is used during painting operations:

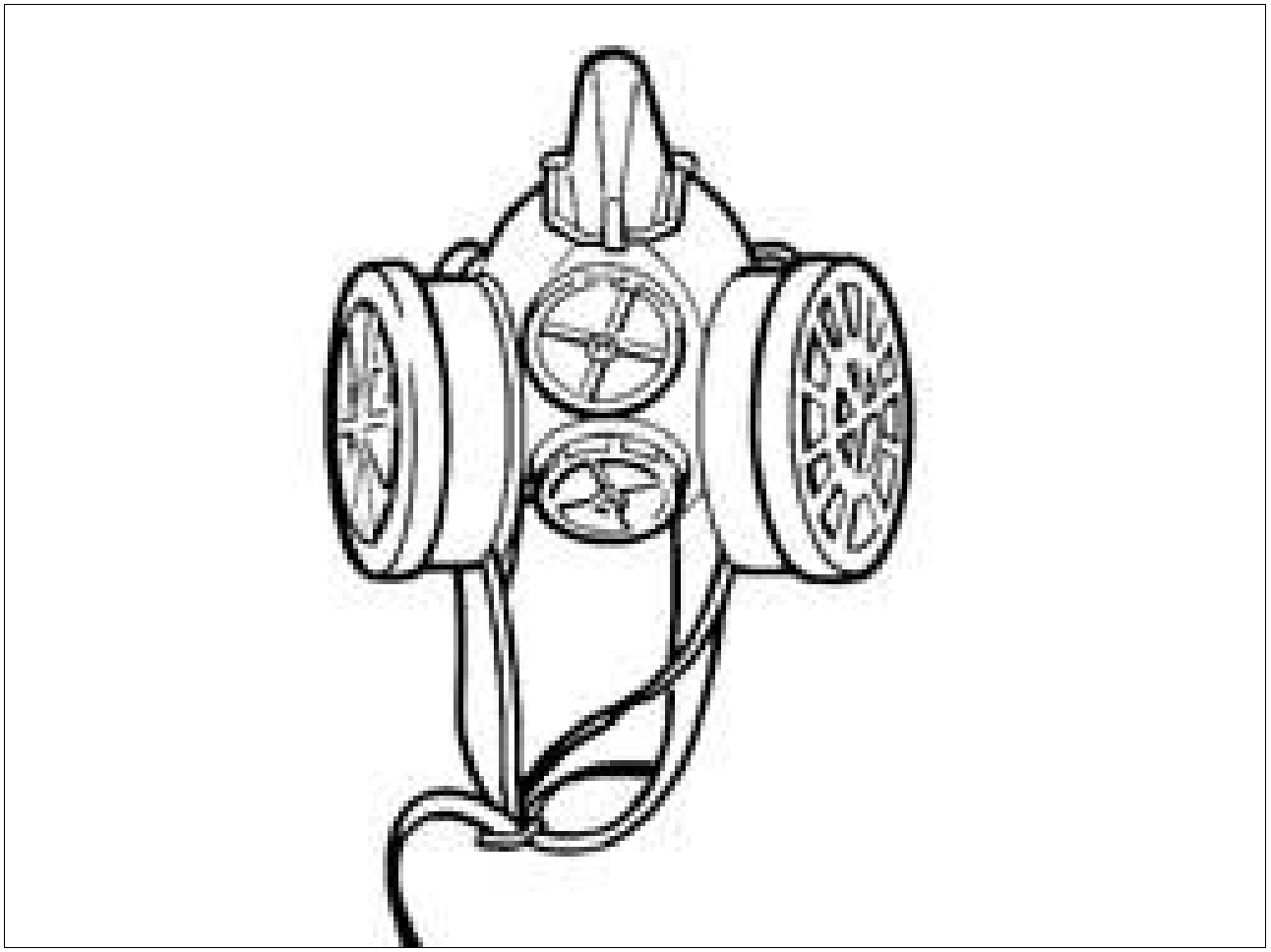
- Filtration masks and protective clothing
- Masking and taping machines
- Spray booths and baking ovens
- Spray guns
- Infrared lamps
- Polishing machines

Protective clothing-

When carrying out painting operations, suitable protective clothing must be worn to protect the technician from contact with harmful substances.

It is also advisable to use a barrier cream on any exposed areas (face, hands, arms), which must be removed at the end of the painting operations.

Fig 1: Filtration Mask

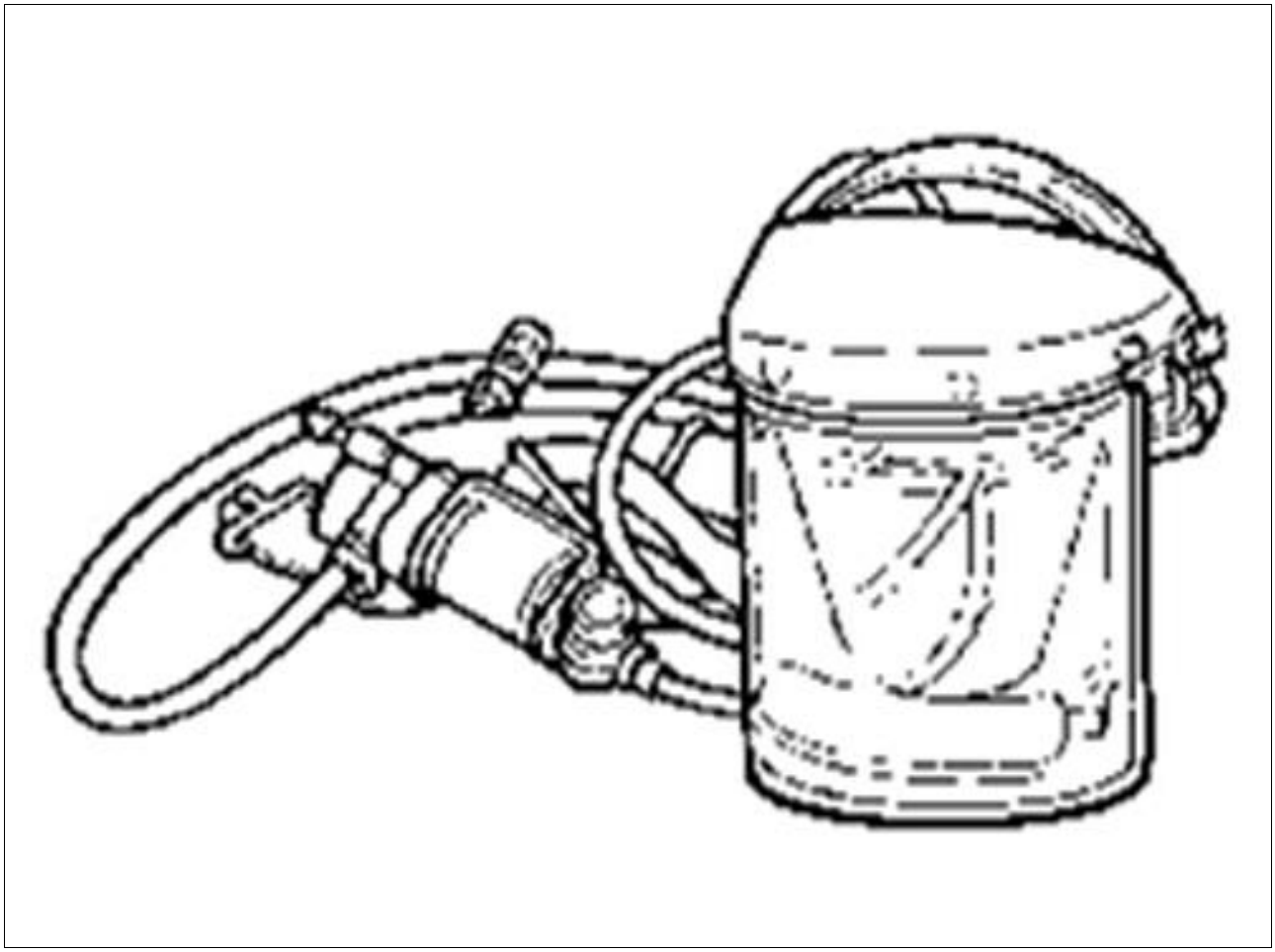


Courtesy of CHRYSLER GROUP, LLC

Filtration mask-

This type of mask only protects the technician's respiratory system and protective goggles and headgear should also be worn at the same time. Its use is recommended for small retouching operations.

Fig 2: Pressurized Mask



Courtesy of CHRYSLER GROUP, LLC

Pressurized mask-

This type of mask guarantees protection of the face and hair and is supplied with fresh air from the compressed air system used for the spray gun.

The air is purified further with a degree of separation close to 100%, by an activated charcoal filter fitted to the operator's belt.

The slight excess pressure created inside the helmet prevents the penetration of paint vapors.

The use of this mask is advisable for long painting operations.

Spray booth-

Spray booths are used for painting operations and for baking prepared parts. If the extent of the damage repaired is medium or large, it would be helpful to have a special spray booth and a hot air circulation oven for drying the paint.

The area should be equipped with an air conditioning system and filtered by purifiers, mainly comprising activated charcoal filters.

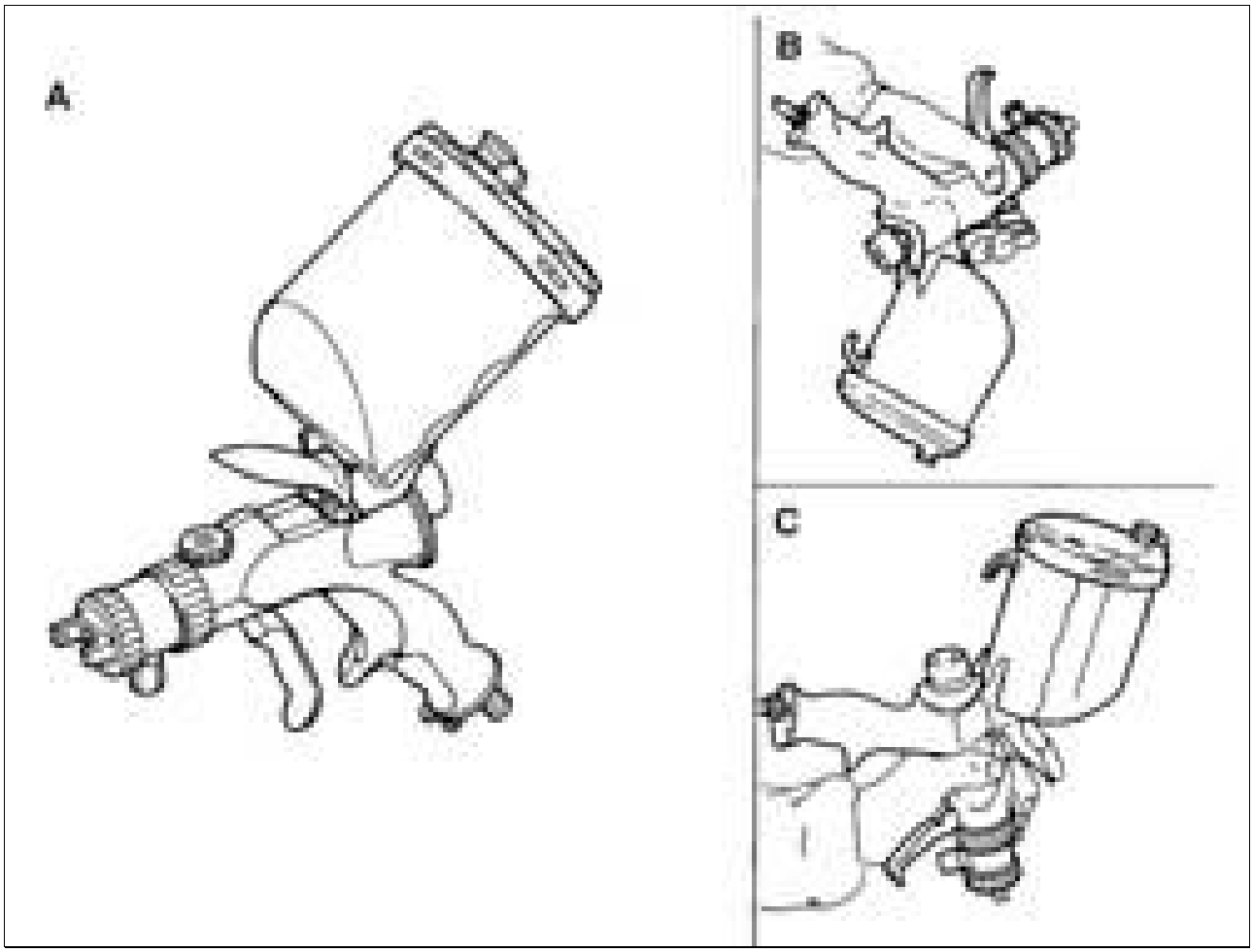
The optimum painting conditions that should be maintained in the booth during the painting stage are as follows:

- Constant temperature between 22 - 25 °C (71 - 77 °F)
- Constant relative humidity of 75 - 80%

The area in question could be:

- A combined painting and drying booth
- A separate painting booth and drying oven

Fig 3: Using Spray Gun



Courtesy of CHRYSLER GROUP, LLC

Use of the spray gun
A - Method of normal usage
B - Use from the bottom to the top
C - Use from the top to the bottom

Spray guns-

Developments in the study of ergonomics and spray painting techniques have led to a new type of High air Volume and Low atomization Pressure (HVLP) spray gun that allows a considerable reduction in paint overspray. This type of spray gun has been designed to be lighter with a grip that reduces fatigue and

eliminates cramp and with controls that require far less effort than conventional spray guns. The handling of the spray gun is also made easier by the even weight distribution and by the improved less bulky design that allows greater control over the part being worked on. The most interesting aspect of this spray gun is the supply system that allows painting in any direction, even with the cup facing downwards, also improving the cleaning procedures with considerable savings in terms of time and materials. The possibility of painting from the top or the bottom, in addition to preventing the formation of areas that are too wet or too dry, also allows access to areas of the bodywork that are difficult to reach. Special care has been taken over the ease of adjustment. This requires minimal, simple movements. This spray gun is extremely efficient, combining a very fine atomization capacity for any product, even water soluble, used by technicians at a pressure of 0.7 g (10 PSI) or below. Thanks to these capabilities for using paint materials, it has been possible to achieve a considerable economic saving and improved working conditions.

Portable infrared (IR) lamps-

If the operation is restricted to small retouches, then the use of an oven is not practical. In these cases the paint can be dried using special infrared lamps fitted on parabolic mirrors. The use of one or more lamps positioned so that the surface that has been retouched is subject to an even temperature allows the paint film to bake and the result is comparable to that achieved in an oven.

This type of lamp greatly reduces drying times, thereby also reducing energy consumption. The lamp should only be used when the paint has already dried to the extent that dust is kept to the outside of the applied finish (flashed off).

Fig 4: Using Polisher

Courtesy of CHRYSLER GROUP, LLC

Polishing machines-

The paint should only be polished after the paint has been baked and after it has cooled down to ambient temperature.

Polishing is also necessary if there are defects in the paint work such as dust, overspray, sagging, orange peel or small scratches.

To remedy these defects, there are numerous products to be applied either manually or mechanically using a polishing machine.

The tool should be parallel to the surface to be polished and should not be at an angle, in order to prevent the paint from overheating and producing circular concentric grooves.

Painting cycles-

It should be pointed out that all painting operations must be carried out using appropriate equipment.

It is recommended to use the specific environmentally-friendly solvents for cleaning the equipment.

There is a silver paintwork identification plate on the vehicle, normally inside the hood or the luggage compartment lid/tailgate, which contains the original color identification code for respraying or touching up.

The products used must comply to the laws in force in terms of safety, hygiene and the environment. In the absence of these, must meet European Community standards. It is the responsibility of the final user to check beforehand that the conditions of usage are compatible with the recommendations in the supplier safety documents.

As far as the practical aspects are concerned, suppliers must certify that the aesthetic/functional features (e.g. mechanical properties, resistance to ageing and protection against corrosion) meet the corporate technical specifications when applied in accordance with the methods indicated in detail in the "product technical chart". Conformity with corporate specifications guarantees that the manufactured article will be in line with the original painting process quality standards.

This certification implies absolute adherence to the instructions laid down for the individual products on Safety Data Sheet that the supplier is obliged to deliver to the user in compliance with the legislation in force in the territory (for Italy pursuant to Legislative Decrees 52/97 and 285/98 and subsequent amendments and additions).

BODYWORK REPAIRS (PANEL SUPPORT)

If a body panel is being replaced, check that dimensions, materials and surface treatment (galvanizing, cataphoresis, e-coating) of the replacement part conform to the manufacturer's specifications.

> *NOTE:*
>
> *Visually inspect the condition and suitability for use of the replacement sheet metal parts. If there are small dimples, it is permissible to restore the appearance and level the defect with a small amount of putty after straightening (insofar as possible) using levers, files, etc. It can be applied after cleaning (painting through cataphoresis or e-coating) the surface near the defect; after it has completely hardened, dry sand using P180-P220 grade sandpaper.*

Painting a panel secured to the bodywork by a mechanical fastening-

- Clean the replacement panel with a low Volatility Organic Compound (VOC) to remove any dust or grease that may be present.
- Gently dry sand the entire surface to be painted, using P320 grade sandpaper and a rotary/orbital power sander equipped with an vacuum cleaner.

> *NOTE:*
>
> *Take care not to nick/remove the cataphoretic painting (e-coating).*

- Remove any residues of dust using compressed air and clean the entire surface using a low VOC detergent or an anti-static product.
- If during the above described operations (point 2) the sheet metal is accidentally stripped by the removal of the cataphoresis (e-coat) and zinc coating, anti-corrosion protection must be restored by spraying a thick epoxy primer on the affected areas.
- If appropriate, seal the joints by applying (single or two component) sealant that hardens at ambient temperature.
- Apply a filler, prepared previously following the instructions on the product technical chart, by spraying 2 crossover coats, at intervals of a few minutes, until the thickness recommended on the product technical chart is reached (2 - 4 crossover coats). Wait for 10 to 15 minutes at ambient temperature before starting the drying process.
- Dry the base coat in an oven at a temperature of 40° - 60° C (104° - 140° F) about 30 - 40 minutes.
- When it is dry (and the panel is cold), dry sand the surface using P400 grade sandpaper to remove any defects.
- Remove any residues of dust using compressed air and clean the entire surface firstly using a low VOC detergent and then finish off with an anti-static cloth.
- Prepare the paint (single stage or two stage) and/or the clear coat for spraying following the instructions on the technical chart for the product and use it within the recommended time.
- Apply the paint in 2 crossover coats with a few seconds in between until the desired thickness and color matching is achieved.
- Leave the paint to dry at ambient temperature, following the instructions on the supplier's technical chart for the time and conditions.
- For aesthetic finishes with single stage paint, dry in the oven at a temperature of 60° C (140° F) for 40 minutes. Alternatively, dry using an IR ray lamp, following the instructions described by the manufacturer (distance of radiant panel from the surface to be dried; exposure time).
- For two stage paint aesthetic finishes, proceed with the application of the clear coat (opaque base coat) prepared previously in accordance with the instructions on the technical chart with 2 or 3 crossover coats with intervals of a few seconds in between.
- Dry in the oven at a temperature of 60° C (140° F) for 40 minutes. Alternatively, dry using an IR ray lamp, following the instructions described by the manufacturer (distance of radiant panel from the surface to be dried; exposure time).
- Polish the surface at least 24 hours after the last coat has baked (and the panel is cold).

Painting a replacement panel secured to the bodywork by welding -

NOTE:

Before spot welding the panels, apply electro-weldable galvanizing protection to the ground edges of the join area (as described in the Service Manual).

- Clean the replacement panel with a low VOC detergent to remove any dust or grease that may be present.
- Fasten the replacement body panel to the bodywork by welding, preserving the integrity of the surrounding surfaces/elements by masking them and - wherever possible - by disassembling them.
- Wait until the work surfaces have cooled down, then proceed with removing the spatter and oxides that have formed in the proximately of the welding seam.
- Brushing and dry sanding with P80 - P120 grade sandpaper.
- If the welding is visible and it is therefore necessary to restore the aesthetic aspect and continuity of the profiles, fill the joint and once it has totally hardened level it out using dry P100 - P120 grit sandpaper on a pneumatic random orbital sander.
- If during these operations the sheet metal is accidentally stripped by the removal of the cataphoresis (e-coat) and zinc coating, anti-corrosion protection must be restored by spraying a high build epoxy primer on the affected areas.
- Remove any residues of dust using compressed air and clean the entire surface using a low VOC detergent or an anti-static product.
- If appropriate, seal the joints by applying (single or two component) sealant that hardens at ambient temperature.
- Apply a filler primer, prepared previously following the instructions on the product technical chart, by spraying 2 crossover coats, at intervals of a few minutes, until the thickness recommended on the product technical chart is reached (2 - 4 crossover coats). Wait for 10 to 15 minutes at ambient temperature before starting the drying process.
- Dry the primer coat in an oven at a temperature of 40° - 60° C (104° - 140° F) for about 30 - 40 minutes.
- Inspect the surface that has been worked on and remove any defects by dry-sanding the surface using P400 grade sandpaper.
- Remove any residues of dust using compressed air and clean the entire surface firstly using a low VOC detergent and then finish off with an anti-static cloth.
- Prepare the paint (single stage or two stage) and/or the clear coat for spraying following the instructions on the technical chart for the product and use it within the recommended time.
- Apply the paint in 2 crossover coats with a few seconds in between until the desired thickness and color matching is achieved.
- Leave the paint to dry at ambient temperature, following the instructions on the supplier's technical chart for the time and conditions.
- For aesthetic finishes with single stage paint, dry in the oven at a temperature of 60° C (140° F) for 40 minutes. Alternatively, dry using an IR ray lamp, following the instructions described by the manufacturer (distance of radiant panel from the surface to be dried; exposure time).
- For aesthetic finishings with a two stage paint, proceed to apply the clear coat prepared earlier following the instructions provided in the technical sheet with 2 or 3 cross-coats and with a flash time of a few seconds between coats.
- Dry in the oven at a temperature of 60° C (140° F) for 40 minutes. Alternatively, dry using an IR ray

lamp, following the instructions described by the manufacturer (distance of radiant panel from the surface to be dried; exposure time).

- Polish the surface at least 24 hours after the last coat has baked (and the panel is cold).

Partial repainting (one or more parts) of the bodywork-

- Protect the areas not involved in the painting operation by masking.
- Restore the aesthetic appearance (profile and surface appearance) of the damaged panel. Lastly, level the area worked on using filler which can be applied after cleaning the surface using special detergent if the damage caused has not exposed the panel or if the panel has been exposed, the corrosion protection should be restored through the local application of an epoxy primer.
- After the filler is completely set, dry sand using P180 - P220 grade sandpaper.
- Then smooth the area to be re-painted with P150 or P220 grit sandpaper, widening the perimeter of the area to be worked on with a slight surface unevenness tapering off towards the exterior, taking care to eliminate all traces of oxidation from the stripped sheet metal.
- Remove any residues of dust using compressed air and clean the entire surface using a low VOC detergent or an anti-static product.
- If appropriate, seal the joints by applying (single or two component) sealant that hardens at ambient temperature.
- Apply a primer filler, prepared previously following the instructions on the product technical chart, by spraying 2 crossover coats, at intervals of a few minutes, until the thickness recommended on the product technical chart is reached (2 - 4 crossover coats). Wait for 10 to 15 minutes at ambient temperature before starting the drying process
- Dry in an oven at a temperature of 40° - 60° C (104° - 140° F) for about 30 - 40 minutes.
- Check the surface that has been worked on and remove any defects by dry-sanding the surface using P 400 grade sand paper.
- Remove any residues of dust using compressed air and clean the entire surface firstly using a low VOC detergent and then finish off with an anti-static cloth.
- Prepare the paint (single stage or two stage) and/or the clear coat for spraying following the instructions on the technical chart for the product and use it within the recommended time.
- Apply the paint in 2 crossover coats with a few seconds in between until the desired thickness and color matching is achieved.
- Leave the paint to dry at ambient temperature, following the instructions on the supplier's technical chart for the time and conditions.
- For aesthetic finishes with single coat paint, dry in the oven at a temperature of 60° C (140° F) for 40 minutes. Alternatively, dry using an IR ray lamp, following the instructions described by the manufacturer (distance of radiant panel from the surface to be dried; exposure time).
- For aesthetic finishes with a two stage paint, proceed to apply the clear coat prepared earlier following the instructions provided in the technical sheet with 2 or 3 cross-coats and with a flash time of a few seconds between coats.
- Dry in the oven at a temperature of 60° C (140° F) for 40 minutes. Alternatively, dry using an IR ray

lamp, following the instructions described by the manufacturer (distance of radiant panel from the surface to be dried; exposure time)

- Polish the surface at least 24 hours after the last coat has baked (and the panel is cold).

PAINTING PLASTIC COMPONENTS PROCEDURE

(Thermoplastic type Poleofinica (PP) example: fascias)

Painting a replacement bumper (fascia)-

In the case of replacement, check that the replacement part complies with the corporate technical specifications in terms of dimensions, materials and surface treatment (black base with solvent or water adhesion promoter 3 ± 0.5 gloss with adhesion promoter and aesthetic finish function).

NOTE:

In the presence of small surface defects, the aesthetic appearance of the part may be restored by levelling out the defect by filling it with filler. This may be done after cleaning of the surface around the defect; after total hardening, smooth with P320 - P400 grit dry sandpaper.

- *Degrease the bumper (fascia) as a precaution to remove any dust or grease using detergent (example: isopropyl alcohol).*
- *Gently sand the surface using fine grade sandpaper (example: P600), taking care not to remove too much of the adhesion promoter film.*

NOTE:

If anti-static liquids are used, first check their compatibility with the black coating because some of them may be particularly aggressive and even cause its removal with the result that the aesthetic finish does not adhere.

- Blow through with compressed air (filtered and purified) and clean using anti-static cloths/special detergents.
- Mask the areas not being painted in the body tint (example: rubbing strips, lower section, etc.).
- Prepare the paint (single stage or two stage) and/or the clear coat for spraying following the instructions on the technical chart for the product and use it within the recommended time
- Apply the paint in 2 crossover coats with a few seconds in between until the desired thickness and color matching is achieved.
- Leave the paint to dry at ambient temperature, following the instructions on the supplier's technical chart for the time and conditions.
- For aesthetic finishes with single stage paint, dry in the oven at a temperature of 60° C (140° F) for 40 minutes. Alternatively, dry using an IR ray lamp, following the instructions described by the manufacturer (distance of radiant panel from the surface to be dried; exposure time).

- For aesthetic finishes with a two stage paint, proceed to apply the clear coat prepared earlier following the instructions provided in the technical sheet with 2 or 3 cross-coats and with a flash time of a few seconds between coats.
- Dry in the oven at a temperature of 60° C (140° F) for 40 minutes. Alternatively, dry using an IR ray lamp, following the instructions described by the manufacturer (distance of radiant panel from the surface to be dried; exposure time).
- Wait until the treated surface has cooled down, then remove the masking.

> *NOTE:*
>
> *When removing the masking at the joints between parts that are not painted and those which are, in order to prevent peeling, it is advisable to remove the masking after drying.*

- Take care over the non painted (black) parts to prevent the unpainted parts on show turning white.
- Polish the surface using fine abrasive paste and/or polish.

Partial repainting of a bumper-

- Blow compressed air through the affected area involved in the repair to allow the complete removal of the aesthetic finish that has been affected.
- Mask the areas not being painted in the body color.
- Apply the primer and filler adhesion promoter, prepared previously following the instructions on the product technical chart, by spraying 2 crossover coats, at intervals of a few minutes, until the thickness recommended on the product technical chart is reached (2 - 4 crossover coats). Wait 10-15 minutes at ambient temperature before proceeding with drying.
- If needed, restore the aesthetic appearance (profile and surface aspect) of the affected component. Lastly, use filler to level the area being worked on.
- After the filler has completely set, dry-sand using P320 - P400 grade sandpaper.
- Then smooth the area to be re-painted with P150 or P220 grit sandpaper, widening the perimeter of the area to be worked on with a slight surface unevenness tapering off towards the exterior.
- Remove any residues of dust using compressed air and clean the entire surface using a low VOC detergent or an anti-static product.
- Dry in the oven at a temperature of 40° - 60° C (104° - 140° F) for about 30 - 40 minutes.
- Inspect the surface previously worked on and remove any defects by dry sanding the surface using P 400 grade sandpaper.
- Remove any residues of dust using compressed air and clean the entire surface firstly using a low VOC detergent and then finish off with an anti-static cloth.
- Prepare the paint (single stage or two sage) and/or the clear coat for spraying following the instructions on the technical chart for the product and use it within the recommended time.
- Apply the paint in 2 crossover coats with a few seconds in between until the desired thickness and

color matching is achieved.

- Allow the paint to dry at ambient temperature, following the instructions on the supplier's technical chart for the time and conditions.
- For aesthetic finishes with single coat paint, dry in the oven at a temperature of 60° C (140° F) for 40 minutes. Alternatively, dry using an IR ray lamp, following the instructions described by the manufacturer (distance of radiant panel from the surface to be dried; exposure time).
- For aesthetic finishes with a two stage paint, proceed to apply the clear coat prepared earlier following the instructions provided in the technical sheet with 2 or 3 cross-coats and with a flash time of a few seconds between coats.
- Proceed with drying in the oven at a temperature of 60° C (140° F) for 40 minutes. Alternatively, dry using an IR ray lamp, following the instructions described by the manufacturer (distance of radiant panel from the surface to be dried; exposure time).
- Polish the surface using fine abrasive paste and/or polish.

PAINTING A THERMOSETTING PLASTIC COMPONENT (KMC-BMC-SMC)-

If a thermosetting element is being replaced, check that dimensions, materials and surface treatment (insulating primer) of the replacement part conform to the company's technical specifications.

Replacement-

Visually check the integrity and suitability for use of the replacement part.

> *NOTE:*
>
> *In the presence of small surface defects, the aesthetic appearance of the part may be restored by levelling out the defect by filling it with filler. This may be done after cleaning of the surface around the defect; after total hardening, smooth with P320 - P400 grit dry sandpaper.*

Repair-

- Restore the appearance (profile and surface appearance) of the affected area.
- Blow compressed air on the affected repair area.
- Level the surface using filler; it can be applied after cleaning the surface using appropriate detergent.
- After the filler is completely set, dry sand using P320 - P400 grade sandpaper.

Painting-

- Mask the areas not being painted, as appropriate; then overhaul the surface involved using P150 or P220 grade abrasive paper extending the perimeter of the area being worked on, in the case of a repair operation, through surface shading towards the outside.
- Remove any residues of dust using compressed air and clean the entire surface using a low VOC detergent or an anti-static product.

- Apply the primer coat, prepared previously following the instructions on the product technical chart, by spraying 2 crossover coats, at intervals of a few minutes, until the thickness recommended on the product technical chart is reached (2 - 4 crossover coats). Wait 10-15 minutes at ambient temperature before proceeding with drying.
- Dry in the oven at a temperature of 40° - 60° C (104° - 140° F) for about 30 - 40 minutes.
- Inspect the surface that has been worked on and remove any defects by dry-sanding the surface using P400 grade sandpaper.
- Remove any residues of dust using compressed air and clean the entire surface first using a low VOC detergent and then finish off with an anti-static cloth.
- Prepare the paint (single stage or two stage) and/or the clear coat for spraying following the instructions on the technical chart for the product and use it within the recommended time.
- Allow the paint to dry at ambient temperature, following the instructions on the supplier's technical chart for the time and conditions.
- For aesthetic finishes with single stage paint, dry in the oven at a temperature of 60° C for 40 minutes. Alternatively, dry using an IR ray lamp, following the instructions described by the manufacturer (distance of radiant panel from the surface to be dried; exposure time).
- For aesthetic finishes with a two stage paint, proceed to apply the clear coat prepared earlier following the instructions provided in the technical sheet with 2 or 3 cross-coats and with a flash time of a few seconds between coats.
- Dry in the oven at a temperature of 60° C (140° F) for 40 minutes. Alternatively, dry using an IR ray lamp, following the instructions described by the manufacturer (distance of radiant panel from the surface to be dried; exposure time).
- Polish the surface using fine abrasive paste and/or polish.

PAINTING A THERMOPLASTIC COMPONENT-

For the repair/painting, identify the specific product line for the materials constituting the surfaces on which the operation is to be carried out. Then proceed by following the instructions given on the technical charts, and the operating methods described in the previous paragraphs.

BODY STRUCTURE > DESCRIPTION > GENERAL PANELS AND FRAMEWORK > RESTORING CORROSION PROTECTION/SOUND INSULATION/SEALANT TREATMENTS

> *WARNING:*
>
> *When using chemical products, strictly follow the safety instructions on the safety data sheet that the supplier must supply to the user.*

The treatments carried out on the body in order to produce the necessary corrosion resistance, sound insulation and sealant properties may be damaged or destroyed during the repair operations.

They must be restored during the appropriate repair operations in order to restore the vehicle to its original condition.

Tooling-

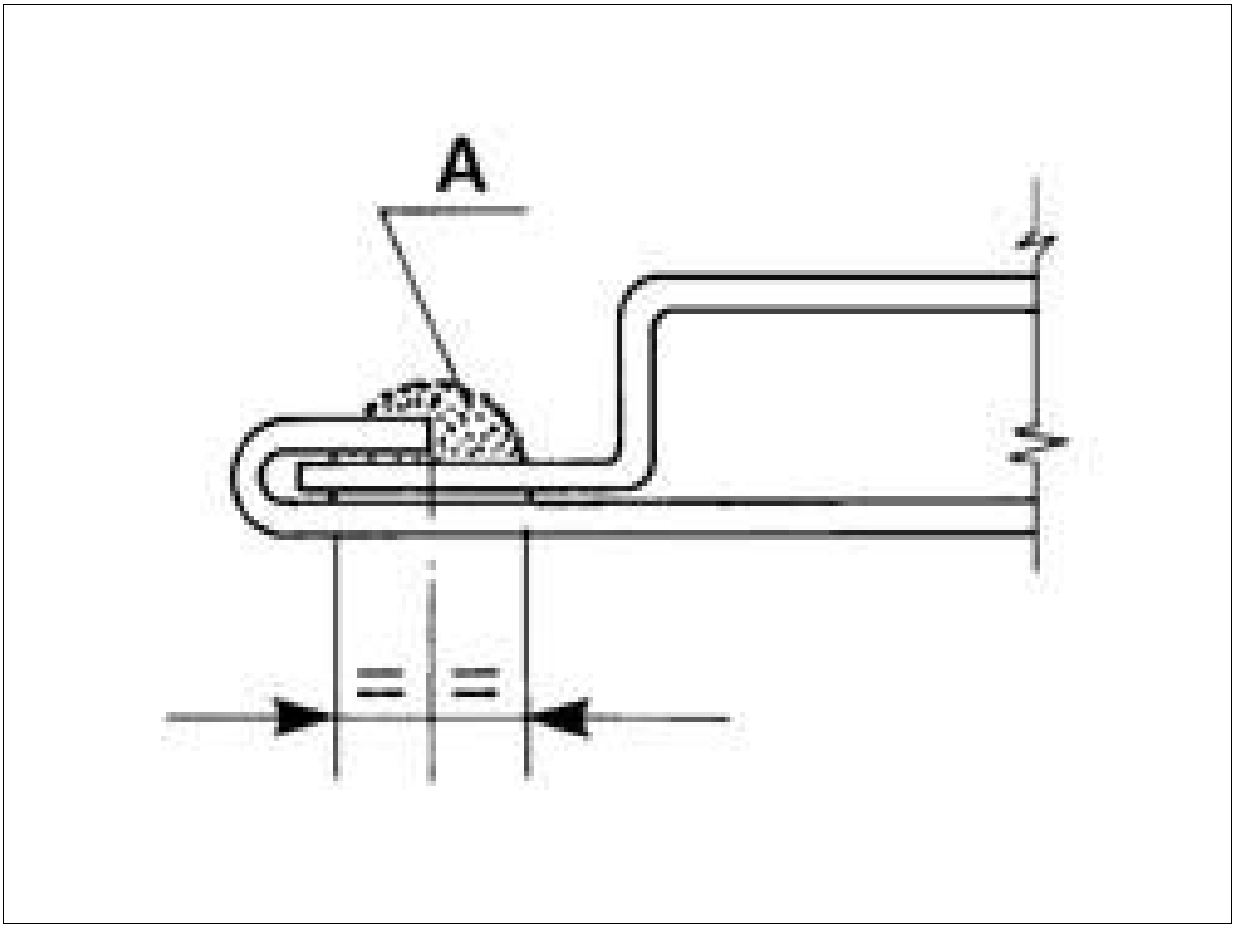
The following equipment is used:

- Pneumatic guns for sealant product extrusion
- Foam injection systems
- Wax based oil injection systems

In box sections that are replaced or repaired by welding or overheating, the internal anti corrosion protection must be renewed by:

- Applying rust converter to hot spots or welded areas which must dry for at least 24 hours at ambient temperature 20° C (68° F)
- Applying wax protection in the replaced or repaired box section (type PPG 853.764 or an equivalent product)
- Renewing the rigid expanded polyurethane foam in the box sections (example: BOSTON PUR foam, TORGGLER - Merano Schiuma P.U.R. - or an equivalent product)
- Renewing the sealer for the joints, where necessary
- Sealing the flanges for the moving parts (example doors and hood) supplied as replacement parts according to the following instructions; clean the area of the spare part which has undergone cataphoretic treatment, using heptane or anti-silicone/anti-static solvents

Fig 1: Sealant Application



Courtesy of CHRYSLER GROUP, LLC

Example of sealant application
A - Sealant

- Applying a bead of SIKAFLEX 221 SIKA (*) polyurethane sealant of the shape and in the position illustrated in the diagram
- Leave the sealant to dry for 24 hours at ambient temperature 20° C (68° F) or 40 minutes at 60° C (140° F)
- Carrying out the normal painting cycle for the component. Apply sound deadening product or stone chipping paint to the outer parts replaced or repaired, as necessary

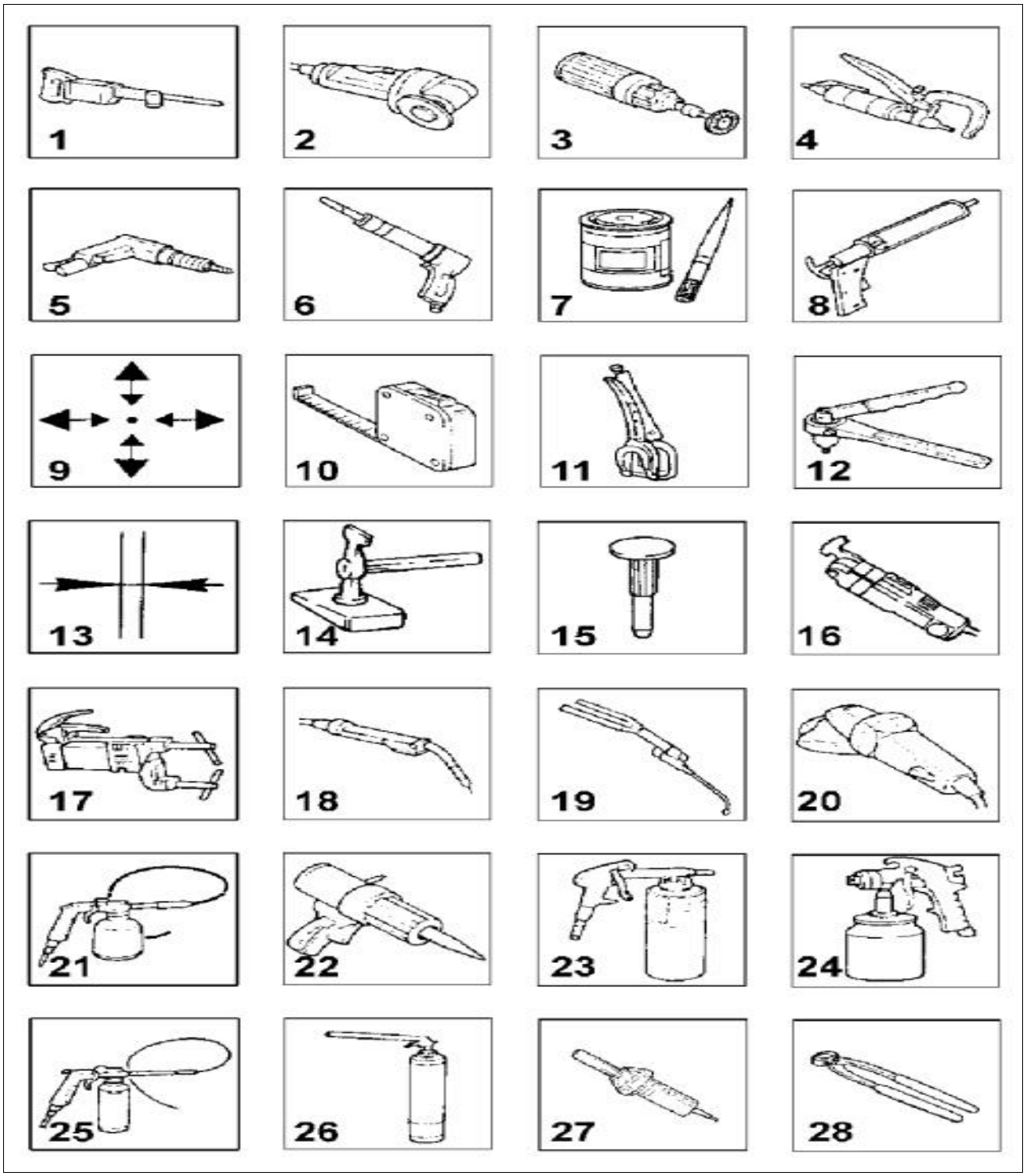
(*) Alternatively, use a similar 3M product or other equivalent products, following the supplier's instructions.

BODY STRUCTURE > DESCRIPTION > SYMBOLS REMOVAL AND INSTALLATION

NOTE:

The following is the graphic index chart and description of the symbols that appear in the repair procedures

Fig 1: Tool Symbols



Courtesy of CHRYSLER GROUP, LLC

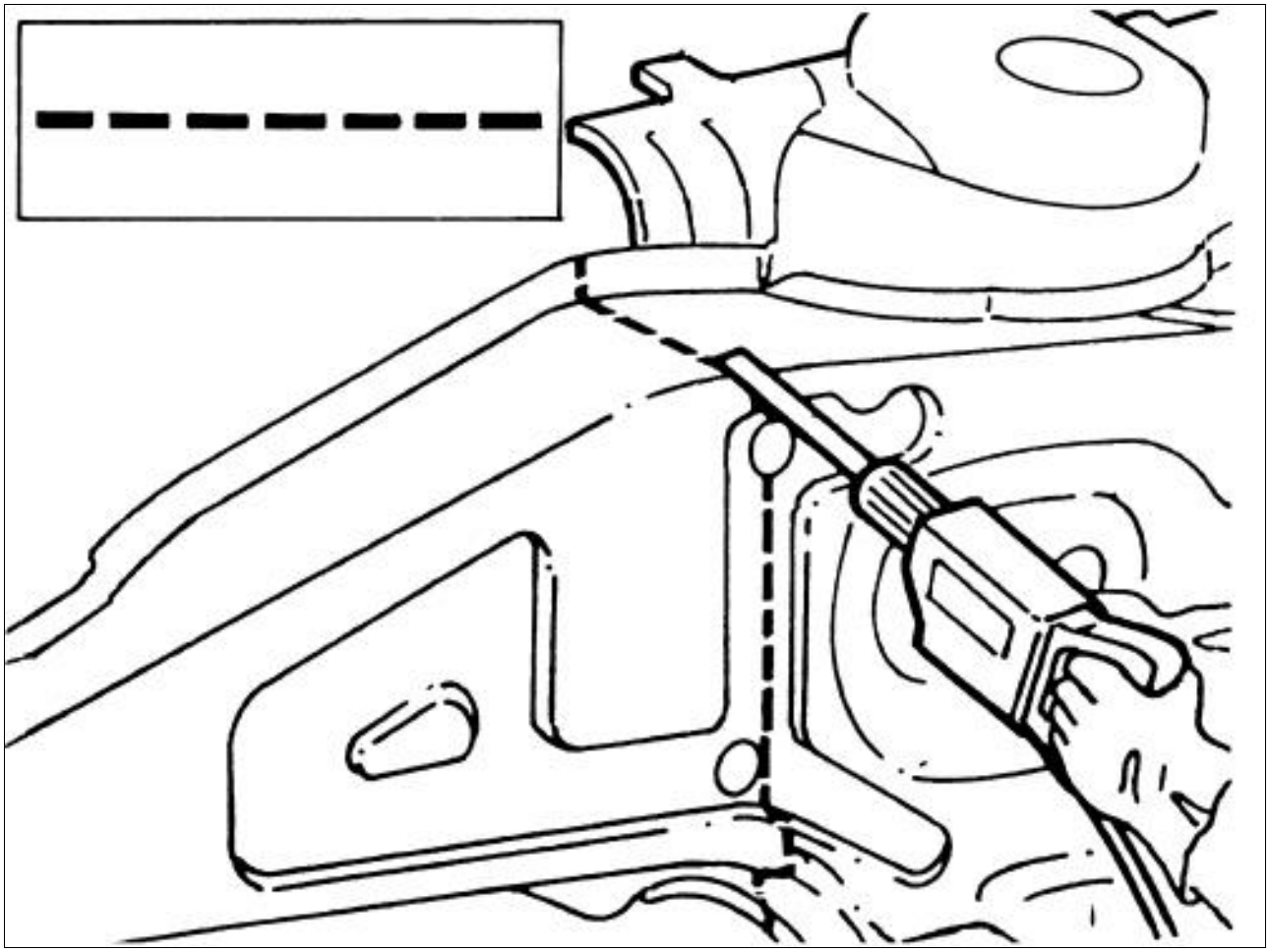
BODY STRUCTURE > DESCRIPTION > SYMBOLS REMOVAL AND INSTALLATION > SYMBOLS

1- Cutting with alternating saw	15- Removing spot welds with hammer and chisel
2- Cutting with circular blade saw	16- Removing treatment with power knife
3- Cleaning with rotary brush	17- Spot welding
4- Removing spot welds with spot weld removal tool	18- MIG welding
5- Removing spot welds with drill. Drilling for MIG welding	19- Welding with oxy-acetylene torch
6- Removing body panel with chisel. Drilling for MIG welding	20- Grinding
7- Applying electro-weldable/weld through protections	21- Applying rust-proofing protection
8- Applying high thickness electro-weldable/weld through protections	22- Application of sealants
9- Centering components	23- Application of underbody protection
10- Measurement	24- Application of paint
11- Fastening components	25- Application of protective waxes
12- Fastening threaded rivets	26- Application of foam products
13- Checking alignment gaps	27- Heating with hot air
14- Straightening edges with hammer and dolly block	28- Removing metal off-cuts

BODY STRUCTURE > DESCRIPTION > SYMBOLS REMOVAL AND INSTALLATION > MACHINING SYMBOLS

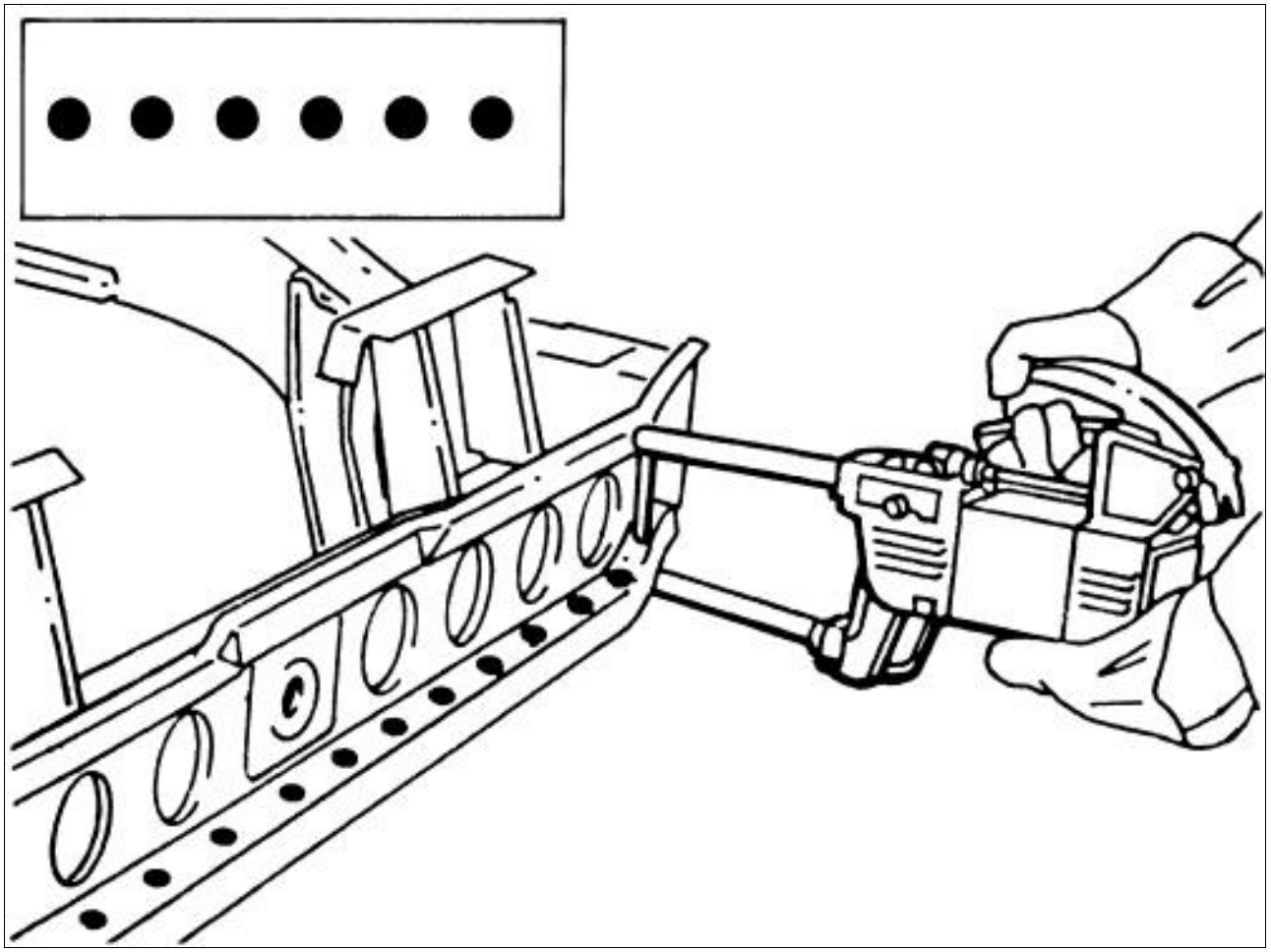
Shown below are the symbols of the processes that are described in the repair procedures with an example of their application. In the illustrations for the procedures, next to the number of the procedure steps for welding operations, sometimes there are numbers between parentheses that indicate the number of spot welds to be made or to filled by MIG welding.

Fig 1: Cutting With A Power Tool Or Pneumatic Chisel



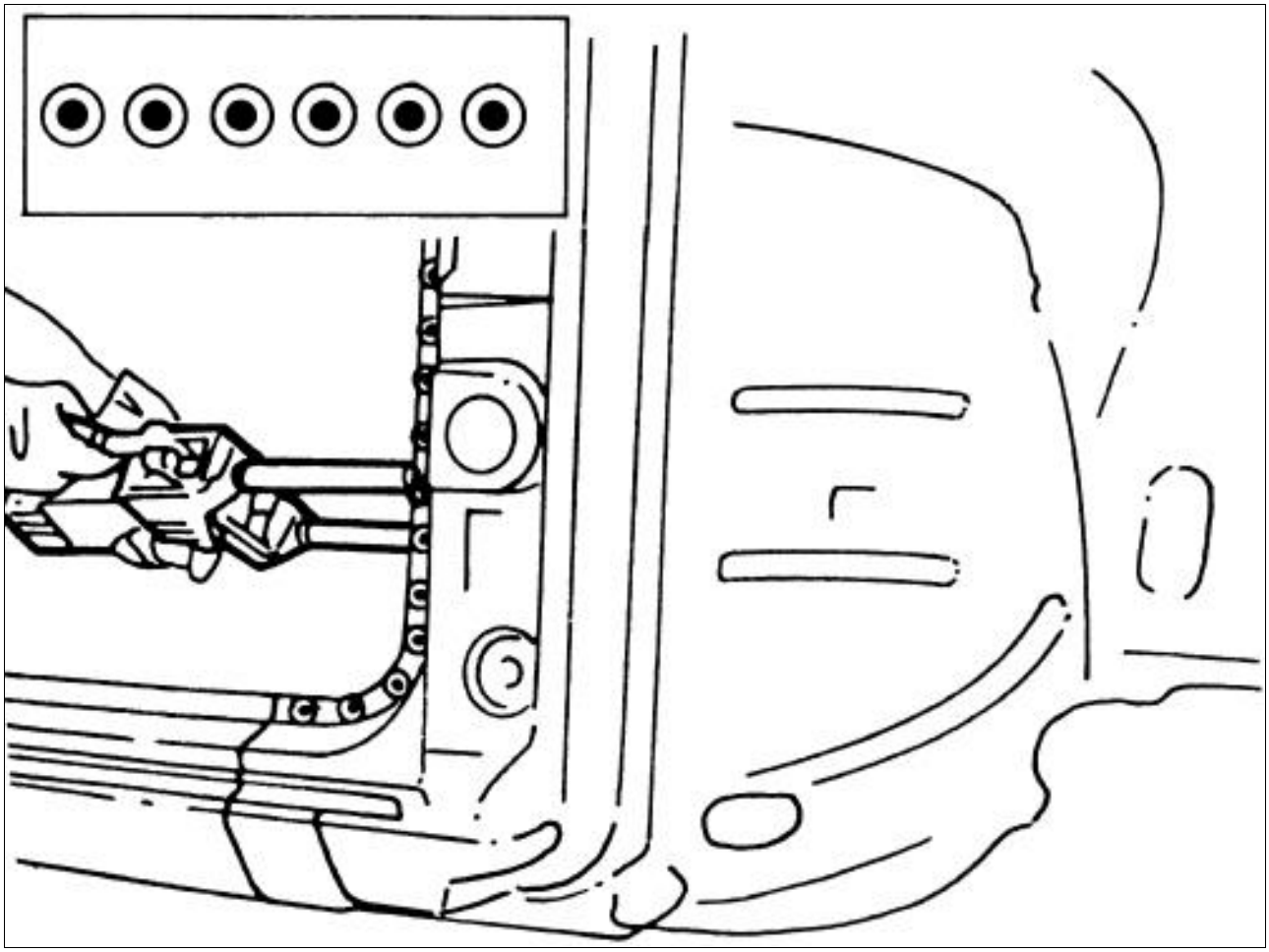
Courtesy of CHRYSLER GROUP, LLC

Fig 2: Spot Welding



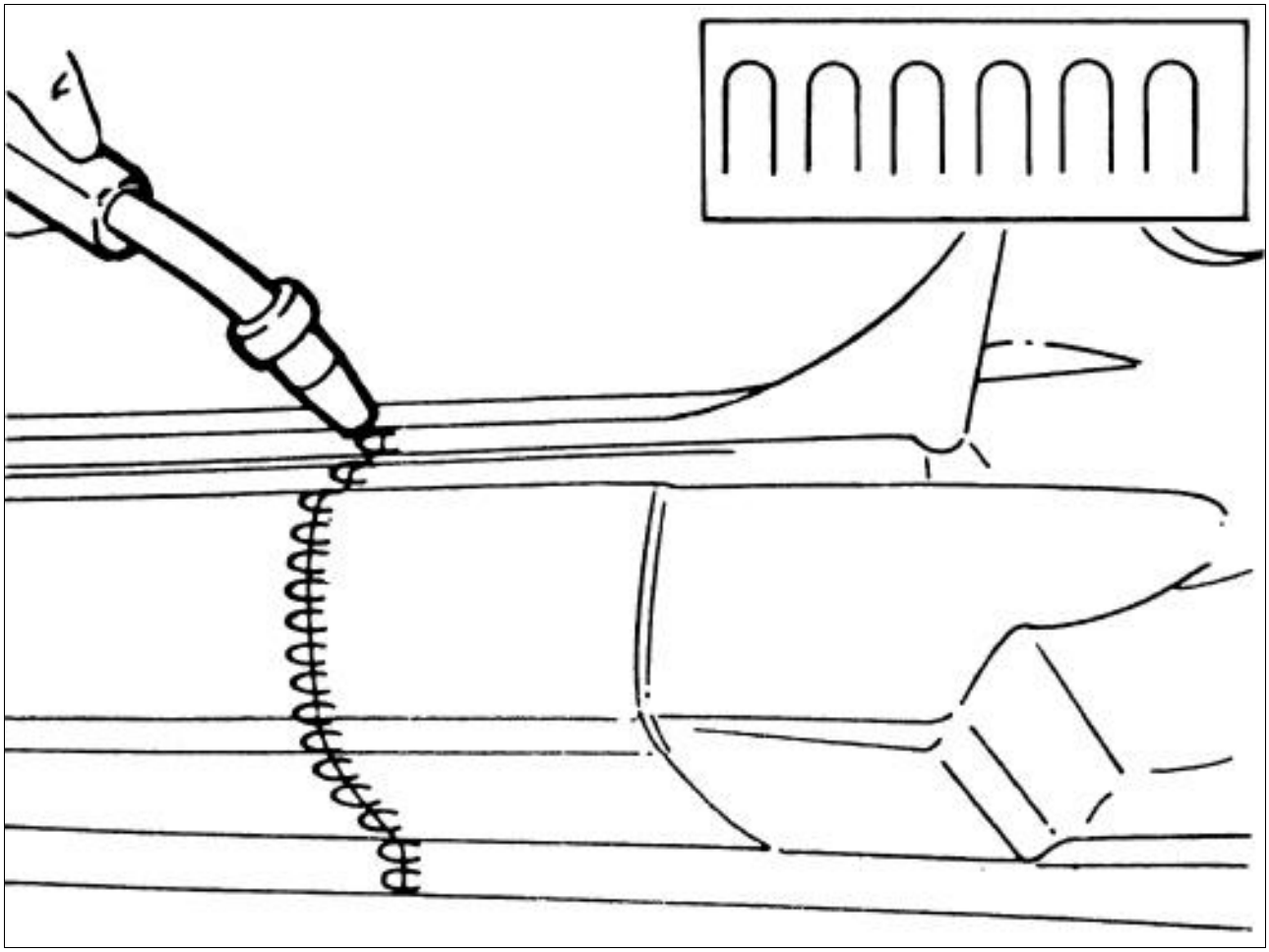
Courtesy of CHRYSLER GROUP, LLC

Fig 3: Spot Welding (Three Panels)



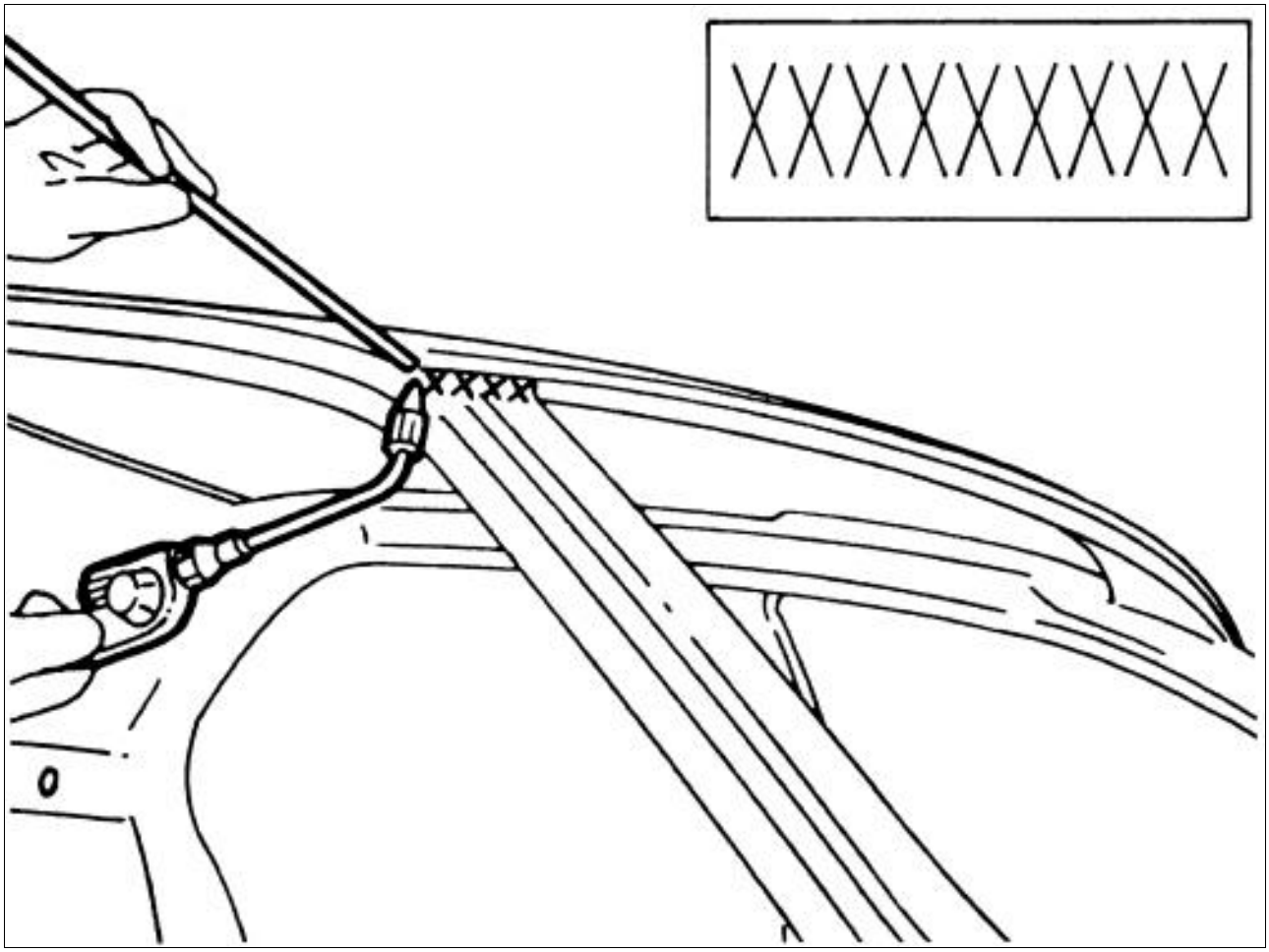
Courtesy of CHRYSLER GROUP, LLC

Fig 4: MIG Welding Seam



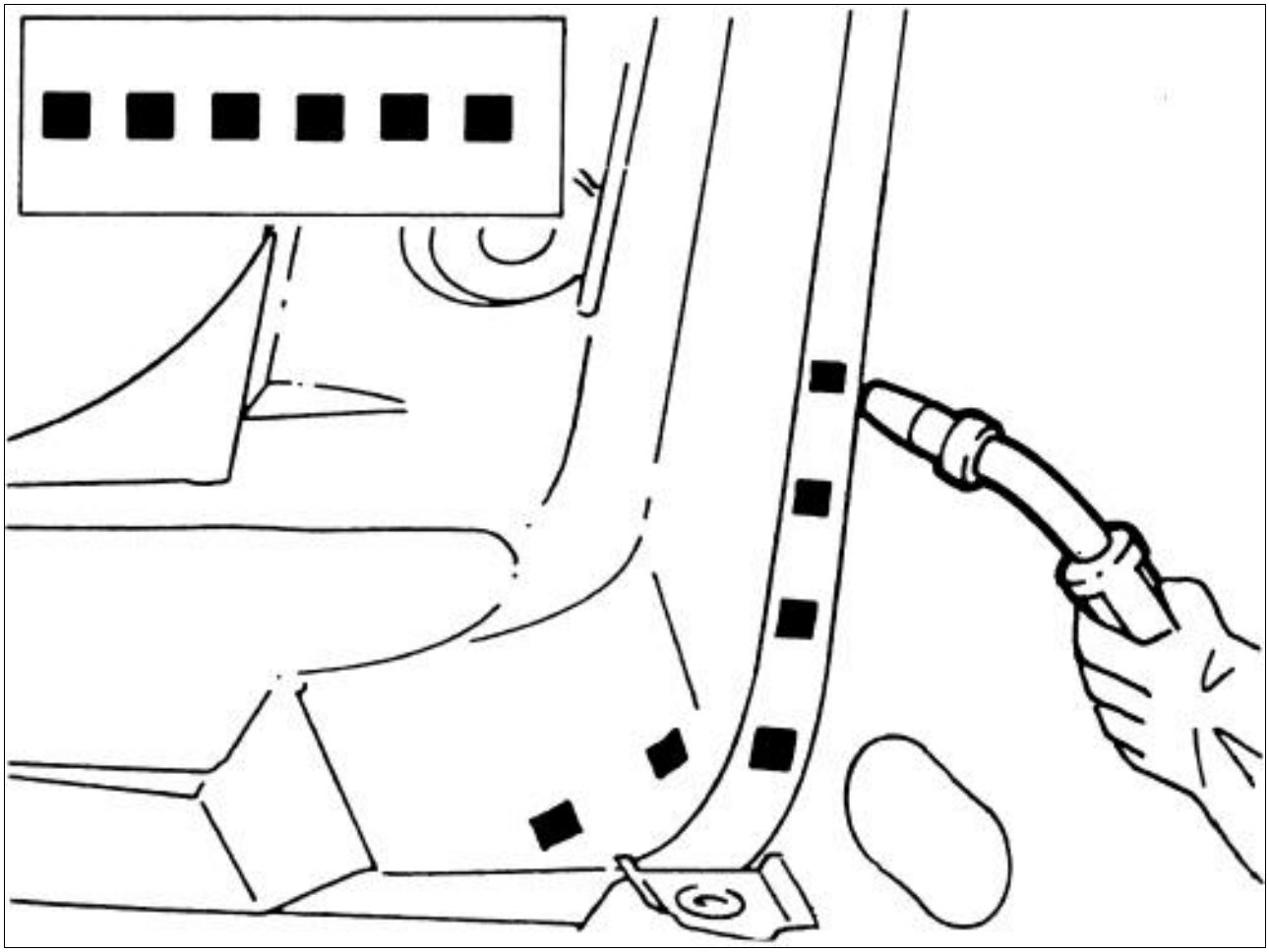
Courtesy of CHRYSLER GROUP, LLC

Fig 5: Brazing



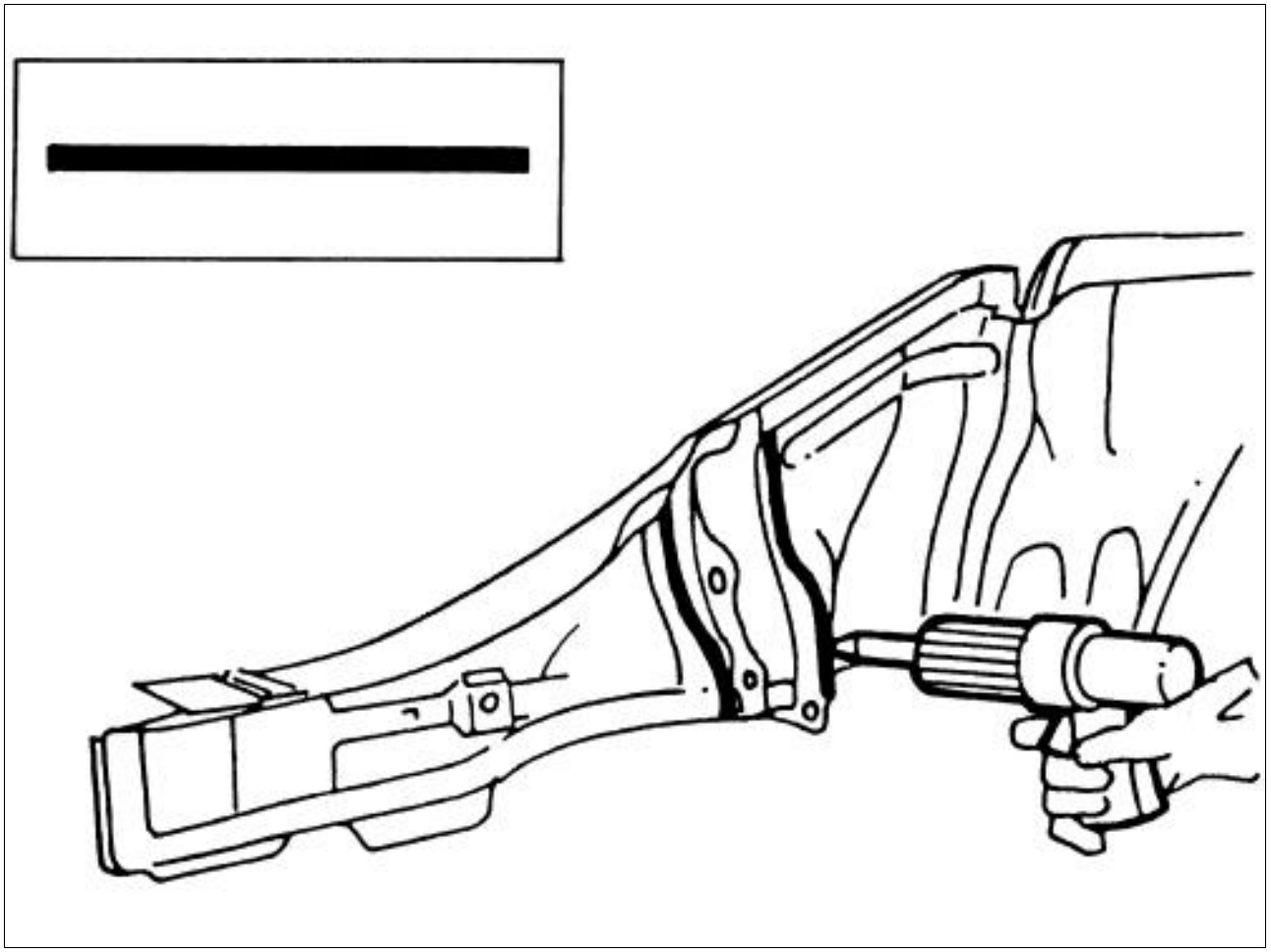
Courtesy of CHRYSLER GROUP, LLC

Fig 6: MIG Fill/Plug Welding



Courtesy of CHRYSLER GROUP, LLC

Fig 7: Sealing



Courtesy of CHRYSLER GROUP, LLC

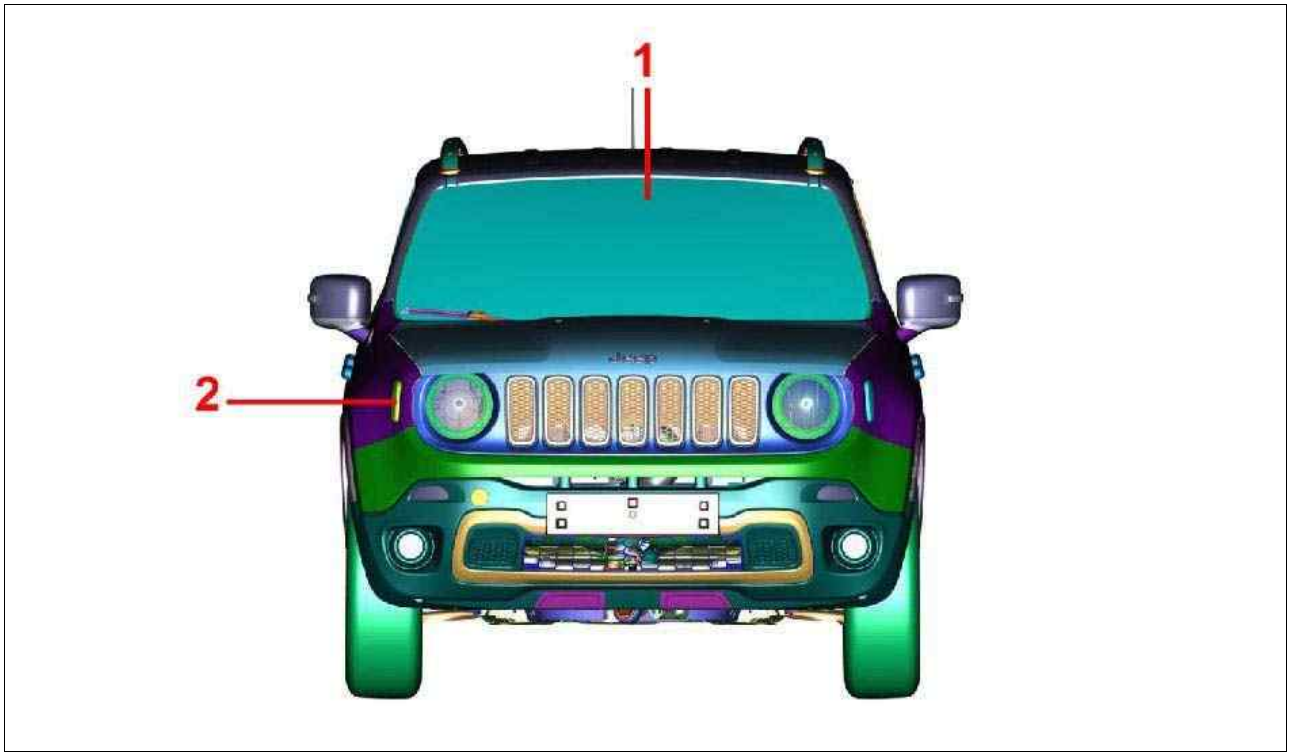
BODY STRUCTURE > GAP AND FLUSH > SPECIFICATIONS > SPECIFICATIONS

BODY GAP AND FLUSH SPECIFICATIONS FOR THE ADJUSTMENT OF MOVING PARTS

To facilitate and verify moving parts disassembly operations, the existing gaps are shown (in millimeters) to allow appropriate adjustment.

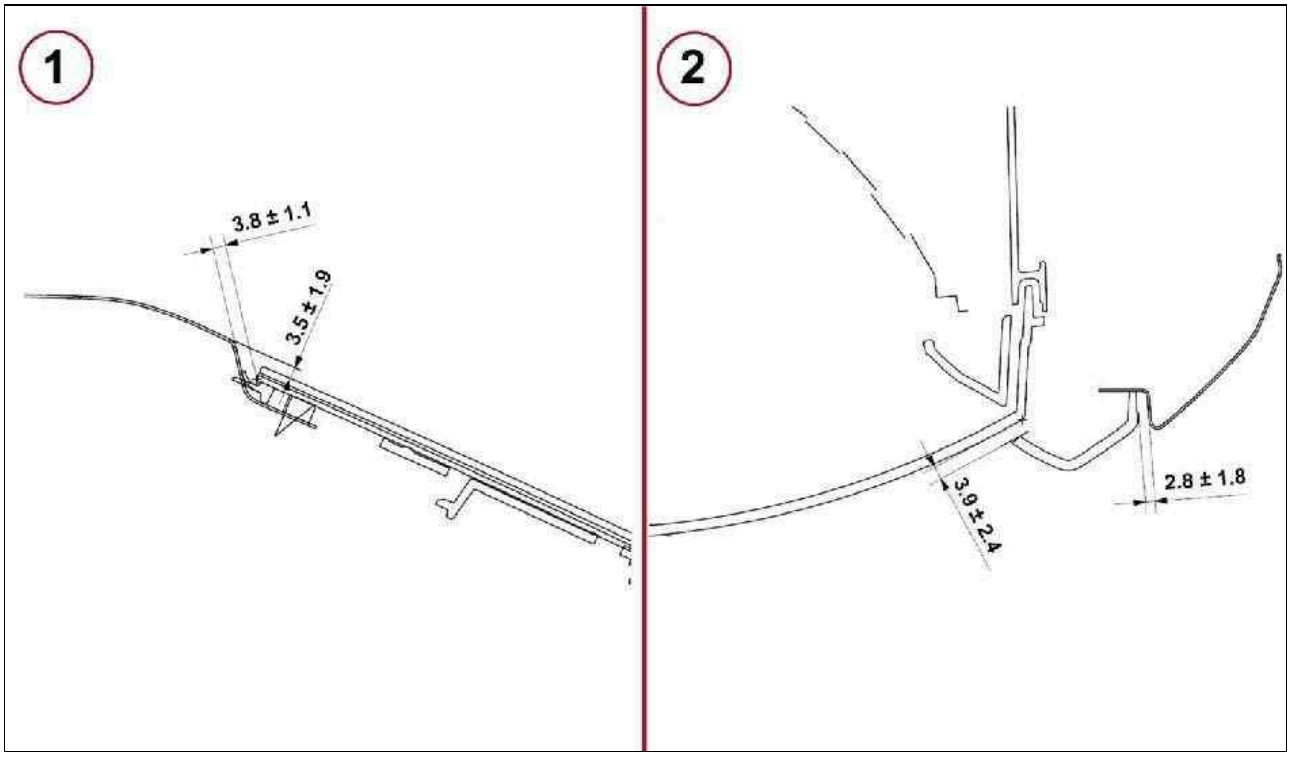
The adjustment procedure is explained in the service information describing moving part removal and installation procedures.

Fig 1: Front View Of Vehicle With Measurement Positions



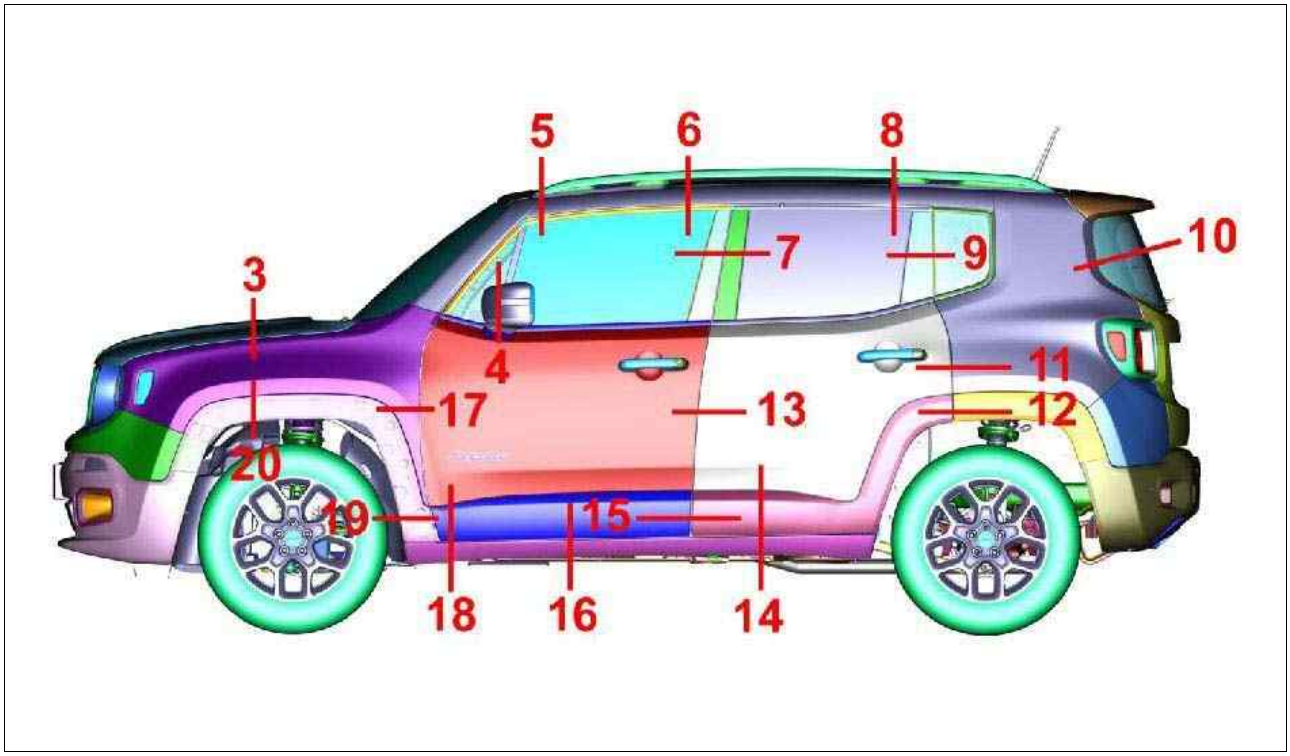
Courtesy of CHRYSLER GROUP, LLC

Fig 2: Front Measurements



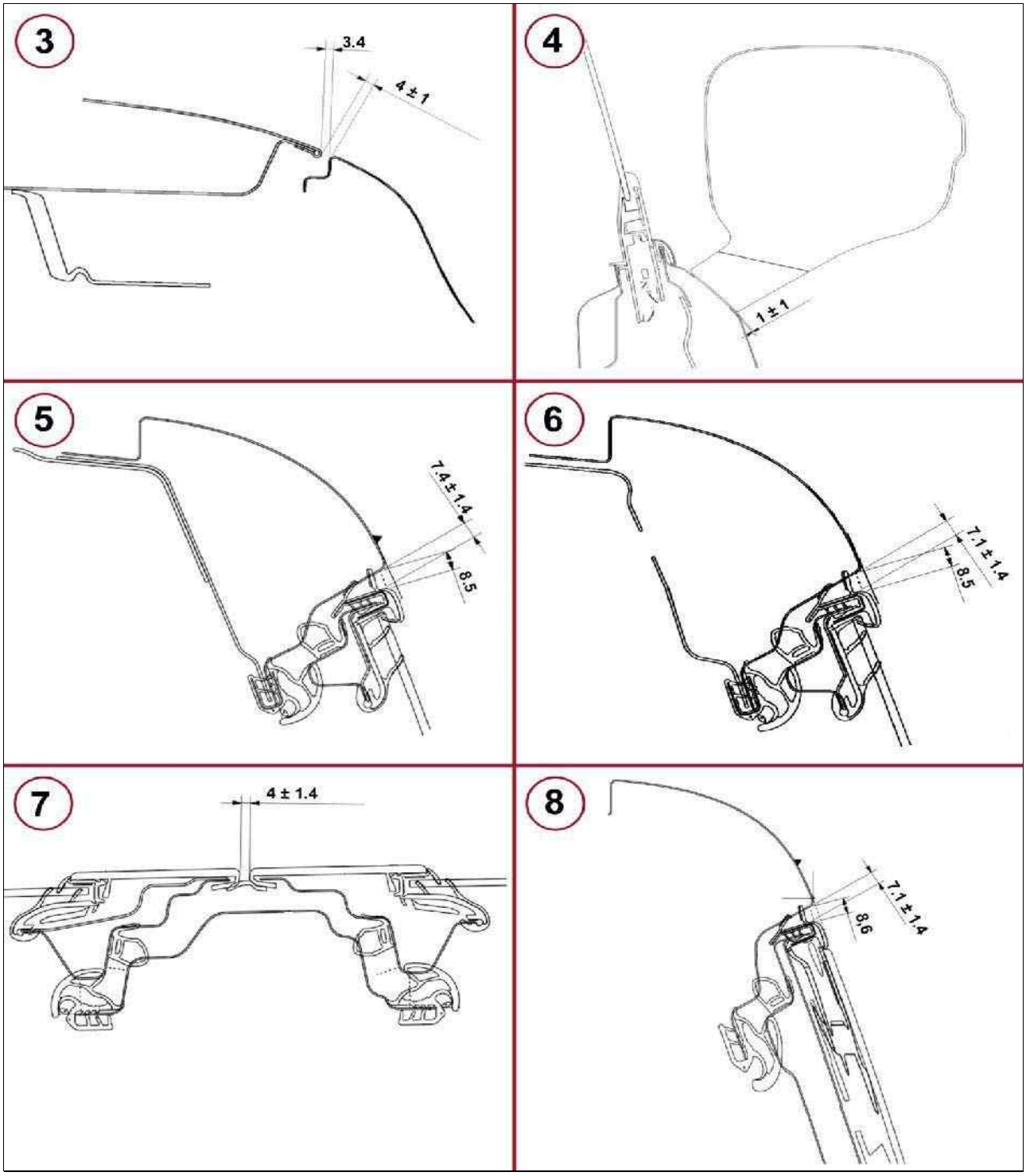
Courtesy of CHRYSLER GROUP, LLC

Fig 3: Side View Of Vehicle With Measurement Positions



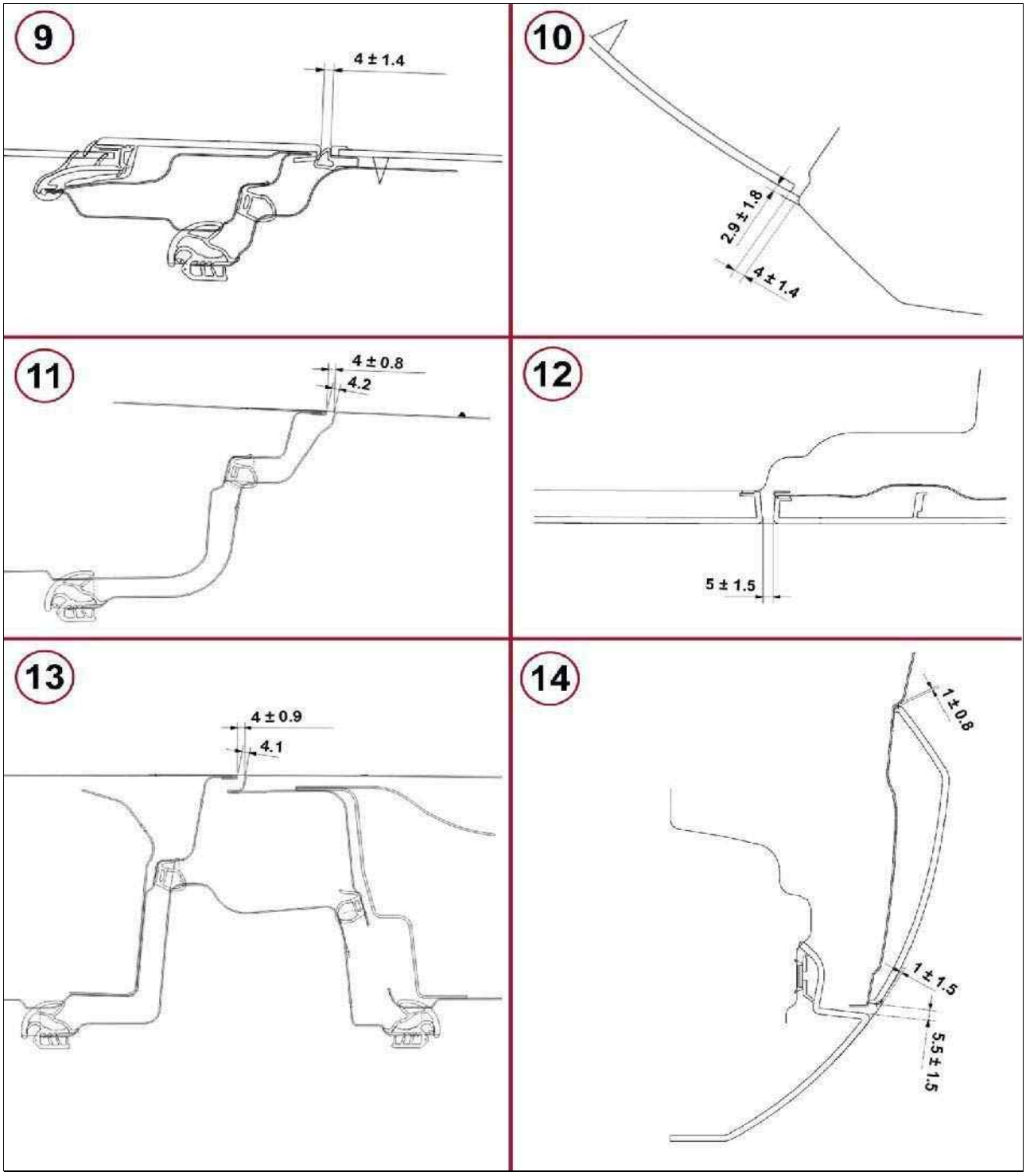
Courtesy of CHRYSLER GROUP, LLC

Fig 4: Side Measurements (1 Of 3)



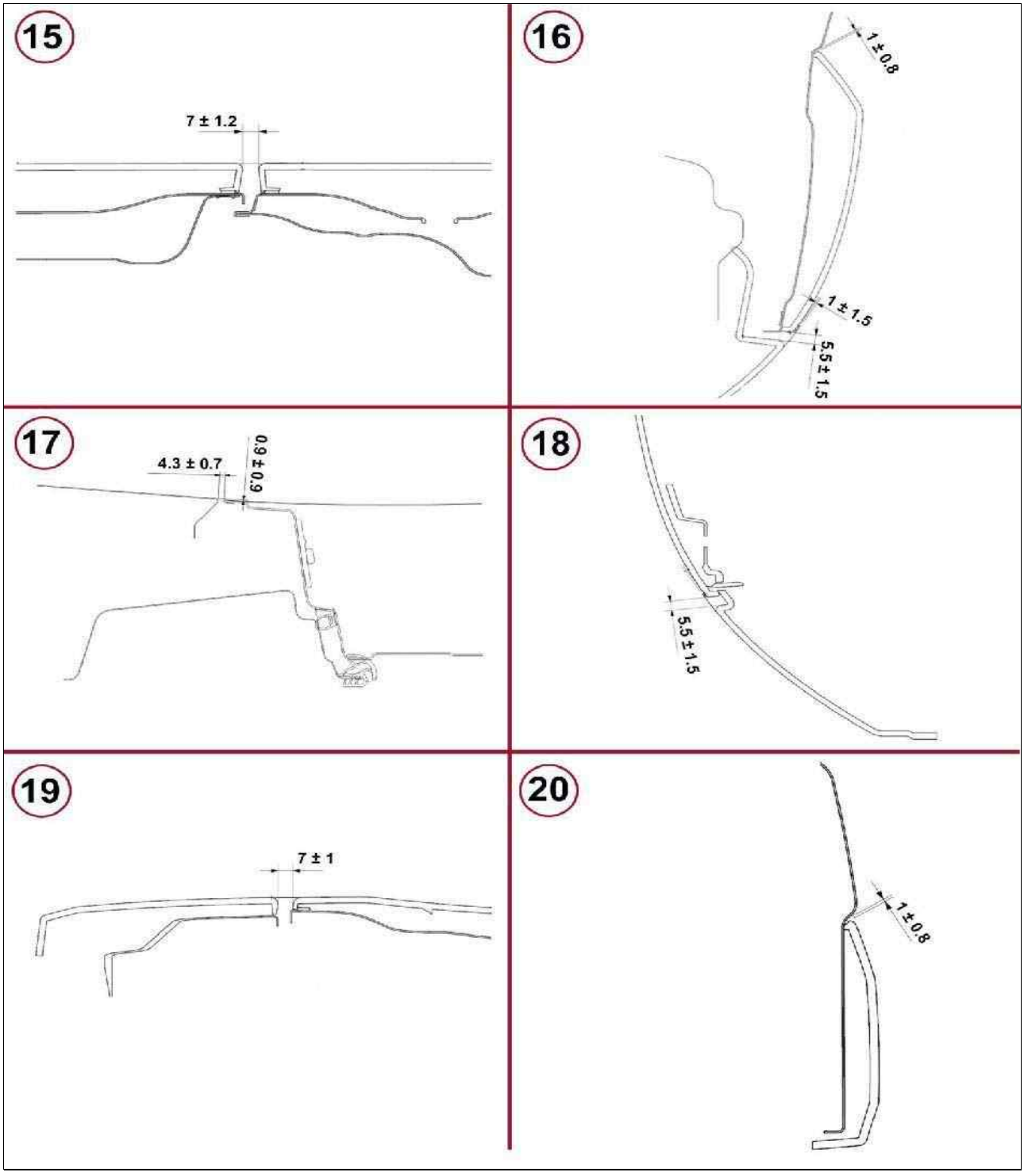
Courtesy of CHRYSLER GROUP, LLC

Fig 5: Side Measurements (2 Of 3)



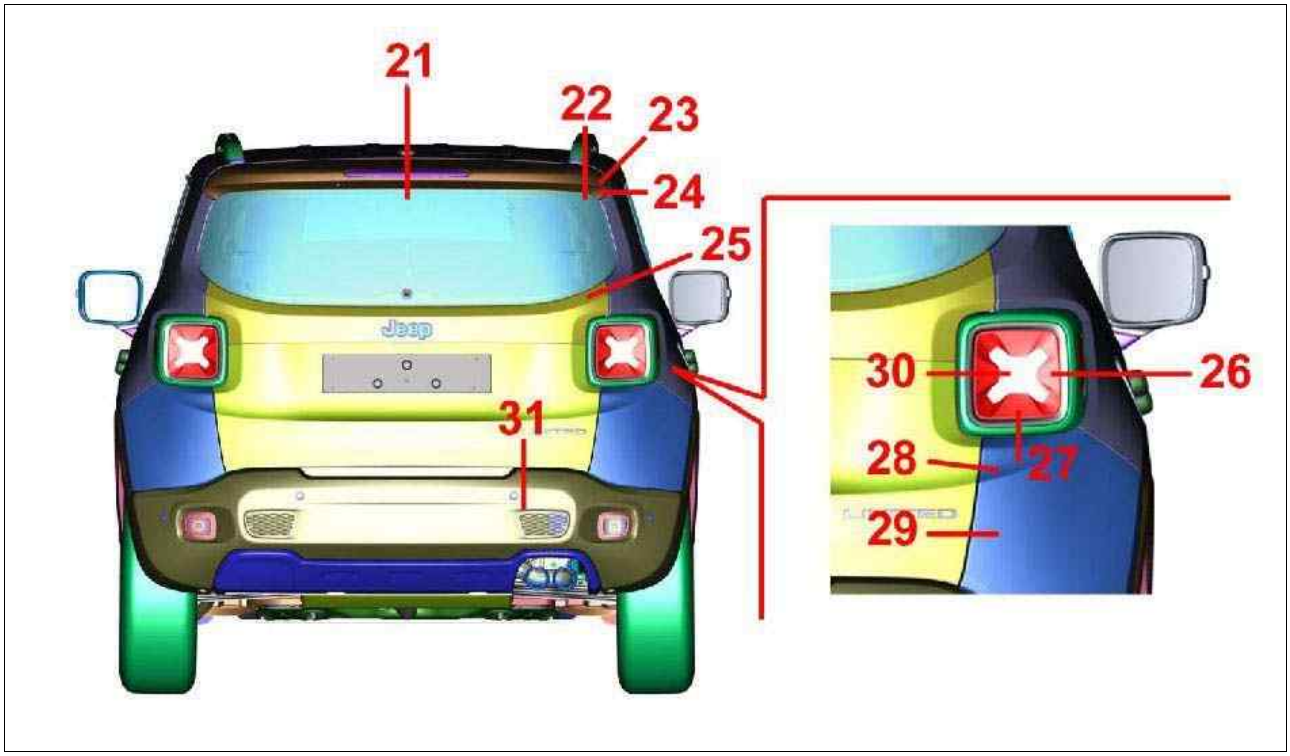
Courtesy of CHRYSLER GROUP, LLC

Fig 6: Side Measurements (3 Of 3)



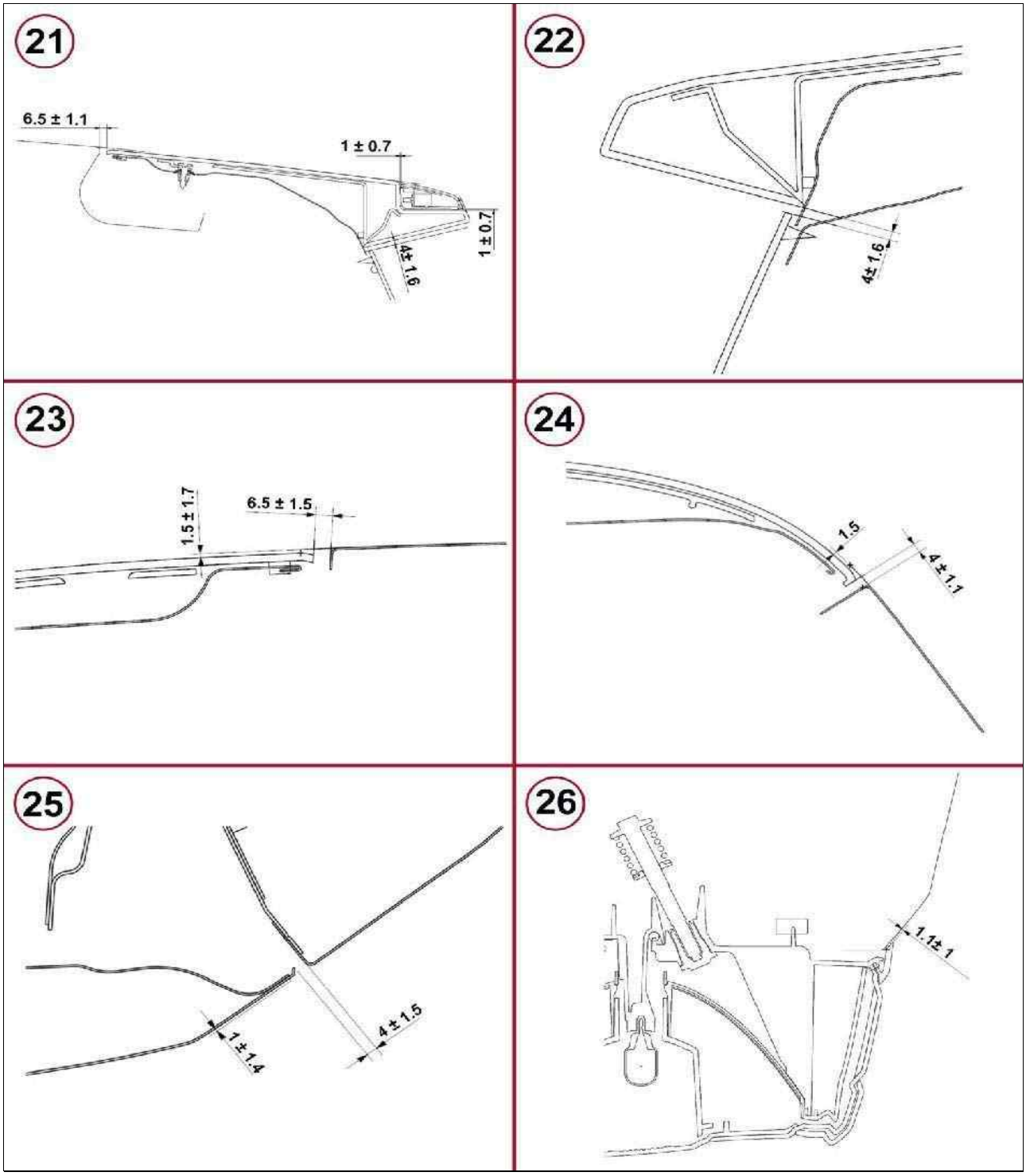
Courtesy of CHRYSLER GROUP, LLC

Fig 7: Rear View Of Vehicle With Measurement Positions



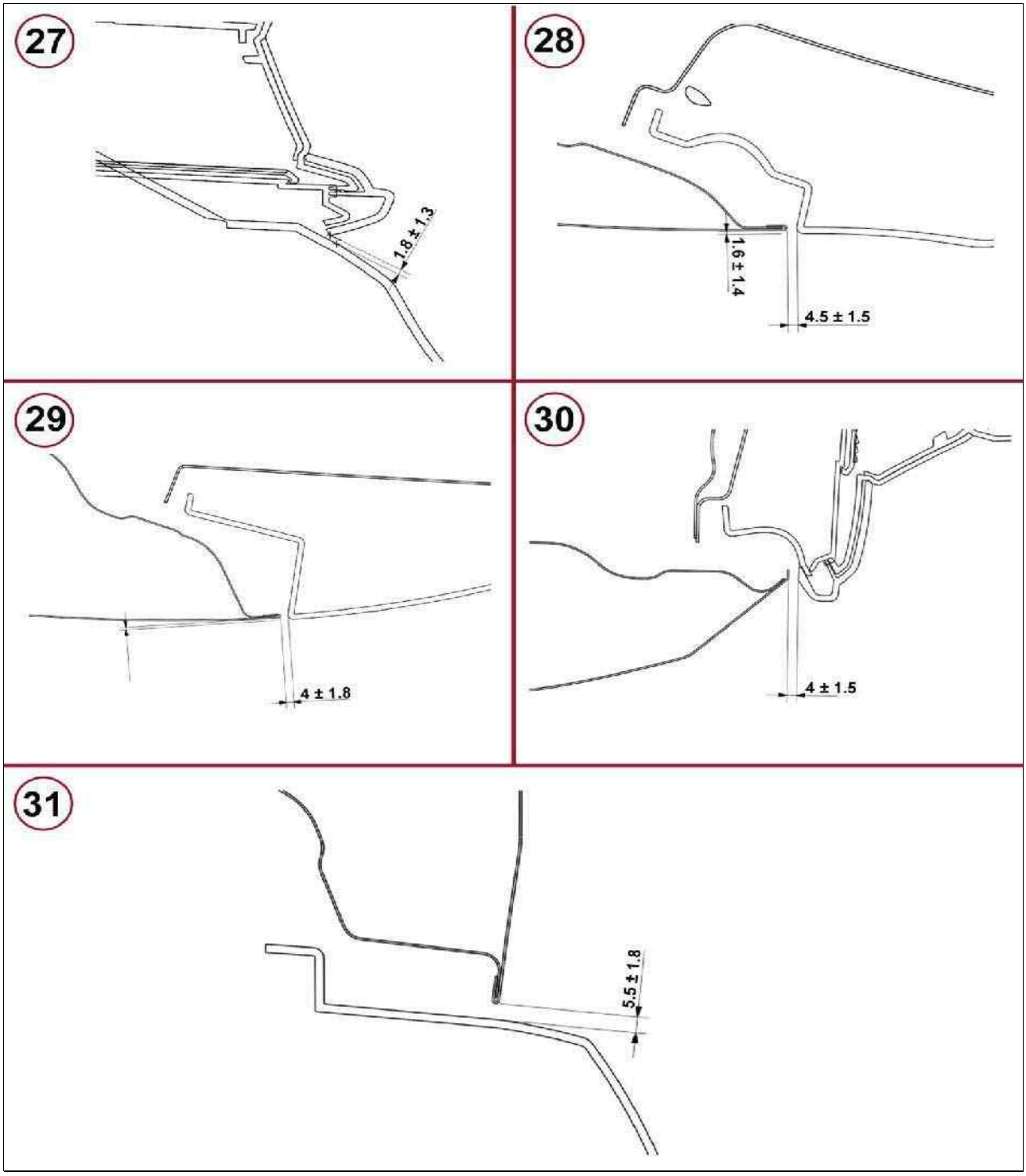
Courtesy of CHRYSLER GROUP, LLC

Fig 8: Rear Measurements (1 Of 2)



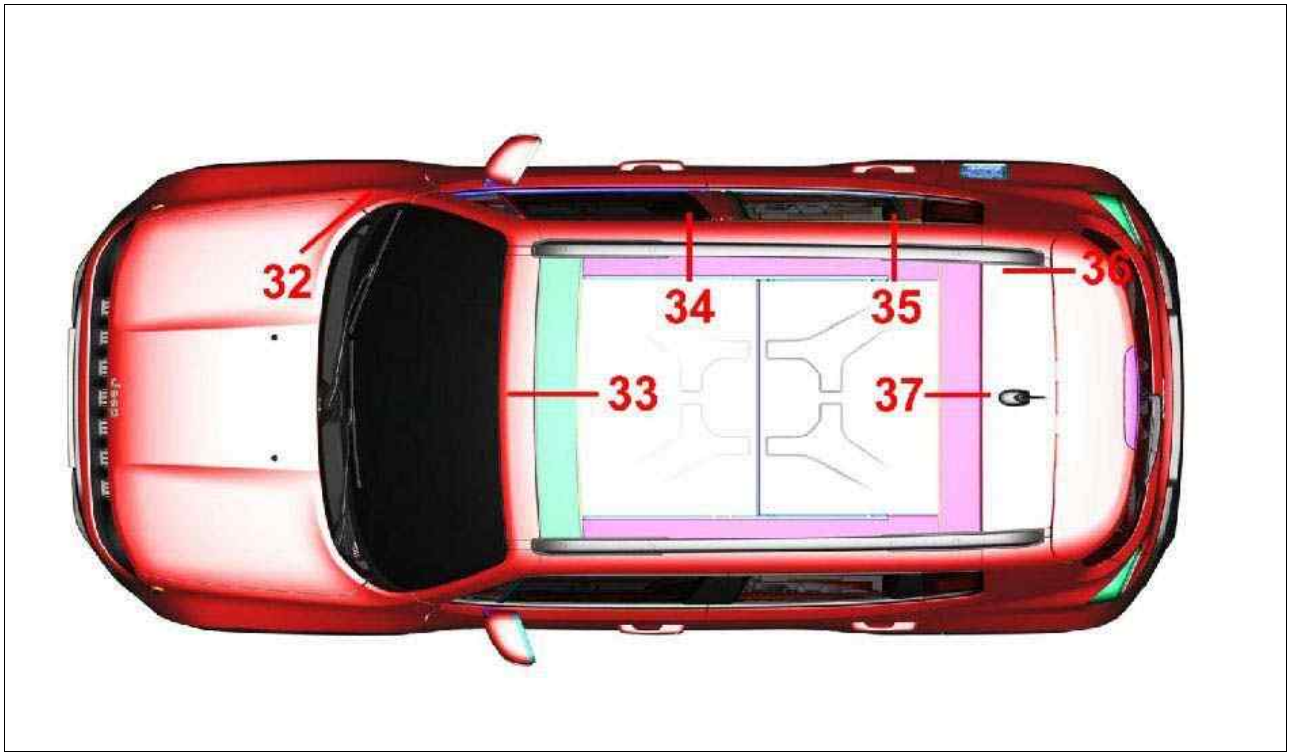
Courtesy of CHRYSLER GROUP, LLC

Fig 9: Rear Measurements (2 Of 2)



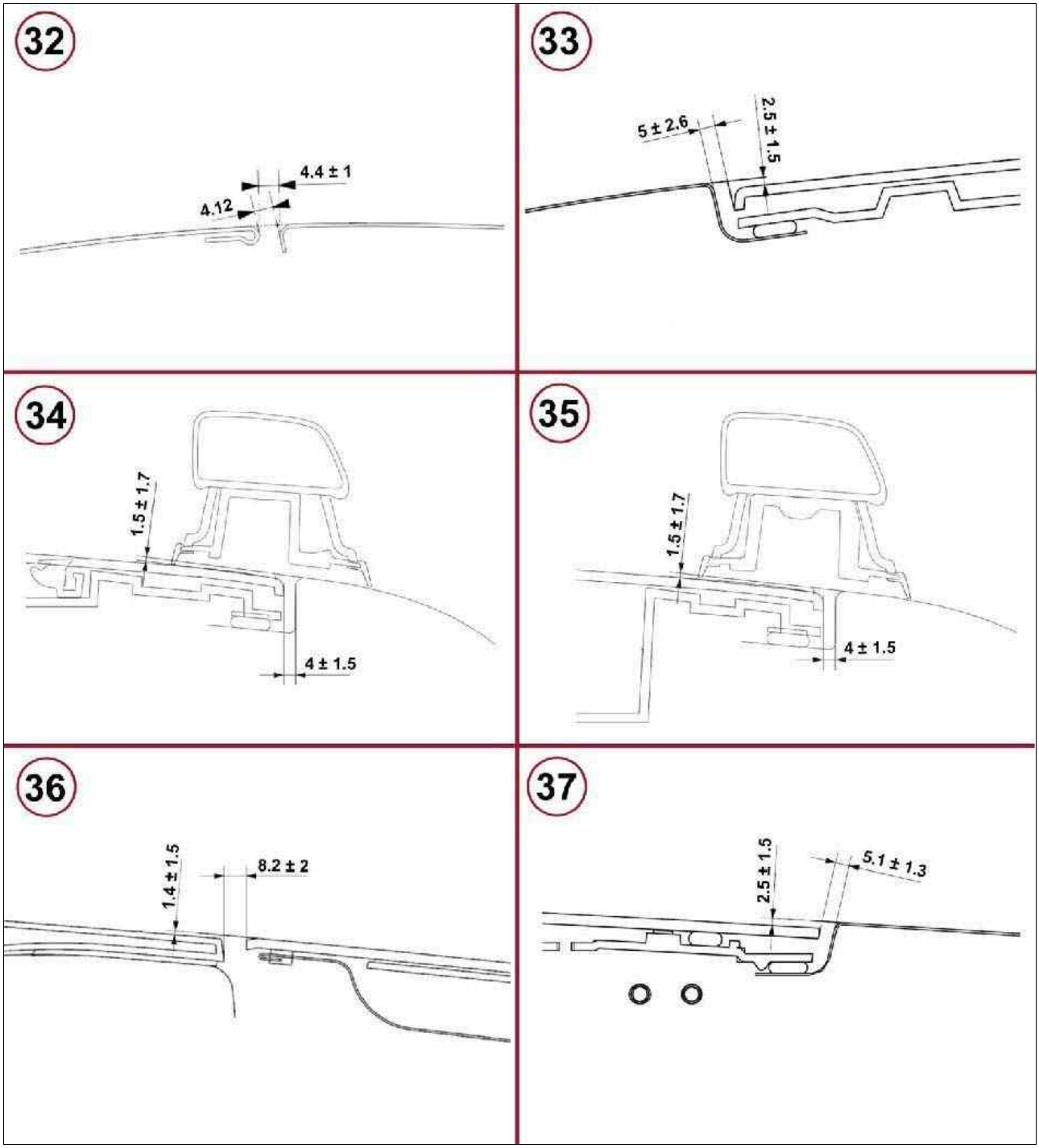
Courtesy of CHRYSLER GROUP, LLC

Fig 10: Top View Of Vehicle With Measurement Positions - Removable Roof



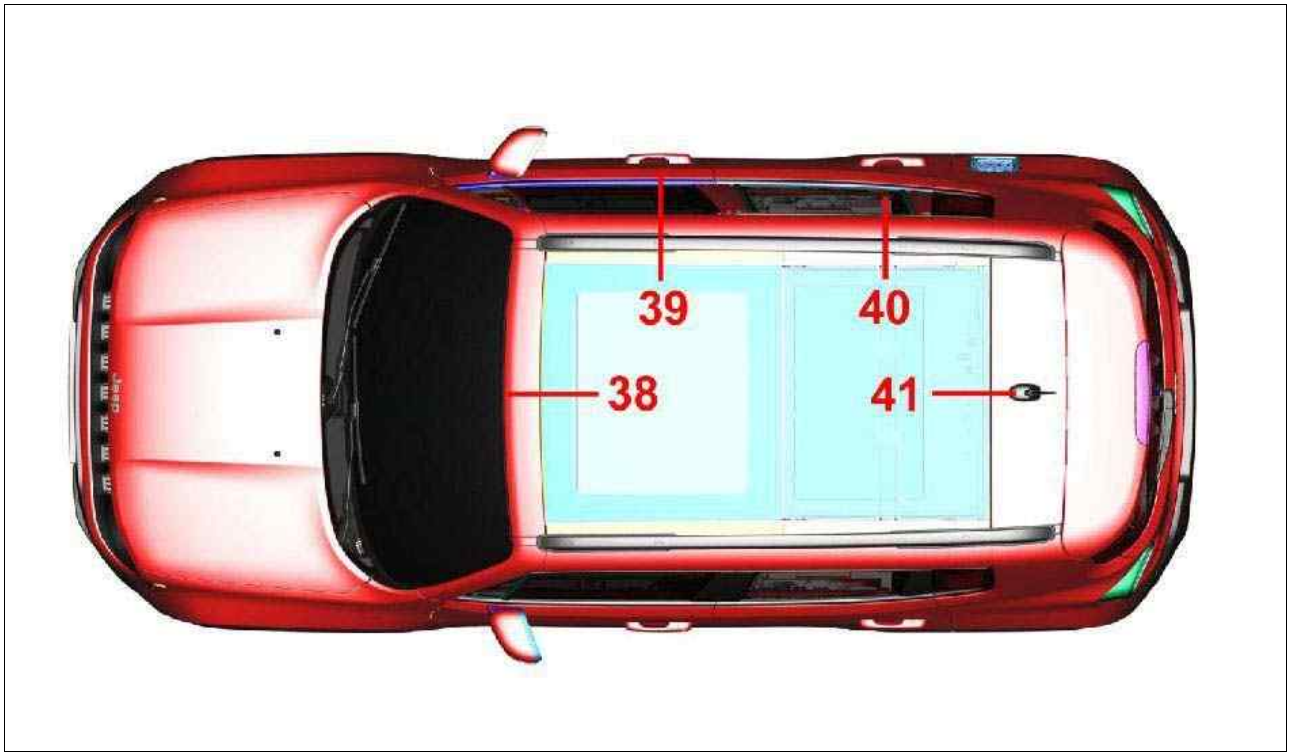
Courtesy of CHRYSLER GROUP, LLC

Fig 11: Top Measurements - Removable Roof



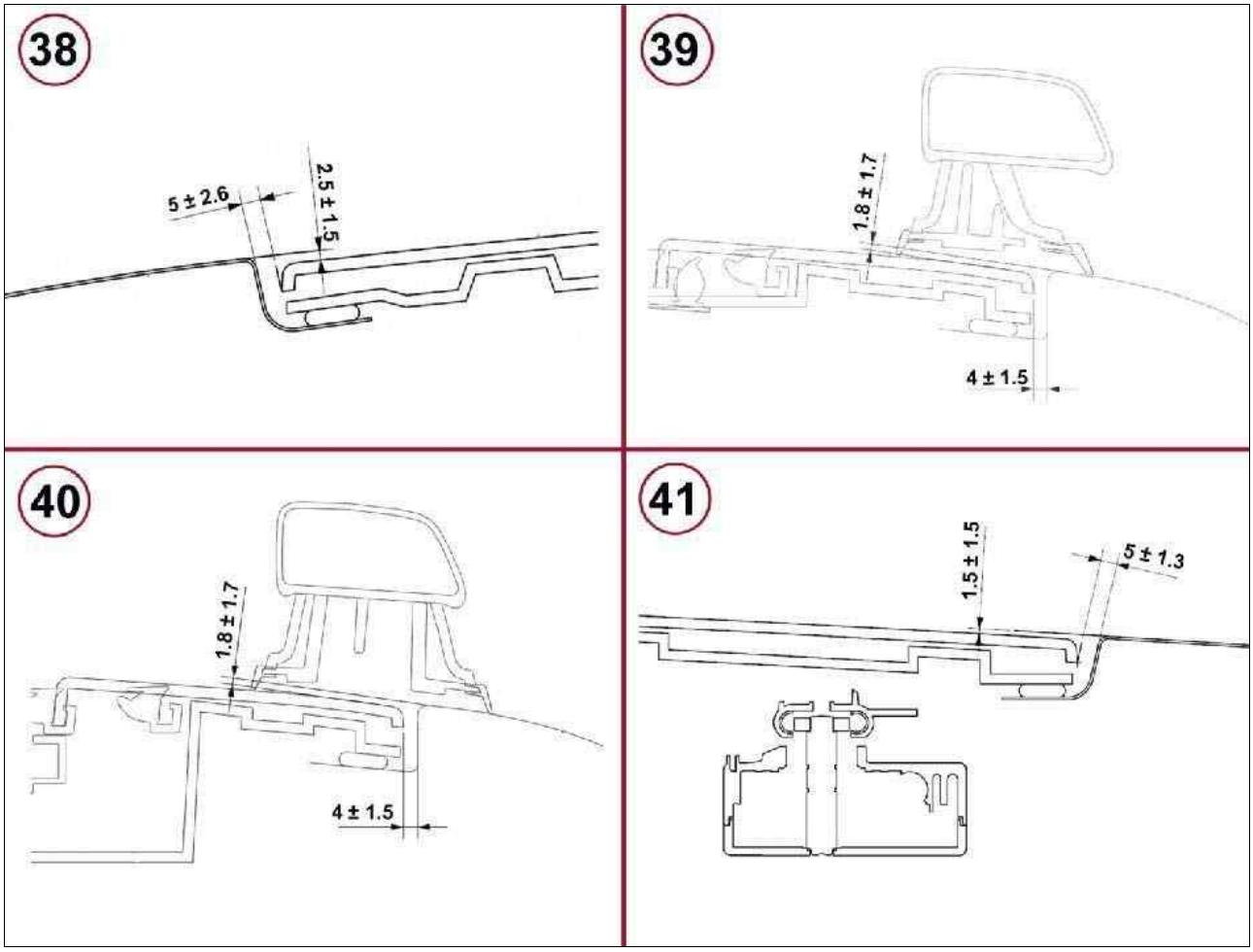
Courtesy of CHRYSLER GROUP, LLC

Fig 12: Top View Of Vehicle With Measurement Positions - Sunroof



Courtesy of CHRYSLER GROUP, LLC

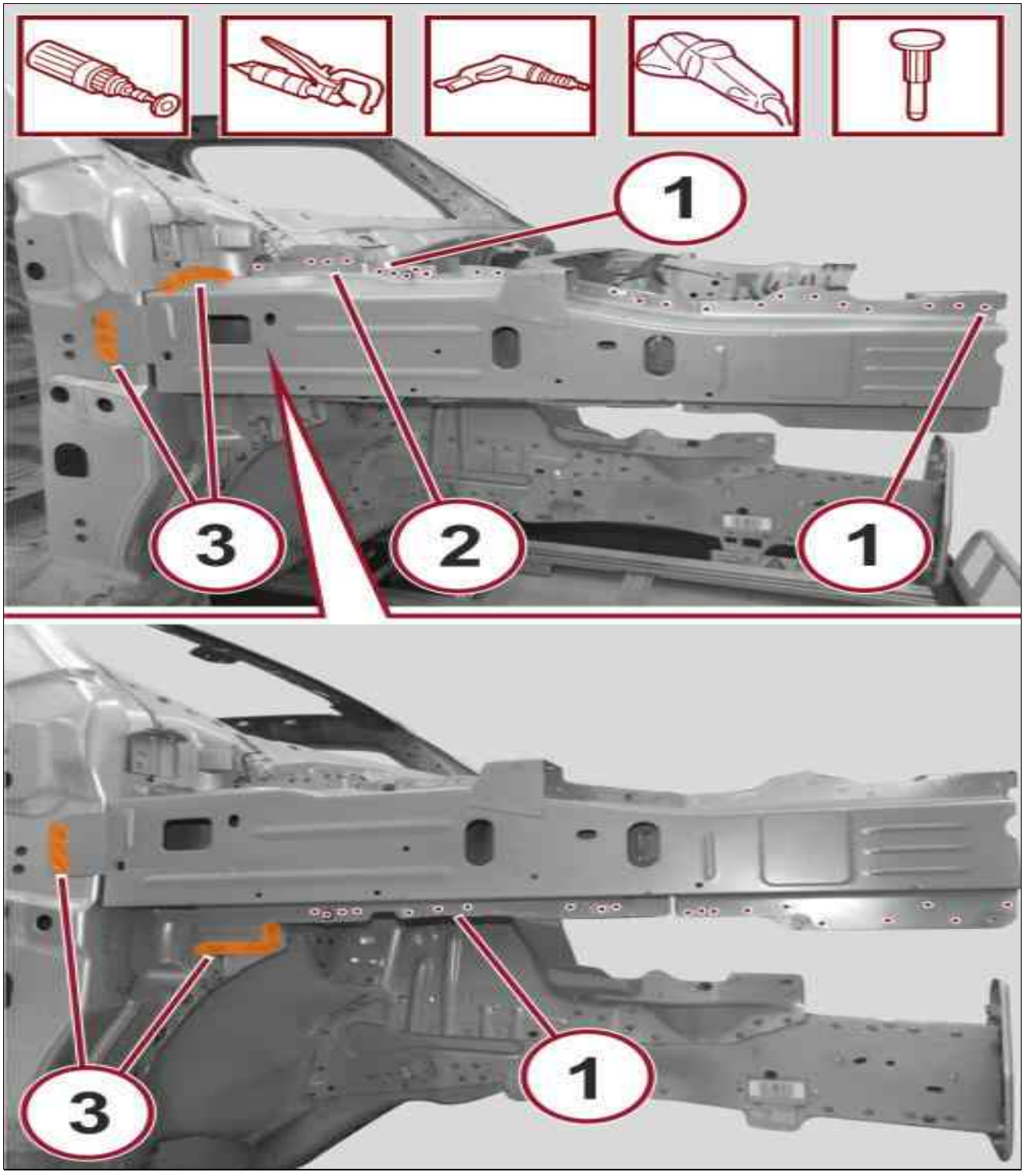
Fig 13: Top Measurements - Sunroof



Courtesy of CHRYSLER GROUP, LLC

BODY STRUCTURE > BEAM, LOAD PATH > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Load Path Beam Removal (1 Of 3)

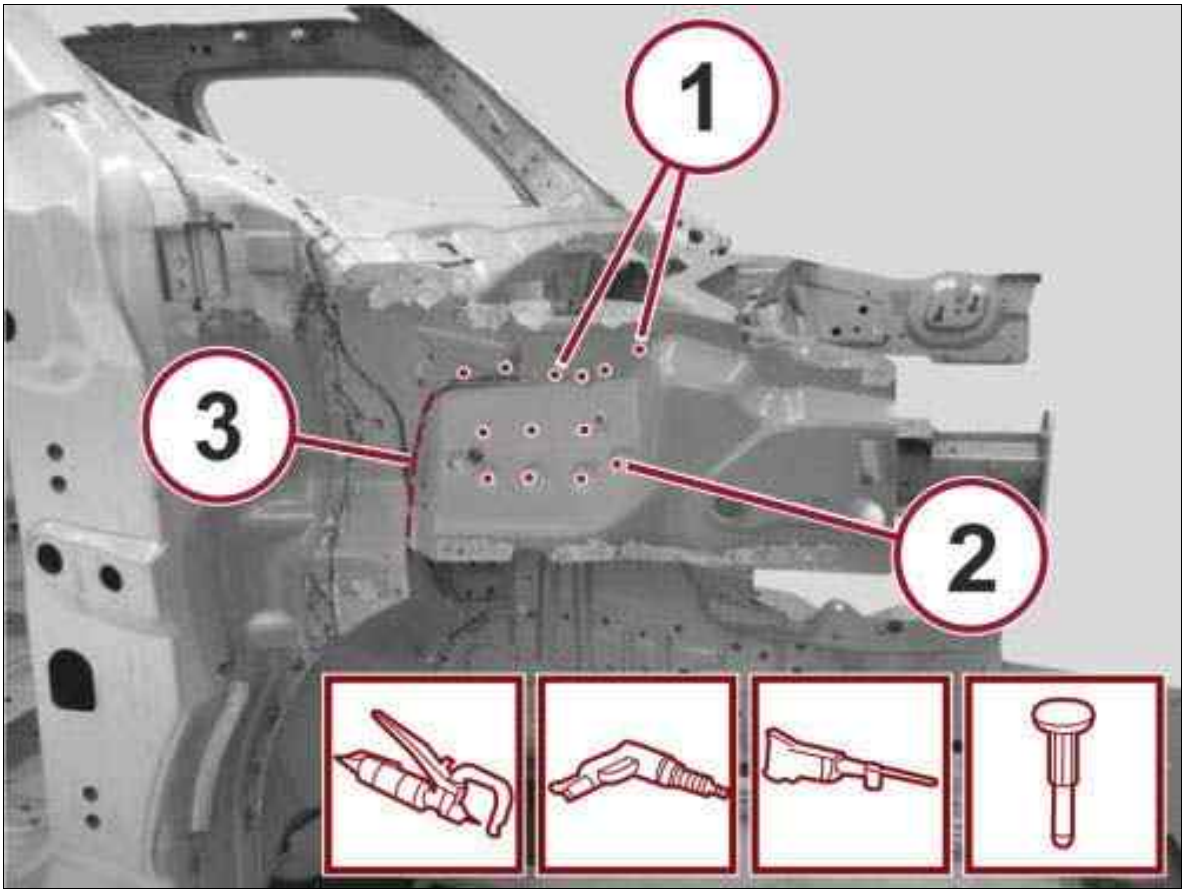


Courtesy of CHRYSLER GROUP, LLC

1. Remove the front fender. Refer to FENDER, FRONT, REMOVAL AND INSTALLATION .
2. Remove the front fender bracket. Refer to BRACKET, FENDER MOUNTING, REMOVAL AND INSTALLATION .
3. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).

4. Straighten the body as necessary.
5. With the use of a rotary brush, remove the paint and gain access to the spot welds.
6. With the use of a spot weld cutting tool, release the spot welds (1) shown in the illustration.
7. With the use of a drill, remove the spot welds (2) shown in the illustration.
8. With the use of a disc grinder, remove the spot welds (3) shown in the illustration.
9. With the use of a chisel and hammer, remove the welds previously released.
10. Remove the cutouts from the vehicle.

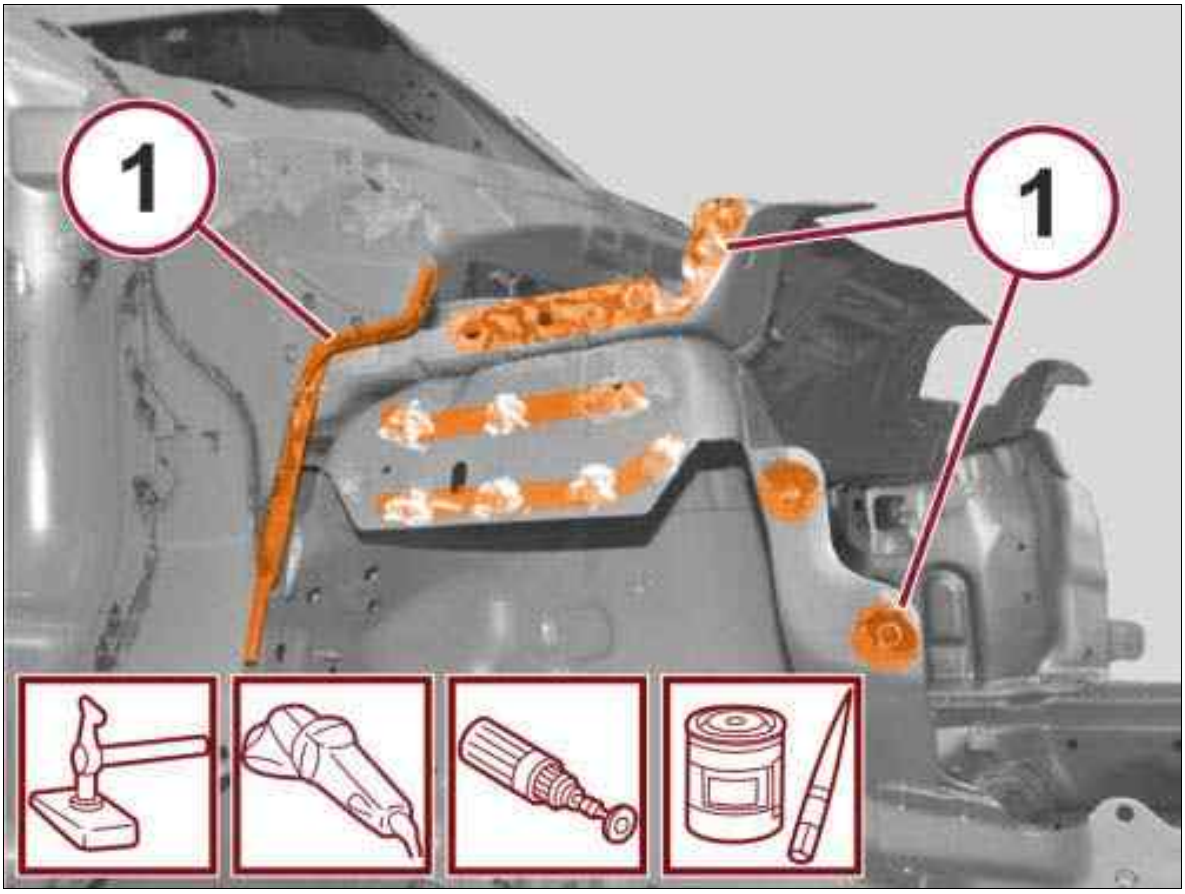
Fig 2: Load Path Beam Removal (2 Of 3)



Courtesy of CHRYSLER GROUP, LLC

11. With the use of a spot weld cutting tool, release the spot welds (1) shown in the illustration.
12. With the use of a drill, release the spot welds (2) shown in the illustration.
13. With the use of a jig saw, cut along the cut line (3).
14. With the use of a chisel and hammer, remove the welds previously released.
15. Remove the cutouts from the vehicle.

Fig 3: Load Path Beam Removal (3 Of 3)

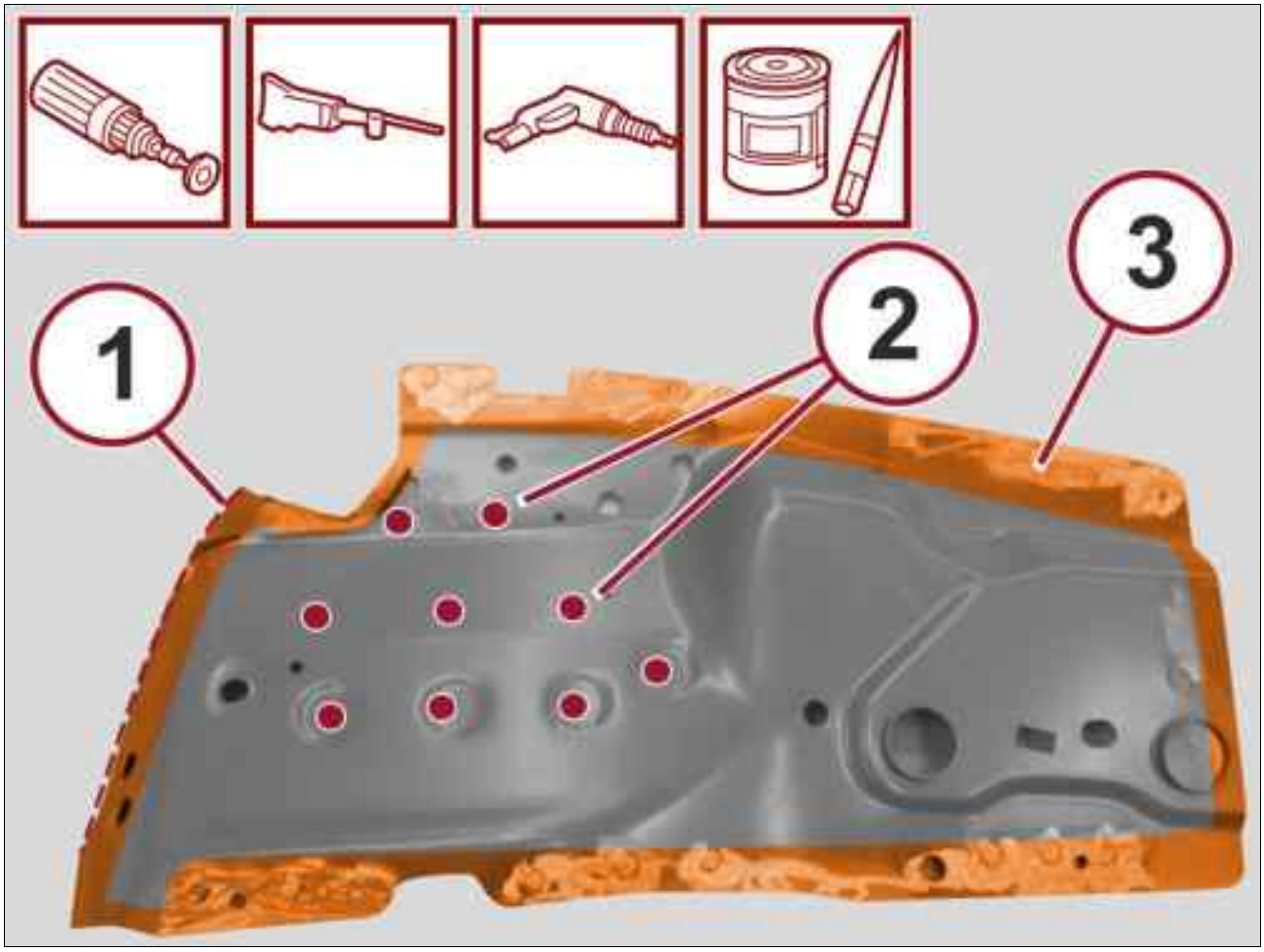


Courtesy of CHRYSLER GROUP, LLC

16. With the use of a hammer and dolly block, straighten the edges (1) of the mating components.
17. With the use of a grinding disc, remove any residue of the spot welds.
18. With the use of a rotary brush, clean the previously treated areas (1).
19. Apply electro-weldable paint/weld through primer to the areas (1) to be welded.

BODY STRUCTURE > BEAM, LOAD PATH > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

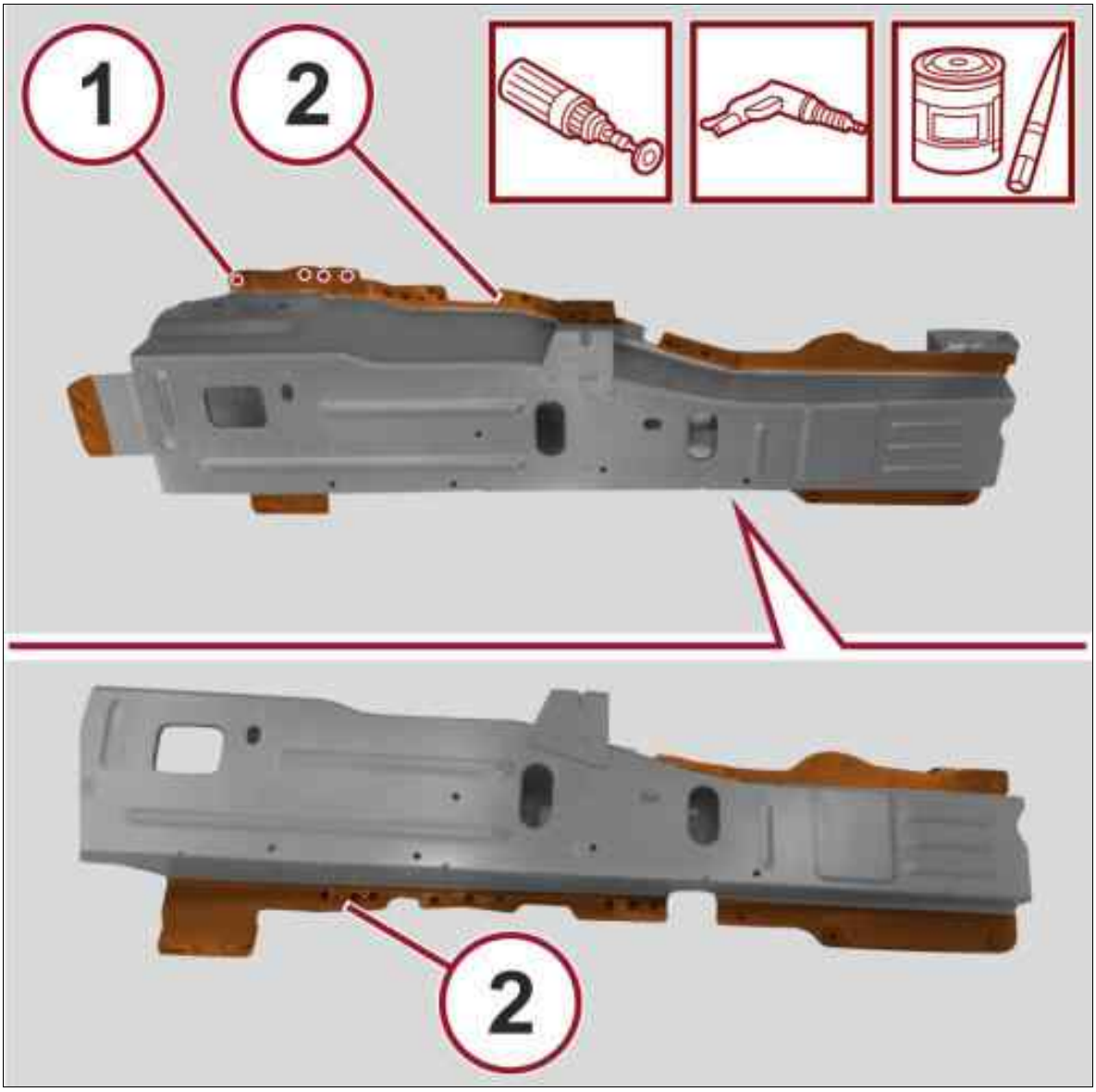
Fig 1: Load Path Beam Installation (1 Of 5)



Courtesy of CHRYSLER GROUP, LLC

1. With the use of a rotary brush, remove the anti-corrosion treatment around the entire perimeter (1) of the inner and outer parts.
2. Use the hacksaw to cut the inner part, following the line shown in the illustration to adjust to the required size.
3. With the use of a drill, drill holes (2) in the parts.
4. Apply electro-weldable paint/weld through primer to the boarders (3) to be welded.

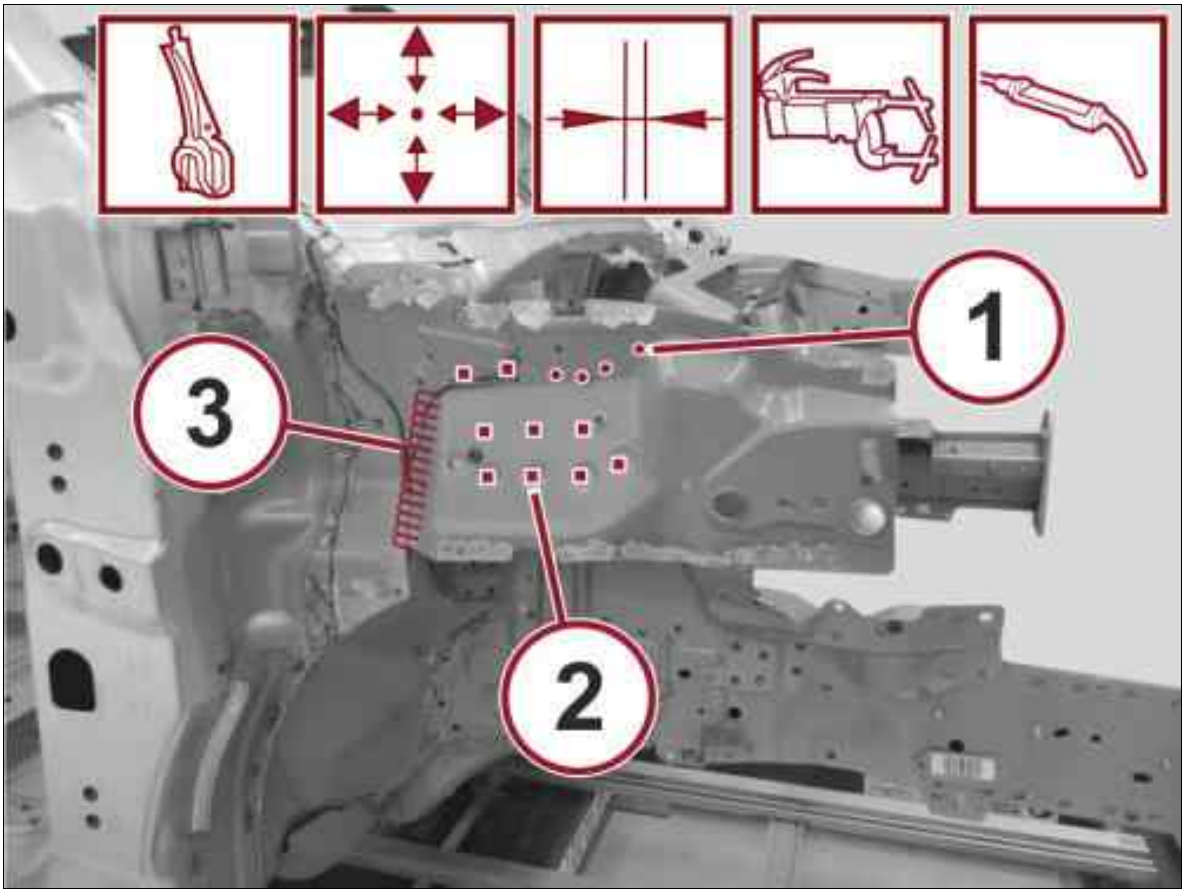
Fig 2: Load Path Beam Installation (2 Of 5)



Courtesy of CHRYSLER GROUP, LLC

5. With the use of a rotary brush, remove the anti-corrosion treatment around the entire perimeter (2) of the inner and outer parts.
6. With the use of a drill, drill holes (1) in the parts.
7. Apply electro-weldable paint/weld through primer to the boarders (2) to be welded.

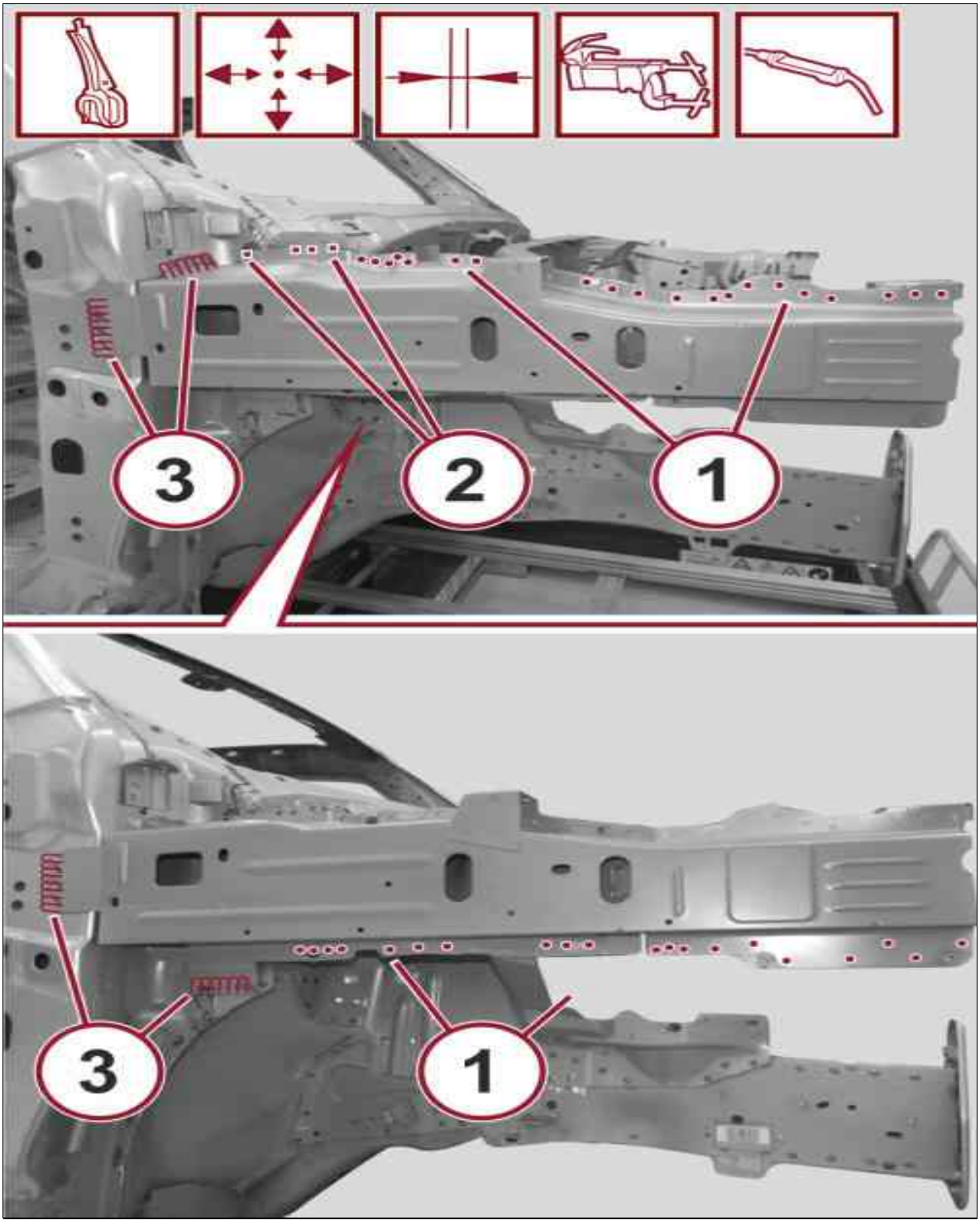
Fig 3: Load Path Beam Installation (3 Of 5)



Courtesy of CHRYSLER GROUP, LLC

8. Position the inner part correctly on the vehicle internal pillar and secure it with the self-locking clamps.
9. Check alignment and surrounding gaps.
10. With the use of a spot welder, apply spot welds to the areas (1) shown in the illustration.
11. With the use of a MIG welder, apply plug welds filling in the areas (2) shown in the illustration.
12. With the use of a MIG welder, apply continuous weld to the area (3) shown in the illustration.

Fig 4: Load Path Beam Installation (4 Of 5)

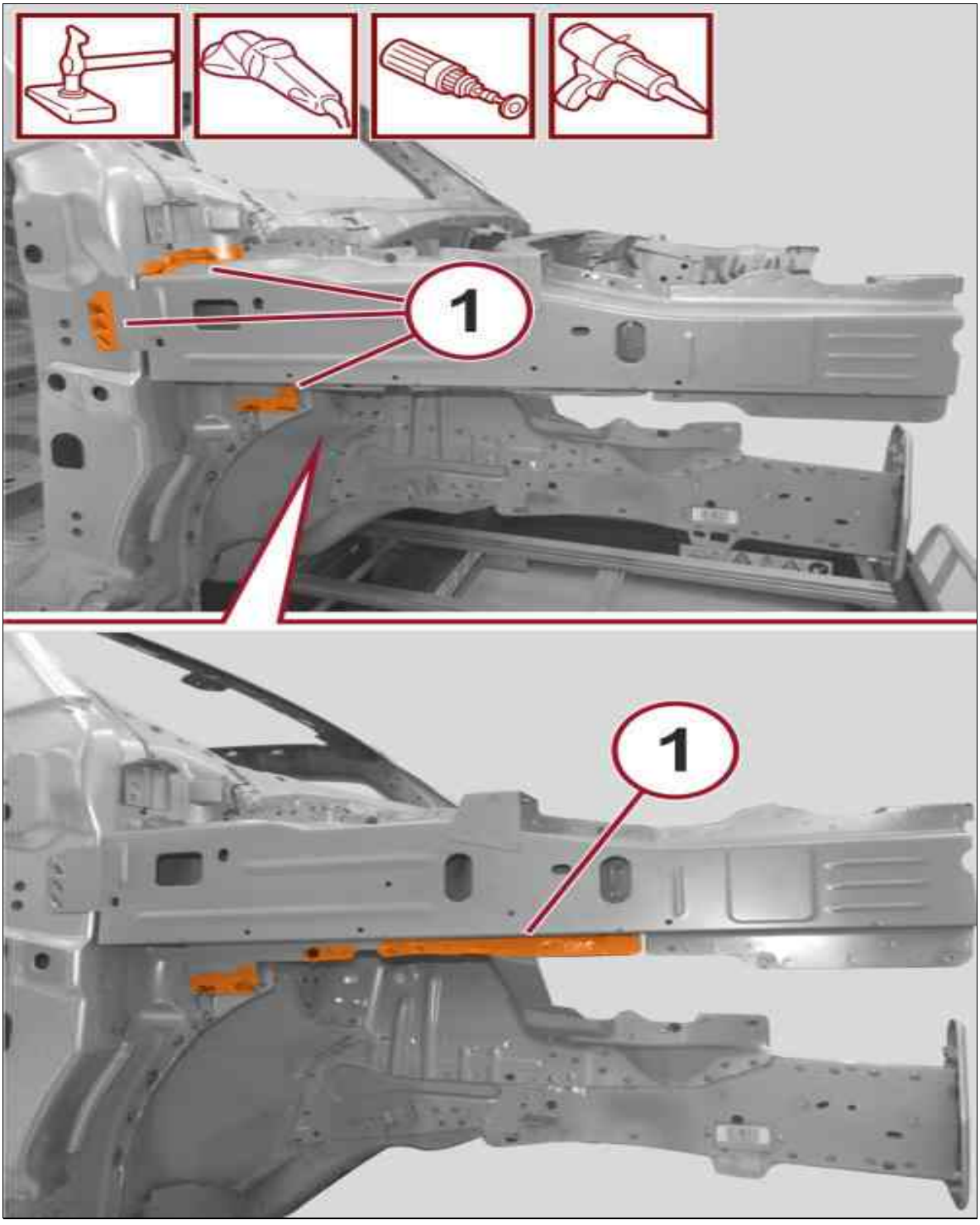


Courtesy of CHRYSLER GROUP, LLC

13. Position the outer part correctly on the vehicle internal pillar and secure it with the self-locking clamps.
14. Check alignment and surrounding gaps.
15. With the use of a spot welder, apply spot welds to the areas (1) shown in the illustration.
16. With the use of a MIG welder, apply plug welds filling in the areas (2) shown in the illustration.

17. With the use of a MIG welder, apply seam weld to the area (3) shown in the illustration.

Fig 5: Load Path Beam Installation (5 Of 5)



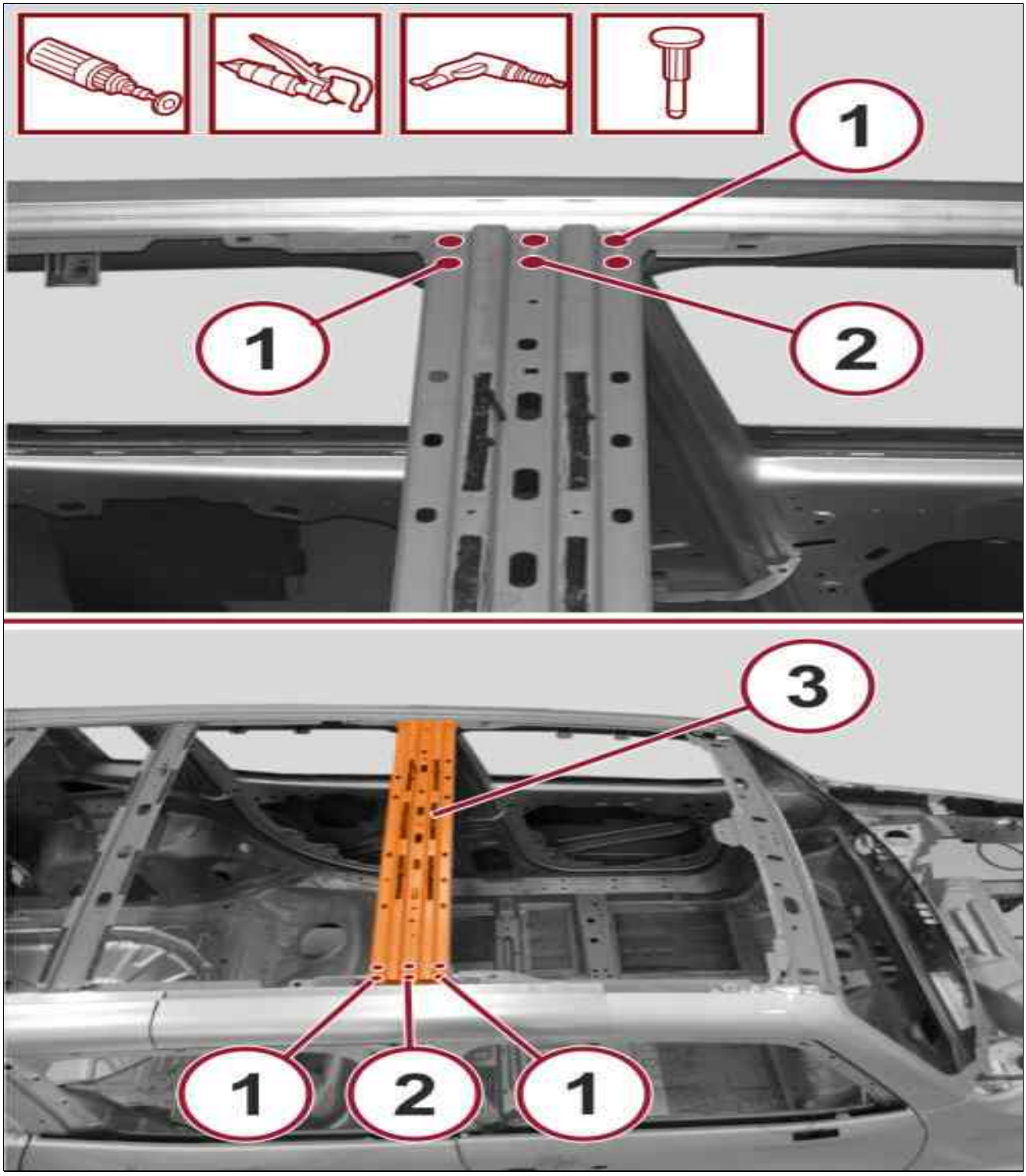
Courtesy of CHRYSLER GROUP, LLC

18. Correct any distortions of the sheet metal using a hammer and dolly block.
19. With the use of a grinding disc, smooth the welds.
20. With the use of a rotary brush, clean the previously welded areas (1).
21. Apply corrosion protection to the areas involved in the welding.

22. Seal the seams between the parts and the vehicle in the areas (1) shown in the illustration.
23. Install the front fender bracket. Refer to BRACKET, FENDER MOUNTING, REMOVAL AND INSTALLATION .
24. Install the front fender. Refer to FENDER, FRONT, REMOVAL AND INSTALLATION .

BODY STRUCTURE > BOW, ROOF > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Roof Bow Removal (1 Of 2)

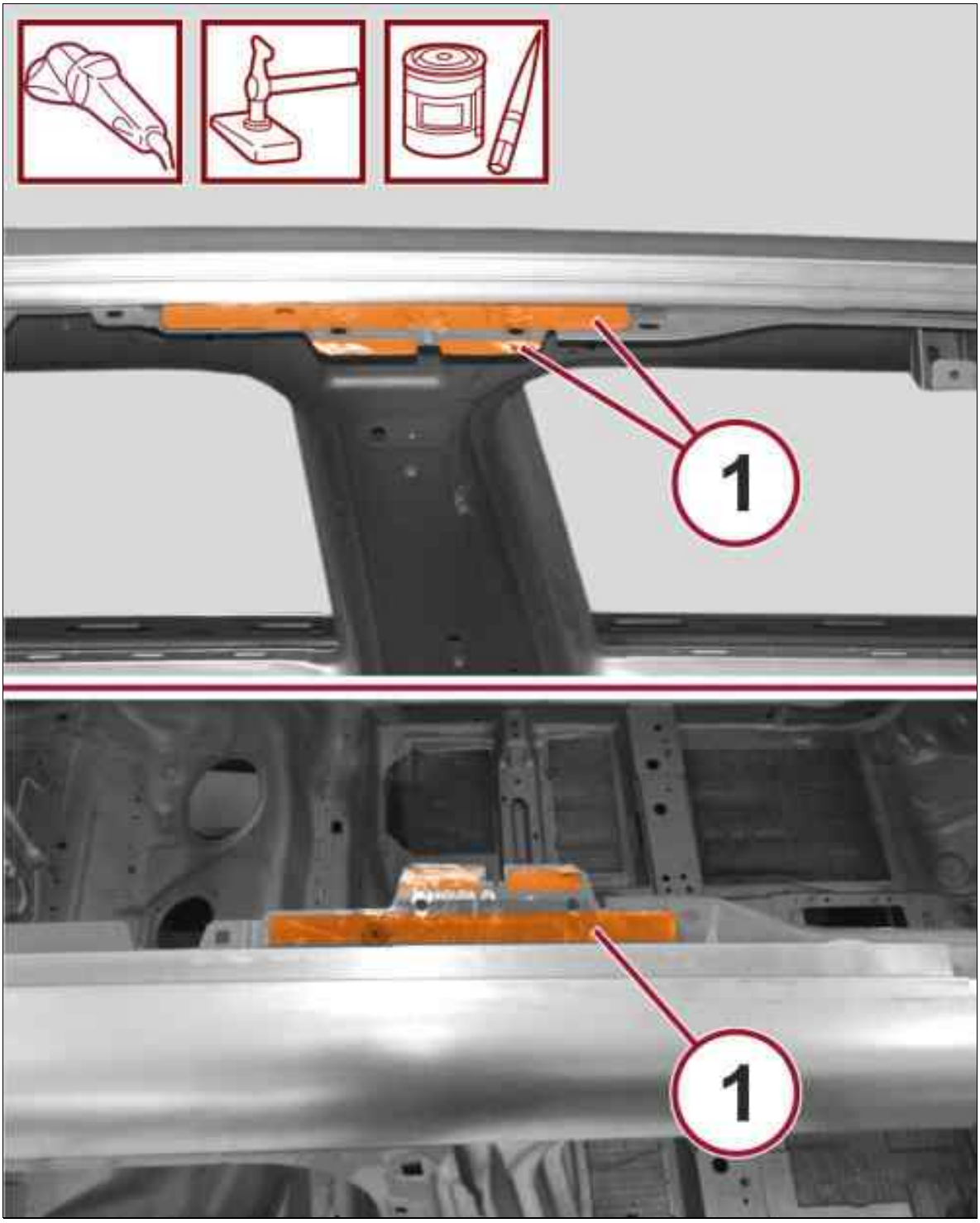


Courtesy of CHRYSLER GROUP, LLC

1. Remove the roof panel. Refer to PANEL, ROOF, REMOVAL AND INSTALLATION .
2. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
3. Straighten the body as necessary.
4. With the use of a rotary brush, remove the paint and gain access to the spot welds.

5. With the use of a spot weld cutting tool, release the spot welds (1) shown in the illustration.
6. With the use of a drill equipped with a spot weld cutting bit, release the spot welds (2) shown in the illustration.
7. Use a chisel and hammer to remove the areas previously released.
8. Remove the supporting roof bow (3).

Fig 2: Roof Bow Removal (2 Of 2)

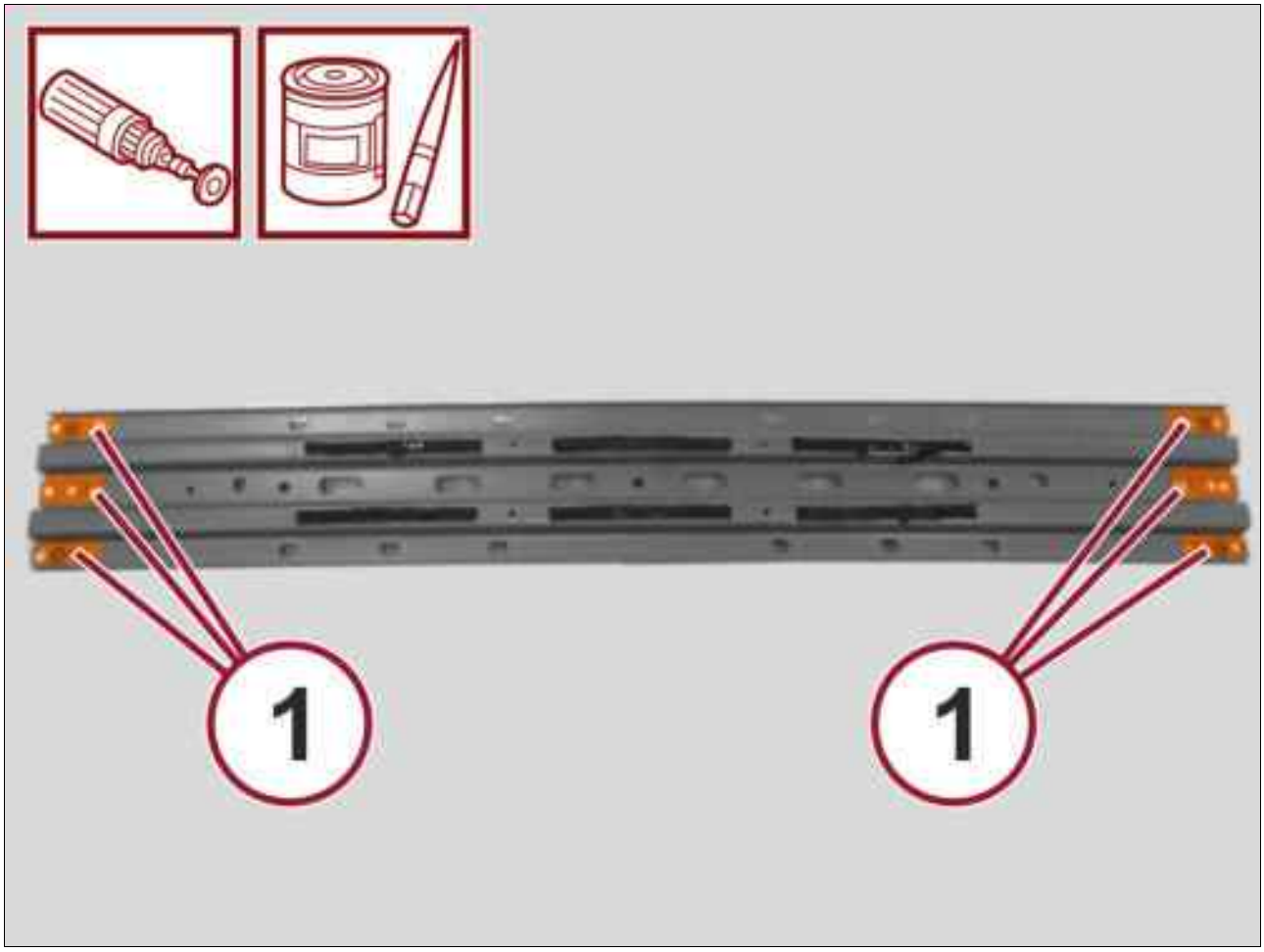


Courtesy of CHRYSLER GROUP, LLC

9. With the use of a disc grinder, remove any residue of the spot welds.
10. With the use of a hammer and dolly block, straighten the contour and defamations of the sheet metal as necessary.
11. Apply electro-weldable paint/weld through primer to the areas (1) affected.

BODY STRUCTURE > BOW, ROOF > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

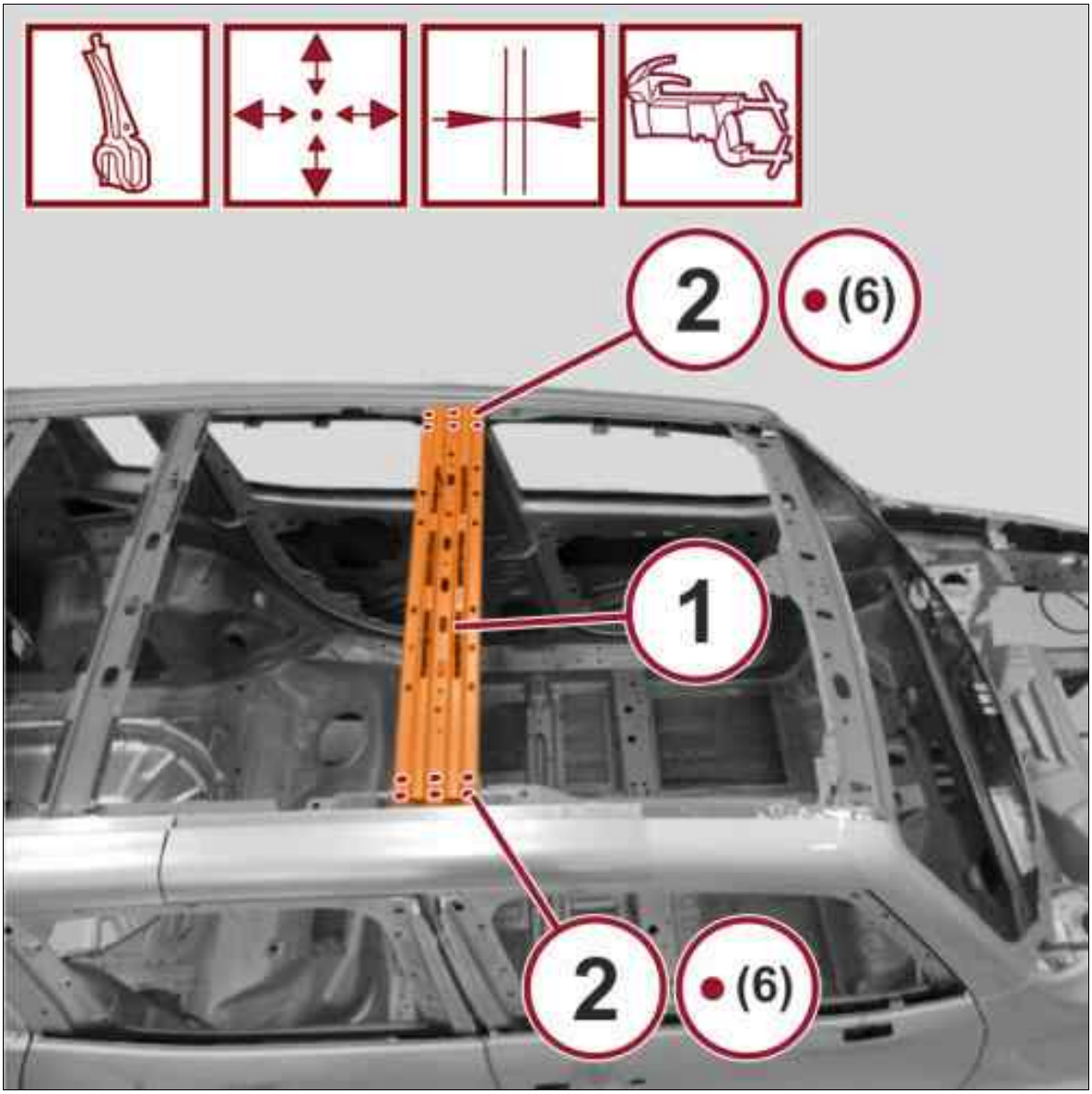
Fig 1: Roof Bow Installation (1 Of 2)



Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion coating from the service part in the areas (1) indicated.
2. Apply electro-weldable paint/weld through primer to the areas (1) that contact the body.

Fig 2: Roof Bow Installation (2 Of 2)

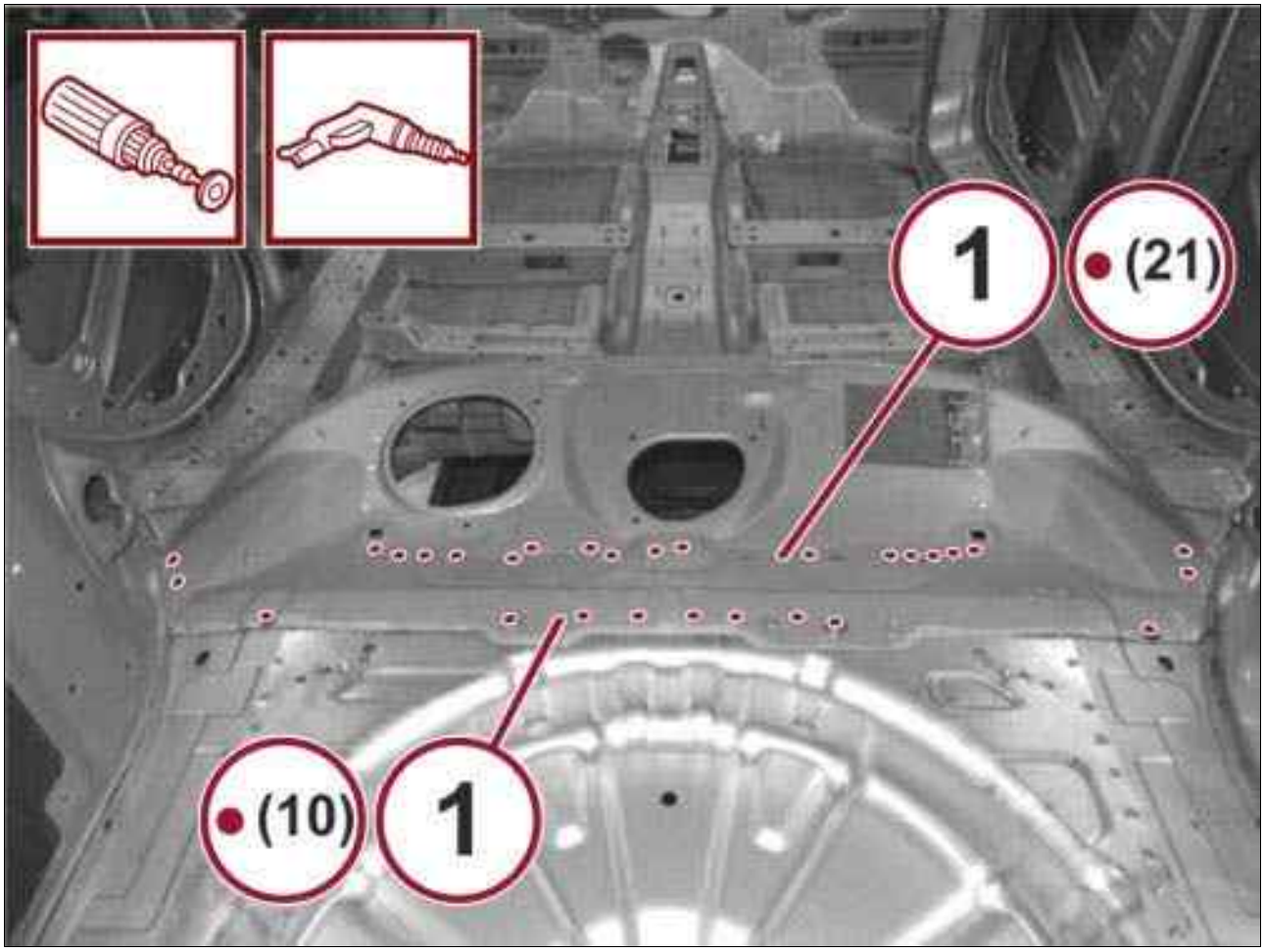


Courtesy of CHRYSLER GROUP, LLC

3. Position the service part (1) correctly on the vehicle and secure it with the self-locking clamps.
4. Check the alignment of the part.
5. With the use of a spot welder, weld the points (2) indicated in the illustration.
6. With the use of a disc grinder, smooth the spot welds.
7. With the use of a rotary brush, clean the previously worked areas.
8. Install the roof panel. Refer to PANEL, ROOF, REMOVAL AND INSTALLATION .

BODY STRUCTURE > PAN, FLOOR > REMOVAL AND INSTALLATION > CENTER FLOOR PAN REMOVAL AND INSTALLATION > REMOVAL

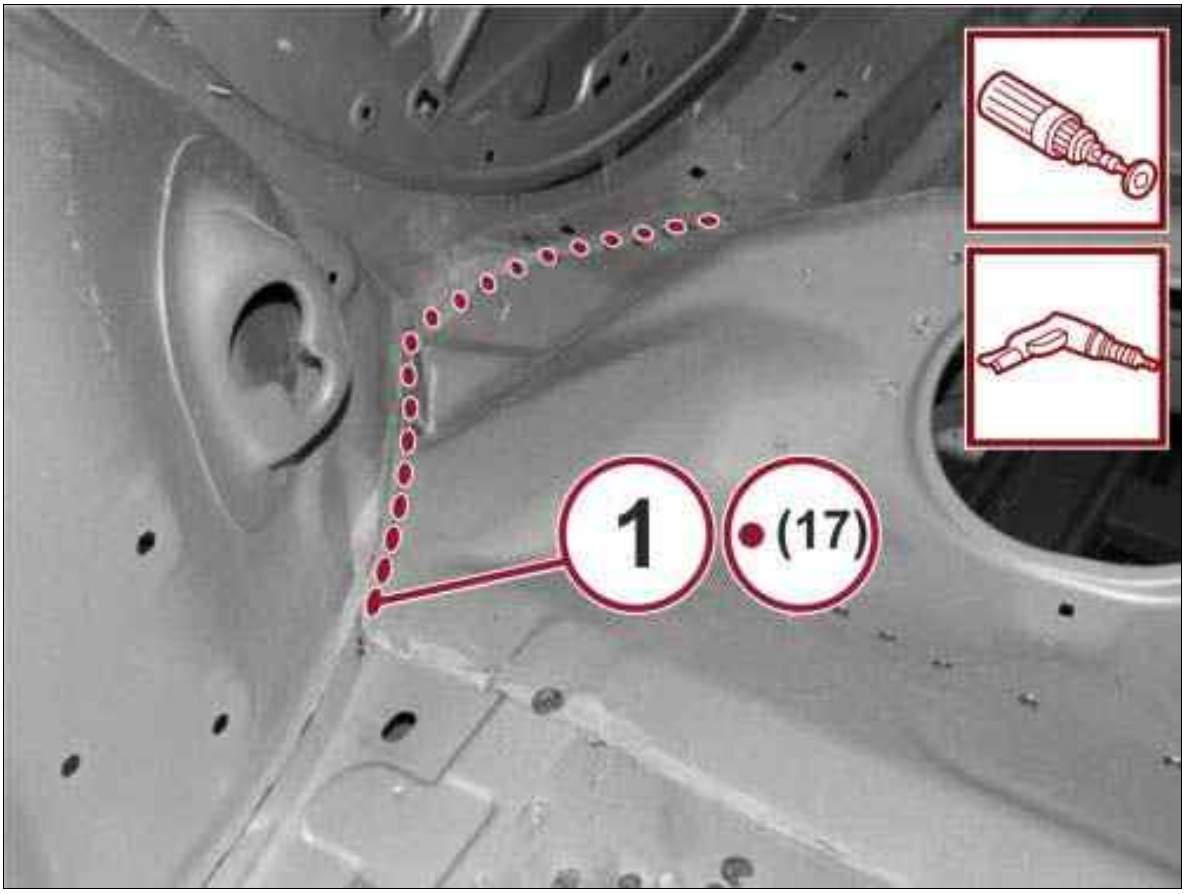
Fig 1: Center Floor Pan Removal (1 Of 5)



Courtesy of CHRYSLER GROUP, LLC

1. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
2. Straighten the body as necessary.
3. With the use of a rotary brush, remove the paint and gain access to the spot welds.
4. With the use of a drill, remove the spot welds (1) shown in the illustration.

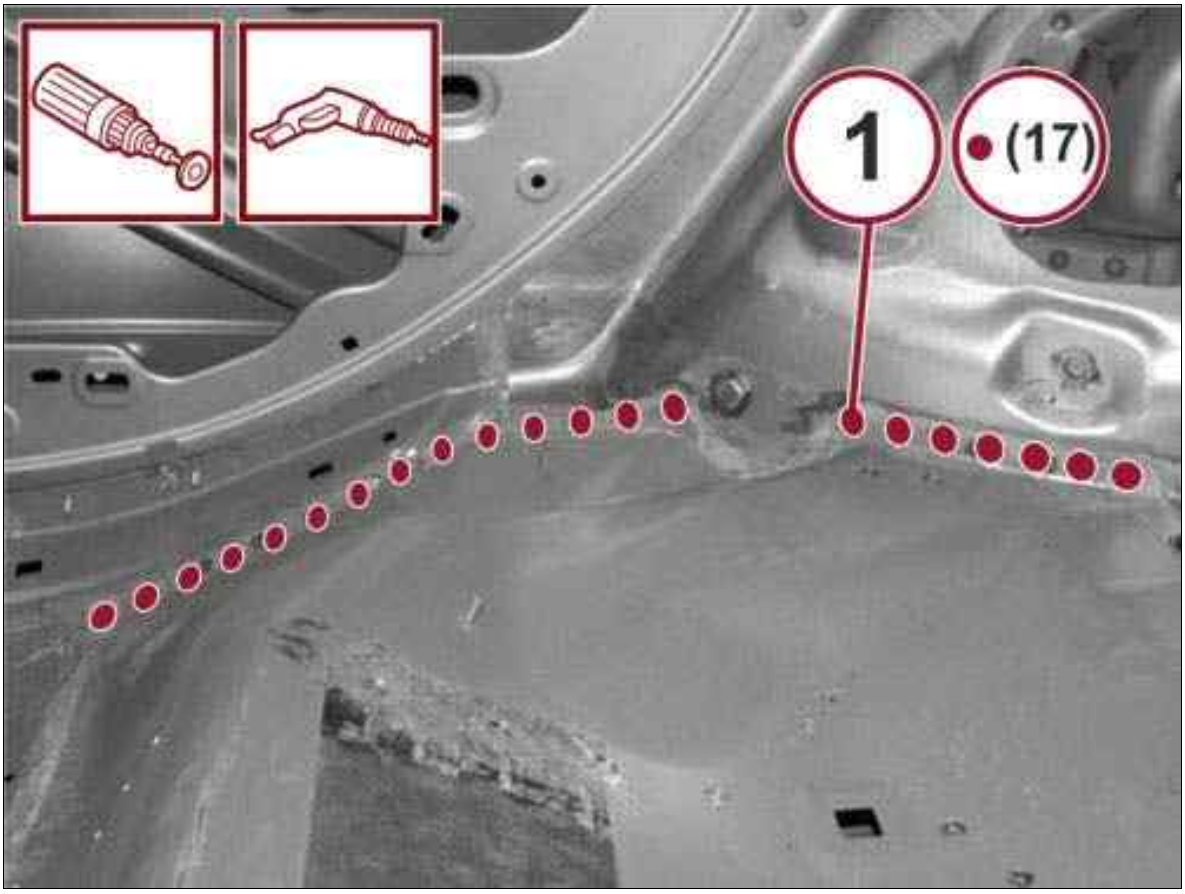
Fig 2: Center Floor Pan Removal (2 Of 5)



Courtesy of CHRYSLER GROUP, LLC

5. With the use of a drill, remove the spot welds (1) shown in the illustration.

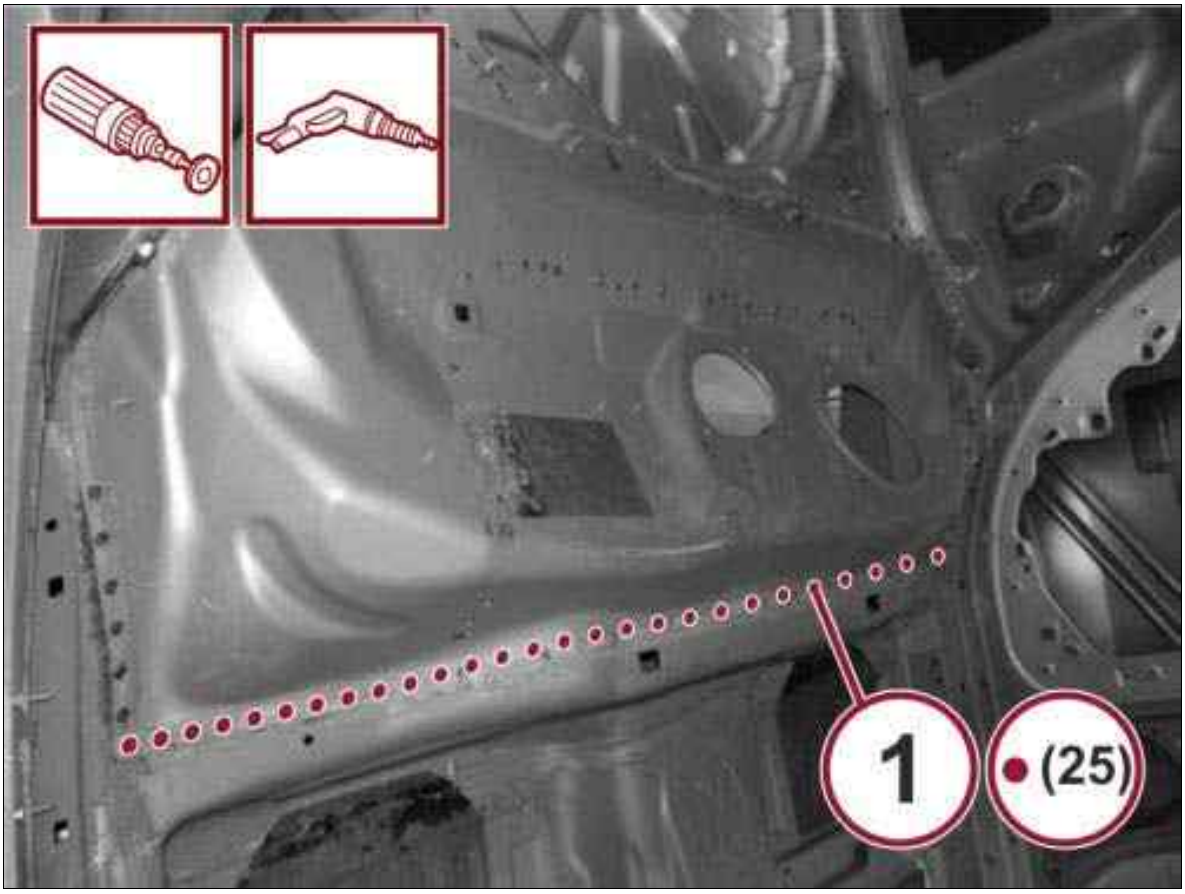
Fig 3: Center Floor Pan Removal (3 Of 5)



Courtesy of CHRYSLER GROUP, LLC

6. With the use of a drill, remove the spot welds (1) shown in the illustration.

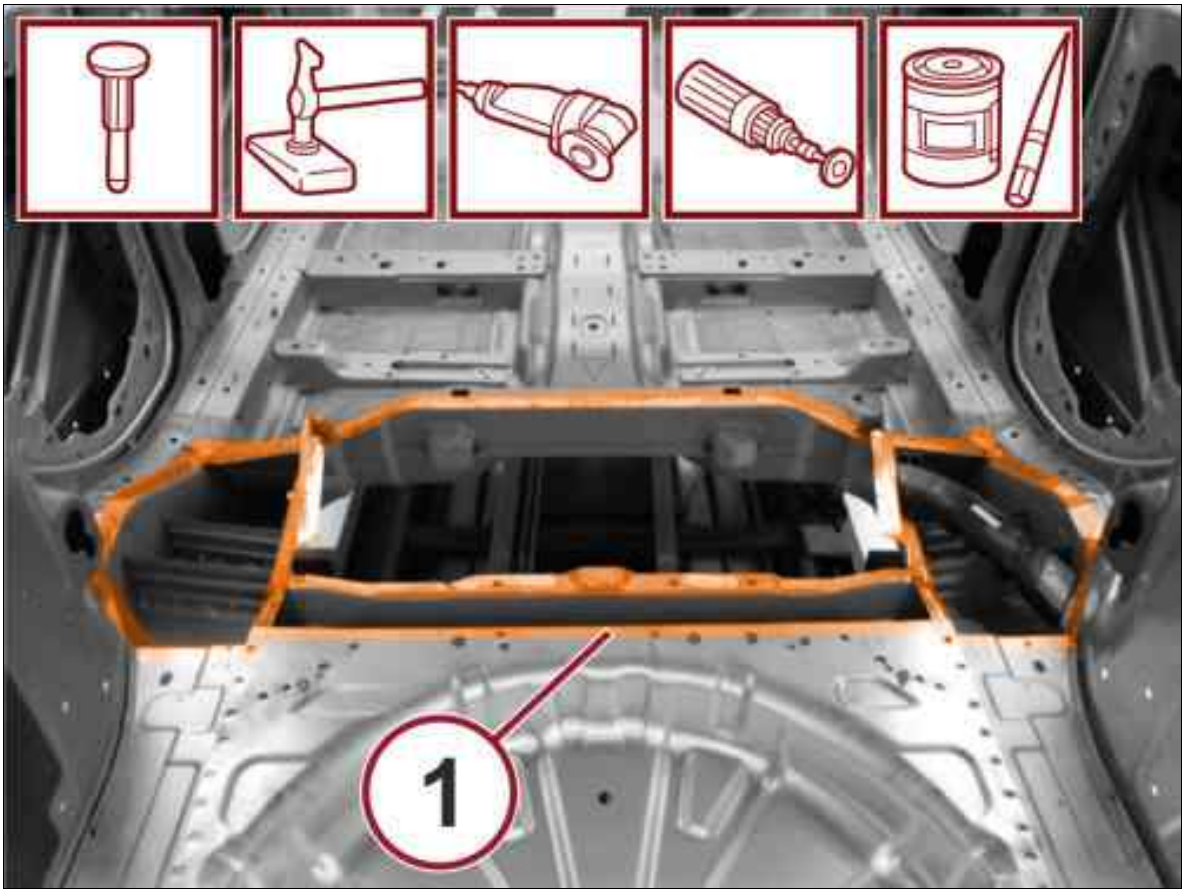
Fig 4: Center Floor Pan Removal (4 Of 5)



Courtesy of CHRYSLER GROUP, LLC

7. With the use of a drill, remove the spot welds (1) shown in the illustration.

Fig 5: Center Floor Pan Removal (5 Of 5)

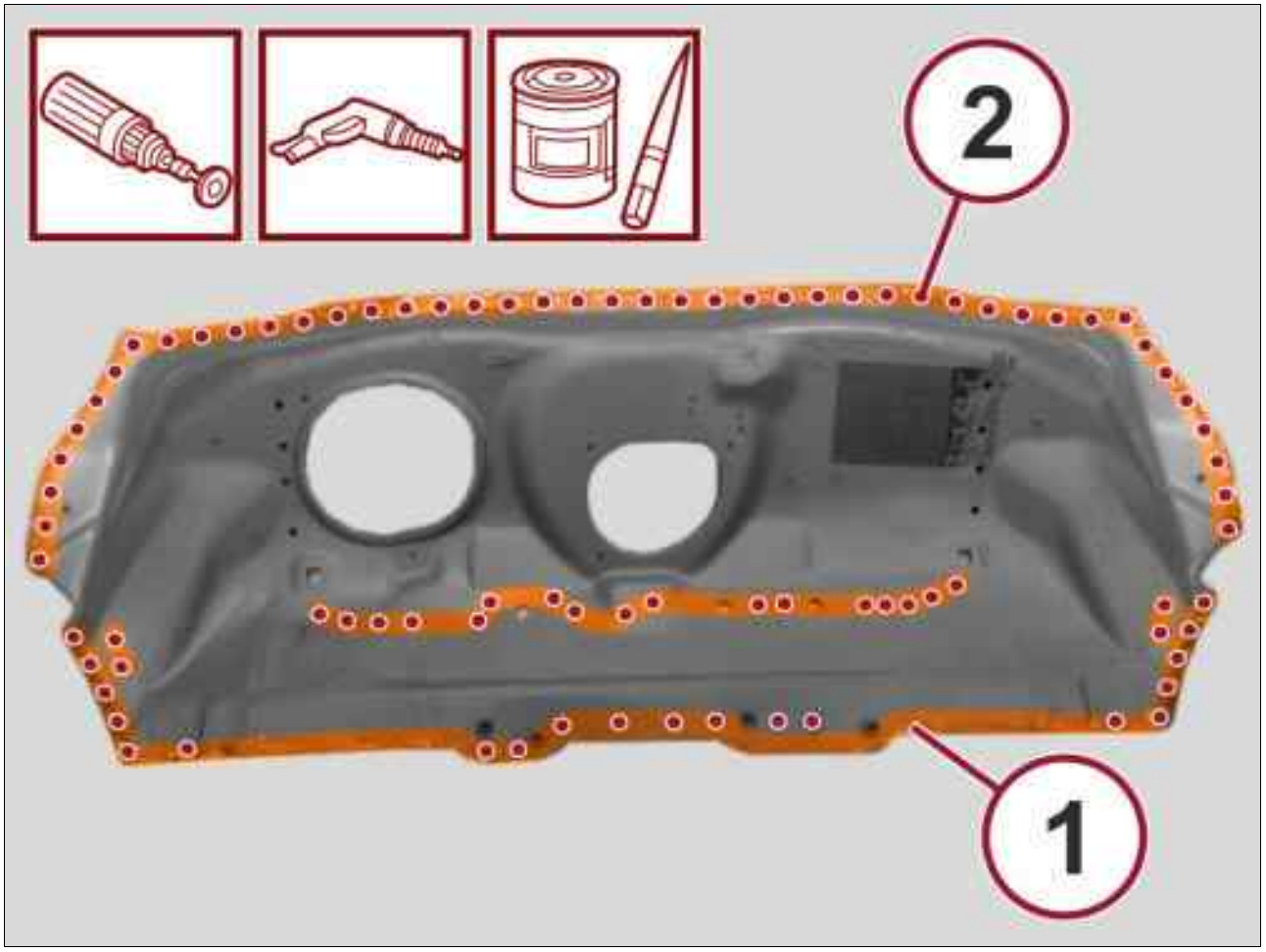


Courtesy of CHRYSLER GROUP, LLC

8. Use a chisel and hammer to remove the areas previously released.
9. With the use of a hammer and dolly block, straighten the edges (1) of the mating components.
10. With the use of a grinding disc, remove any residue of the spot welds.
11. With the use of a rotary brush, clean the previously treated areas (1).
12. Apply electro-weldable paint/weld through primer to the boarders (1) to be welded.

BODY STRUCTURE > PAN, FLOOR > REMOVAL AND INSTALLATION > CENTER FLOOR PAN REMOVAL AND INSTALLATION > INSTALLATION

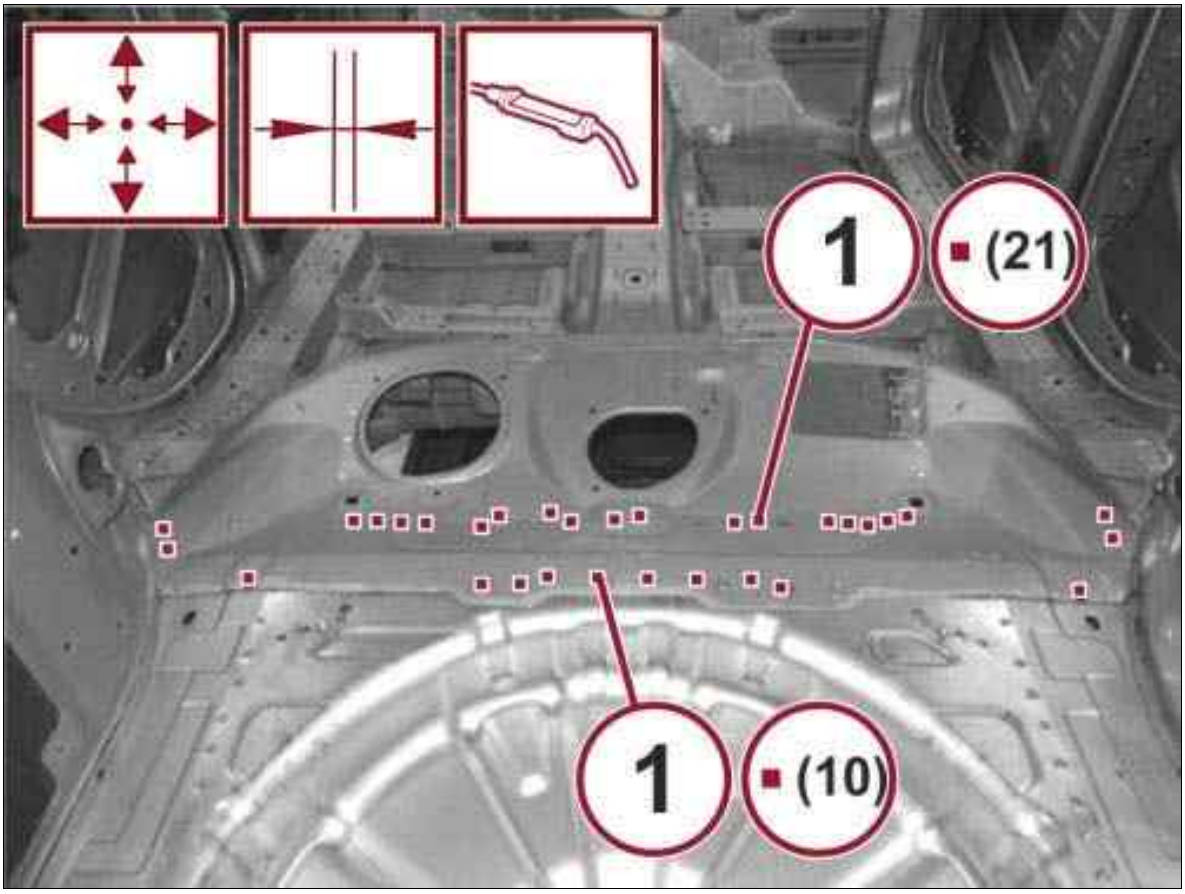
Fig 1: Center Floor Pan Installation (1 Of 6)



Courtesy of CHRYSLER GROUP, LLC

1. With the use of a rotary brush, remove the anti-corrosion treatment around the entire perimeter (1) of the inner and outer parts.
2. With the use of a drill, drill holes (2) in the areas shown in the illustration.
3. Apply electro-weldable paint/weld through primer to the boarders (1).

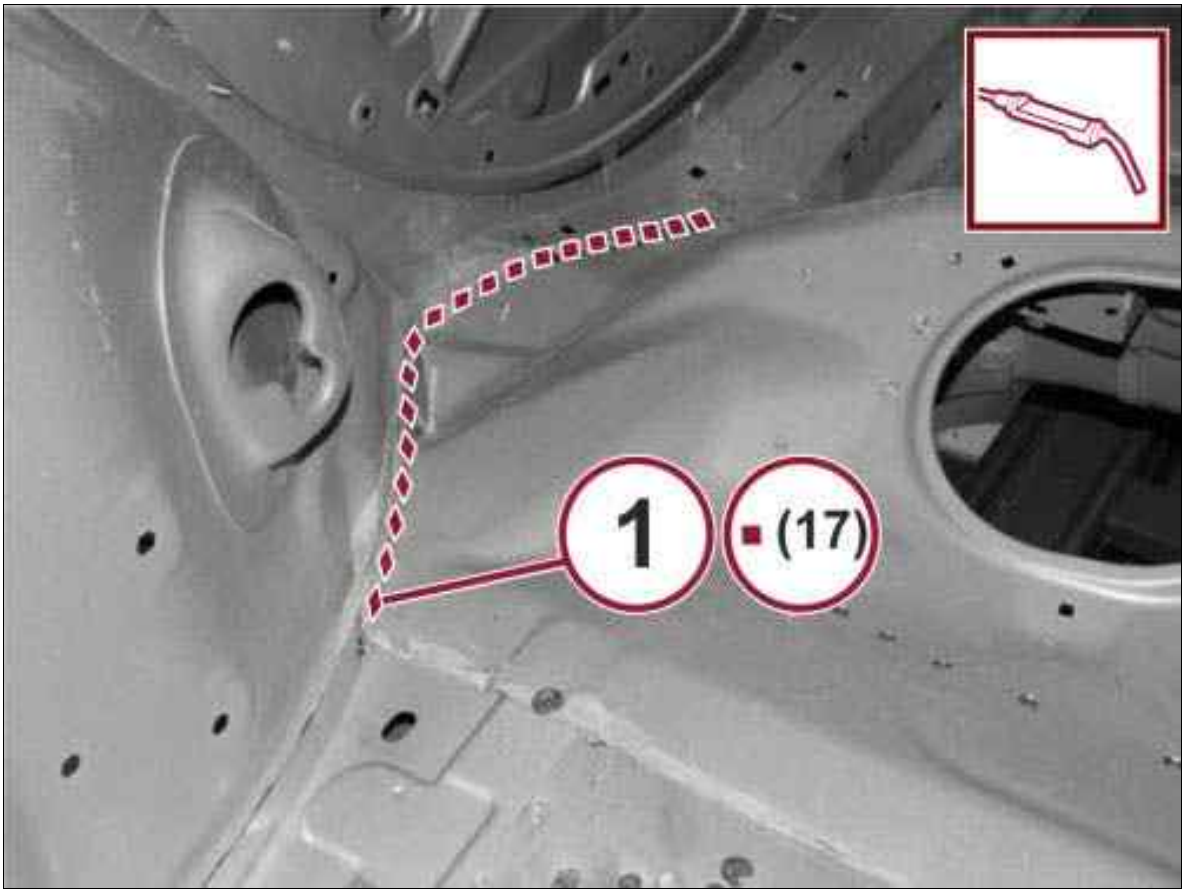
Fig 2: Center Floor Pan Installation (2 Of 6)



Courtesy of CHRYSLER GROUP, LLC

4. Position the service part (1) correctly on the vehicle internal pillar and secure it with the self-locking clamps.
5. Check alignment and surrounding gaps.
6. With the use of a MIG welder, apply plug welds filling in the areas (1) shown in the illustration.

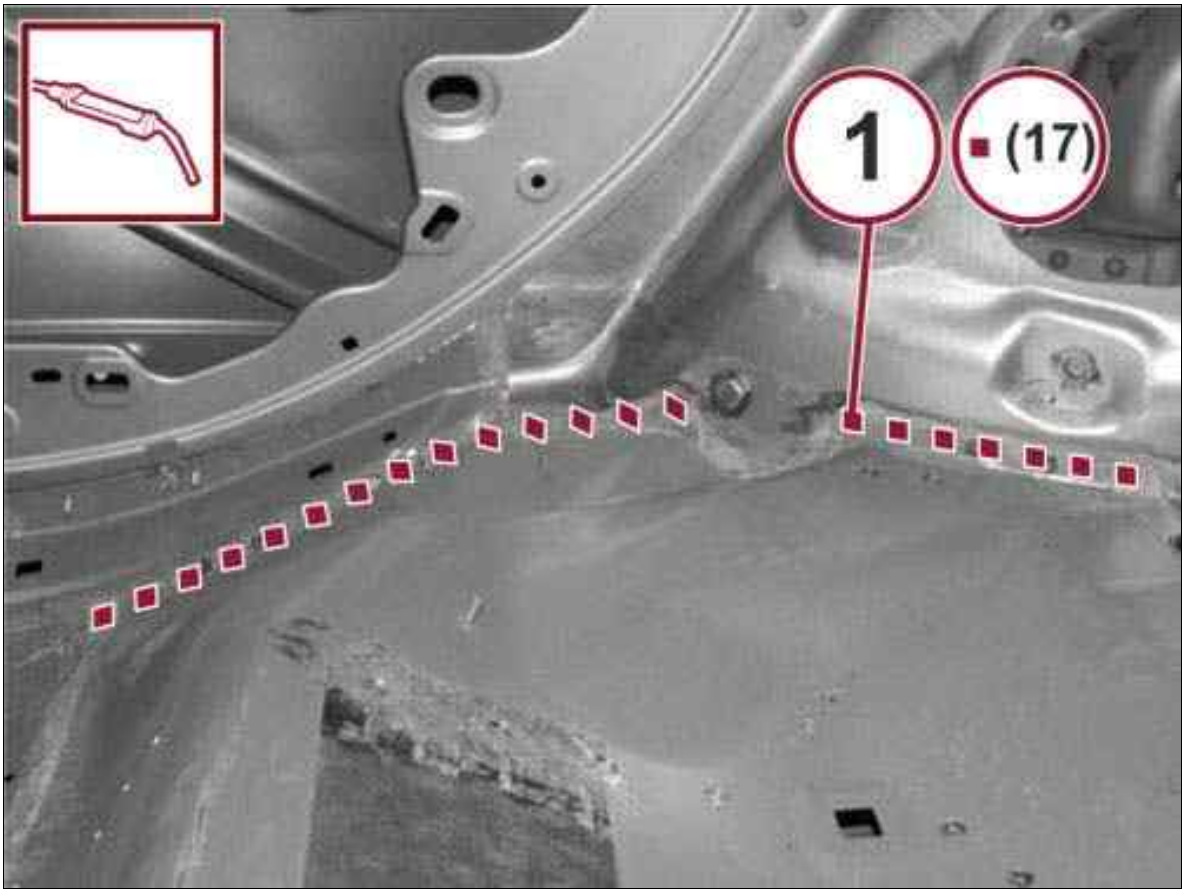
Fig 3: Center Floor Pan Installation (3 Of 6)



Courtesy of CHRYSLER GROUP, LLC

7. With the use of a MIG welder, apply plug welds filling in the areas (1) shown in the illustration.

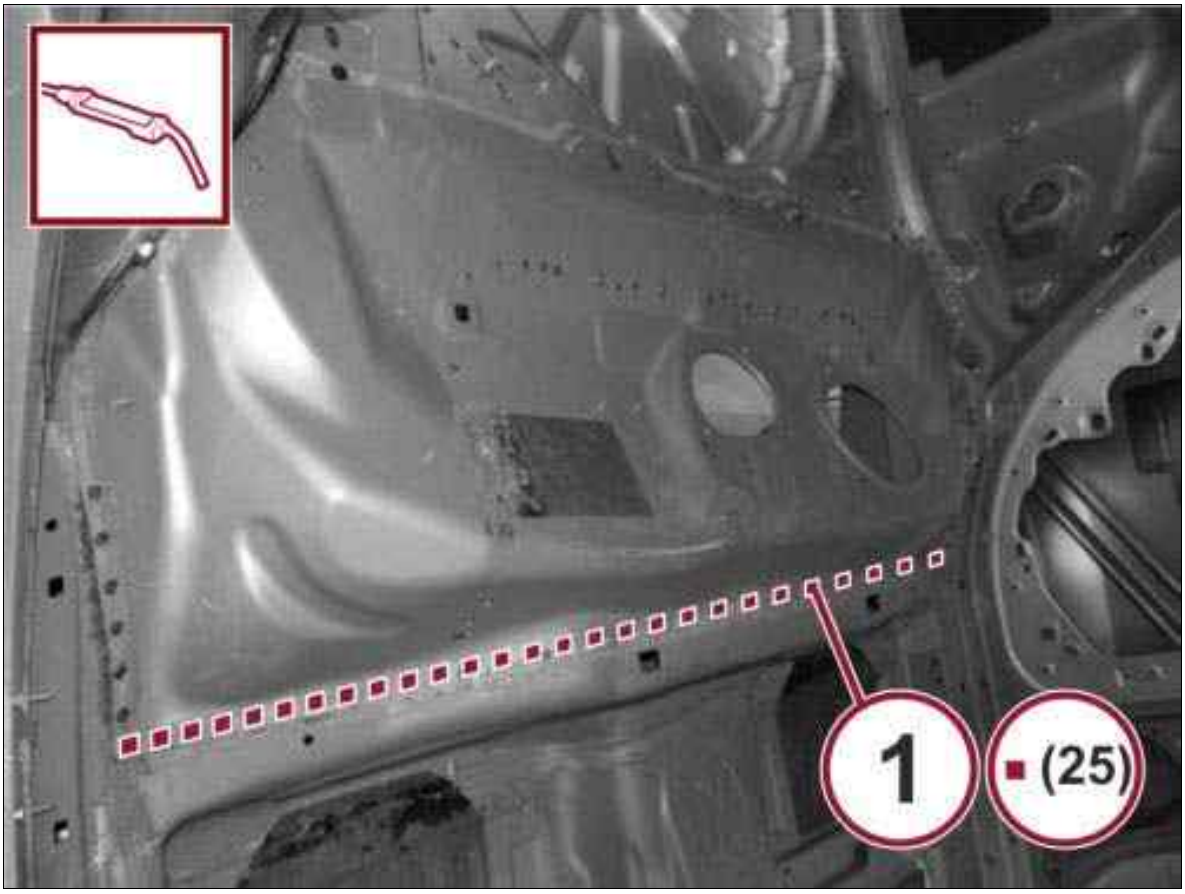
Fig 4: Center Floor Pan Installation (4 Of 6)



Courtesy of CHRYSLER GROUP, LLC

8. With the use of a MIG welder, apply plug welds filling in the areas (1) shown in the illustration.

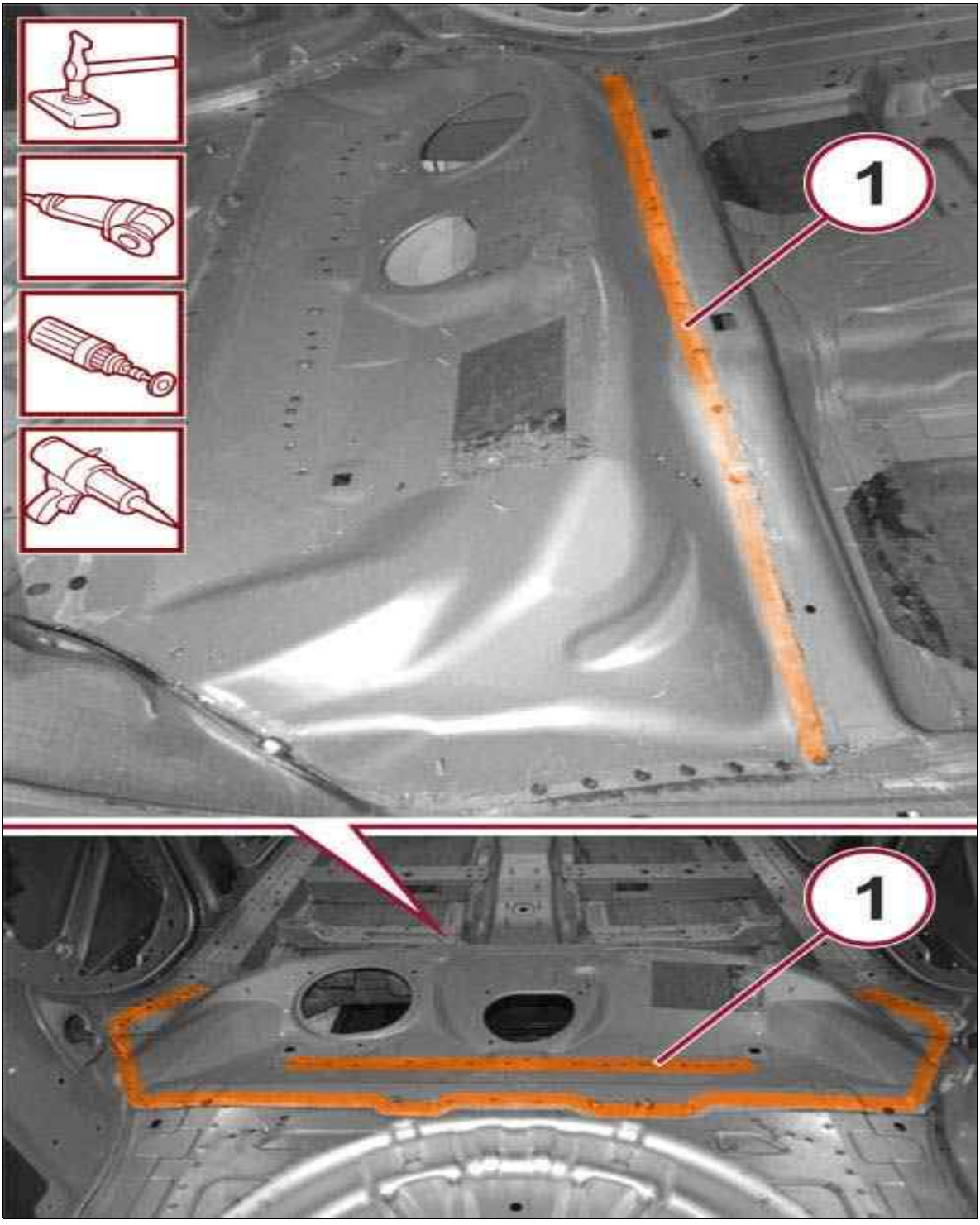
Fig 5: Center Floor Pan Installation (5 Of 6)



Courtesy of CHRYSLER GROUP, LLC

9. With the use of a MIG welder, apply plug welds filling in the areas (1) shown in the illustration.

Fig 6: Center Floor Pan Installation (6 Of 6)



Courtesy of CHRYSLER GROUP, LLC

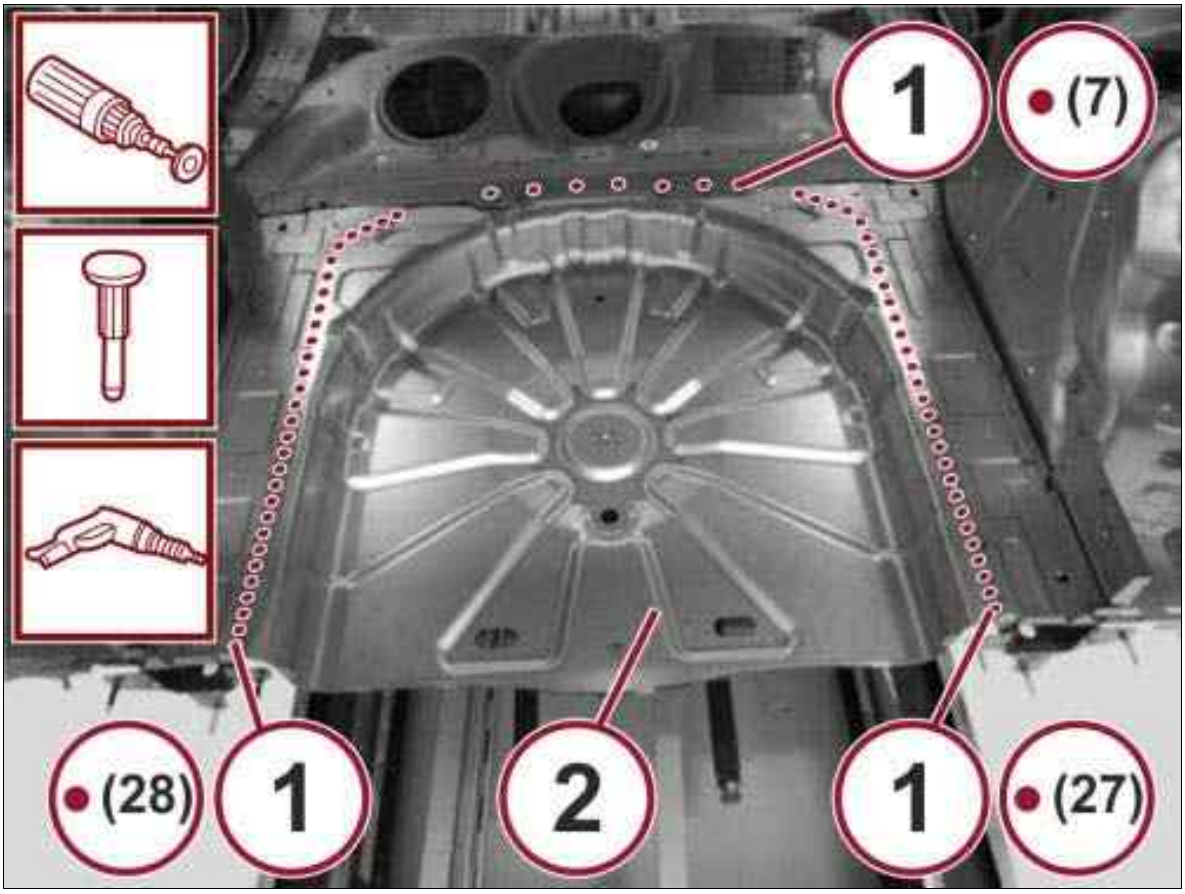
10. Correct any distortions of the sheet metal using a hammer and dolly block.
11. With the use of a grinding disc, smooth the welds.
12. With the use of a rotary brush, clean the previously welded areas (1).
13. Apply corrosion protection to the areas involved in the welding.

14. Seal the seams between the parts and the vehicle in the areas (1) shown in the illustration.

BODY STRUCTURE > PAN, FLOOR > REMOVAL AND INSTALLATION > REAR FLOOR PAN REMOVAL AND INSTALLATION > REMOVAL

1. Remove the rear closure panel. Refer to PANEL, REAR CLOSURE, REMOVAL AND INSTALLATION .
2. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
3. Straighten the body as necessary.

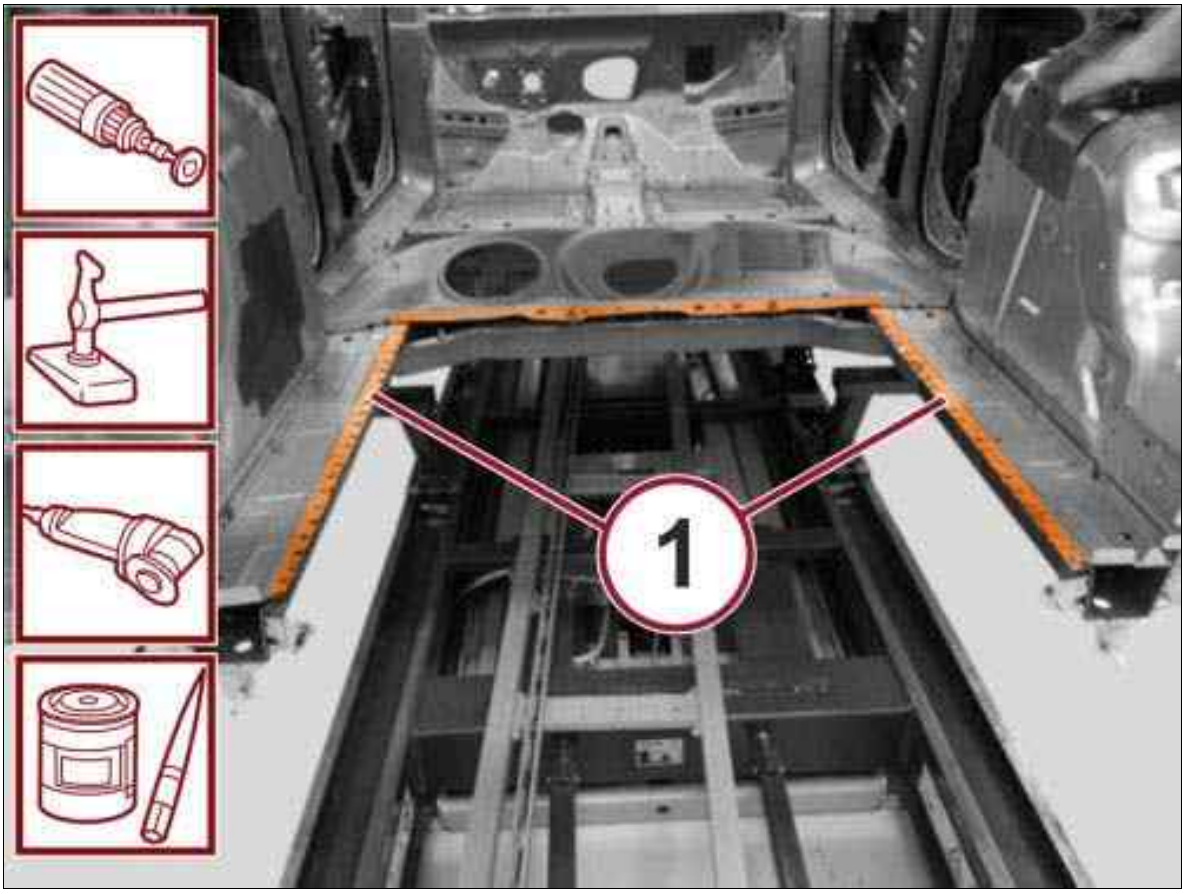
   Fig 1: Rear Floor Pan Removal (1 Of 2)



Courtesy of CHRYSLER GROUP, LLC

4. With the use of a rotary brush, remove the paint and gain access to the spot welds.
5. Release the spot welds (1) shown in the illustration.
6. Use a drill to remove the spot welds (1) not accessible with a spot weld cutting tool.
7. Use a chisel and hammer to remove the areas previously released.
8. Leave the front and side panels in place and remove the rear pan floor (2).

Fig 2: Rear Floor Pan Removal (2 Of 2)

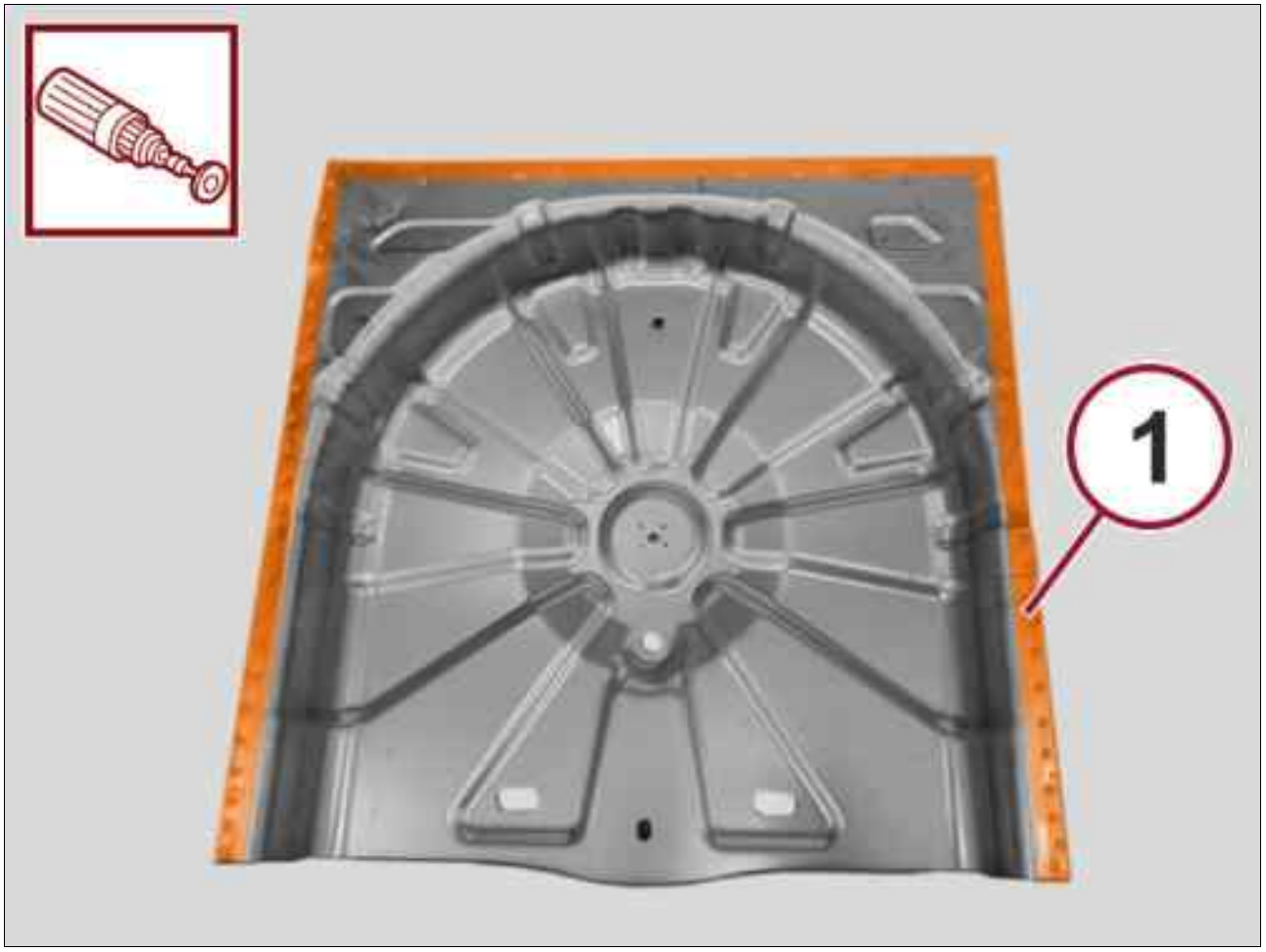


Courtesy of CHRYSLER GROUP, LLC

9. With the use of a rotary brush, clean the previously treated areas (1).
10. With the use of a hammer and dolly block, straighten the edges (1) of the mating components.
11. With the use of a grinding disc, remove any residue of the spot welds.
12. Apply electro-weldable paint/weld through primer to the boarders (1) to be welded.

BODY STRUCTURE > PAN, FLOOR > REMOVAL AND INSTALLATION > REAR FLOOR PAN REMOVAL AND INSTALLATION > INSTALLATION

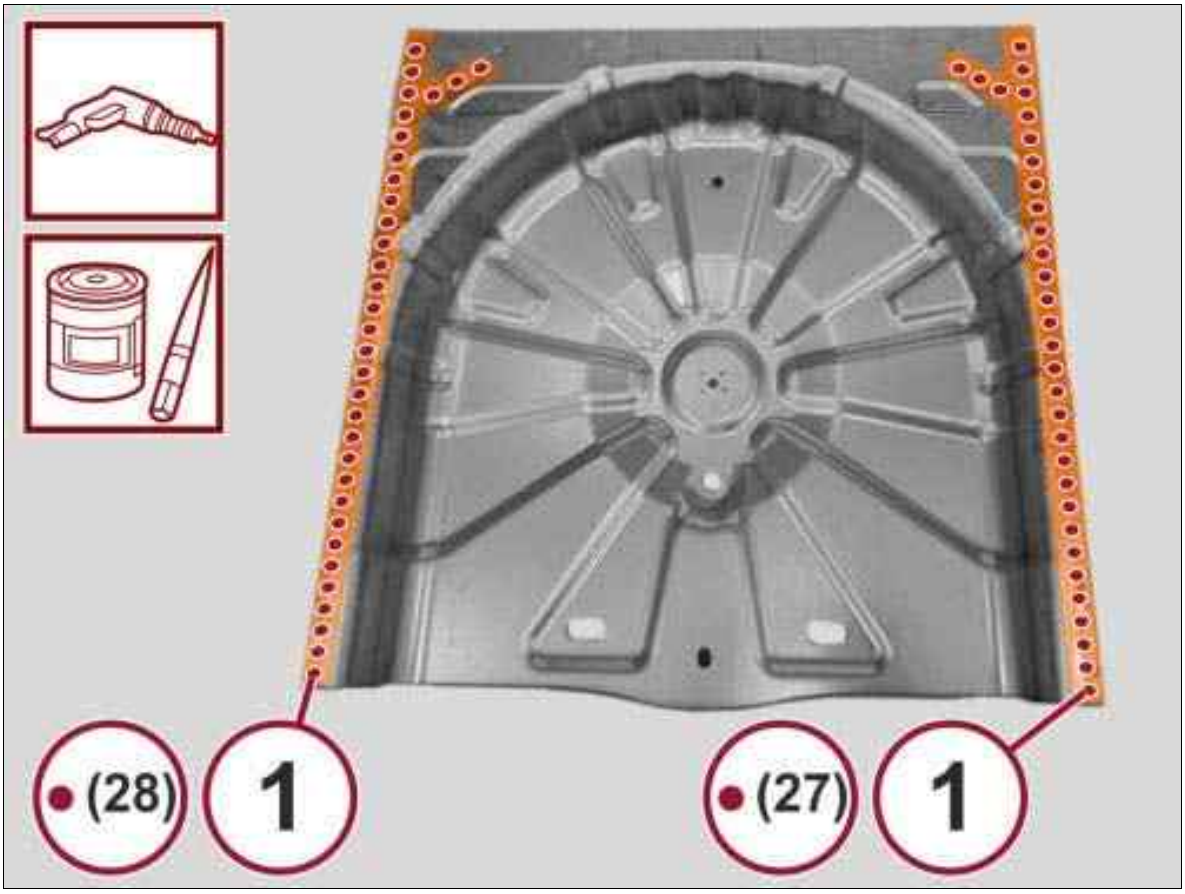
Fig 1: Rear Floor Pan Installation (1 Of 4)



Courtesy of CHRYSLER GROUP, LLC

1. With the use of a rotary brush, remove the anti-corrosion treatment around the entire perimeter (1) of the inner and outer parts.

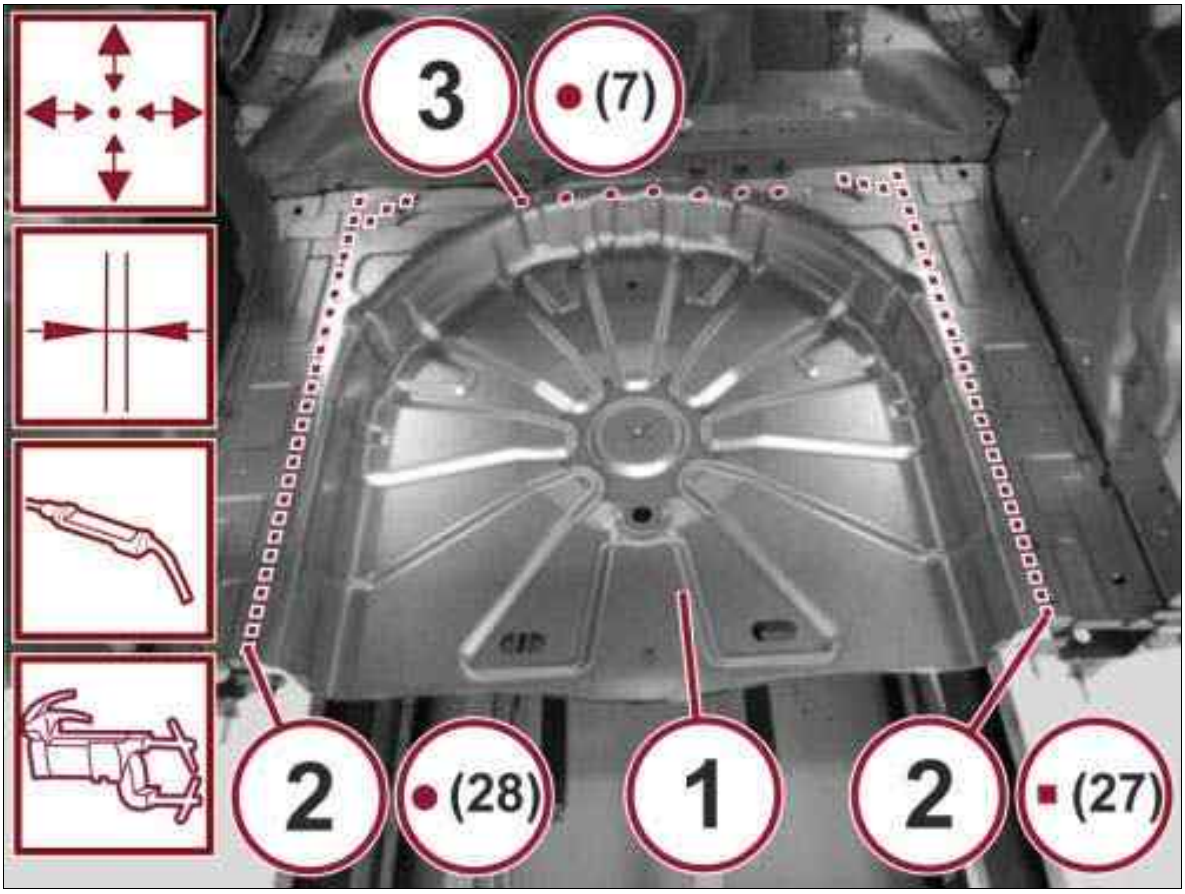
Fig 2: Rear Floor Pan Installation (2 Of 4)



Courtesy of CHRYSLER GROUP, LLC

2. Drill the service part in accordance to where the welds will be placed (1).
3. Apply electro-weldable paint/weld through primer on the areas drilled.

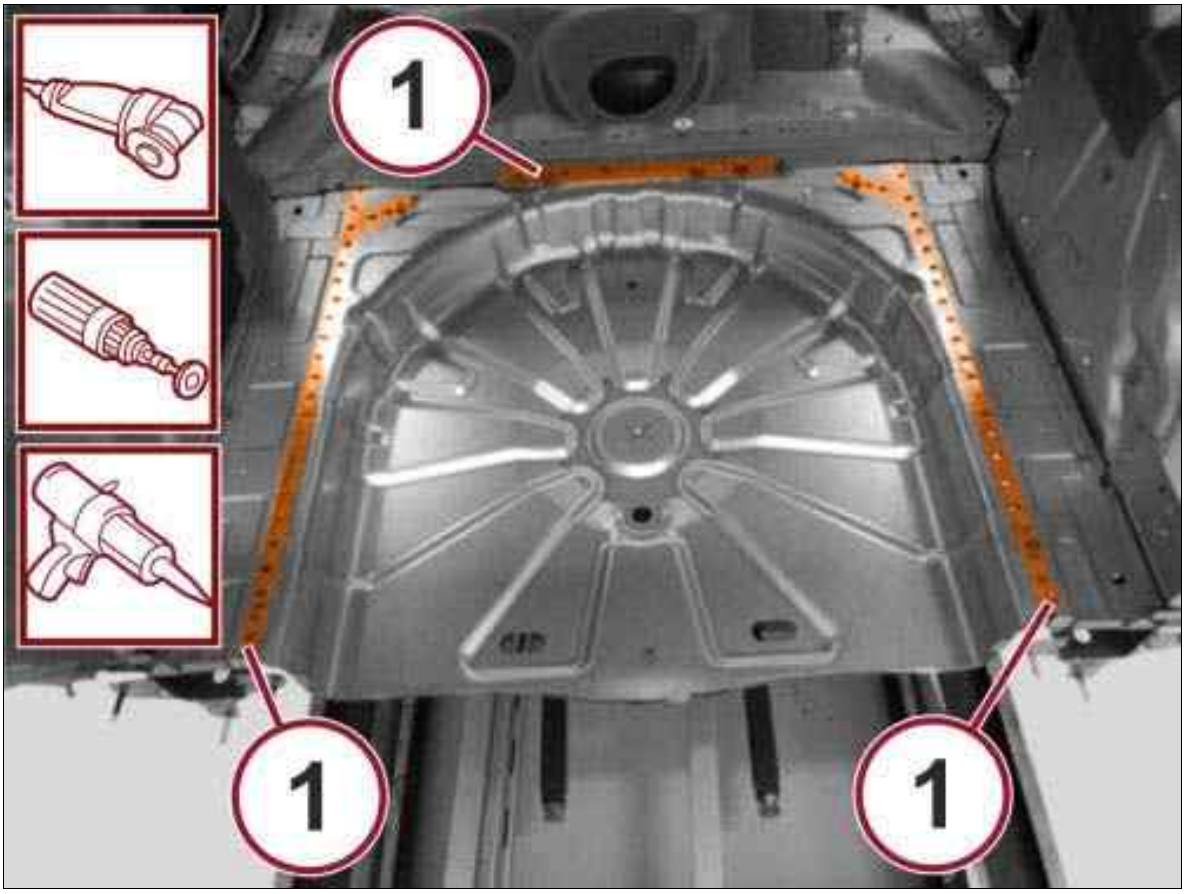
Fig 3: Rear Floor Pan Installation (3 Of 4)



Courtesy of CHRYSLER GROUP, LLC

4. Position the rear floor into position.
5. Check alignment and surrounding gaps.
6. Insert the edges of the rear floor (1) beneath the related front and side panels.
7. With the use of a MIG welder, apply plug welds filling in the areas (2) shown in the illustration.
8. With the use of a spot welder, weld the areas (3) shown in the illustration.

Fig 4: Rear Floor Pan Installation (4 Of 4)



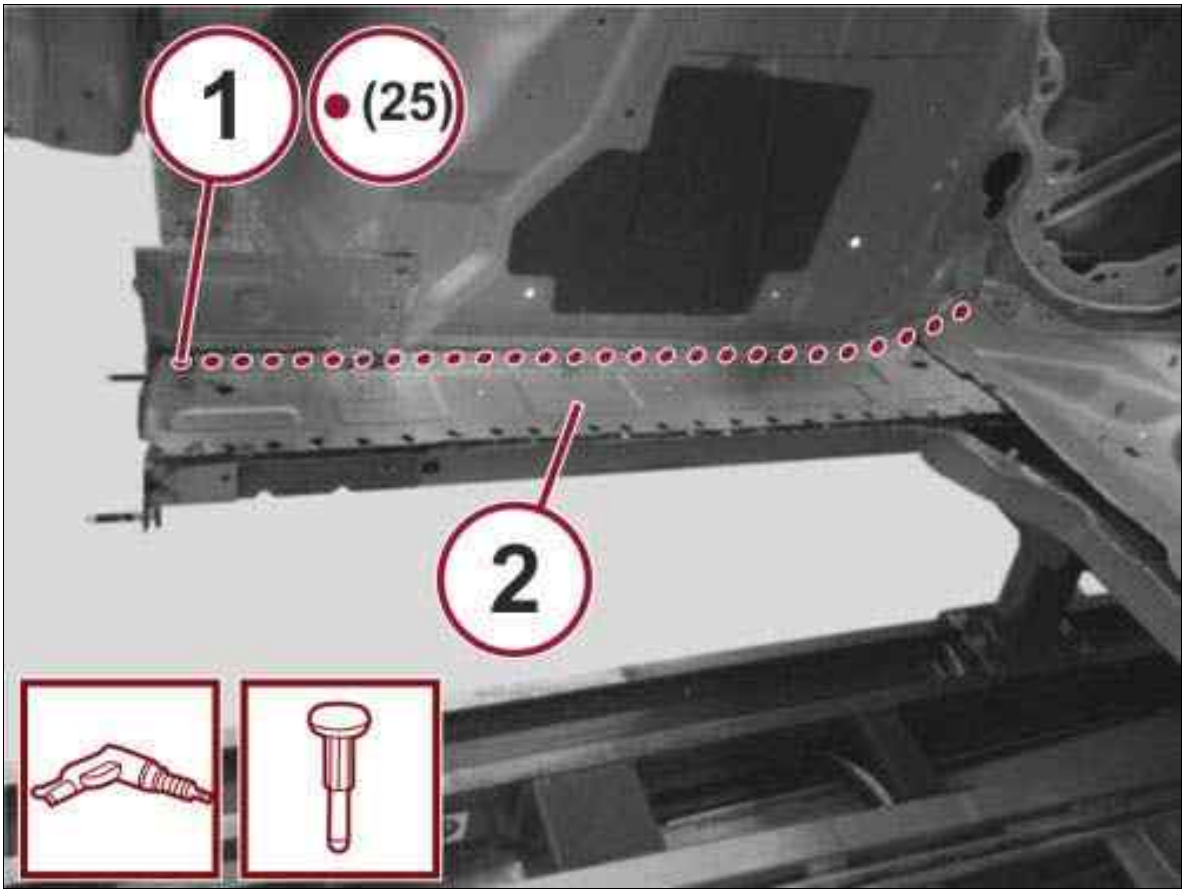
Courtesy of CHRYSLER GROUP, LLC

9. With the use of a grinding disc, smooth the welds.
10. With the use of a rotary brush, clean the previously treated areas (1).
11. Apply corrosion protection to the areas affected.
12. Apply sealer to the seams.
13. Install the rear closure panel. Refer to PANEL, REAR CLOSURE, REMOVAL AND INSTALLATION .

BODY STRUCTURE > PAN, FLOOR > REMOVAL AND INSTALLATION > REAR FLOOR PAN EXTENSION REMOVAL AND INSTALLATION > REMOVAL

1. Remove the rear closure panel. Refer to PANEL, REAR CLOSURE, REMOVAL AND INSTALLATION .
2. Remove the rear floor pan. Refer to REAR FLOOR PAN REMOVAL AND INSTALLATION .
3. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
4. Straighten the body as necessary.

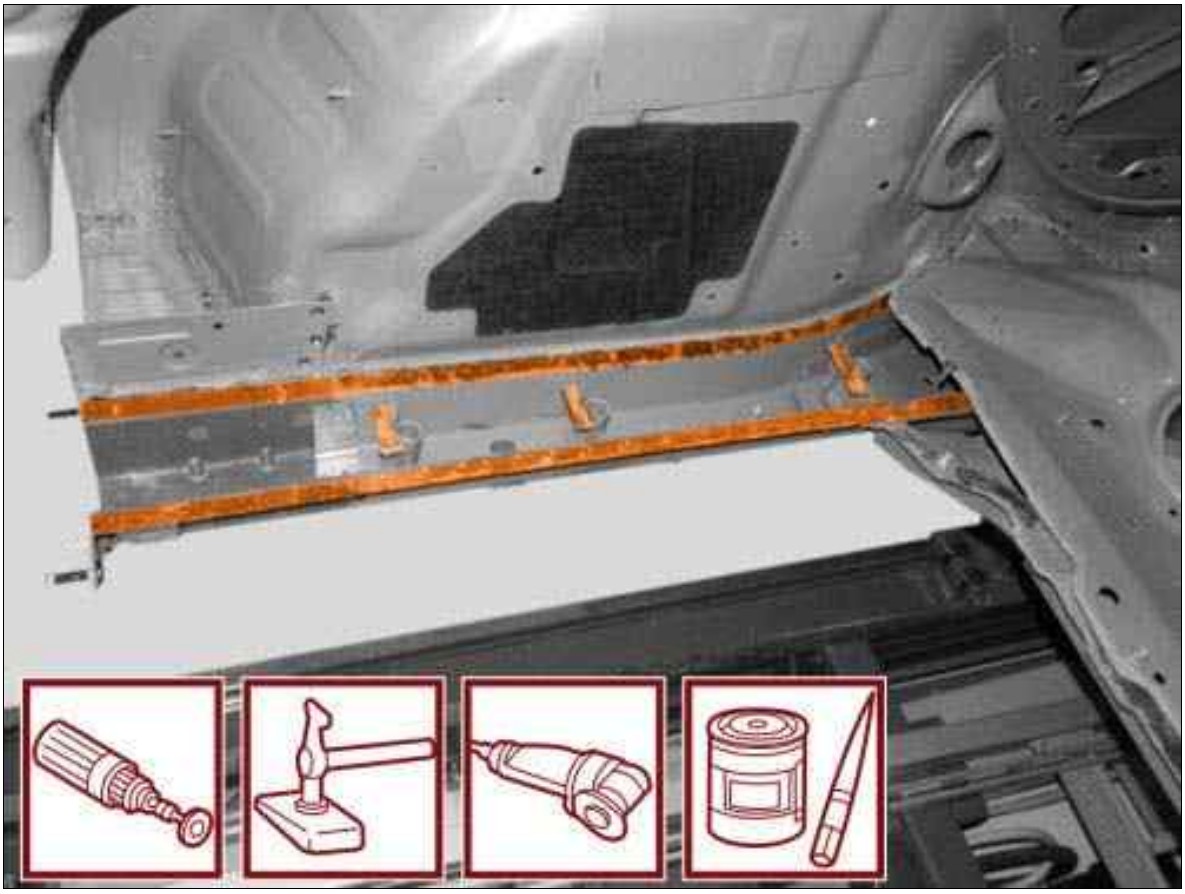
Fig 1: Rear Floor Pan Extension Removal (1 Of 2)



Courtesy of CHRYSLER GROUP, LLC

5. With the use of a drill, release the spot welds (1) indicated in the illustration.
6. With the use of a chisel and hammer, remove the spot welds previously released.
7. Remove the rear floor pan extension (2) from the vehicle.

Fig 2: Rear Floor Pan Extension Removal (2 Of 2)

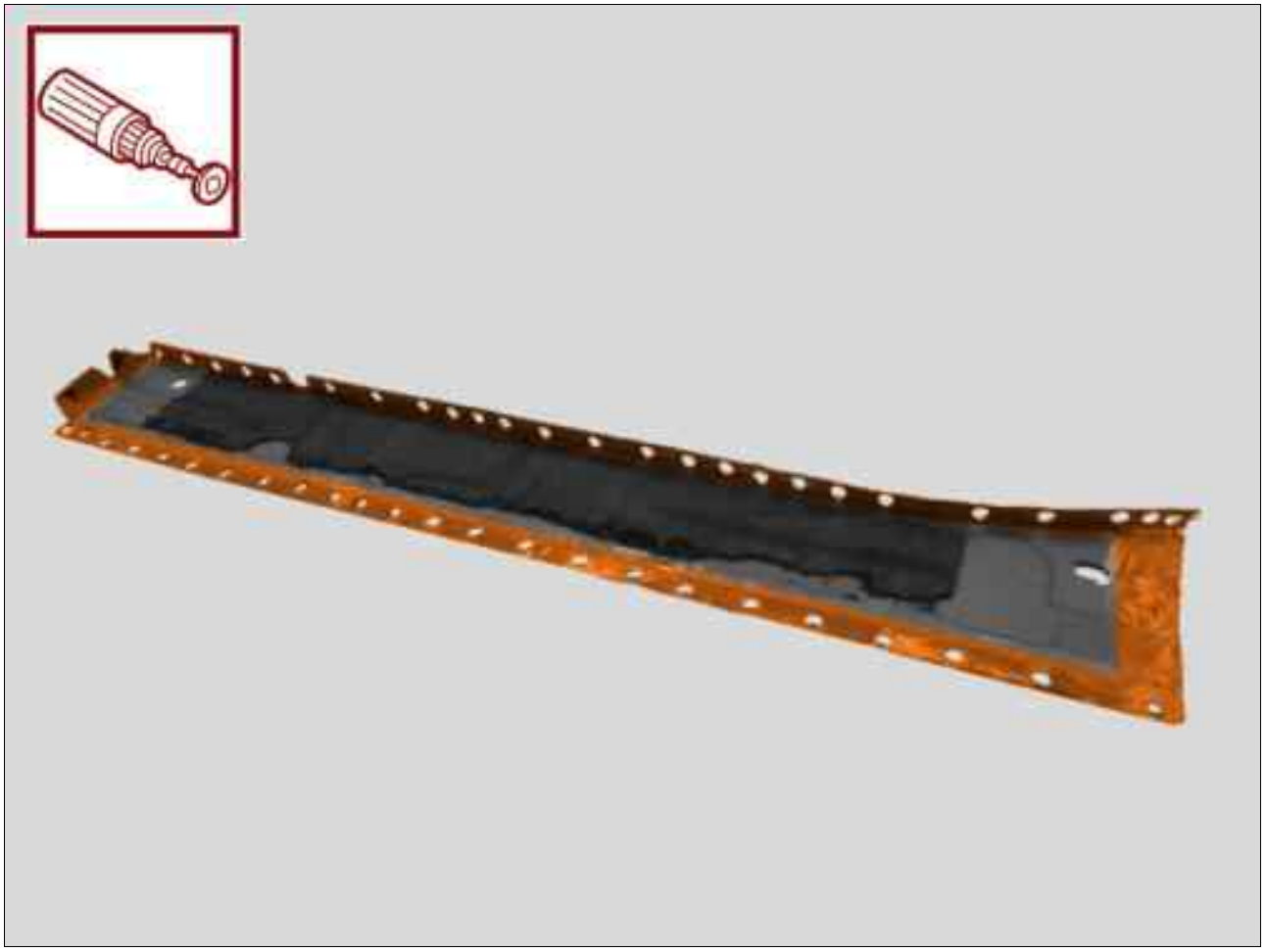


Courtesy of CHRYSLER GROUP, LLC

8. With the use of a rotary brush, clean the previously treated areas.
9. With the use of a hammer and dolly block, straighten the edges of the mating components.
10. With the use of a disc grinder, remove any residue of the spot welds.
11. Apply electro-weldable paint/weld through primer to the areas highlighted.

BODY STRUCTURE > PAN, FLOOR > REMOVAL AND INSTALLATION > REAR FLOOR PAN EXTENSION REMOVAL AND INSTALLATION > INSTALLATION

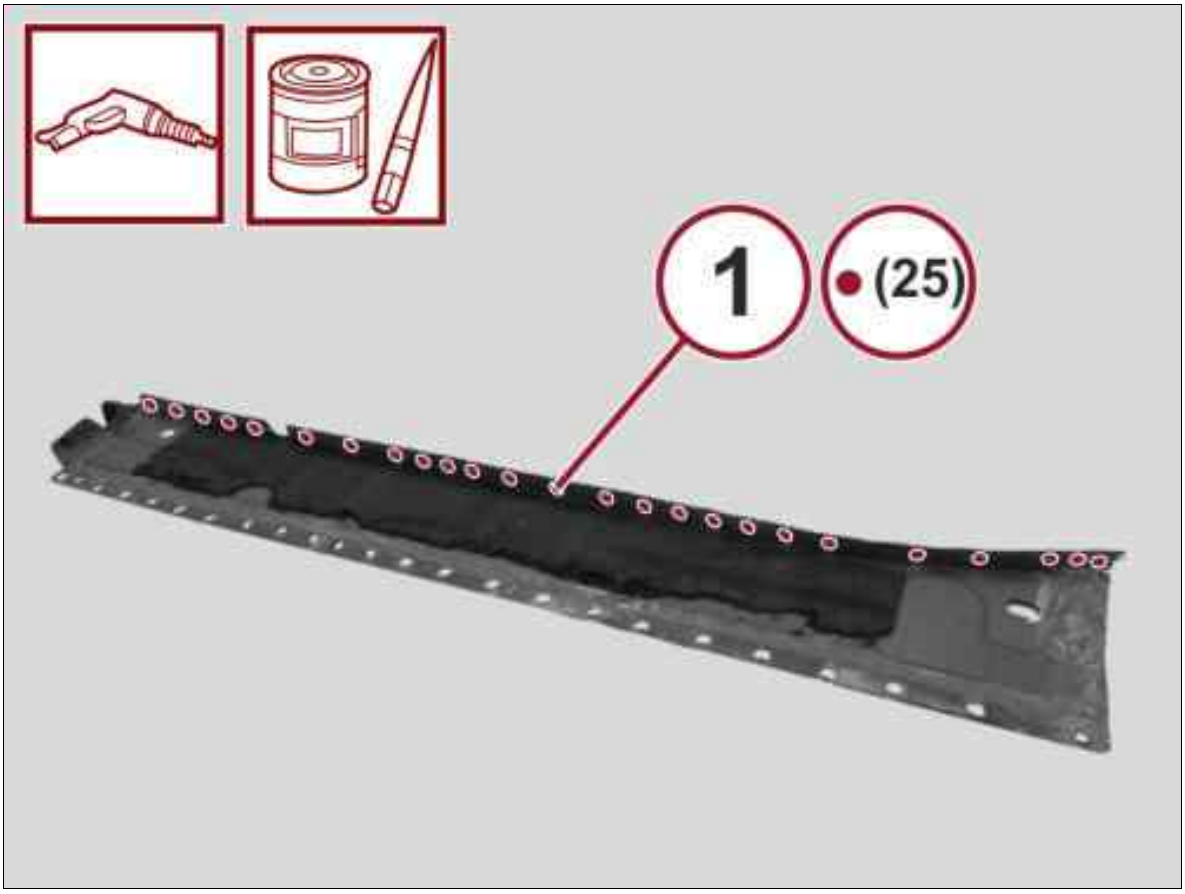
Fig 1: Rear Floor Pan Extension Installation (1 Of 4)



Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the entire perimeter of the inner and outer part using a rotary brush.

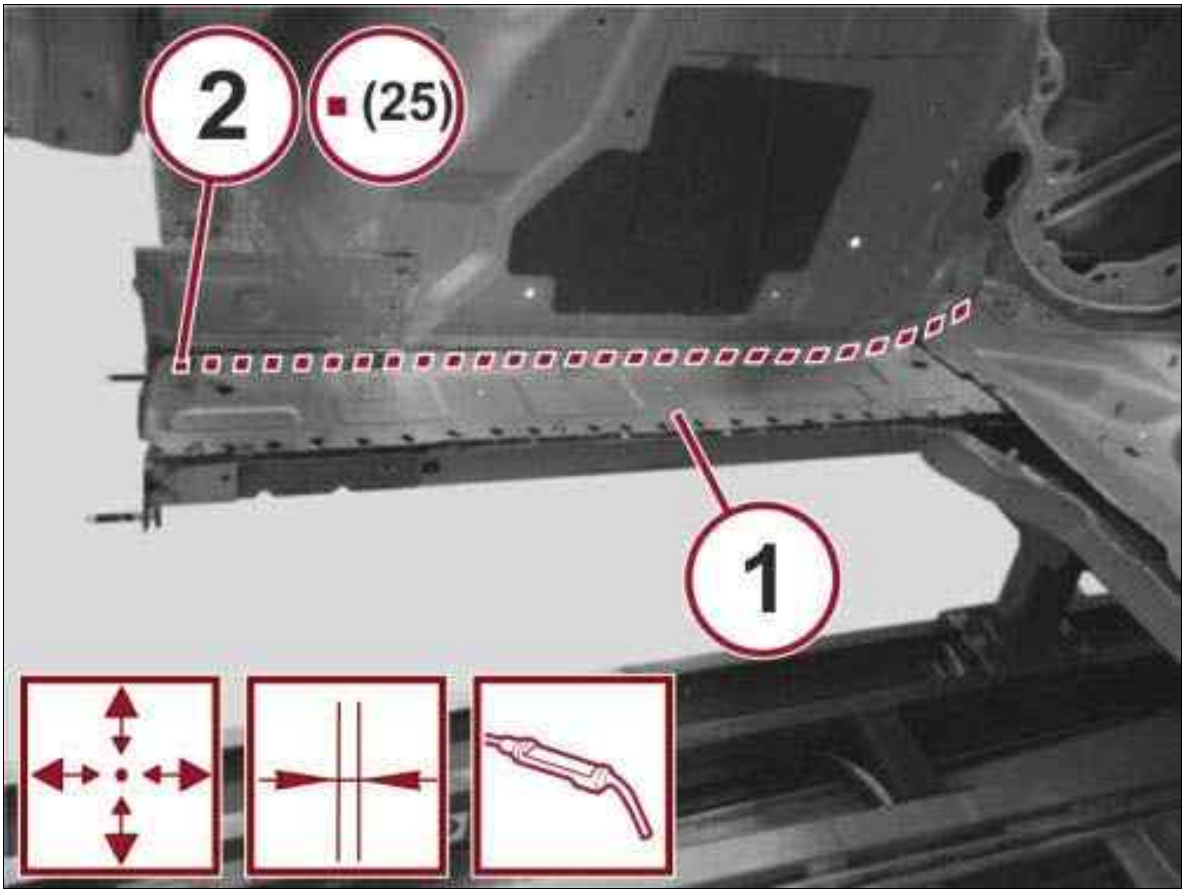
Fig 2: Rear Floor Pan Extension Installation (2 Of 4)



Courtesy of CHRYSLER GROUP, LLC

2. With the use of a drill and the service part placed on a bench, drill holes at the points (1) indicated.
3. Apply elctro-weldable paint/weld through primer to the locations drilled.

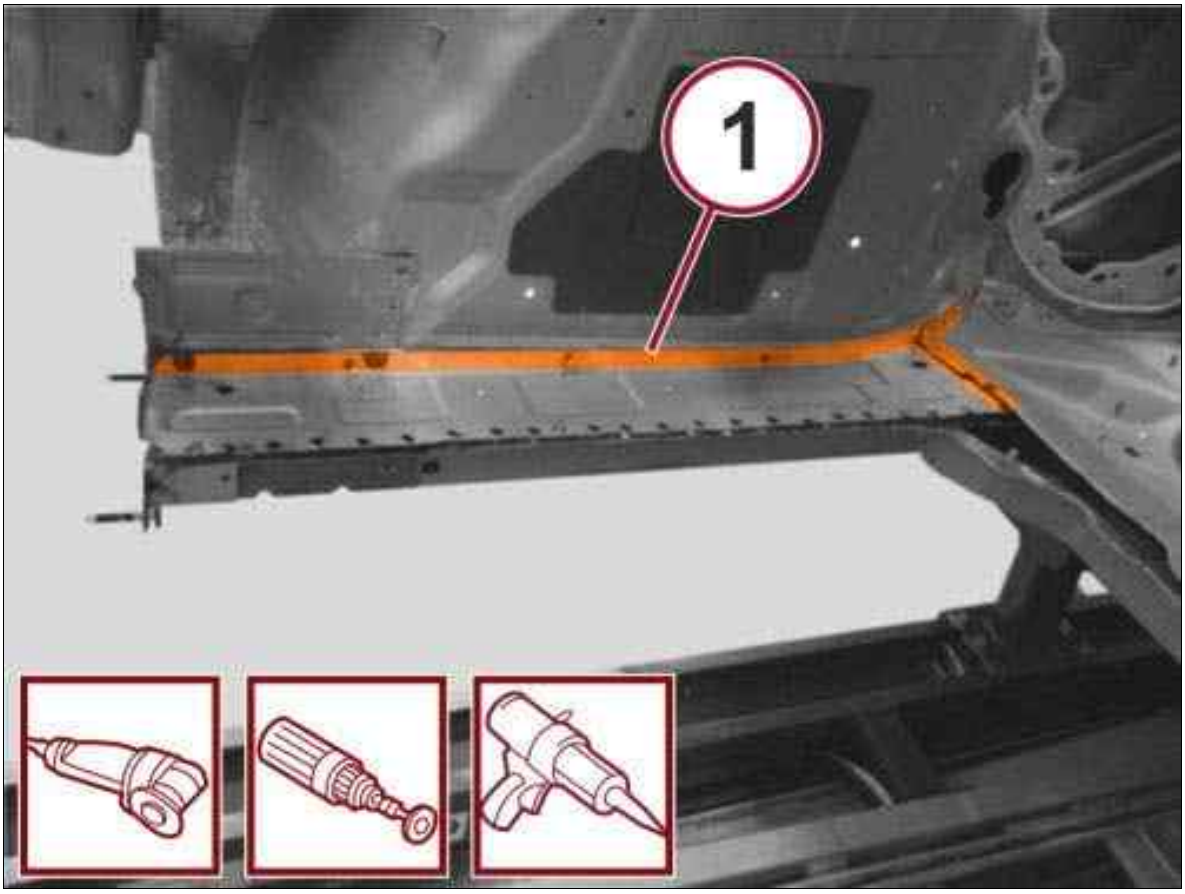
Fig 3: Rear Floor Pan Extension Installation (3 Of 4)



Courtesy of CHRYSLER GROUP, LLC

4. Position the service part (1) correctly on the rear frame rail and floor pan.
5. Check alignment and surrounding gaps.
6. With the use of a MIG welder, apply plug welds filling in the holes (2) made previously.

Fig 4: Rear Floor Pan Extension Installation (4 Of 4)

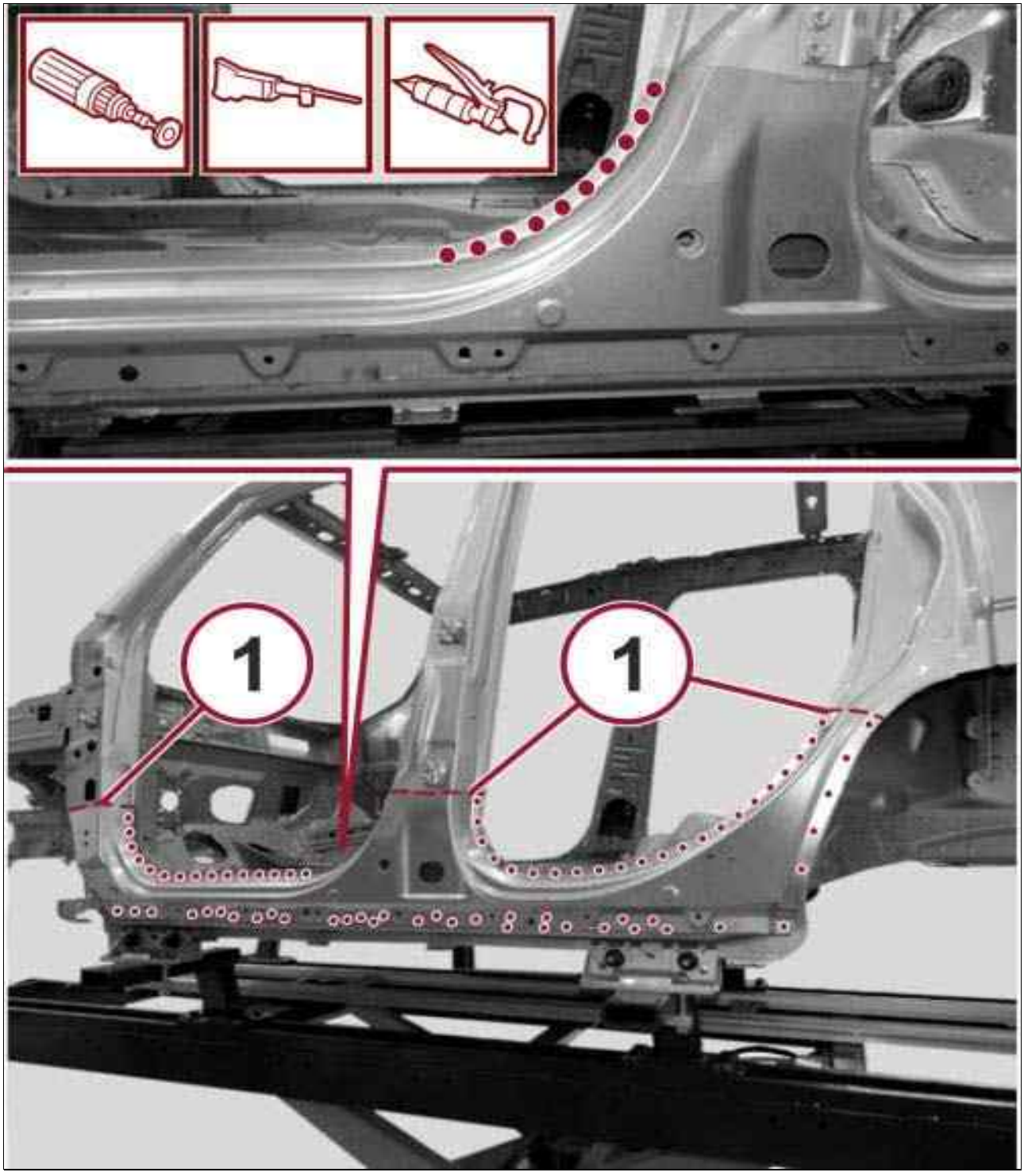


Courtesy of CHRYSLER GROUP, LLC

7. With the use of a grinding disc, smooth the welds.
8. With the use a of rotary brush, clean the areas previously welded.
9. Apply corrosion protection to the areas involved in the welding.
10. Install the rear floor pan. Refer to REAR FLOOR PAN REMOVAL AND INSTALLATION .
11. Seal the seams.
12. Install the rear closure panel. Refer to PANEL, REAR CLOSURE, REMOVAL AND INSTALLATION .

BODY STRUCTURE > PANEL, BODY SIDE APERTURE > REMOVAL AND INSTALLATION > SILL-BODY SIDE APERTURE REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Sill-Body Side Aperture Removal (1 Of 3)

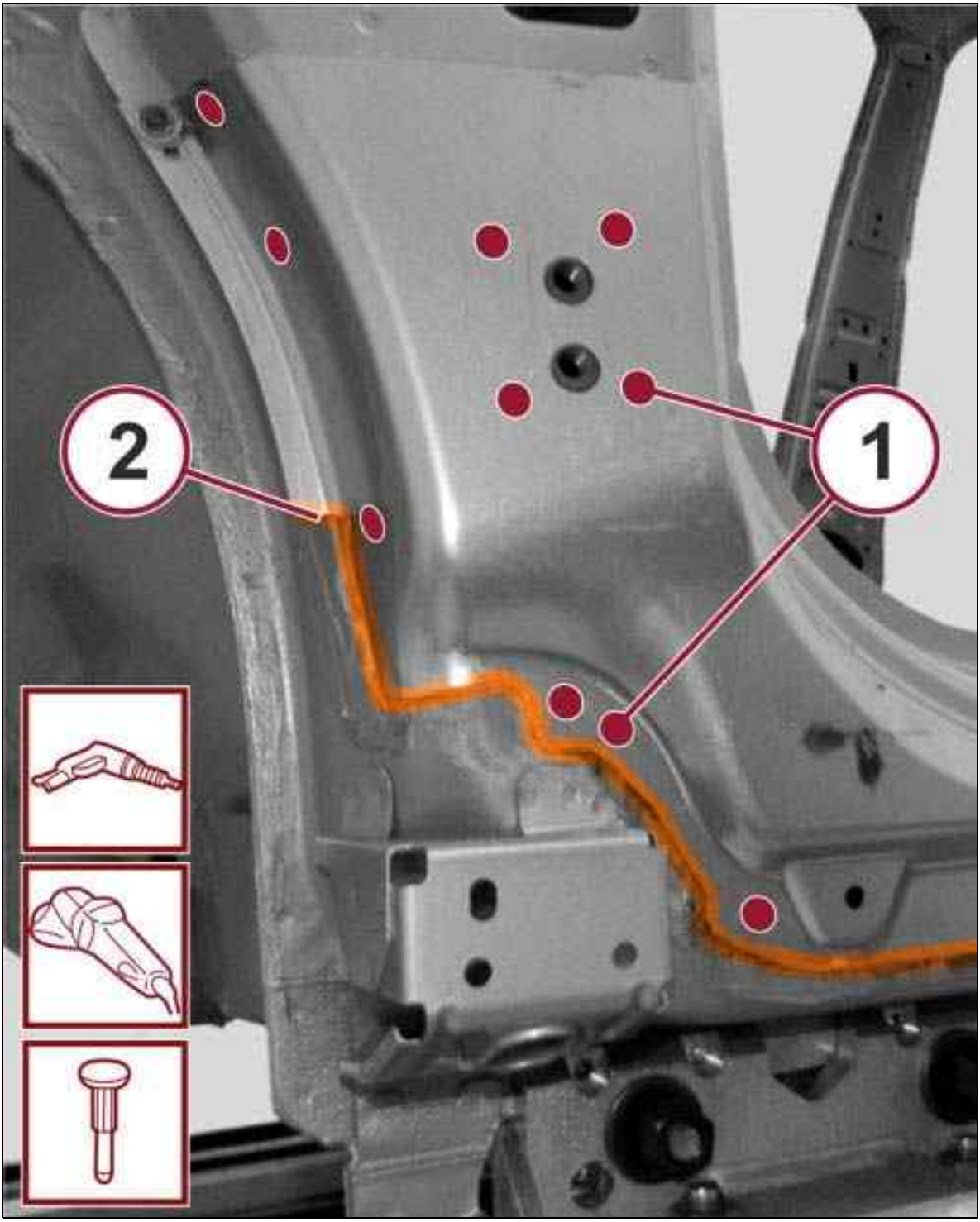


Courtesy of CHRYSLER GROUP, LLC

1. Remove the front fender. Refer to FENDER, FRONT, REMOVAL AND INSTALLATION .
2. Remove the front door lower hinge. Refer to HINGE, DOOR, REMOVAL AND INSTALLATION .
3. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
4. Straighten the body as necessary.

5. With the use of a rotary brush, remove the sealer (where applied) and paint to gain access to the spot welds.
6. With the use of a jigsaw, cut along the cut lines (1) shown in the illustration on the body side aperture sill.
7. With the use of a spot weld cutting tool, release the spot welds shown in the illustration.

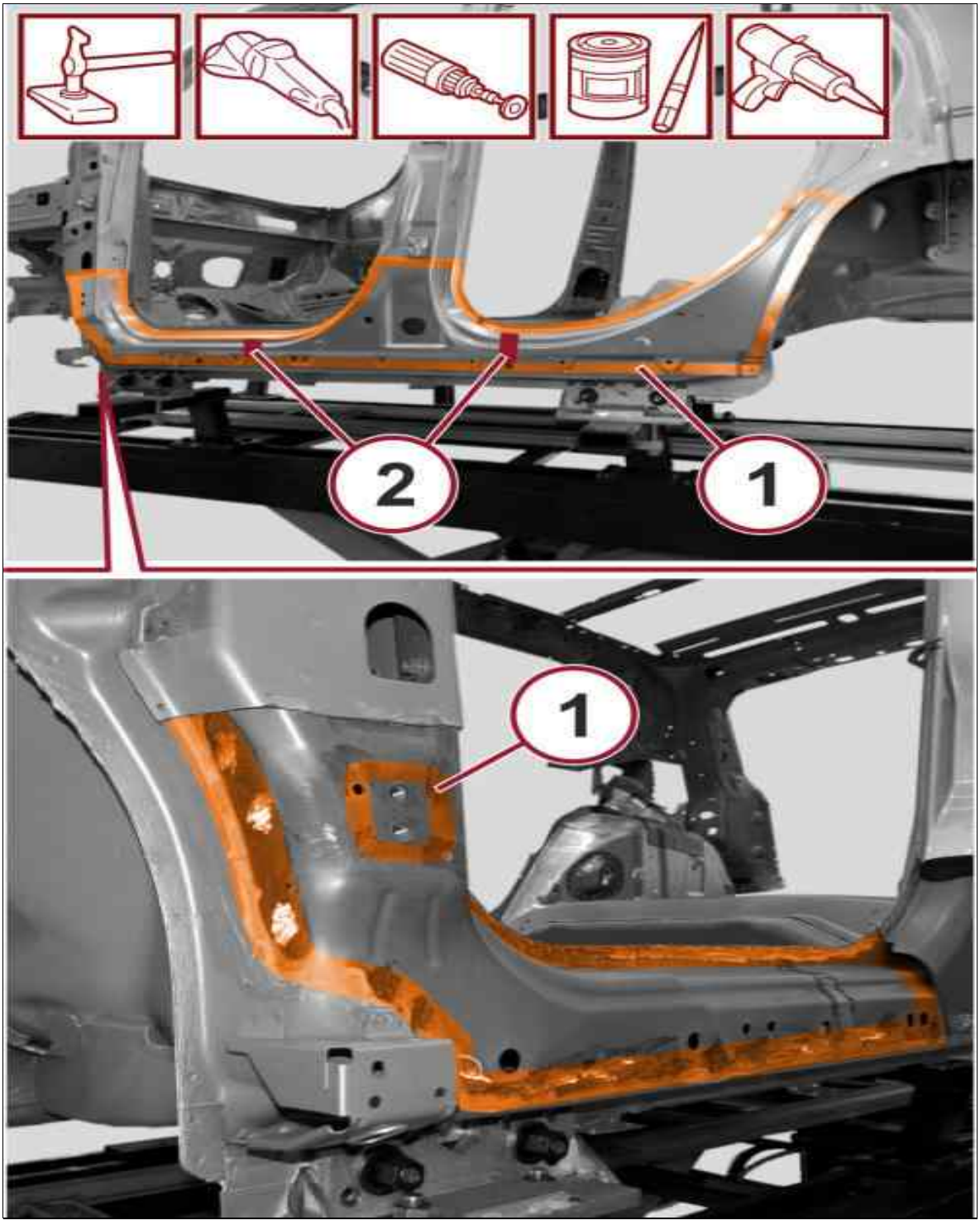
Fig 2: Sill-Body Side Aperture Removal (2 Of 3)



Courtesy of CHRYSLER GROUP, LLC

8. With the use of a drill, release the spot welds (1) shown in the illustration.
9. With the use of a grinding wheel, remove the weld (2) shown in the illustration.
10. With the use of a chisel and hammer, remove the welds previously released and areas where there is adhesive joining the sheet metal.
11. Remove the cutouts from the vehicle.

Fig 3: Sill-Body Side Aperture Removal (3 Of 3)

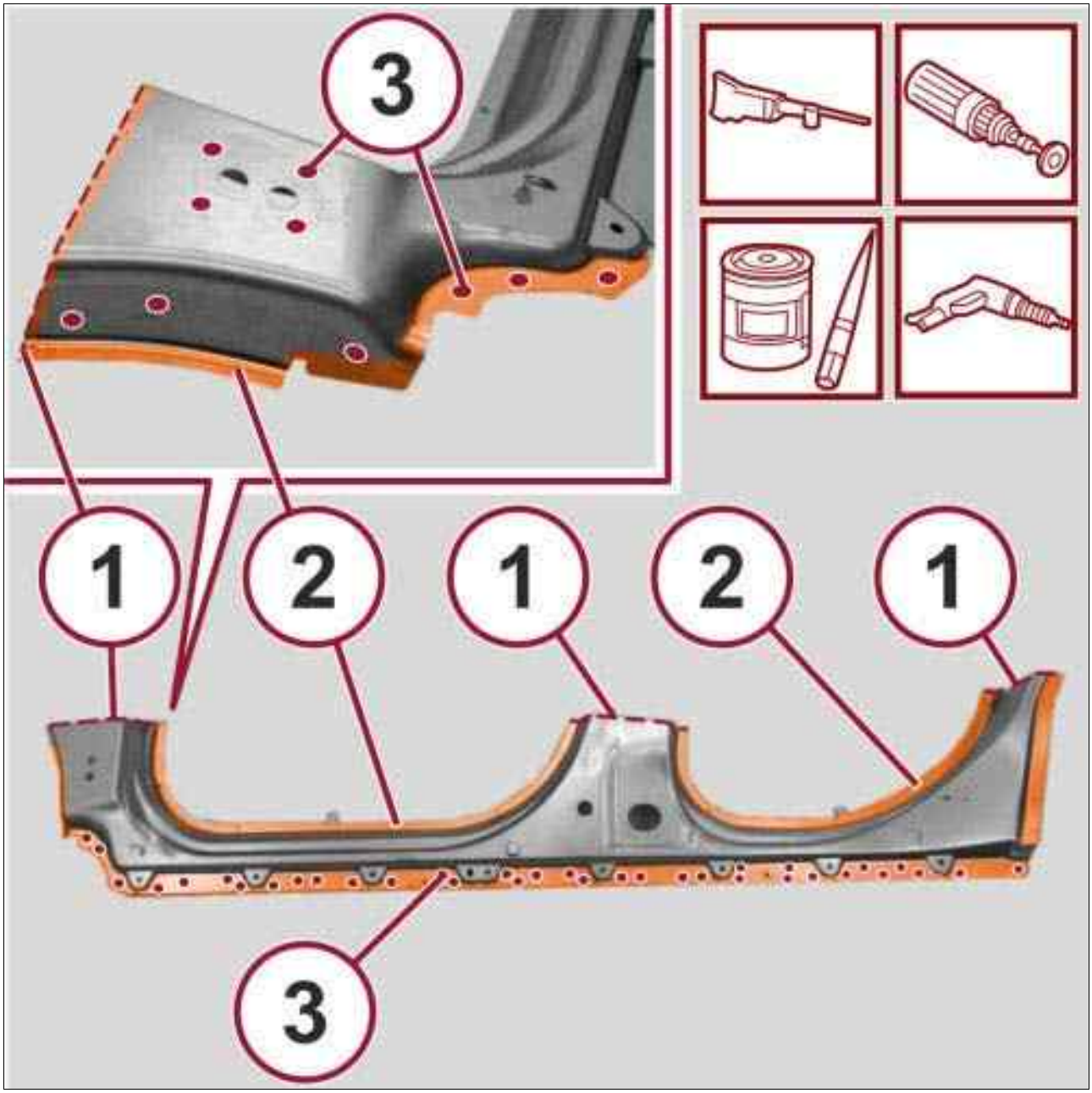


Courtesy of CHRYSLER GROUP, LLC

12. With the use of a hammer and dolly block, straighten the edges of the mating components.
13. With the use of a disc grinder, remove any residue of the spot welds.
14. With the use of a rotary brush, clean the previously treated areas.
15. Apply electro-weldable paint/weld through primer to the areas (1) highlighted.
16. Apply sealant to the joining sheet metal areas (2).

BODY STRUCTURE > PANEL, BODY SIDE APERTURE > REMOVAL AND INSTALLATION > SILL-BODY SIDE APERTURE REMOVAL AND INSTALLATION > INSTALLATION

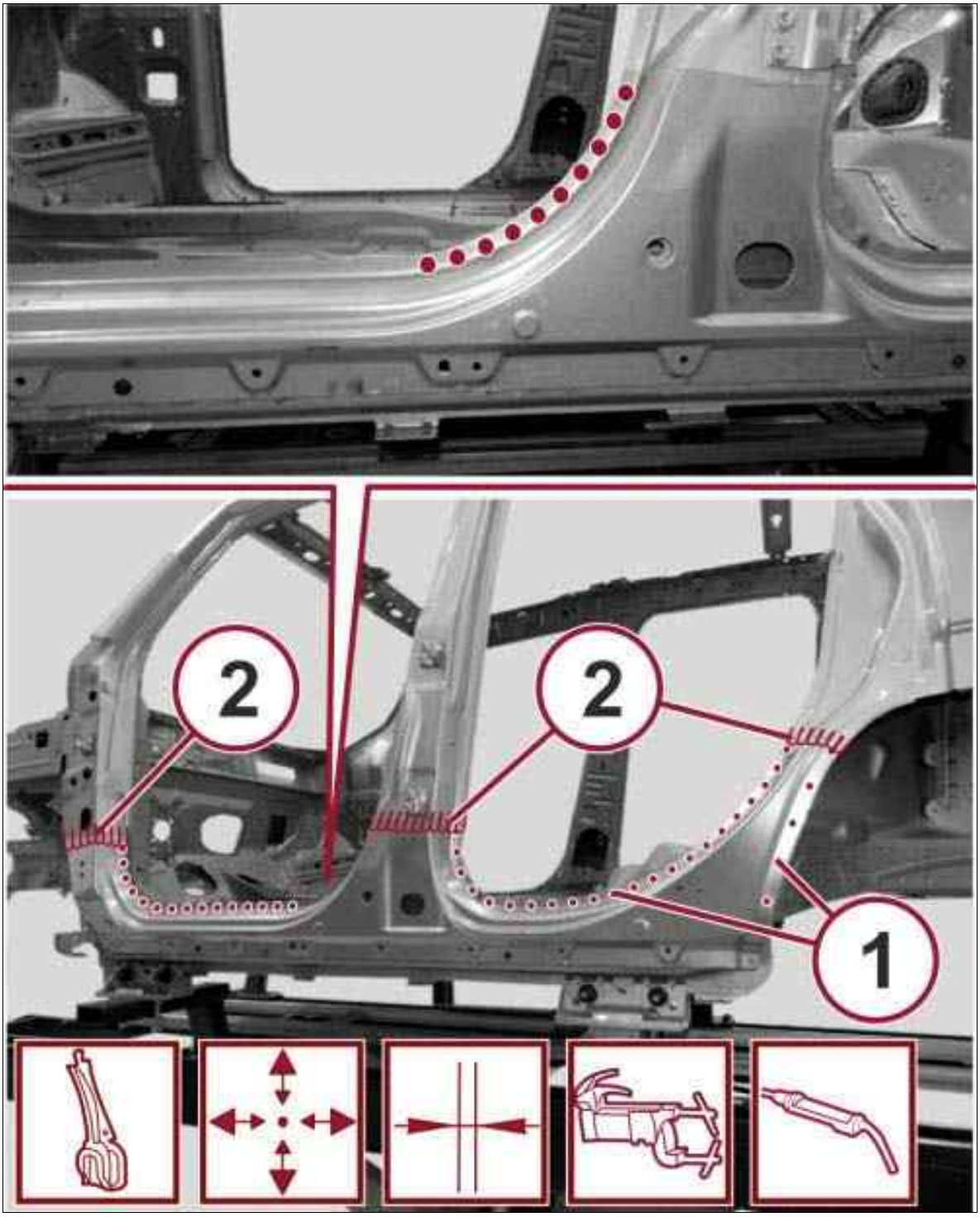
Fig 1: Sill-Body Side Aperture Installation (1 Of 4)



Courtesy of CHRYSLER GROUP, LLC

1. Cut at the cut lines (1) as indicated in the illustration, leaving enough length to for overlapping.
2. Remove the anti-corrosion treatment from the entire perimeter (2) of the inner and outer part using a rotary brush.
3. With the use of a drill, drill holes (3) in the area shown in the illustration.
4. Apply elctro-weldable paint/weld through primer to the boarders of the areas to be welded.

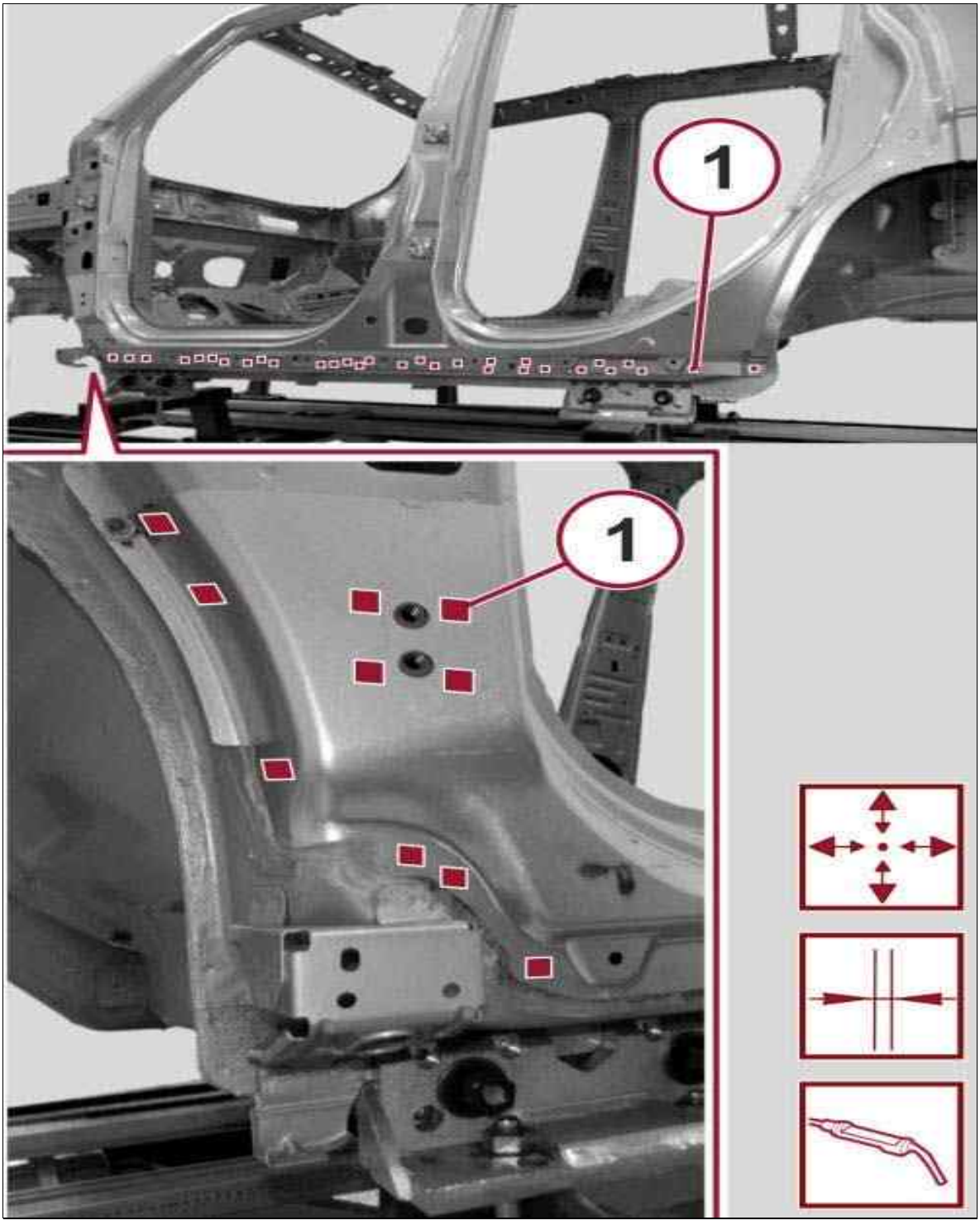
Fig 2: Sill-Body Side Aperture Installation (2 Of 4)



Courtesy of CHRYSLER GROUP, LLC

5. Position the body side aperture sill service part correctly on the vehicle and secure it with the self-locking clamps.
6. Check alignment and surrounding gaps.
7. With the use of a spot welder, apply spot welds to the areas (1) indicated in the illustration.
8. With the use of a MIG welder, apply seam welds to the area (2) indicated in the illustration.

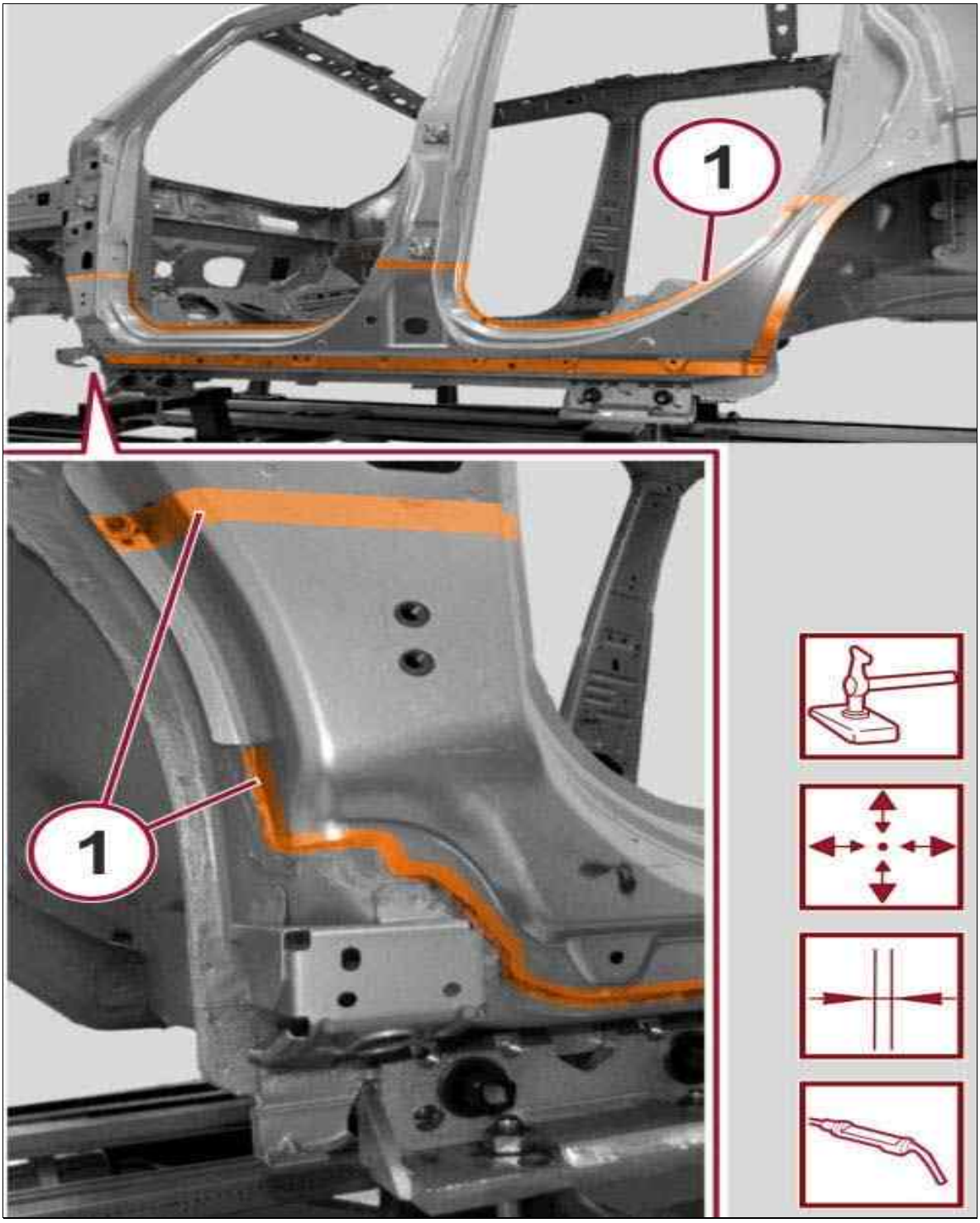
Fig 3: Sill-Body Side Aperture Installation (3 Of 4)



Courtesy of CHRYSLER GROUP, LLC

9. Check alignment and surrounding gaps.
10. With the use of a MIG welder, apply plug welds filling in the areas (1) shown in the illustration.

Fig 4: Sill-Body Side Aperture Installation (4 Of 4)



Courtesy of CHRYSLER GROUP, LLC

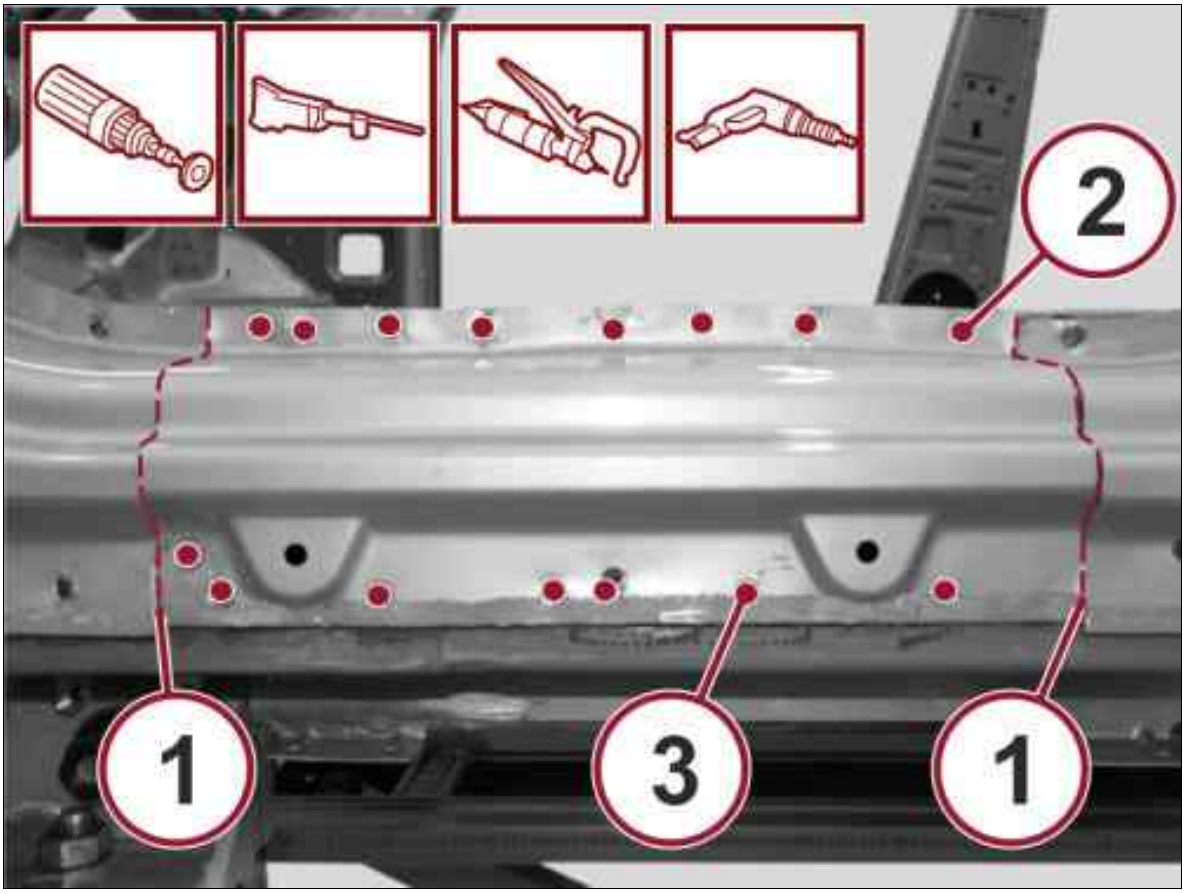
11. Correct any distortions to the sheet metal using a hammer and dolly block.
12. Use a grinding disc to smooth the welds.
13. Use a rotary brush to clean the previously welded areas.
14. Apply corrosion protection to the areas involved in the welding.

15. Seal the seams between the parts and the vehicle in the areas (1) indicated.
16. Install the front door lower hinge. Refer to HINGE, DOOR, REMOVAL AND INSTALLATION .
17. Install the front fender. Refer to FENDER, FRONT, REMOVAL AND INSTALLATION .

BODY STRUCTURE > PANEL, BODY SIDE APERTURE > REMOVAL AND INSTALLATION > SILL SECTION-BODY SIDE APERTURE REMOVAL AND INSTALLATION > REMOVAL

1. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
2. Straighten the body as necessary.

   Fig 1: Sill Section-Body Side Aperture Removal (1 Of 2)

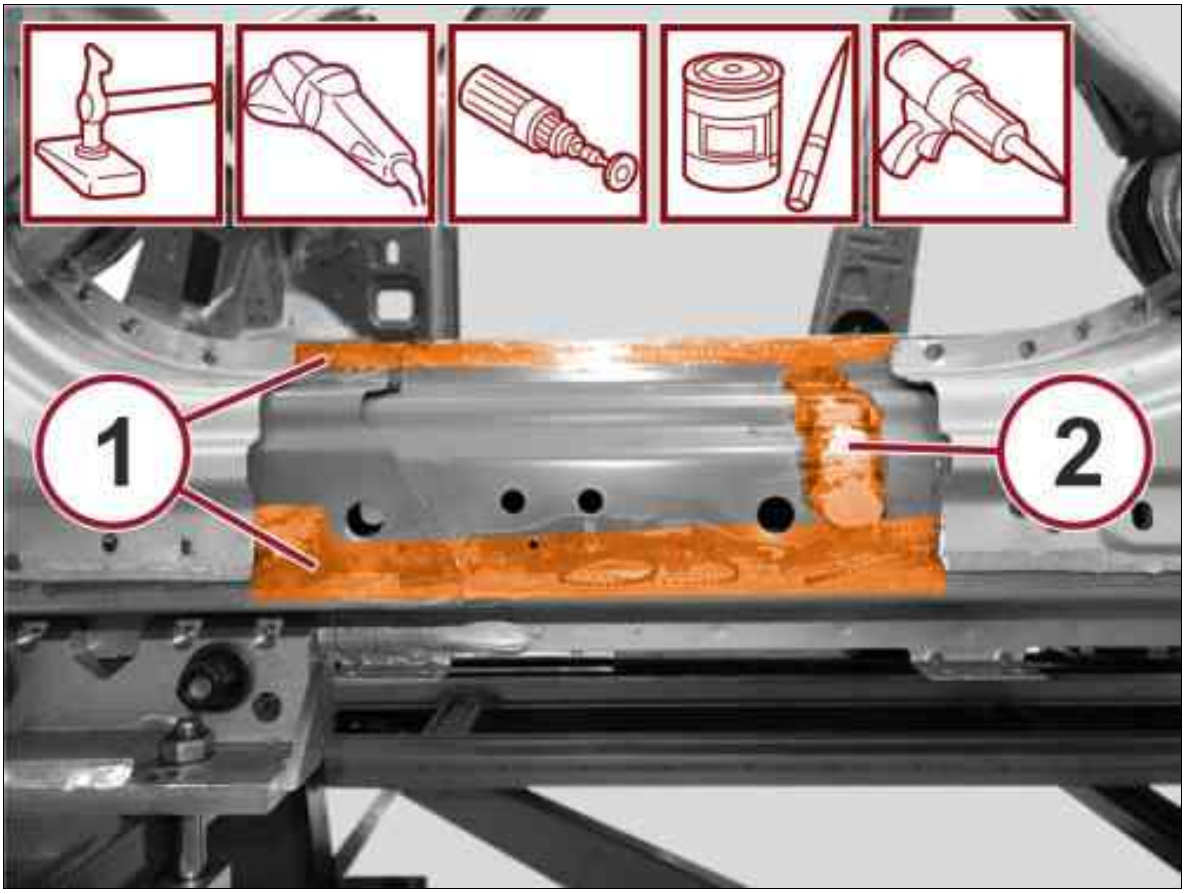


Courtesy of CHRYSLER GROUP, LLC

3. With the use of a rotary brush, remove the paint to gain access to the spot welds.
4. With the use of a jigsaw, cut along the cut lines (1), in the affected area, of the body side aperture sill.
5. With the use of a spot weld cutting tool, release the spot welds (2) shown in the illustration.
6. With the use of a drill, release the spot welds (3) shown in the illustration.

7. With the use of a chisel and hammer, remove the spot welds previously released.

Fig 2: Sill Section-Body Side Aperture Removal (2 Of 2)

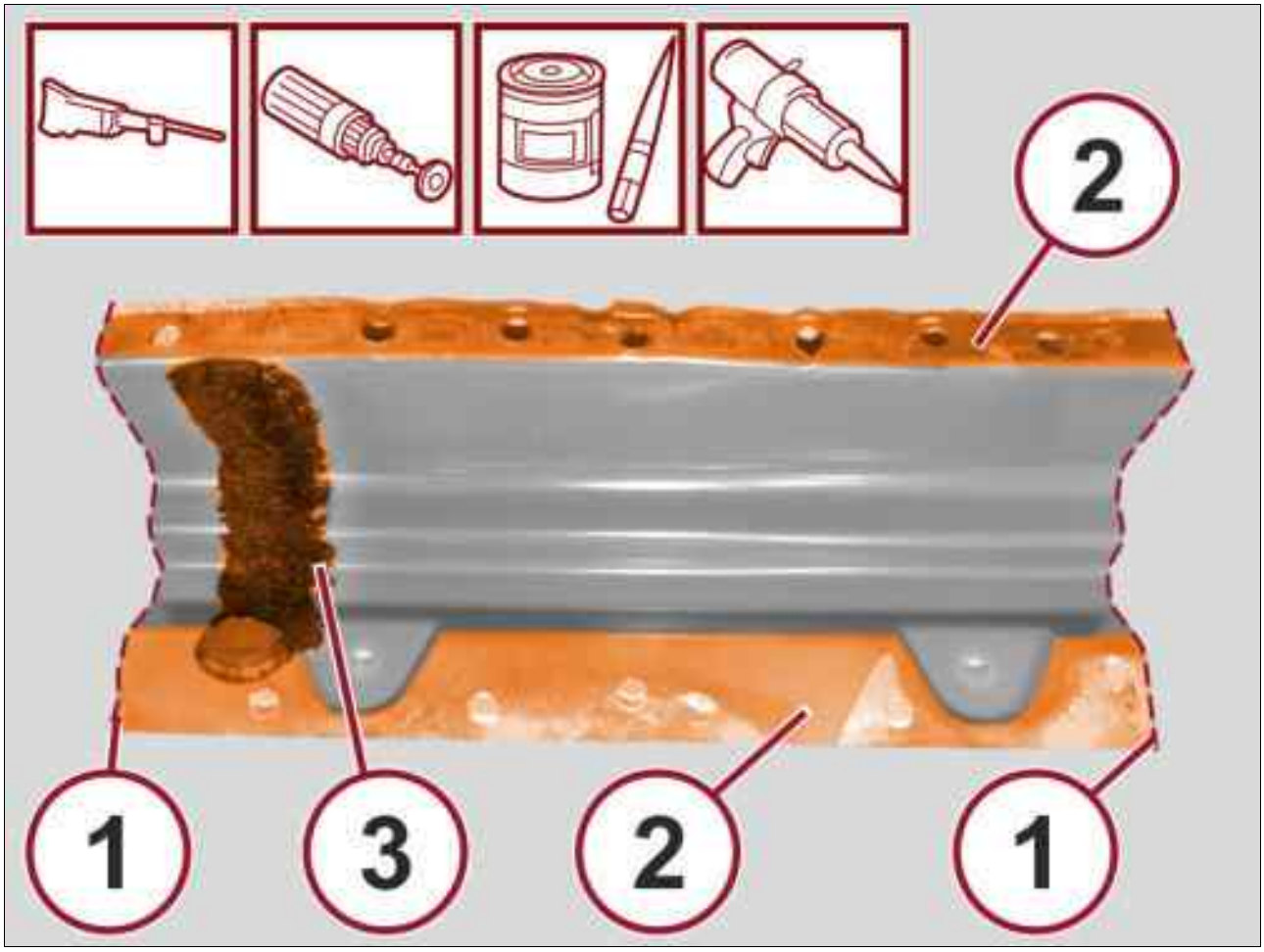


Courtesy of CHRYSLER GROUP, LLC

8. With the use of a hammer and dolly block, straighten the edges of the mating components.
9. With the use of a disc grinder, remove any residue of the spot welds.
10. With the use of a rotary brush, clean the previously treated areas.
11. Apply electro-weldable paint/weld through primer to the areas (1) highlighted.
12. Apply sealant to the joint plate (2).

BODY STRUCTURE > PANEL, BODY SIDE APERTURE > REMOVAL AND INSTALLATION > SILL SECTION-BODY SIDE APERTURE REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Sill Section-Body Side Aperture Installation (1 Of 3)



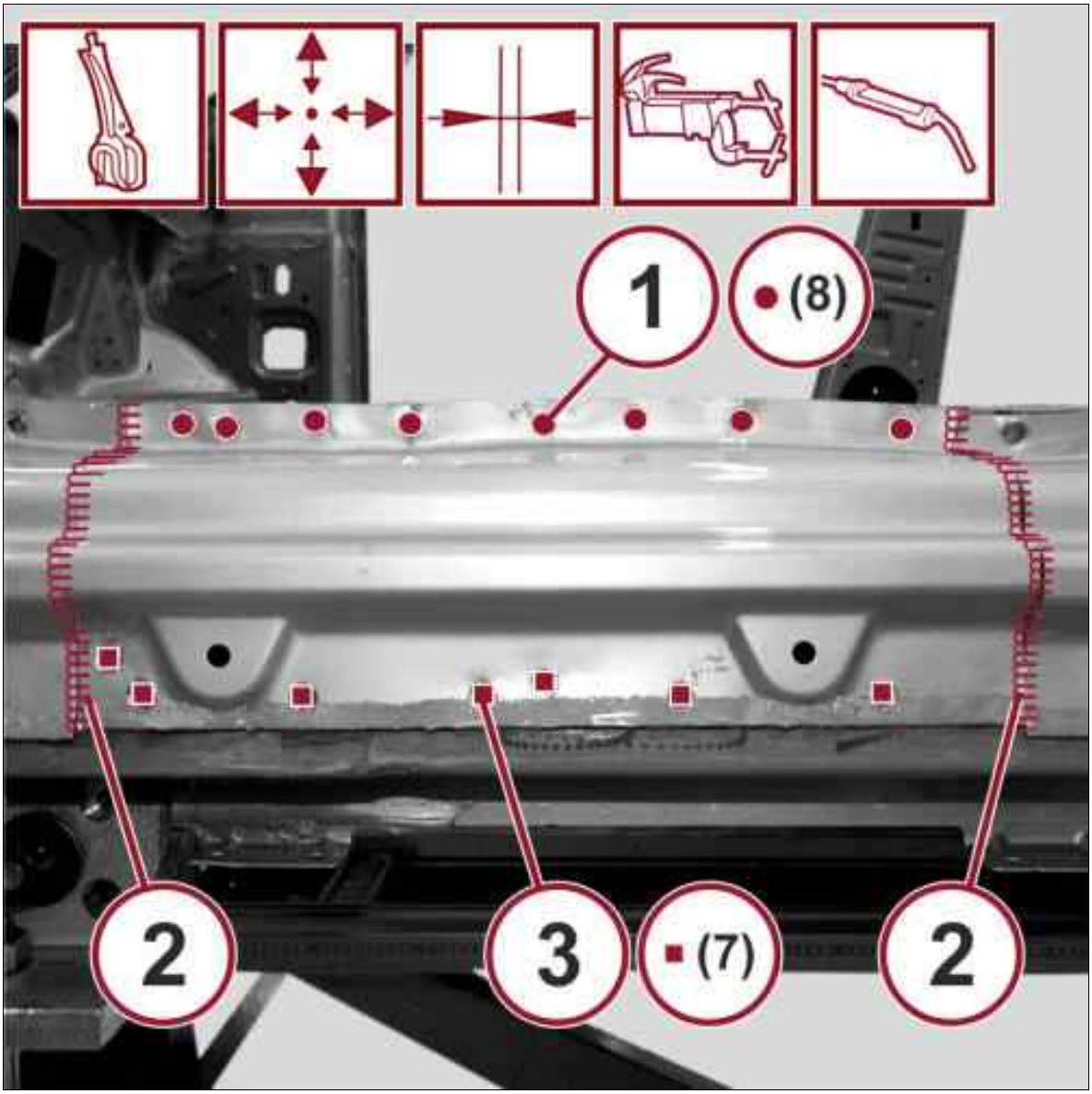
Courtesy of CHRYSLER GROUP, LLC

NOTE:

Be certain to leave the service panel long enough to allow for overlapping.

1. Cut the service part at the points (1) shown in the illustration. Be certain that the section of the panel remains for overlapping.
2. Remove the anti-corrosion treatment from the entire perimeter (2) of the inner and outer part using a rotary brush.
3. Apply elctro-weldable paint/weld through primer to the boarders of the areas to be welded.
4. Apply sealant to the junction plate in the area (3) shown in the illustration.

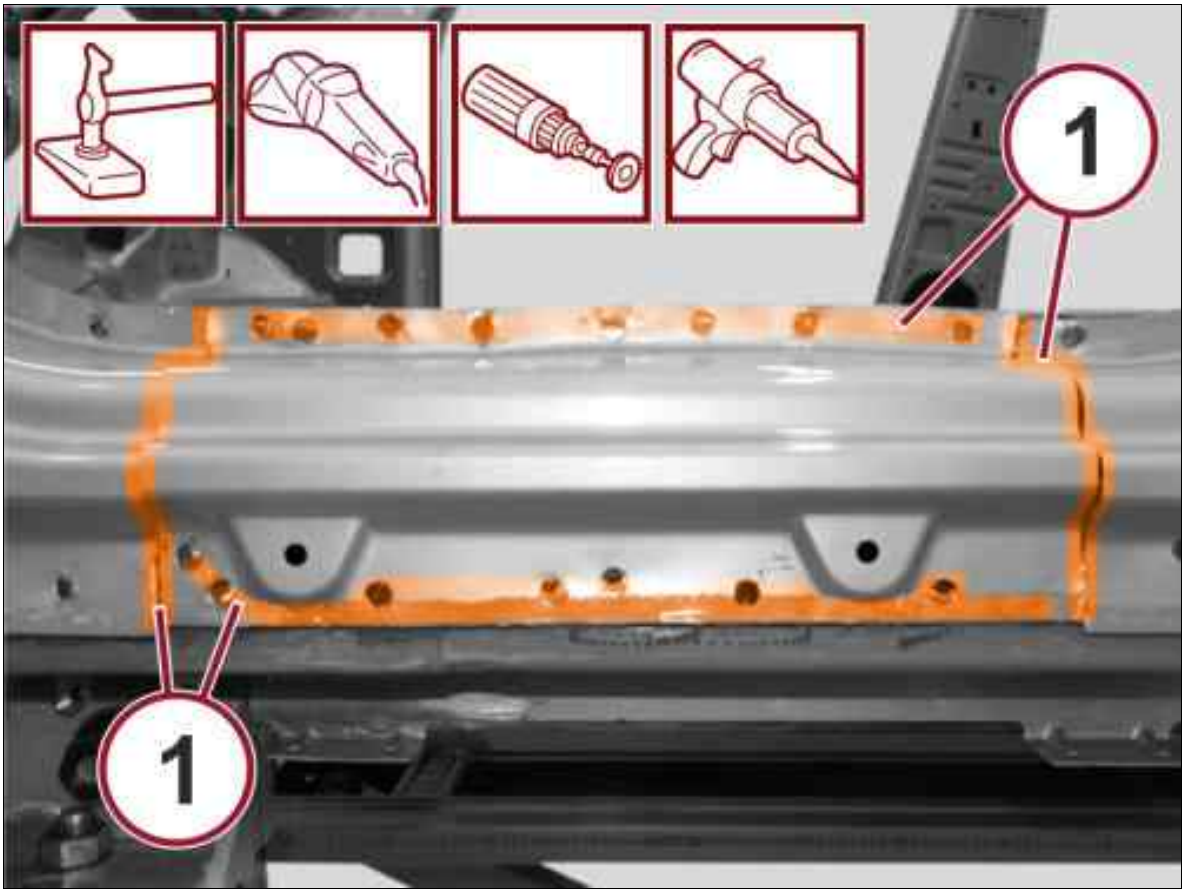
Fig 2: Sill Section-Body Side Aperture Installation (2 Of 3)



Courtesy of CHRYSLER GROUP, LLC

5. Position the body side aperture sill service part correctly on the vehicle and secure it with the self-locking clamps.
6. Check alignment and surrounding gaps.
7. With the use of a spot welder, apply spot welds to the areas (1) indicated in the illustration.
8. With the use of a MIG welder, apply seam welds to the area (2) indicated in the illustration.
9. With the use of a MIG welder, apply plug welds filling in the areas (3) shown in the illustration.

Fig 3: Sill Section-Body Side Aperture Installation (3 Of 3)



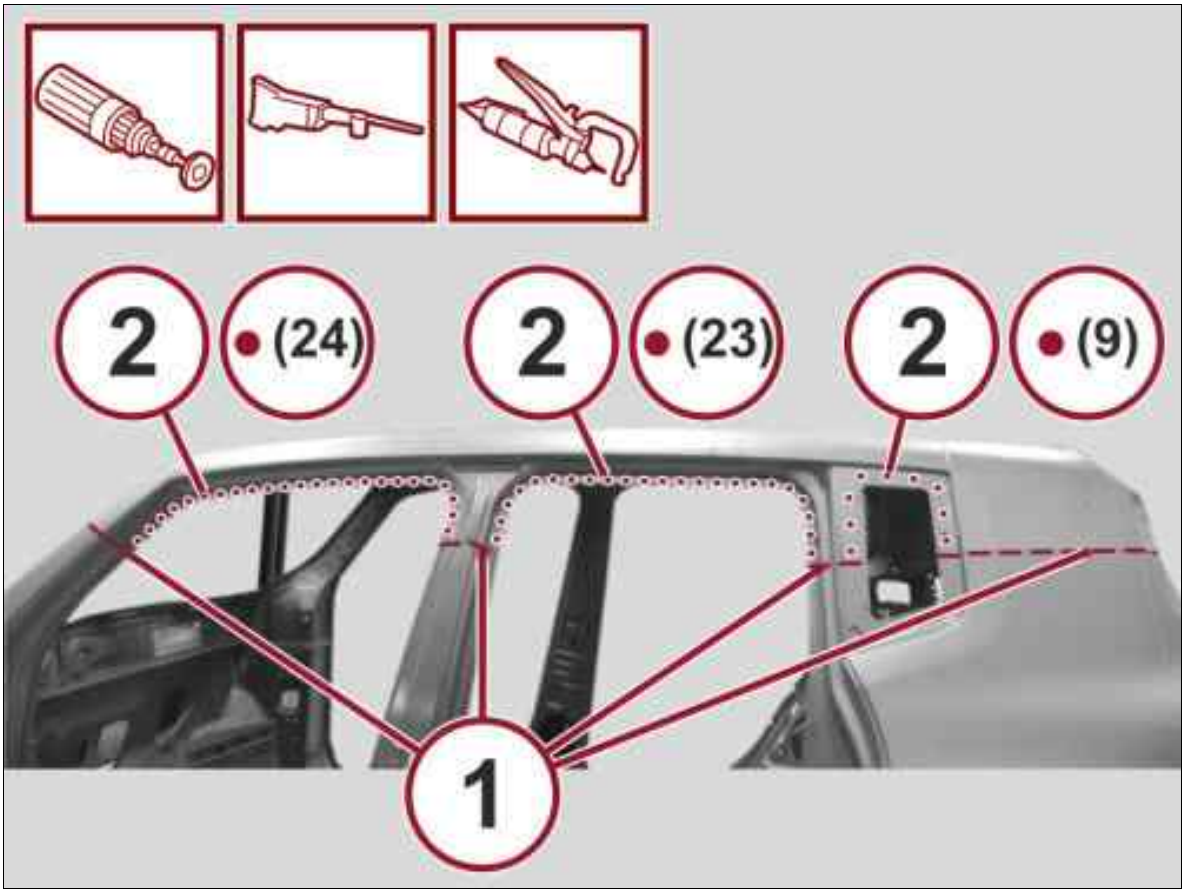
Courtesy of CHRYSLER GROUP, LLC

10. Correct any distortions to the sheet metal using a hammer and dolly block.
11. Use a grinding disc to smooth the welds.
12. Use a rotary brush to clean the previously welded areas.
13. Apply corrosion protection to the areas involved in the welding.
14. Seal the seams between the parts and the vehicle in the areas (1) indicated.

BODY STRUCTURE > PANEL, BODY SIDE APERTURE > REMOVAL AND INSTALLATION > UPPER-BODY SIDE APERTURE REMOVAL AND INSTALLATION > REMOVAL

1. Remove the roof panel. Refer to PANEL, ROOF, REMOVAL AND INSTALLATION .
2. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
3. Straighten the body as necessary.

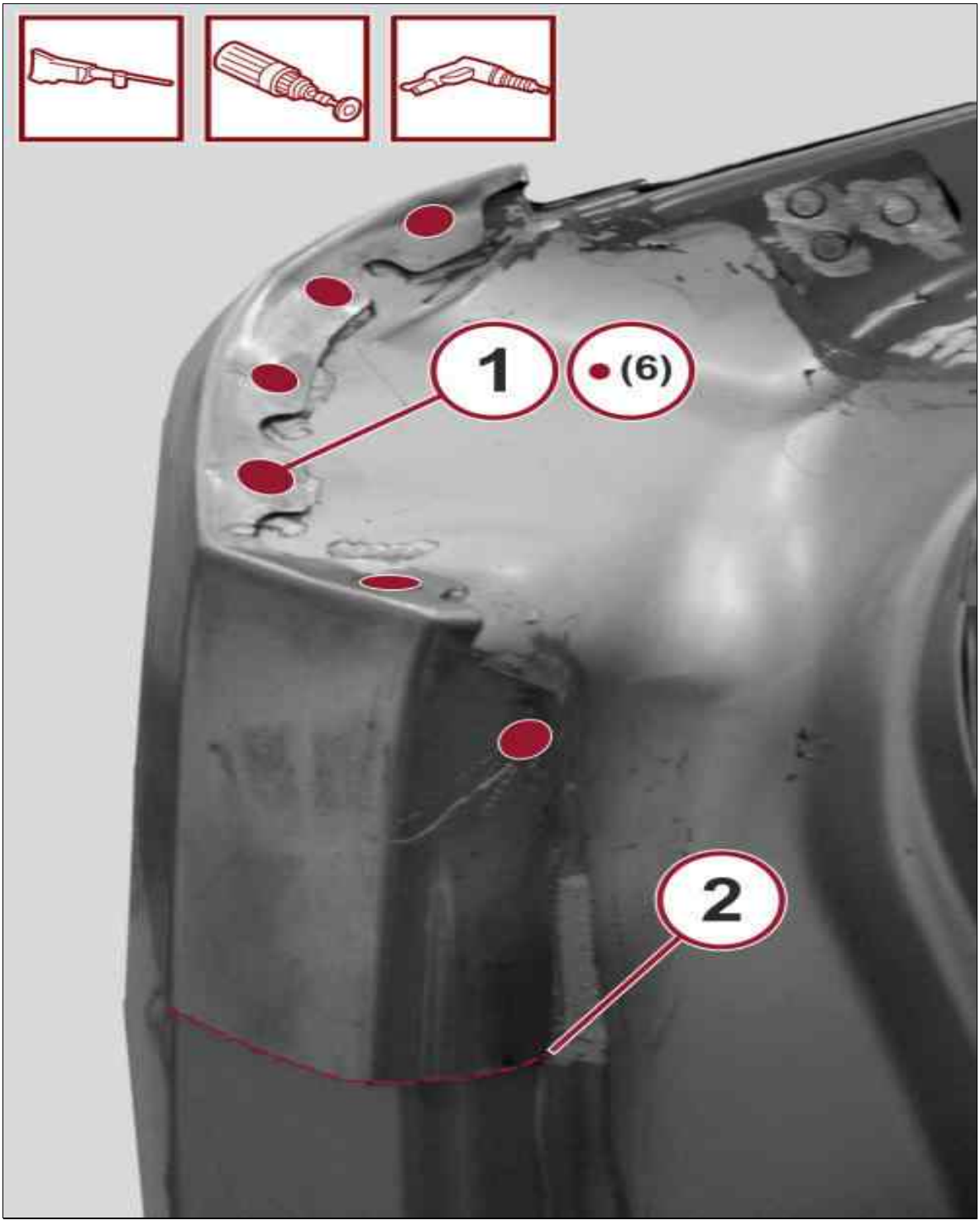
Fig 1: Upper-Body Side Aperture Removal (1 Of 4)



Courtesy of CHRYSLER GROUP, LLC

4. With the use of a rotary brush, remove the paint and gain access to the spot welds.
5. With the use of a jigsaw, cut along the cut lines (1) shown in the illustration.
6. With the use of a spot weld cutting tool, release the spot welds (2).

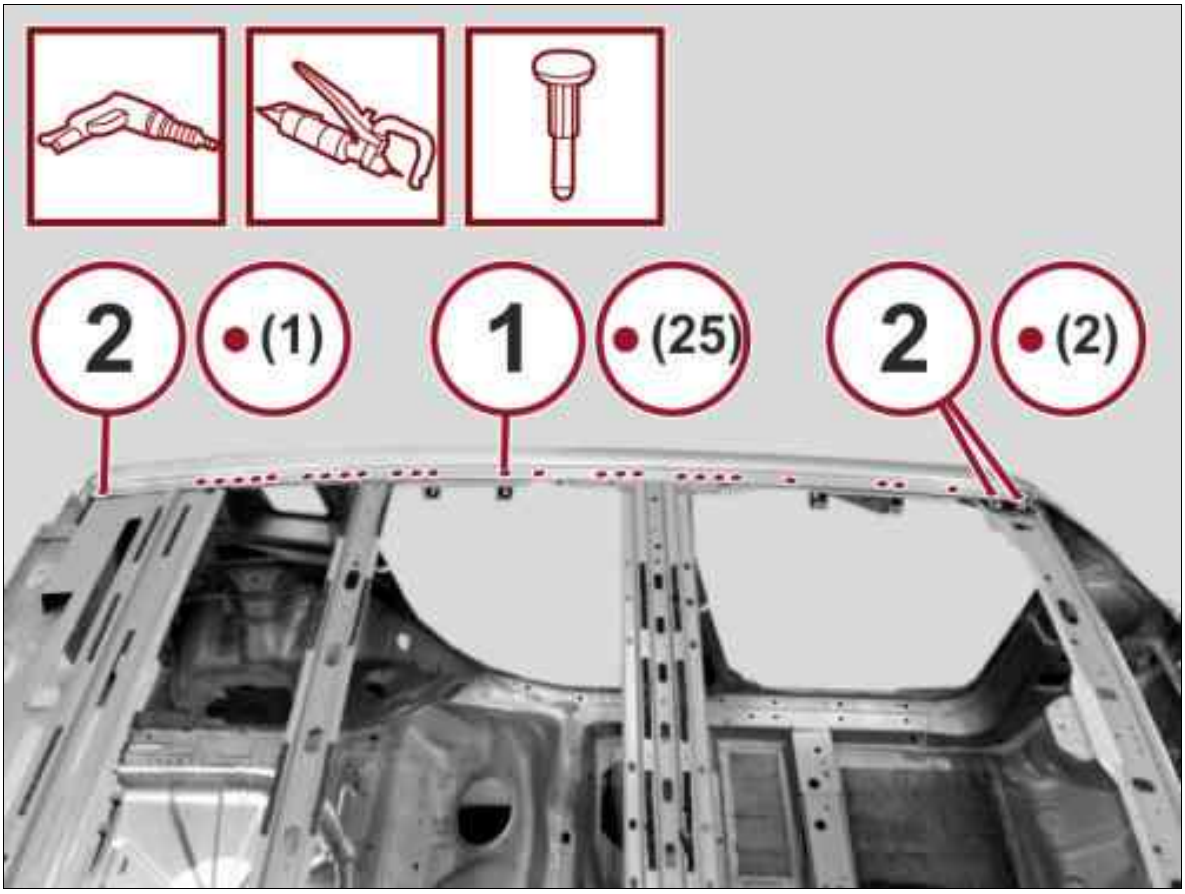
Fig 2: Upper-Body Side Aperture Removal (2 Of 4)



Courtesy of CHRYSLER GROUP, LLC

7. With the use of a rotary brush, remove the paint and gain access to the spot welds.
8. With the use of a drill, release the spot welds (1) shown in the illustration.
9. With the use of a jigsaw, cut along the cut line (2) shown in the illustration.

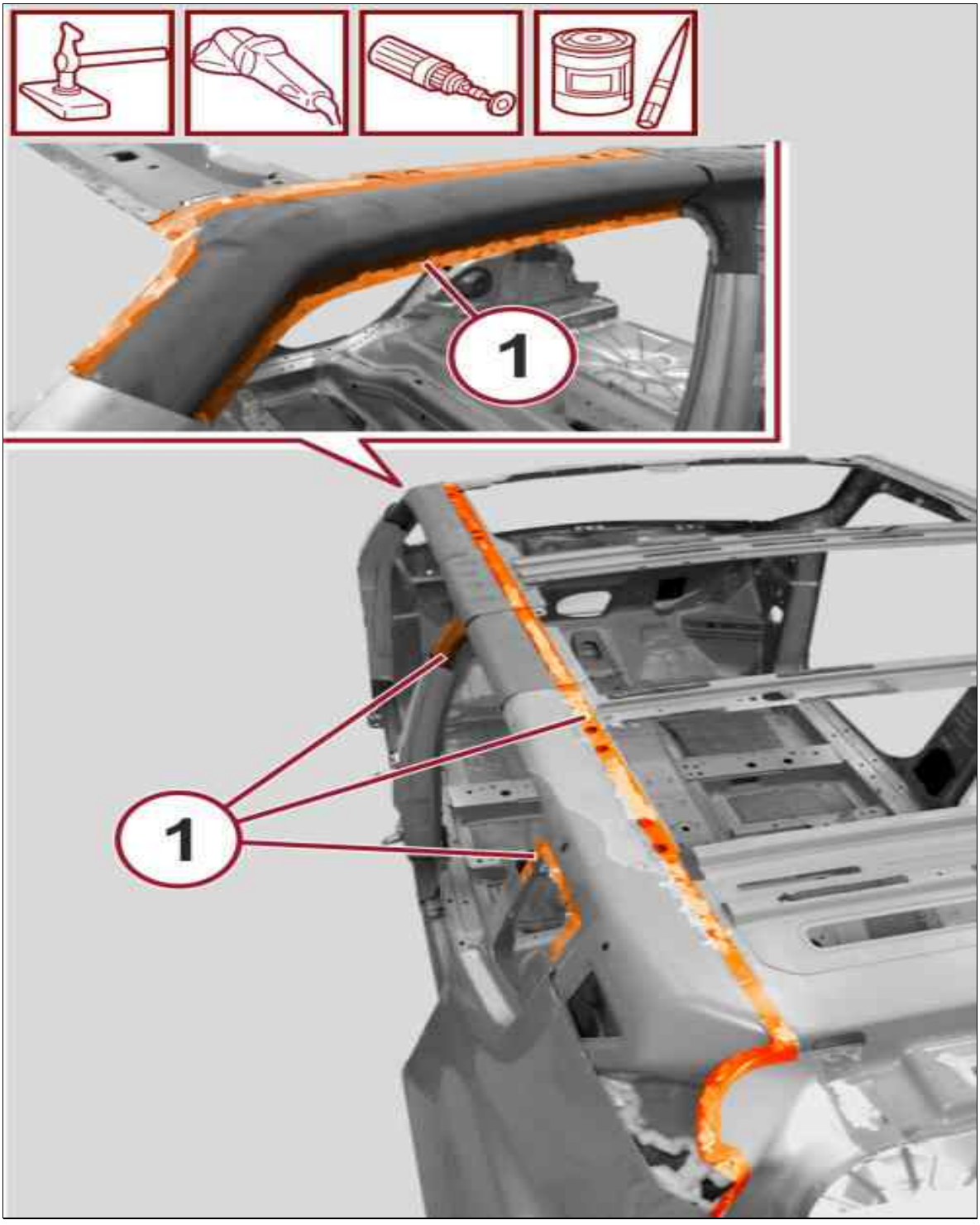
Fig 3: Upper-Body Side Aperture Removal (3 Of 4)



Courtesy of CHRYSLER GROUP, LLC

10. With the use of a drill, release the spot welds (1) shown in the illustration.
11. With the use of a spot weld cutting tool, release the spot welds (2).
12. With the use of a chisel and hammer, remove the welds previously released.
13. Remove the cutouts from the vehicle.

Fig 4: Upper-Body Side Aperture Removal (4 Of 4)

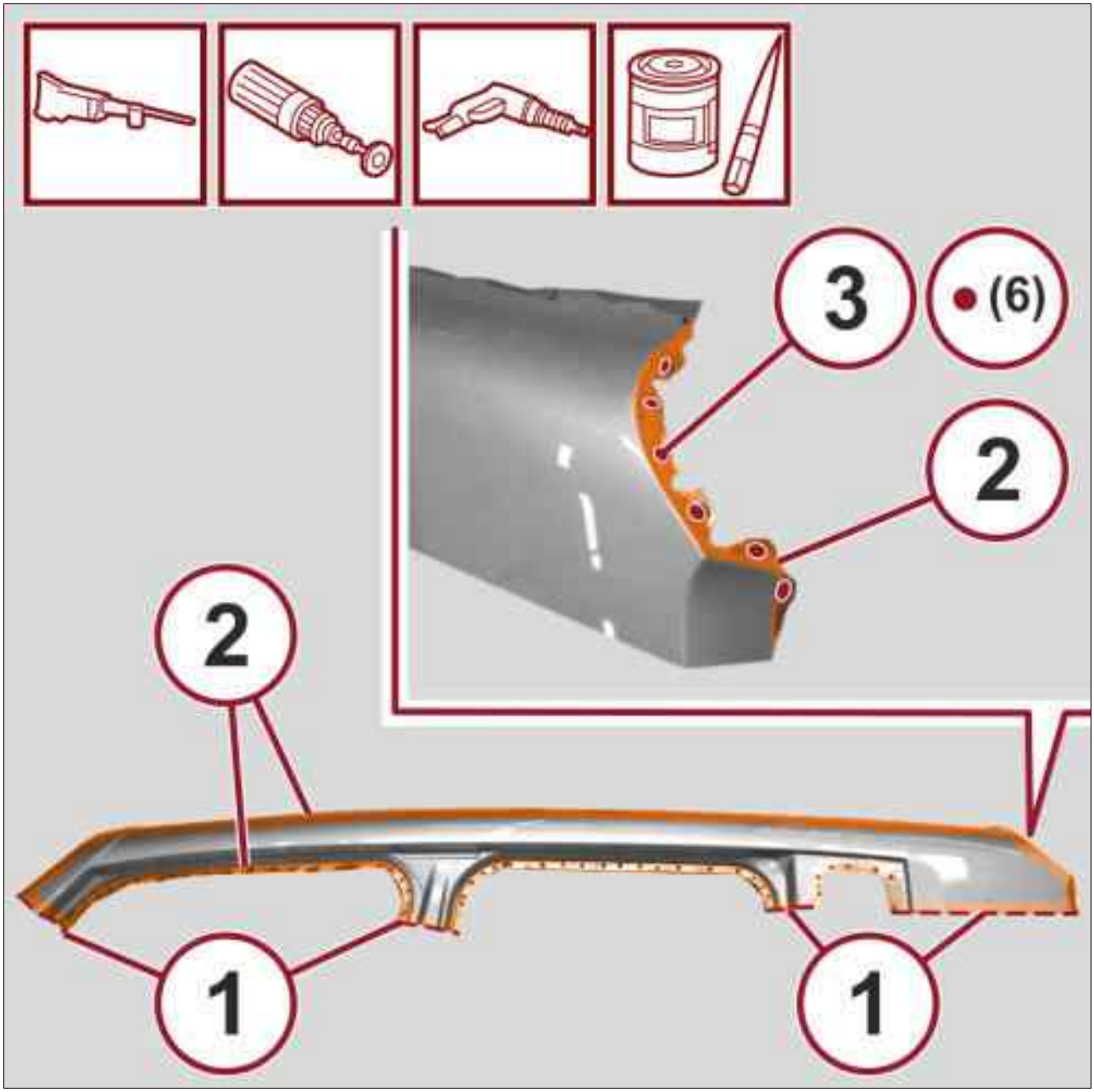


Courtesy of CHRYSLER GROUP, LLC

14. With the use of a hammer and dolly block, straighten the edges of the mating components.
15. With the use of a disc grinder, remove any residue of the spot welds.
16. With the use of a rotary brush, clean the previously treated areas.
17. Apply electro-weldable paint/weld through primer to the areas (1) highlighted.

BODY STRUCTURE > PANEL, BODY SIDE APERTURE > REMOVAL AND INSTALLATION > UPPER-BODY SIDE APERTURE REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Upper-Body Side Aperture Installation (1 Of 7)



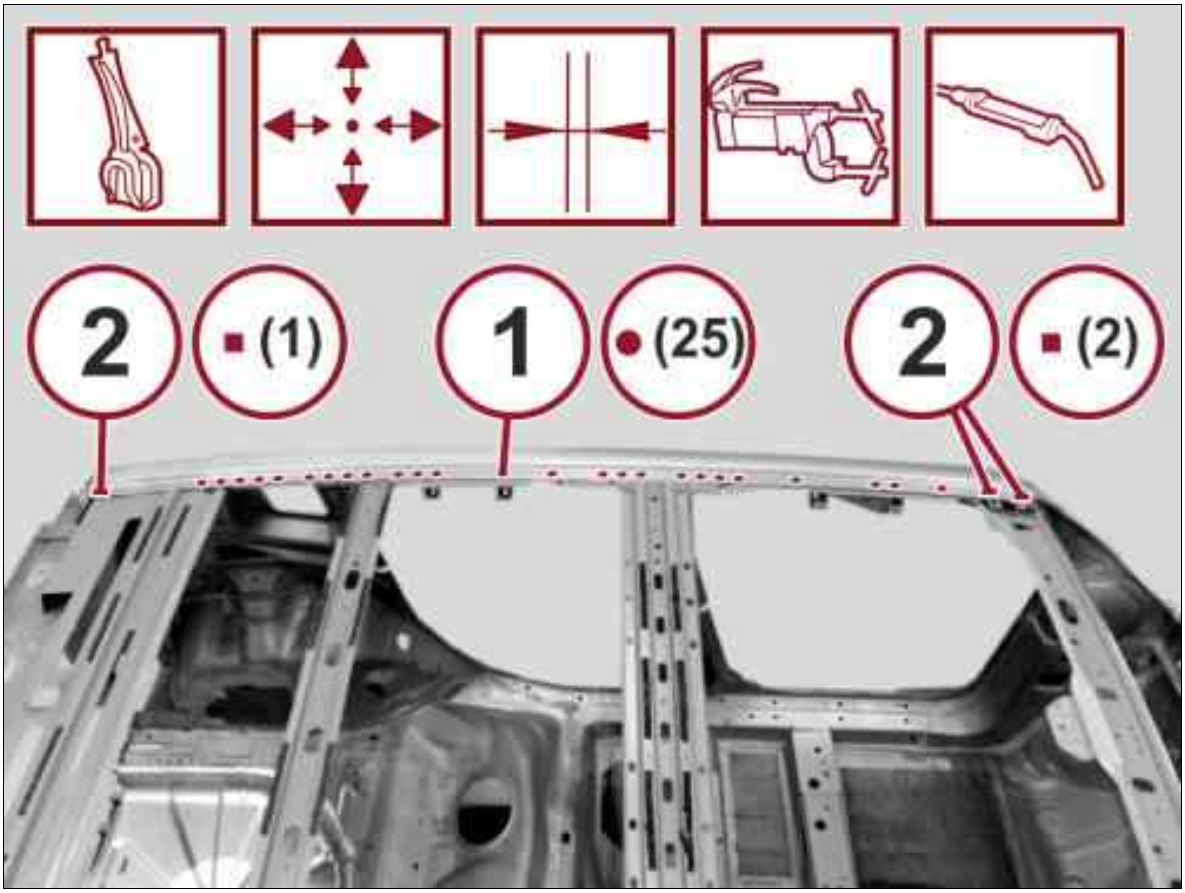
Courtesy of CHRYSLER GROUP, LLC

NOTE:

Be certain to leave the service panel long enough to allow for overlapping.

1. Cut at the cut lines (1) as indicated in the illustration, leaving enough length to for overlapping.
2. Remove the anti-corrosion treatment from the entire perimeter (2) of the inner and outer part using a rotary brush.
3. With the use of a drill, drill holes (3) in the area shown in the illustration.
4. Apply elctro-weldable paint/weld through primer to the boarders of the areas to be welded.

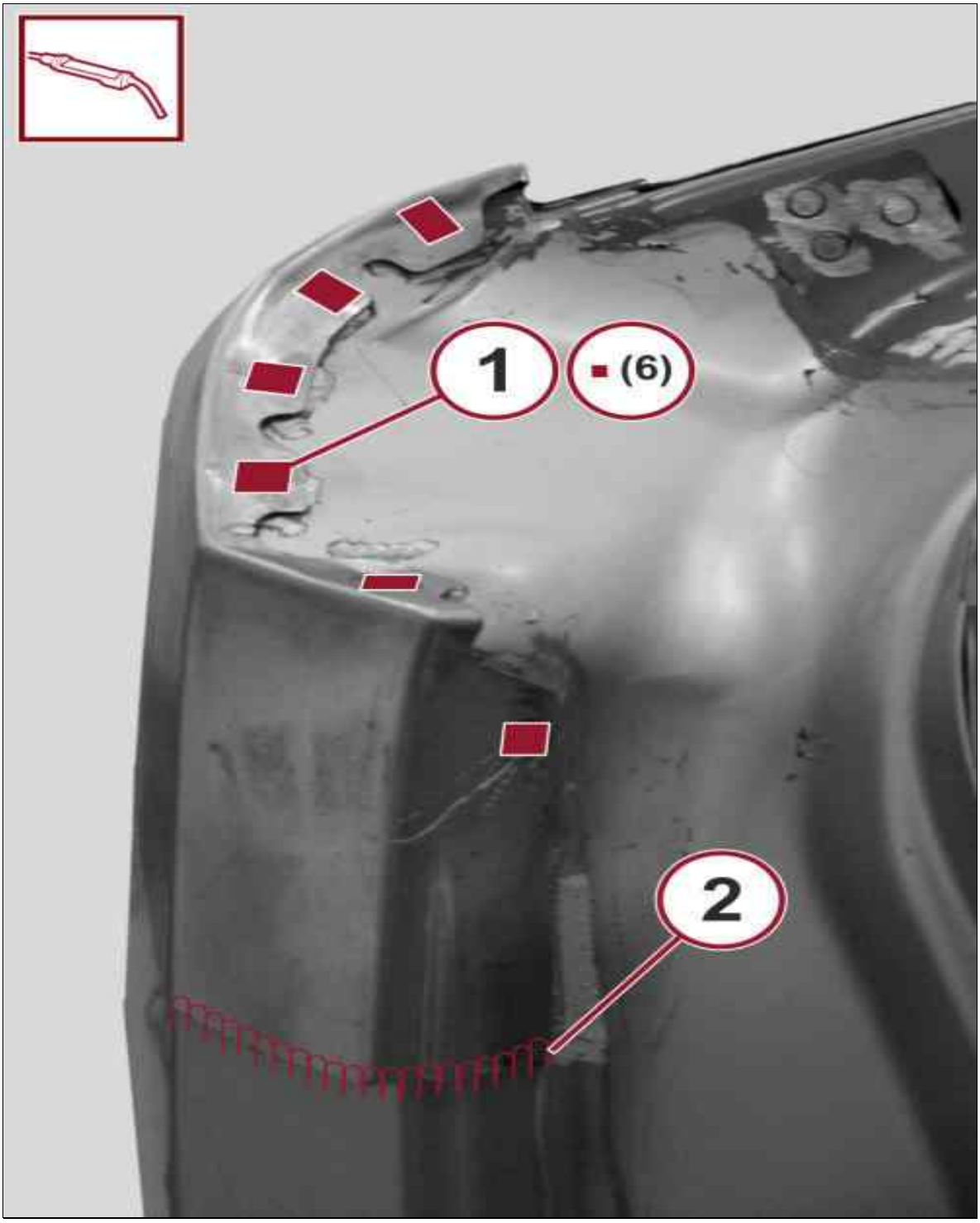
Fig 2: Upper-Body Side Aperture Installation (2 Of 7)



Courtesy of CHRYSLER GROUP, LLC

5. Position the service part correctly on the vehicle and secure it with the self-locking clamps.
6. Check alignment and surrounding gaps.
7. With the use of a spot welder, apply spot welds to the areas (1) indicated in the illustration.
8. With the use of a MIG welder, apply plug welds filling in the areas (2) shown in the illustration.

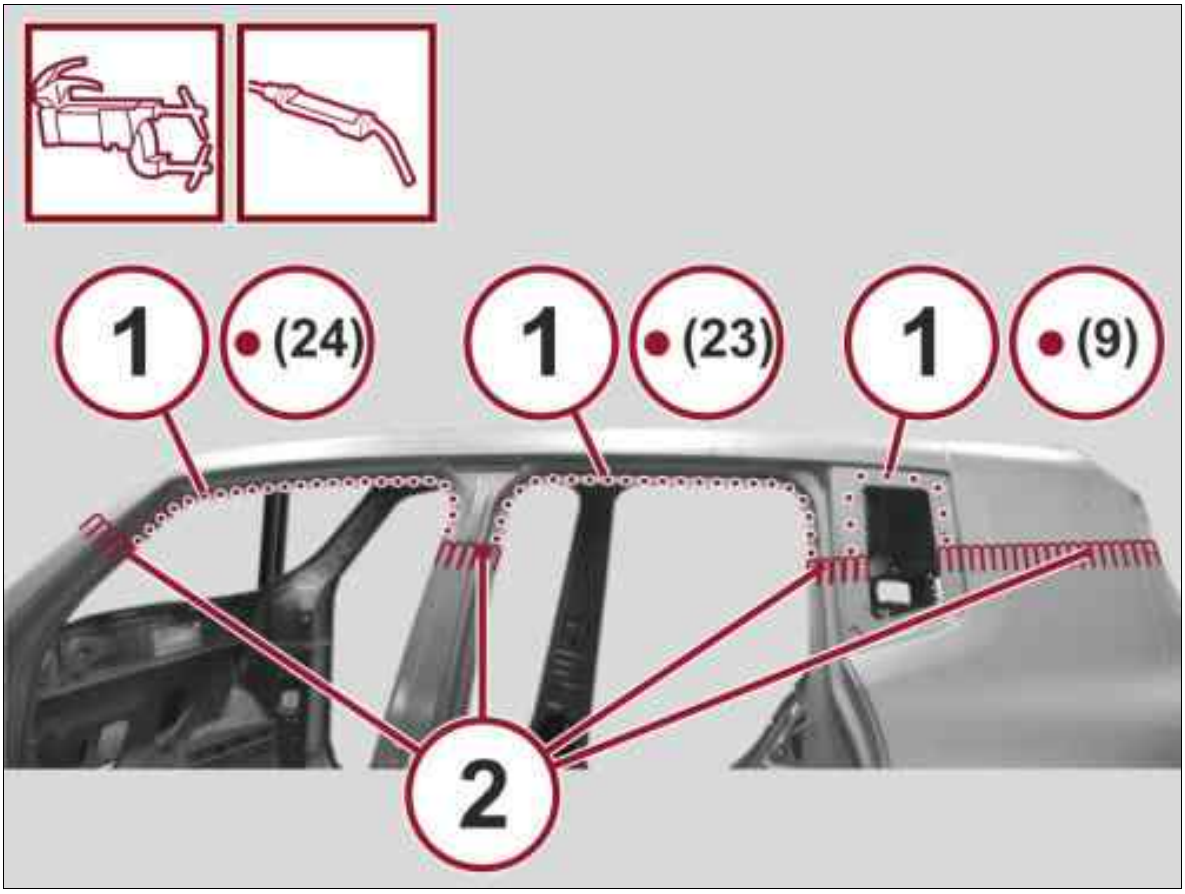
Fig 3: Upper-Body Side Aperture Installation (3 Of 7)



Courtesy of CHRYSLER GROUP, LLC

9. With the use of a MIG welder, apply plug welds filling in the areas (1) shown in the illustration.
10. With the use of a MIG welder, apply seam welds to the area (2) indicated in the illustration.

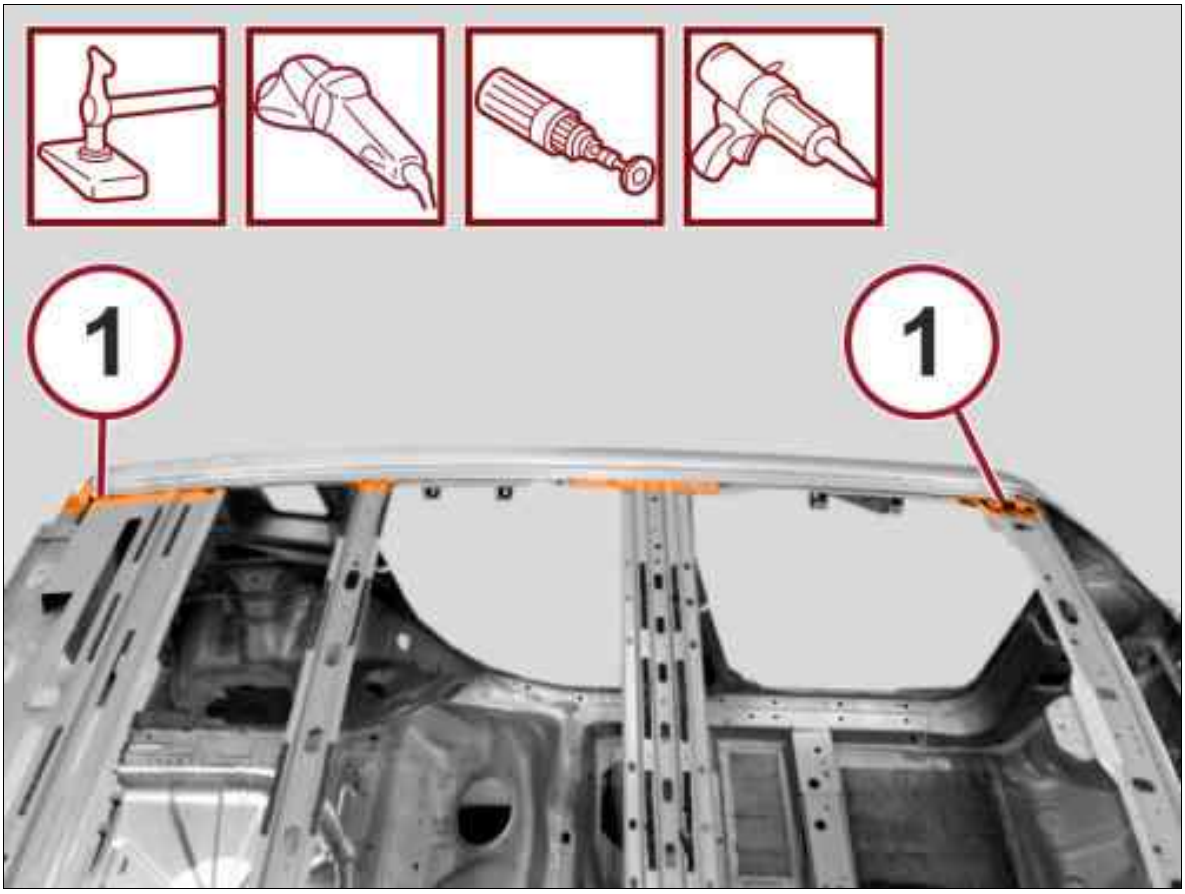
Fig 4: Upper-Body Side Aperture Installation (4 Of 7)



Courtesy of CHRYSLER GROUP, LLC

11. With the use of a spot welder, apply spot welds to the areas (1) indicated in the illustration.
12. With the use of a MIG welder, apply seam welds to the area (2) indicated in the illustration.

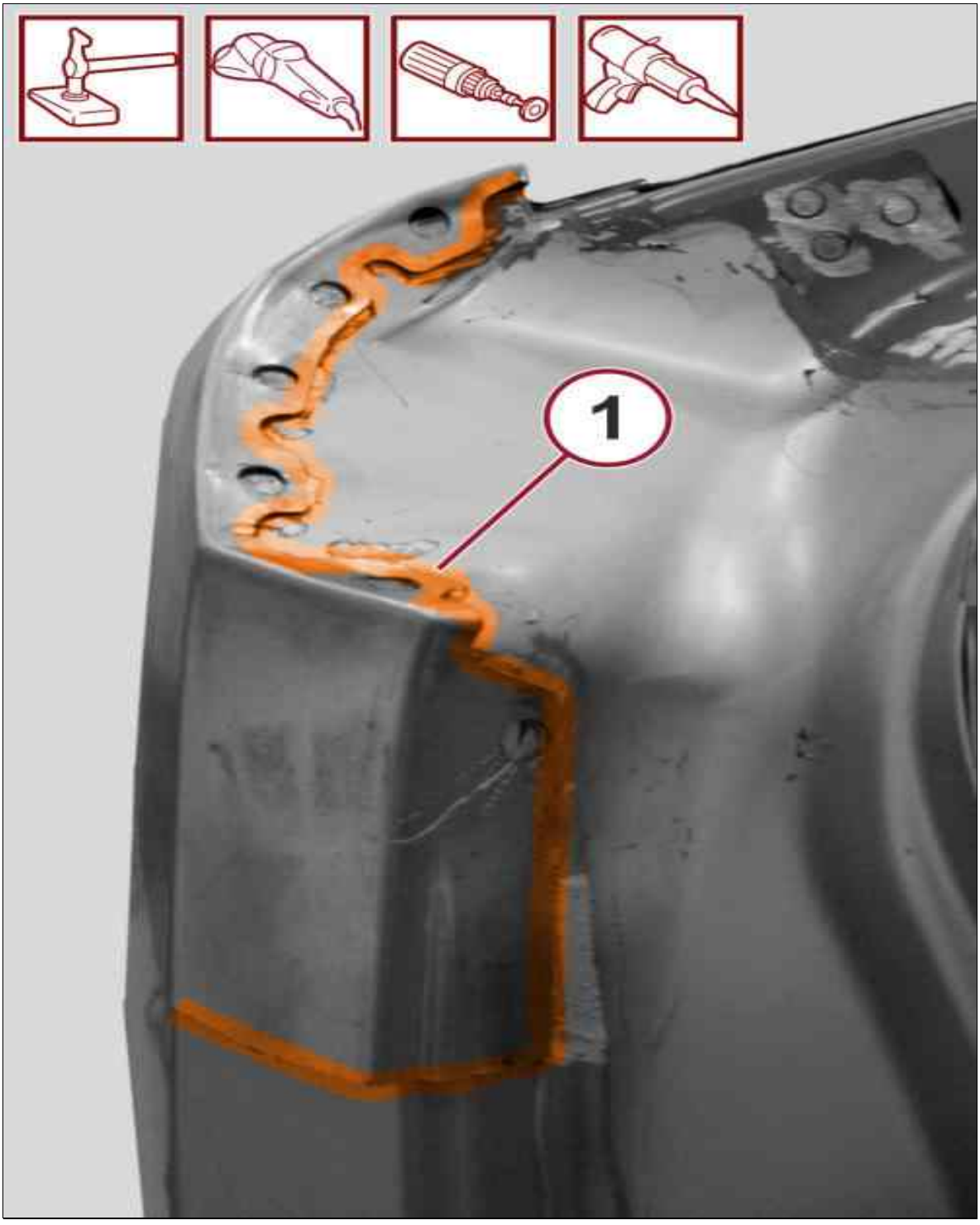
Fig 5: Upper-Body Side Aperture Installation (5 Of 7)



Courtesy of CHRYSLER GROUP, LLC

13. Correct any distortions to the sheet metal using a hammer and dolly block.
14. Use a grinding disc to smooth the welds.
15. Use a rotary brush to clean the previously welded areas.
16. Apply corrosion protection to the areas involved in the welding.
17. Seal the seams between the parts and the vehicle in the areas (1) indicated.

Fig 6: Upper-Body Side Aperture Installation (6 Of 7)

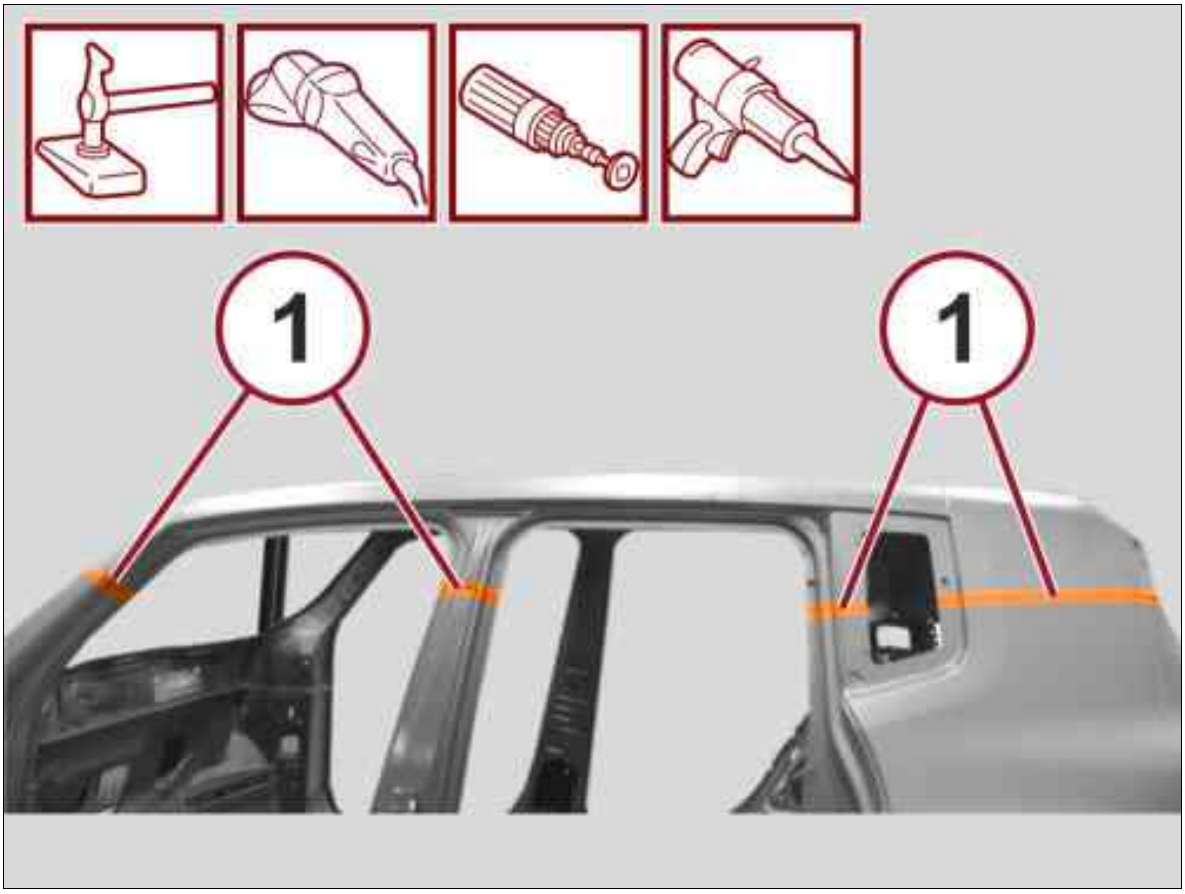


Courtesy of CHRYSLER GROUP, LLC

18. Correct any distortions to the sheet metal using a hammer and dolly block.
19. Use a grinding disc to smooth the welds.
20. Use a rotary brush to clean the previously welded areas.
21. Apply corrosion protection to the areas involved in the welding.

22. Seal the seams between the parts and the vehicle in the areas (1) indicated.

Fig 7: Upper-Body Side Aperture Installation (7 Of 7)



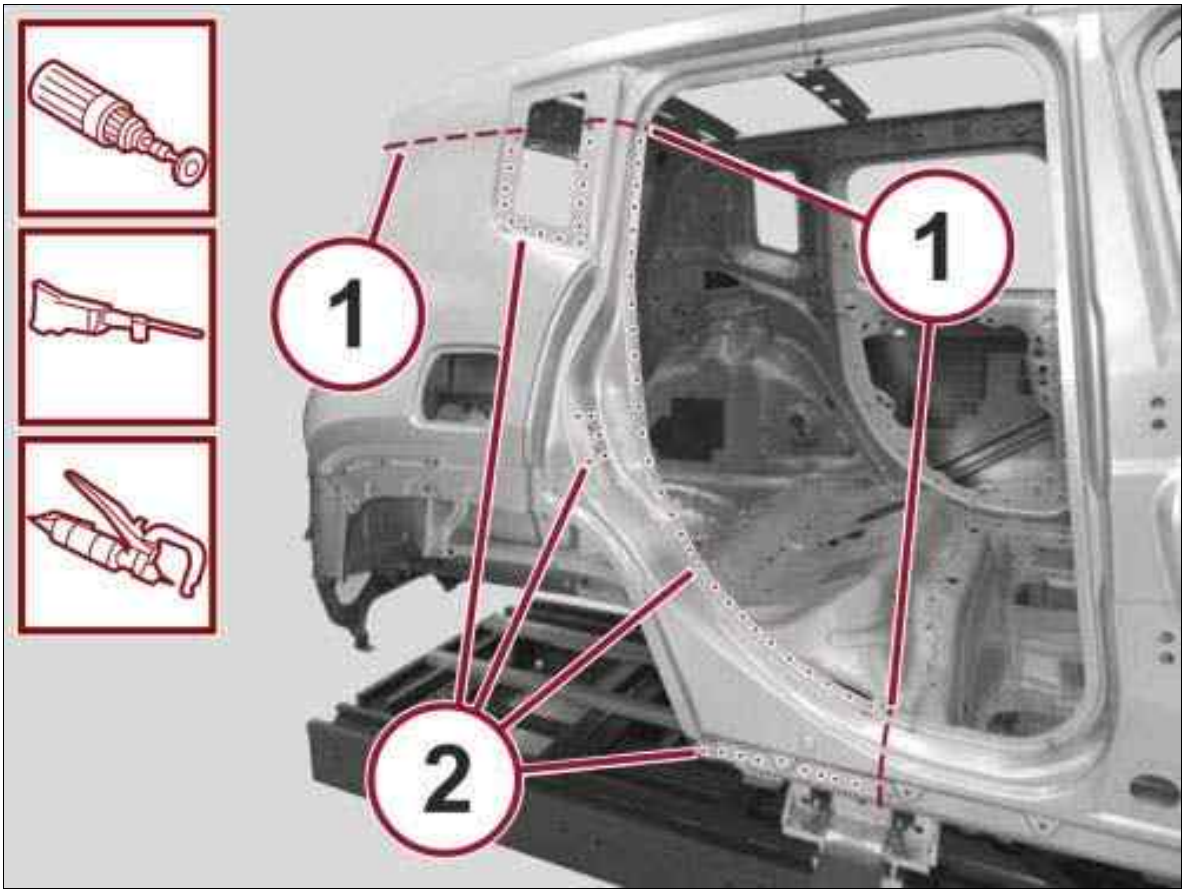
Courtesy of CHRYSLER GROUP, LLC

23. Correct any distortions to the sheet metal using a hammer and dolly block.
24. Use a grinding disc to smooth the welds.
25. Use a rotary brush to clean the previously welded areas.
26. Apply corrosion protection to the areas involved in the welding.
27. Seal the seams between the parts and the vehicle in the areas (1) indicated.
28. Install the roof panel. Refer to PANEL, ROOF, REMOVAL AND INSTALLATION .

BODY STRUCTURE > PANEL, QUARTER > REMOVAL AND INSTALLATION > QUARTER PANEL REMOVAL AND INSTALLATION > REMOVAL

1. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
2. Straighten the body as necessary.

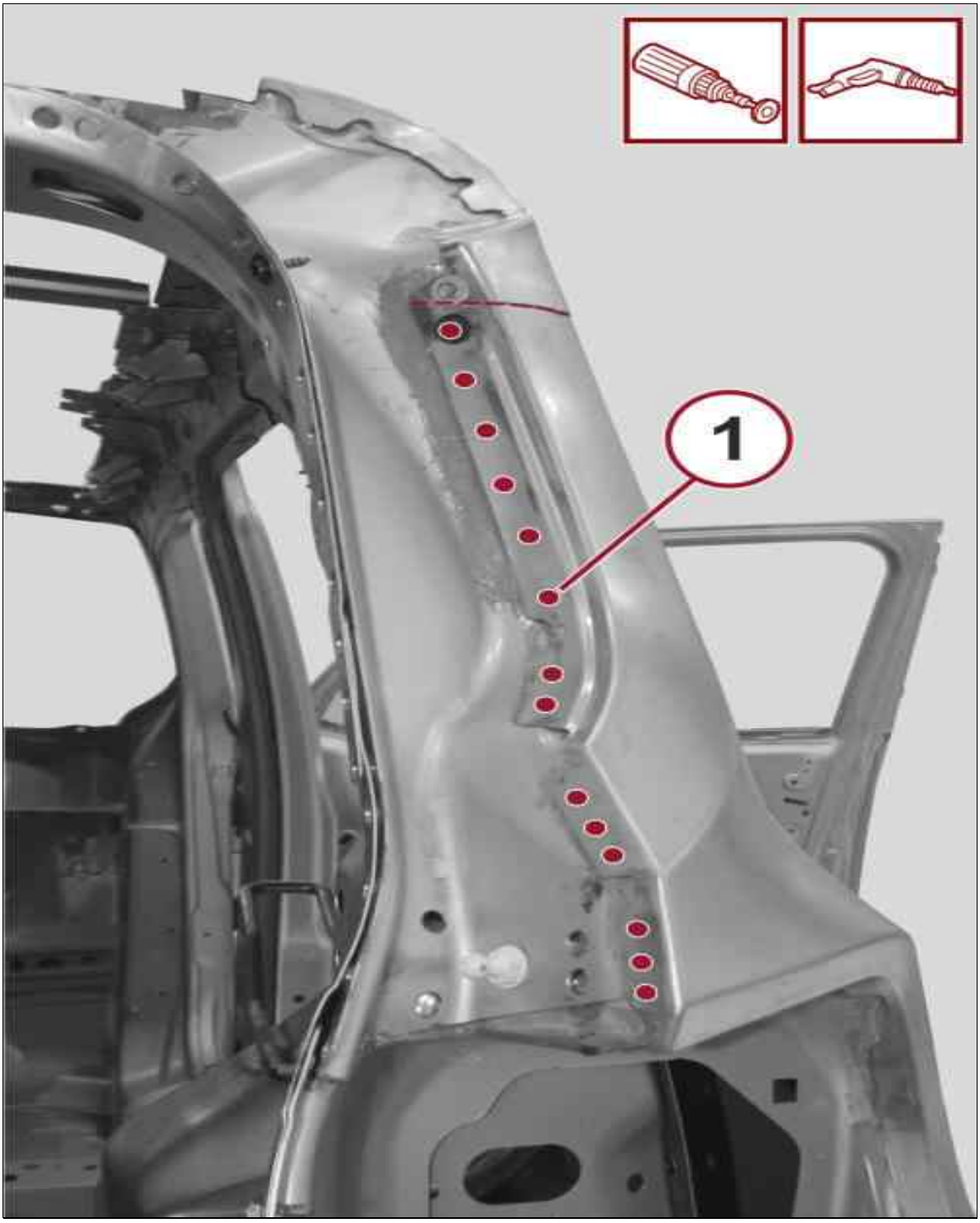
Fig 1: Quarter Panel Removal (1 Of 7)



Courtesy of CHRYSLER GROUP, LLC

3. With the use of a rotary brush, remove the paint to gain access to the spot welds.
4. With the use of a jigsaw, cut along the cut lines (1) shown in the illustration.
5. With the use of a spot weld cutting tool, release the spot welds (2) shown in the illustration.

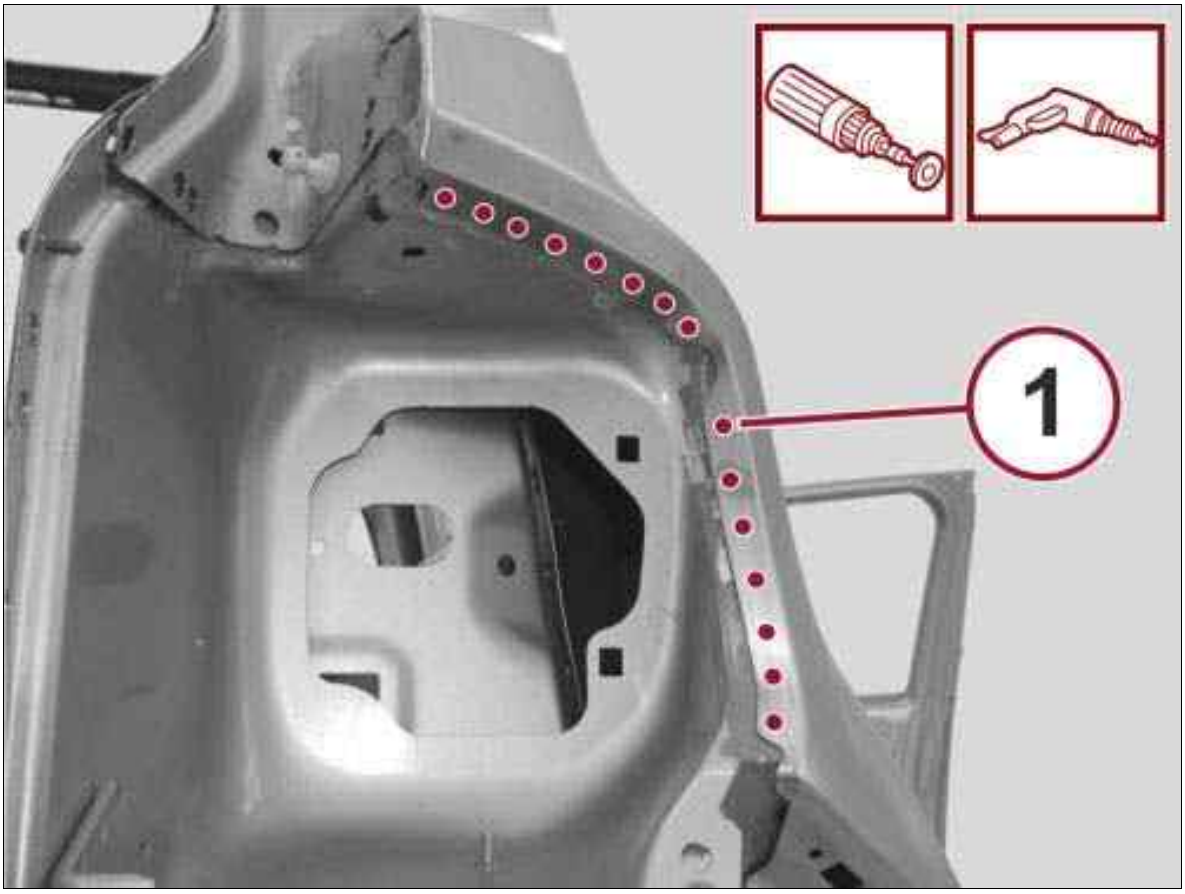
Fig 2: Quarter Panel Removal (2 Of 7)



Courtesy of CHRYSLER GROUP, LLC

6. With the use of a drill, release the spot welds (1) shown in the illustration.

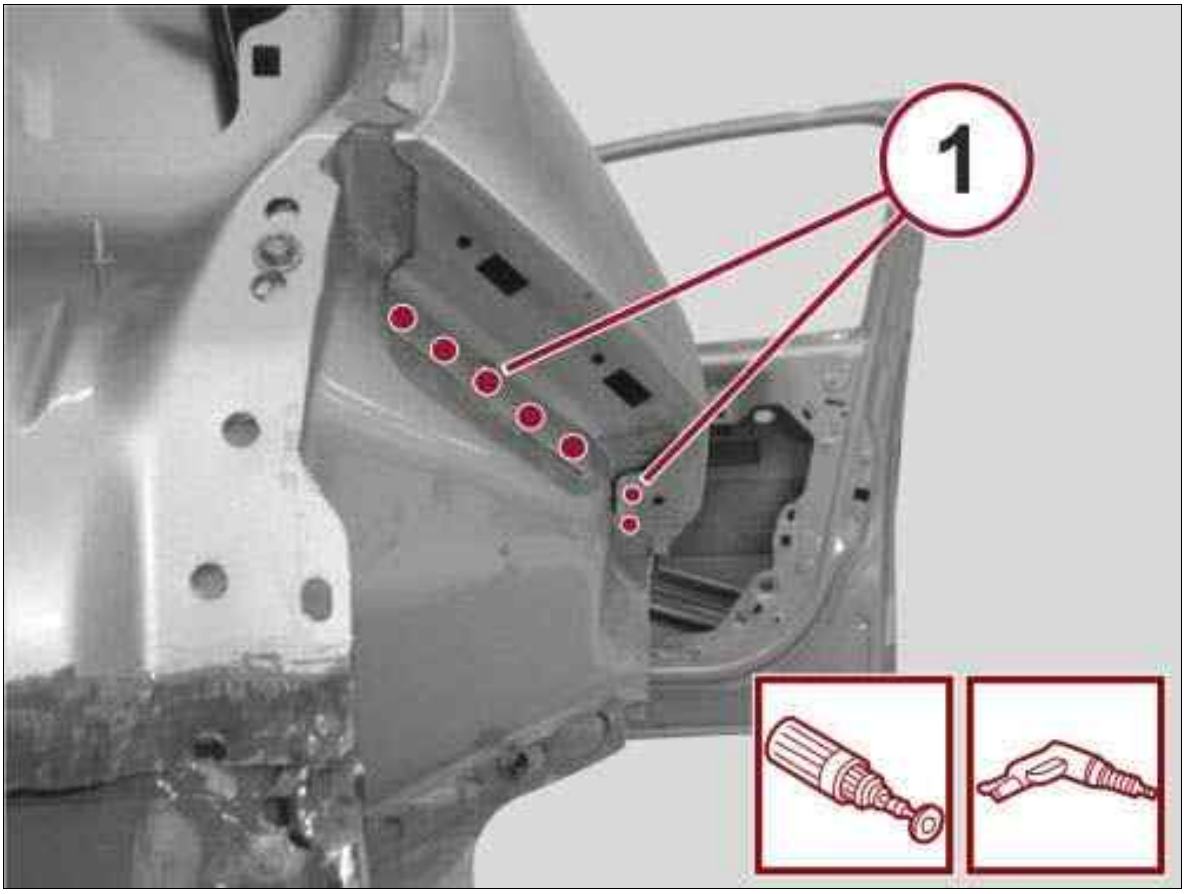
Fig 3: Quarter Panel Removal (3 Of 7)



Courtesy of CHRYSLER GROUP, LLC

7. With the use of a drill, release the spot welds (1) shown in the illustration.

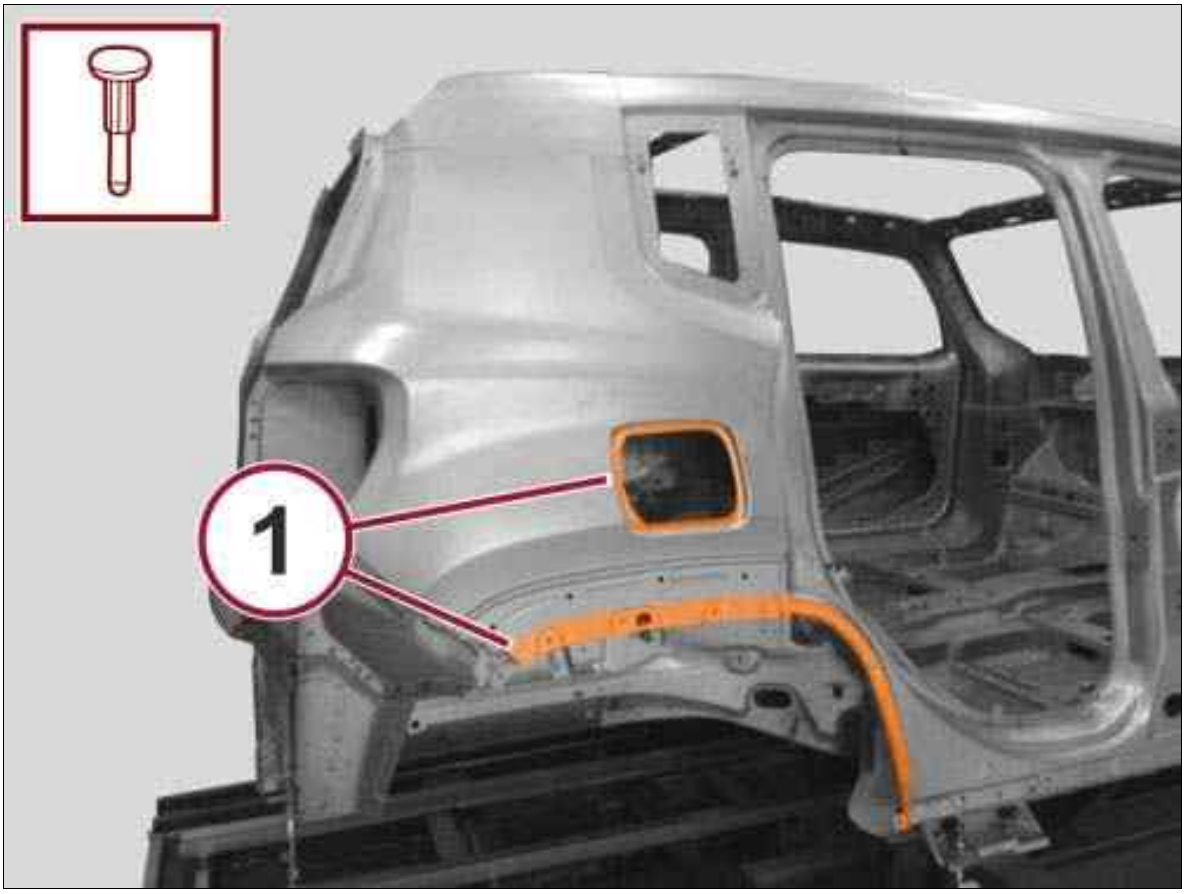
Fig 4: Quarter Panel Removal (4 Of 7)



Courtesy of CHRYSLER GROUP, LLC

8. With the use of a drill, release the spot welds (1) shown in the illustration.

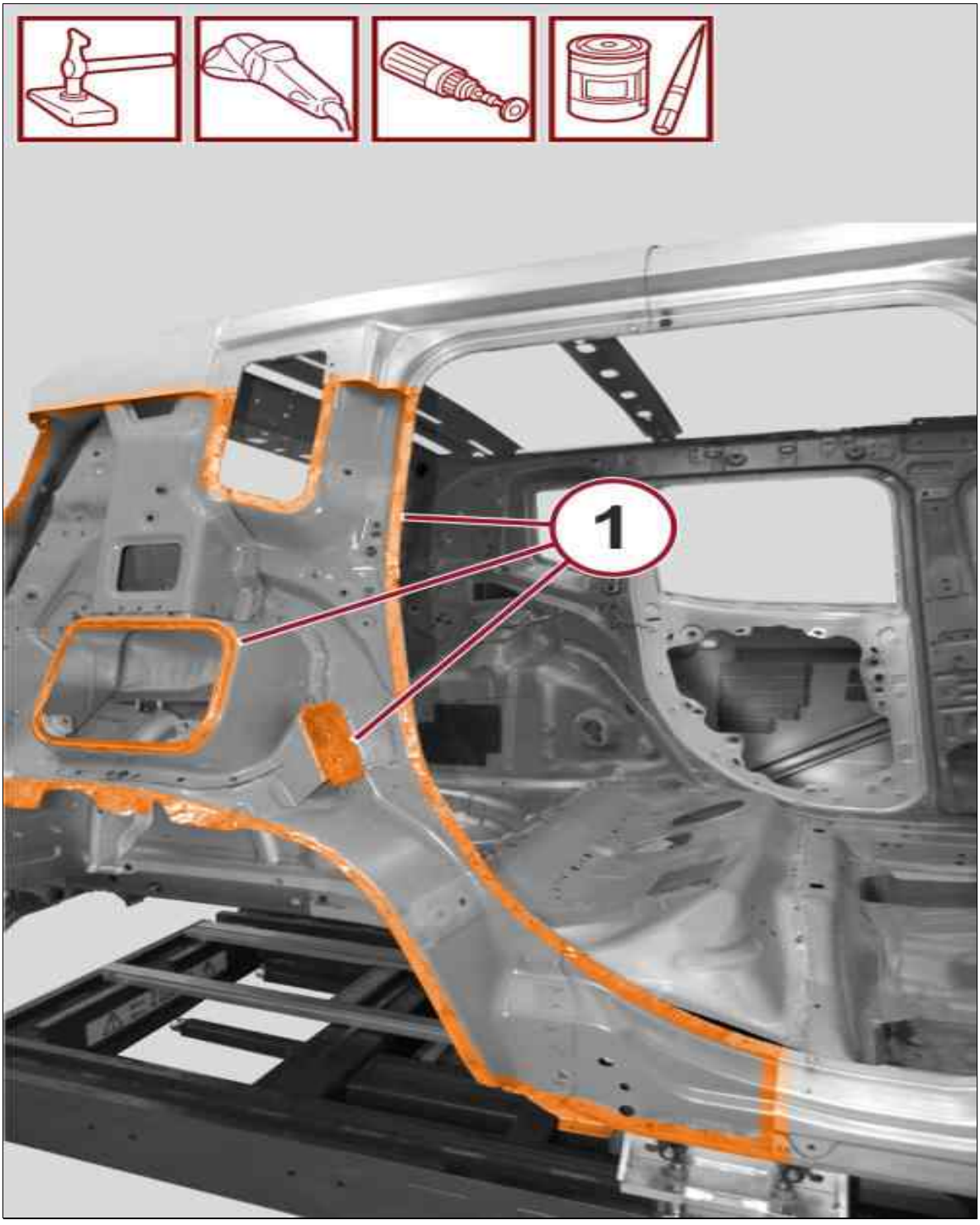
Fig 5: Quarter Panel Removal (5 Of 7)



Courtesy of CHRYSLER GROUP, LLC

9. With the use of a chisel and hammer, release the beads of sealant in the areas shown in the illustration (1).
10. With the use of a chisel and hammer, remove the welds previously released and areas where there is adhesive joining the sheet metal.
11. Remove the quarter panel (rear fender) and clippings from the vehicle

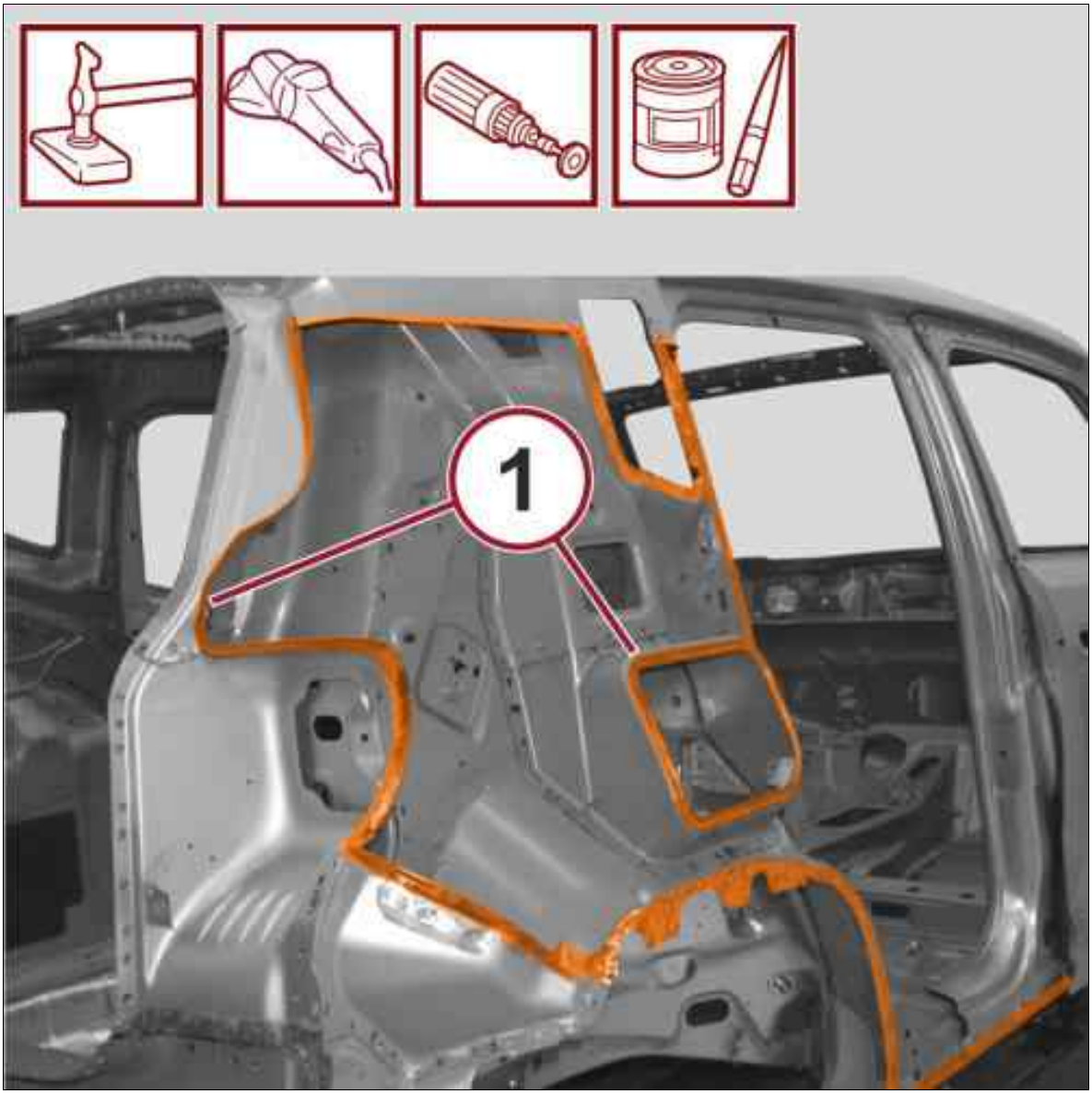
Fig 6: Quarter Panel Removal (6 Of 7)



Courtesy of CHRYSLER GROUP, LLC

12. With the use of a hammer and dolly block, straighten the edges of the mating components.
13. With the use of a disc grinder, remove any residue of the sealant and spot welds.
14. With the use of a rotary brush, clean the previously treated areas.
15. Apply electro-weldable paint/weld through primer to the areas (1) highlighted.

Fig 7: Quarter Panel Removal (7 Of 7)

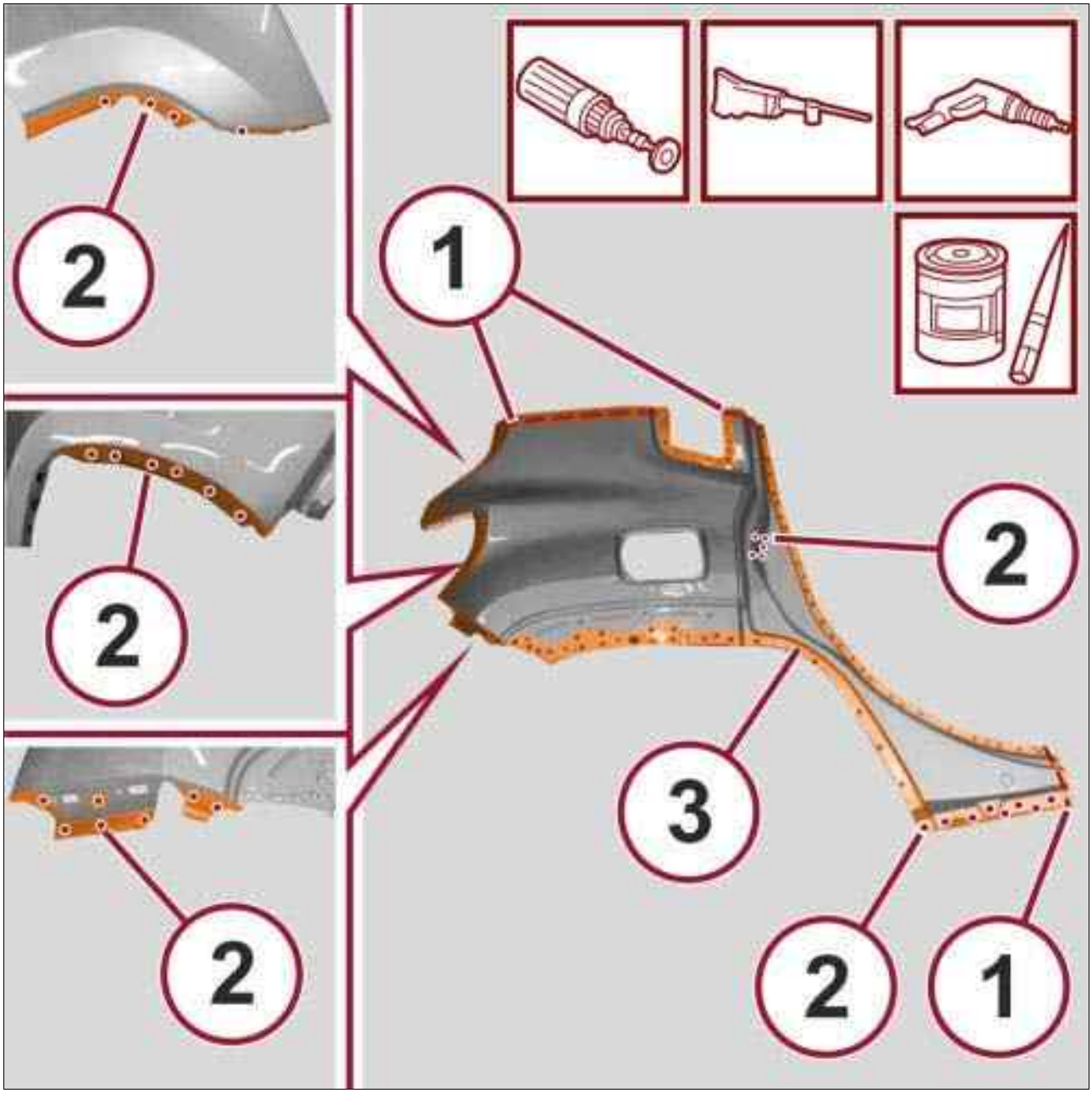


Courtesy of CHRYSLER GROUP, LLC

16. With the use of a hammer and dolly block, straighten the edges (1) of the mating components.
17. With the use of a disc grinder, remove any residue of the sealant and spot welds.
18. With the use of a rotary brush, clean the previously treated areas.
19. Apply electro-weldable paint/weld through primer to the areas (1) highlighted.

BODY STRUCTURE > PANEL, QUARTER > REMOVAL AND INSTALLATION > QUARTER PANEL REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Quarter Panel Installation (1 Of 7)



Courtesy of CHRYSLER GROUP, LLC

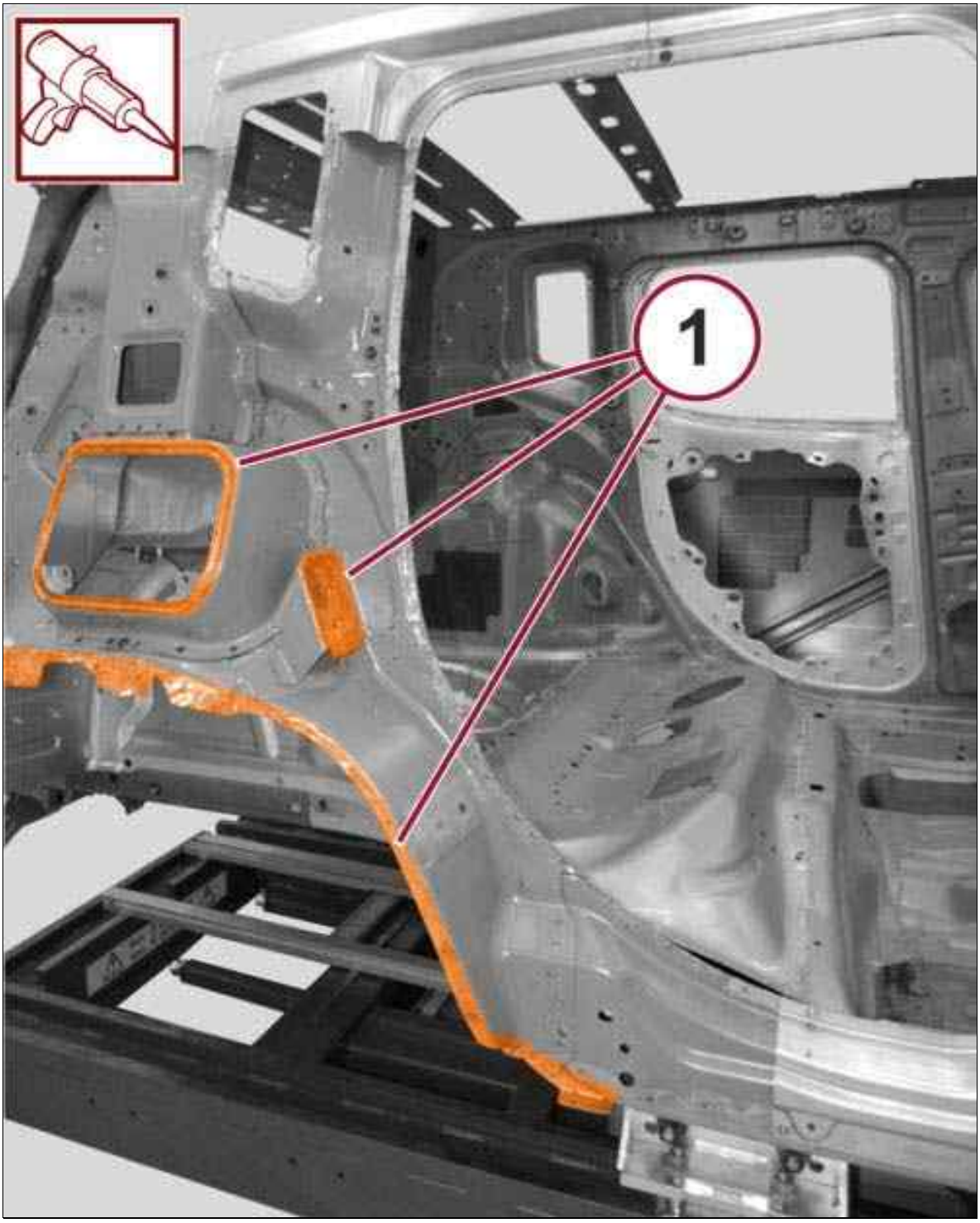
1. Remove the anti-corrosion treatment from the entire perimeter of the inner and outer part using a rotary brush.

> *NOTE:*
>
> *Be certain to leave the service panel long enough to allow for overlapping.*

2. Cut at the cut lines (1) as indicated in the illustration, leaving enough length to for overlapping.
3. With the use of a drill, drill holes (2) in the area shown in the illustration.

4. Apply elctro-weldable paint/weld through primer to the boarders of the areas (3) to be welded.

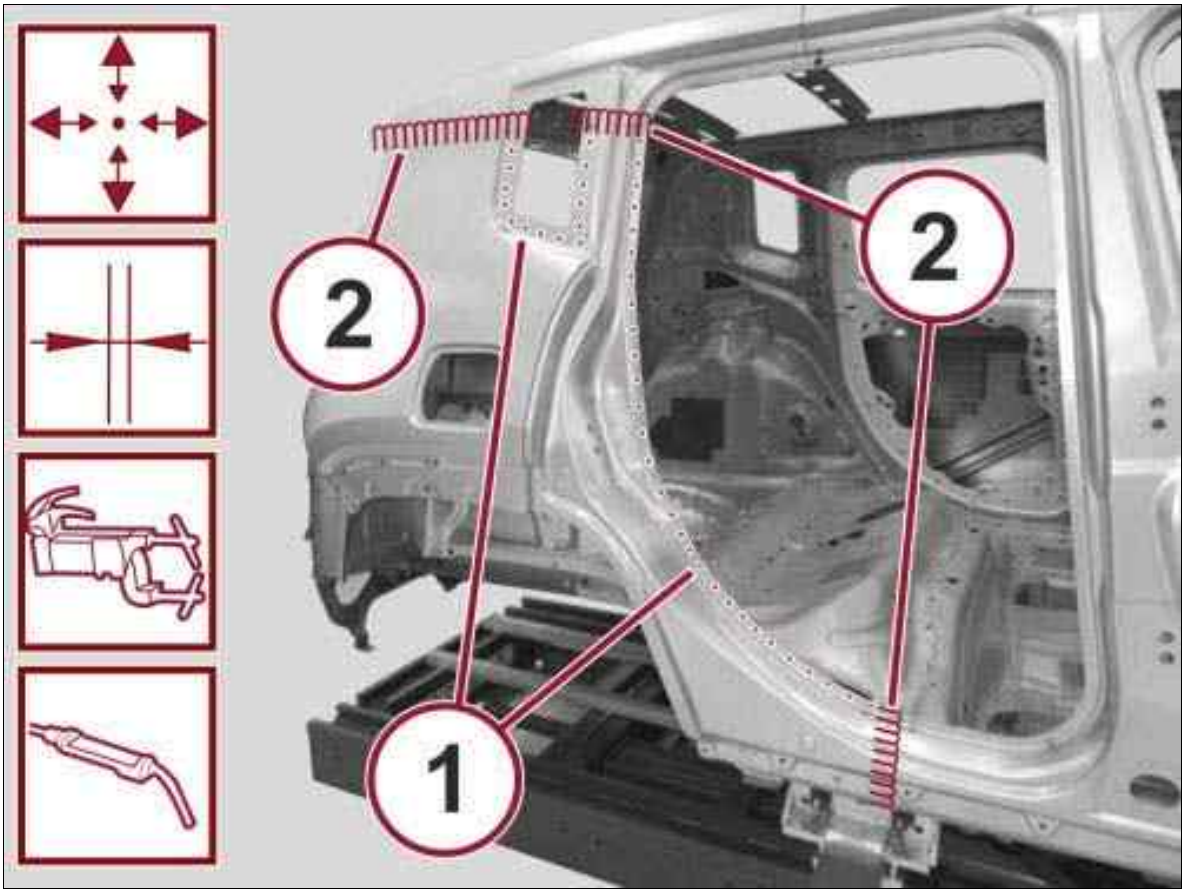
Fig 2: Quarter Panel Installation (2 Of 7)



Courtesy of CHRYSLER GROUP, LLC

5. Apply sealant to the joining sheet metal areas (1).

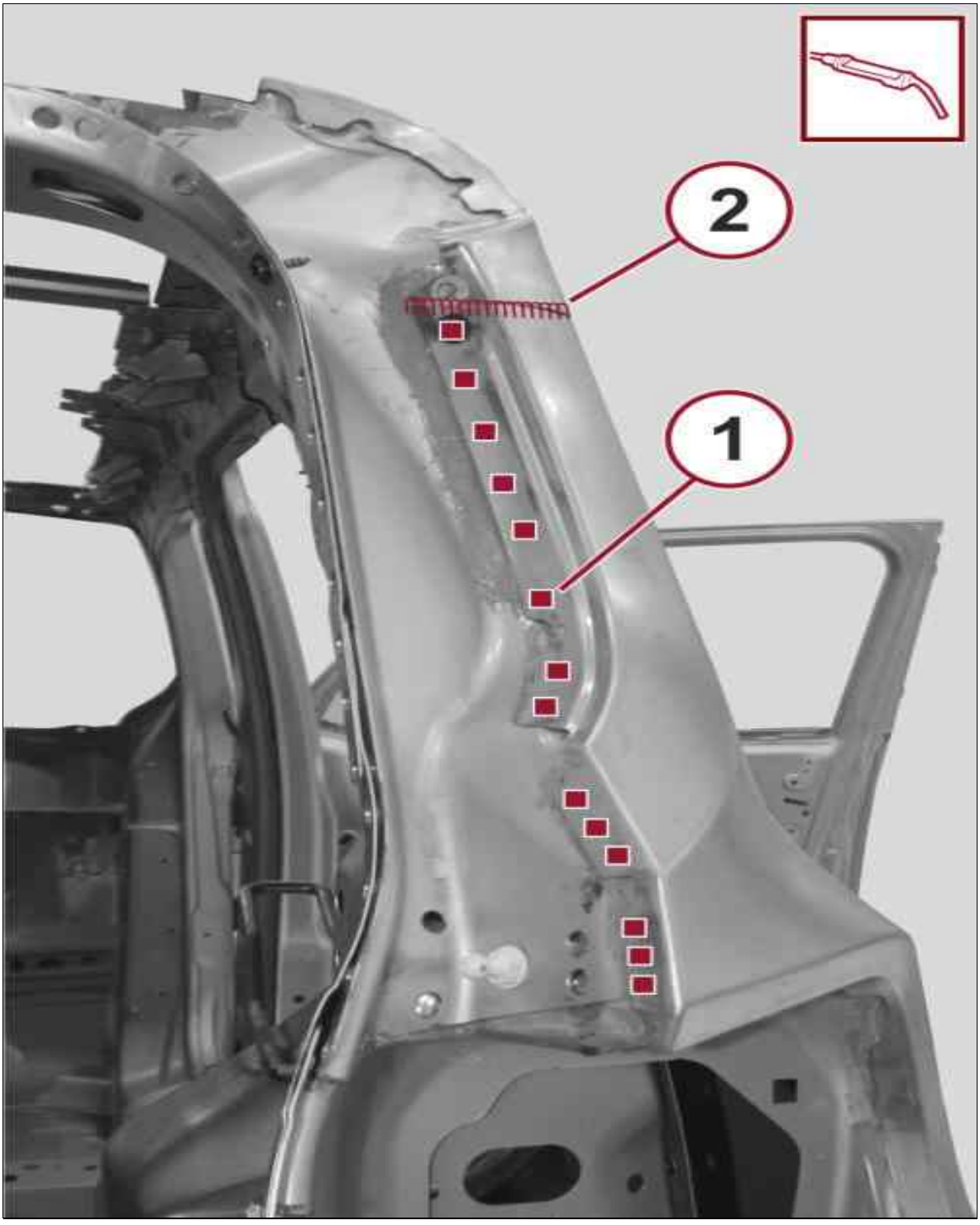
Fig 3: Quarter Panel Installation (3 Of 7)



Courtesy of CHRYSLER GROUP, LLC

6. Position the service part correctly on the vehicle and secure it with the self-locking clamps.
7. Check alignment and surrounding gaps.
8. With the use of a spot welder, apply spot welds to the areas (1) indicated in the illustration.
9. With the use of a MIG welder, apply seam welds to the area (2) indicated in the illustration.

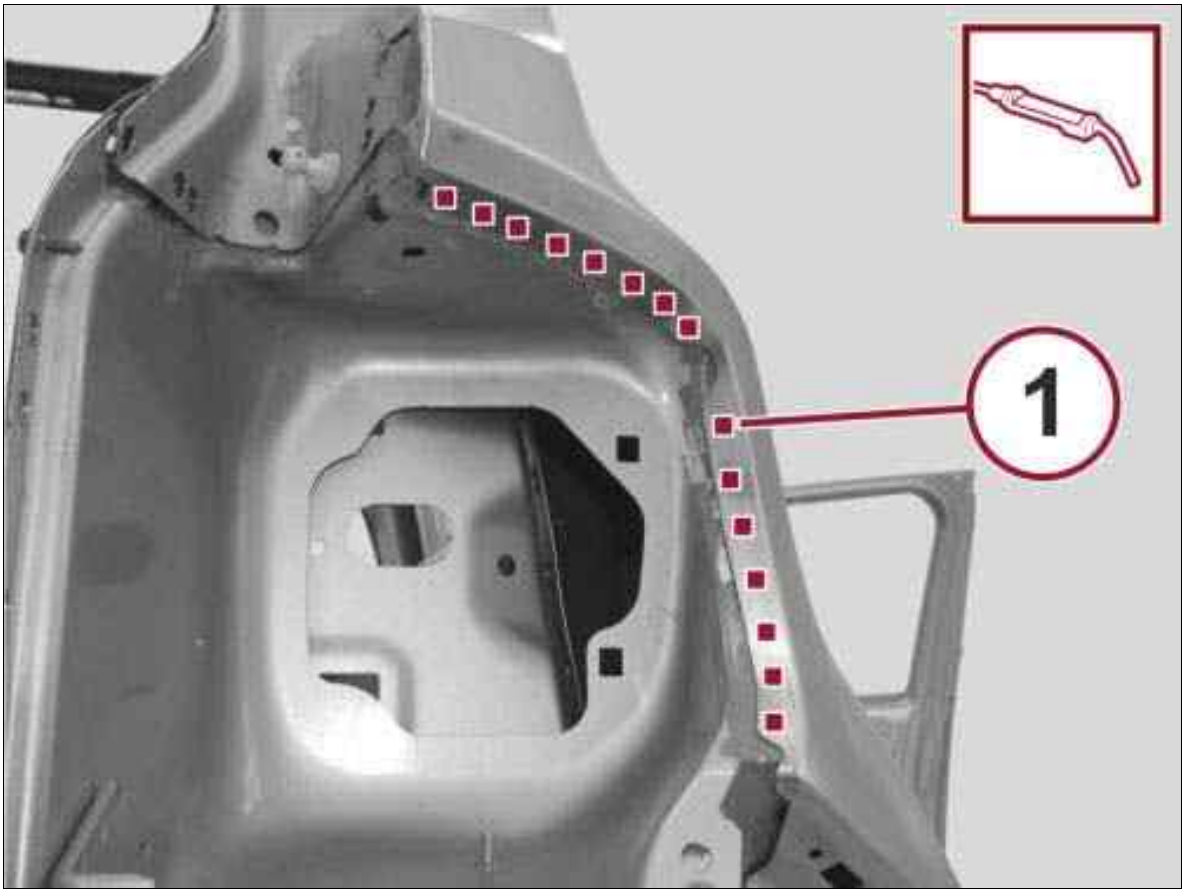
Fig 4: Quarter Panel Installation (4 Of 7)



Courtesy of CHRYSLER GROUP, LLC

10. With the use of a MIG welder, apply plug welds filling in the areas (1) shown in the illustration.
11. With the use of a MIG welder, apply seam welds to the area (2) indicated in the illustration.

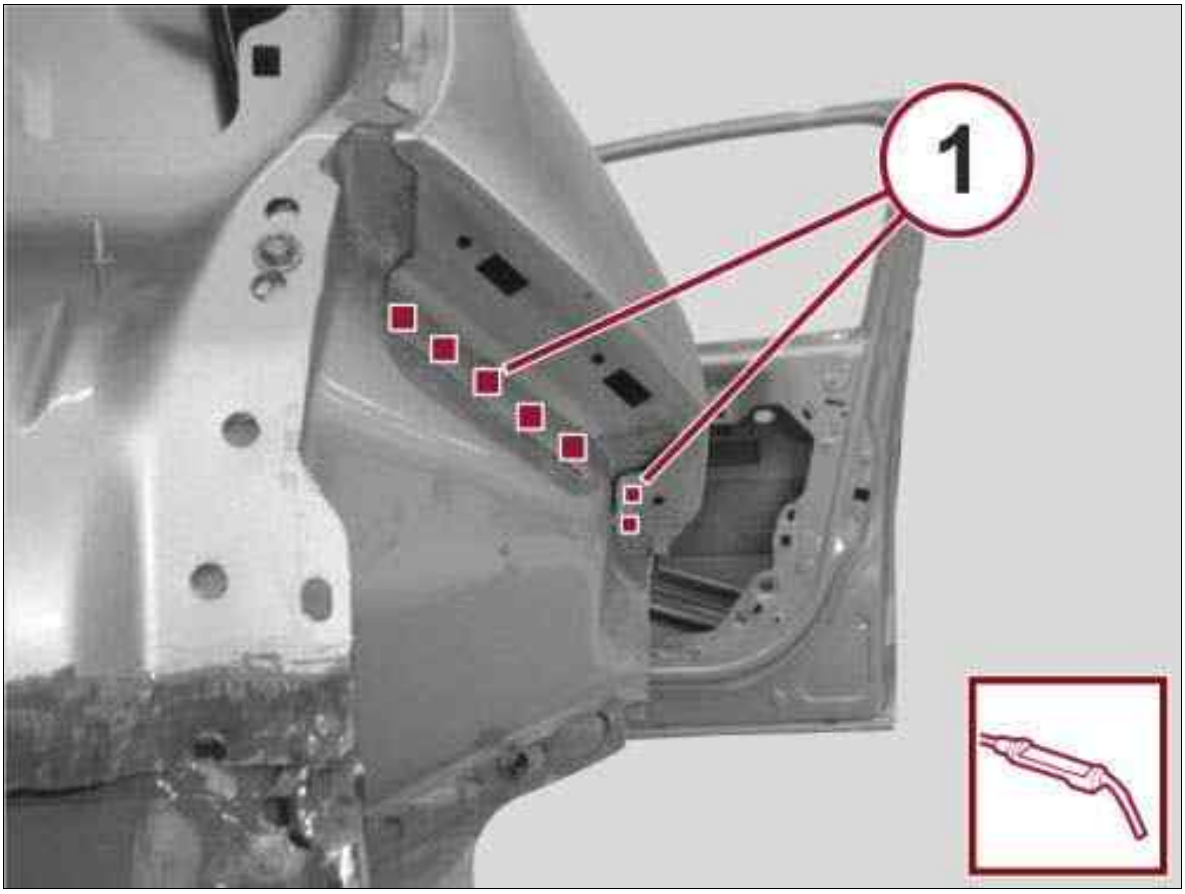
Fig 5: Quarter Panel Installation (5 Of 7)



Courtesy of CHRYSLER GROUP, LLC

12. With the use of a MIG welder, apply plug welds filling in the areas (1) shown in the illustration.

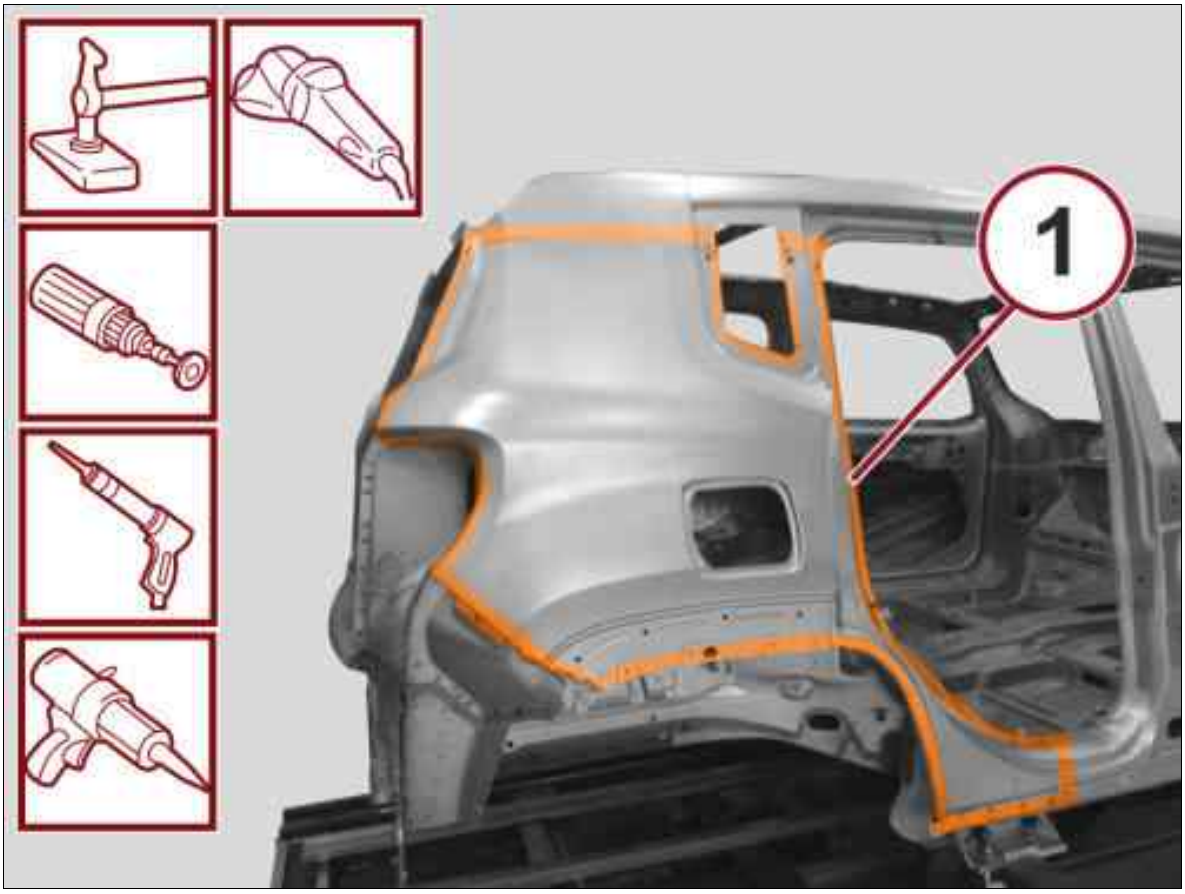
Fig 6: Quarter Panel Installation (6 Of 7)



Courtesy of CHRYSLER GROUP, LLC

13. With the use of a MIG welder, apply plug welds filling in the areas (1) shown in the illustration.

Fig 7: Quarter Panel Installation (7 Of 7)



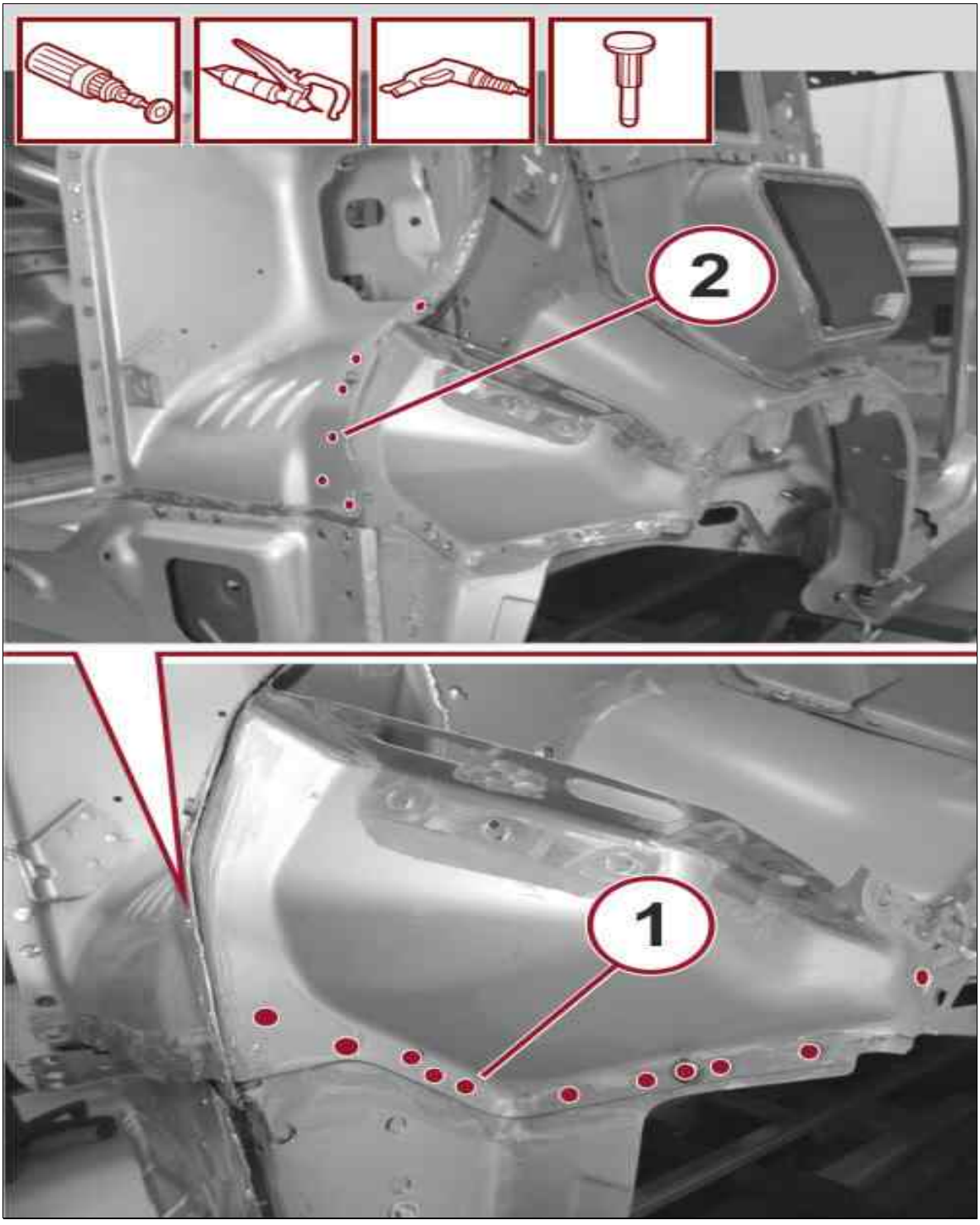
Courtesy of CHRYSLER GROUP, LLC

14. Correct any distortions to the sheet metal using a hammer and dolly block.
15. Use a grinding disc to smooth the welds.
16. Use a rotary brush to clean the previously welded areas.
17. Apply corrosion protection to the areas involved in the welding.
18. Seal the seams between the parts and the vehicle in the areas (1) indicated.

BODY STRUCTURE > PANEL, QUARTER > REMOVAL AND INSTALLATION > QUARTER PANEL EXTENSION REMOVAL AND INSTALLATION > REMOVAL

1. Remove the quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .
2. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
3. Straighten the body as necessary.

Fig 1: Quarter Panel Extension Removal (1 Of 2)

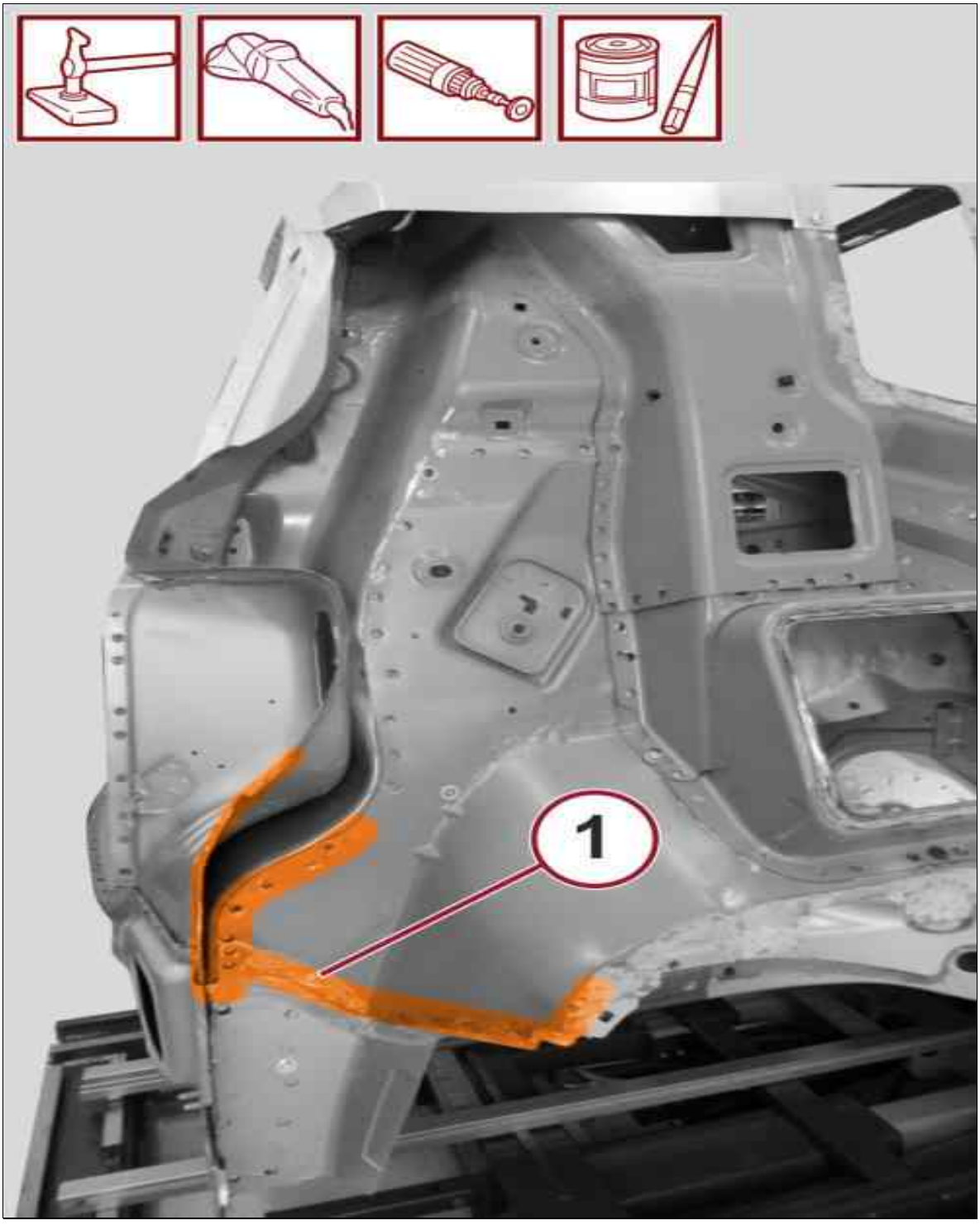


Courtesy of CHRYSLER GROUP, LLC

4. With the use of a rotary brush, remove the paint and gain access to the spot welds.
5. With the use of a spot weld cutting tool, release the spot welds (1) shown in the illustration.
6. With the use of a drill, release the spot welds (2) shown in the illustration.
7. With the use of a chisel and hammer, remove the spot welds previously released.

8. Remove the quarter panel extension from the vehicle.

Fig 2: Quarter Panel Extension Removal (2 Of 2)

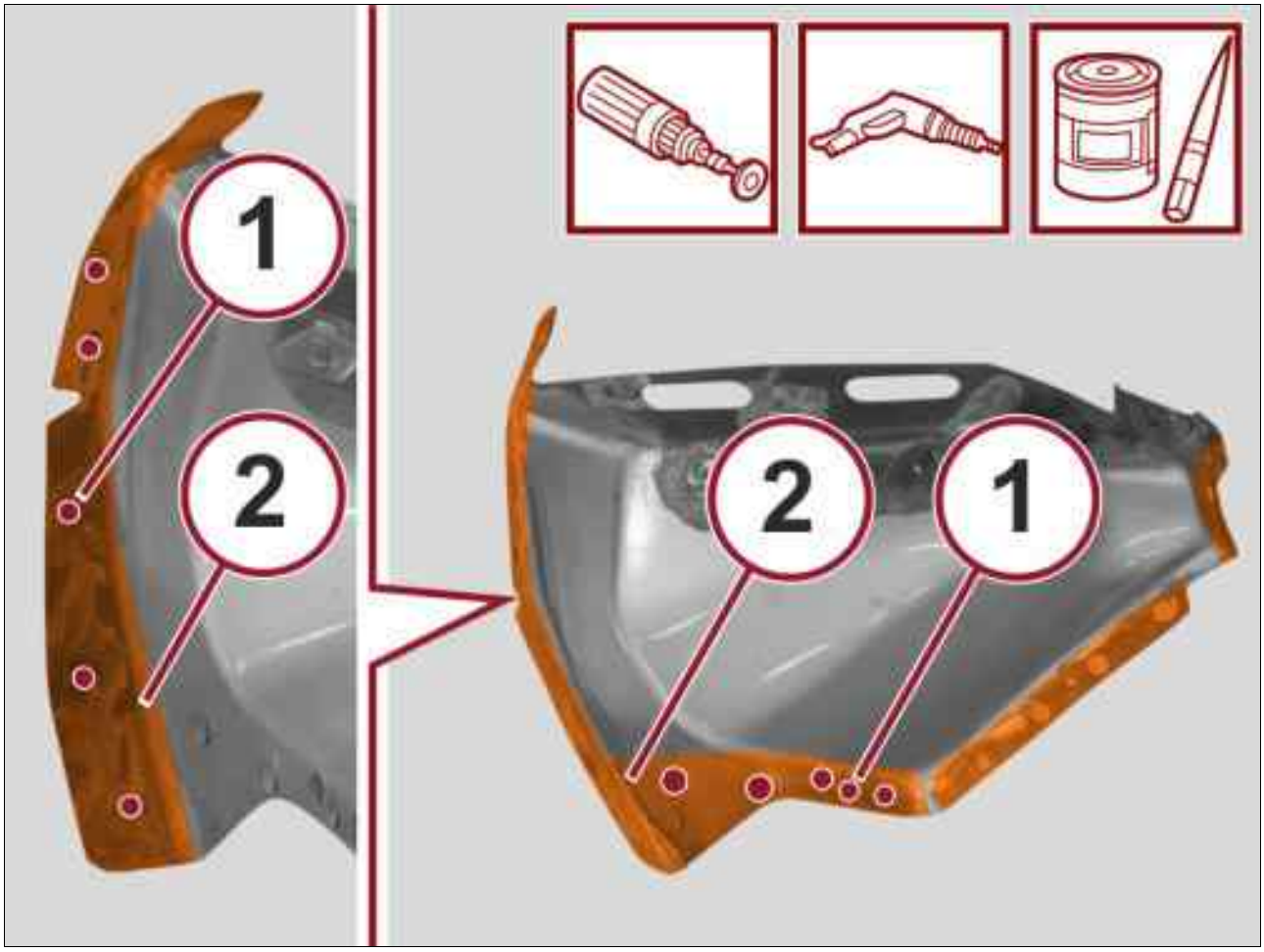


Courtesy of CHRYSLER GROUP, LLC

9. With the use of a hammer and dolly block, straighten the edges of the mating components.
10. With the use of a disc grinder, remove any residue of the spot welds.
11. With the use of a rotary brush, clean the previously treated areas.
12. Apply electro-weldable paint/weld through primer to the areas (1) to be welded.

BODY STRUCTURE > PANEL, QUARTER > REMOVAL AND INSTALLATION > QUARTER PANEL EXTENSION REMOVAL AND INSTALLATION > INSTALLATION

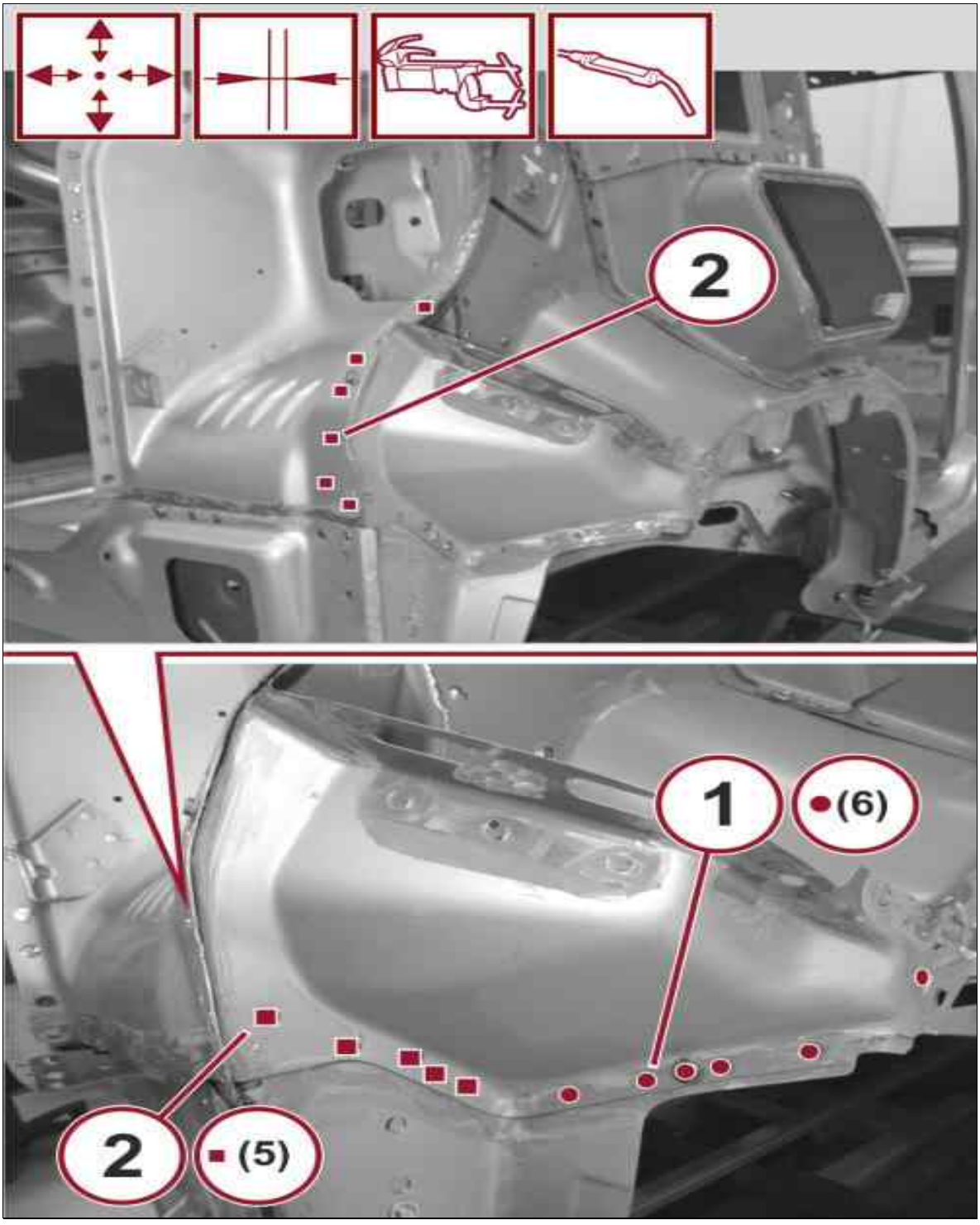
Fig 1: Quarter Panel Extension Installation (1 Of 3)



Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the entire perimeter of the inner and outer part using a rotary brush.
2. With the use of a drill, drill holes at the points (1) indicated.
3. Apply elctro-weldable paint/weld through primer to the boarders (2) involved in welding.

Fig 2: Quarter Panel Extension Installation (2 Of 3)

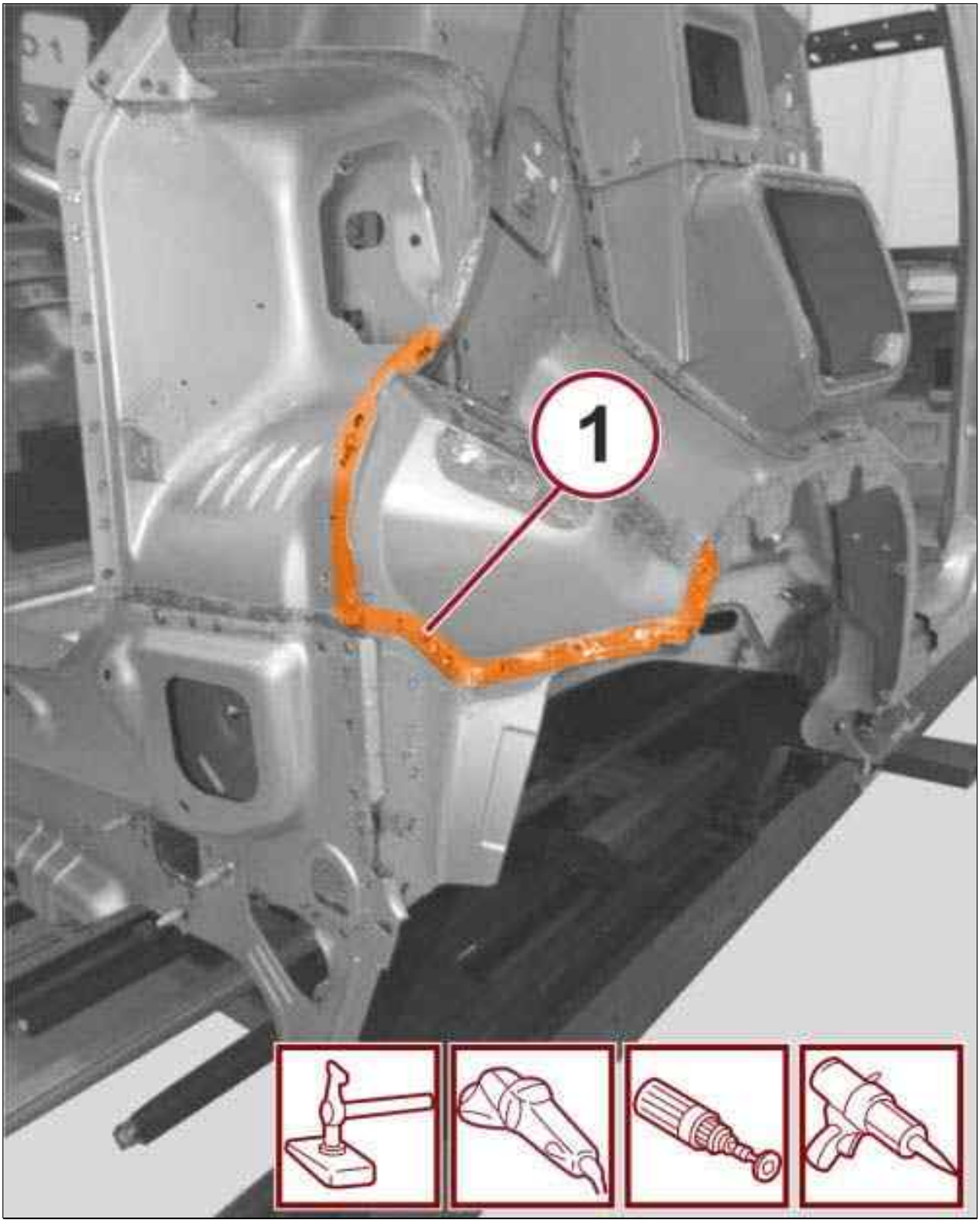


Courtesy of CHRYSLER GROUP, LLC

4. Position the service part correctly on the vehicle interior pillar and secure it with the self-locking clamps.
5. Check alignment and surrounding gaps.
6. With the use of a spot welder, apply spot welds to the areas (1) indicated in the illustration.
7. With the use of a MIG welder, apply plug welds filling in the holes (2) indicated in the

illustration.

Fig 3: Quarter Panel Extension Installation (3 Of 3)



Courtesy of CHRYSLER GROUP, LLC

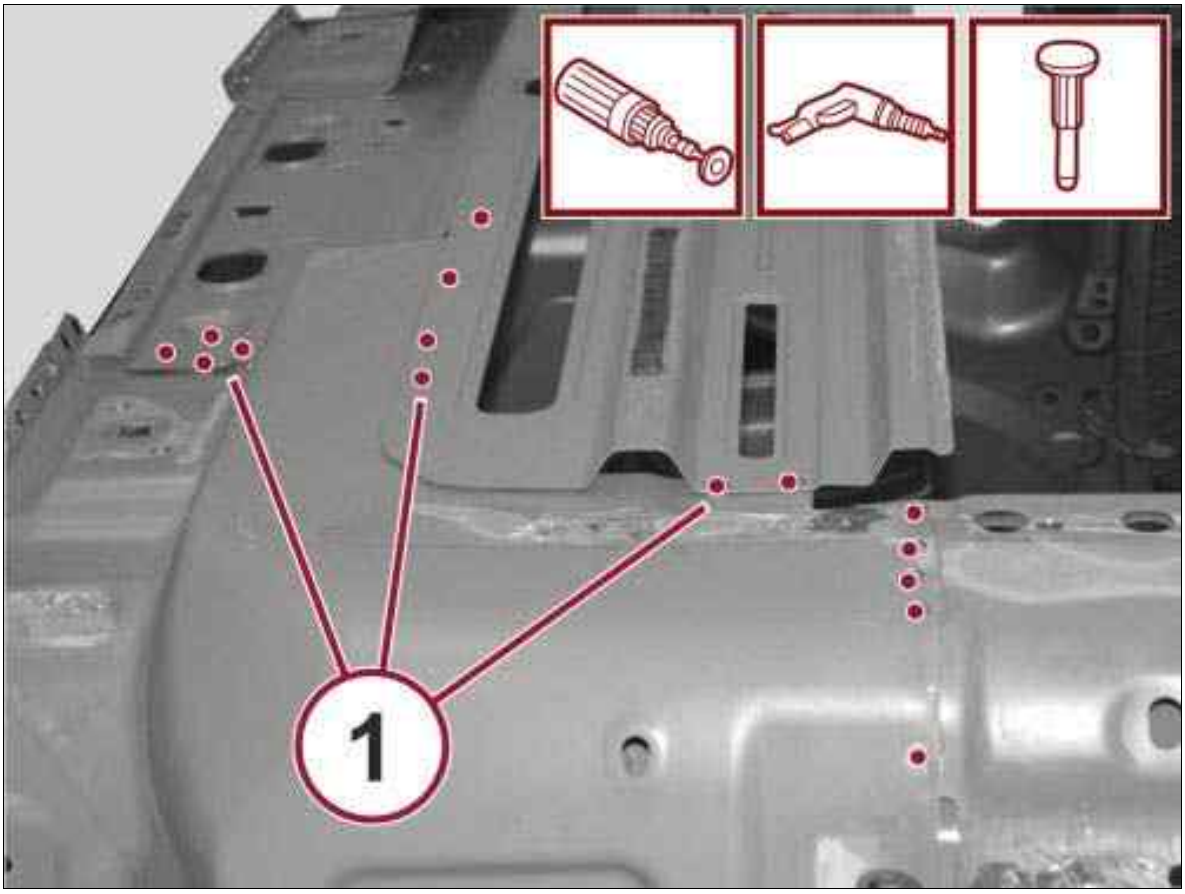
8. Correct any distortions to the sheet metal using a hammer and dolly block.
9. Use a grinding disc to smooth the welds.
10. Use a rotary brush to clean the previously welded areas.
11. Apply corrosion protection to the areas involved in the welding.

12. Seal the seams between the service part and the vehicle in the area (1) highlighted.
13. Install the quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .

BODY STRUCTURE > PANEL, QUARTER > REMOVAL AND INSTALLATION > QUARTER PANEL INNER REMOVAL AND INSTALLATION > REMOVAL

1. Remove the roof panel. Refer to PANEL, ROOF, REMOVAL AND INSTALLATION .
2. Remove the upper body side aperture. Refer to PANEL, BODY SIDE APERTURE, REMOVAL AND INSTALLATION .
3. Remove the quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .
4. Remove the quarter panel extension. Refer to QUARTER PANEL EXTENSION REMOVAL AND INSTALLATION .
5. Remove the taillamp mounting panel. Refer to PANEL, TAILLAMP MOUNTING, REMOVAL AND INSTALLATION .
6. Remove the liftgate opening trough. Refer to TROUGH, LIFTGATE OPENING, REMOVAL AND INSTALLATION .
7. Remove the outer rear wheelhouse. Refer to OUTER REAR WHEELHOUSE REMOVAL AND INSTALLATION .
8. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
9. Straighten the body as necessary.

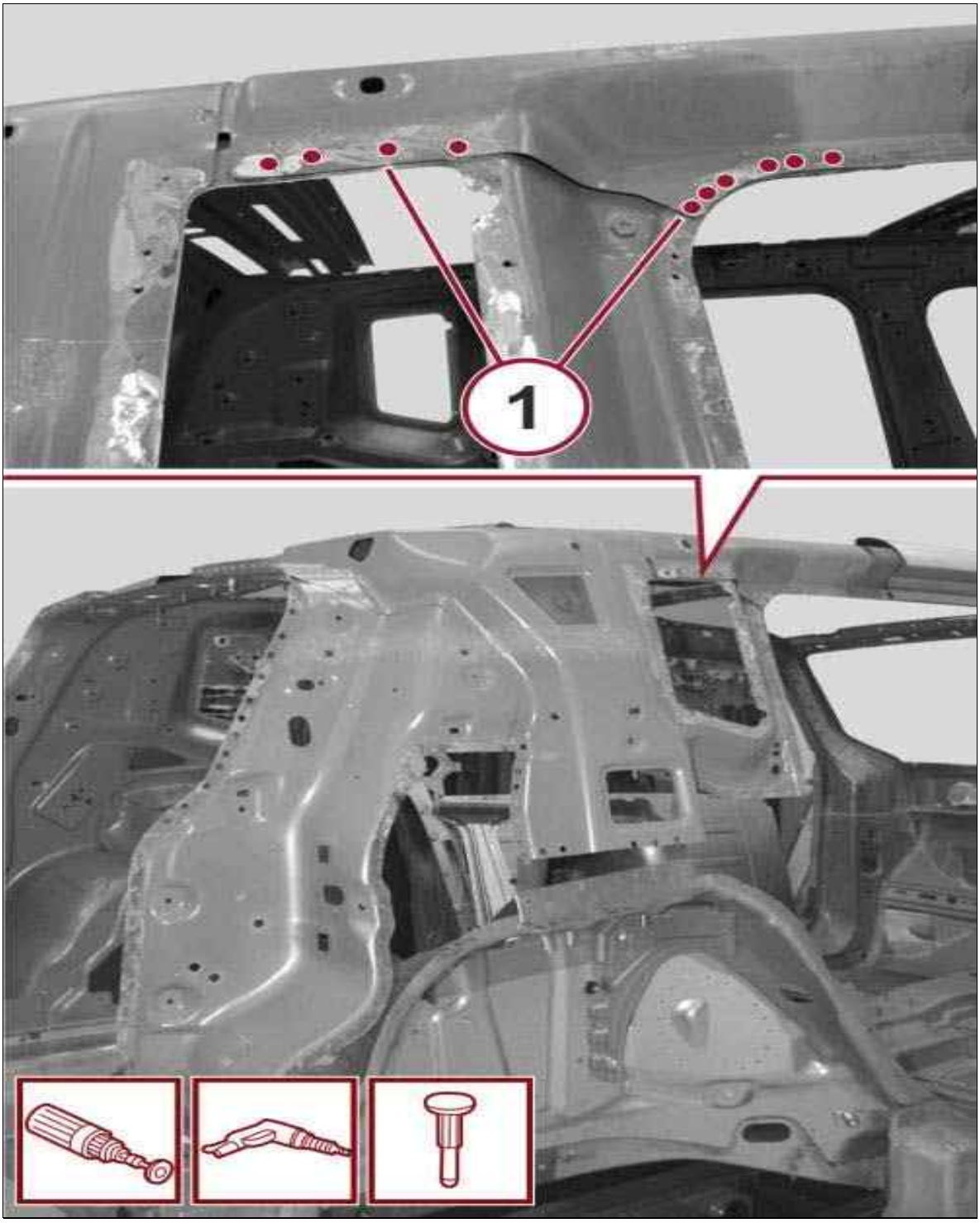
Fig 1: Quarter Panel Inner Removal (1 Of 5)



Courtesy of CHRYSLER GROUP, LLC

10. With the use of a rotary brush, remove the paint and gain access to the spot welds.
11. With the use of a drill, release the spot welds (1) shown in the illustration.
12. With the use of a chisel and hammer, remove the spot welds previously released.

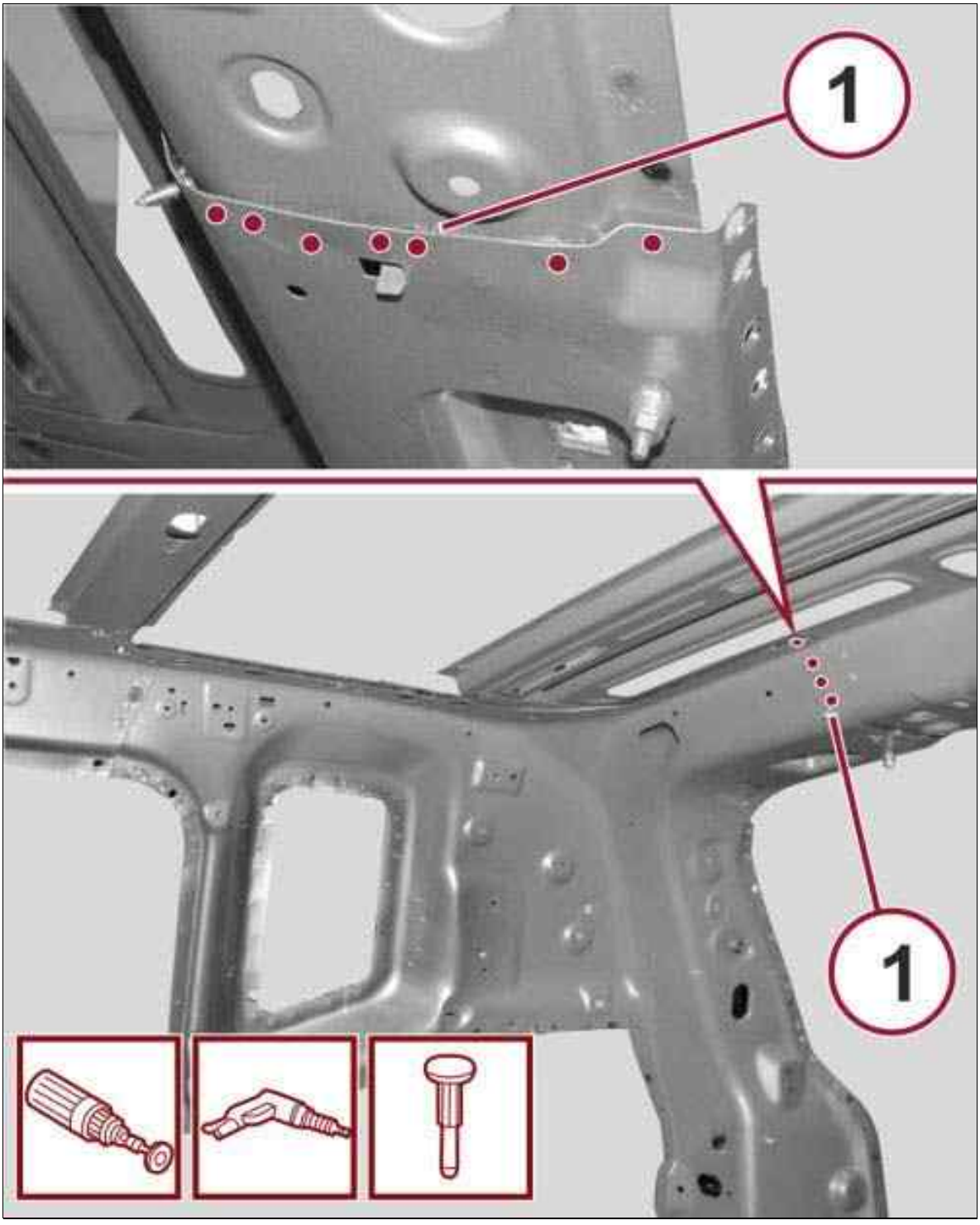
Fig 2: Quarter Panel Inner Removal (2 Of 5)



Courtesy of CHRYSLER GROUP, LLC

13. With the use of a rotary brush, remove the paint and gain access to the spot welds.
14. With the use of a drill, release the spot welds (1) shown in the illustration.
15. With the use of a chisel and hammer, remove the spot welds previously released.

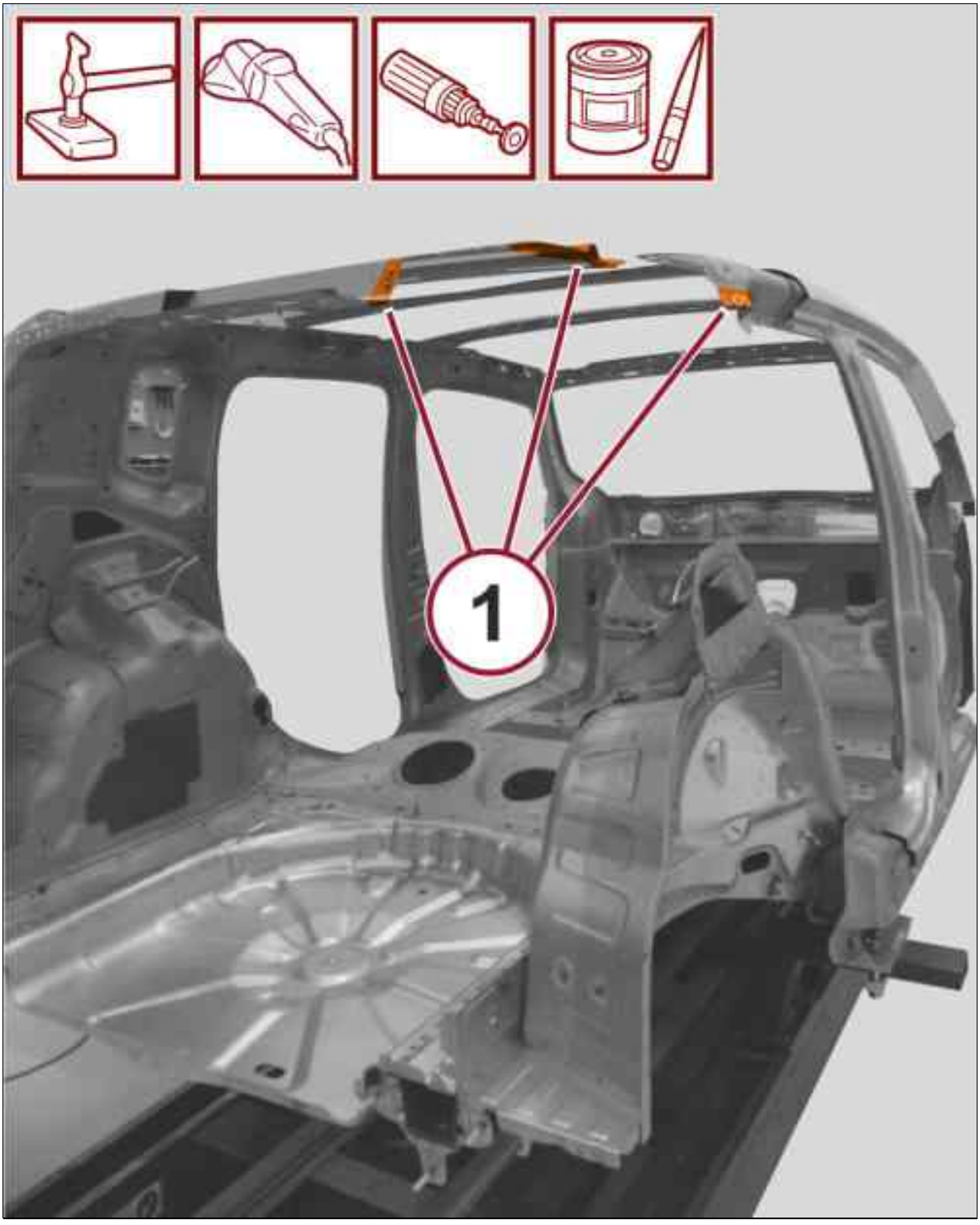
Fig 3: Quarter Panel Inner Removal (3 Of 5)



Courtesy of CHRYSLER GROUP, LLC

16. With the use of a rotary brush, remove the paint and gain access to the spot welds.
17. With the use of a drill, release the spot welds (1) shown in the illustration.
18. With the use of a chisel and hammer, remove the spot welds previously released.
19. Remove the inner quarter panel from the vehicle.

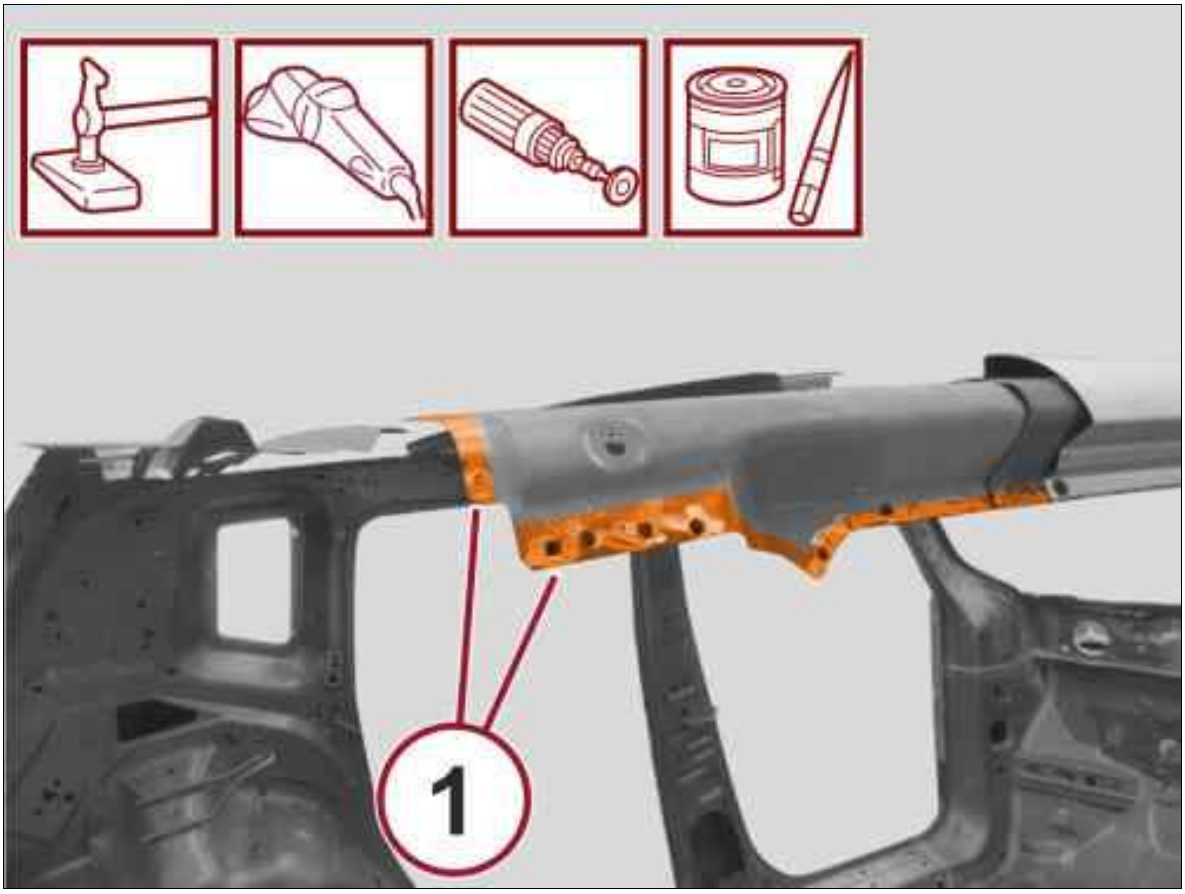
Fig 4: Quarter Panel Inner Removal (4 Of 5)



Courtesy of CHRYSLER GROUP, LLC

20. With the use of a hammer and dolly block, straighten the edges of the mating components.
21. With the use of a disc grinder, remove any residue of the spot welds.
22. With the use of a rotary brush, clean the previously treated areas.
23. Apply electro-weldable paint/weld through primer to the areas (1) indicated.

Fig 5: Quarter Panel Inner Removal (5 Of 5)

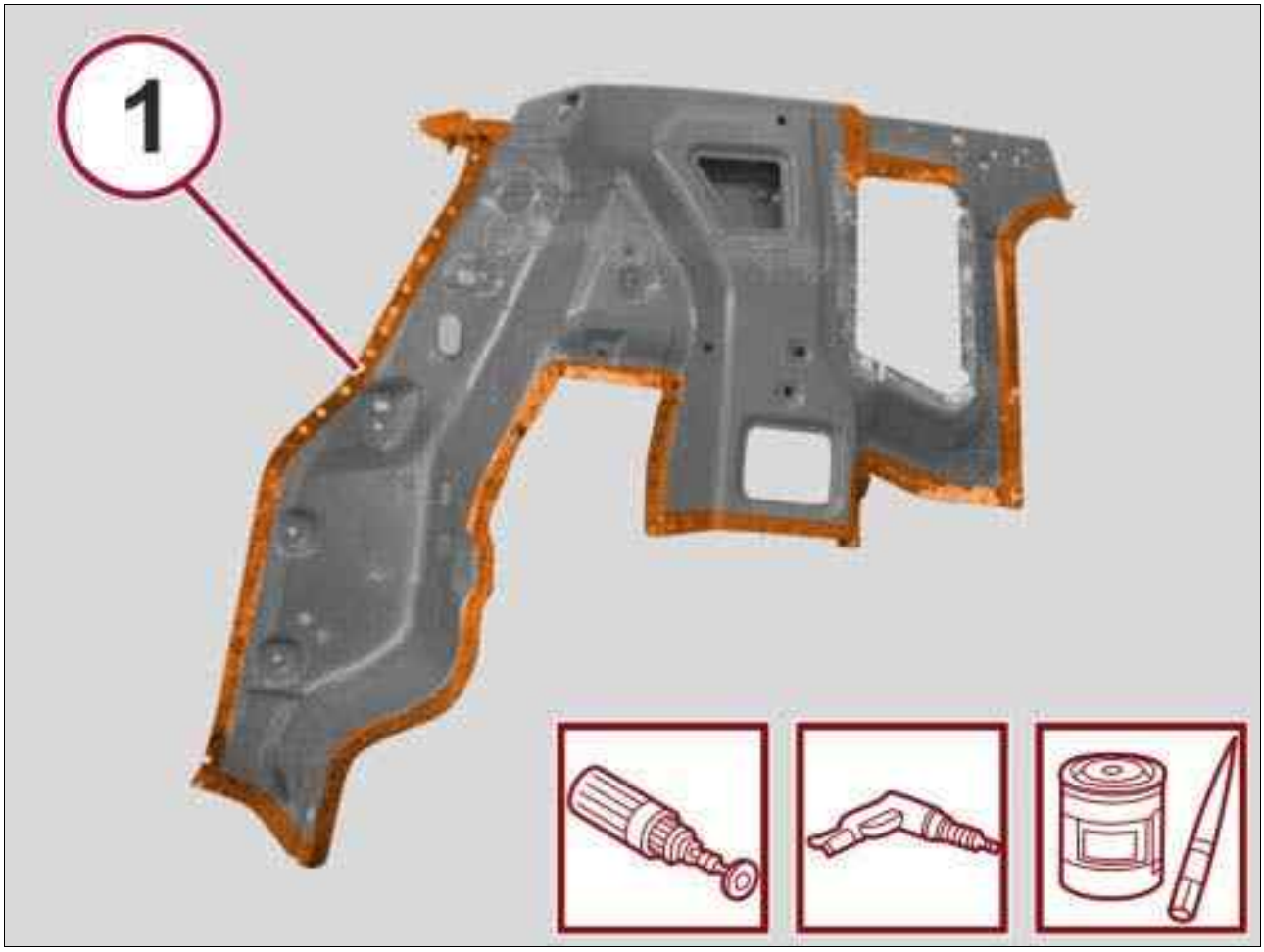


Courtesy of CHRYSLER GROUP, LLC

24. With the use of a hammer and dolly block, straighten the edges of the mating components.
25. With the use of a disc grinder, remove any residue of the spot welds.
26. With the use of a rotary brush, clean the previously treated areas.
27. Apply electro-weldable paint/weld through primer to the areas (1) indicated.

BODY STRUCTURE > PANEL, QUARTER > REMOVAL AND INSTALLATION > QUARTER PANEL INNER REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Quarter Panel Inner Installation (1 Of 5)



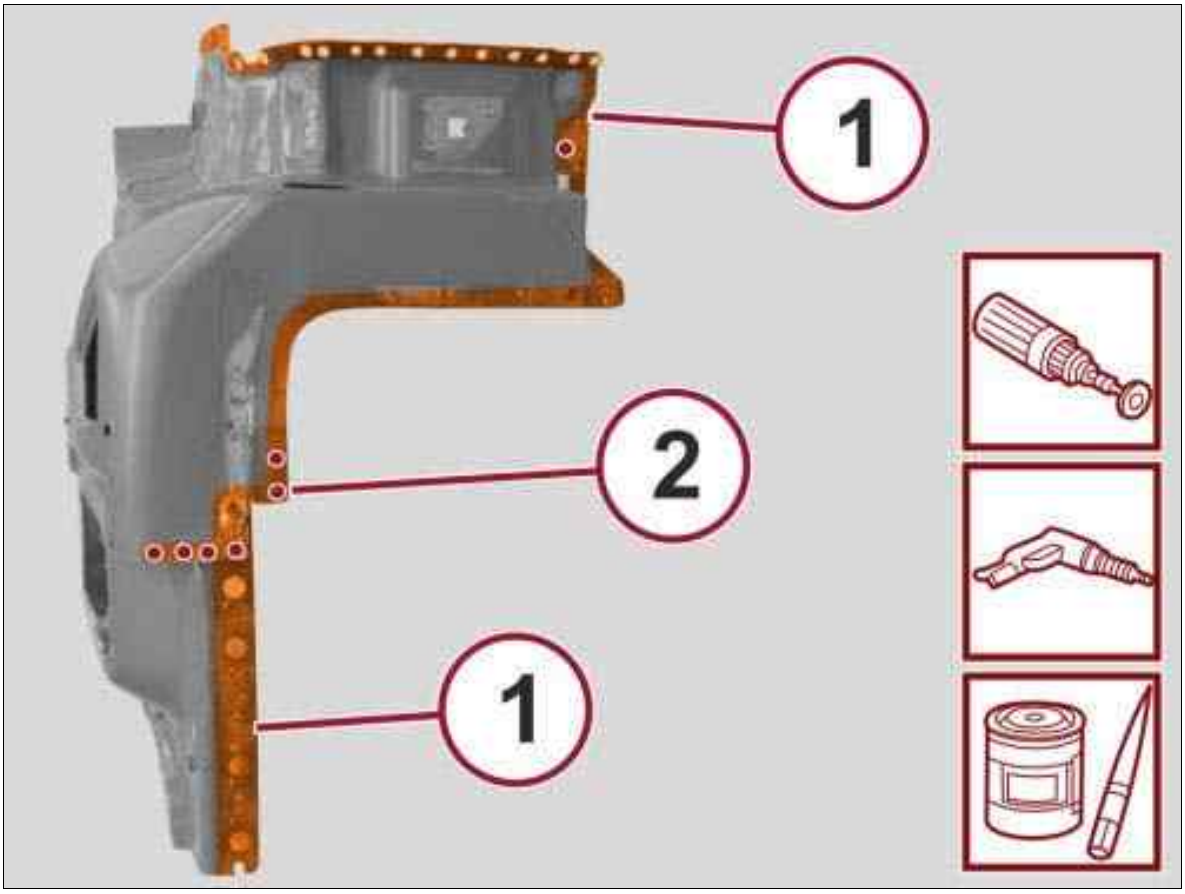
Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the entire perimeter of the inner and outer service part (1) using a rotary brush.
2. With the use of a drill, drill holes at the points (2) indicated.

> *NOTE:*
>
> *Drill holes in the corresponding holes previously on the body, in order to be certain subsequent correct coupling and welding of the sheet metal.*

3. Apply elctro-weldable paint/weld through primer to the boarders (2) involved in welding.

Fig 2: Quarter Panel Inner Installation (2 Of 5)



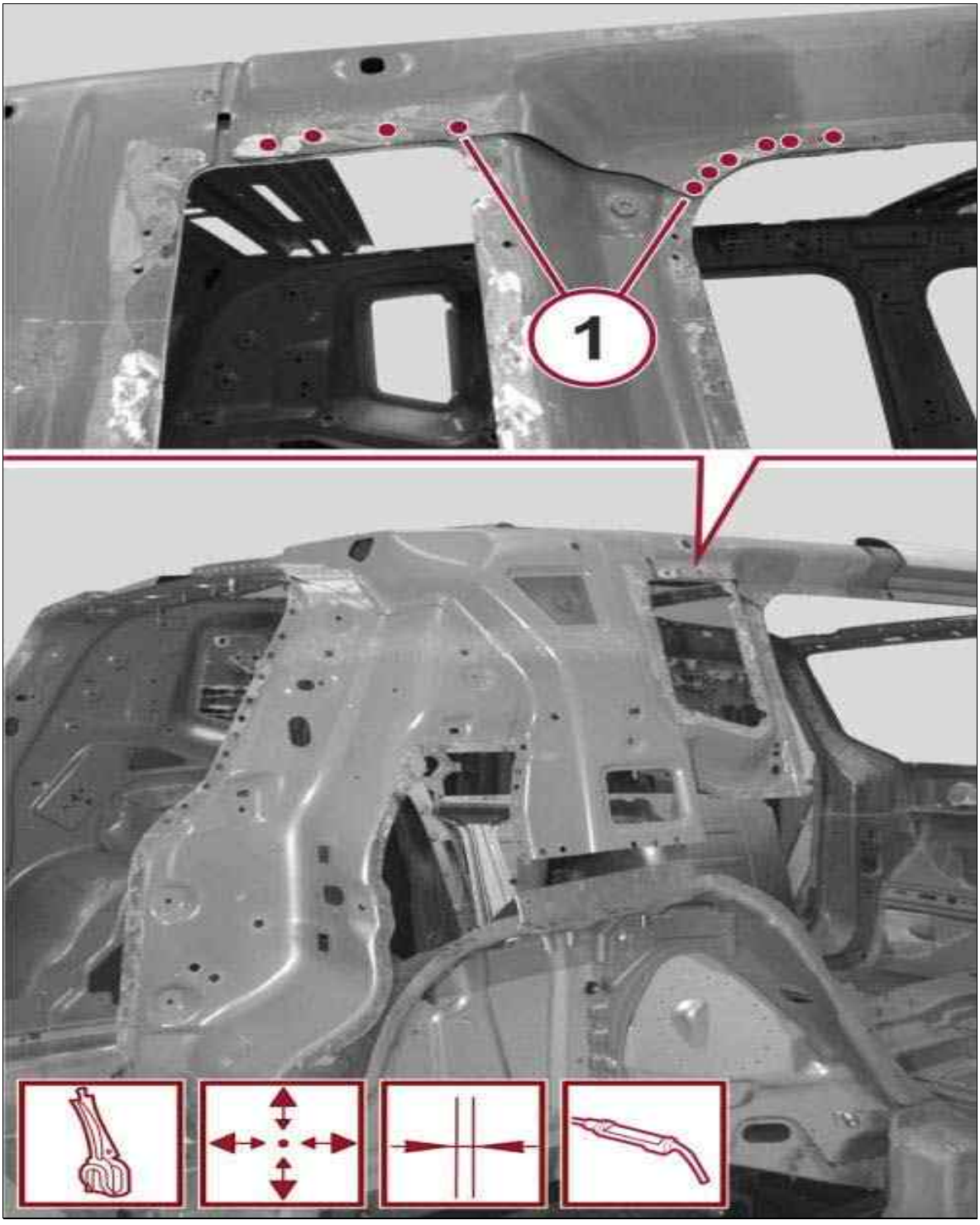
Courtesy of CHRYSLER GROUP, LLC

4. Remove the anti-corrosion treatment from the entire perimeter of the inner and outer service part (1) using a rotary brush.
5. With the use of a drill, drill holes at the points (2) indicated.

> *NOTE:*
>
> *Drill holes in the corresponding holes previously on the body, in order to be certain subsequent correct coupling and welding of the sheet metal.*

6. Apply elctro-weldable paint/weld through primer to the boarders involved in welding.

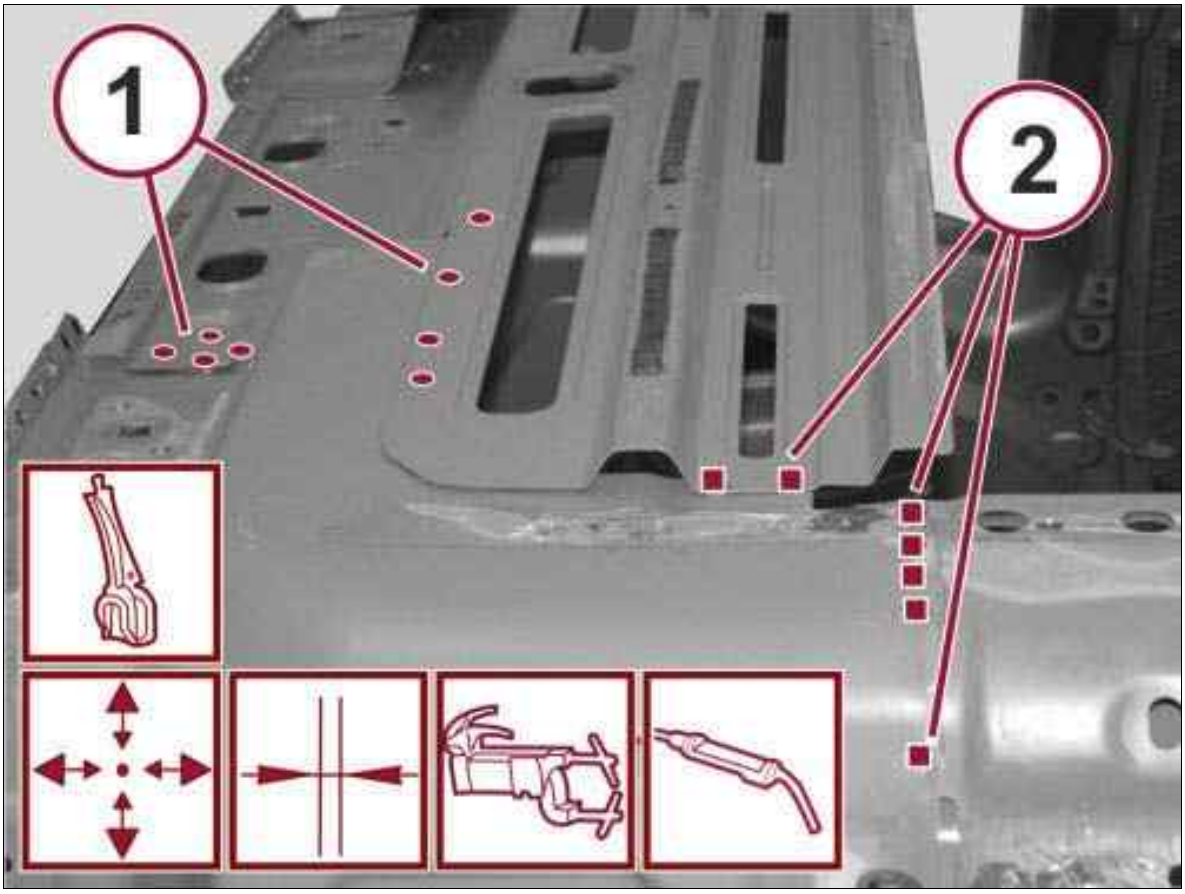
Fig 3: Quarter Panel Inner Installation (3 Of 5)



Courtesy of CHRYSLER GROUP, LLC

7. Position the service part correctly on the vehicle and secure it with the self-locking clamps.
8. Check alignment and surrounding gaps.
9. With the use of a MIG welder, apply plug welds filling in the holes (1) indicated in the illustration.

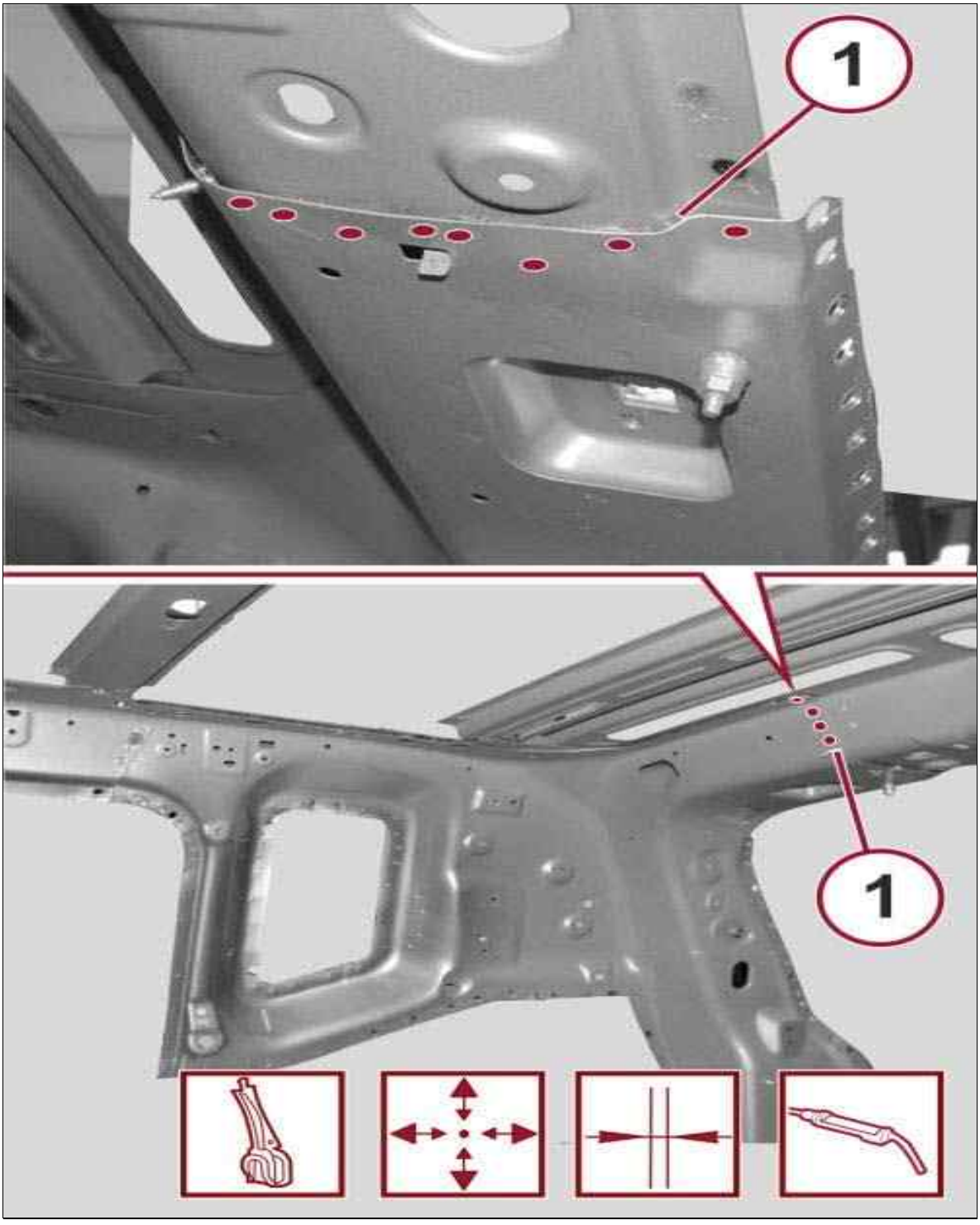
Fig 4: Quarter Panel Inner Installation (4 Of 5)



Courtesy of CHRYSLER GROUP, LLC

10. Position the service part correctly on the vehicle and secure it with the self-locking clamps.
11. Check alignment and surrounding gaps.
12. With the use of a MIG welder, apply plug welds filling in the holes (1) indicated in the illustration.
13. With the use of a spot welder, apply spot welds to the areas (2) indicated in the illustration.

Fig 5: Quarter Panel Inner Installation (5 Of 5)



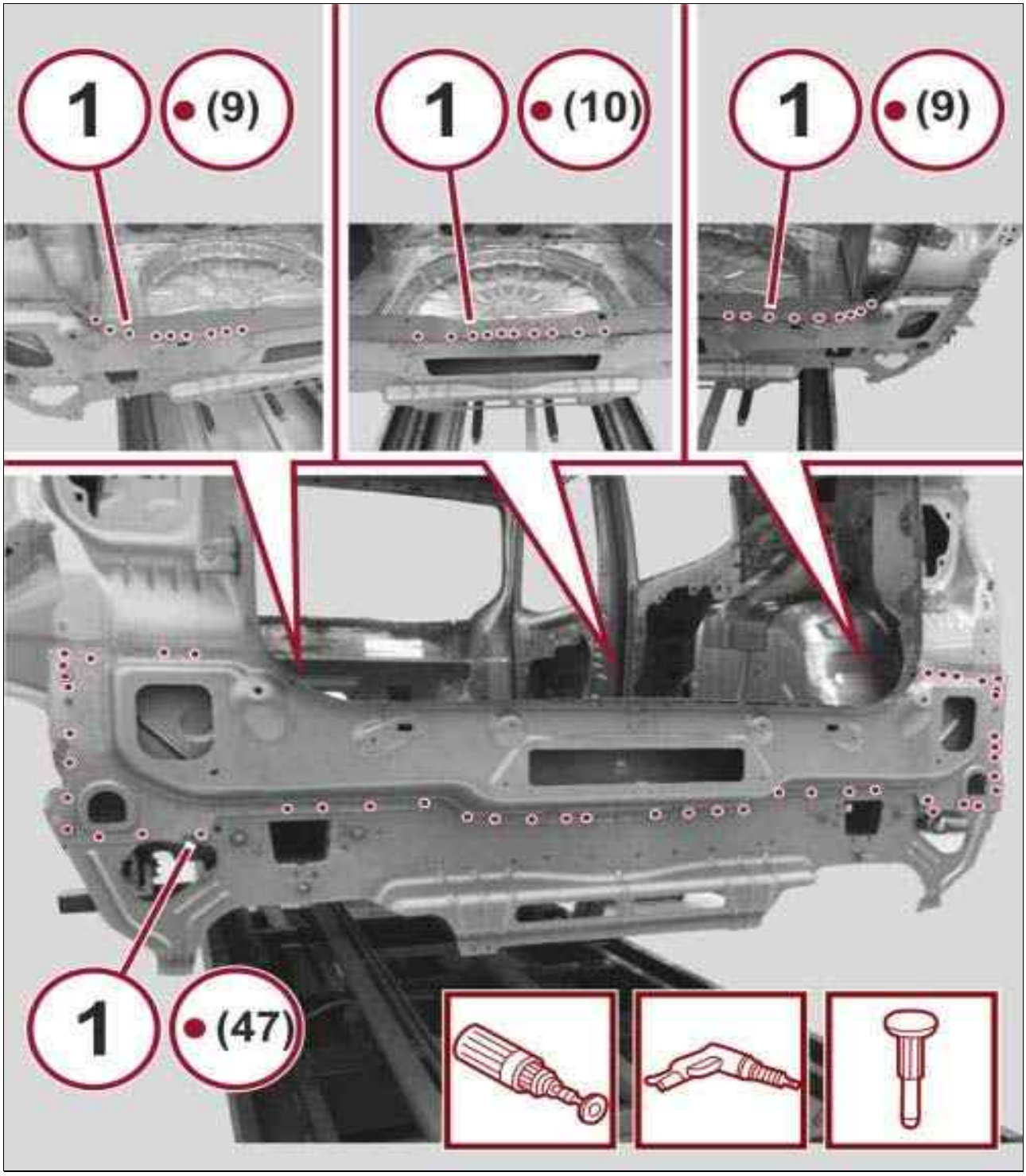
Courtesy of CHRYSLER GROUP, LLC

14. Position the service part correctly on the vehicle and secure it with the self-locking clamps.
15. Check alignment and surrounding gaps.
16. With the use of a MIG welder, apply plug welds filling in the holes (1) indicated in the illustration.
17. Correct any distortions to the sheet metal using a hammer and dolly block.

18. Use a grinding disc to smooth the welds.
19. Use a rotary brush to clean the previously welded areas.
20. Apply corrosion protection to the areas involved in the welding.
21. Install the outer rear wheelhouse. Refer to OUTER REAR WHEELHOUSE REMOVAL AND INSTALLATION .
22. Install the liftgate opening trough. Refer to TROUGH, LIFTGATE OPENING, REMOVAL AND INSTALLATION .
23. Install the taillamp mounting panel. Refer to PANEL, TAILLAMP MOUNTING, REMOVAL AND INSTALLATION .
24. Install the quarter panel extension. Refer to QUARTER PANEL EXTENSION REMOVAL AND INSTALLATION .
25. Install the body side aperture quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .
26. Upper the upper body side aperture. Refer to PANEL, BODY SIDE APERTURE, REMOVAL AND INSTALLATION .
27. Install the roof panel. Refer to PANEL, ROOF, REMOVAL AND INSTALLATION .

BODY STRUCTURE > PANEL, REAR CLOSURE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Rear Closure Panel Removal (1 Of 3)

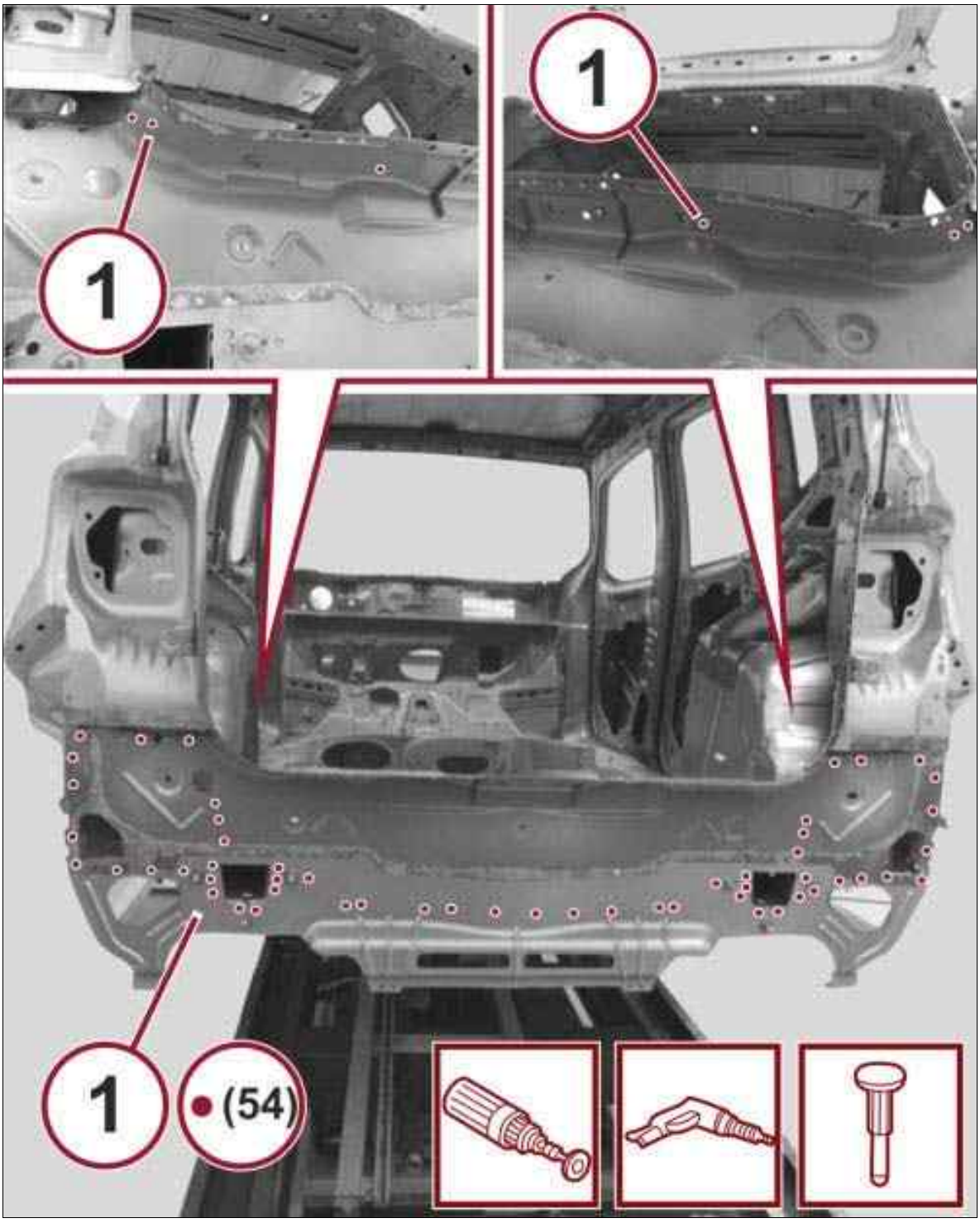


Courtesy of CHRYSLER GROUP, LLC

1. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
2. Straighten the body as necessary.
3. With the use of a rotary brush, remove the paint and gain access to the spot welds.
4. With the use of a drill, remove the spot welds (1) highlighted in the illustration.

5. Use a chisel and hammer to remove the areas previously released.
6. Remove the outer portion of the closure panel.

Fig 2: Rear Closure Panel Removal (2 Of 3)

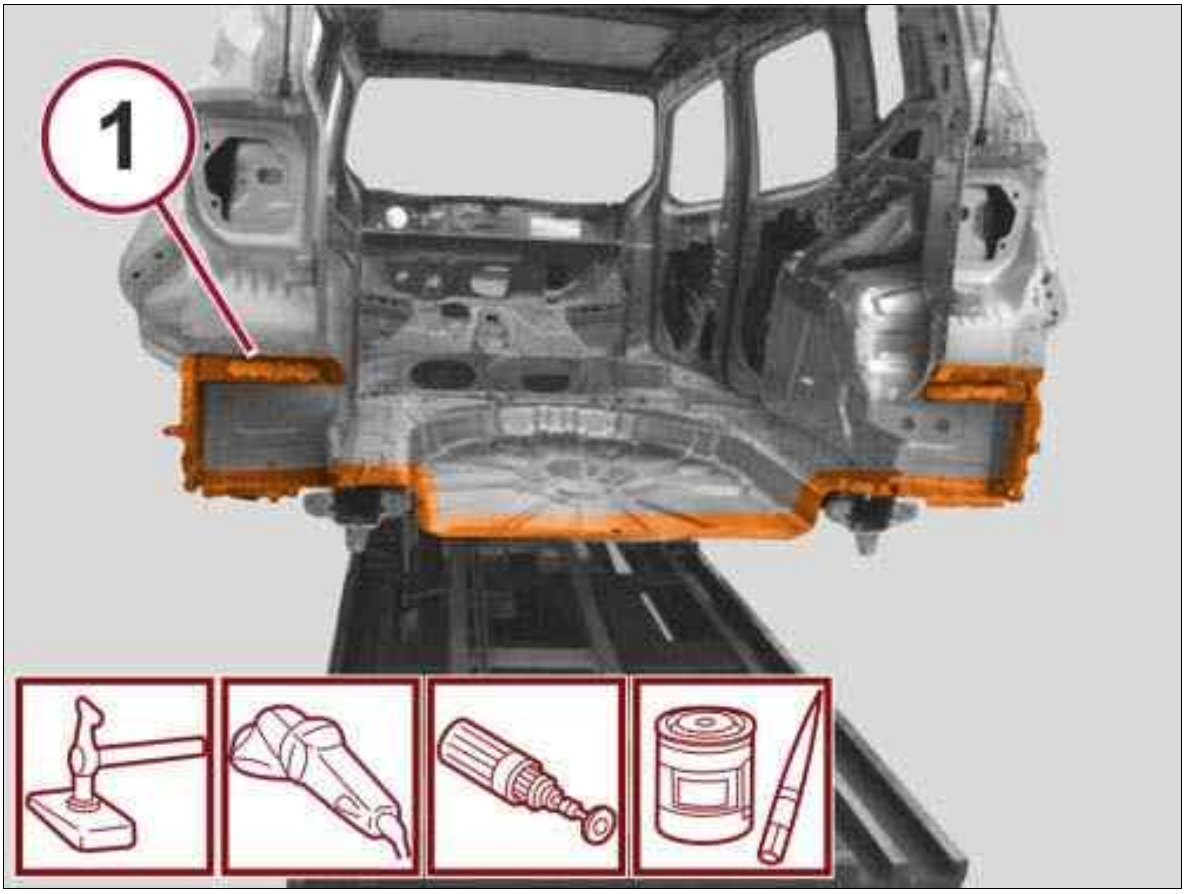


Courtesy of CHRYSLER GROUP, LLC

7. With the use of a rotary brush, remove the paint and gain access to the spot welds.
8. With the use of a drill, remove the spot welds (1) highlighted in the illustration.
9. Use a chisel and hammer to remove the areas previously released.

10. Remove the inner portion of the closure panel.

Fig 3: Rear Closure Panel Removal (3 Of 3)

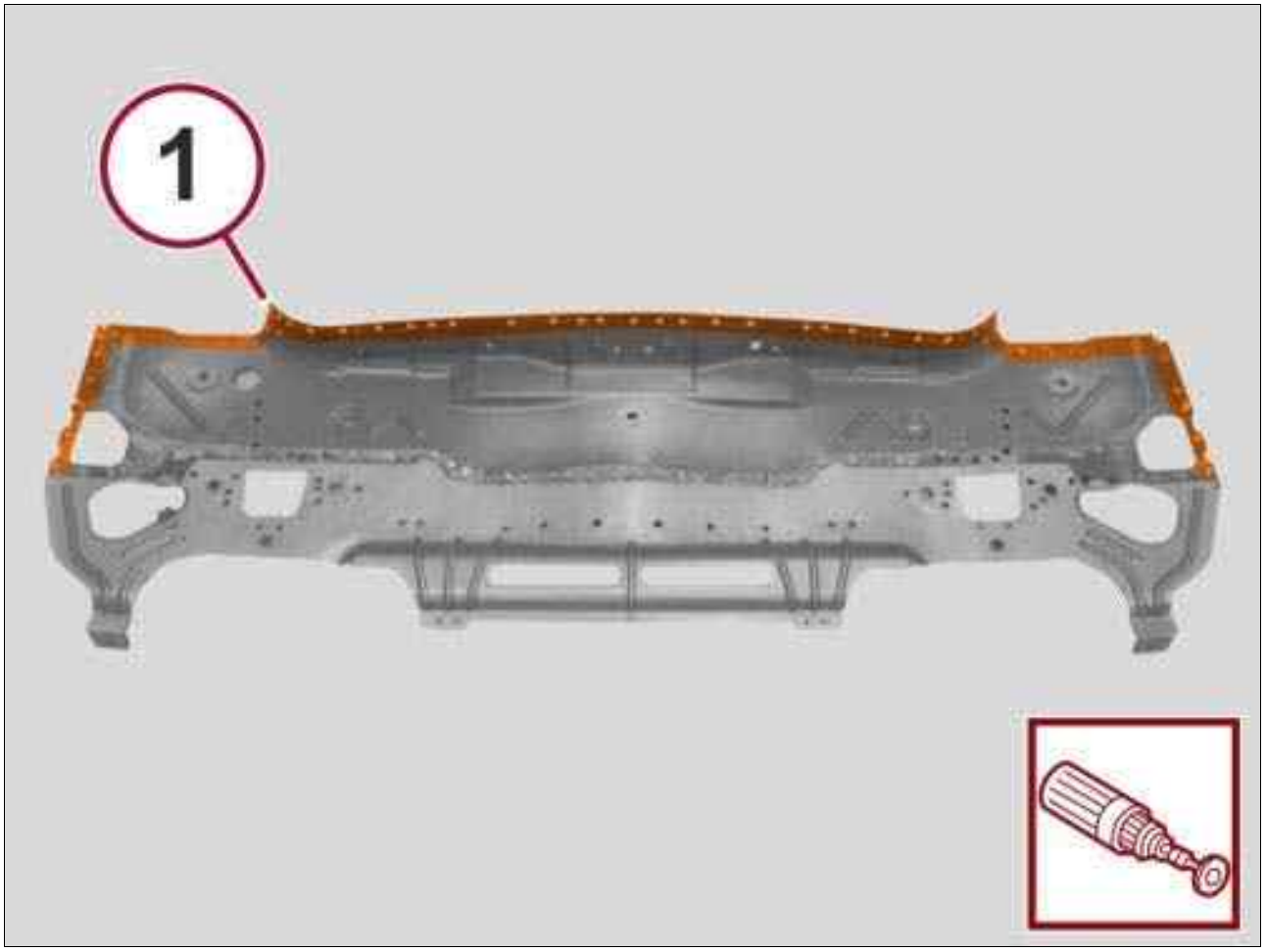


Courtesy of CHRYSLER GROUP, LLC

11. With the use of a hammer and dolly block, straighten the edges (1) of the mating components.
12. With the use of a grinding disc, remove any residue of the spot welds.
13. With the use of a rotary brush, clean the previously treated areas (1).
14. Apply electro-weldable paint/weld through primer to the boarders (1) to be welded.

BODY STRUCTURE > PANEL, REAR CLOSURE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

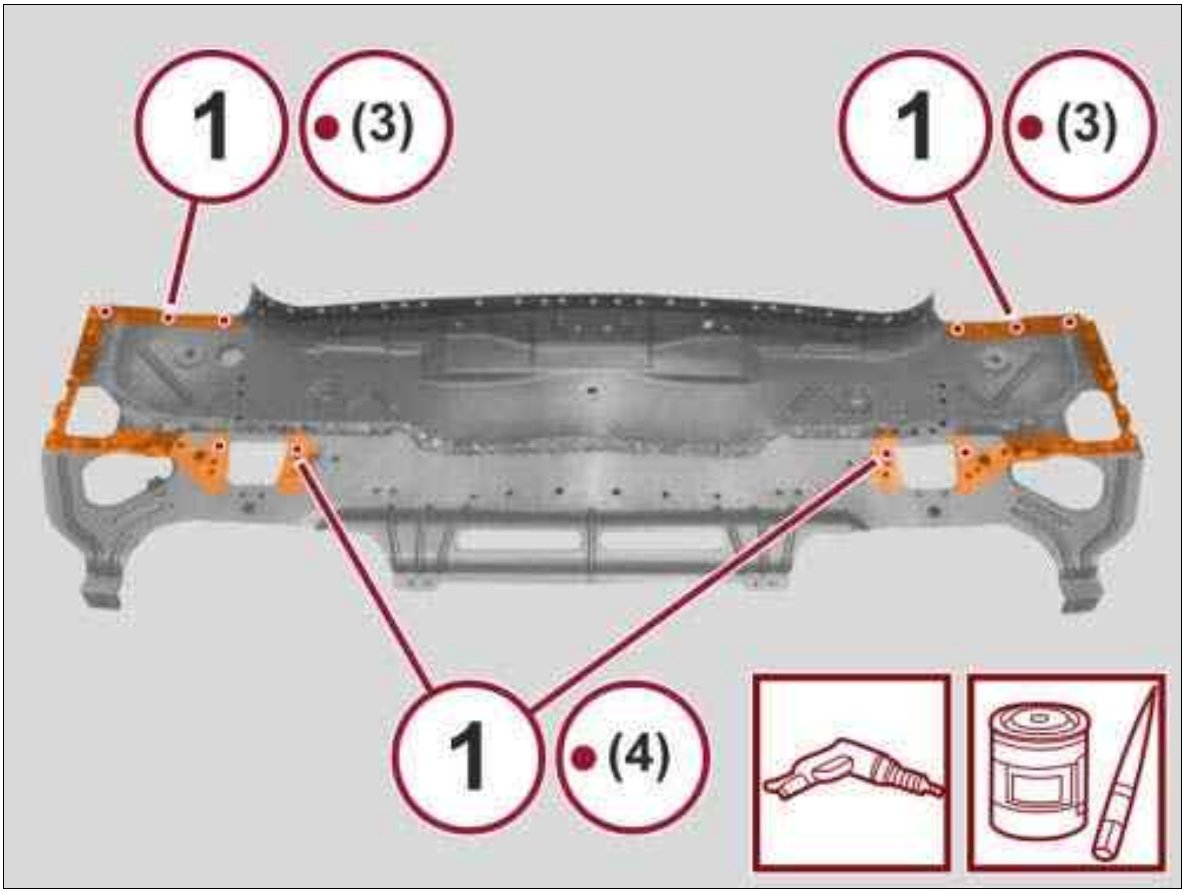
Fig 1: Rear Closure Panel Installation (1 Of 9)



Courtesy of CHRYSLER GROUP, LLC

1. With the use of a rotary brush, remove the anti-corrosion treatment around the entire perimeter (1) of the inner and outer parts.

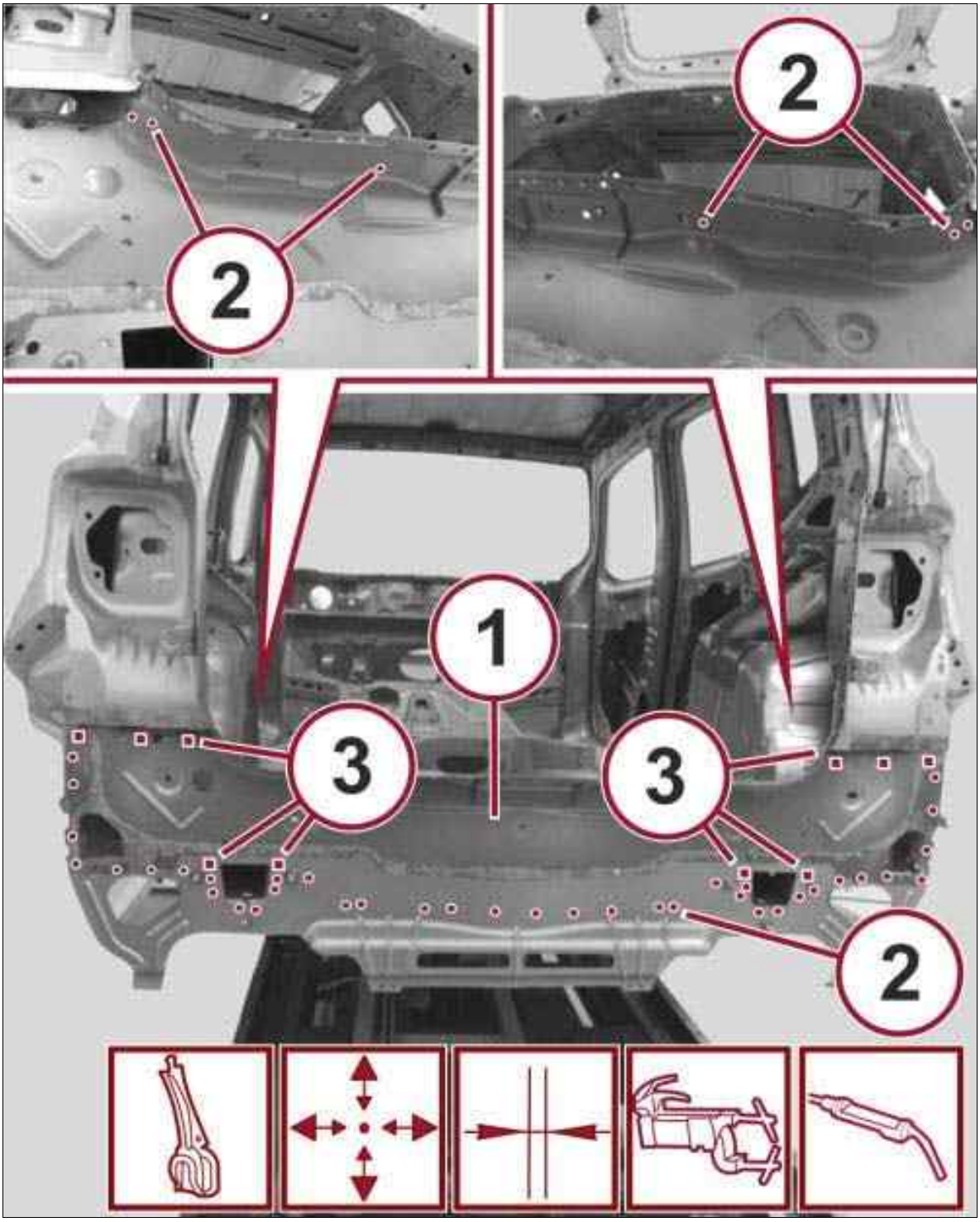
Fig 2: Rear Closure Panel Installation (2 Of 9)



Courtesy of CHRYSLER GROUP, LLC

2. With the use of a drill, drill holes (1) in the areas shown in the illustration.
3. Apply electro-weldable paint/weld through primer to the boarders involved.

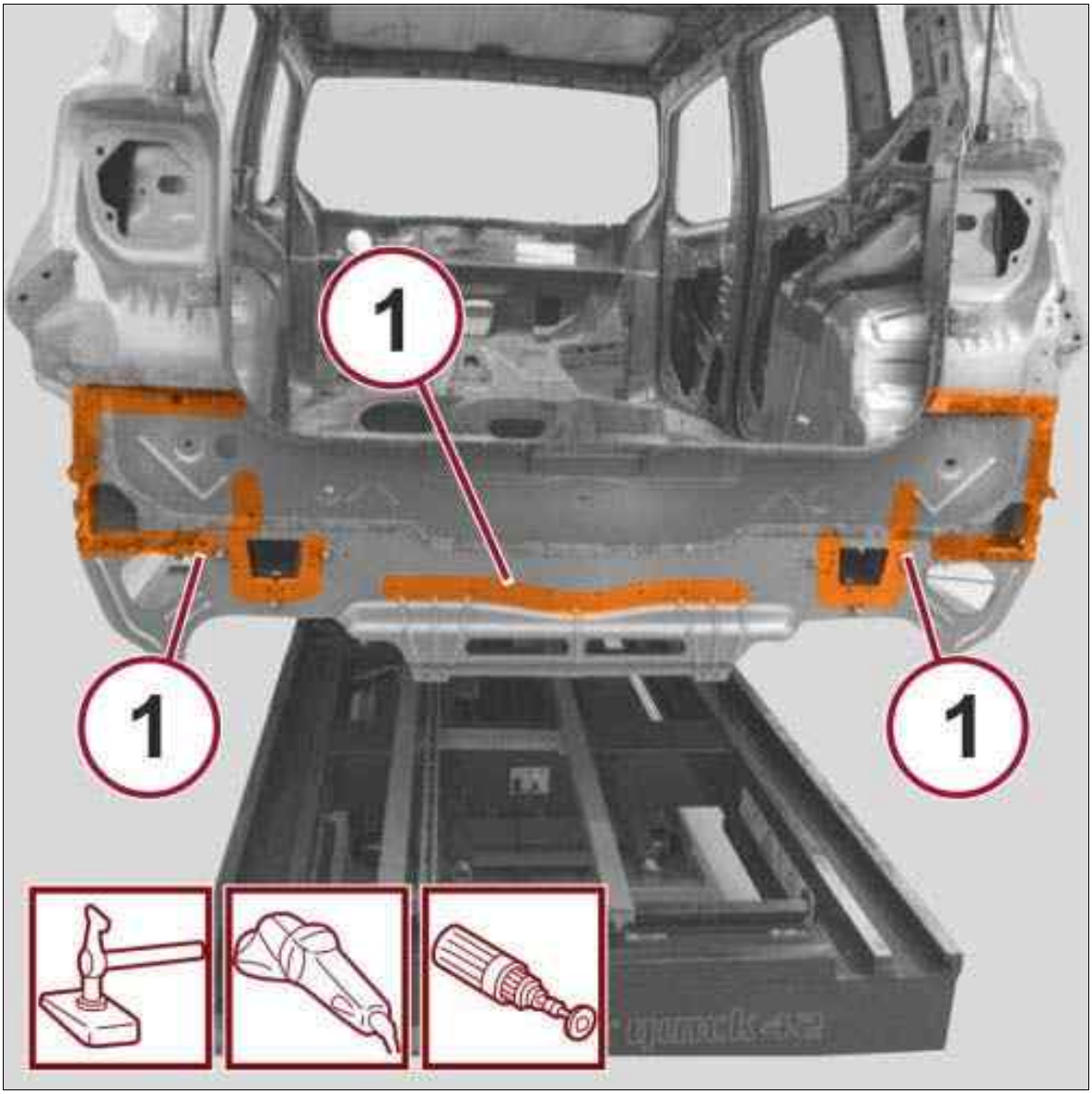
Fig 3: Rear Closure Panel Installation (3 Of 9)



Courtesy of CHRYSLER GROUP, LLC

4. Position the inner service part (1) correctly on the vehicle internal pillar and secure it with the self-locking clamps.
5. Check alignment and surrounding gaps.
6. With the use of a spot welder, apply spot welds (2) in the areas shown in the illustration.
7. With the use of a MIG welder, apply plug welds filling in the areas (3) shown in the illustration.

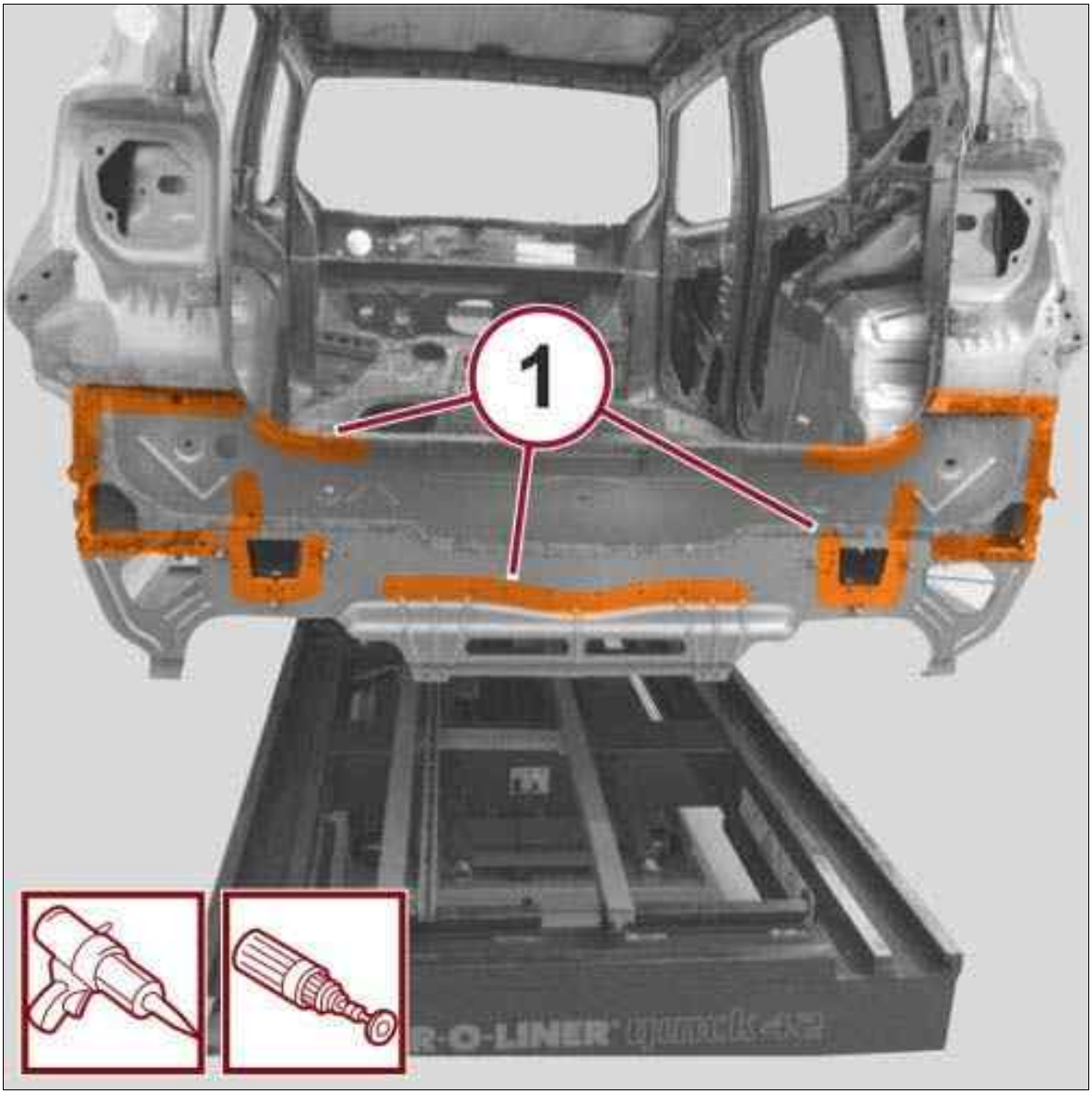
Fig 4: Rear Closure Panel Installation (4 Of 9)



Courtesy of CHRYSLER GROUP, LLC

8. Correct any distortions of the sheet metal using a hammer and dolly block.
9. With the use of a grinding disc, smooth the welds.
10. With the use of a rotary brush, clean the previously welded areas (1).

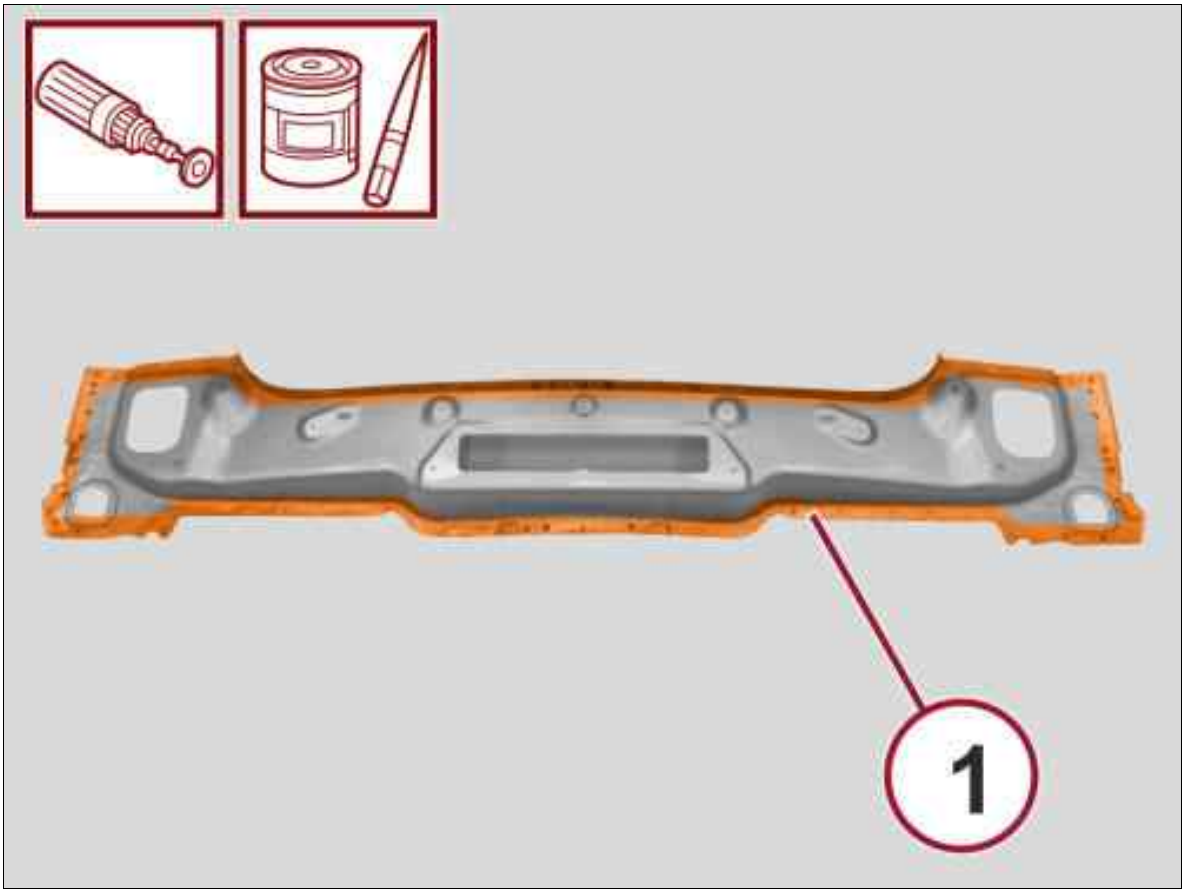
Fig 5: Rear Closure Panel Installation (5 Of 9)



Courtesy of CHRYSLER GROUP, LLC

11. Apply corrosion protection to the areas (1) involved in the welding.
12. Seal the seams between the parts and the vehicle.

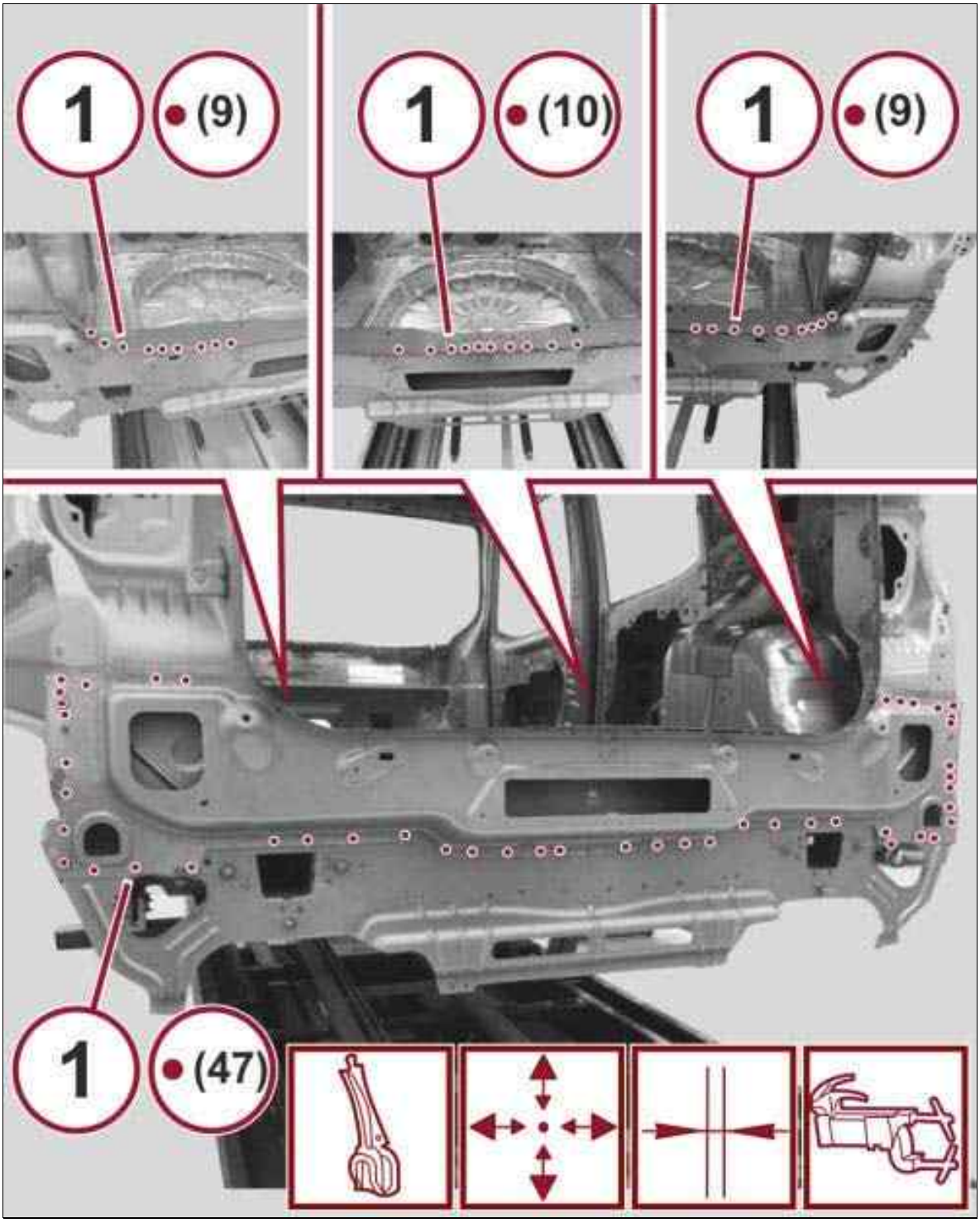
Fig 6: Rear Closure Panel Installation (6 Of 9)



Courtesy of CHRYSLER GROUP, LLC

13. With the use of a rotary brush, remove the anti-corrosion treatment around the entire perimeter (1) of the inner and outer parts.
14. Apply electro-weldable paint/weld through primer to the boarders (1) involved.

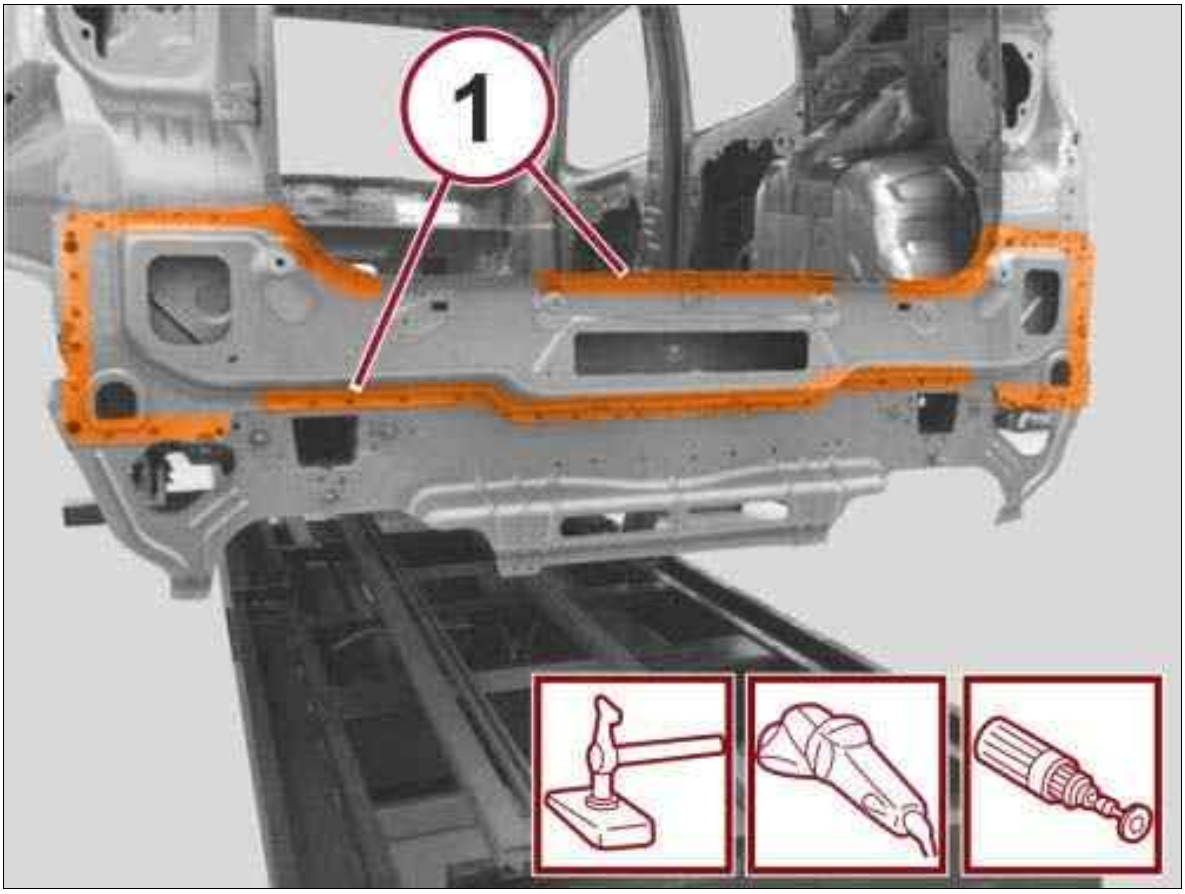
Fig 7: Rear Closure Panel Installation (7 Of 9)



Courtesy of CHRYSLER GROUP, LLC

15. Position the exterior service part correctly on the vehicle internal pillar and secure it with the self-locking clamps.
16. Check alignment and surrounding gaps.
17. With the use of a spot welder, apply spot welds (1) in the areas shown in the illustration.

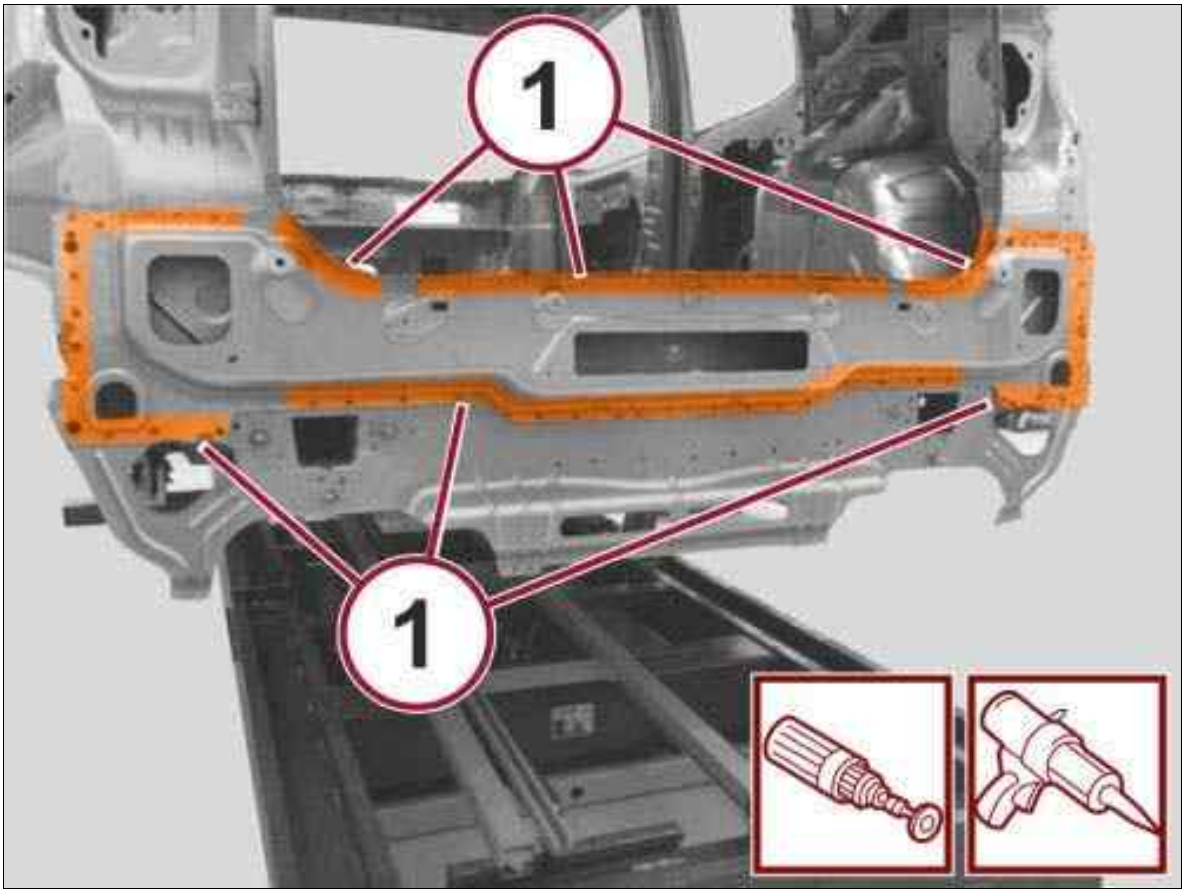
Fig 8: Rear Closure Panel Installation (8 Of 9)



Courtesy of CHRYSLER GROUP, LLC

18. Correct any distortions of the sheet metal using a hammer and dolly block.
19. With the use of a grinding disc, smooth the welds in the highlighted area (1).
20. With the use of a rotary brush, clean the previously welded areas.

Fig 9: Rear Closure Panel Installation (9 Of 9)



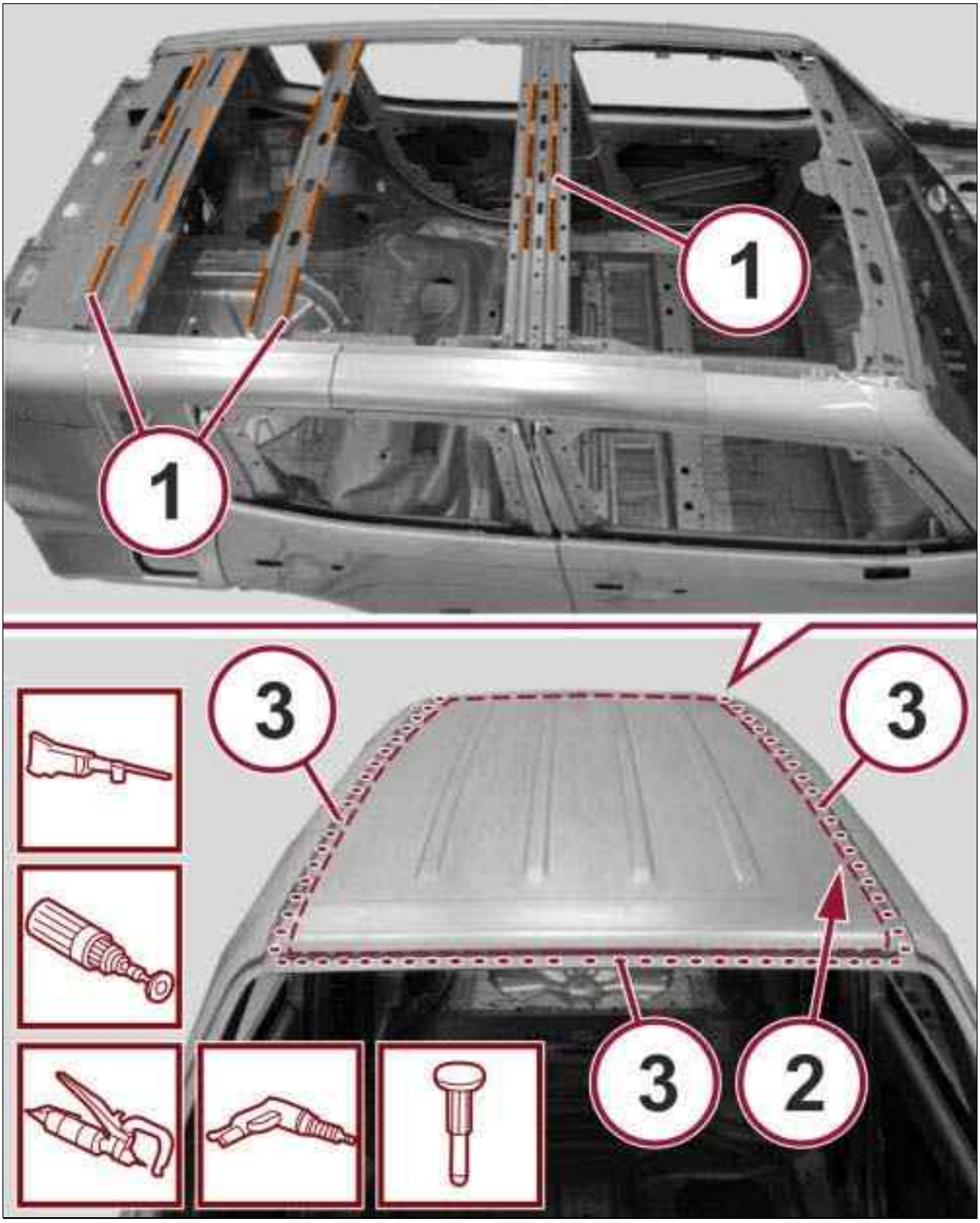
Courtesy of CHRYSLER GROUP, LLC

21. Apply corrosion protection to the areas (1) involved in the welding.
22. Seal the seams between the parts and the vehicle.

BODY STRUCTURE > PANEL, ROOF > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

1. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
2. Straighten the body as necessary.

Fig 1: Roof Panel Removal (1 Of 3)

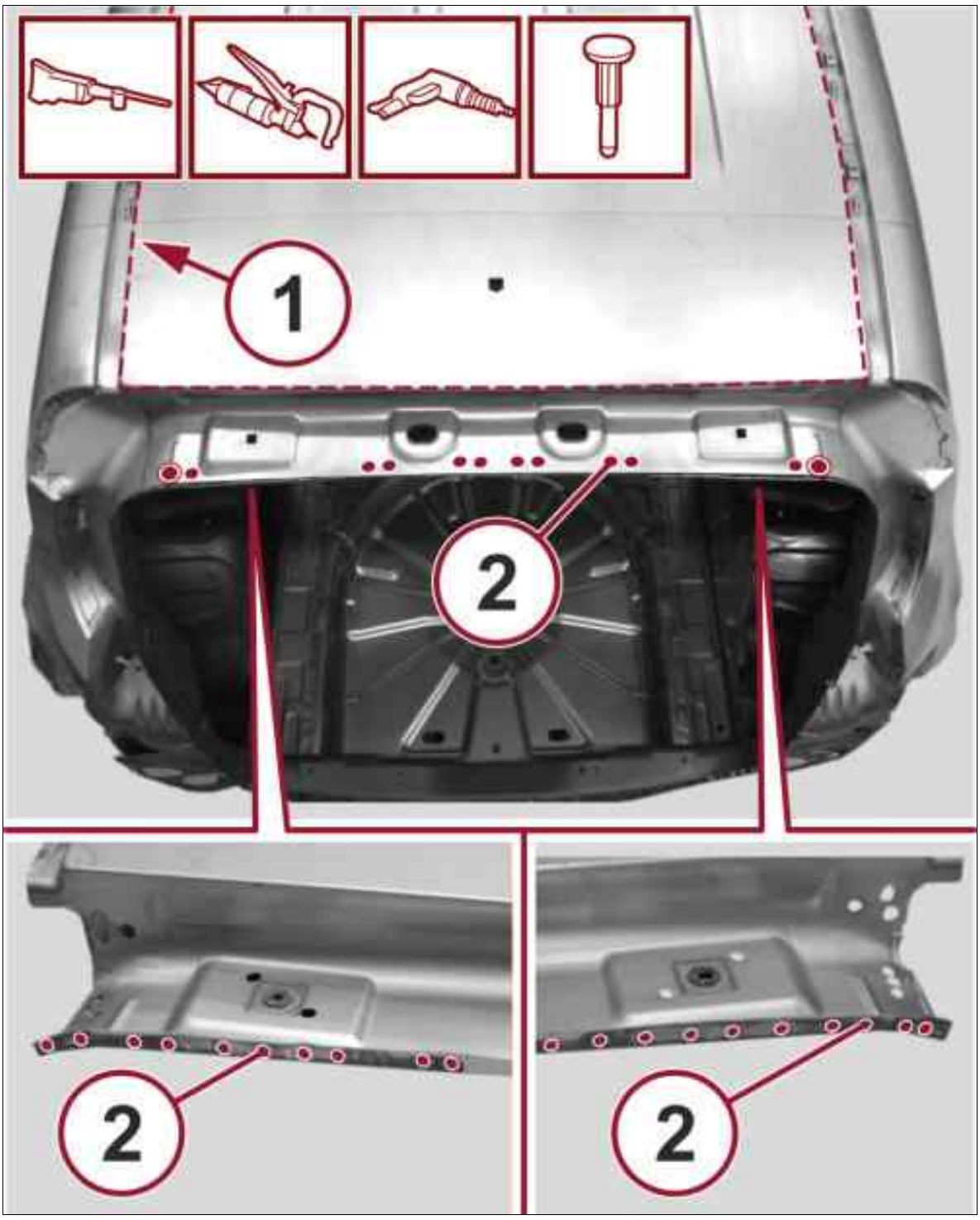


Courtesy of CHRYSLER GROUP, LLC

3. With the use of a vibrating knife equipped with an appropriate blade, cut the sealant (1) between the roof bows and the roof.
4. With the use of a rotary brush, remove the paint and gain access to the spot welds.
5. With the use of a jig saw, cut the roof along the cut line (2).
6. With the use of a spot weld cutting tool, release the spot welds (3) shown in the illustration.

7. With the use of a drill, release the spot welds not accessible with the spot weld cutting tool.
8. Use a chisel and hammer to remove the areas previously released.
9. Remove the cutouts of sheet metal.

Fig 2: Roof Panel Removal (2 Of 3)

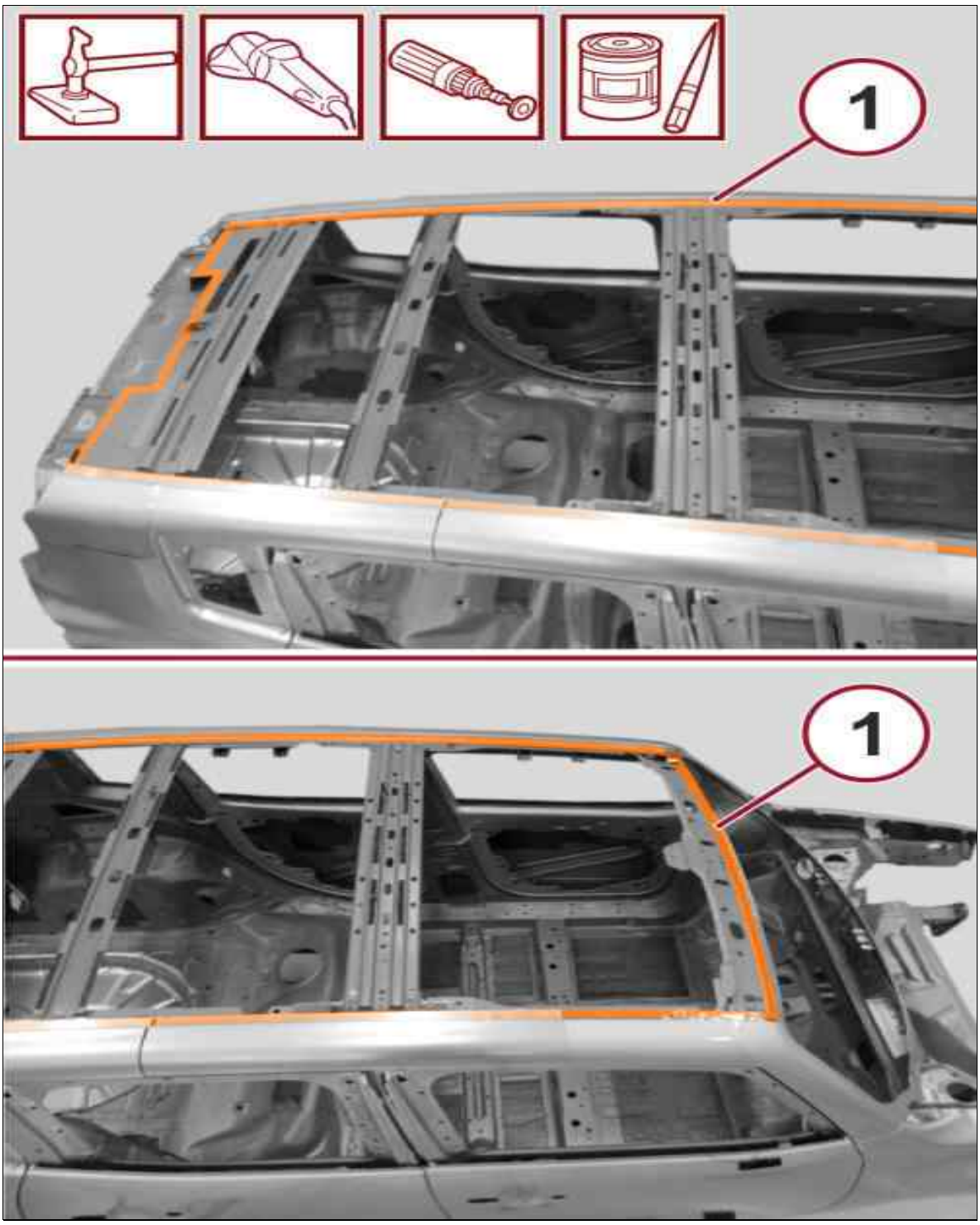


Courtesy of CHRYSLER GROUP, LLC

10. With the use of a jig saw, cut the roof along the cut line (1).
11. With the use of a spot weld cutting tool, release the spot welds (2) shown in the illustration.

12. With the use of a drill, release the spot welds not accessible with the spot weld cutting tool.
13. Use a chisel and hammer to remove the areas previously released.
14. Remove the cutouts of sheet metal.

Fig 3: Roof Panel Removal (3 Of 3)



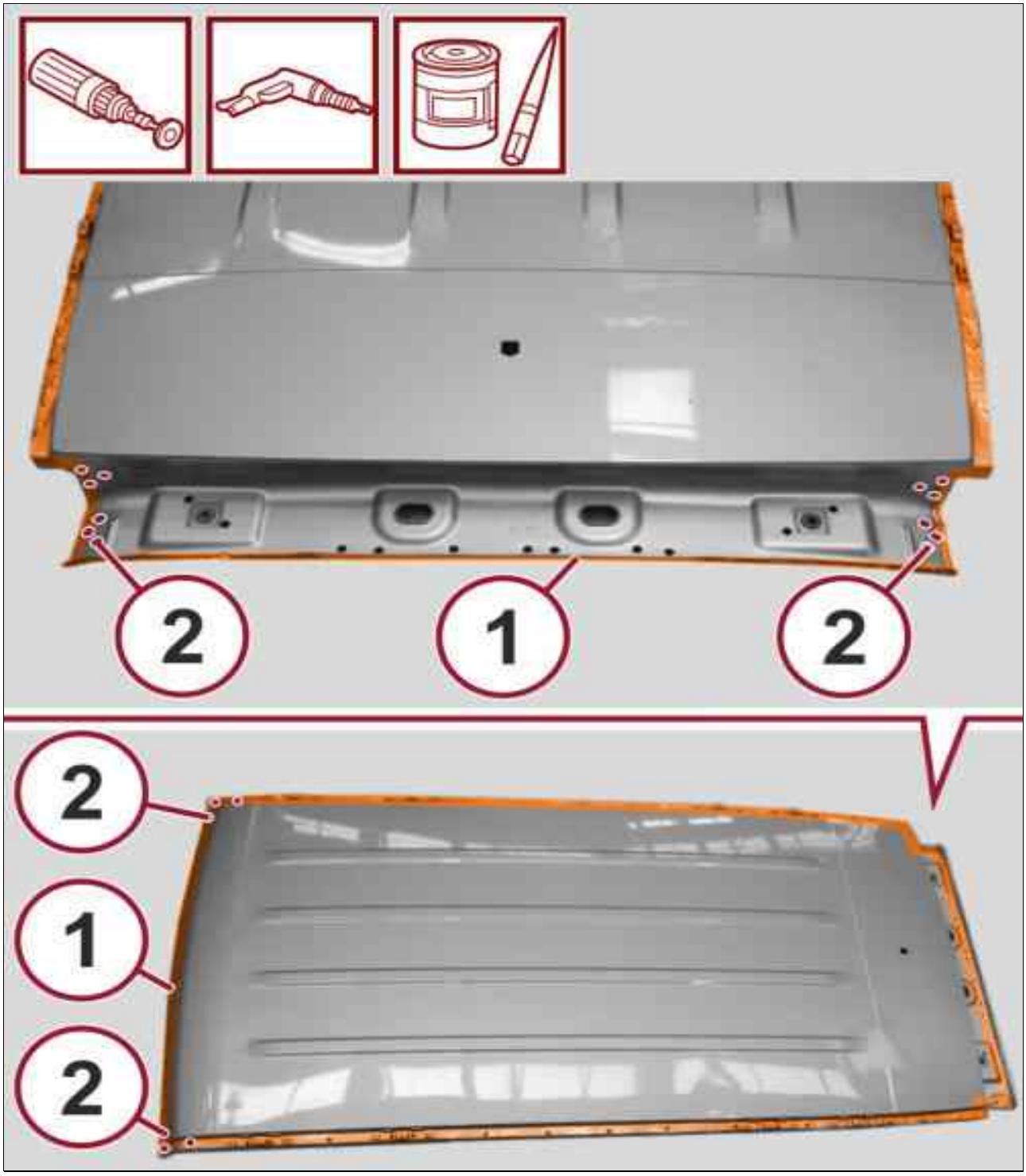
Courtesy of CHRYSLER GROUP, LLC

15. With the use of a hammer and dolly block, straighten the edges of the mating components.
16. With the use of a grinding disc, remove any residue of the spot welds.

17. Remove the sealant from the roof bows.
18. With the use of a rotary brush, clean the previously treated areas.
19. Apply electro-weldable paint/weld through primer to the areas (1) to be welded.

BODY STRUCTURE > PANEL, ROOF > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

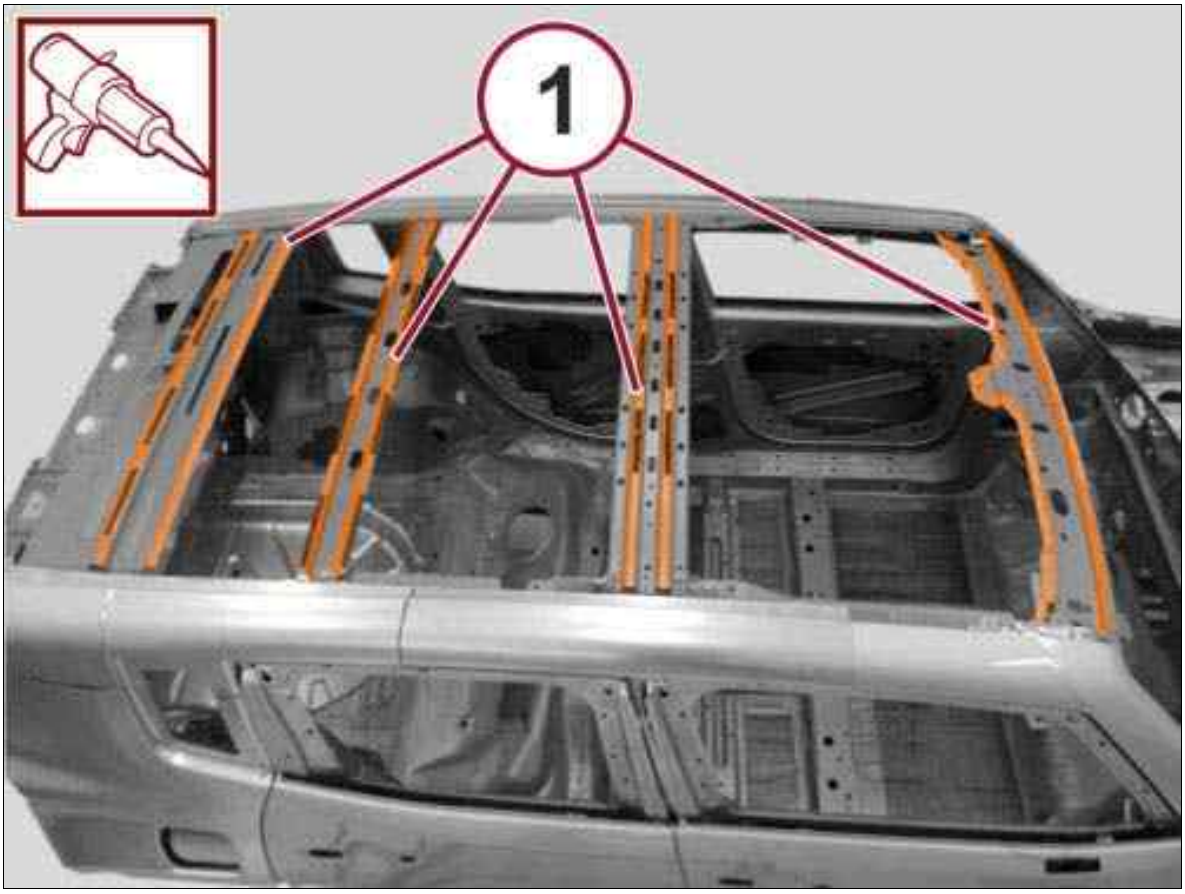
Fig 1: Roof Panel Installation (1 Of 4)



Courtesy of CHRYSLER GROUP, LLC

1. With the use of a rotary brush, remove the anti-corrosion treatment around the entire perimeter (1) of the inner and outer parts.
2. Use a drill to drill the parts at the points (2) indicated.
3. Apply electro-weldable paint/weld through primer to the boarders (1) to be welded.

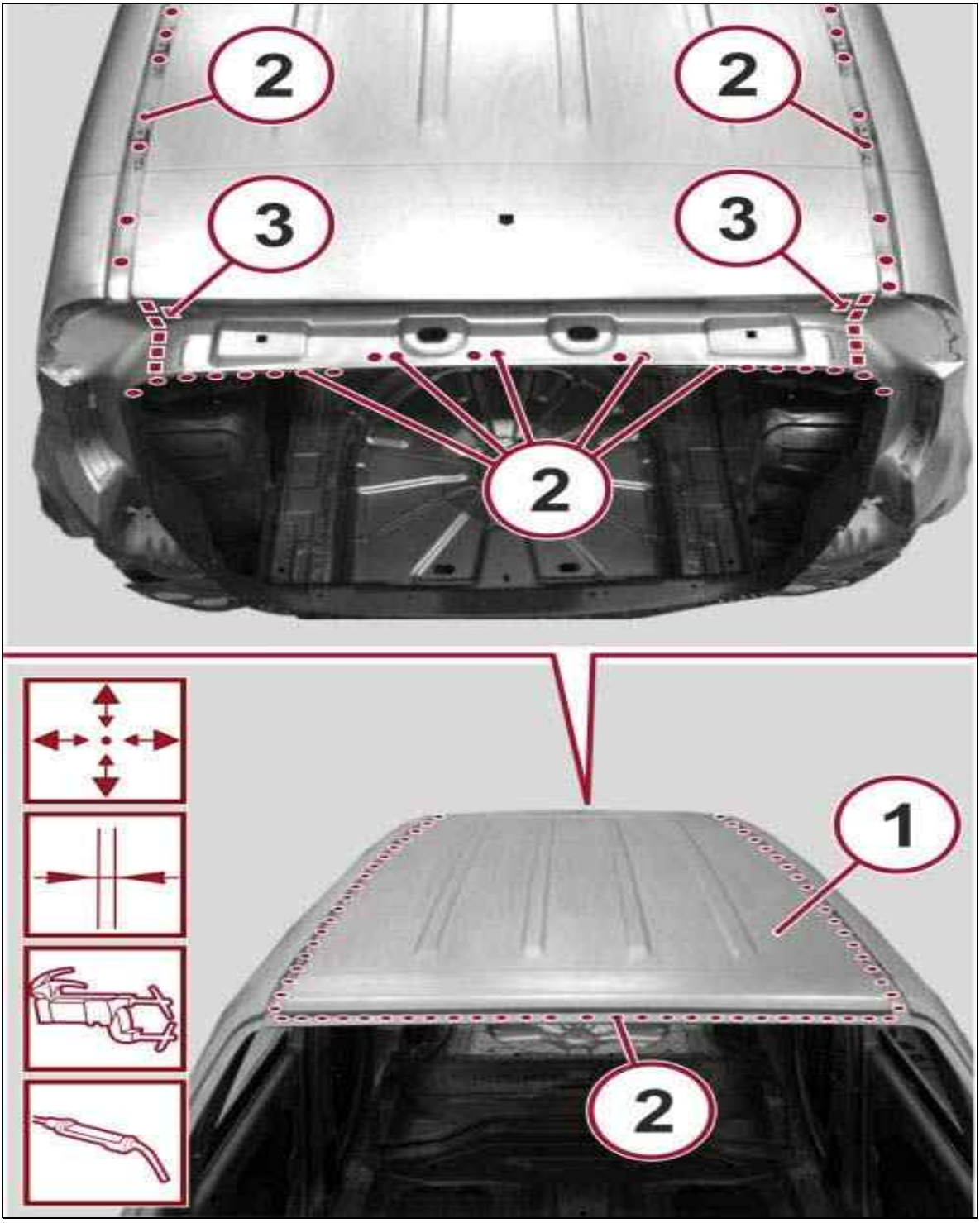
Fig 2: Roof Panel Installation (2 Of 4)



Courtesy of CHRYSLER GROUP, LLC

4. Apply a bead of sealant along the roof bows (1).

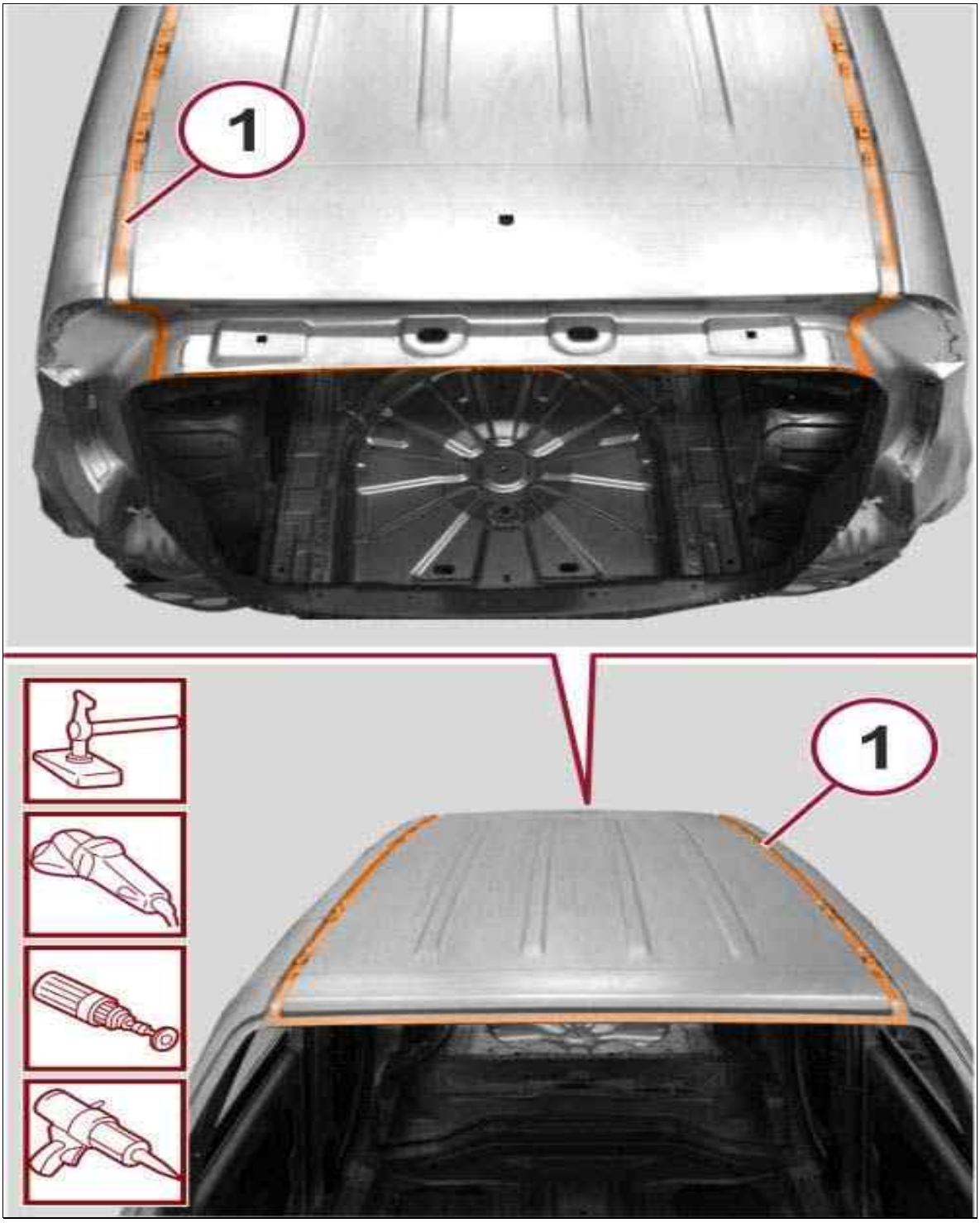
Fig 3: Roof Panel Installation (3 Of 4)



Courtesy of CHRYSLER GROUP, LLC

5. Position the service part (1) correctly on the vehicle and secure it with the self-locking clamps.
6. Check alignment and surrounding gaps.
7. With the use of a spot welder, weld the points (2) indicated in the illustration.
8. With the use of a MIG welder apply plug welds to fill in the holes (3) made previously.

Fig 4: Roof Panel Installation (4 Of 4)



Courtesy of CHRYSLER GROUP, LLC

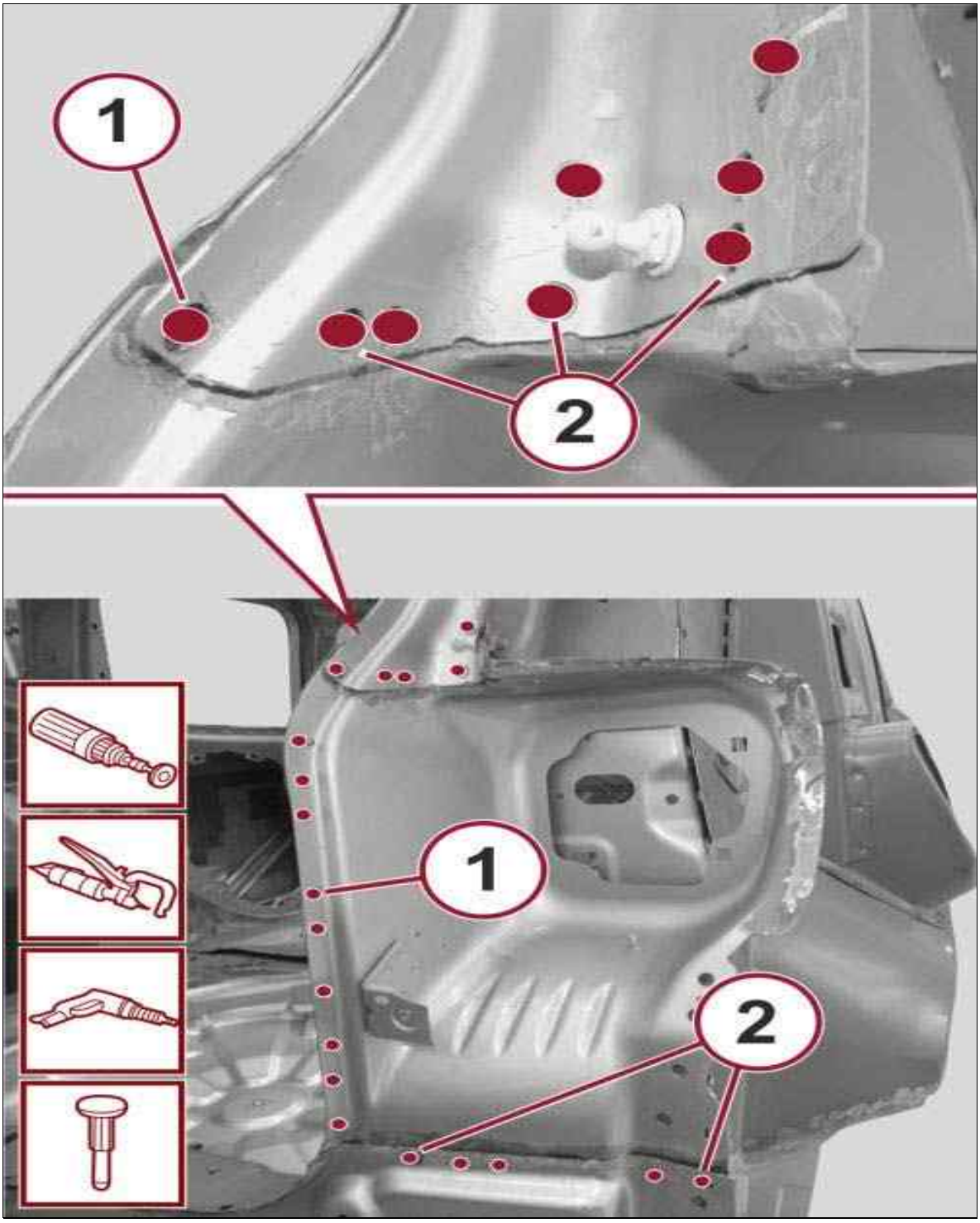
9. Correct any contour and deformations of the sheet metal using a hammer and dolly block.
10. With the use of a grinding wheel, smooth the welds.
11. With the use of a rotary brush, clean the previously welded areas.
12. Apply corrosion protection to the areas involved in the welding.

13. Seal the seams between the parts and the vehicle.

BODY STRUCTURE > PANEL, TAILLAMP MOUNTING > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

1. Remove the quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .
2. Remove the quarter panel extension. Refer to QUARTER PANEL EXTENSION REMOVAL AND INSTALLATION .
3. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
4. Straighten the body as necessary.

Fig 1: Taillamp Mounting Panel Removal (1 Of 2)

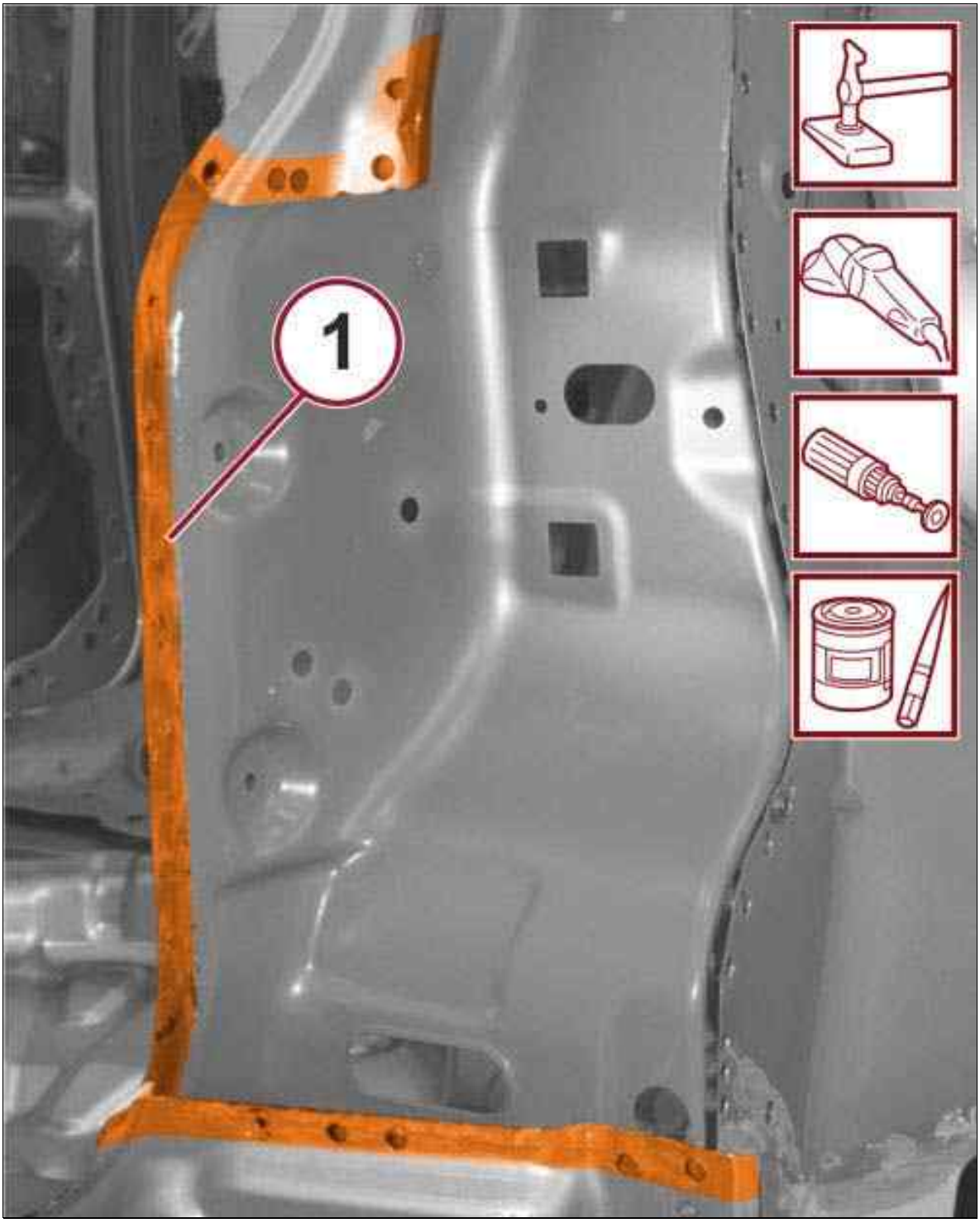


Courtesy of CHRYSLER GROUP, LLC

5. With the use of a rotary brush, remove the paint and access to the spot welds.
6. With the use of a spot weld cutting tool, release the spot welds (1).
7. With the use of a drill, release the spot welds (2).
8. Use a chisel and hammer to remove the welds previously released.

9. Remove the taillamp mounting panel and cutouts from the vehicle.

Fig 2: Taillamp Mounting Panel Removal (2 Of 2)

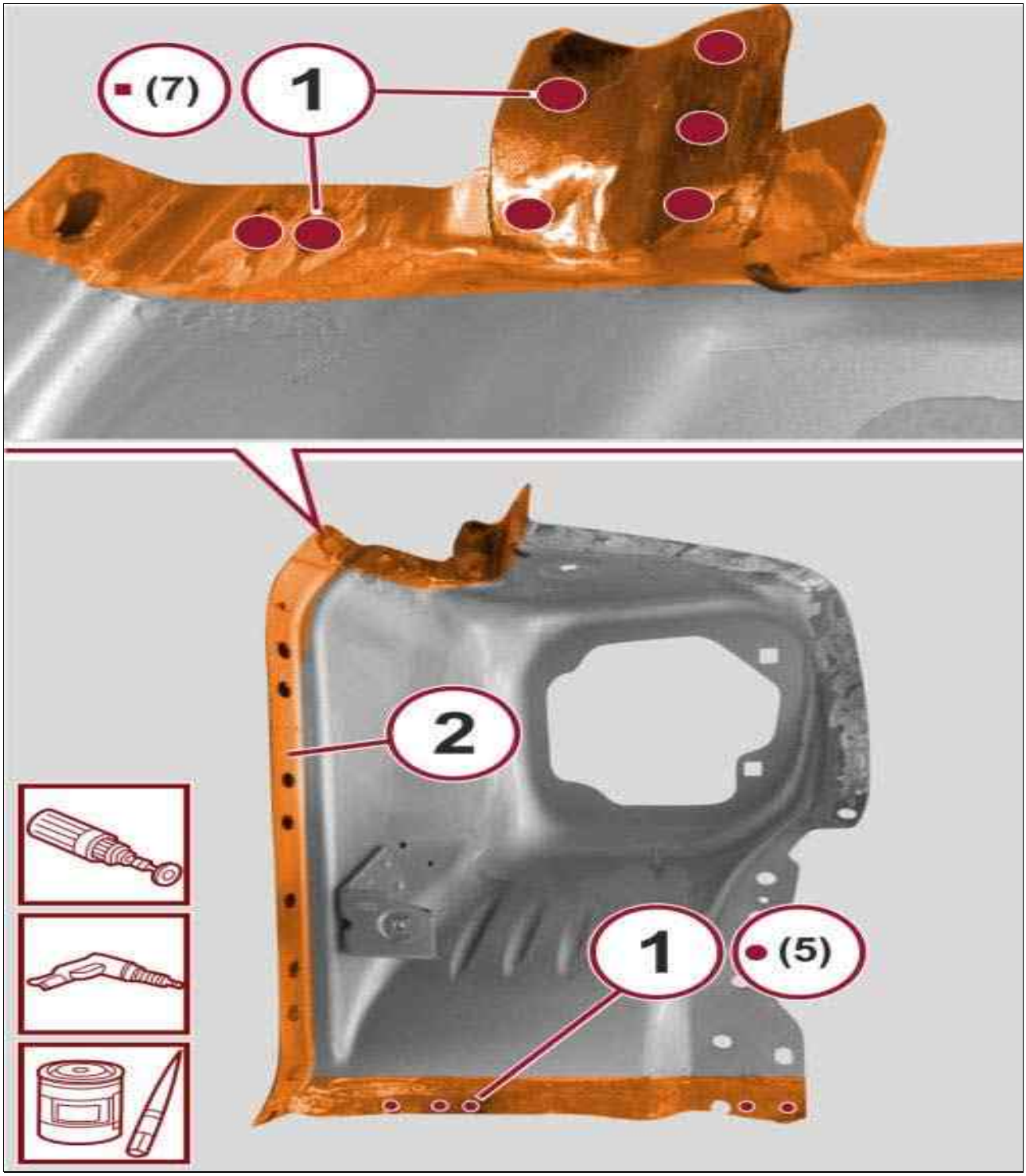


Courtesy of CHRYSLER GROUP, LLC

10. With the use of a hammer and dolly block, straighten the edges of the mating components.
11. With the use of a disc grinder, remove any residue of the spot welds.
12. With the use of a rotary brush, clean the previously treated areas.
13. Apply electro-weldable paint/weld through primer to the highlighted areas (1).

BODY STRUCTURE > PANEL, TAILLAMP MOUNTING > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Taillamp Mounting Panel Installation (1 Of 2)

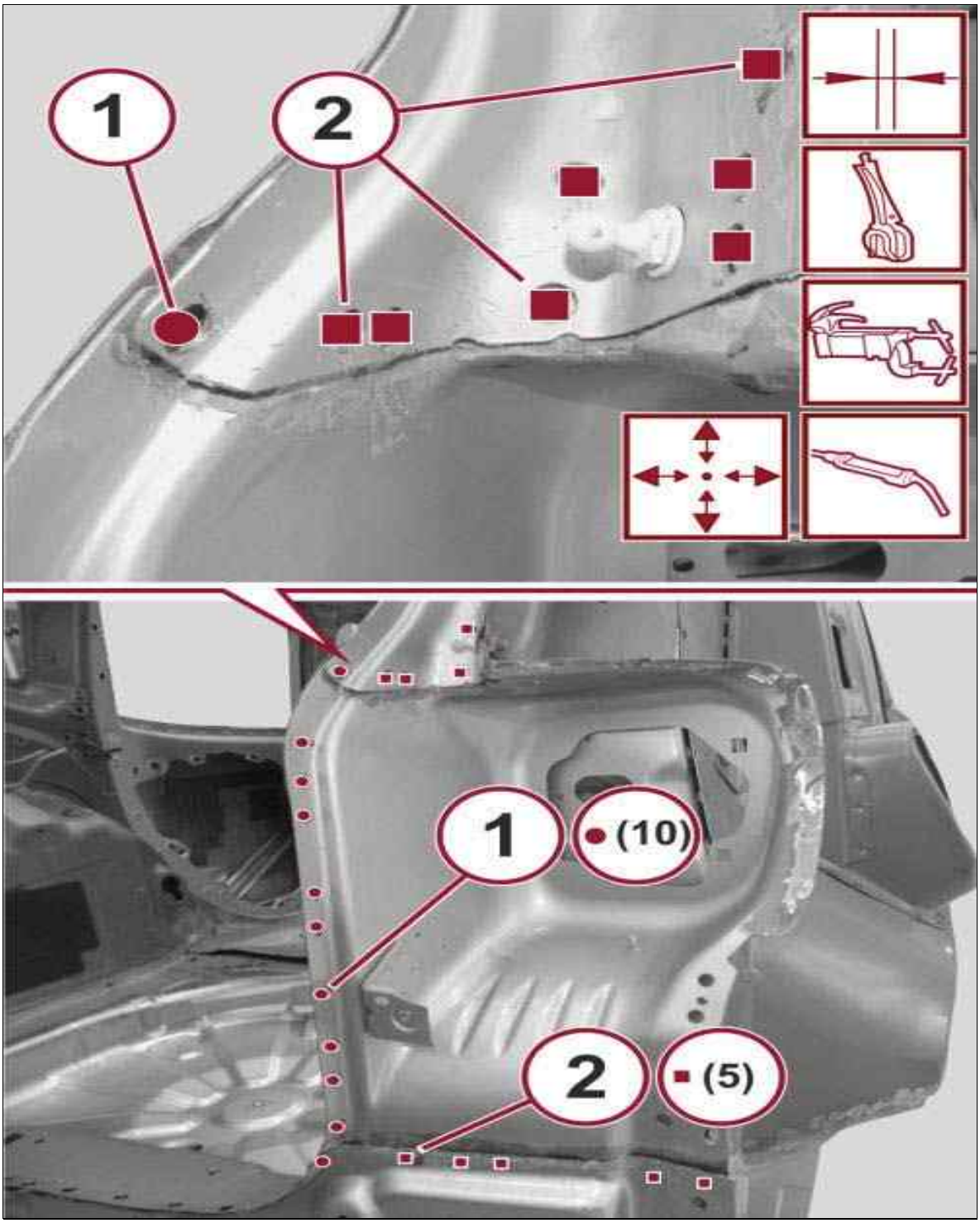


Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the entire perimeter (1) of the inner and outer part using a rotary brush.

2. With the use of a drill, drill holes at the indicated points (1).
3. Apply elctro-weldable paint/weld through primer to the highlighted border areas (2) involved in welding.

Fig 2: Taillamp Mounting Panel Installation (2 Of 2)



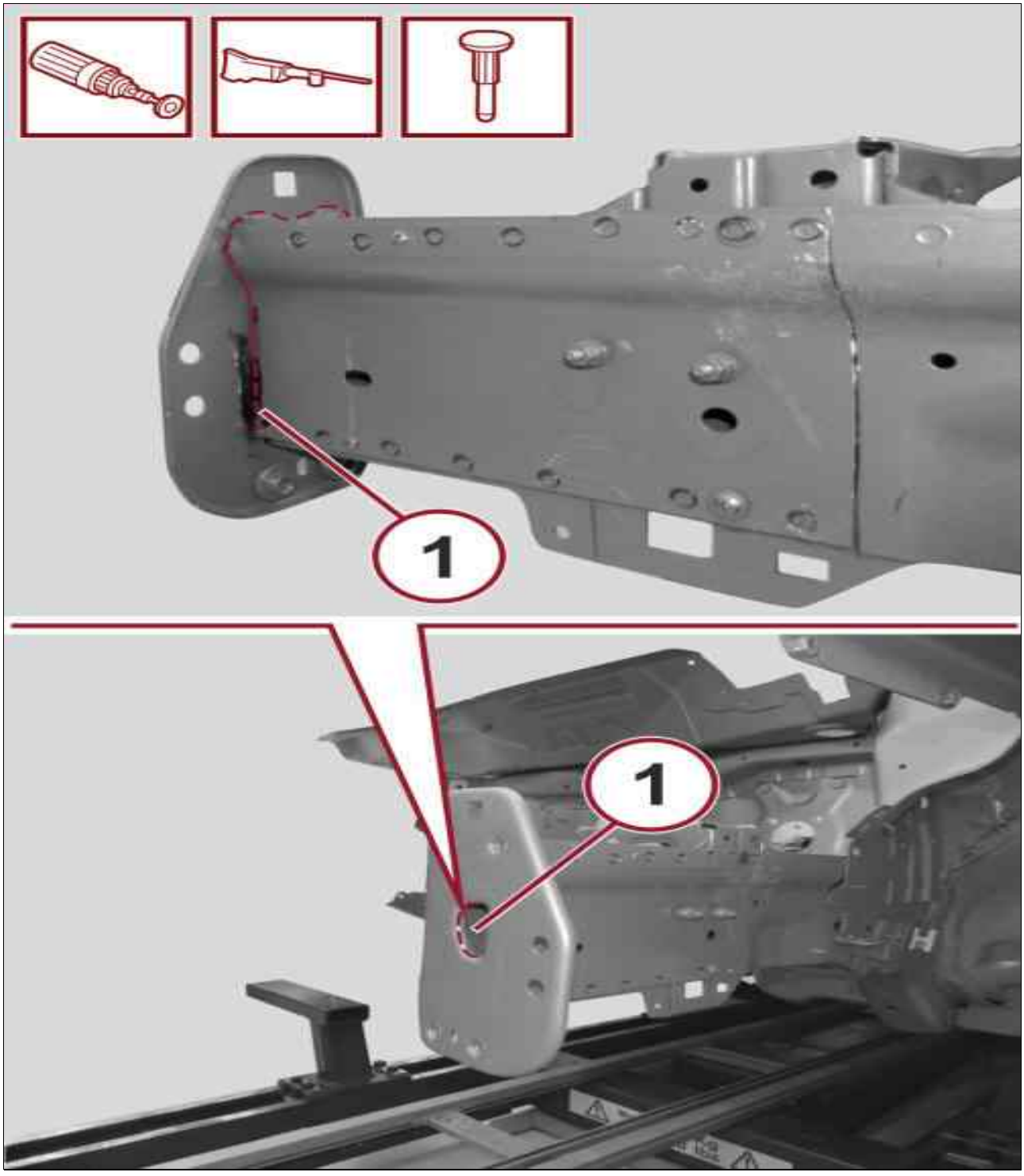
Courtesy of CHRYSLER GROUP, LLC

4. Position the part (1) correctly on the vehicle and secure it with the self-locking clamps.
5. Check alignment and surrounding gaps.

6. With the use of a spot welder, apply spot welds at the indicated points (1).
7. With the use of a MIG welder, apply plug welds filling in the holes (2) previously made.
8. Correct any distortions to the sheet metal using a hammer and dolly block.
9. Use a grinding disc to smooth the welds.
10. Use a rotary brush to clean the previously welded areas.
11. Apply corrosion protection to the areas involved in the welding.
12. Seal the seams between the parts and the vehicle.
13. Install the quarter panel extension. Refer to QUARTER PANEL EXTENSION REMOVAL AND INSTALLATION .
14. Install the quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .

BODY STRUCTURE > PLATE, FRONT SIDERAIL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Front Siderail Plate Removal (1 Of 2)

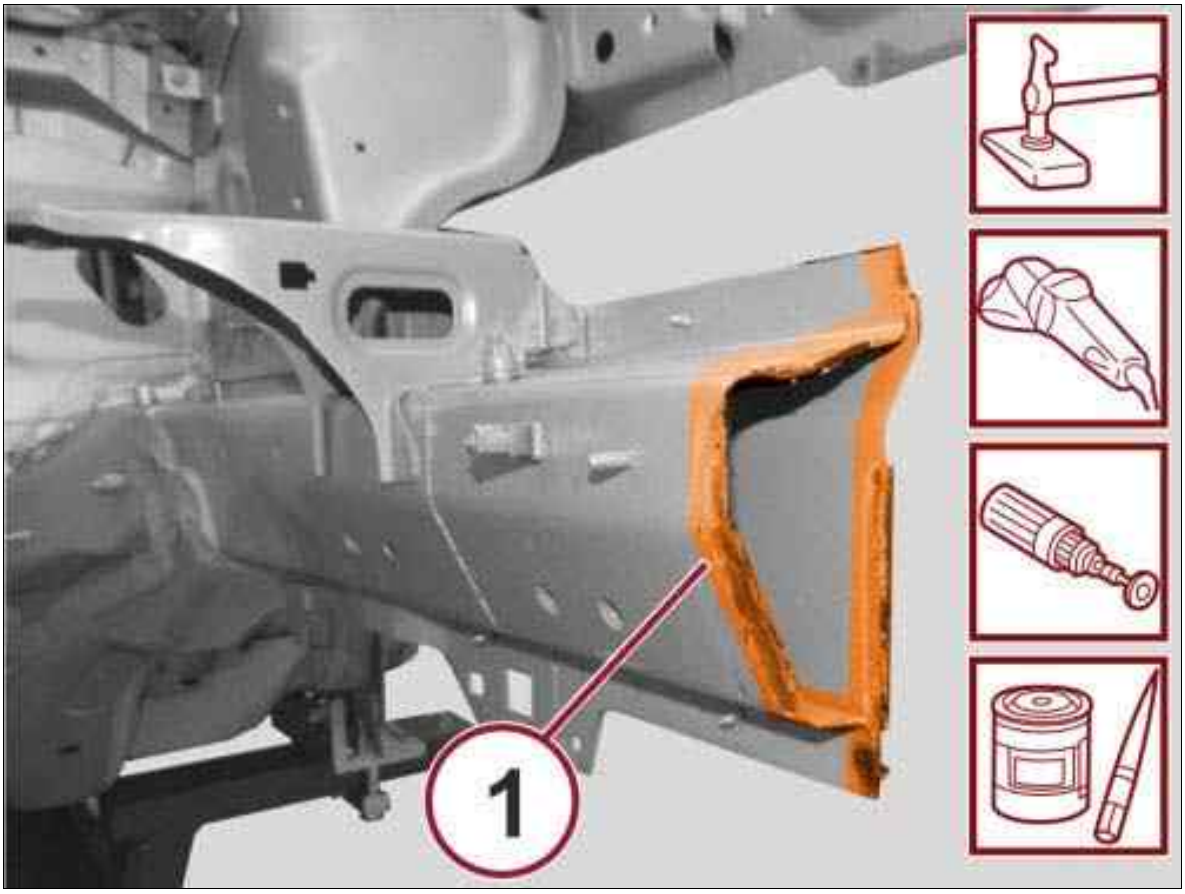


Courtesy of CHRYSLER GROUP, LLC

1. Remove the front fender. Refer to FENDER, FRONT, REMOVAL AND INSTALLATION .
2. Use a rotary brush to remove the paint and gain access to the plate welds.
3. Use the jigsaw along the cut lines (1) shown in the illustration.
4. Use a chisel and hammer to remove the plate.

5. Remove the plate from the vehicle.

Fig 2: Front Siderail Plate Removal (2 Of 2)

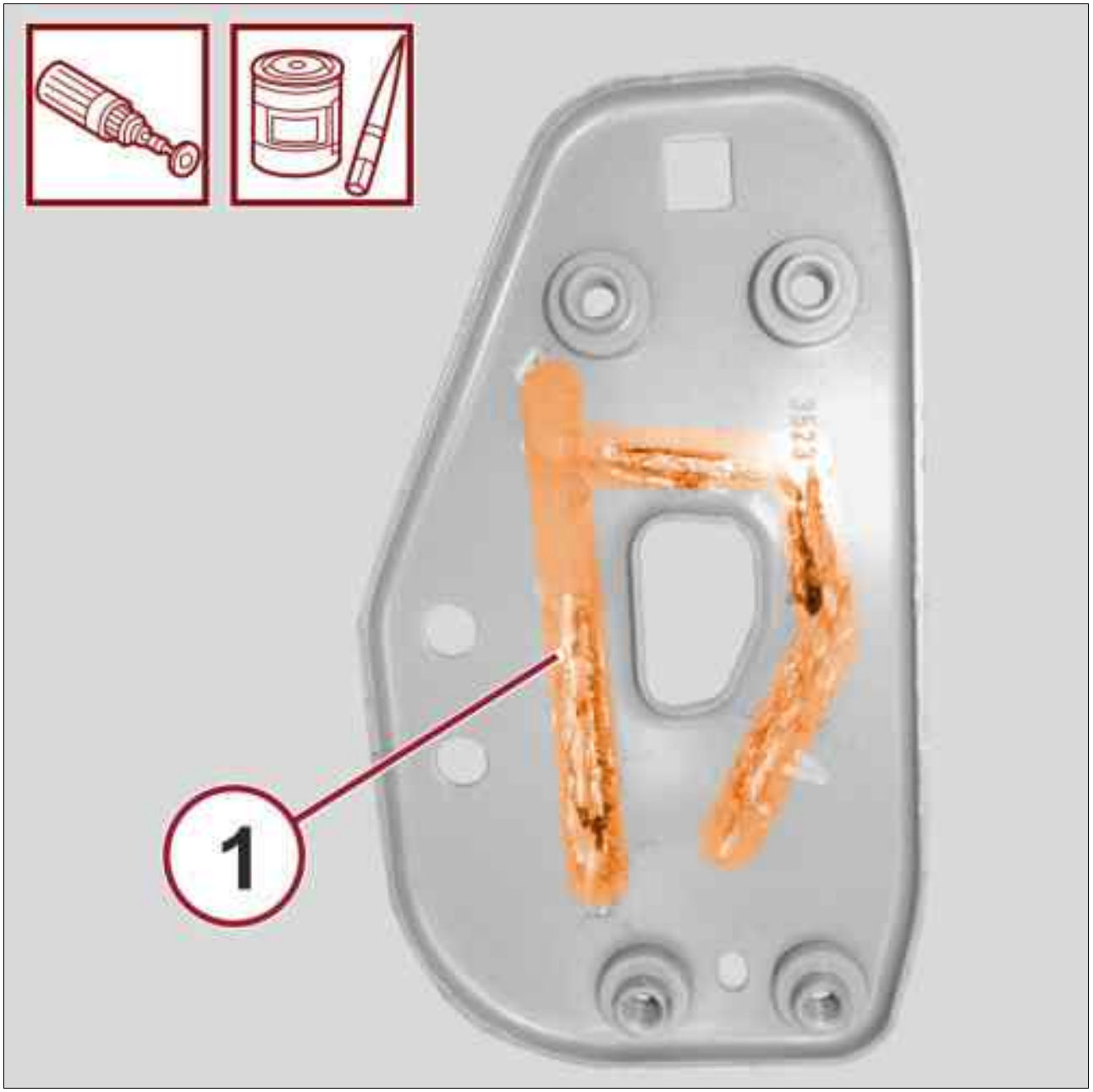


Courtesy of CHRYSLER GROUP, LLC

6. Straighten the edges of the front frame rail with the use of a hammer and dolly block.
7. With the use of a grinding wheel, remove any welding residue.
8. Use a rotary brush and clean the previously treated areas.
9. Apply electro-weldable paint/weld through primer to the area (1) to be welded.

BODY STRUCTURE > PLATE, FRONT SIDERAIL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

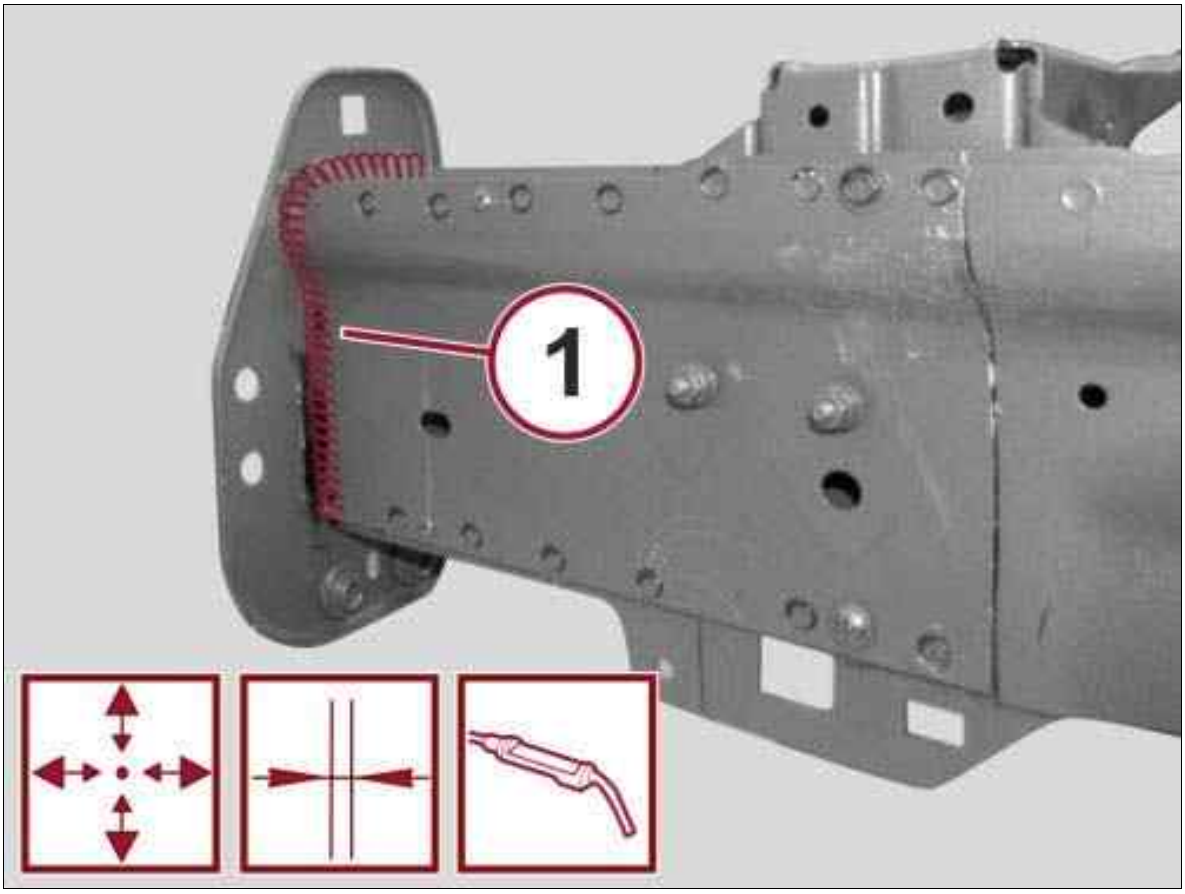
Fig 1: Front Siderail Plate Installation (1 Of 3)



Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the areas to be welded using a rotary brush.
2. Apply electro-weldable paint/weld through primer to the area (1) to be welded.

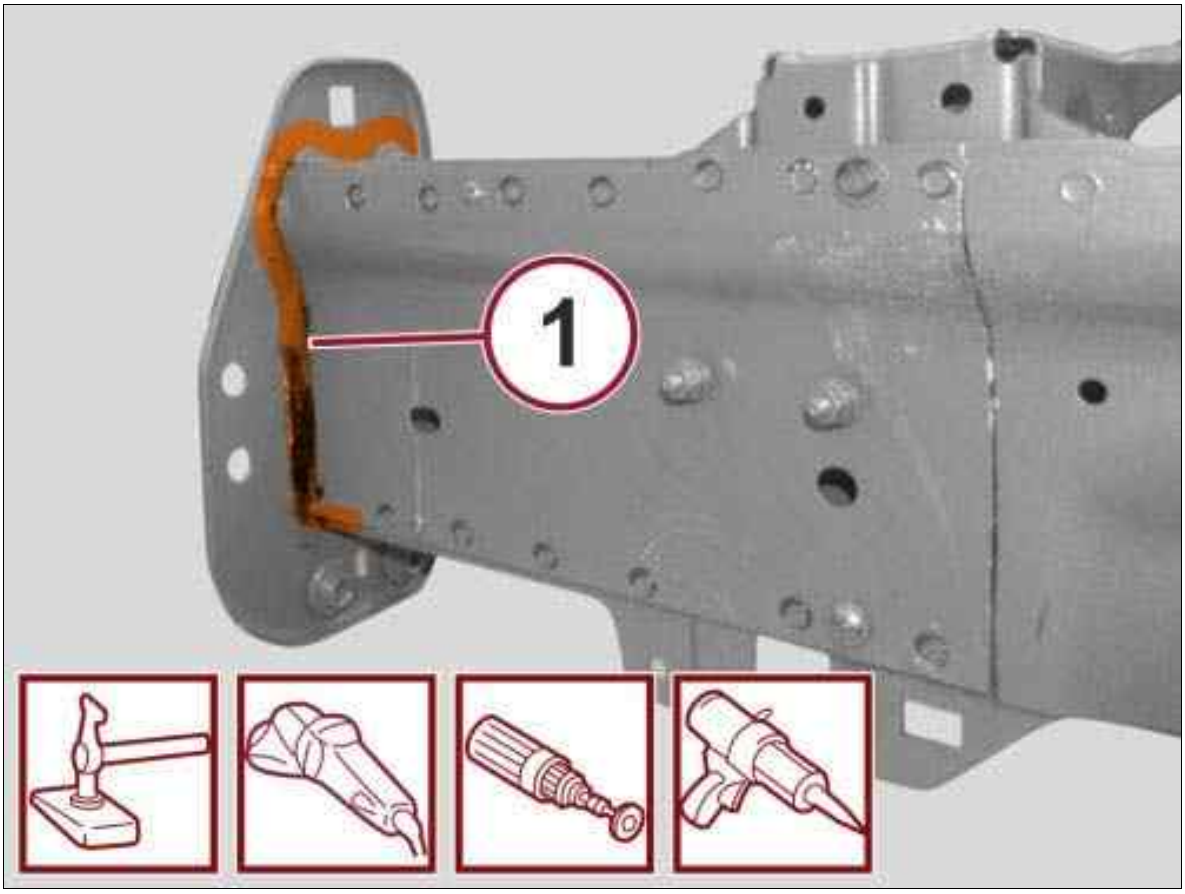
Fig 2: Front Siderail Plate Installation (2 Of 3)



Courtesy of CHRYSLER GROUP, LLC

3. Correctly position the part on the vehicle and check the alignment and squaring.
4. Use a MIG welder to seam-weld the areas (1) indicated in the illustration.

Fig 3: Front Siderail Plate Installation (3 Of 3)



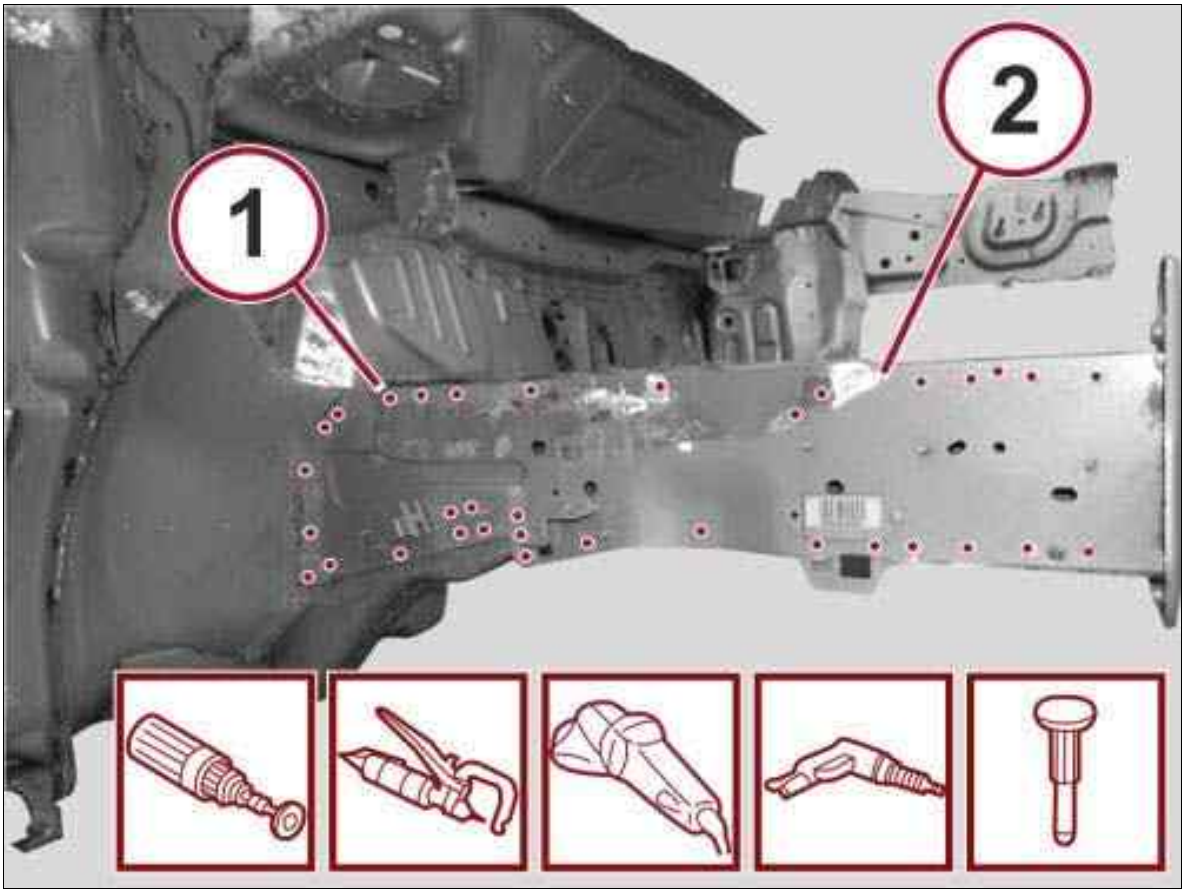
Courtesy of CHRYSLER GROUP, LLC

5. Correct any distortions to the sheet metal using a hammer and dolly block.
6. Use a grinding wheel to smooth the welds (1).
7. Use a rotary brush to clean the previously welded areas.
8. Apply corrosion protection to the areas affected.
9. Install the front fender. Refer to FENDER, FRONT, REMOVAL AND INSTALLATION .

BODY STRUCTURE > RAIL, FRONT FRAME > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

1. Remove upper load path beam. Refer to BEAM, LOAD PATH, REMOVAL AND INSTALLATION .
2. Remove the front wheelhouse. Refer to WHEELHOUSE, FRONT, REMOVAL AND INSTALLATION .
3. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
4. Straighten the body as necessary.

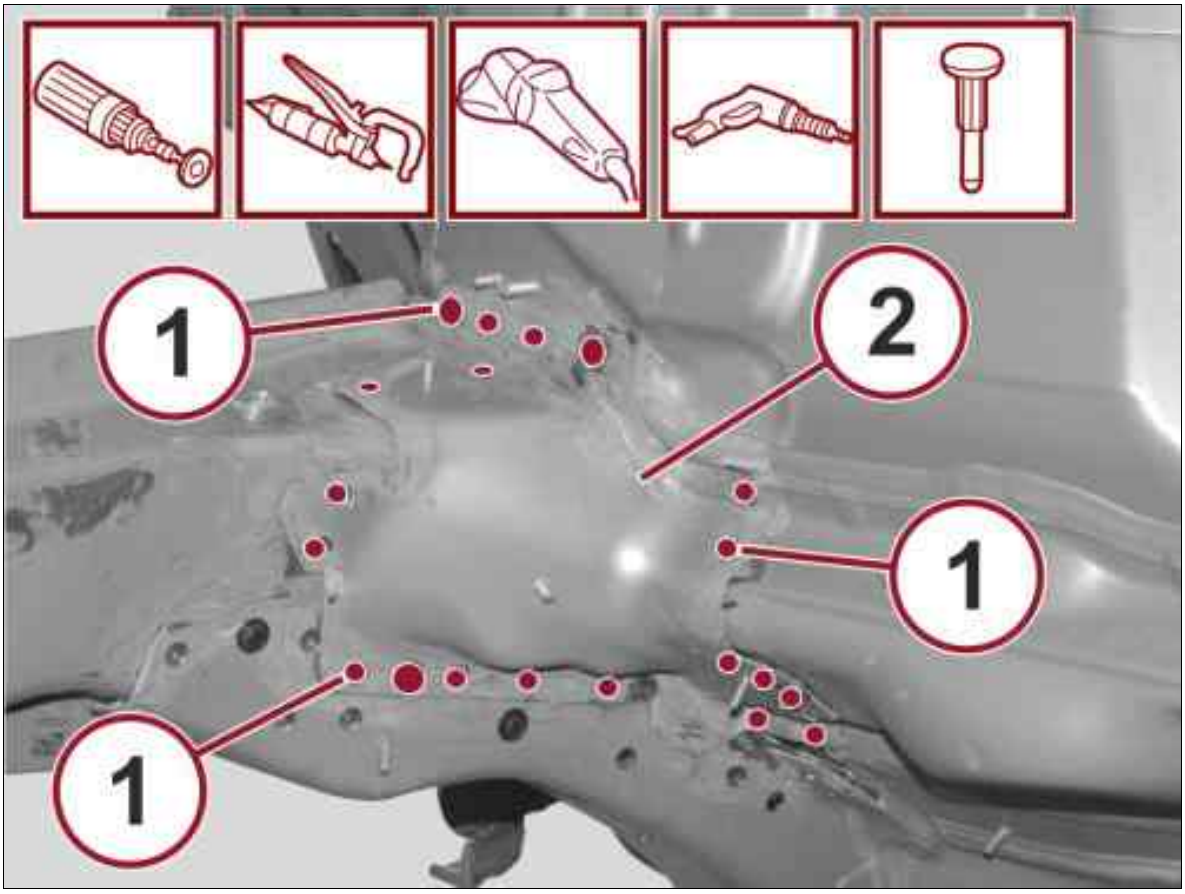
Fig 1: Front Frame Rail Removal (1 Of 6)



Courtesy of CHRYSLER GROUP, LLC

5. Use a rotary brush to remove the paint and gain access to the spot welds.
6. With the use of a spot weld cutting tool, release the spot welds (1) shown in the illustration.
7. Grind the spot welds not accessible with a drill.
8. Use a chisel and hammer to remove the welds previously released.
9. Remove the part (2) from the vehicle.

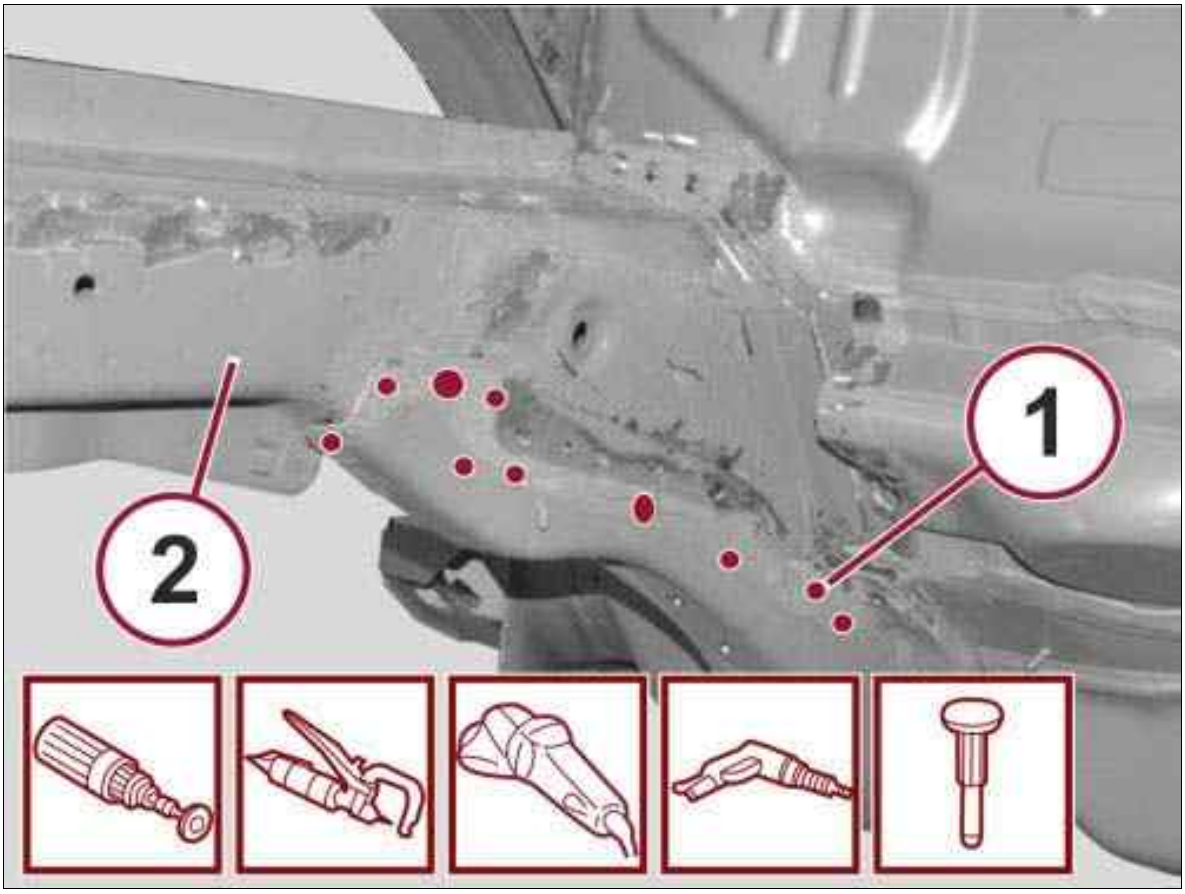
Fig 2: Front Frame Rail Removal (2 Of 6)



Courtesy of CHRYSLER GROUP, LLC

10. Use a rotary brush to remove the paint and gain access to the spot welds.
11. With the use of a spot weld cutting tool, release the spot welds (1) shown in the illustration.
12. Grind the spot welds not accessible with a drill.
13. Use a chisel and hammer to remove the welds previously released.
14. Remove the inner part (2) from the vehicle.

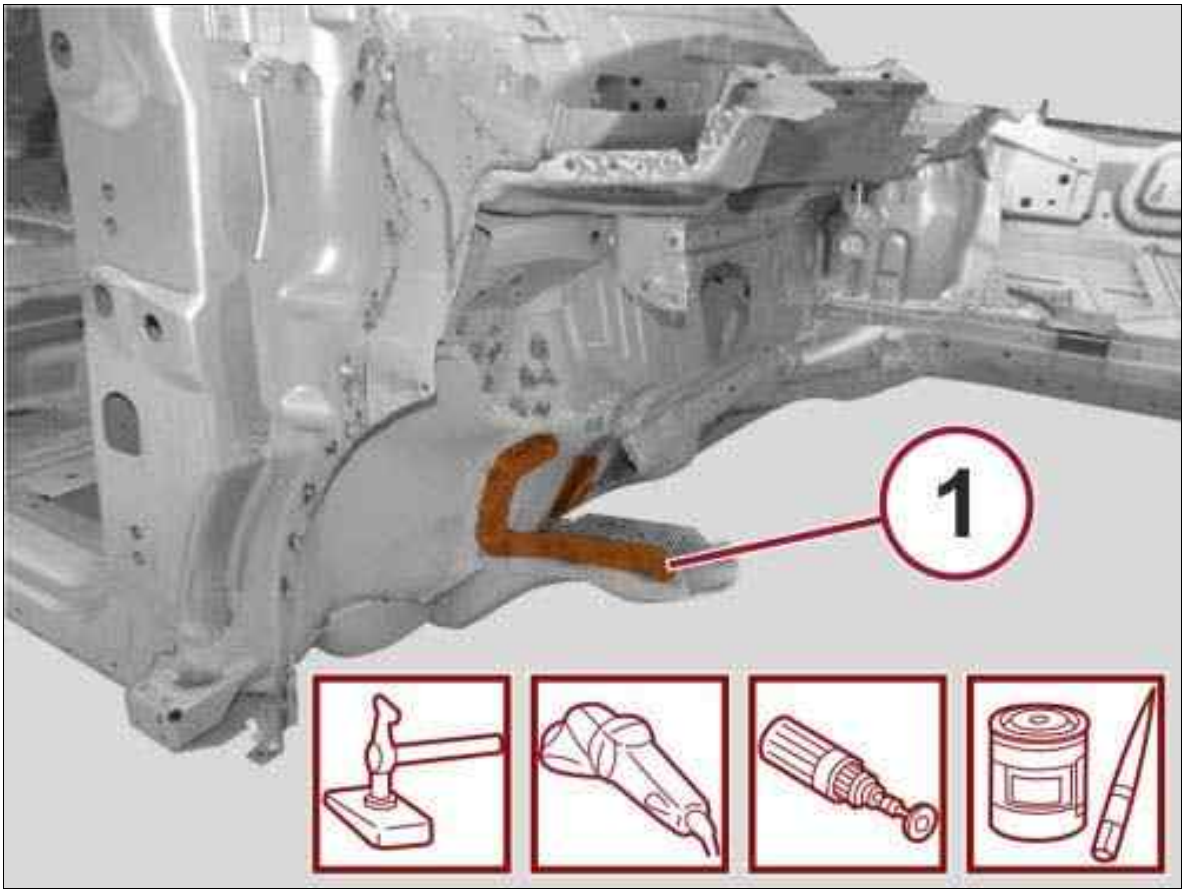
Fig 3: Front Frame Rail Removal (3 Of 6)



Courtesy of CHRYSLER GROUP, LLC

15. Use a rotary brush to remove the paint and gain access to the spot welds.
16. With the use of a spot weld cutting tool, release the spot welds (1) shown in the illustration.
17. Grind the spot welds not accessible with a drill.
18. Use a chisel and hammer to remove the welds previously released.
19. Remove the part (2) from the vehicle.

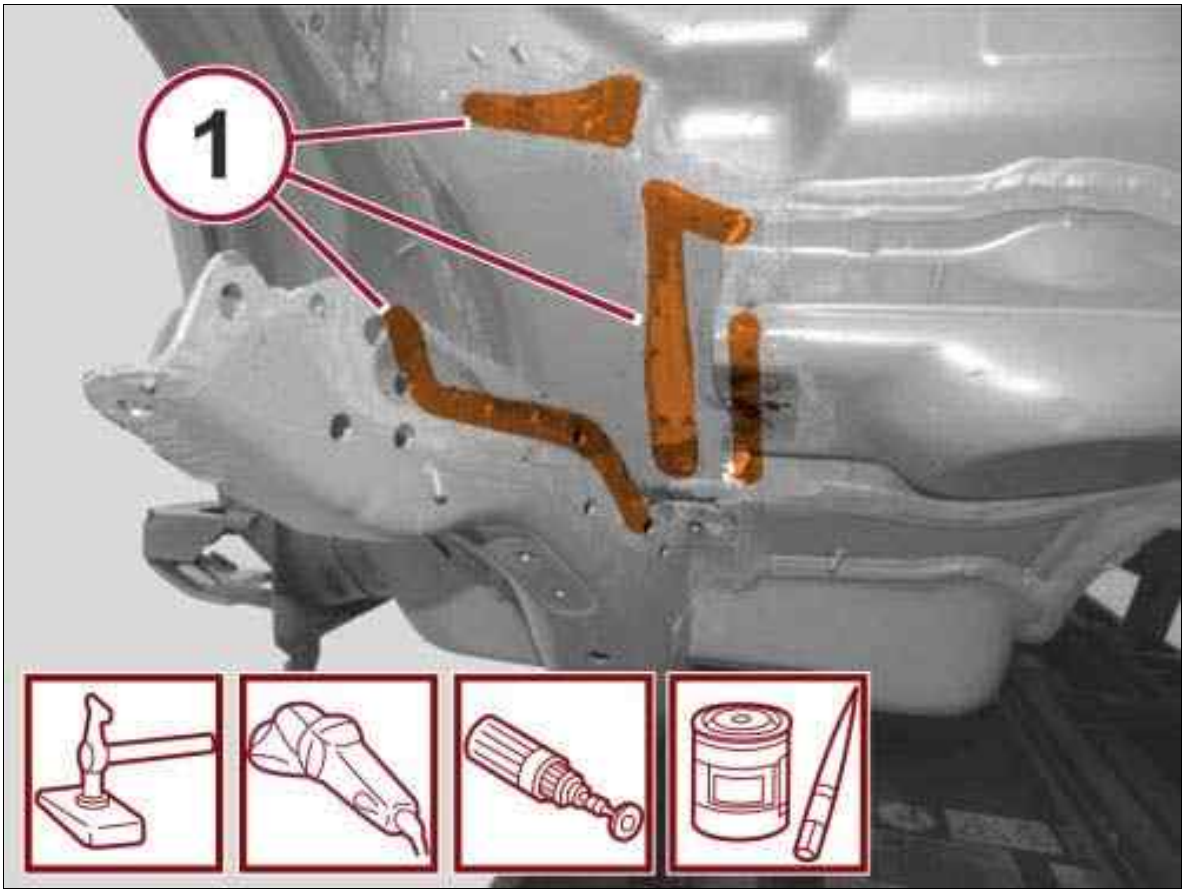
Fig 4: Front Frame Rail Removal (4 Of 6)



Courtesy of CHRYSLER GROUP, LLC

20. With the use of a hammer and dolly block, straighten the edges of the mating components.
21. With the use of a grinding wheel, remove any residue of the spot welds.
22. Use a rotary brush and clean the previously treated areas.
23. Apply electro-weldable paint/weld through primer to the areas shown in the illustration (1).

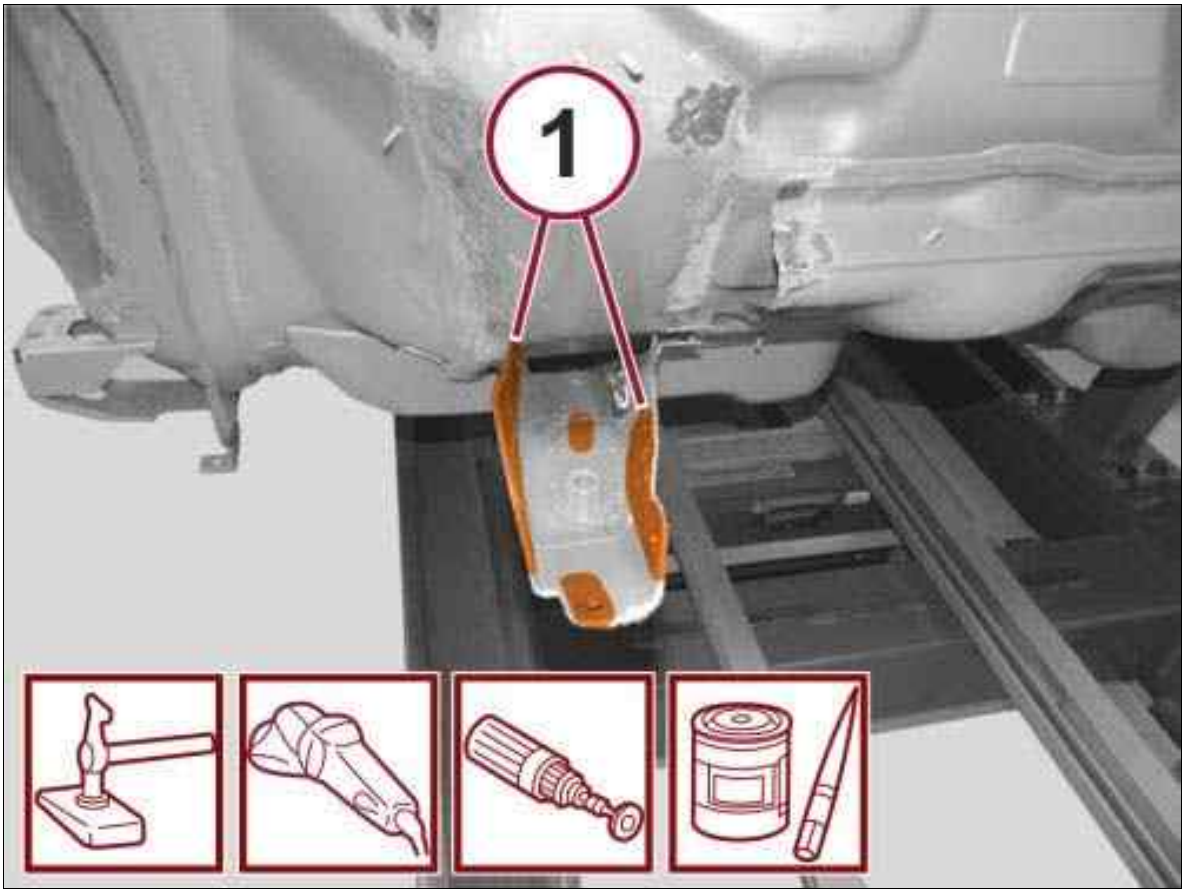
Fig 5: Front Frame Rail Removal (5 Of 6)



Courtesy of CHRYSLER GROUP, LLC

24. With the use of a hammer and dolly block, straighten the edges of the mating components.
25. With the use of a grinding wheel, remove any residue of the spot welds.
26. Use a rotary brush and clean the previously treated areas.
27. Apply electro-weldable paint/weld through primer to the areas shown in the illustration (1).

Fig 6: Front Frame Rail Removal (6 Of 6)

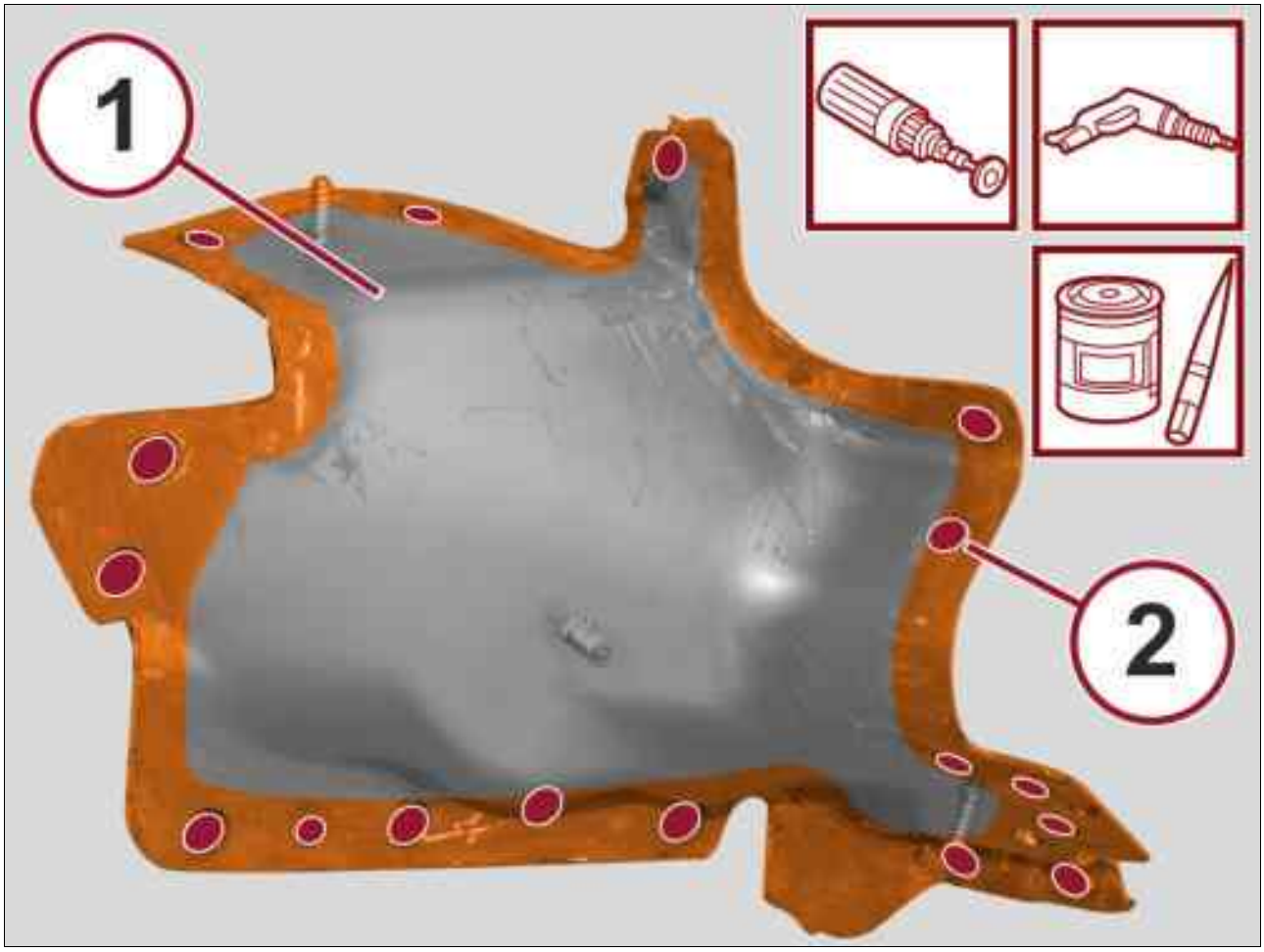


Courtesy of CHRYSLER GROUP, LLC

28. With the use of a hammer and dolly block, straighten the edges of the mating components.
29. With the use of a grinding wheel, remove any residue of the spot welds.
30. Use a rotary brush and clean the previously treated areas.
31. Use a rotary brush and clean the previously treated areas.
32. Apply electro-weldable paint/weld through primer to the areas shown in the illustration (1).

BODY STRUCTURE > RAIL, FRONT FRAME > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

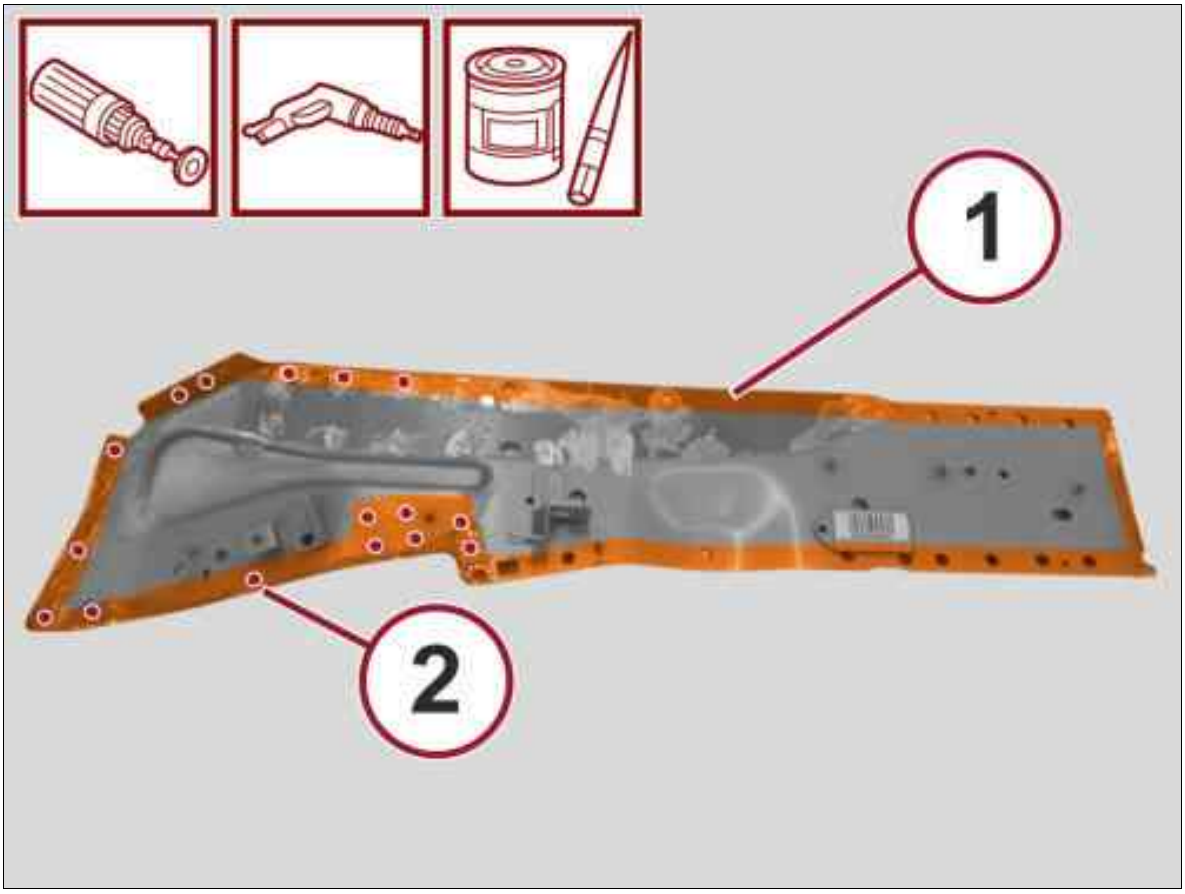
Fig 1: Front Frame Rail Installation (1 Of 8)



Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the entire perimeter of the internal support (1) using a rotary brush.
2. Drill out the part at the indicated points (2).
3. Apply elctro-weldable paint/weld through primer to the areas involved.

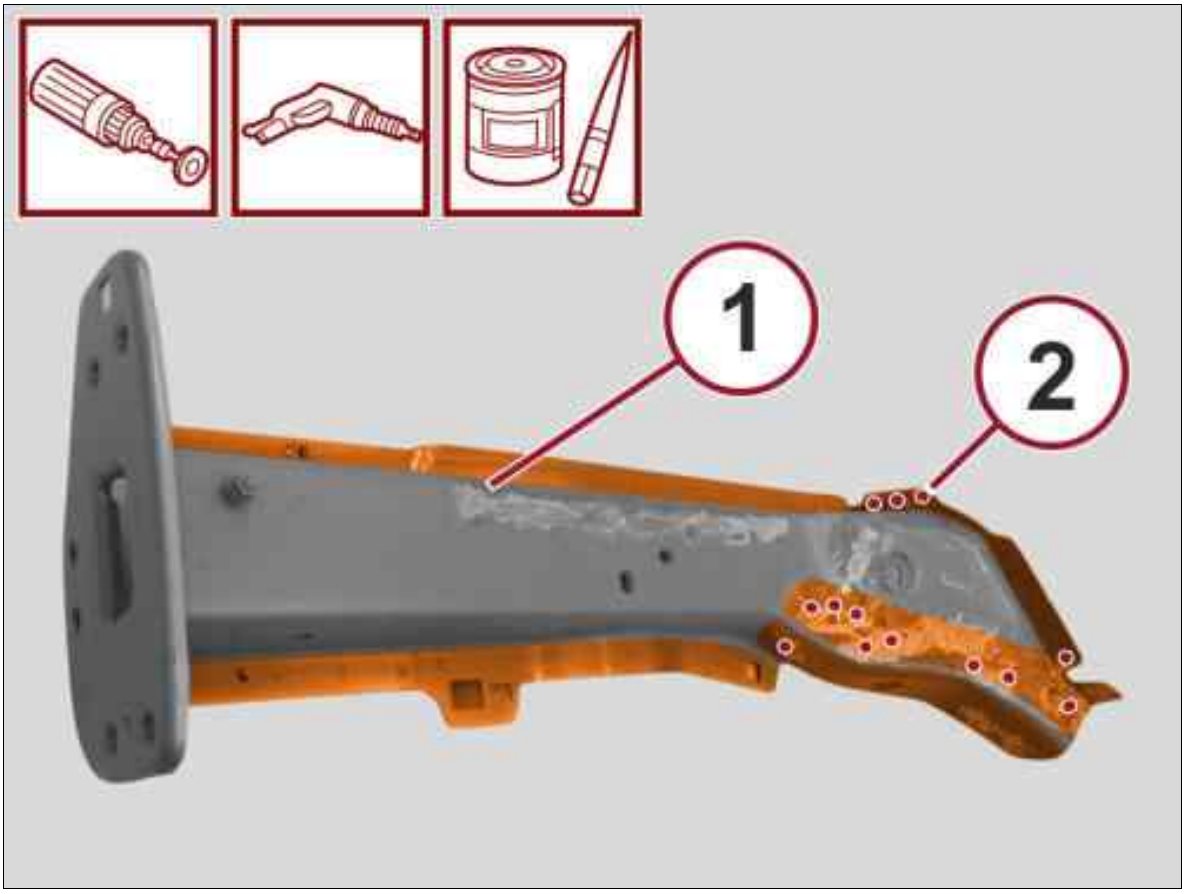
Fig 2: Front Frame Rail Installation (2 Of 8)



Courtesy of CHRYSLER GROUP, LLC

4. Remove the anti-corrosion treatment from the entire perimeter (1) of the inner and outer part using a rotary brush.
5. Drill out the part at the indicated points (2).
6. Apply elctro-weldable paint/weld through primer to the areas involved.

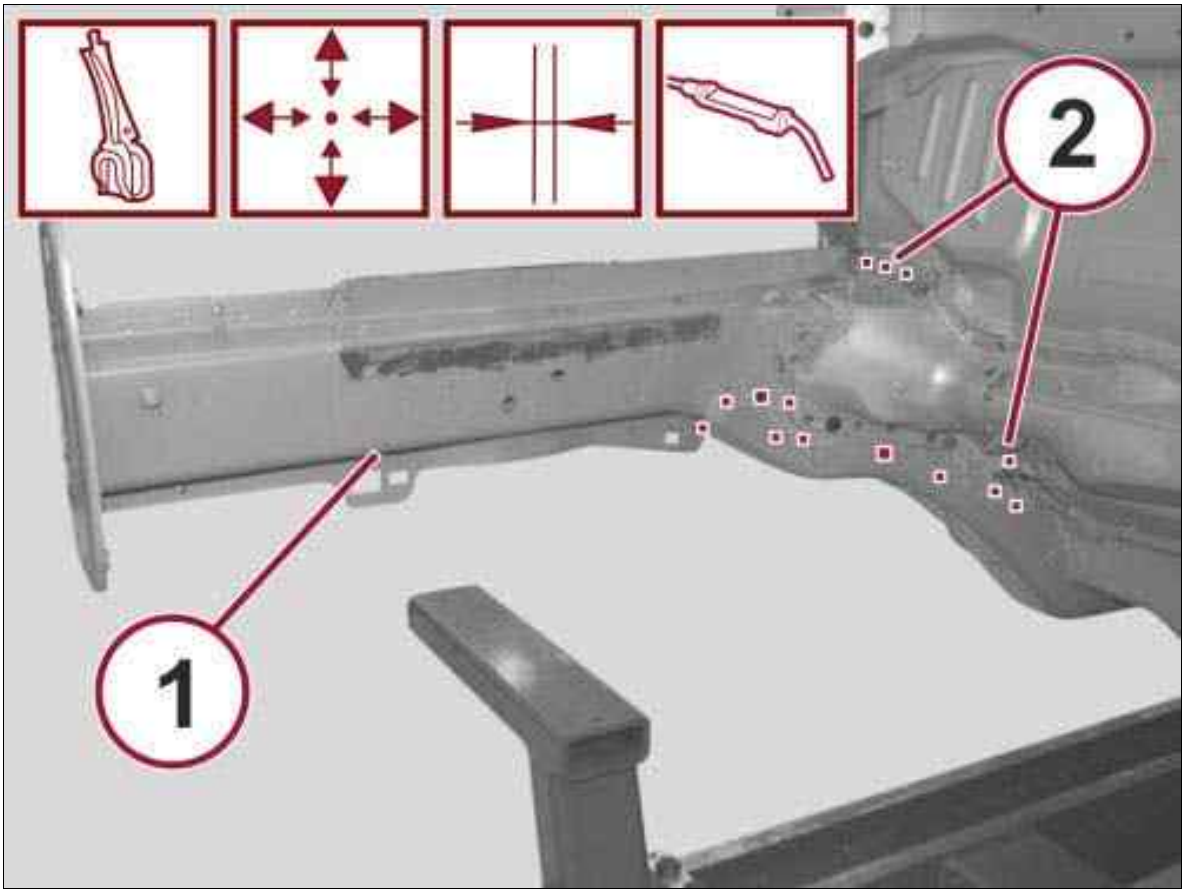
Fig 3: Front Frame Rail Installation (3 Of 8)



Courtesy of CHRYSLER GROUP, LLC

7. Remove the anti-corrosion treatment from the entire perimeter of the internal support (1) using a rotary brush.
8. Drill out the part at the indicated points (2).
9. Apply elctro-weldable paint/weld through primer to the areas involved.

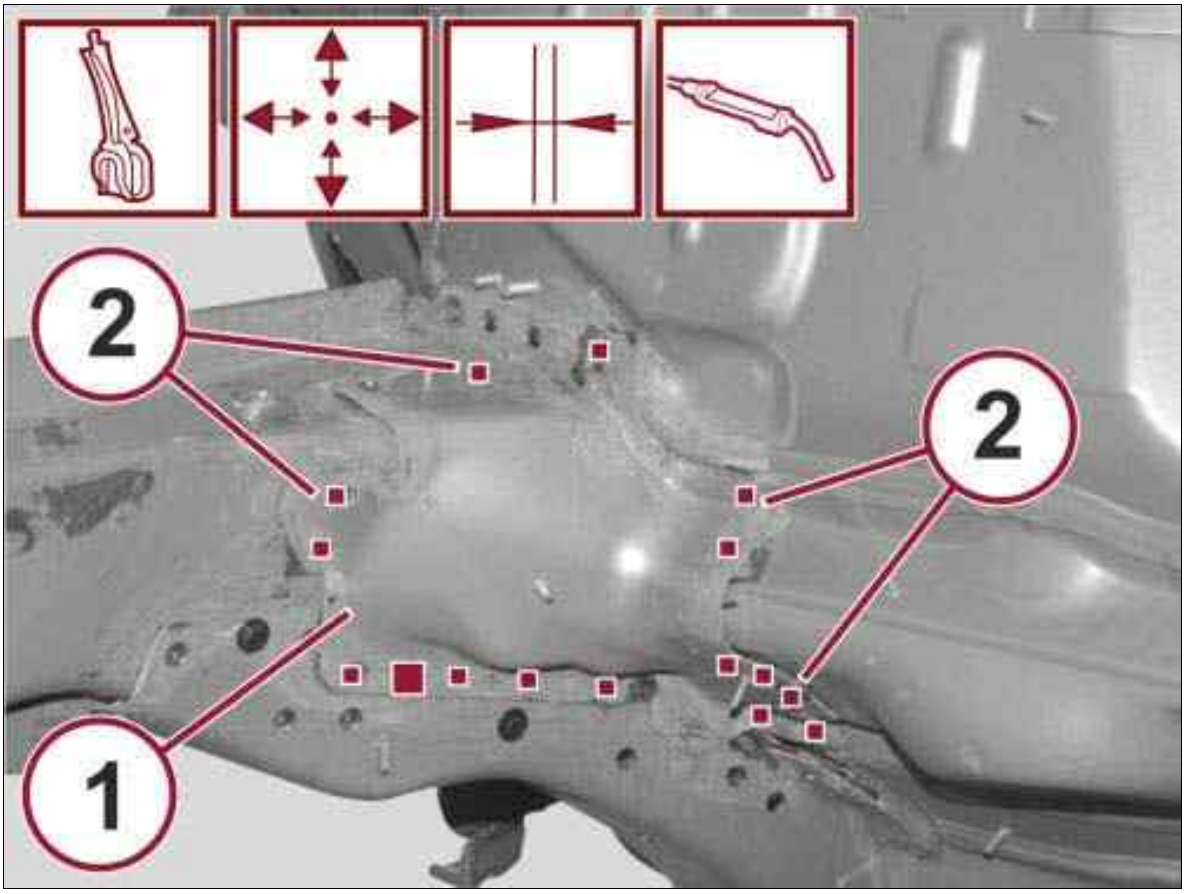
Fig 4: Front Frame Rail Installation (4 Of 8)



Courtesy of CHRYSLER GROUP, LLC

10. Position the service parts (1) correctly on the vehicle and secure it with the self-locking clamps.
11. Check alignment and surrounding gaps.
12. With the use of a MIG welder, apply plug welds to fill in the holes (2) made previously.

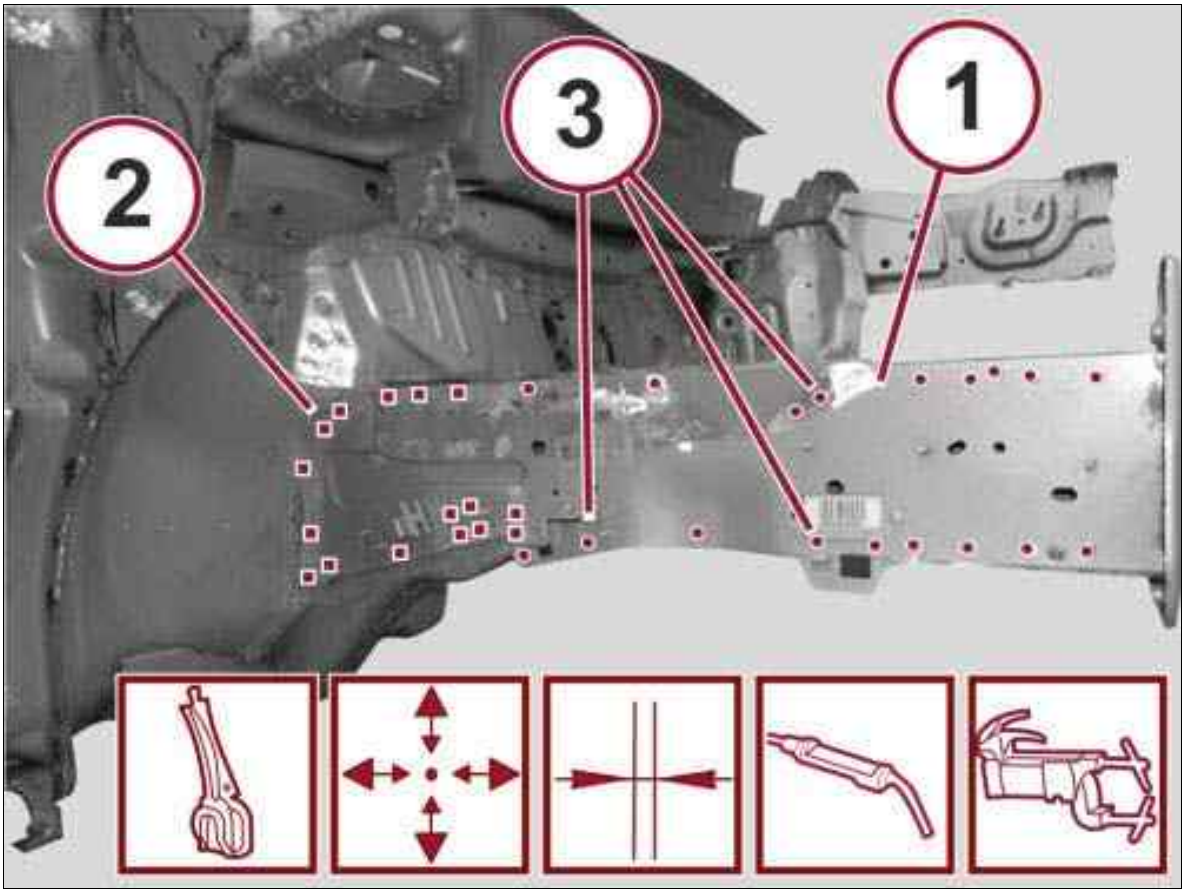
Fig 5: Front Frame Rail Installation (5 Of 8)



Courtesy of CHRYSLER GROUP, LLC

13. Position the service part (1) correctly on the vehicle and secure it with the self-locking clamps.
14. Check alignment and surrounding gaps.
15. With the use of a MIG welder, apply plug welds to fill in the holes (2) made previously.

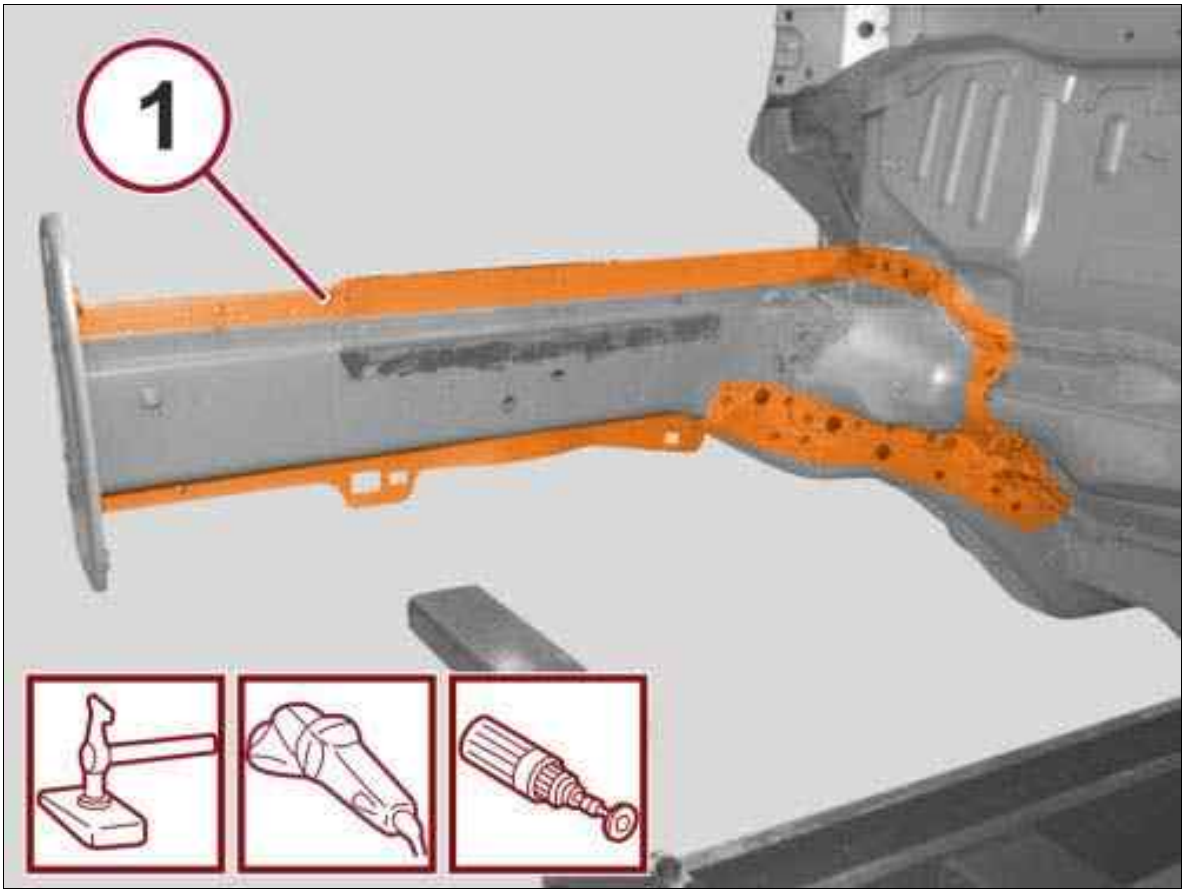
Fig 6: Front Frame Rail Installation (6 Of 8)



Courtesy of CHRYSLER GROUP, LLC

16. Position the service parts (1) correctly on the vehicle and secure it with the self-locking clamps.
17. Check alignment and surrounding gaps.
18. With the use of a MIG welder, apply plug welds to fill in the holes (2) made previously.
19. Use a spot welder to weld the points (3) indicated in the illustration.

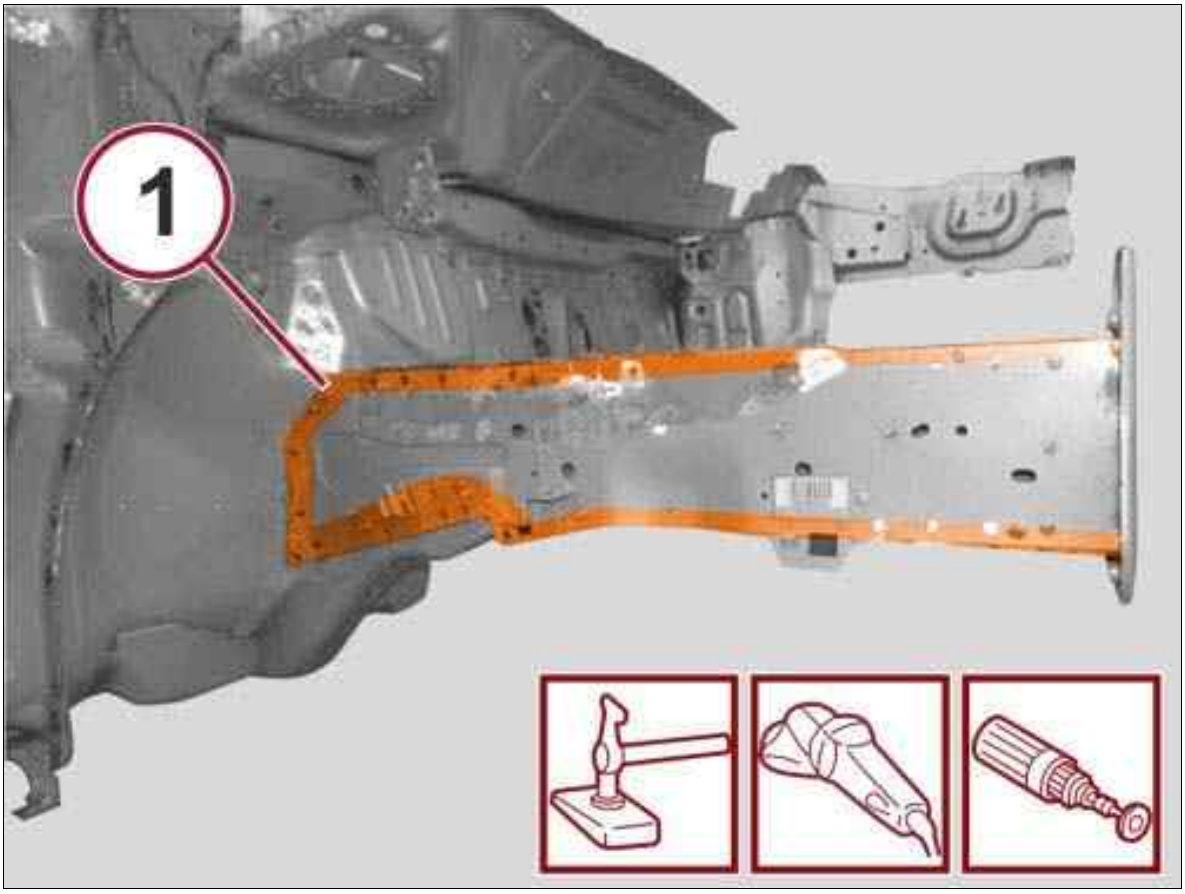
Fig 7: Front Frame Rail Installation (7 Of 8)



Courtesy of CHRYSLER GROUP, LLC

20. Correct any distortions to the panel using a hammer and dolly block.
21. Use a grinding wheel to smooth the welds along the perimeter (1).
22. Use a rotary brush to clean the previously welded areas.

Fig 8: Front Frame Rail Installation (8 Of 8)



Courtesy of CHRYSLER GROUP, LLC

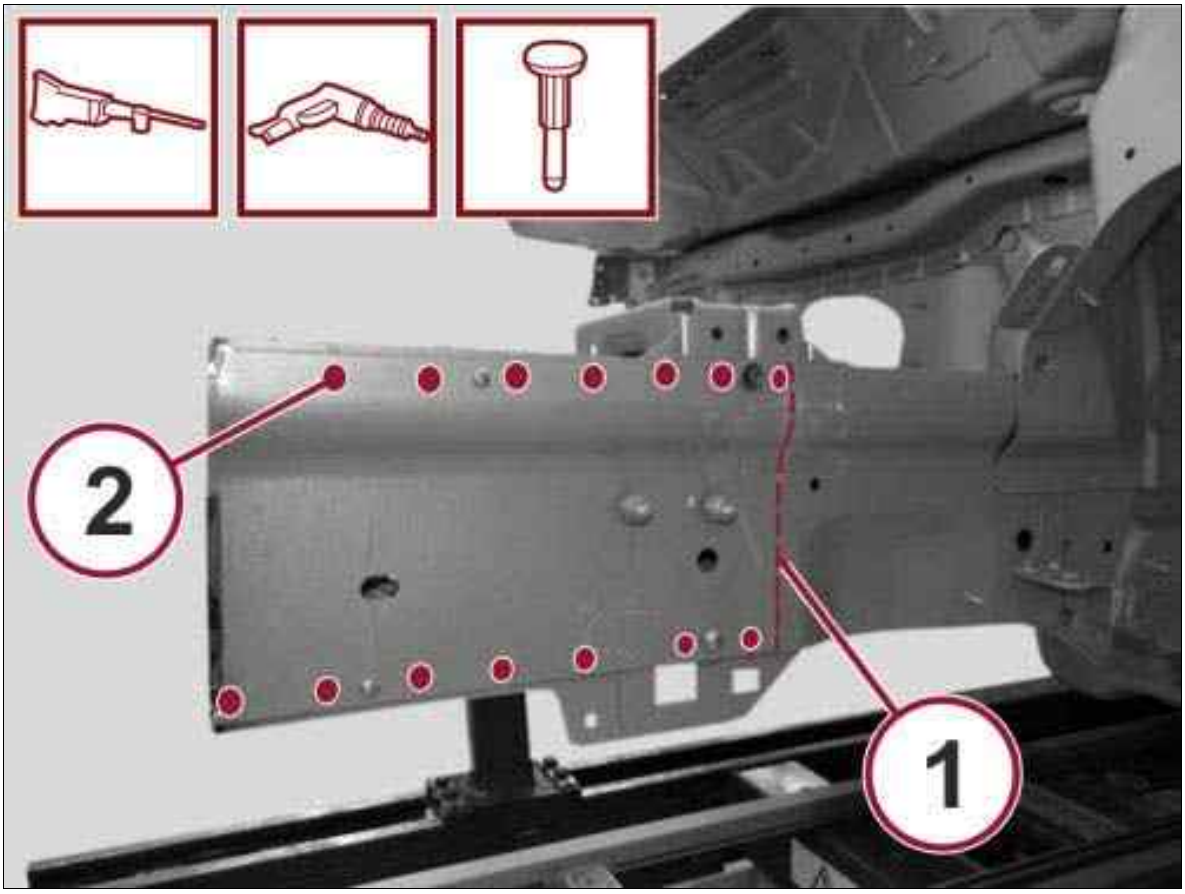
23. Correct any distortions to the panel using a hammer and dolly block.
24. Use a grinding wheel to smooth the welds along the perimeter (1).
25. Use a rotary brush to clean the previously welded areas.
26. Apply corrosion protection to the areas involved in the welding.
27. Seal the seams between the service part and the vehicle.
28. Install the front wheelhouse. Refer to WHEELHOUSE, FRONT, REMOVAL AND INSTALLATION .
29. Install upper load path beam. Refer to BEAM, LOAD PATH, REMOVAL AND INSTALLATION .

BODY STRUCTURE > RAIL, FRONT FRAME > REMOVAL AND INSTALLATION > SECTIONING REMOVAL AND INSTALLATION > REMOVAL

1. Remove the front side rail plate. Refer to PLATE, FRONT SIDERAIL, REMOVAL AND INSTALLATION .
2. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).

3. Straighten the body as necessary.

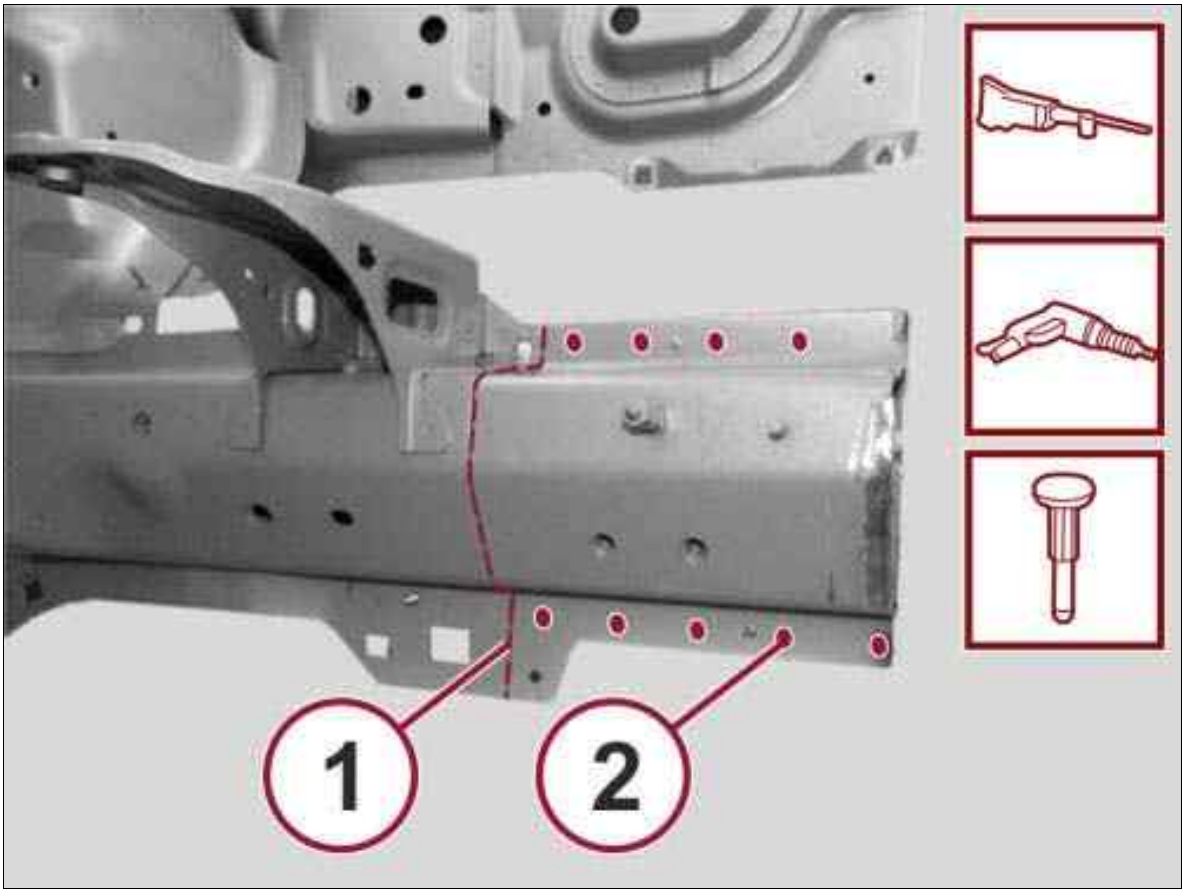
Fig 1: Front Frame Rail Sectioning Removal (1 Of 3)



Courtesy of CHRYSLER GROUP, LLC

4. Use the jigsaw along the cut line (1) shown in the illustration.
5. With the use of a drill, release the spot welds (2) shown in the illustration.
6. Use a chisel and hammer to remove the welds previously released.

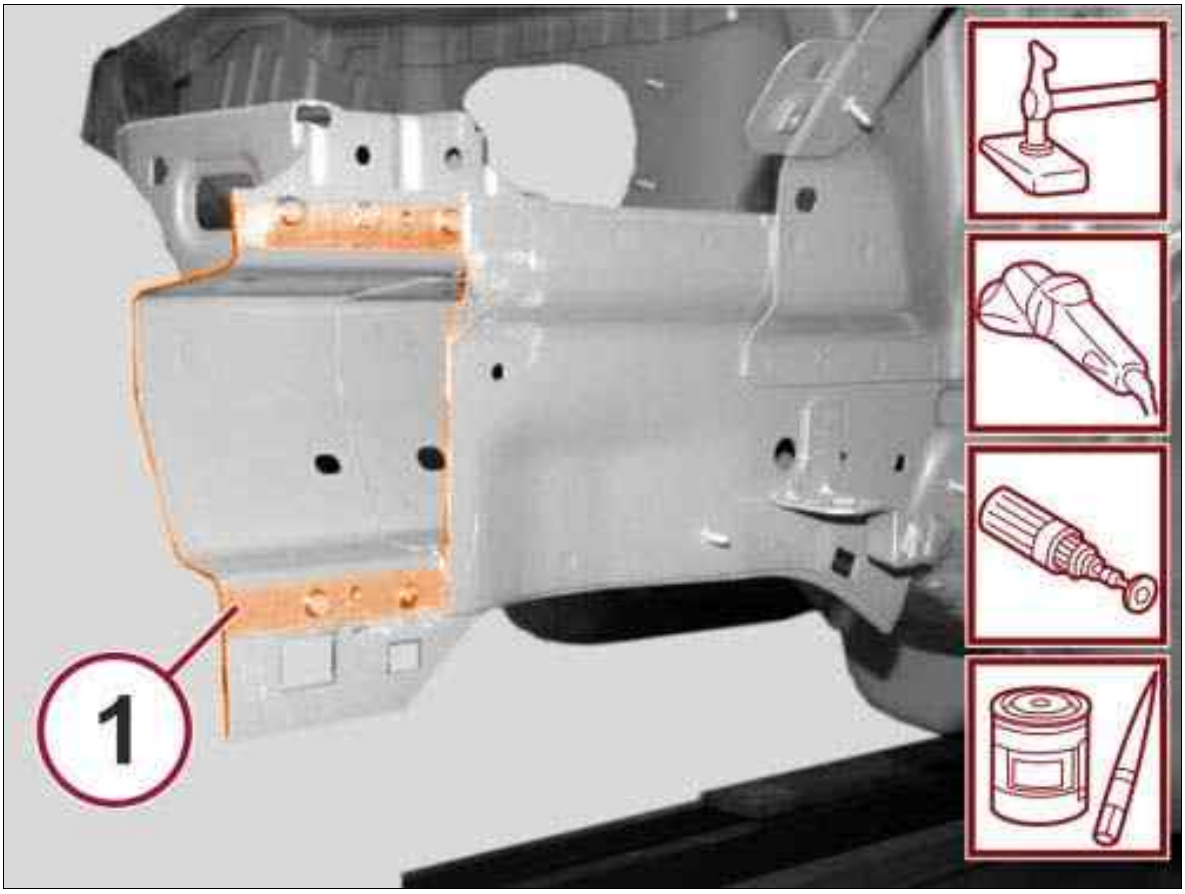
Fig 2: Front Frame Rail Sectioning Removal (2 Of 3)



Courtesy of CHRYSLER GROUP, LLC

7. Use the jigsaw along the cut line (1) shown in the illustration.
8. With the use of a drill, release the spot welds (2) shown in the illustration.
9. Use a chisel and hammer to remove the welds previously released.
10. Remove the cut parts from the vehicle.

Fig 3: Front Frame Rail Sectioning Removal (3 Of 3)

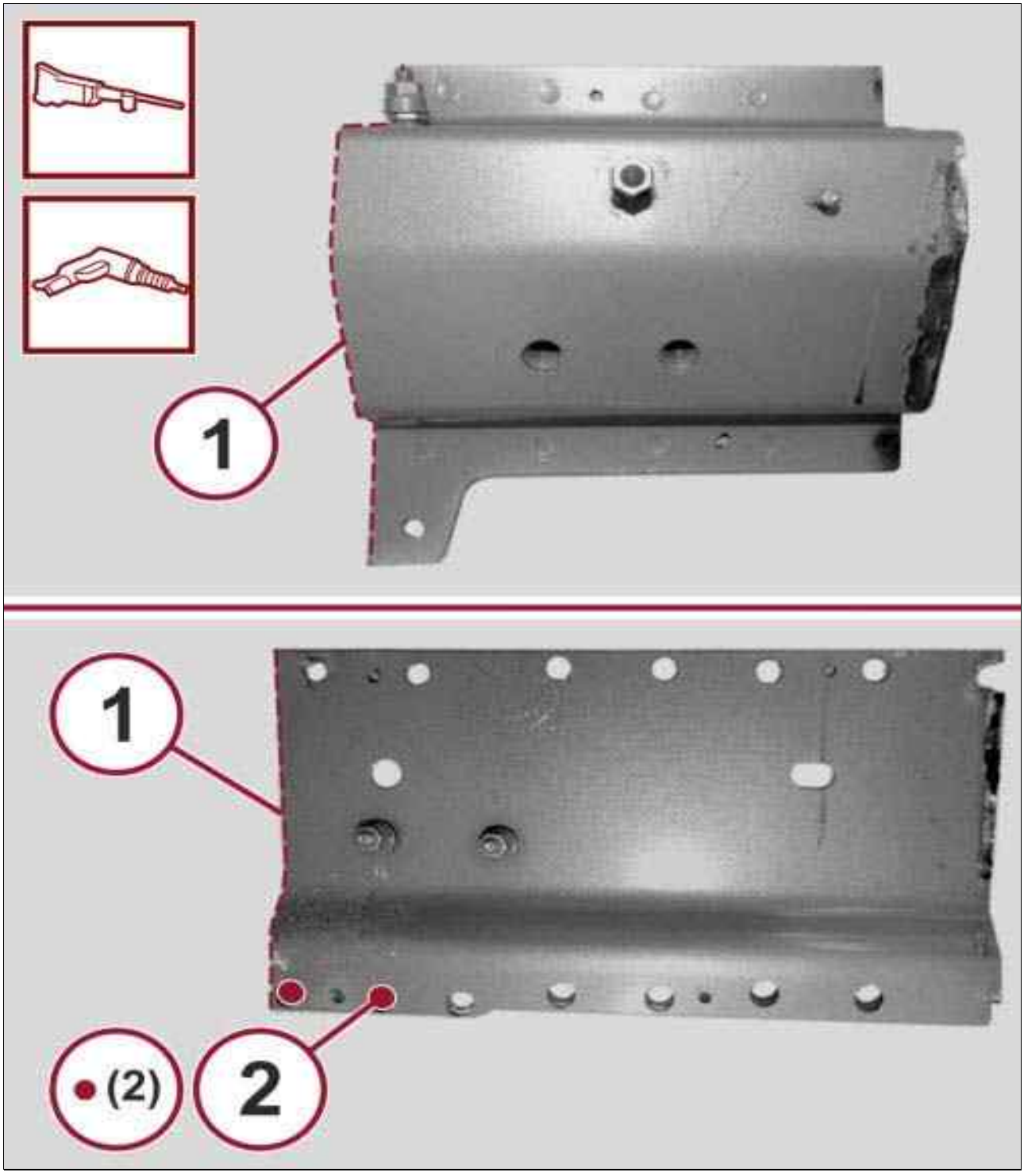


Courtesy of CHRYSLER GROUP, LLC

11. With the use of a hammer and dolly block, straighten the edges of the mating components.
12. With the use of a grinding wheel, remove any residue of the spot welds.
13. Use a rotary brush and clean the previously treated areas.
14. Apply electro-weldable paint/weld through primer to the areas (1) to be welded.

BODY STRUCTURE > RAIL, FRONT FRAME > REMOVAL AND INSTALLATION > SECTIONING REMOVAL AND INSTALLATION > INSTALLATION

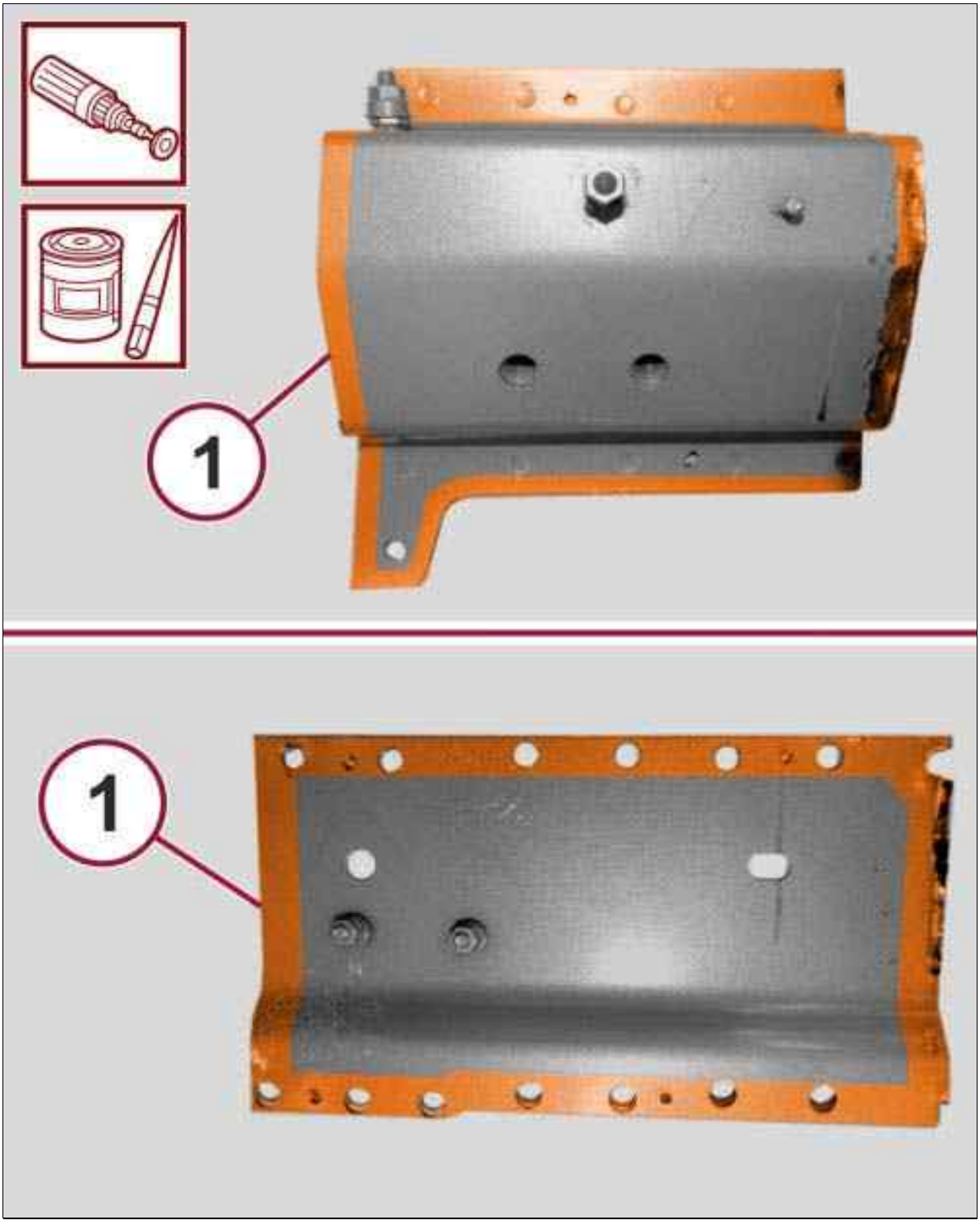
Fig 1: Front Frame Rail Sectioning Installation (1 Of 7)



Courtesy of CHRYSLER GROUP, LLC

1. Use the jigsaw and cut the parts along the cut lines (1) shown in the illustration and adjust them as necessary.
2. Use a drill to drill holes in the parts at locations shown in the illustration (2).

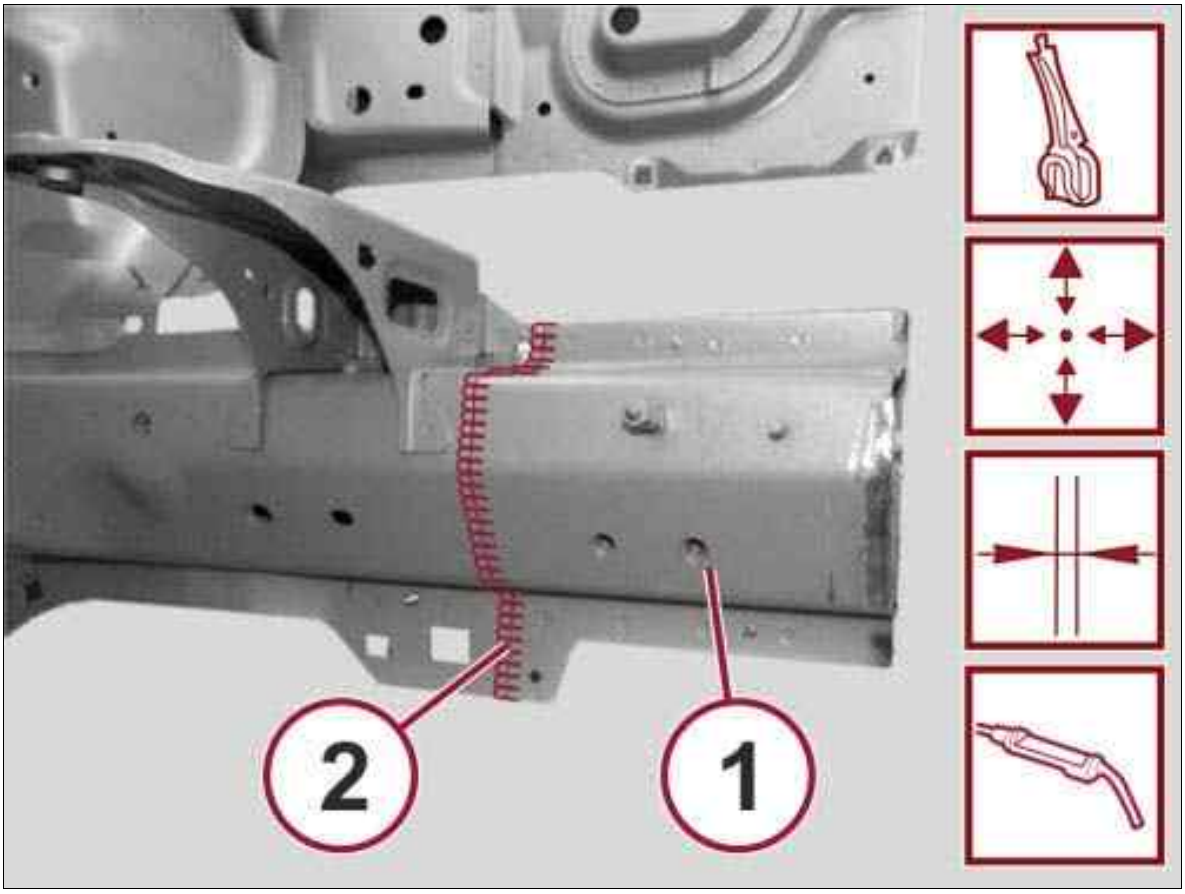
Fig 2: Front Frame Rail Sectioning Installation (2 Of 7)



Courtesy of CHRYSLER GROUP, LLC

3. Remove the anti-corrosion treatment from the entire perimeter (1) of the inner and outer part using a rotary brush.
4. Apply elctro-weldable paint/weld through primer to the areas involved.

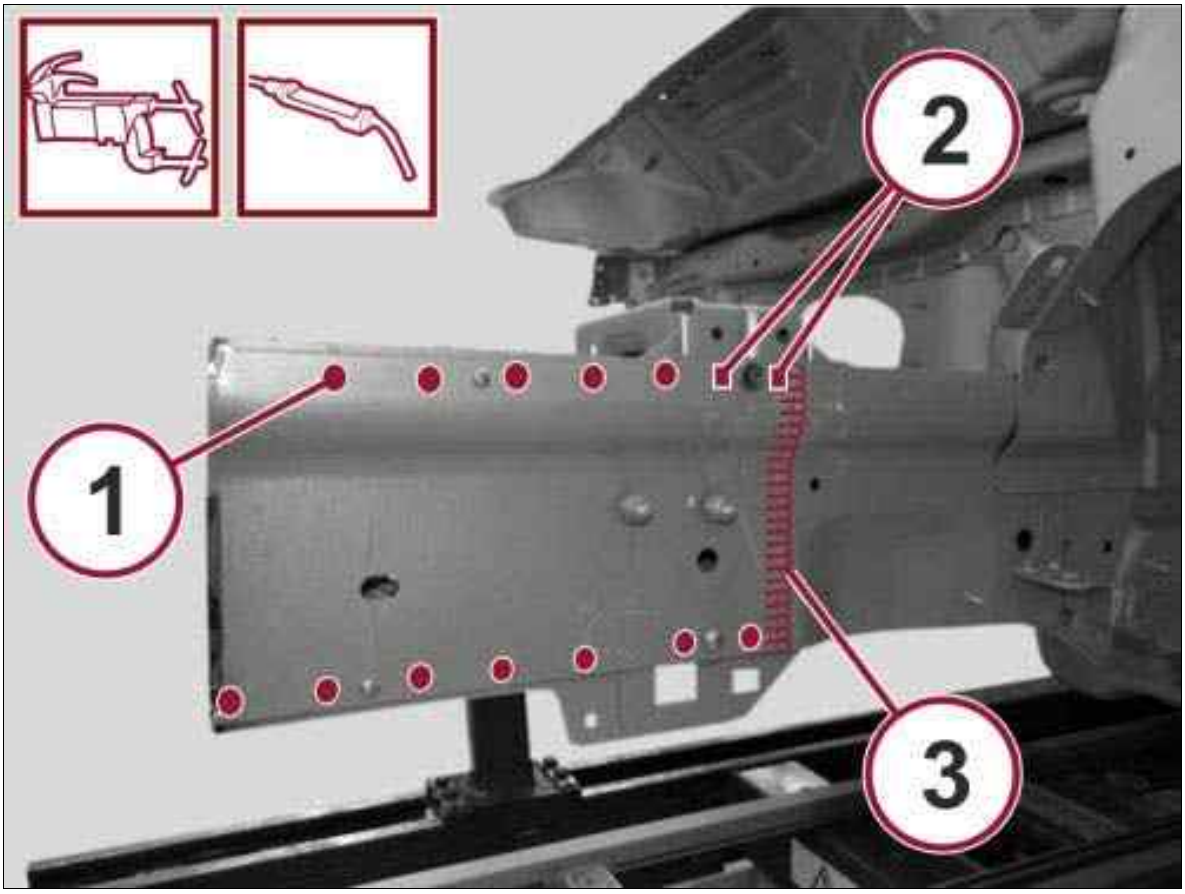
Fig 3: Front Frame Rail Sectioning Installation (3 Of 7)



Courtesy of CHRYSLER GROUP, LLC

5. Position the parts (1) correctly on the vehicle and secure it with the self-locking clamps.
6. Check alignment and surrounding gaps.
7. Use a MIG welder to seam-weld along the joint areas (2).

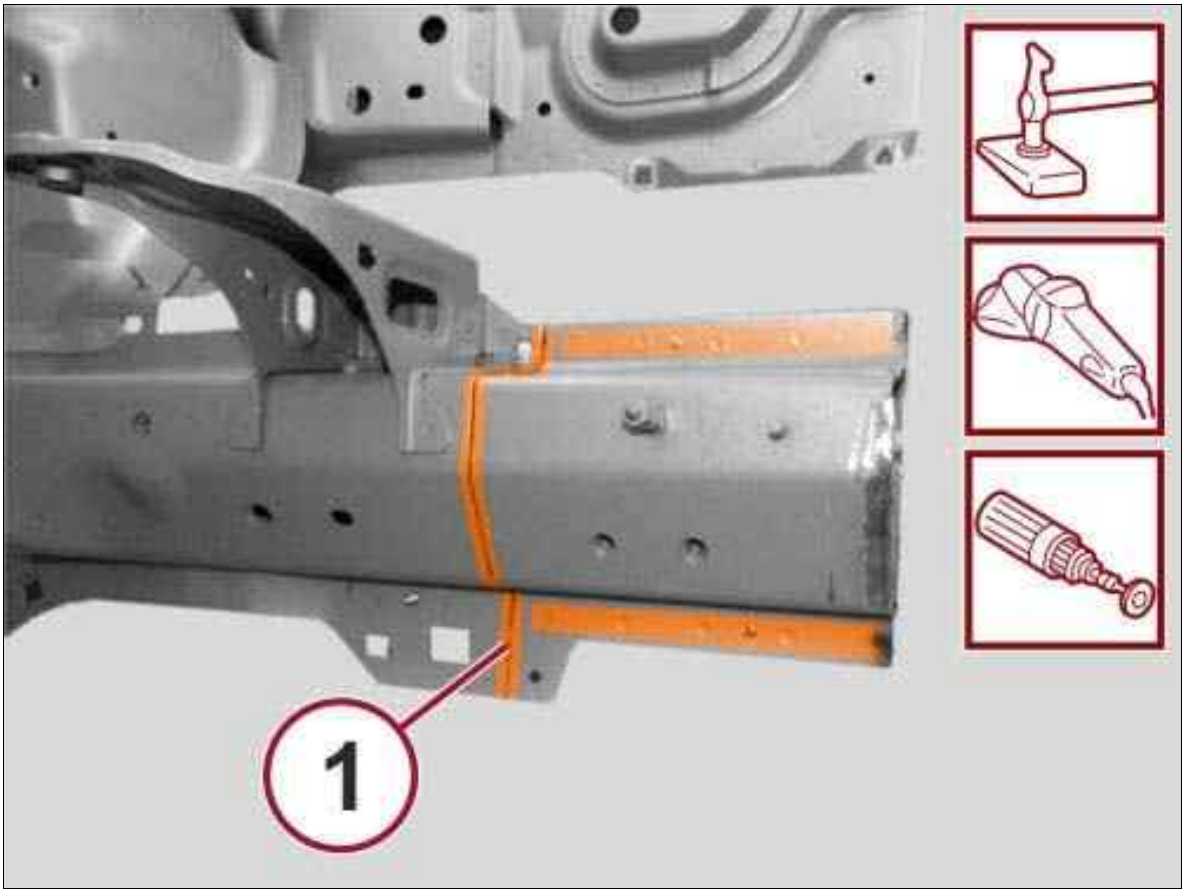
Fig 4: Front Frame Rail Sectioning Installation (4 Of 7)



Courtesy of CHRYSLER GROUP, LLC

8. Use a spot welder to perform the spot welds (1) where indicated.
9. With the use of a MIG welder, apply plug welds to fill in the holes (2) made previously.
10. Use a MIG welder to seam-weld along the joint area (3).

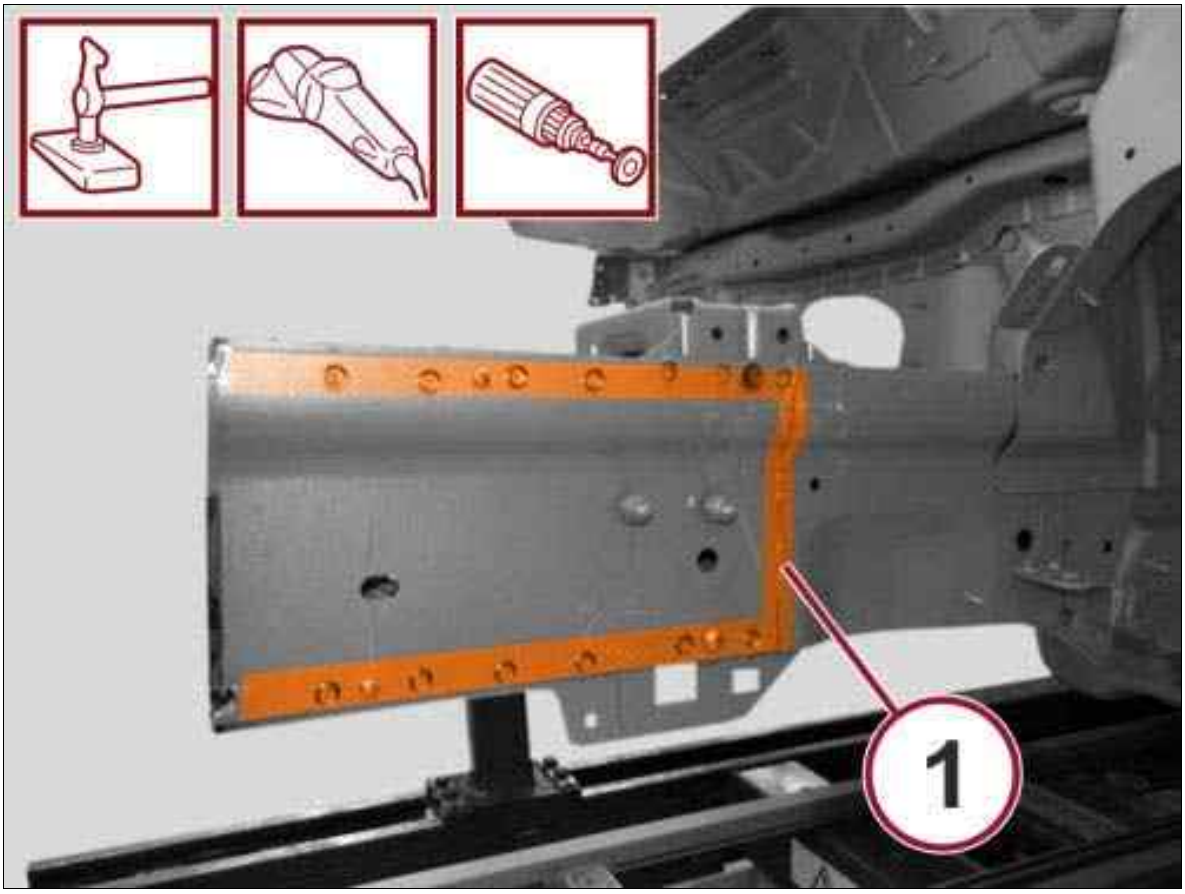
Fig 5: Front Frame Rail Sectioning Installation (5 Of 7)



Courtesy of CHRYSLER GROUP, LLC

11. Correct any distortions to the sheet metal using a hammer and dolly block.
12. Use a grinding wheel to smooth the welds along the perimeter (1).
13. Use a rotary brush to clean the previously welded areas.

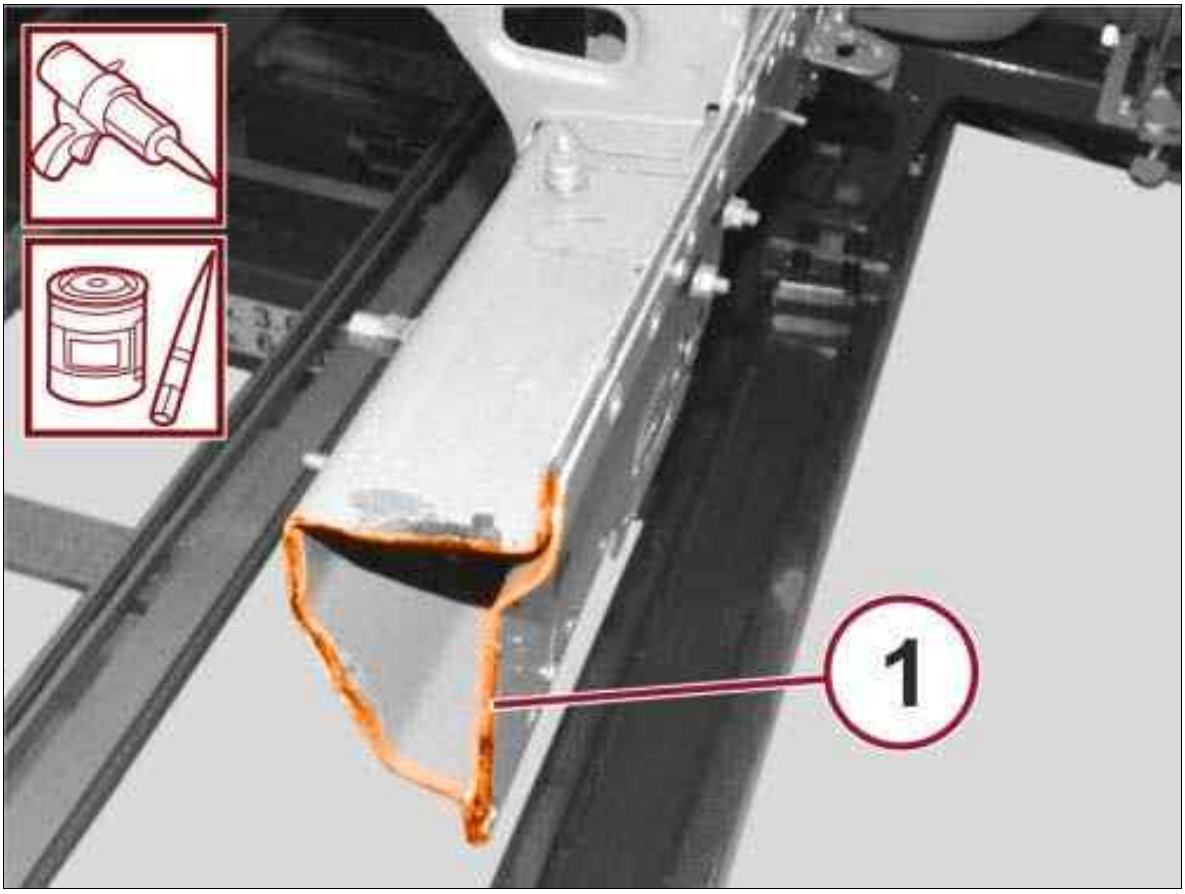
Fig 6: Front Frame Rail Sectioning Installation (6 Of 7)



Courtesy of CHRYSLER GROUP, LLC

14. Correct any distortions to the sheet metal using a hammer and dolly block.
15. Use a grinding wheel to smooth the welds along the perimeter (1).
16. Use a rotary brush to clean the previously welded areas.

Fig 7: Front Frame Rail Sectioning Installation (7 Of 7)



Courtesy of CHRYSLER GROUP, LLC

17. Apply corrosion protection to the areas involved in the welding.
18. Apply elctro-weldable paint/weld through primer to the ends of the parts (1).
19. Instal the front siderail plate. Refer to PLATE, FRONT SIDERAIL, REMOVAL AND INSTALLATION .

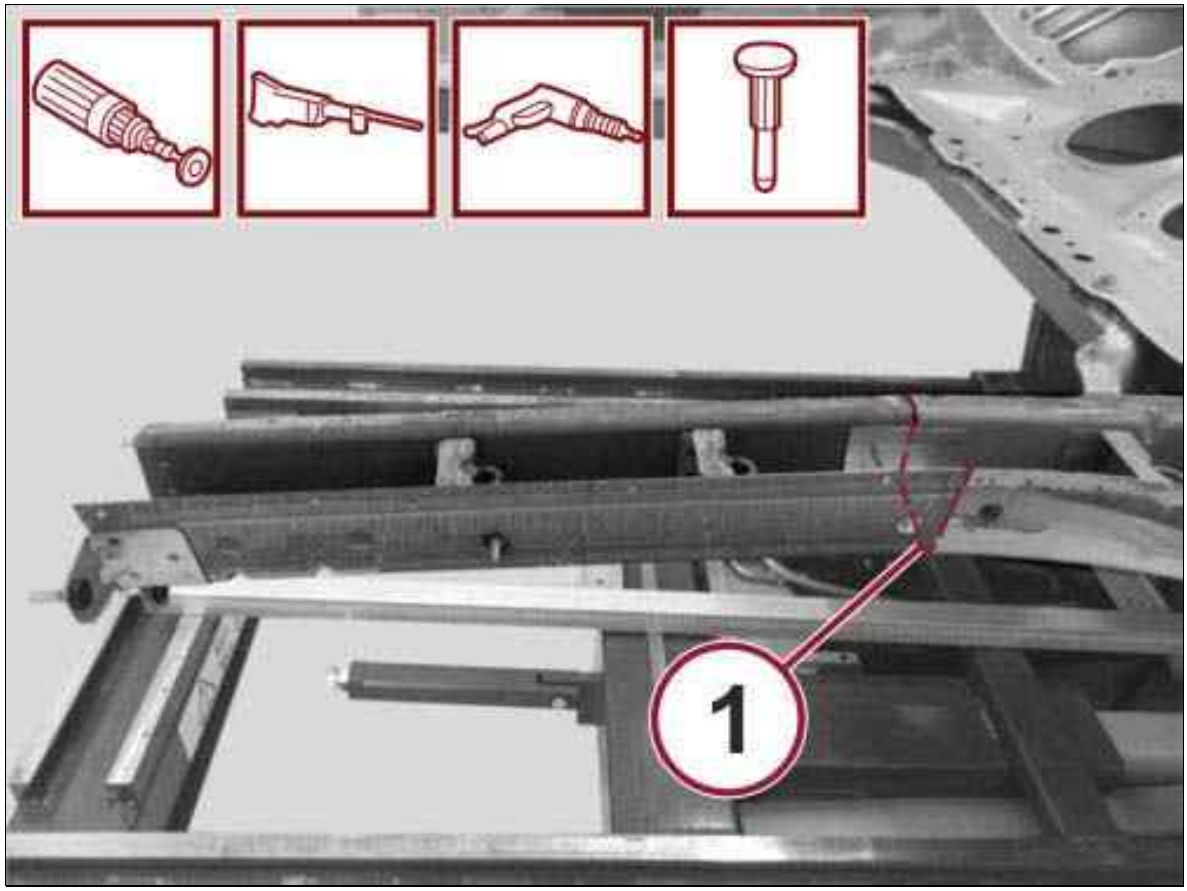
BODY STRUCTURE > RAIL, REAR FRAME > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

1. Remove the rear closure panel. Refer to PANEL, REAR CLOSURE, REMOVAL AND INSTALLATION .
2. Remove the taillamp mounting panel. Refer to PANEL, TAILLAMP MOUNTING, REMOVAL AND INSTALLATION .
3. Remove the rear floor pan. Refer to PAN, FLOOR, REMOVAL AND INSTALLATION .
4. Remove the rear floor pan extension. Refer to REAR FLOOR PAN EXTENSION REMOVAL AND INSTALLATION .
5. Remove the rear inner wheelhouse. Refer to WHEELHOUSE, REAR, REMOVAL AND

INSTALLATION .

6. Remove the quarter panel extension. Refer to QUARTER PANEL EXTENSION REMOVAL AND INSTALLATION .
7. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
8. Straighten the body as necessary.

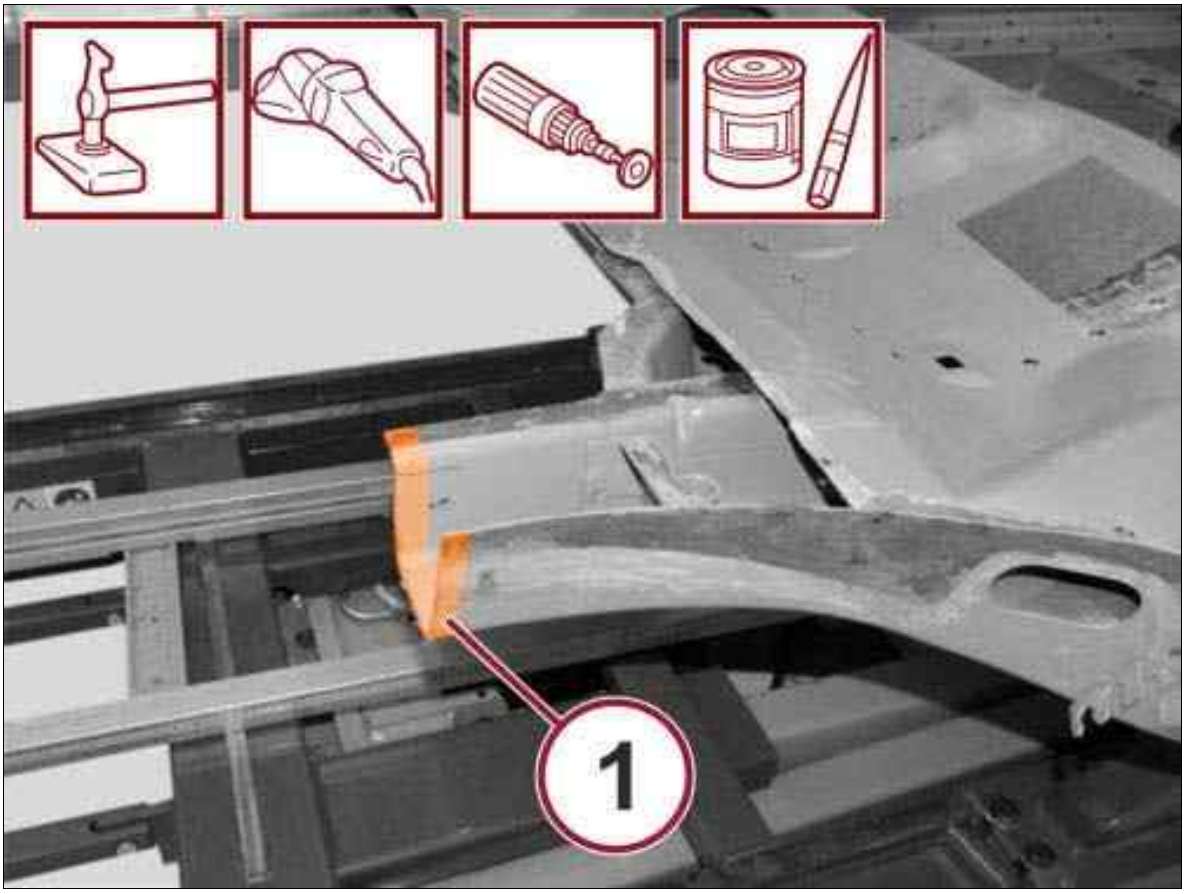
Fig 1: Rear Frame Rail Removal (1 Of 2)



Courtesy of CHRYSLER GROUP, LLC

9. With the use of a rotary brush, remove the paint and gain access to the spot welds.
10. Use the jigsaw along the cut line (1) shown in the illustration.
11. With the use of a drill, release the spot welds.
12. Use a chisel and hammer to remove the welds previously released.
13. Remove the rear frame rail and trimmings from the vehicle.

Fig 2: Rear Frame Rail Removal (2 Of 2)

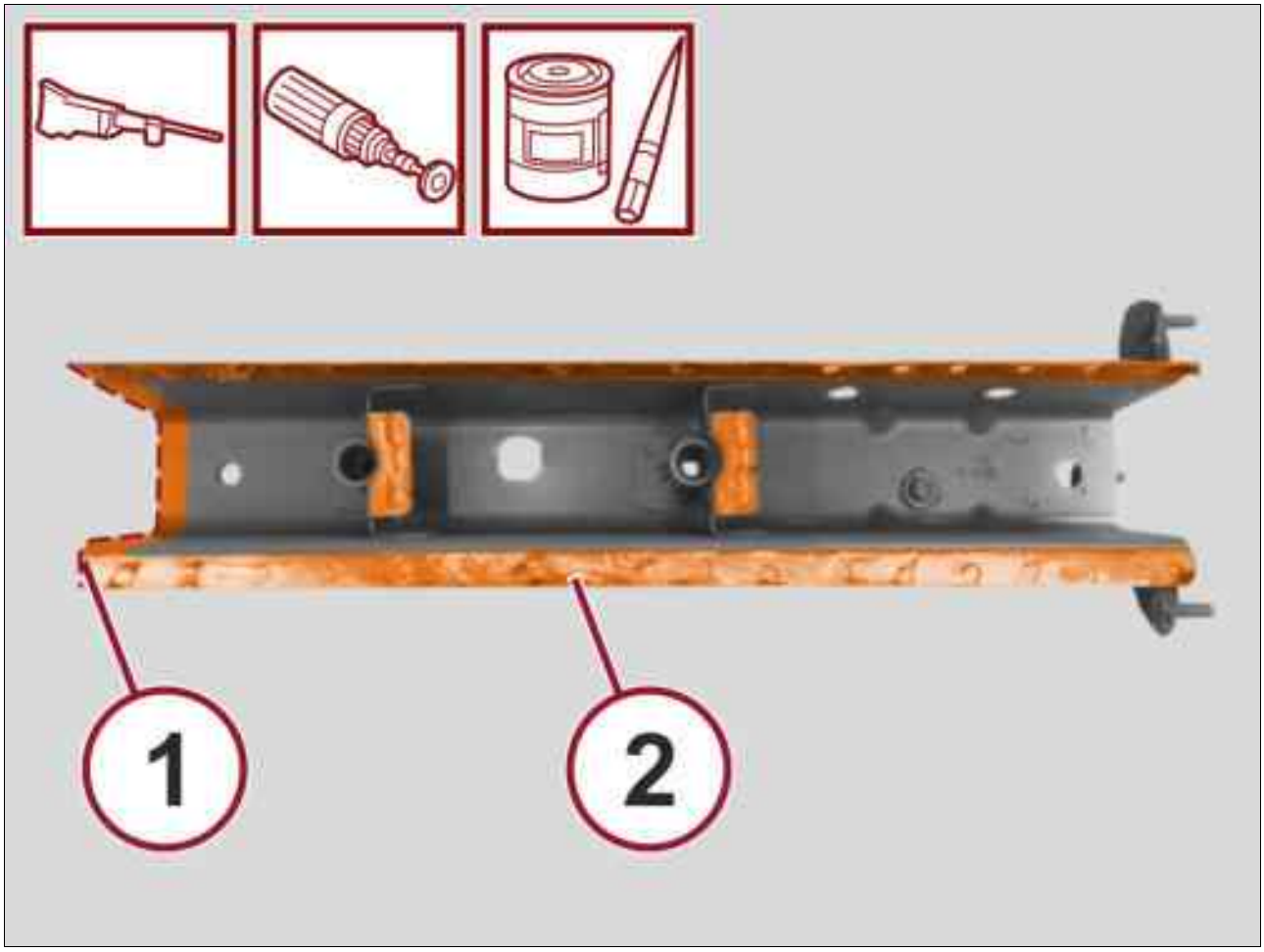


Courtesy of CHRYSLER GROUP, LLC

14. With the use of a hammer and dolly block, straighten the edges of the mating components.
15. With the use of a disc grinder, remove any residue of the spot welds.
16. With the use of a rotary brush, clean the previously treated areas.
17. Apply electro-weldable paint/weld through primer to the areas (1) to be welded.

BODY STRUCTURE > RAIL, REAR FRAME > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Rear Frame Rail Installation (1 Of 3)



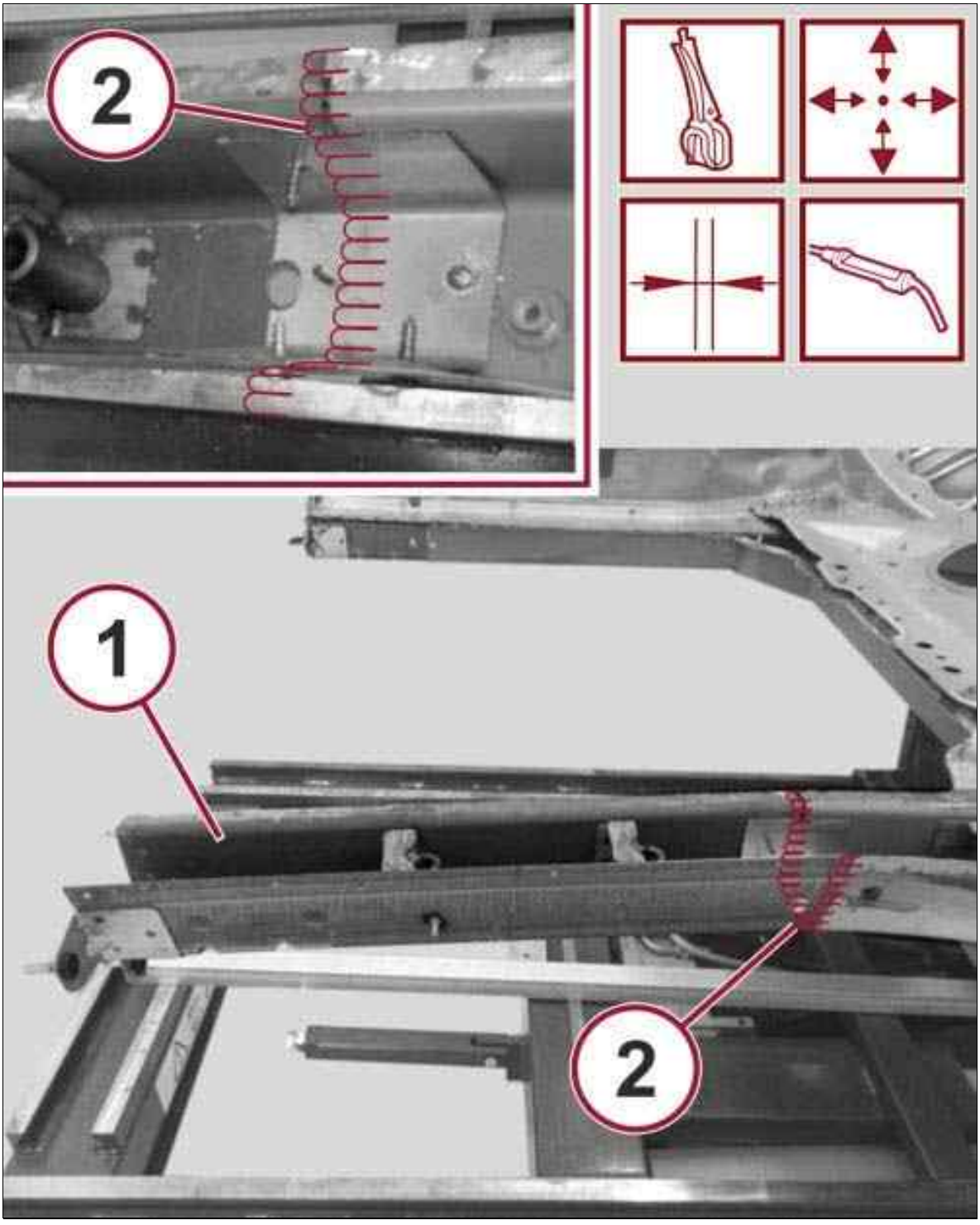
Courtesy of CHRYSLER GROUP, LLC

NOTE:

Be certain to leave the service panel long enough to allow for overlapping.

1. Cut the service rear frame rail along the cut line (1), being certain to leave enough length on the part to allow for overlapping.
2. Remove the anti-corrosion treatment from the entire perimeter (2) of the inner and outer part using a rotary brush.
3. Apply elctro-weldable paint/weld through primer to the areas involved.

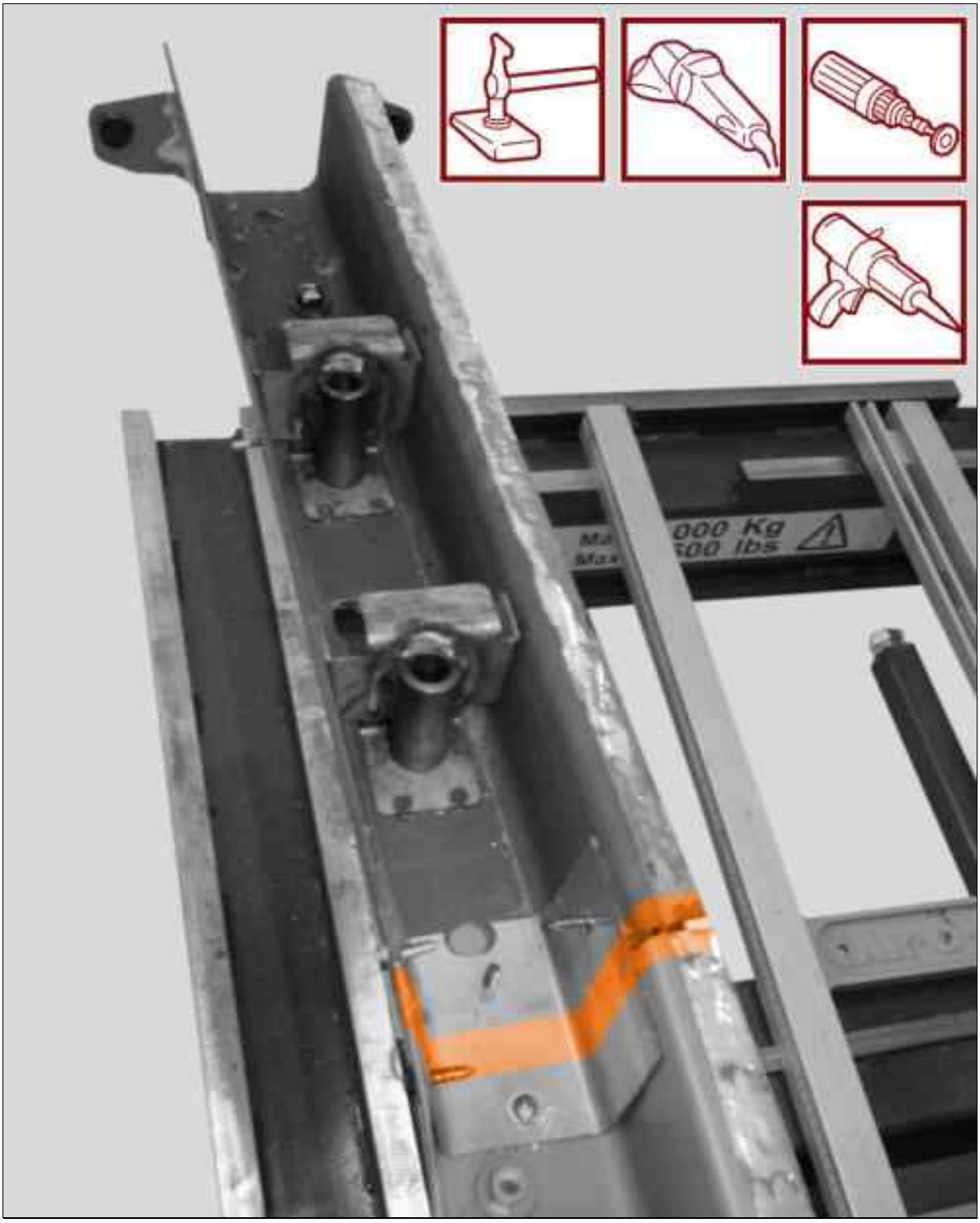
Fig 2: Rear Frame Rail Installation (2 Of 3)



Courtesy of CHRYSLER GROUP, LLC

4. Position the part (1) correctly on the vehicle and secure it with the self-locking clamps.
5. Check alignment and surrounding gaps.
6. Use a MIG welder to seam-weld along the area (2) indicated in the illustration.

Fig 3: Rear Frame Rail Installation (3 Of 3)



Courtesy of CHRYSLER GROUP, LLC

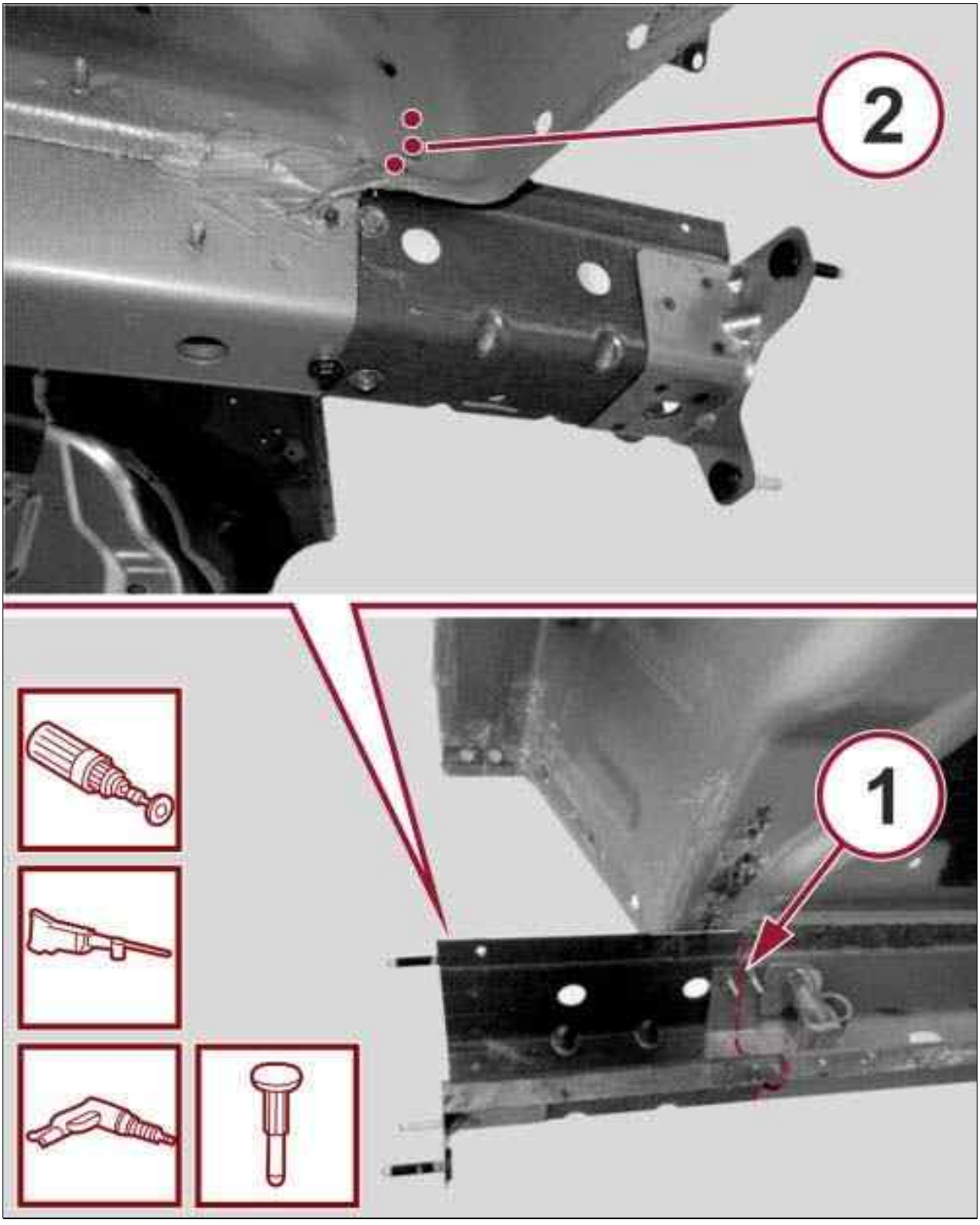
7. Correct any distortions to the sheet metal using a hammer and dolly block.
8. Use a grinding disc to smooth the welds.
9. Use a rotary brush to clean the previously welded areas.
10. Apply corrosion protection to the areas involved in the welding.

11. Seal the seams between the parts and the vehicle.
12. Install the rear floor pan extension. Refer to REAR FLOOR PAN EXTENSION REMOVAL AND INSTALLATION .
13. Install the rear floor pan. Refer to PAN, FLOOR, REMOVAL AND INSTALLATION .
14. Install the quarter panel extension. Refer to QUARTER PANEL EXTENSION REMOVAL AND INSTALLATION .
15. Install the rear inner wheelhouse. Refer to WHEELHOUSE, REAR, REMOVAL AND INSTALLATION .
16. Install the taillamp mounting panel. Refer to PANEL, TAILLAMP MOUNTING, REMOVAL AND INSTALLATION .
17. Install the rear closure panel. Refer to PANEL, REAR CLOSURE, REMOVAL AND INSTALLATION .

BODY STRUCTURE > RAIL, REAR FRAME > REMOVAL AND INSTALLATION > SECTIONING REMOVAL AND INSTALLATION > REMOVAL

1. Remove the rear closure panel. Refer to PANEL, REAR CLOSURE, REMOVAL AND INSTALLATION .
2. Remove the rear floor pan. Refer to PAN, FLOOR, REMOVAL AND INSTALLATION .
3. Remove the rear floor pan extension. Refer to REAR FLOOR PAN EXTENSION REMOVAL AND INSTALLATION .
4. Remove the rear wheelhouse reinforcement. Refer to REINFORCEMENT REAR WHEELHOUSE REMOVAL AND INSTALLATION .
5. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
6. Straighten the body as necessary.

Fig 1: Rear Frame Rail Sectioning Removal (1 Of 2)

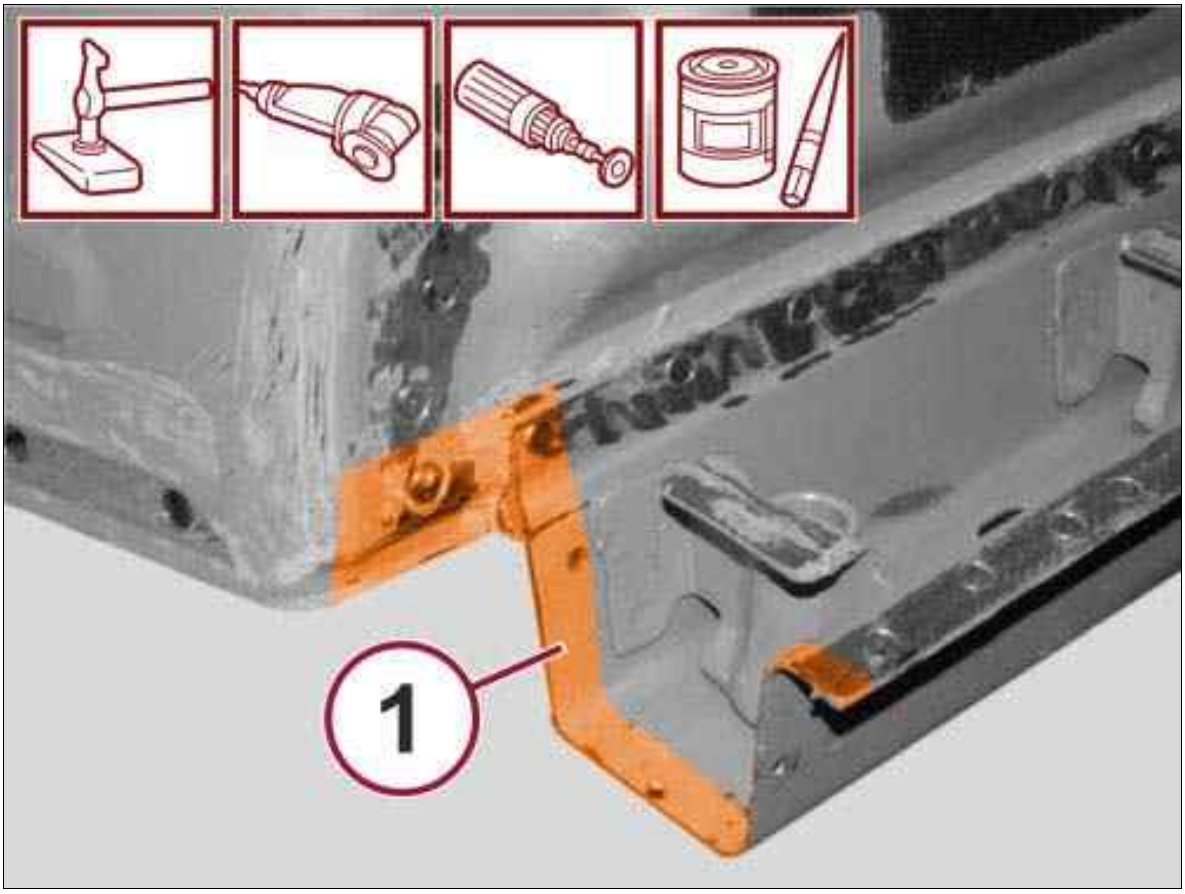


Courtesy of CHRYSLER GROUP, LLC

7. With the use of a rotary brush, remove the paint and gain access to the spot welds.
8. Use the jigsaw along the cut line (1) shown in the illustration.
9. With the use of a drill, release the spot welds (2).
10. Use a chisel and hammer to remove the welds previously released.

11. Remove the part from the vehicle.

Fig 2: Rear Frame Rail Sectioning Removal (2 Of 2)

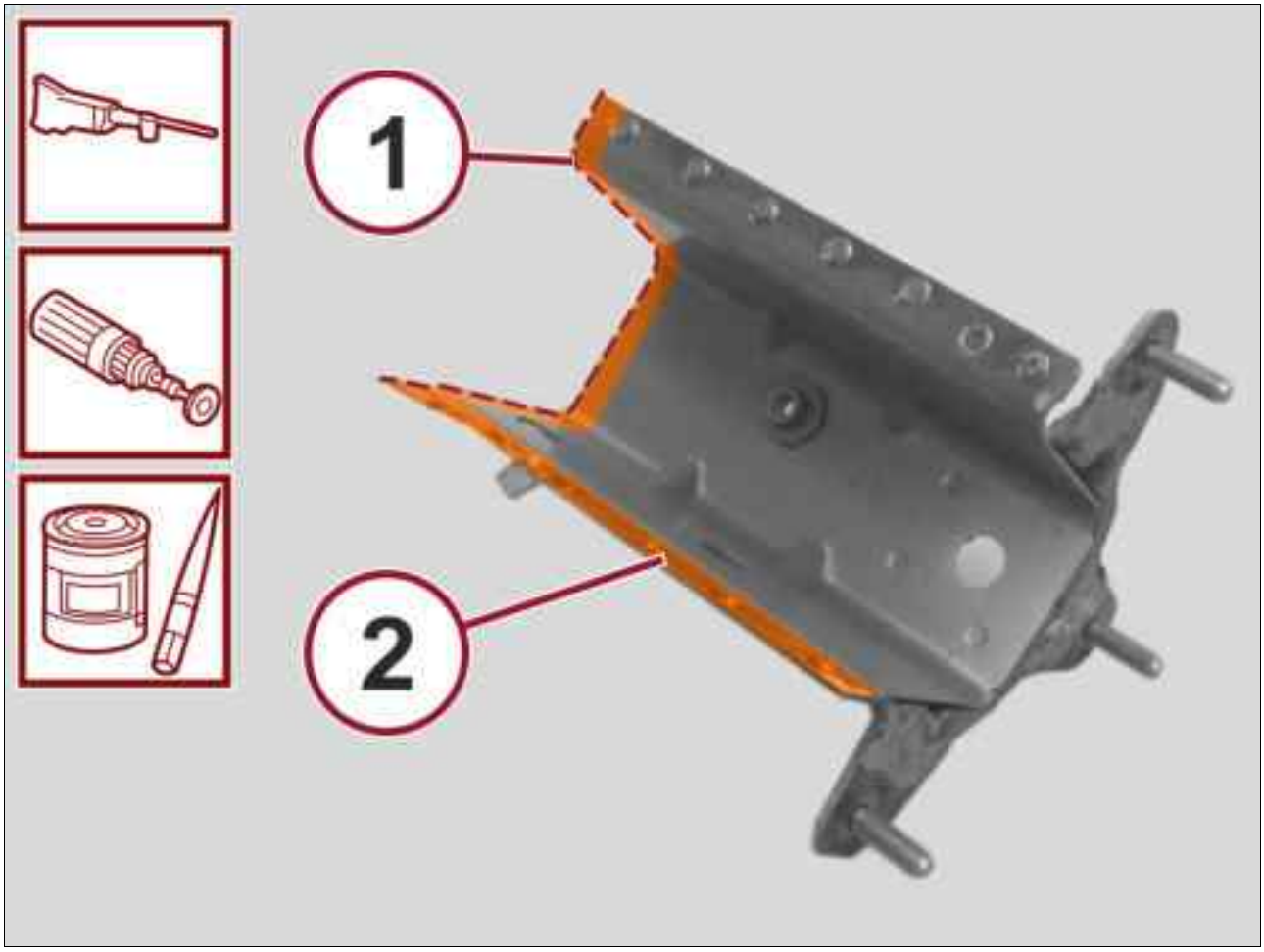


Courtesy of CHRYSLER GROUP, LLC

12. With the use of a hammer and dolly block, straighten the edges of the mating components.
13. With the use of a disc grinder, remove any residue of the spot welds.
14. With the use of a rotary brush, clean the previously treated areas.
15. Apply electro-weldable paint/weld through primer to the areas (1) to be welded.

BODY STRUCTURE > RAIL, REAR FRAME > REMOVAL AND INSTALLATION > SECTIONING REMOVAL AND INSTALLATION > INSTALLATION

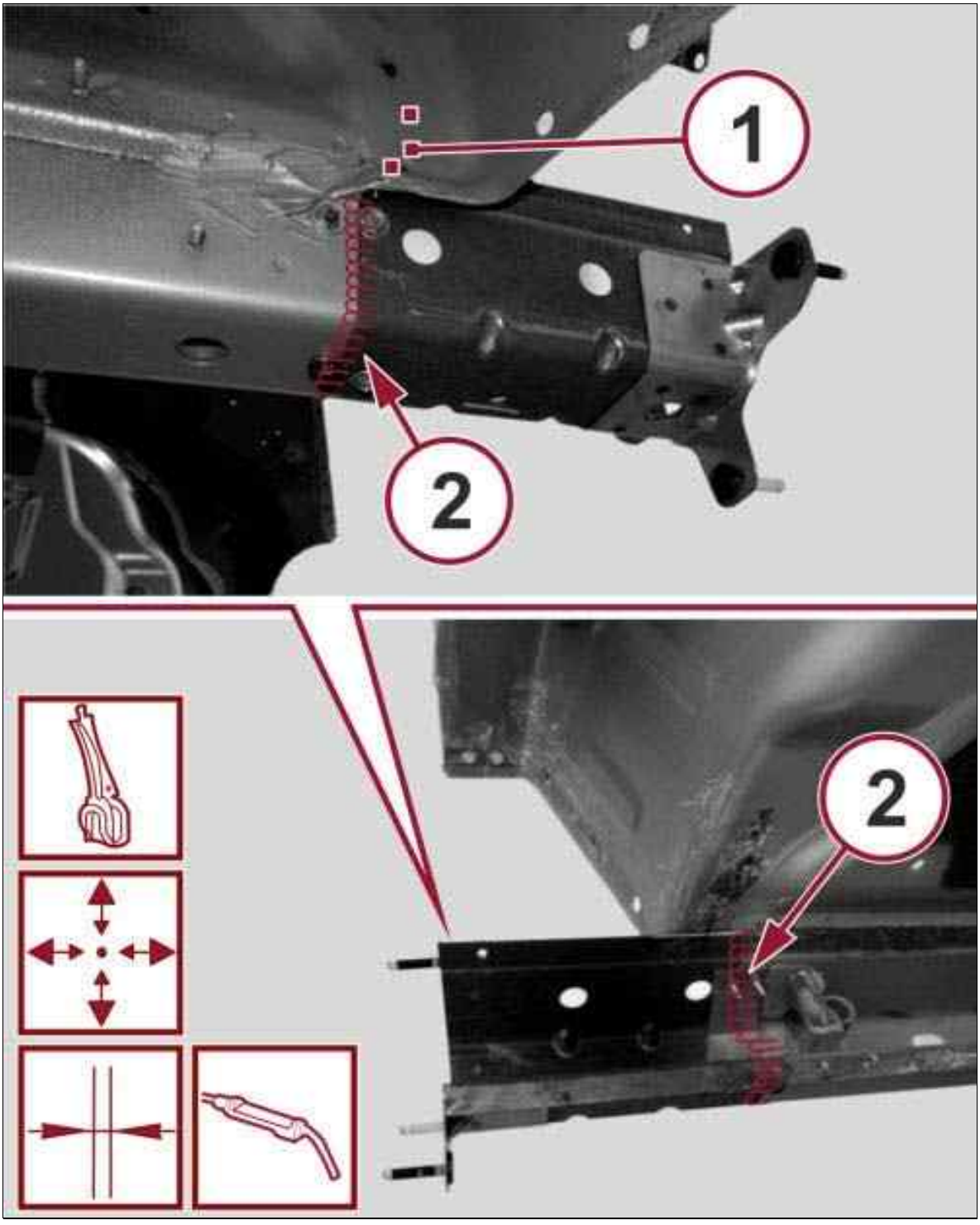
Fig 1: Rear Frame Rail Sectioning Installation (1 Of 3)



Courtesy of CHRYSLER GROUP, LLC

1. Cut the service rear frame rail along the cut line (1), respecting the need to maintain a section of sheet metal for layering.
2. Remove the anti-corrosion treatment from the entire perimeter (2) of the inner and outer part using a rotary brush.
3. Apply elctro-weldable paint/weld through primer to the areas involved.

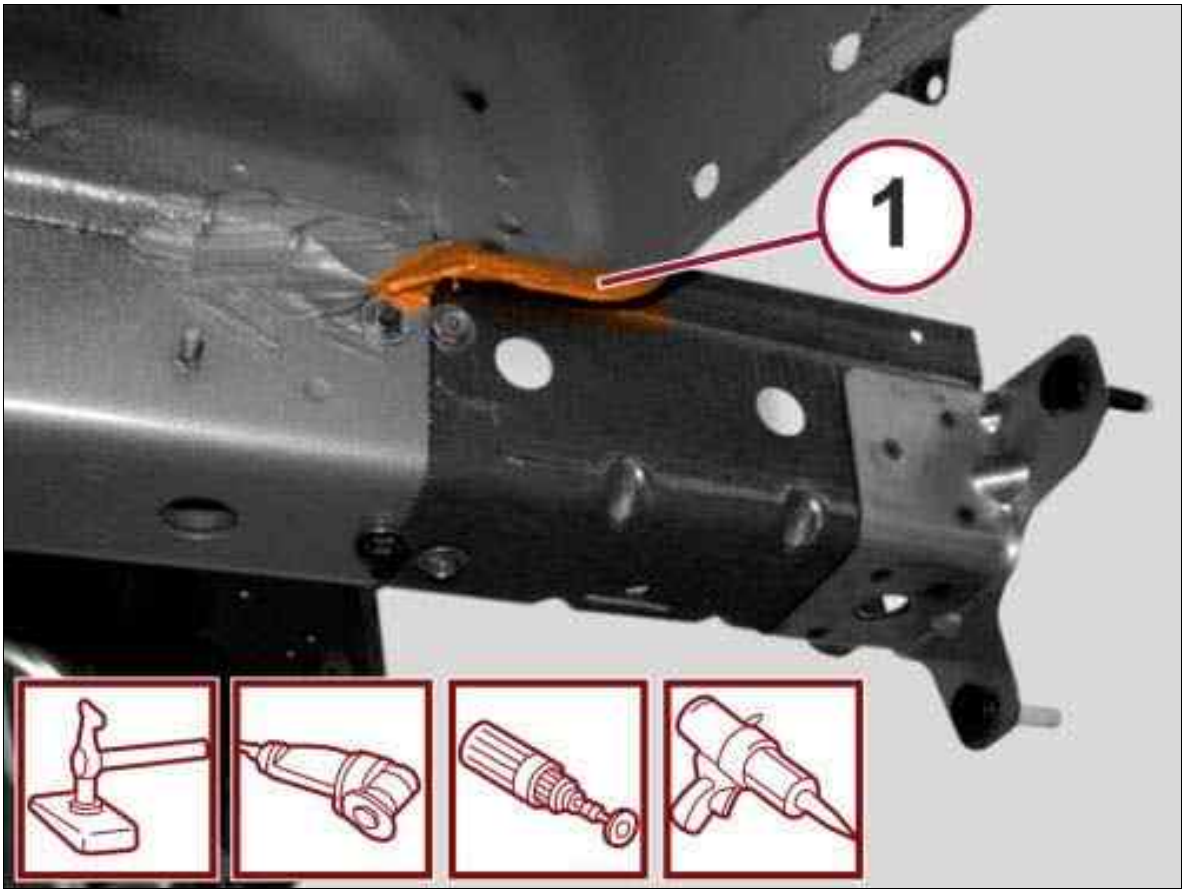
Fig 2: Rear Frame Rail Sectioning Installation (2 Of 3)



Courtesy of CHRYSLER GROUP, LLC

4. Position the part correctly on the vehicle and secure it with the self-locking clamps.
5. Check alignment and surrounding gaps.
6. With the use of a MIG welder, apply plug welds filling on the areas (1) in the illustration.
7. Using a MIG welder, seam-weld along the area (2) indicated in the illustration.

Fig 3: Rear Frame Rail Sectioning Installation (3 Of 3)



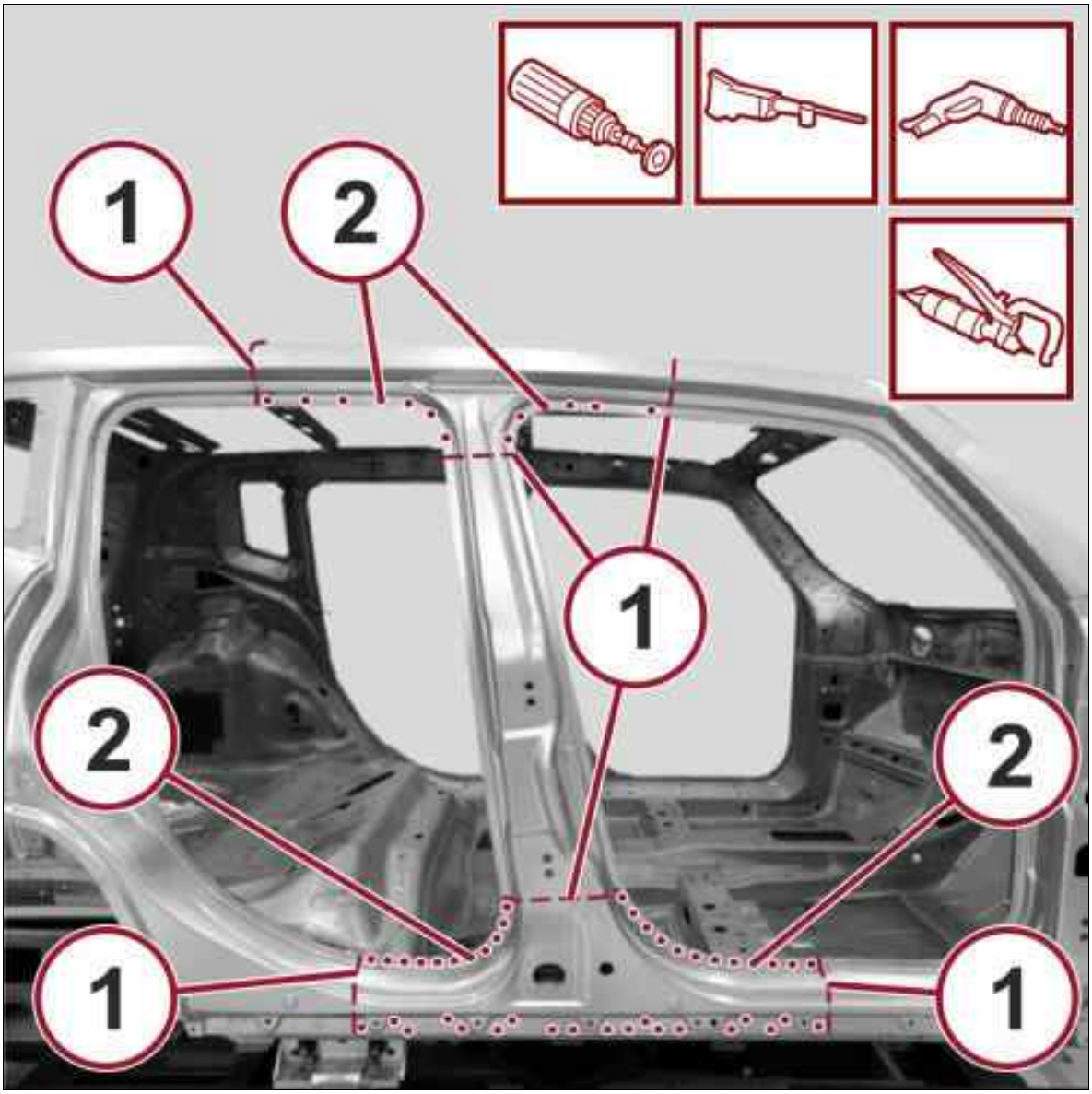
Courtesy of CHRYSLER GROUP, LLC

8. Correct any distortions to the sheet metal using a hammer and dolly block.
9. Use a grinding disc to smooth the welds.
10. Use a rotary brush to clean the previously welded areas.
11. Apply corrosion protection to the areas involved in the welding.
12. Seal the seams between the parts and the vehicle, in the areas (1) shown in the illustration.
13. Install the rear floor pan extension. Refer to REAR FLOOR PAN EXTENSION REMOVAL AND INSTALLATION .
14. Install the rear floor pan. Refer to PAN, FLOOR, REMOVAL AND INSTALLATION .
15. Install the rear wheelhouse reinforcement. Refer to REINFORCEMENT REAR WHEELHOUSE REMOVAL AND INSTALLATION .
16. Install the rear closure panel. Refer to PANEL, REAR CLOSURE, REMOVAL AND INSTALLATION .

BODY STRUCTURE > REINFORCEMENT, B-PILLAR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

1. Remove the roof panel. Refer to PANEL, ROOF, REMOVAL AND INSTALLATION .
2. Remove the roof bow. Refer to REMOVAL AND INSTALLATION .
3. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
4. Straighten the body as necessary.

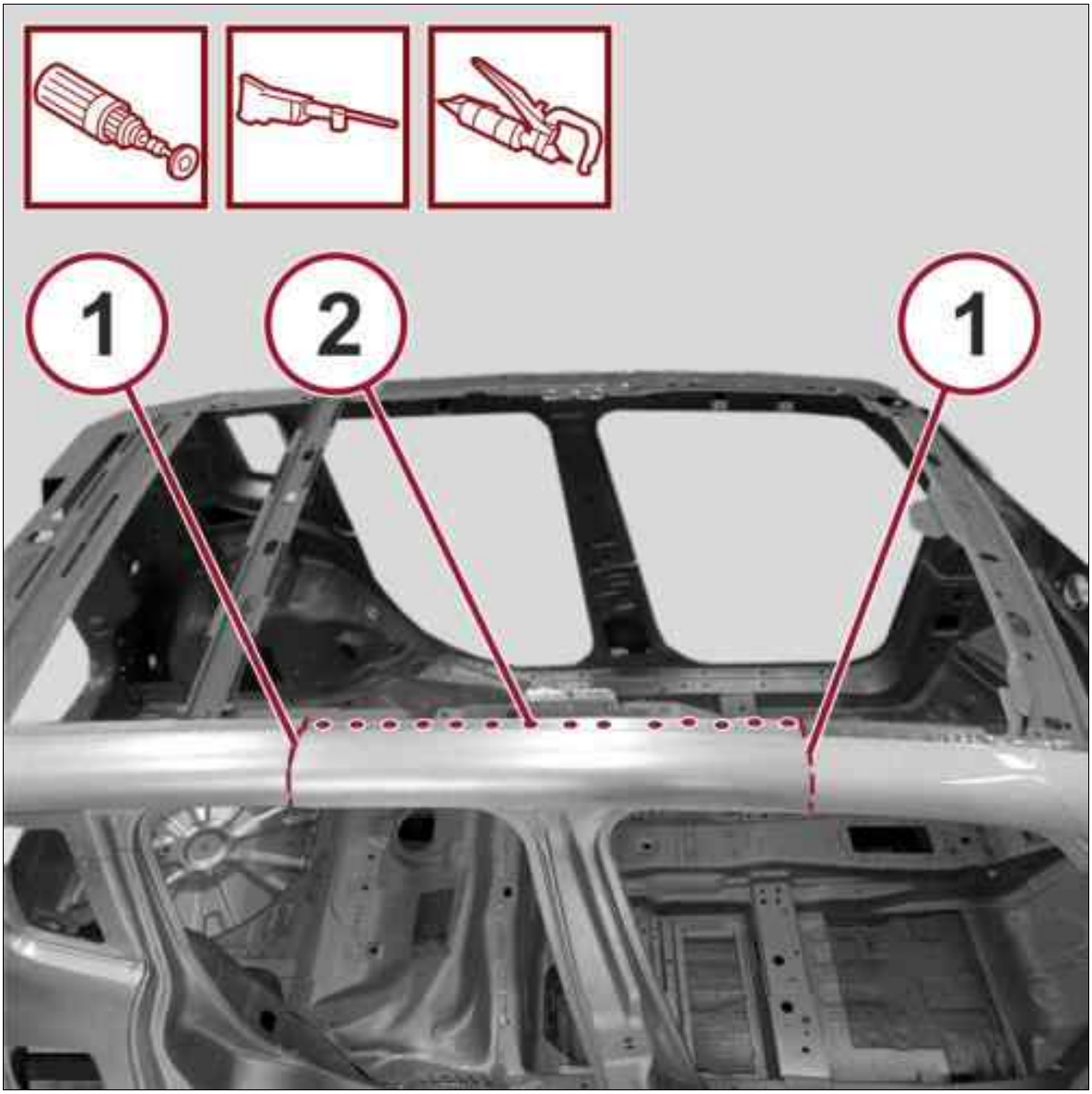
   Fig 1: B-Pillar Reinforcement Removal (1 Of 5)



Courtesy of CHRYSLER GROUP, LLC

5. With the use of a rotary brush, remove the paint and gain access to the spot welds.
6. With the use of a jigsaw, cut along the cut lines (1) shown in the illustration.
7. With the use of a spot weld cutting tool, release the spot welds (2).
8. With the use of a drill, release the spot welds that can not be accessed with the spot weld cutting tool.

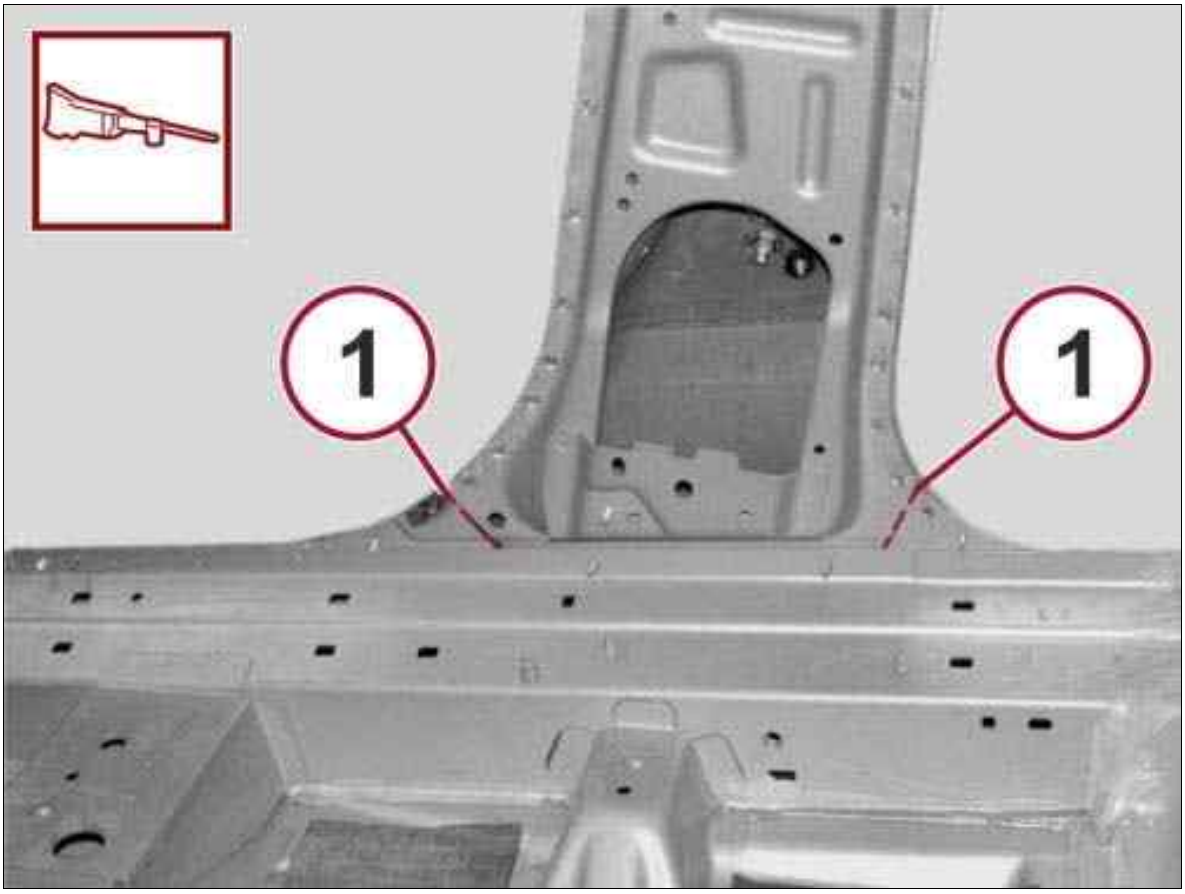
Fig 2: B-Pillar Reinforcement Removal (2 Of 5)



Courtesy of CHRYSLER GROUP, LLC

9. With the use of a rotary brush, remove the paint and gain access to the spot welds.
10. With the use of a jigsaw, cut along the cut lines (1) shown in the illustration.
11. With the use of a spot weld cutting tool, release the spot welds (2).

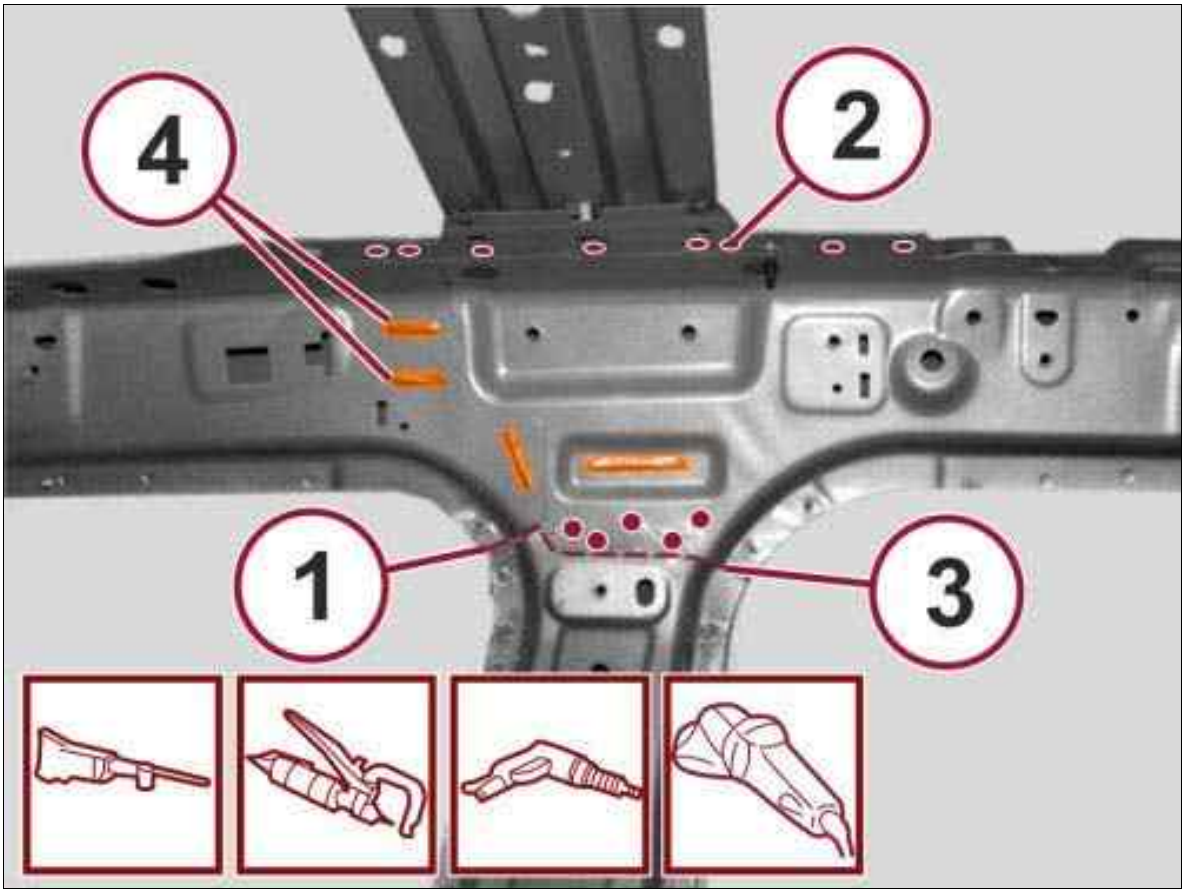
Fig 3: B-Pillar Reinforcement Removal (3 Of 5)



Courtesy of CHRYSLER GROUP, LLC

12. With the use of a jigsaw, cut along the cut lines (1) shown in the illustration.

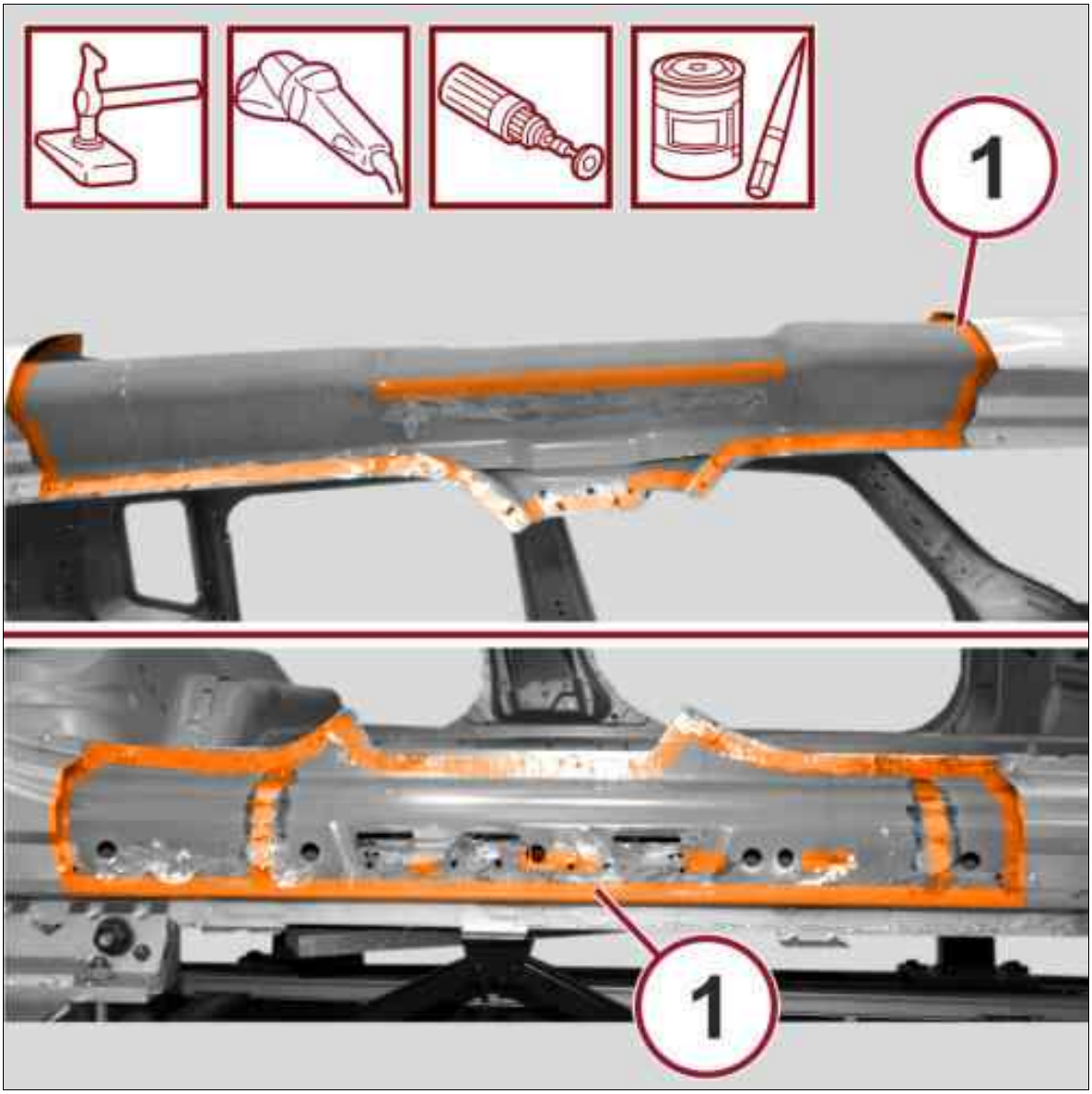
Fig 4: B-Pillar Reinforcement Removal (4 Of 5)



Courtesy of CHRYSLER GROUP, LLC

13. With the use of a jigsaw, cut along the cut lines (1) shown in the illustration.
14. With the use of a spot weld cutting tool, release the spot welds (2) shown in the illustration.
15. With the use of a drill, release the spot welds (3) shown in the illustration.
16. With the use of a grinding wheel remove the welds (4) shown in the illustration.

Fig 5: B-Pillar Reinforcement Removal (5 Of 5)

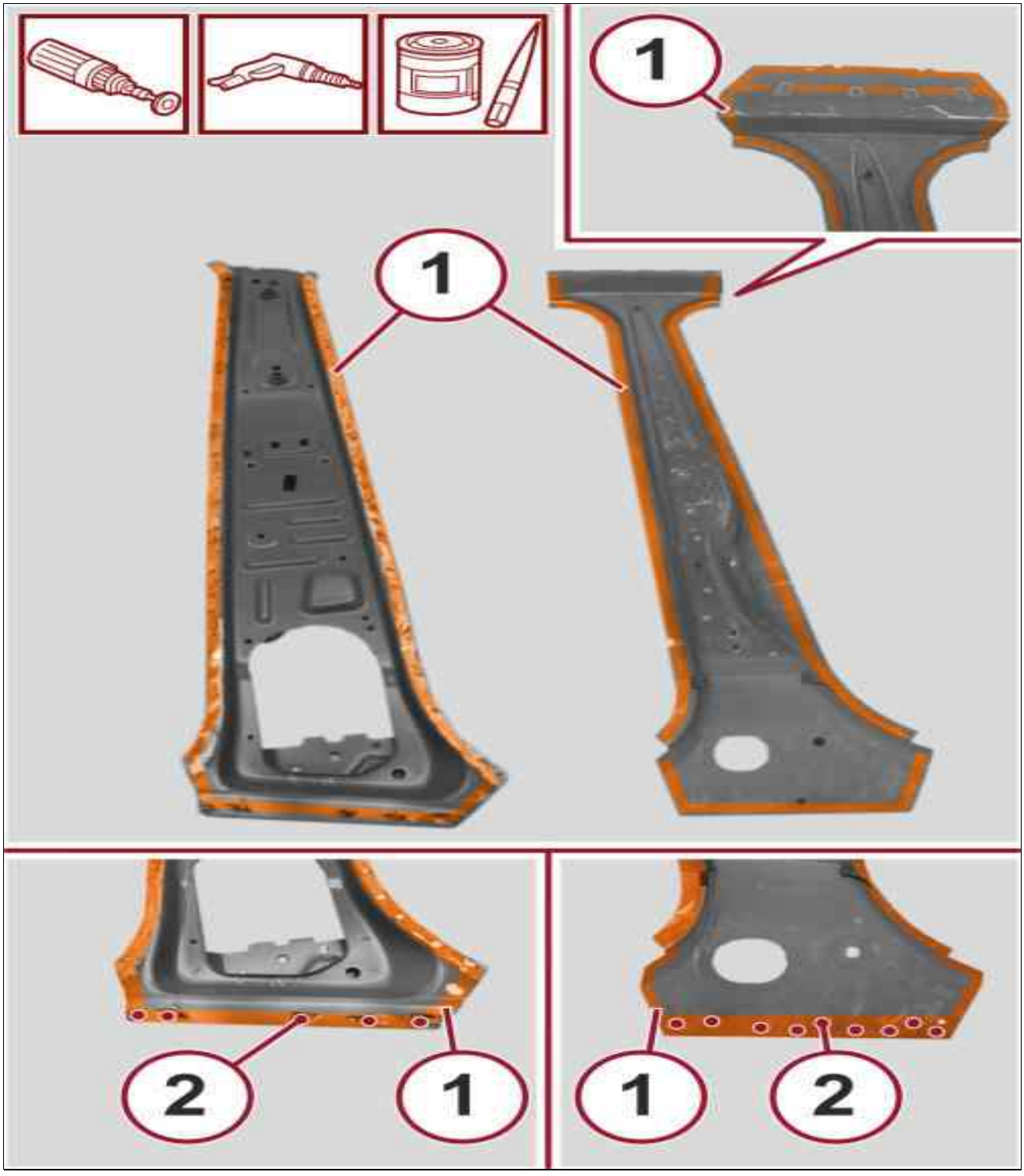


Courtesy of CHRYSLER GROUP, LLC

17. With the use of a hammer and dolly block, straighten the edges of the mating components.
18. With the use of a disc grinder, remove any residue of the spot welds.
19. With the use of a rotary brush, clean the previously treated areas.
20. Apply electro-weldable paint/weld through primer to the areas (1) to be welded.

BODY STRUCTURE > REINFORCEMENT, B-PILLAR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

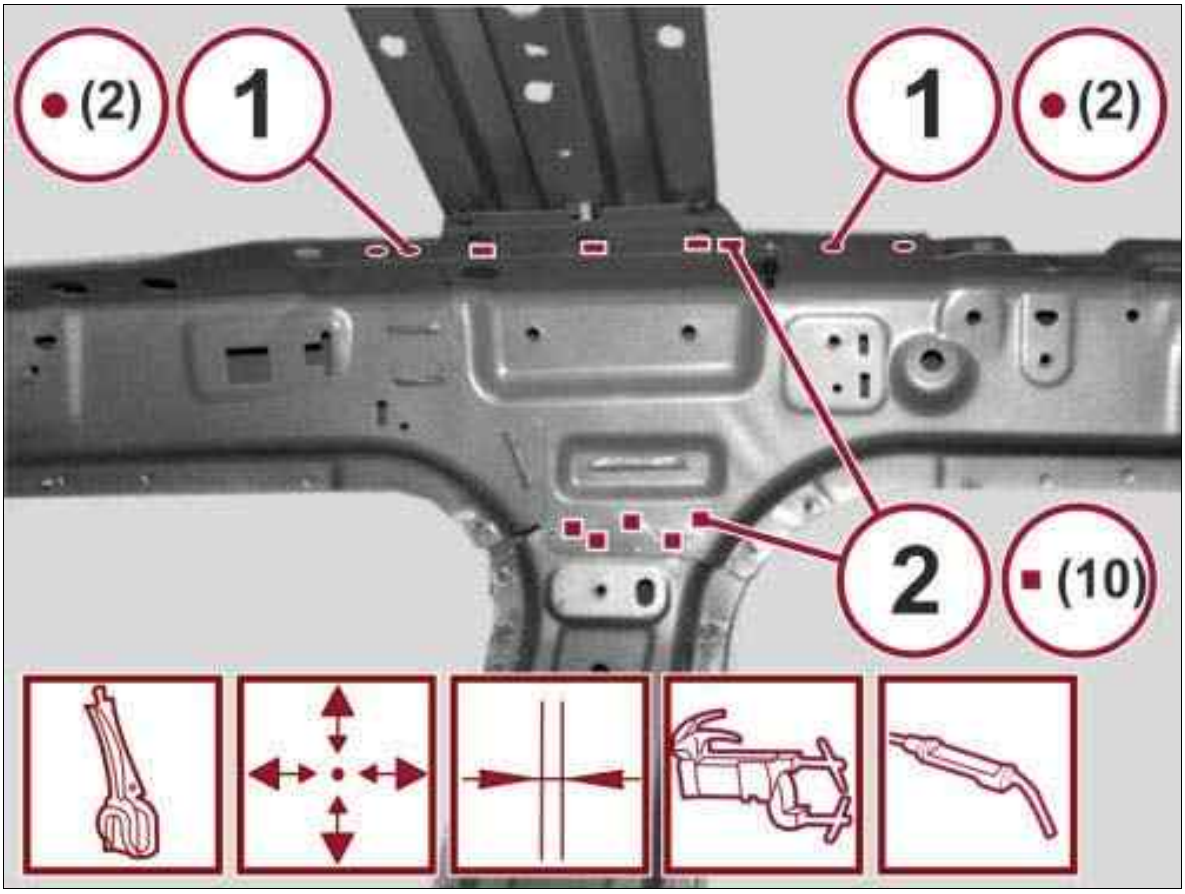
Fig 1: B-Pillar Reinforcement Installation (1 Of 7)



Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the entire perimeter (1) of the inner and outer part using a rotary brush.
2. With the use of a drill, drill holes (2) in the areas shown in the illustration.
3. Apply elctro-weldable paint/weld through primer to the boarders involved with welding.

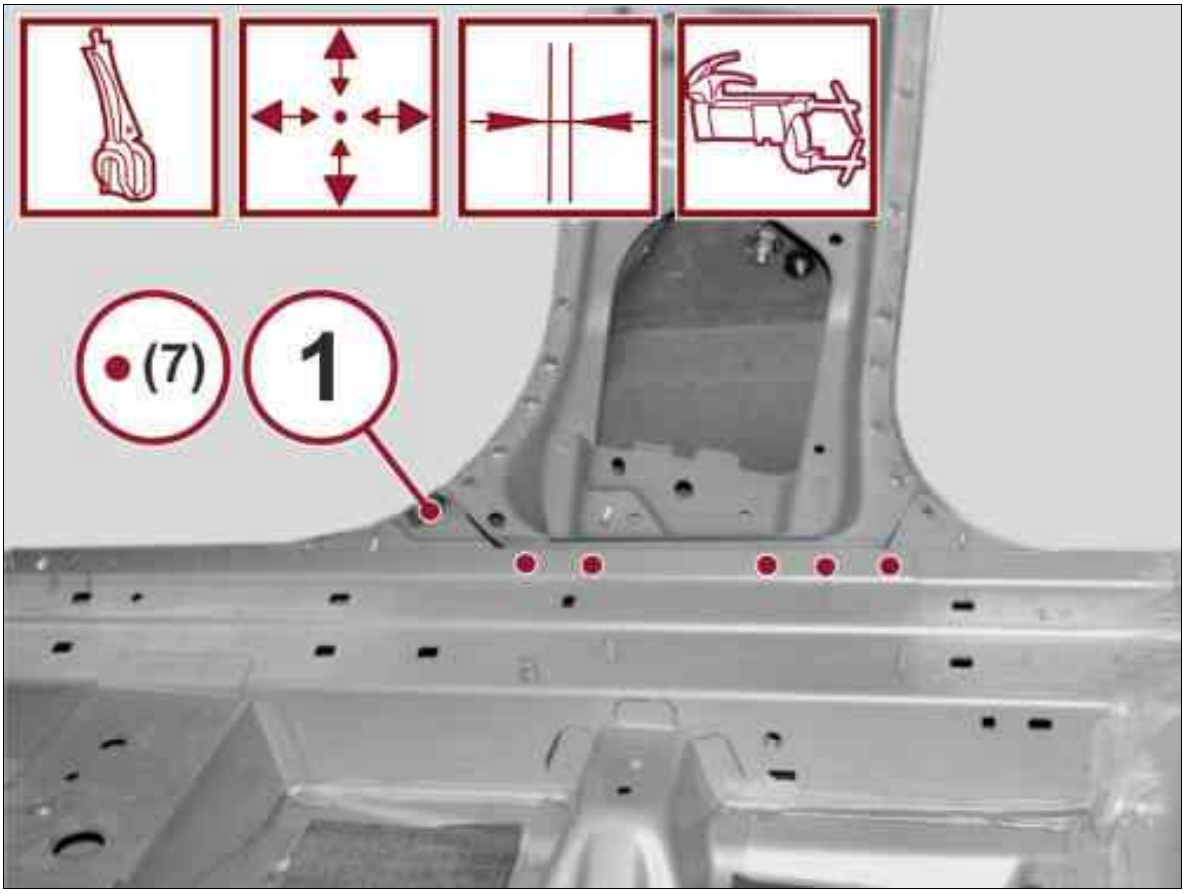
Fig 2: B-Pillar Reinforcement Installation (2 Of 7)



Courtesy of CHRYSLER GROUP, LLC

4. Correct any distortions to the sheet metal using a hammer and dolly block.
5. Use a grinding disc to smooth the welds.
6. Use a rotary brush to clean the previously welded areas.
7. Apply corrosion protection to the areas involved in the welding.
8. Position the service part correctly on the interior pillar and secure it with the self-locking clamps.
9. Check alignment and surrounding gaps.
10. With the use of a spot welder, apply spot welds to the areas (1) indicated in the illustration.
11. With the use of a MIG welder, apply weld to the areas (2) indicated in the illustration.

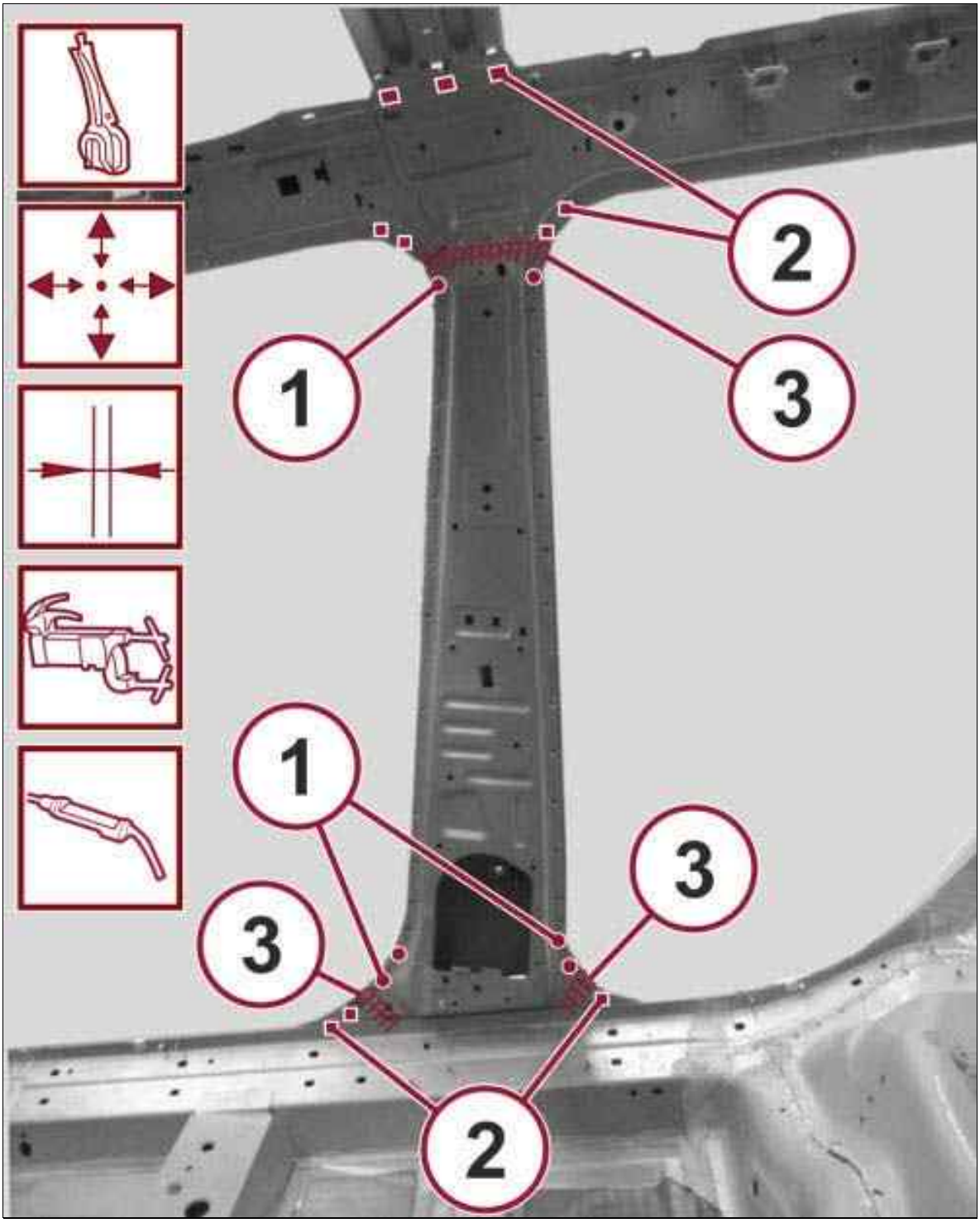
Fig 3: B-Pillar Reinforcement Installation (3 Of 7)



Courtesy of CHRYSLER GROUP, LLC

12. Position the service part correctly on the interior pillar and secure it with the self-locking clamps.
13. Check alignment and surrounding gaps.
14. With the use of a spot welder, apply spot welds to the areas (1) indicated in the illustration.

Fig 4: B-Pillar Reinforcement Installation (4 Of 7)

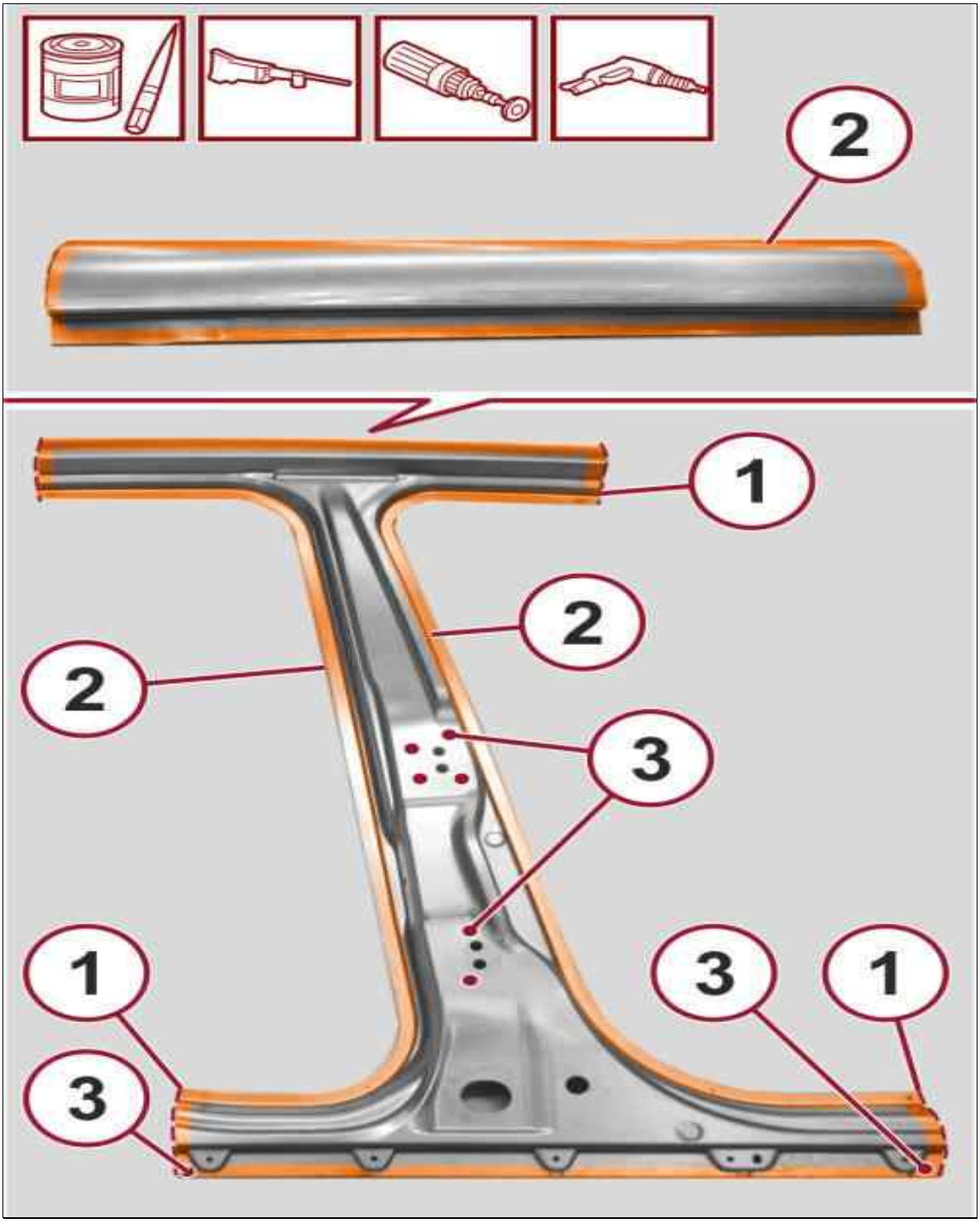


Courtesy of CHRYSLER GROUP, LLC

15. Position the service part correctly on the vehicle's B-pillar and secure it with the self-locking clamps.
16. Check alignment and surrounding gaps.
17. With the use of a spot welder, apply spot welds to the areas (1) indicated in the illustration.
18. With the use of a MIG welder, apply plug welds to the areas (2) indicated in the illustration.

19. With the use of a MIG welder, apply seam welds to the areas (3) indicated in the illustration.

Fig 5: B-Pillar Reinforcement Installation (5 Of 7)



Courtesy of CHRYSLER GROUP, LLC

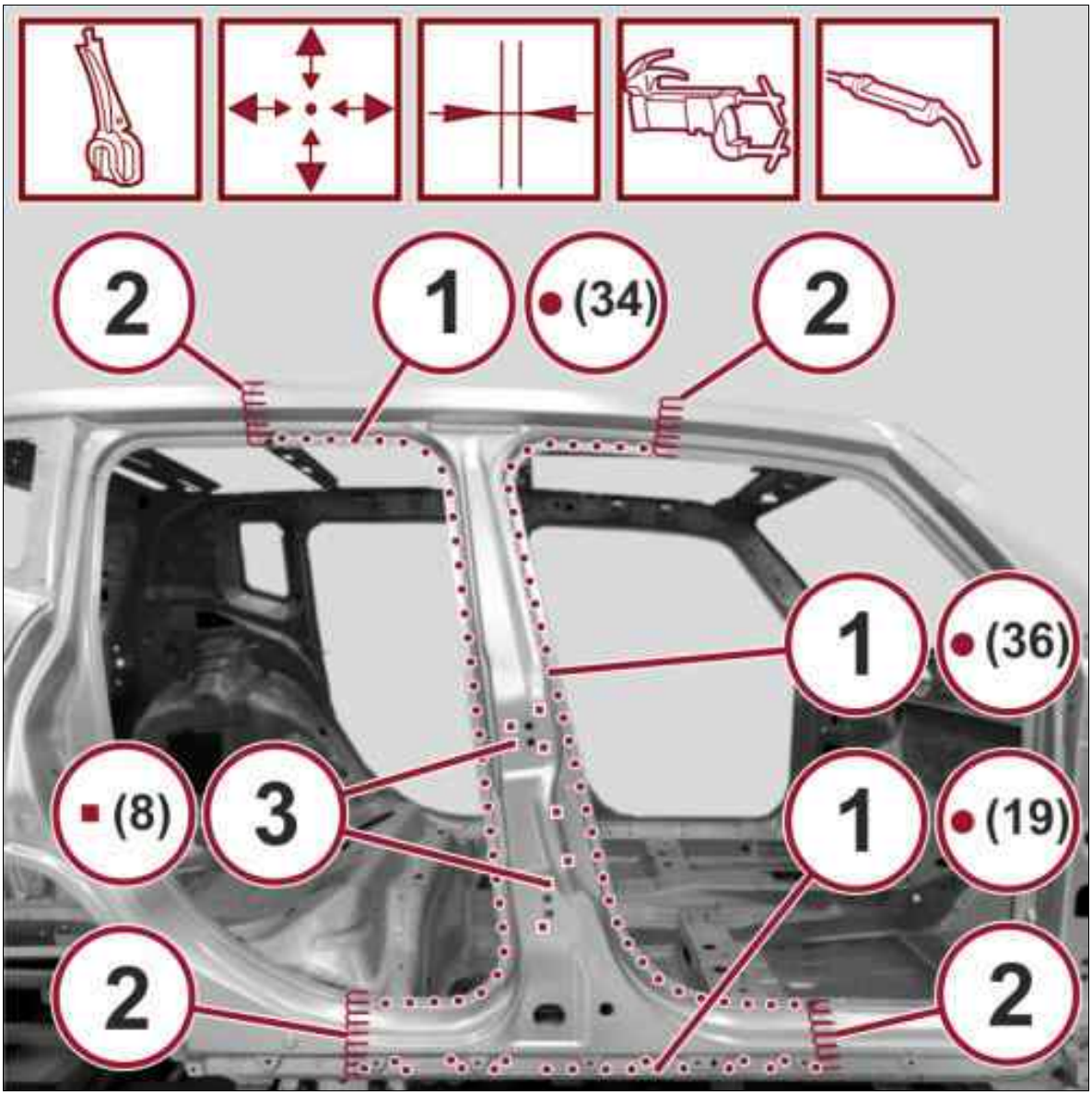
20. Correct any distortions to the sheet metal using a hammer and dolly block.
21. Use a grinding disc to smooth the welds.
22. Use a rotary brush to clean the previously welded areas.
23. Apply corrosion protection to the areas involved in the welding.

NOTE:

Be certain that to leave the service panel long enough to allow for overlapping.

24. Cut the outer B-pillar service part at the cut lines (1) leaving enough length for overlap.
25. Remove the anti-corrosion treatment from the entire perimeter (2) of the inner and outer part using a rotary brush.
26. With the use of a drill, drill holes (3) in the area shown in the illustration.
27. Apply elctro-weldable paint/weld through primer to the boarders of the areas to be welded.

Fig 6: B-Pillar Reinforcement Installation (6 Of 7)



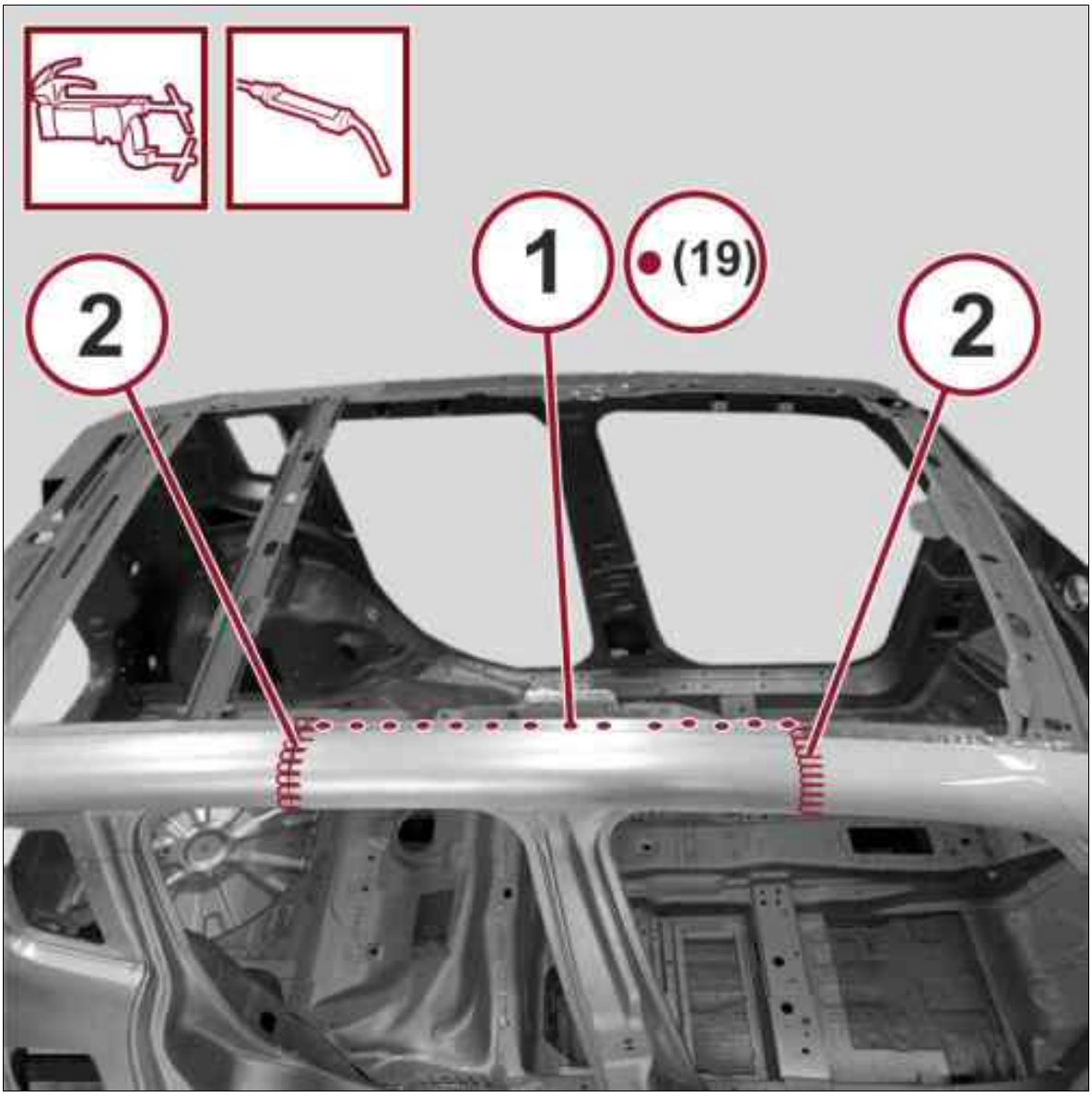
Courtesy of CHRYSLER GROUP, LLC

28. Position the service part correctly on the vehicle interior pillar and secure it with the

self-locking clamps.

29. Check alignment and surrounding gaps.
30. With the use of a spot welder, apply spot welds to the areas (1) indicated in the illustration.
31. With the use of a MIG welder, apply seam welds to the areas (2) indicated in the illustration.
32. With the use of a MIG welder, apply plug welds to the areas (3) indicated in the illustration.

Fig 7: B-Pillar Reinforcement Installation (7 Of 7)



Courtesy of CHRYSLER GROUP, LLC

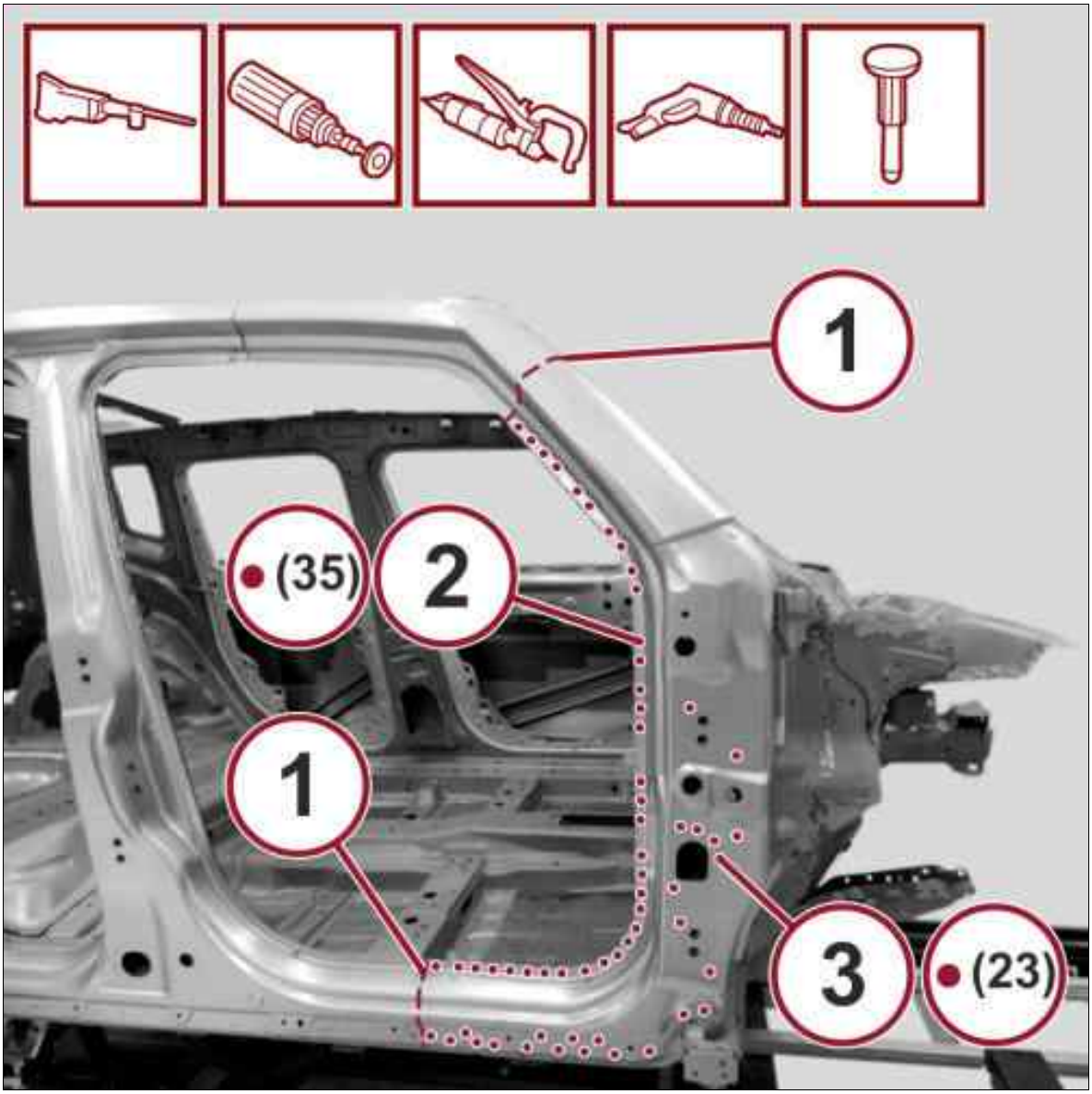
33. With the use of a spot welder, apply spot welds to the areas (1) indicated in the illustration.
34. With the use of a MIG welder, apply seam welds to the areas (2) indicated in the illustration.
35. Correct any distortions to the sheet metal using a hammer and dolly block.
36. Use a grinding disc to smooth the welds.

37. Use a rotary brush to clean the previously welded areas.
38. Apply corrosion protection to the areas involved in the welding.
39. Install the roof bow. Refer to REMOVAL AND INSTALLATION .
40. Install the roof panel. Refer to PANEL, ROOF, REMOVAL AND INSTALLATION .

BODY STRUCTURE > REINFORCEMENT, COWL SIDE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

1. Remove the front fender. Refer to FENDER, FRONT, REMOVAL AND INSTALLATION .
2. Remove the load path beam. Refer to BEAM, LOAD PATH, REMOVAL AND INSTALLATION .
3. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
4. Straighten the body as necessary.

Fig 1: Cowl Side Reinforcement Removal (1 Of 4)

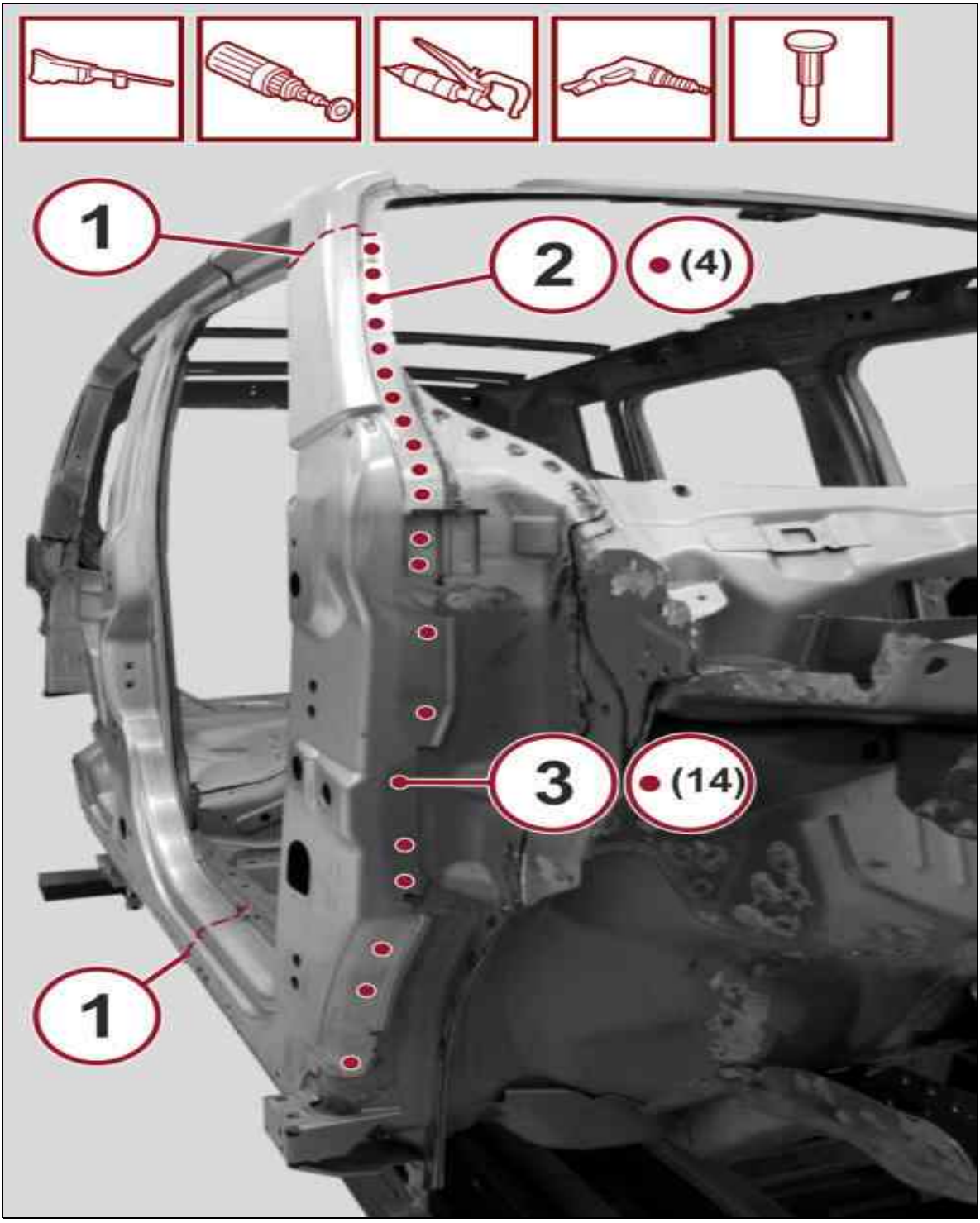


Courtesy of CHRYSLER GROUP, LLC

> *NOTE:*
>
> *Use care to only cut the outer piece of sheet metal.*

5. With the use of a jigsaw, cut along the cut lines (1) shown in the illustration.
6. With the use of a rotary brush, remove the paint and gain access to the spot welds.
7. With the use of a spot weld cutting tool, release the spot welds (2).
8. With the use of a drill, release the spot welds (3).
9. With the use of a chisel and hammer, remove the welds previously released.

Fig 2: Cowl Side Reinforcement Removal (2 Of 4)



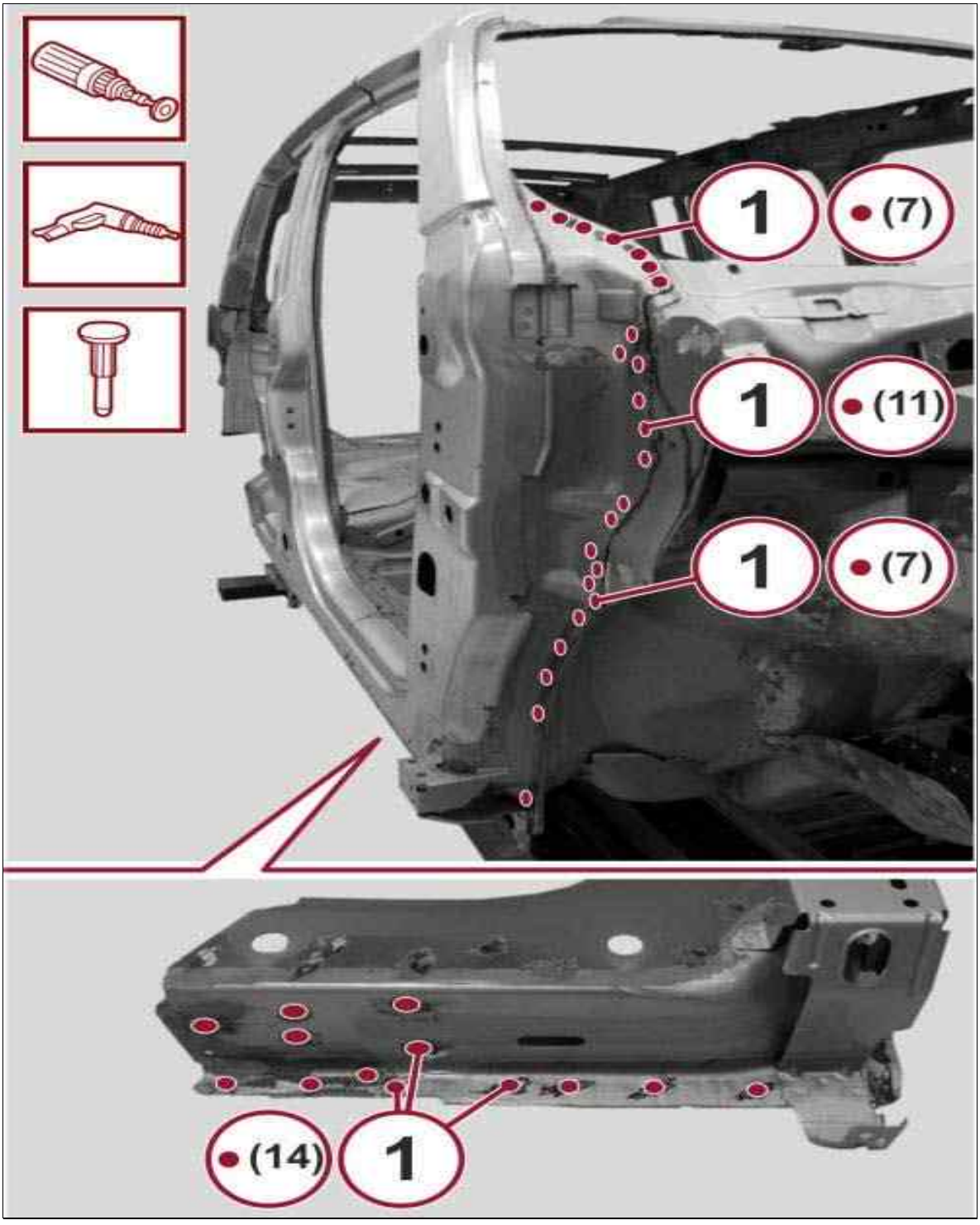
Courtesy of CHRYSLER GROUP, LLC

> *NOTE:*
>
> *Use care to only cut the outer piece of sheet metal.*

10. With the use of a jigsaw, cut along the cut lines (1) shown in the illustration.

11. With the use of a rotary brush, remove the paint and gain access to the spot welds.
12. With the use of a spot weld cutting tool, release the spot welds (2).
13. With the use of a drill, release the spot welds (3), not accessible with the spot weld cutting tool.
14. Use a chisel and hammer to remove the welds previously released.
15. Remove the outer part from the vehicle.

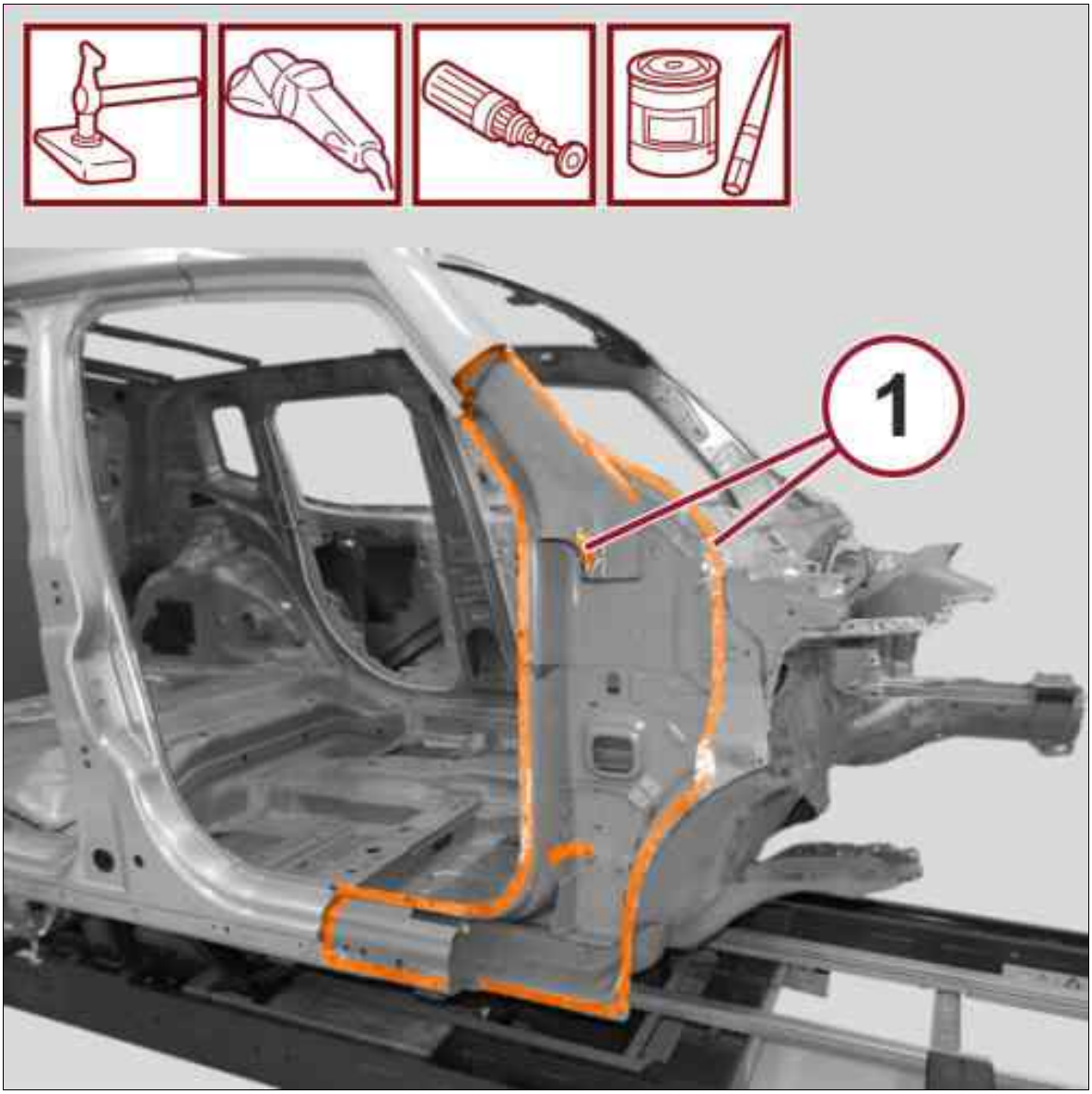
Fig 3: Cowl Side Reinforcement Removal (3 Of 4)



Courtesy of CHRYSLER GROUP, LLC

16. With the use of a rotary brush, remove the paint and gain access to the spot welds.
17. With the use of a drill, release the spot welds (1) at the indicated points.
18. With the use of a chisel and hammer, remove the welds previously released.
19. Remove the cowl side reinforcement from the vehicle.

Fig 4: Cowl Side Reinforcement Removal (4 Of 4)

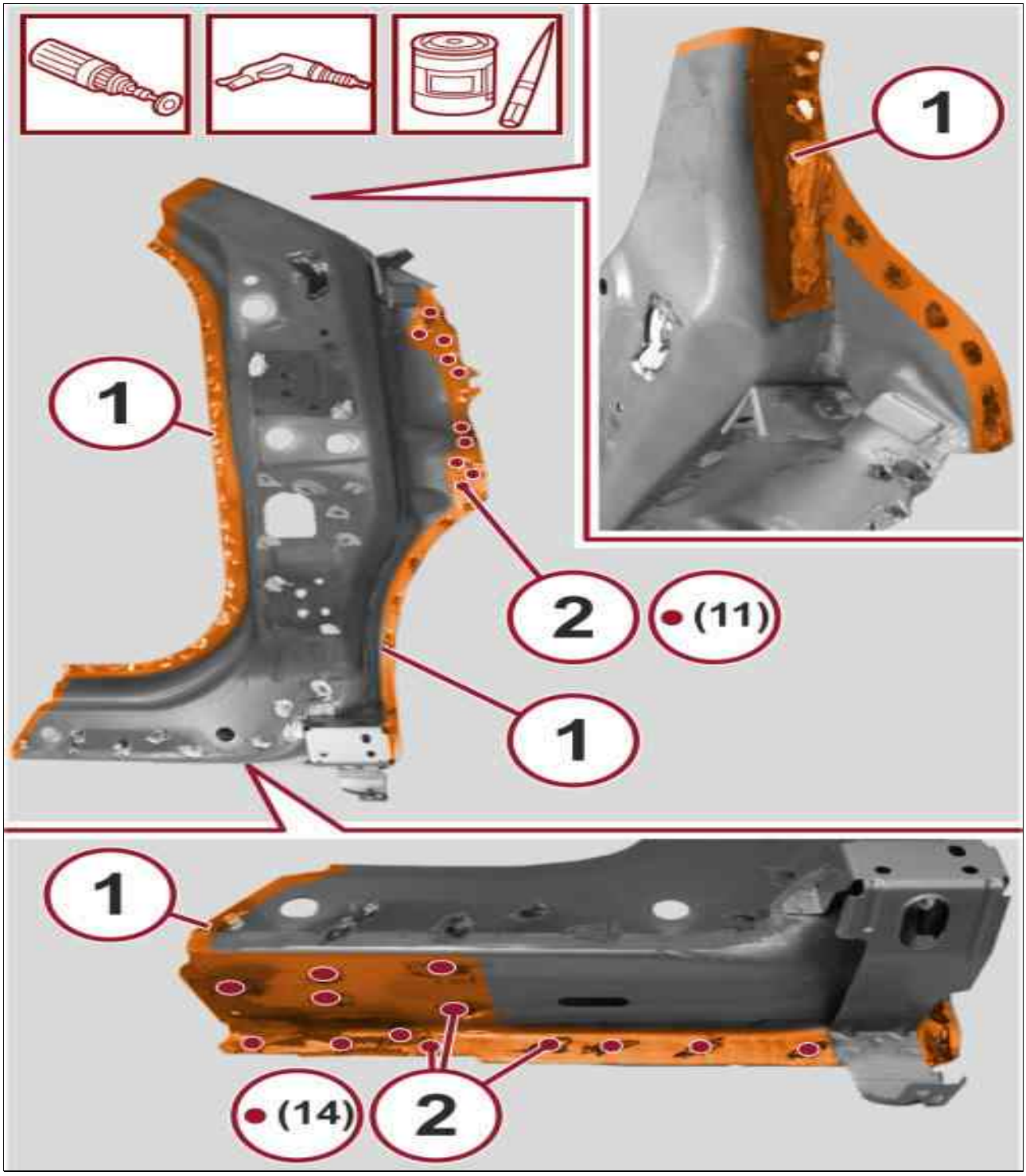


Courtesy of CHRYSLER GROUP, LLC

20. With the use of a hammer and dolly block, straighten the edges of the mating components.
21. With the use of a disc grinder, remove any residue of the spot welds.
22. With the use of a rotary brush, clean the previously treated areas.
23. Apply electro-weldable paint/weld through primer to the areas (1) to be welded.

BODY STRUCTURE > REINFORCEMENT, COWL SIDE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

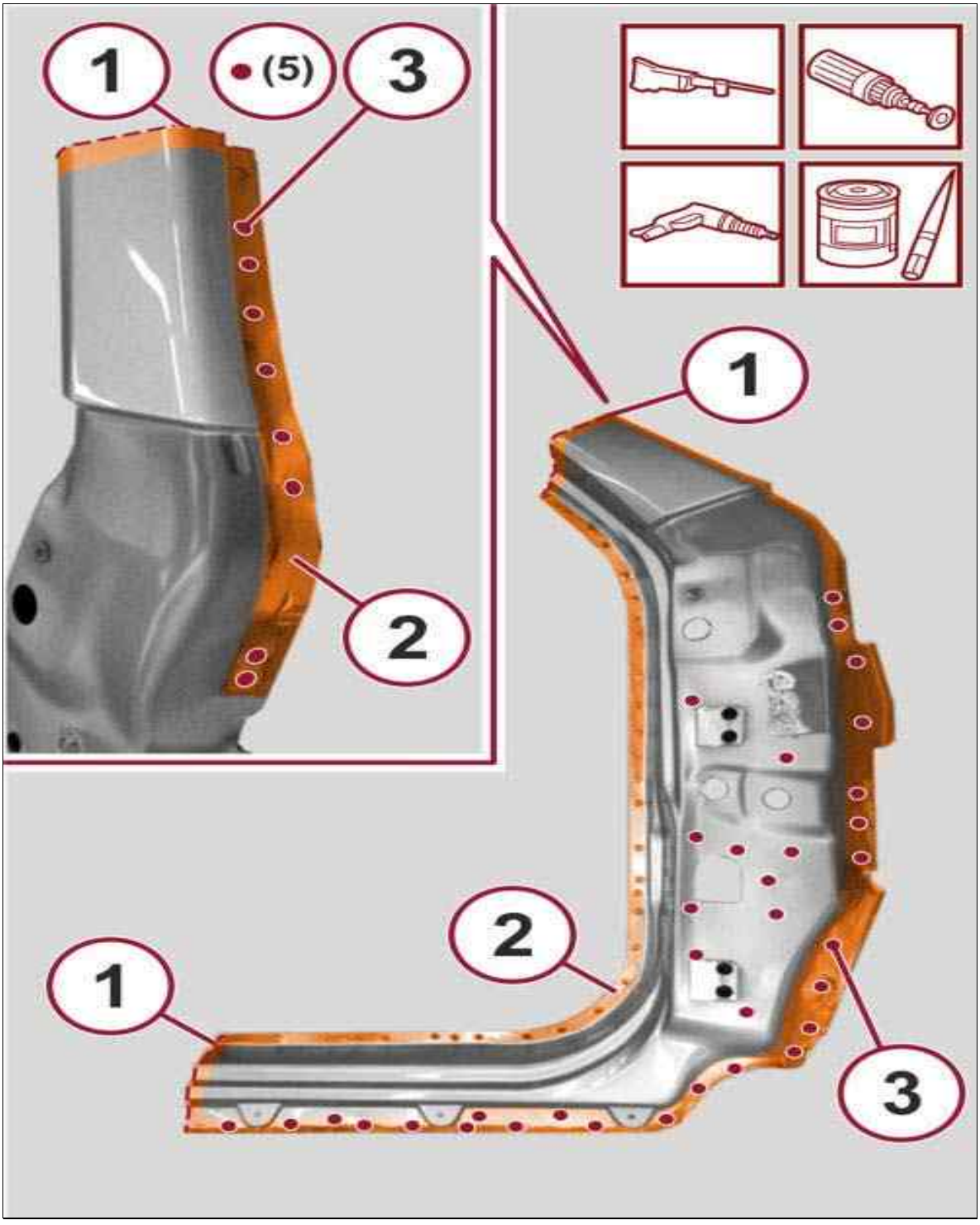
Fig 1: Cowl Side Reinforcement Installation (1 Of 12)



Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the entire perimeter (1) of the inner and outer part using a rotary brush.
2. With the use of a drill, drill holes (2) in the area shown in the illustration.
3. Apply elctro-weldable paint/weld through primer to the boarders involved.

Fig 2: Cowl Side Reinforcement Installation (2 Of 12)



Courtesy of CHRYSLER GROUP, LLC

NOTE:

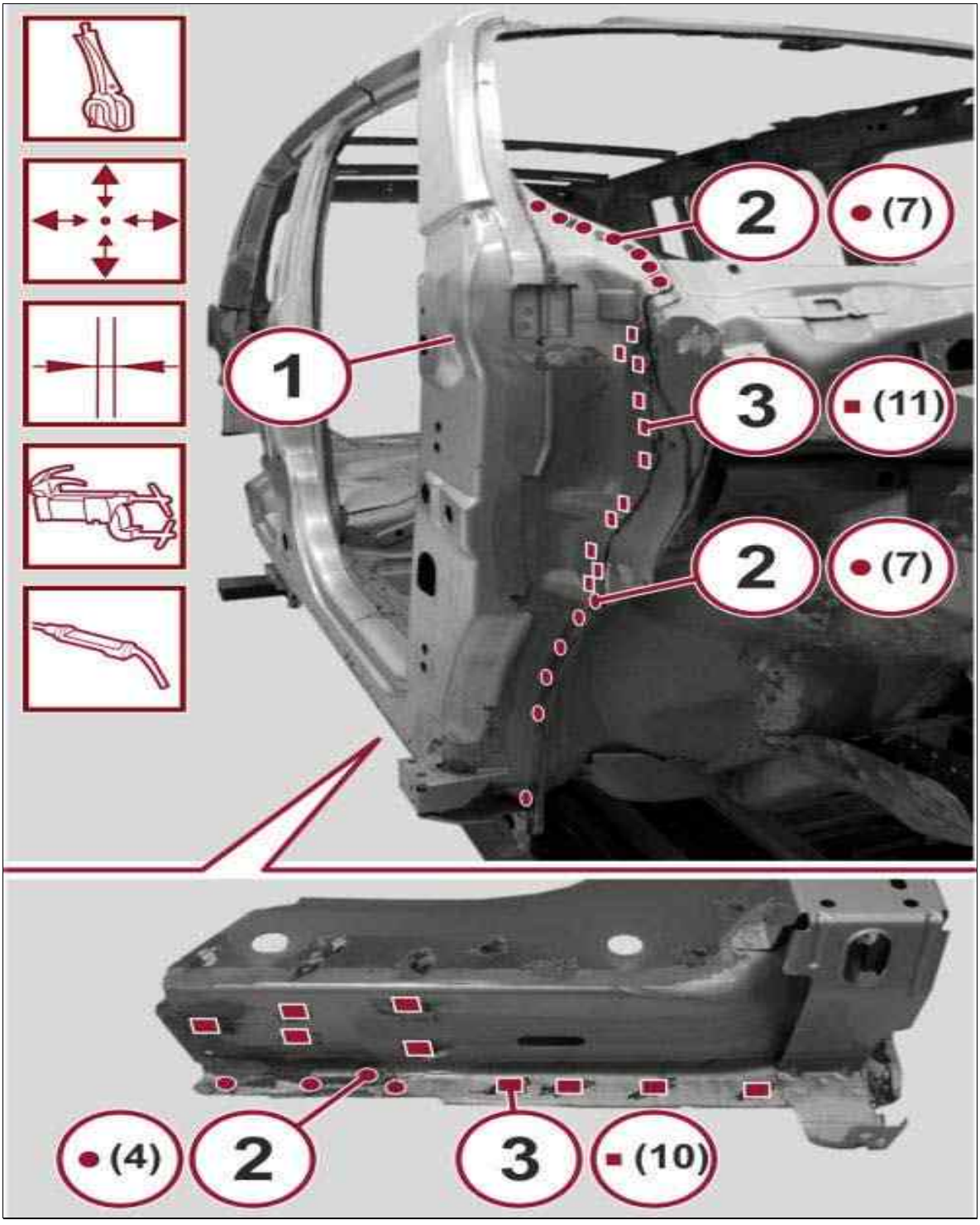
Be certain that to leave the service panel long enough to allow for overlapping.

4. With the external service part placed on a workbench cut at the cut lines (1) as indicated in the

illustration.

5. Remove the anti-corrosion treatment from the entire perimeter (2) of the inner and outer part using a rotary brush.
6. With the use of a drill, drill holes (3) in the area shown in the illustration.
7. Apply elctro-weldable paint/weld through primer to the boarders of the areas to be welded.

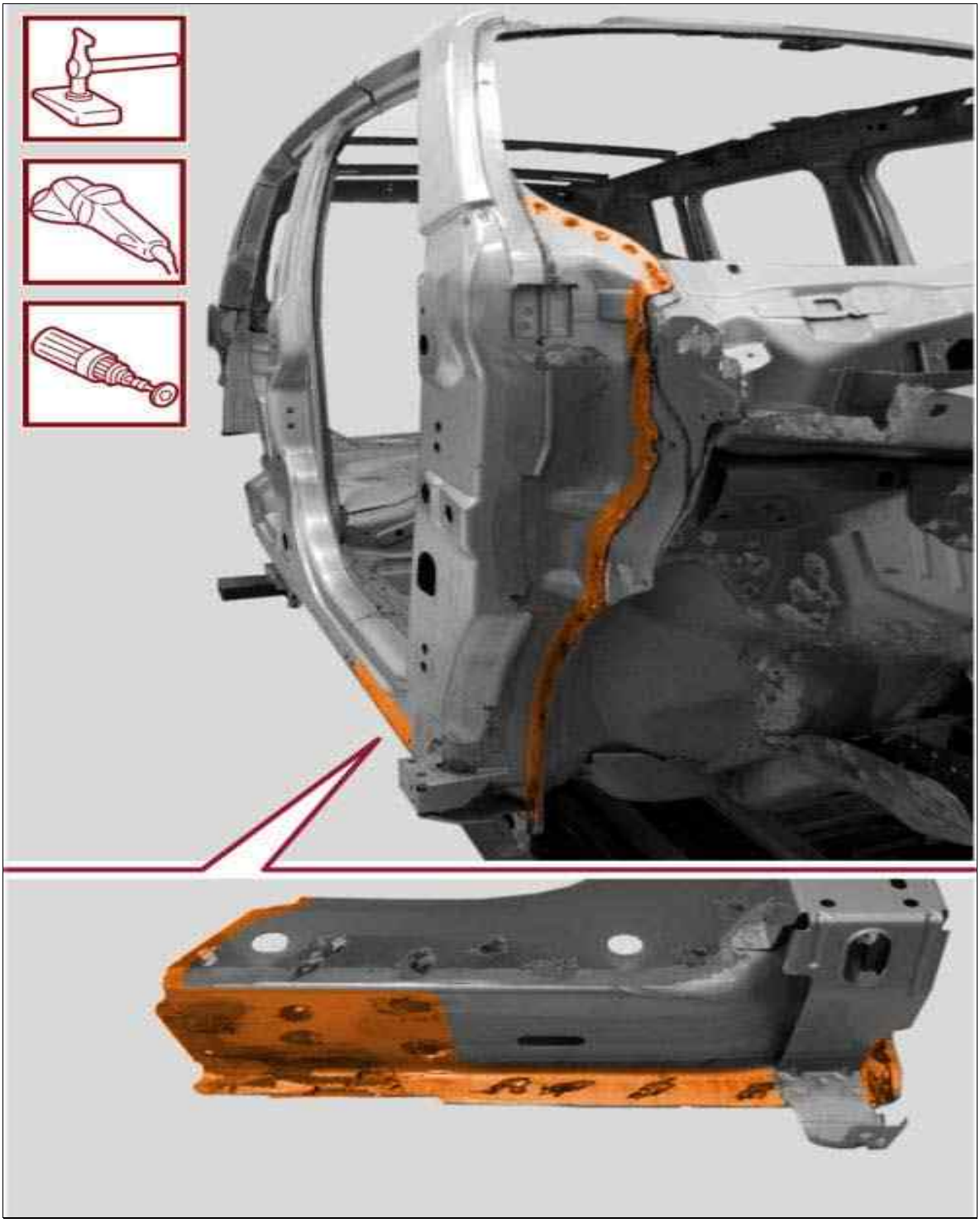
Fig 3: Cowl Side Reinforcement Installation (3 Of 12)



Courtesy of CHRYSLER GROUP, LLC

8. Position the cowl side reinforcement correctly on the vehicle and secure it with the self-locking clamps.
9. Check alignment and surrounding gaps.
10. With the use of a spot welder, apply spot welds to the areas (2) indicated in the illustration.
11. With the use of a MIG welder, apply plug welds filling in the holes (3) previously made.

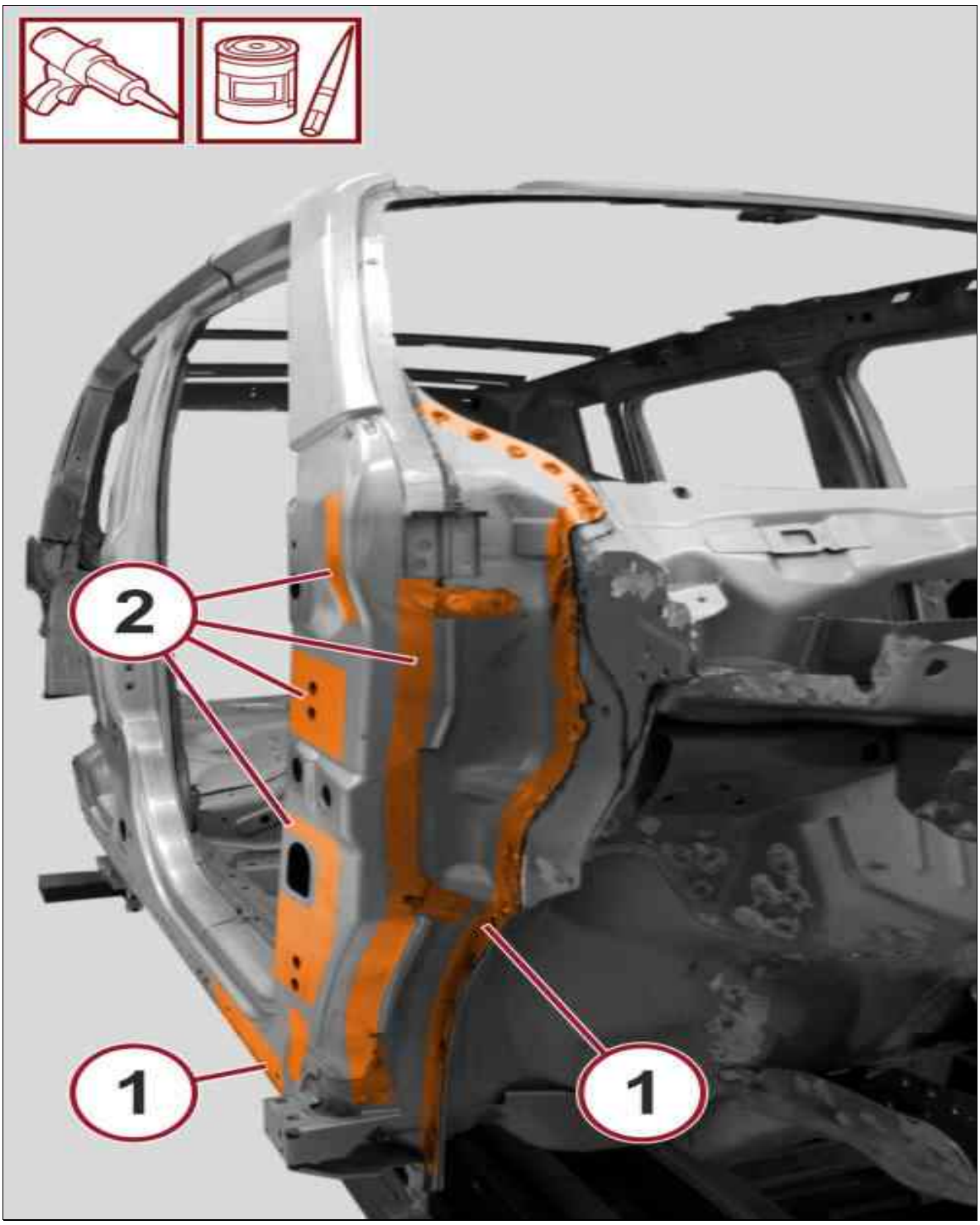
Fig 4: Cowl Side Reinforcement Installation (4 Of 12)



Courtesy of CHRYSLER GROUP, LLC

12. Correct any distortions to the sheet metal using a hammer and dolly block.
13. Use a grinding disc to smooth the welds in the highlighted area.
14. Use a rotary brush to clean the previously welded areas.

Fig 5: Cowl Side Reinforcement Installation (5 Of 12)

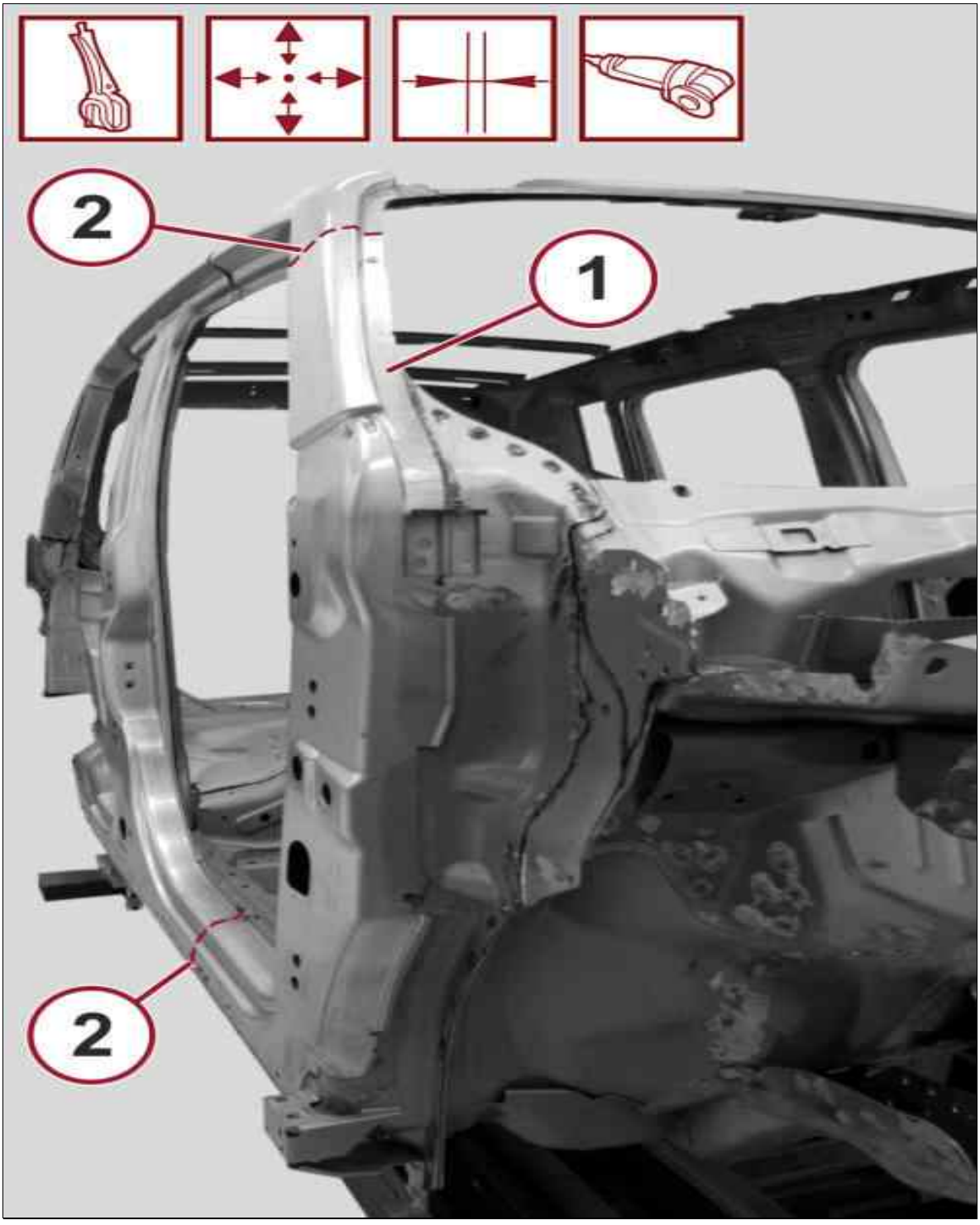


Courtesy of CHRYSLER GROUP, LLC

15. Apply corrosion protection to the areas (1) involved in the welding.
16. Seal the seams between the parts and the vehicle.

17. Apply elctro-weldable paint/weld through primer to the areas (2) indicated.

Fig 6: Cowl Side Reinforcement Installation (6 Of 12)

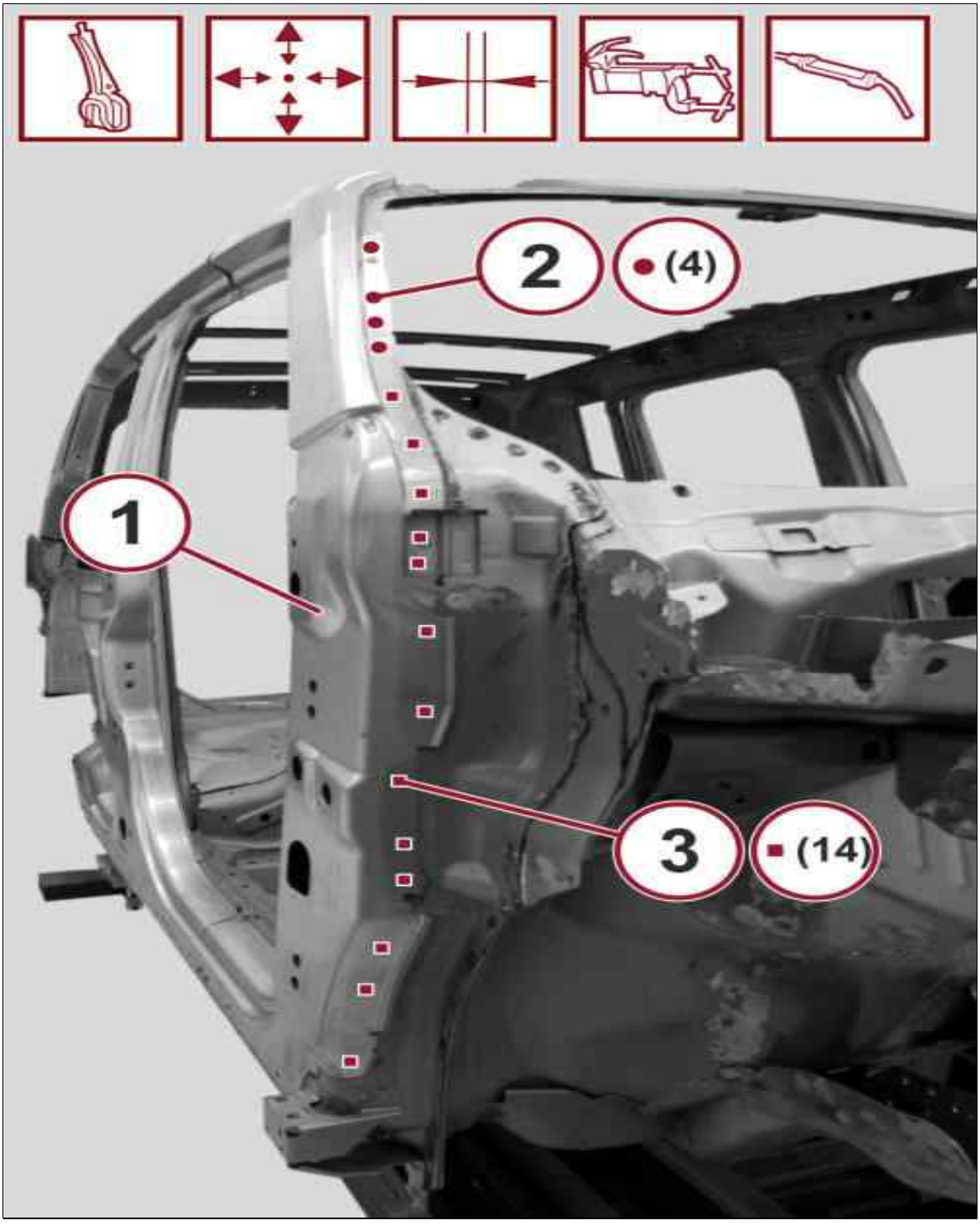


Courtesy of CHRYSLER GROUP, LLC

18. Position the external part (1) correctly on the vehicle and secure it with the self-locking clamps.
19. Check alignment and surrounding gaps.
20. With the use of a circular saw, cut the edges of the panel sheet to obtain a perfect joint line.
21. Remove the external service part and the excess pieces of cutoff sheet metal used for the

adjustment.

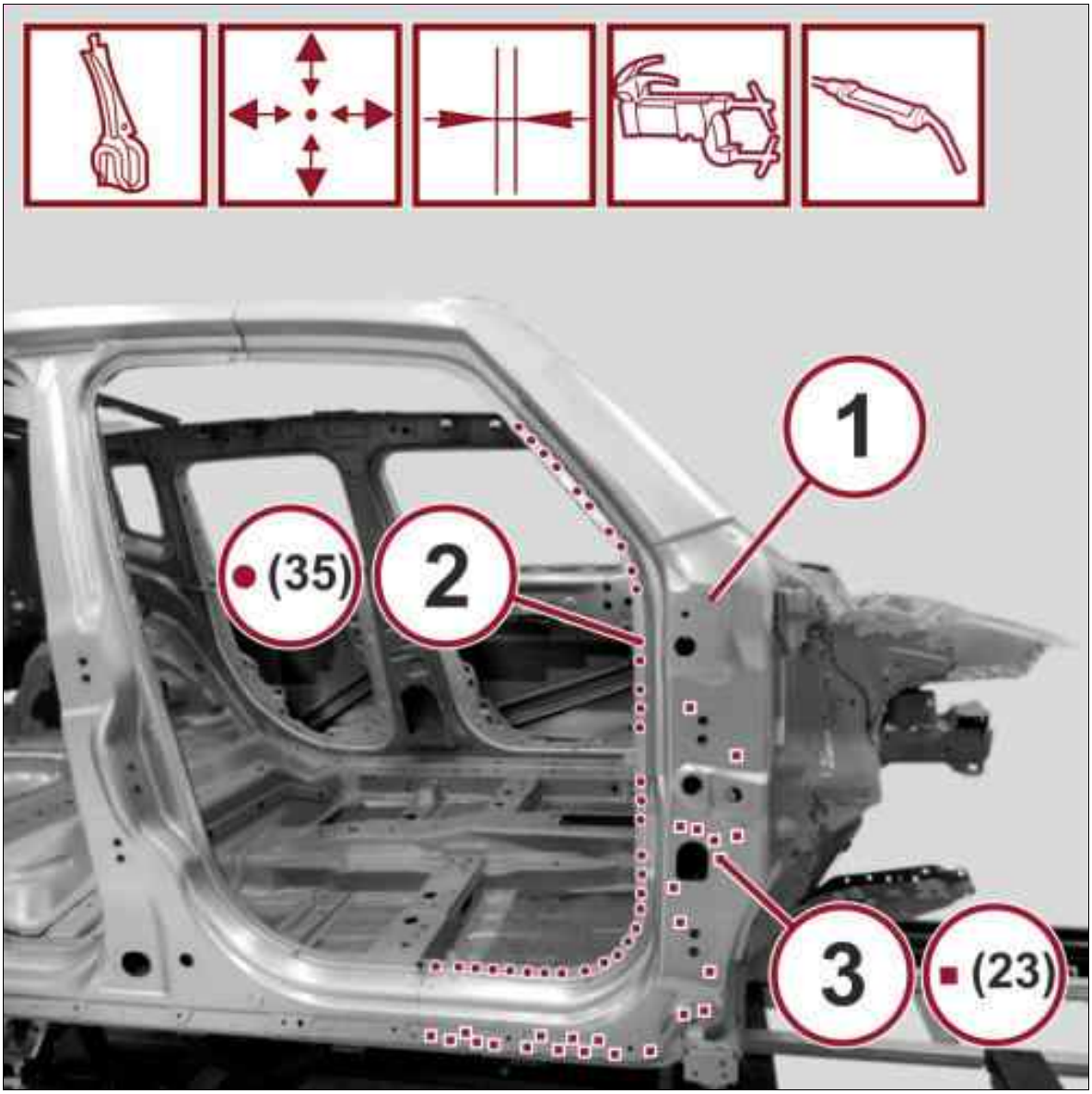
Fig 7: Cowl Side Reinforcement Installation (7 Of 12)



Courtesy of CHRYSLER GROUP, LLC

22. Position the external part (1) correctly on the vehicle and secure it with the self-locking clamps.
23. Check alignment and surrounding gaps.
24. With the use of a spot welder, apply spot welds to the areas (2) indicated in the illustration.
25. With the use of a MIG welder, apply plug welds filling in the holes (3) previously made.

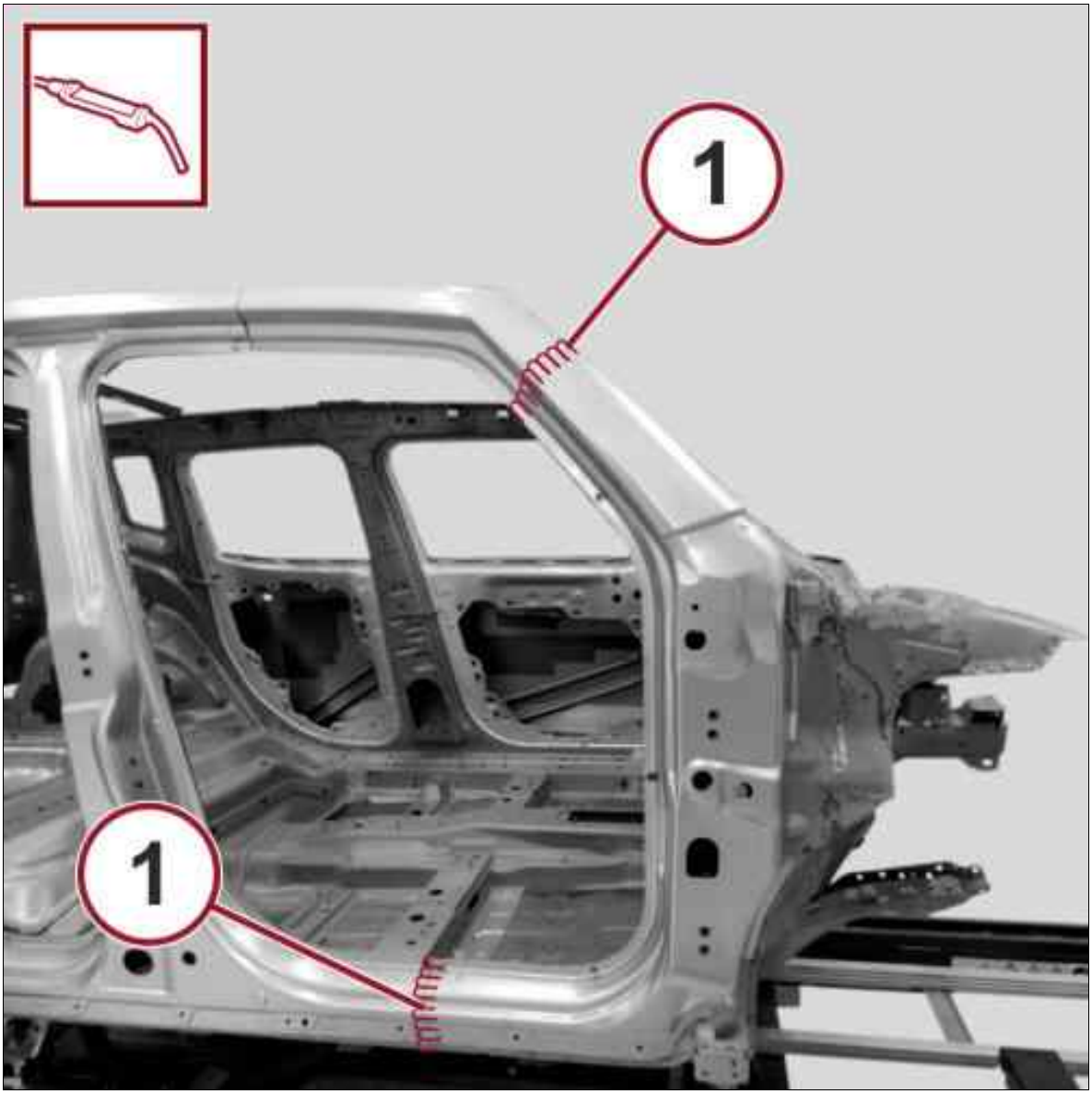
Fig 8: Cowl Side Reinforcement Installation (8 Of 12)



Courtesy of CHRYSLER GROUP, LLC

26. Position the external part (1) correctly on the vehicle and secure it with the self-locking clamps.
27. Check alignment and surrounding gaps.
28. With the use of a spot welder, apply spot welds to the areas (2) indicated in the illustration.
29. With the use of a MIG welder, apply plug welds filling in the holes (3) previously made.

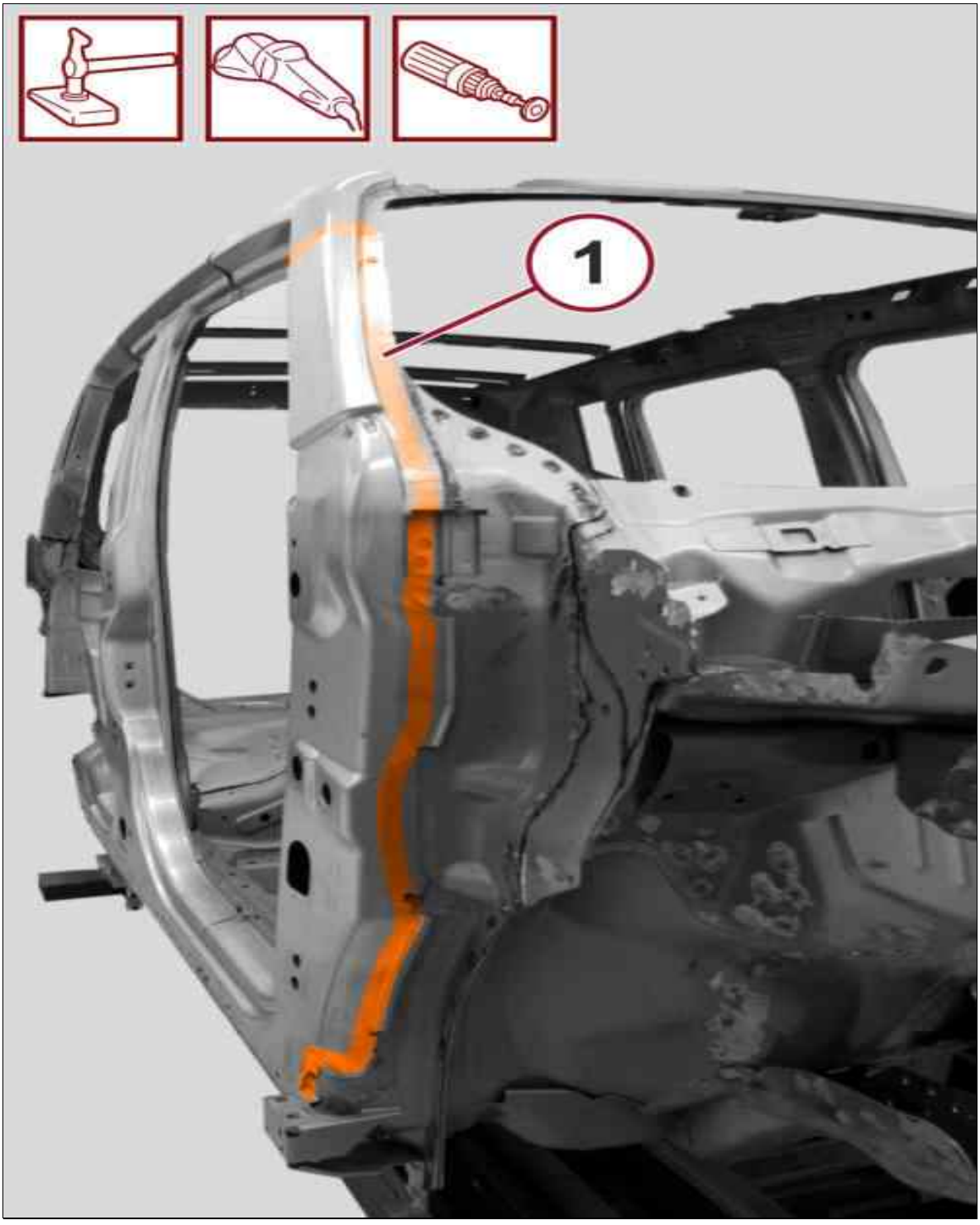
Fig 9: Cowl Side Reinforcement Installation (9 Of 12)



Courtesy of CHRYSLER GROUP, LLC

30. With the use of a MIG welder, butt weld in the seam areas (1).

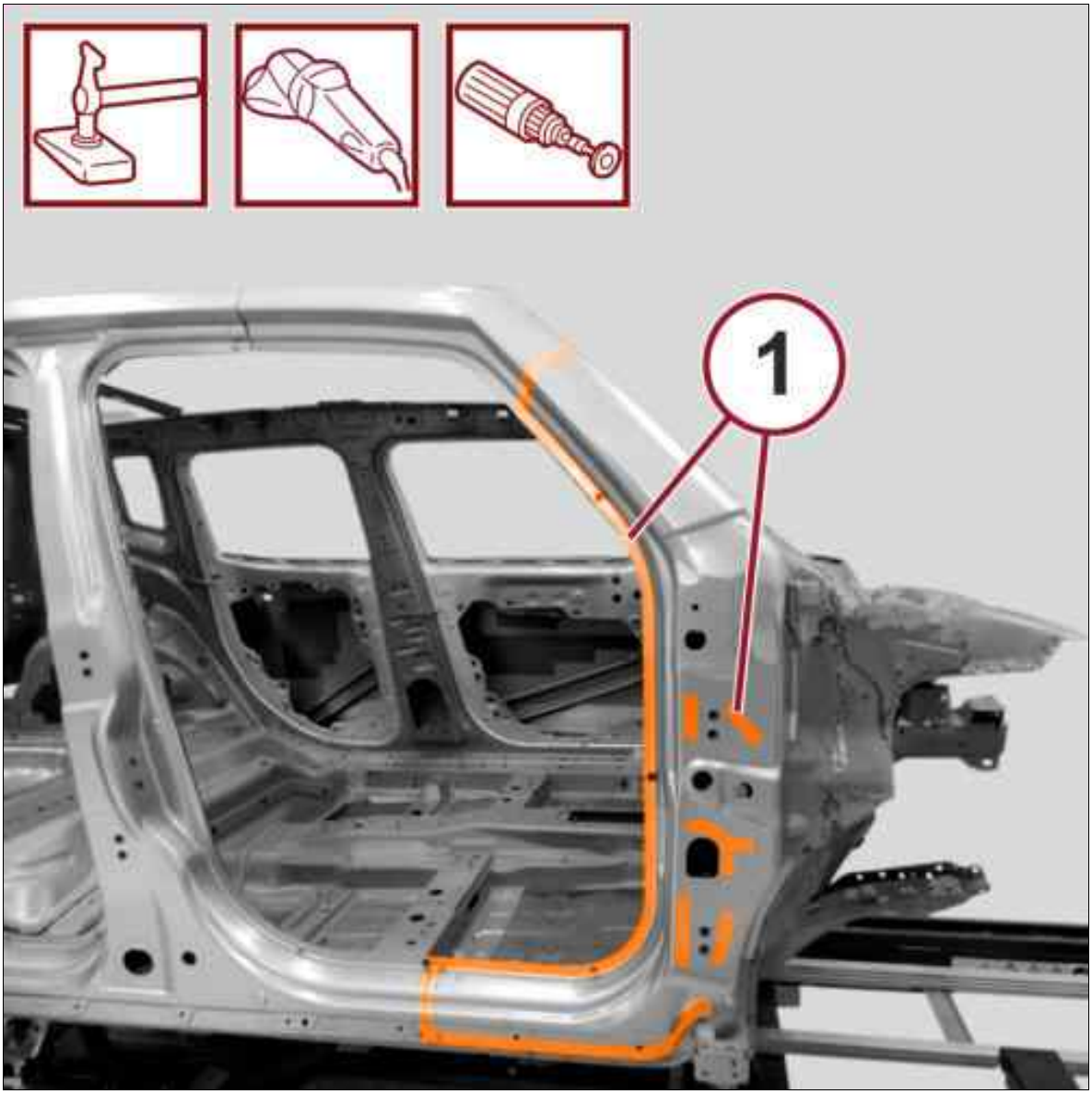
Fig 10: Cowl Side Reinforcement Installation (10 Of 12)



Courtesy of CHRYSLER GROUP, LLC

31. Correct any distortions to the sheet metal using a hammer and dolly block.
32. Use a grinding disc to smooth the welds in the area highlighted (1).
33. Use a rotary brush to clean the previously welded areas.

Fig 11: Cowl Side Reinforcement Installation (11 Of 12)



Courtesy of CHRYSLER GROUP, LLC

34. Correct any distortions to the sheet metal using a hammer and dolly block.
35. Use a grinding disc to smooth the welds in the area highlighted (1).
36. Use a rotary brush to clean the previously welded areas.

Fig 12: Cowl Side Reinforcement Installation (12 Of 12)

Courtesy of CHRYSLER GROUP, LLC

37. Apply corrosion protection to the areas involved in the welding.
38. Seal the seams between the internal parts and the vehicle in the area highlighted (1).
39. Install the load path beam. Refer to BEAM, LOAD PATH, REMOVAL AND INSTALLATION .
40. Install the front fender. Refer to FENDER, FRONT, REMOVAL AND INSTALLATION .

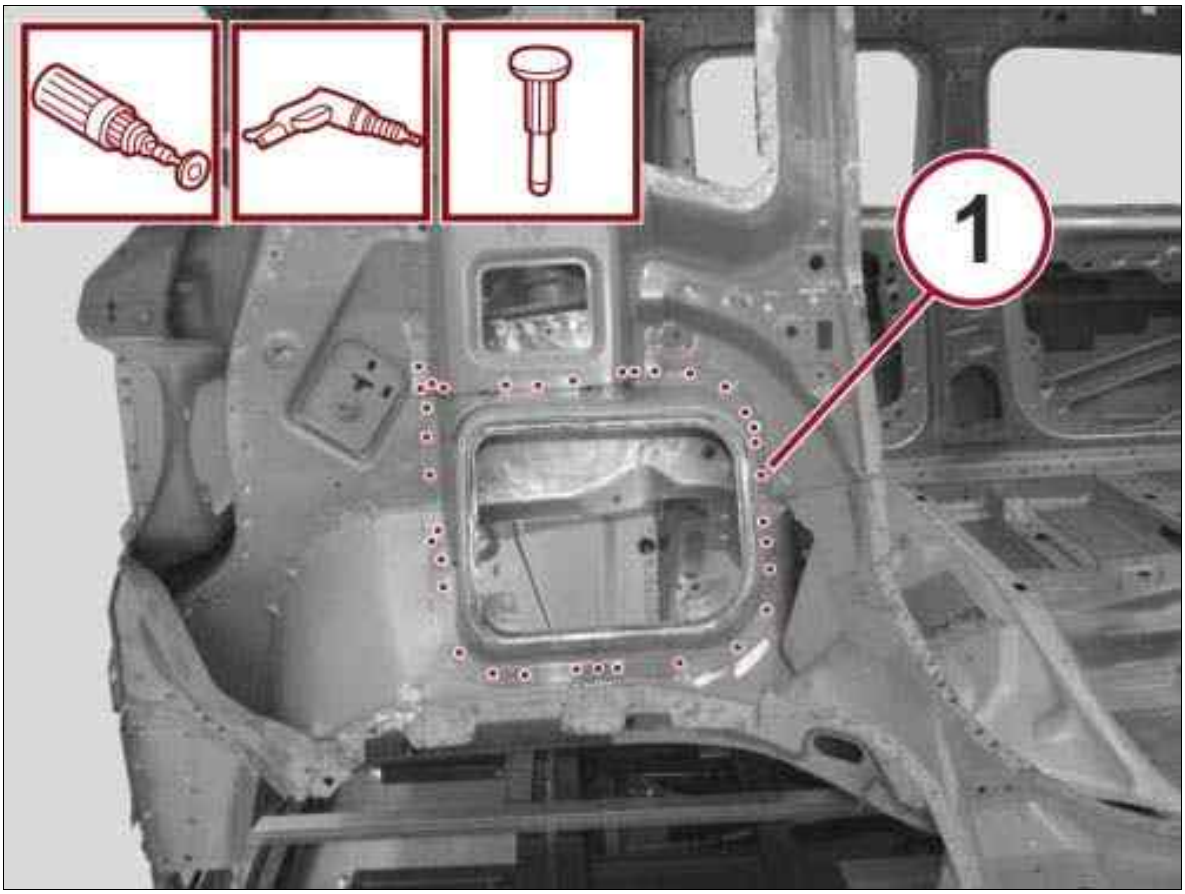
BODY STRUCTURE > REINFORCEMENT, FUEL FILLER DOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

1. Remove the quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .
2. Be certain the components connected are not distorted by checking the body alignment

measurements with suitable equipment (reference rigs, templates or gauges).

3. Straighten the body as necessary.

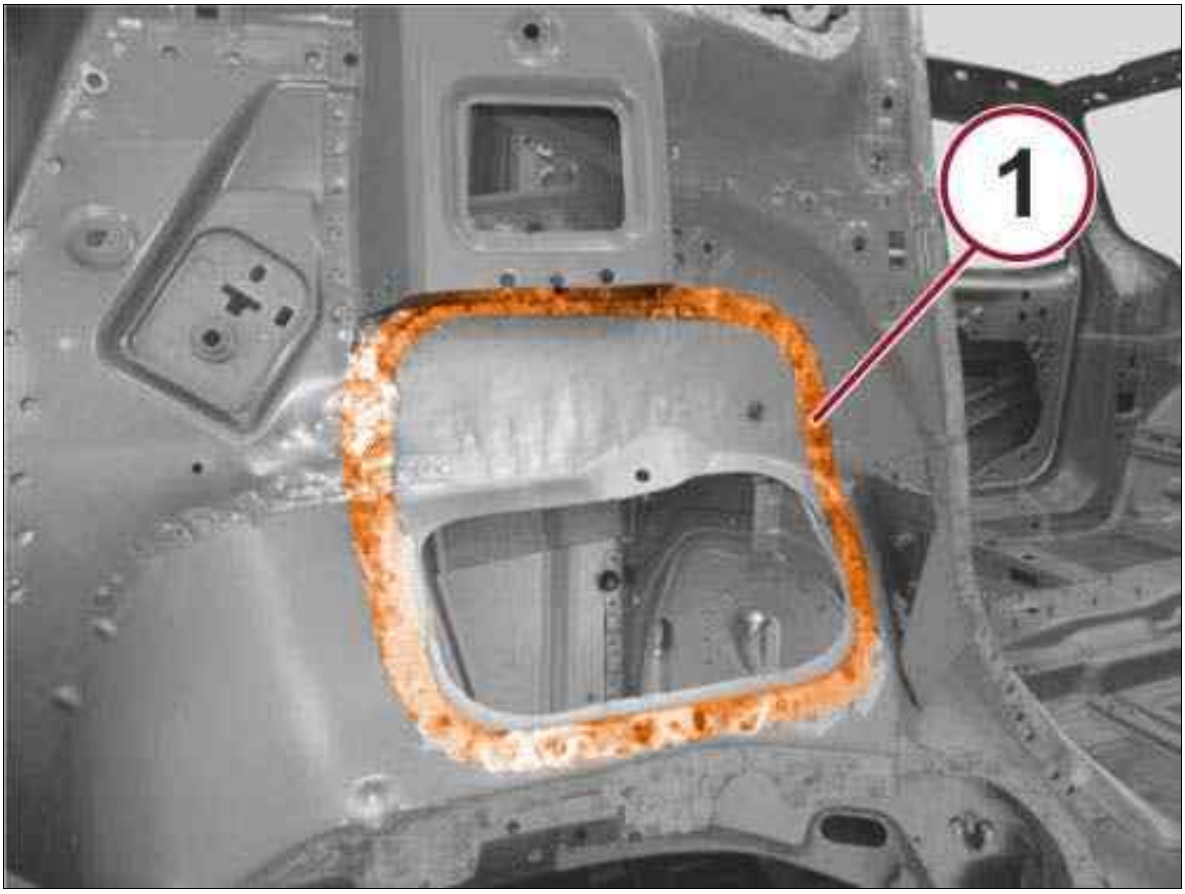
Fig 1: Fuel Filler Door Reinforcement Removal (1 Of 2)



Courtesy of CHRYSLER GROUP, LLC

4. With the use of a rotary brush, remove the paint and access to the spot welds.
5. With the use of a drill, release the spot welds (1).
6. Use a chisel and hammer to remove the welds previously released.
7. Remove the fuel door reinforcement from the vehicle.

Fig 2: Fuel Filler Door Reinforcement Removal (2 Of 2)



Courtesy of CHRYSLER GROUP, LLC

8. With the use of a hammer and dolly block, straighten the edges of the mating components.
9. With the use of a disc grinder, remove any residue of the spot welds.
10. With the use of a rotary brush, clean the previously treated areas.
11. Apply electro-weldable paint/weld through primer to the highlighted areas (1).

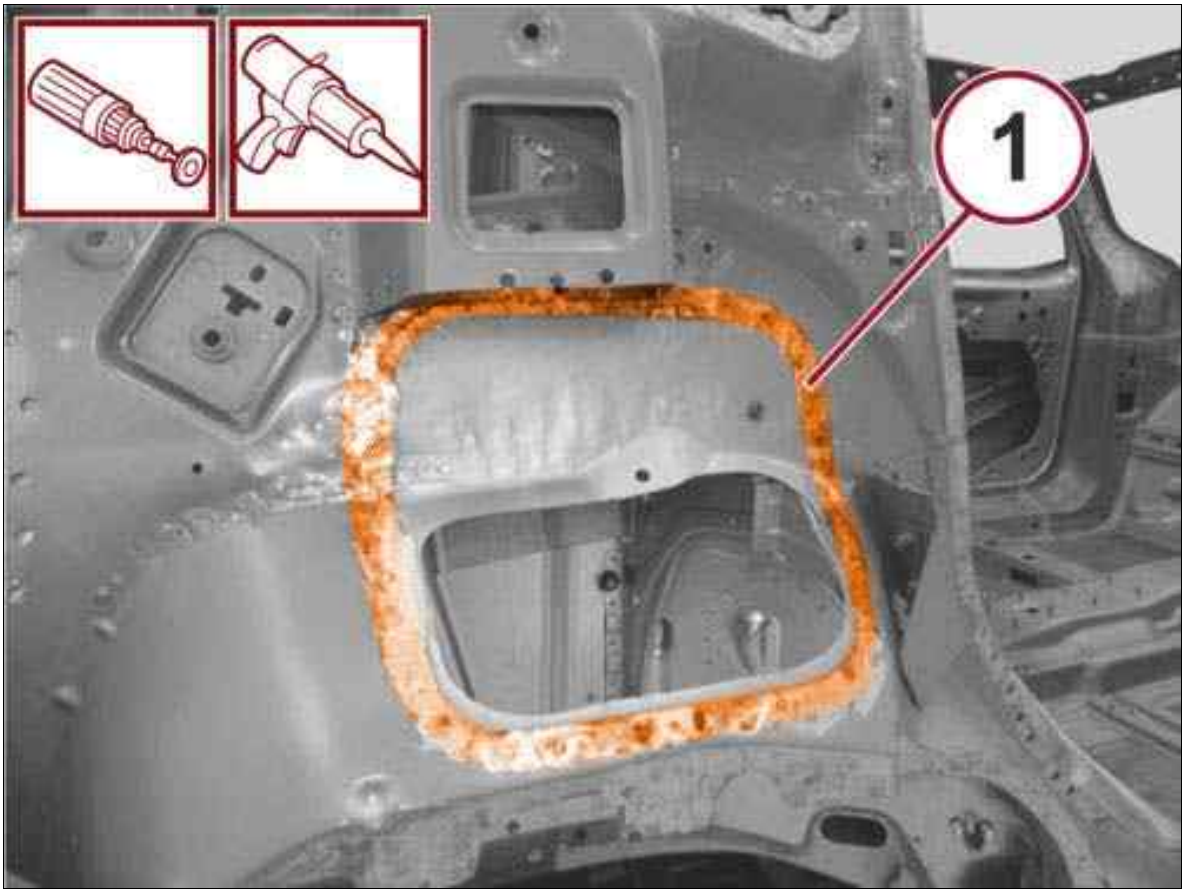
BODY STRUCTURE > REINFORCEMENT, FUEL FILLER DOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Fuel Filler Door Reinforcement Installation (1 Of 4)

Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the entire perimeter of the inner and outer part using a rotary brush.
2. With the use of a drill, drill holes at the indicated points (1).
3. Apply elctro-weldable paint/weld through primer to the highlighted border areas (2) involved in welding.

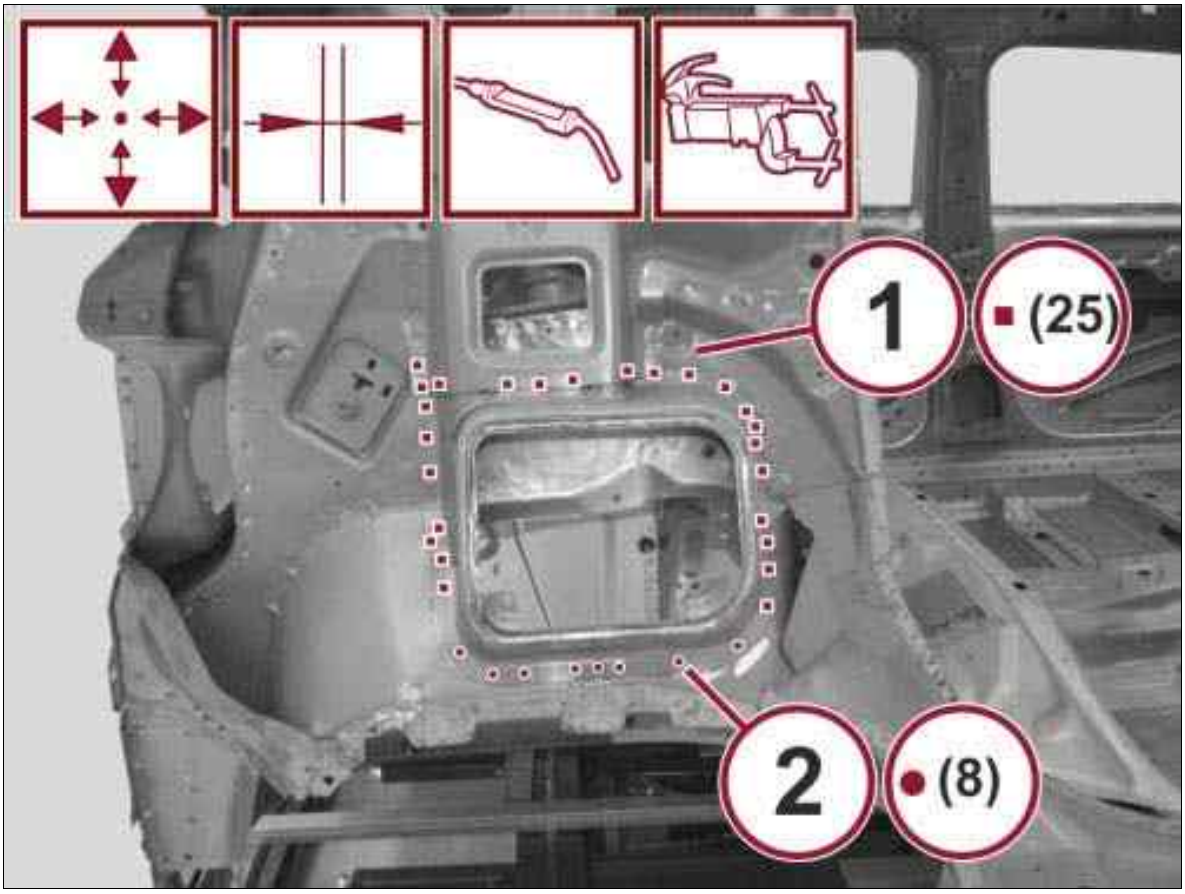
Fig 2: Fuel Filler Door Reinforcement Installation (2 Of 4)



Courtesy of CHRYSLER GROUP, LLC

4. Apply sealant to the area (1) shown in the illustration.

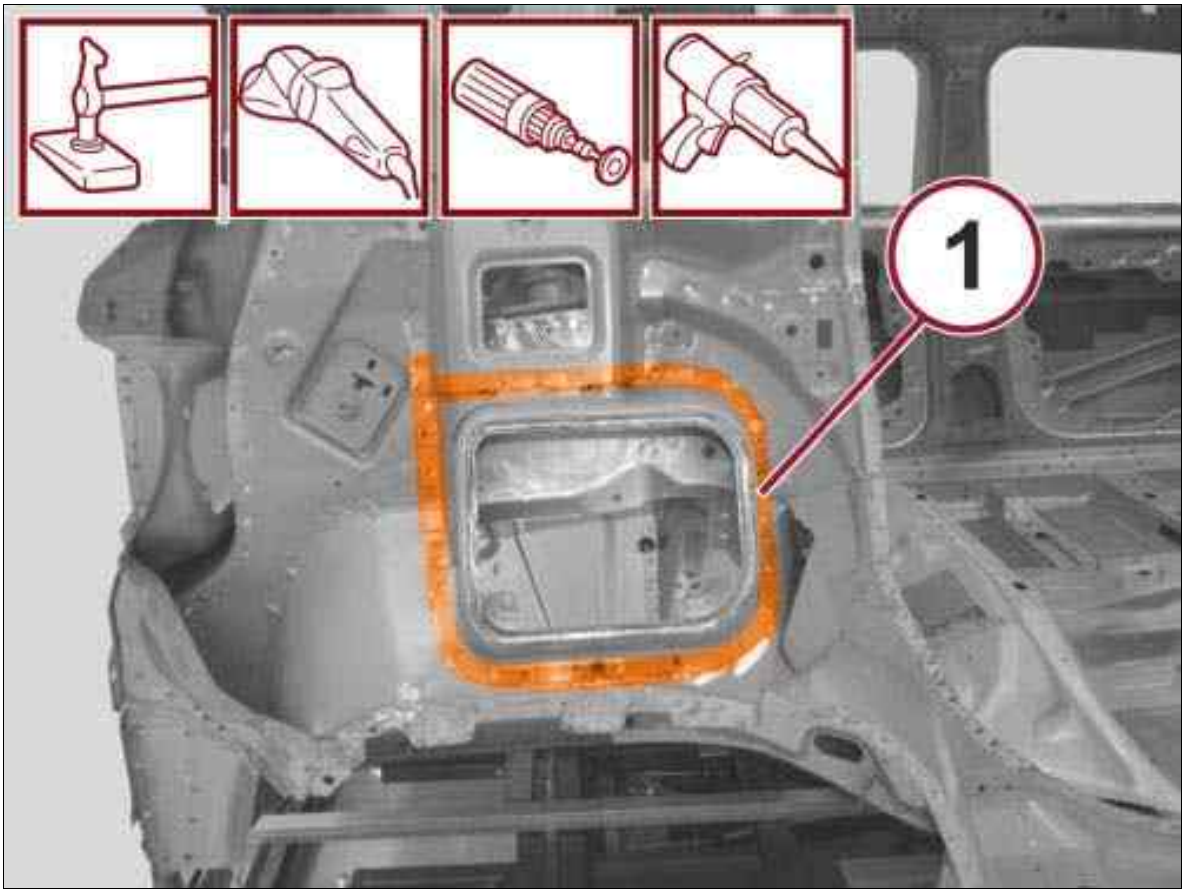
Fig 3: Fuel Filler Door Reinforcement Installation (3 Of 4)



Courtesy of CHRYSLER GROUP, LLC

5. Position the part correctly on the vehicle and secure it with the self-locking clamps.
6. Check alignment and surrounding gaps.
7. With the use of a MIG welder, apply plug welds filling in the holes (1) previously made.
8. With the use of a spot welder, apply spot welds at the indicated points (2).

Fig 4: Fuel Filler Door Reinforcement Installation (4 Of 4)

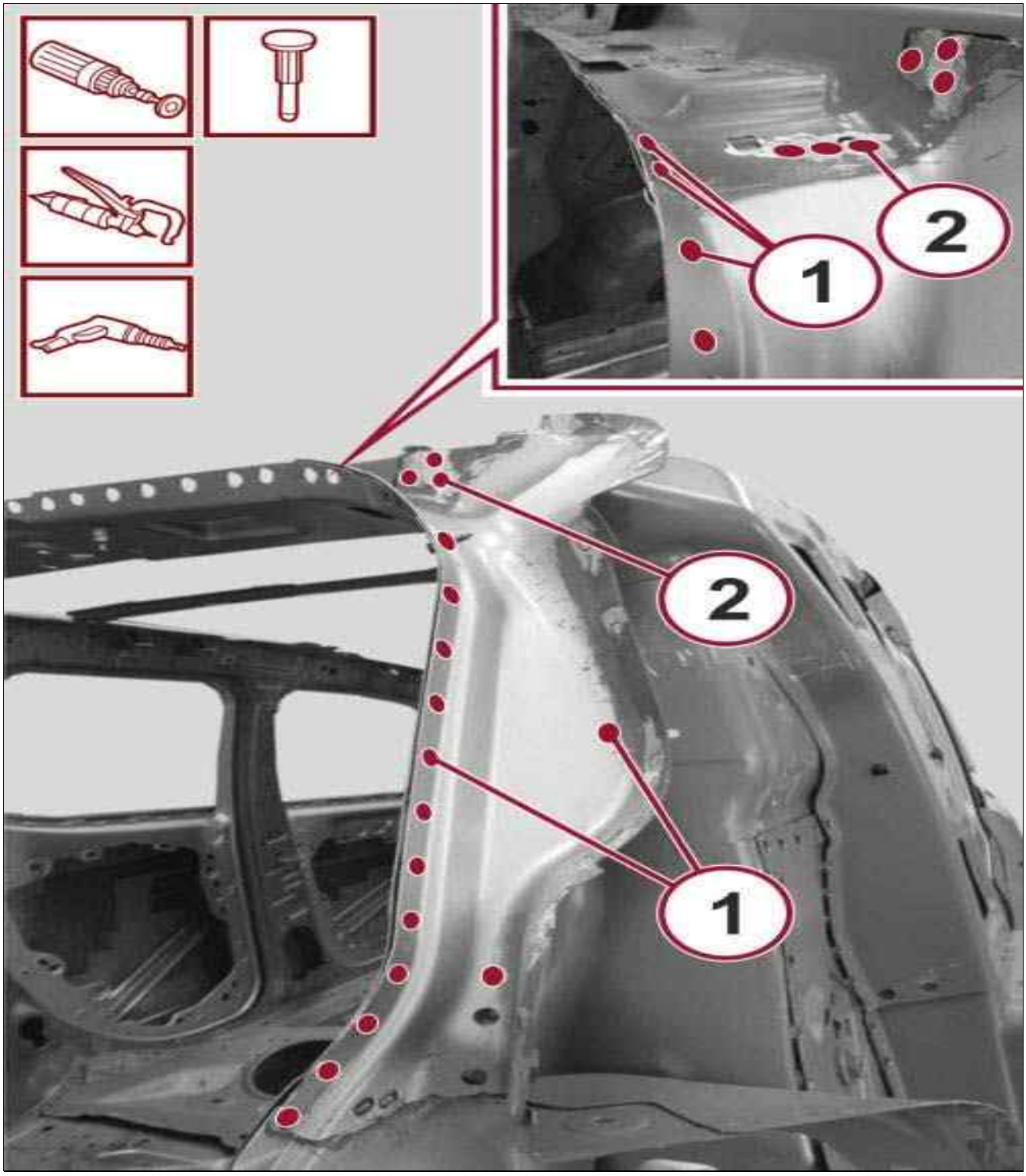


Courtesy of CHRYSLER GROUP, LLC

9. Correct any distortions to the sheet metal using a hammer and dolly block.
10. Use a grinding disc to smooth the welds.
11. Use a rotary brush to clean the previously welded areas.
12. Apply corrosion protection to the area (1) involved in the welding.
13. Install the quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .

BODY STRUCTURE > TROUGH, LIFTGATE OPENING > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Liftgate Opening Trough Removal (1 Of 2)

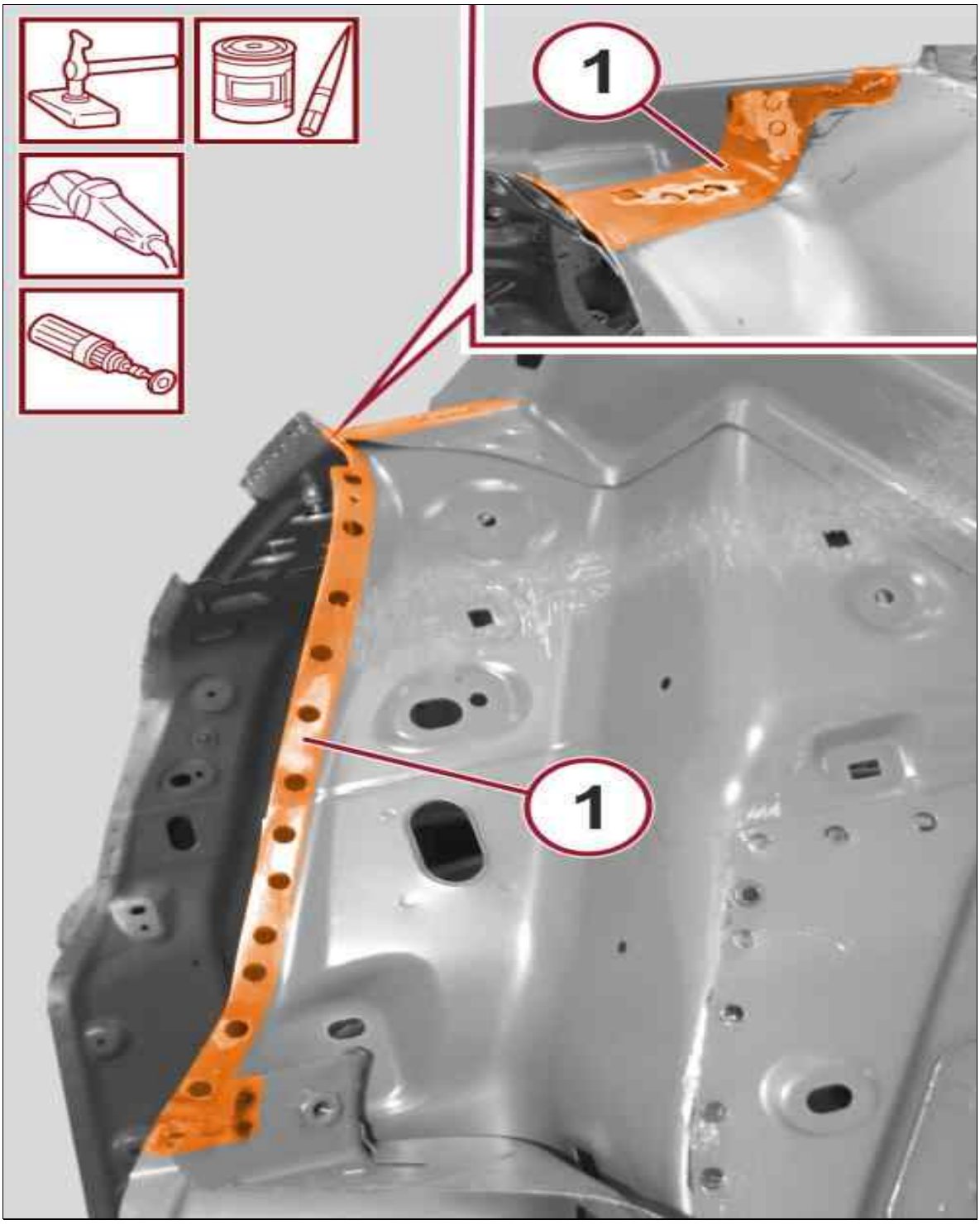


Courtesy of CHRYSLER GROUP, LLC

1. Remove the roof panel. Refer to PANEL, ROOF, REMOVAL AND INSTALLATION .
2. Remove the quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .
3. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
4. Straighten the body as necessary.

5. With the use of a rotary brush, remove the paint and gain access to the spot welds.
6. With the use of a spot weld cutting tool, release the spot welds (1) shown in the illustration.
7. With the use of a drill, release the spot welds (2) shown in the illustration.
8. With the use of a chisel and hammer, remove the spot welds previously released.
9. Remove the liftgate opening trough and cut-outs from the vehicle.

Fig 2: Liftgate Opening Trough Removal (2 Of 2)

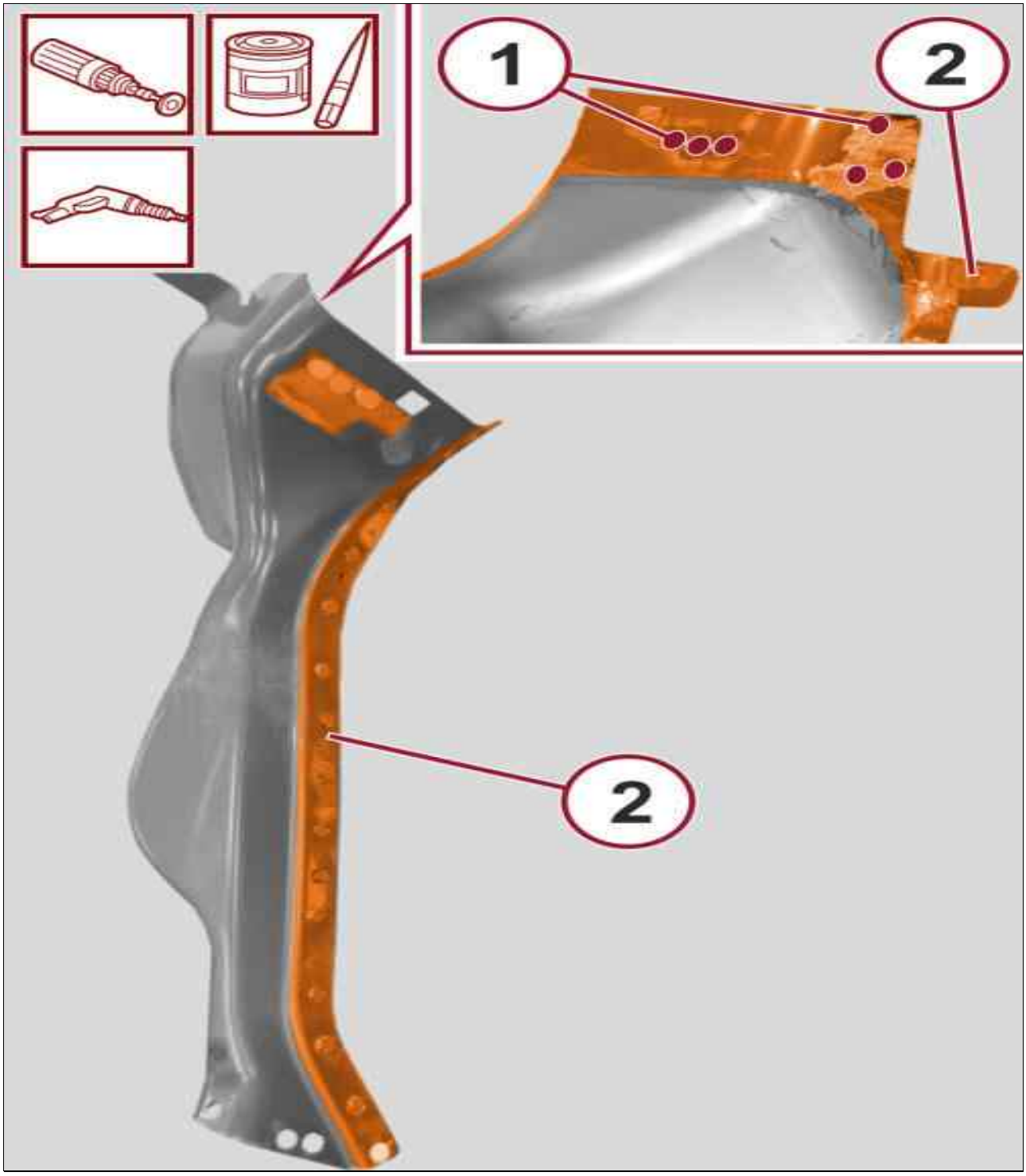


Courtesy of CHRYSLER GROUP, LLC

10. With the use of a hammer and dolly block, straighten the edges of the mating components.
11. With the use of a disc grinder, remove any residue of the spot welds.
12. With the use of a rotary brush, clean the previously treated areas.
13. Apply electro-weldable paint/weld through primer to the areas (1) to be welded.

BODY STRUCTURE > TROUGH, LIFTGATE OPENING > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

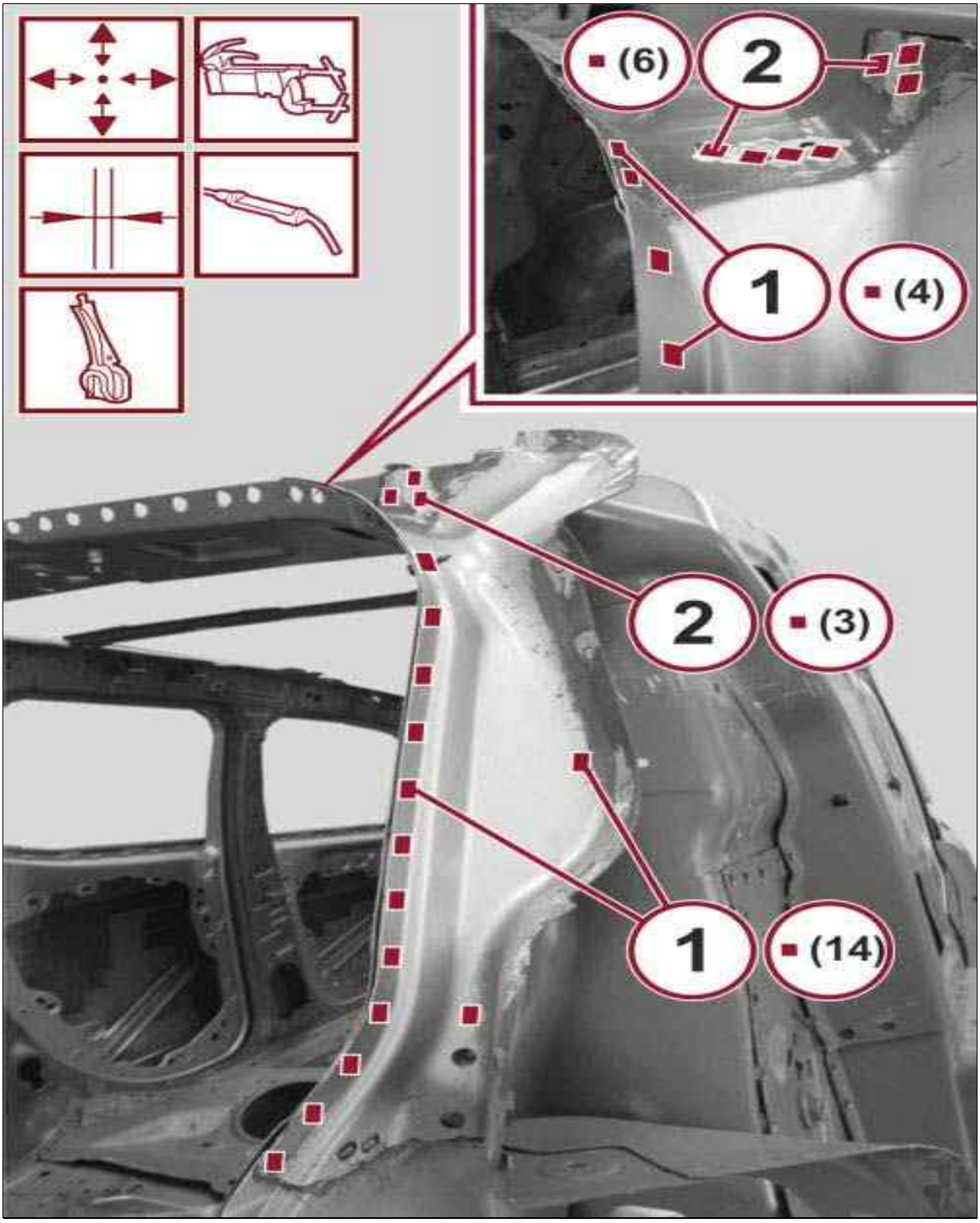
Fig 1: Liftgate Opening Trough Installation (1 Of 2)



Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the entire perimeter of the inner and outer part using a rotary brush.
2. With the use of a drill, drill holes at the points (1) indicated.
3. Apply elctro-weldable paint/weld through primer to the boarders (2) involved in welding.

Fig 2: Liftgate Opening Trough Installation (2 Of 2)



Courtesy of CHRYSLER GROUP, LLC

4. Position the service part correctly on the vehicle interior pillar and secure it with the self-locking clamps.
5. Check alignment and surrounding gaps.
6. With the use of a spot welder, apply spot welds to the areas (1) indicated in the illustration.
7. With the use of a MIG welder, apply plug welds filling in the holes (2) indicated in the

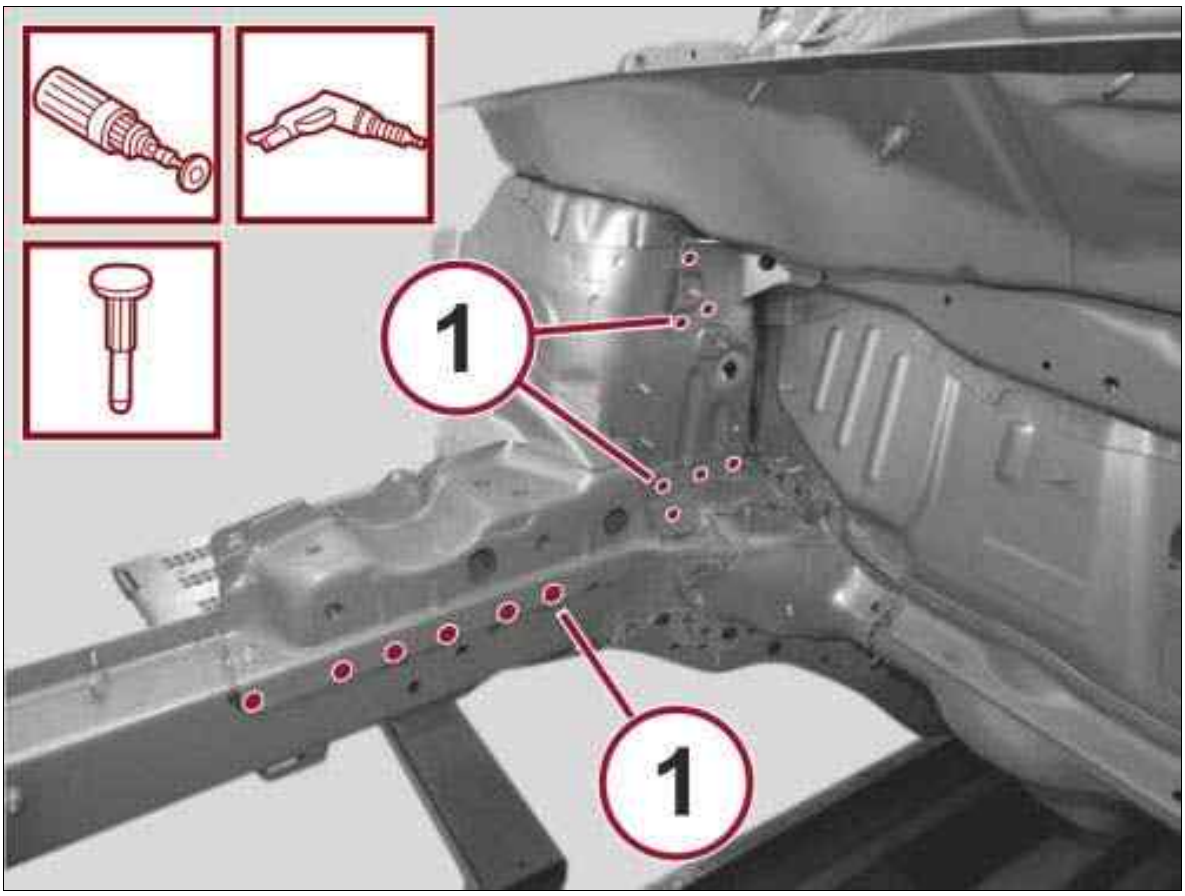
illustration.

8. Correct any distortions to the sheet metal using a hammer and dolly block.
9. Use a grinding disc to smooth the welds.
10. Use a rotary brush to clean the previously welded areas.
11. Apply corrosion protection to the areas involved in the welding.
12. Install the quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .
13. Install the roof panel. Refer to PANEL, ROOF, REMOVAL AND INSTALLATION .

BODY STRUCTURE > WHEELHOUSE, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

1. Remove upper load path beam. Refer to BEAM, LOAD PATH, REMOVAL AND INSTALLATION .
2. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
3. Straighten the body as necessary.

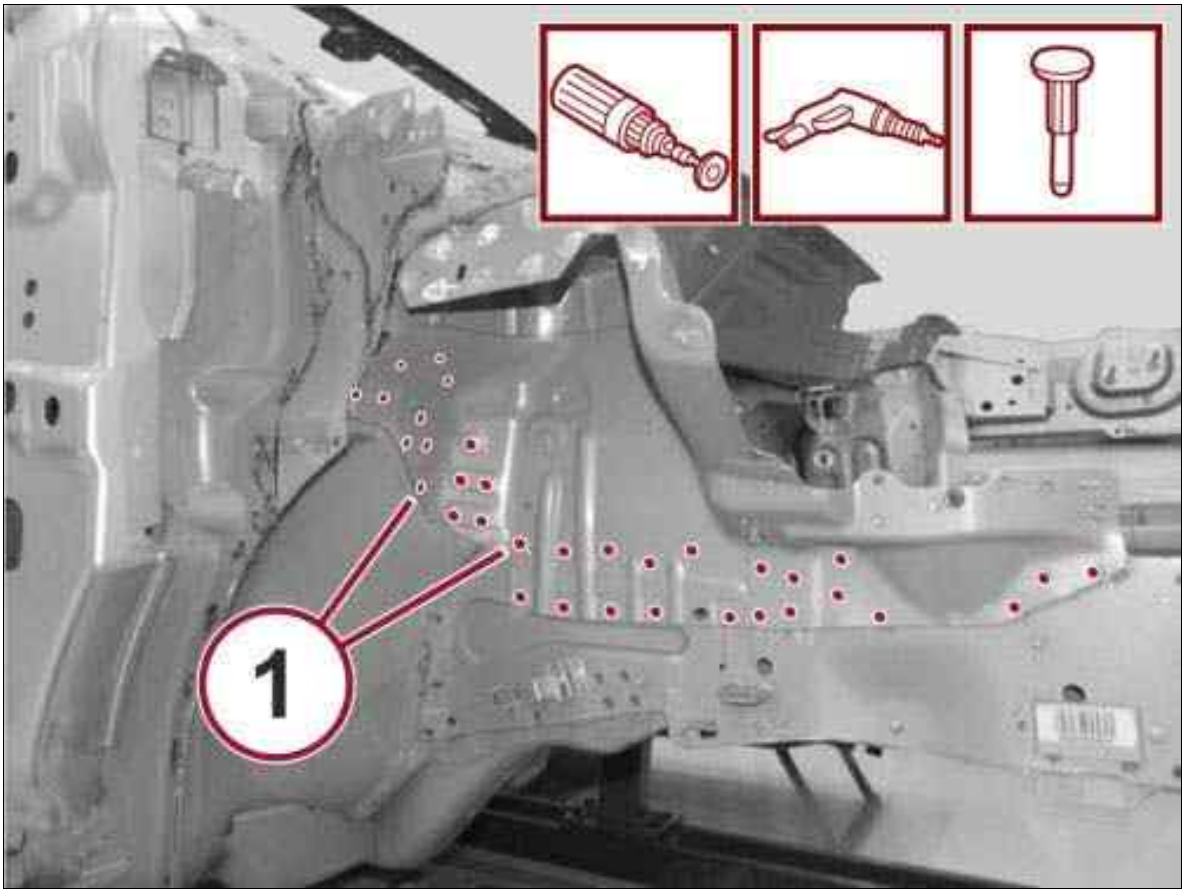
Fig 1: Front Wheelhouse Removal (1 Of 5)



Courtesy of CHRYSLER GROUP, LLC

4. Use a rotary brush to remove the paint and gain access to the spot welds (1).
5. With the use of a drill, release the spot welds (1) shown in the illustration.
6. Use a chisel and hammer to remove the welds previously released.
7. Remove the strut tower reinforcement from the vehicle.

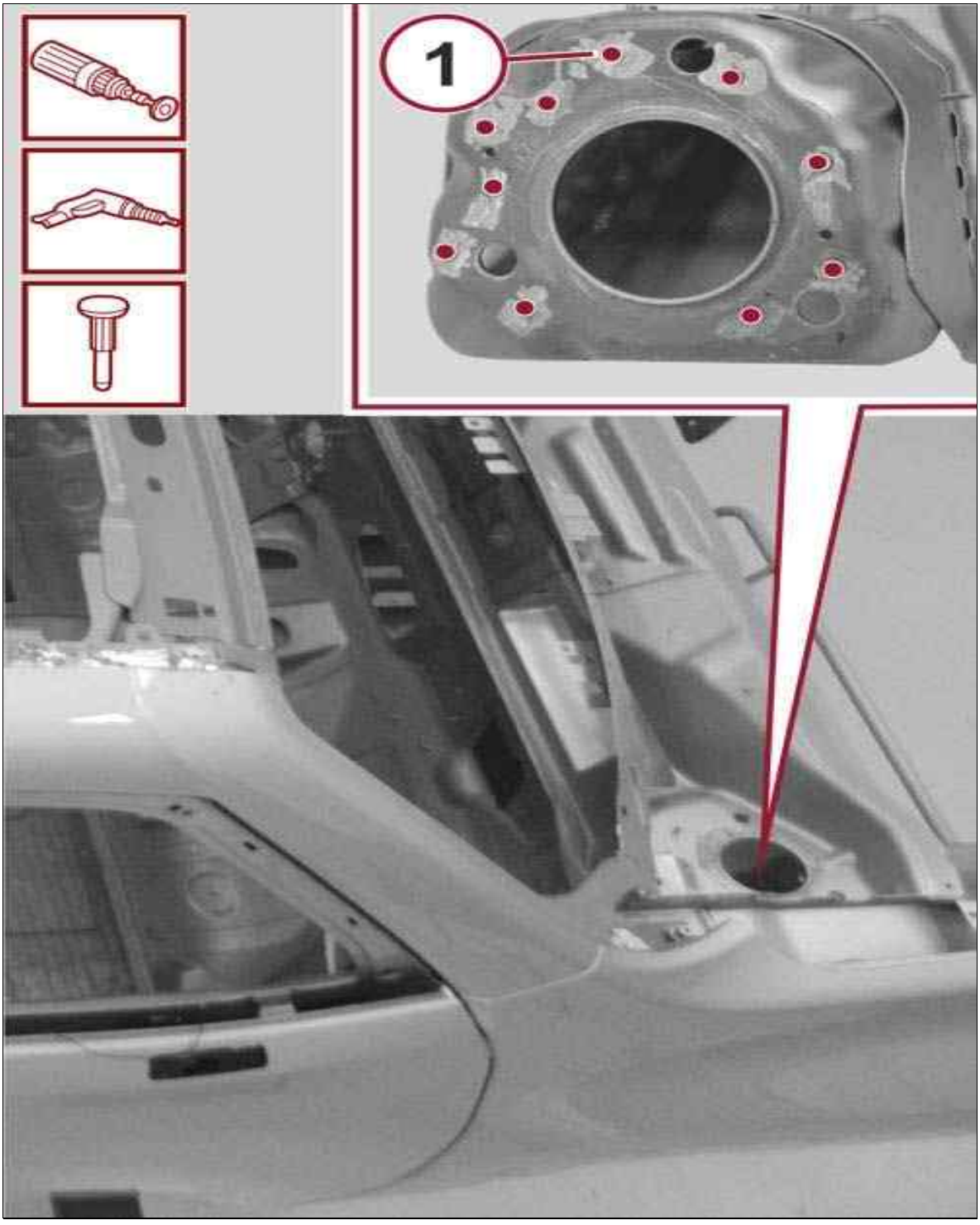
Fig 2: Front Wheelhouse Removal (2 Of 5)



Courtesy of CHRYSLER GROUP, LLC

8. Use a rotary brush to remove the paint and gain access to the spot welds (1).
9. With the use of a drill, release the spot welds (1) shown in the illustration.
10. Use a chisel and hammer to remove the welds previously released.

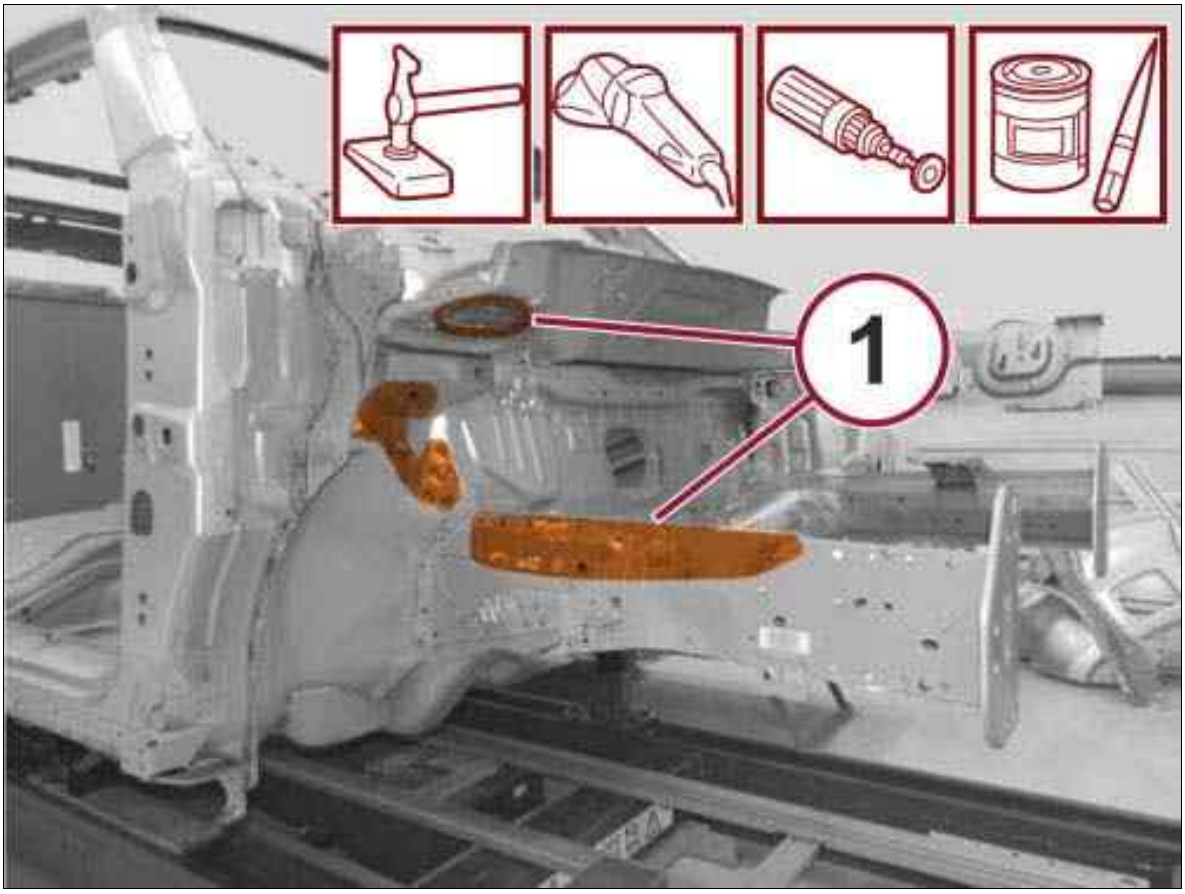
Fig 3: Front Wheelhouse Removal (3 Of 5)



Courtesy of CHRYSLER GROUP, LLC

11. Use a rotary brush to remove the paint and gain access to the spot welds (1).
12. With the use of a drill, release the spot welds (1) shown in the illustration.
13. Use a chisel and hammer to remove the welds previously released.
14. Remove the part from the vehicle.

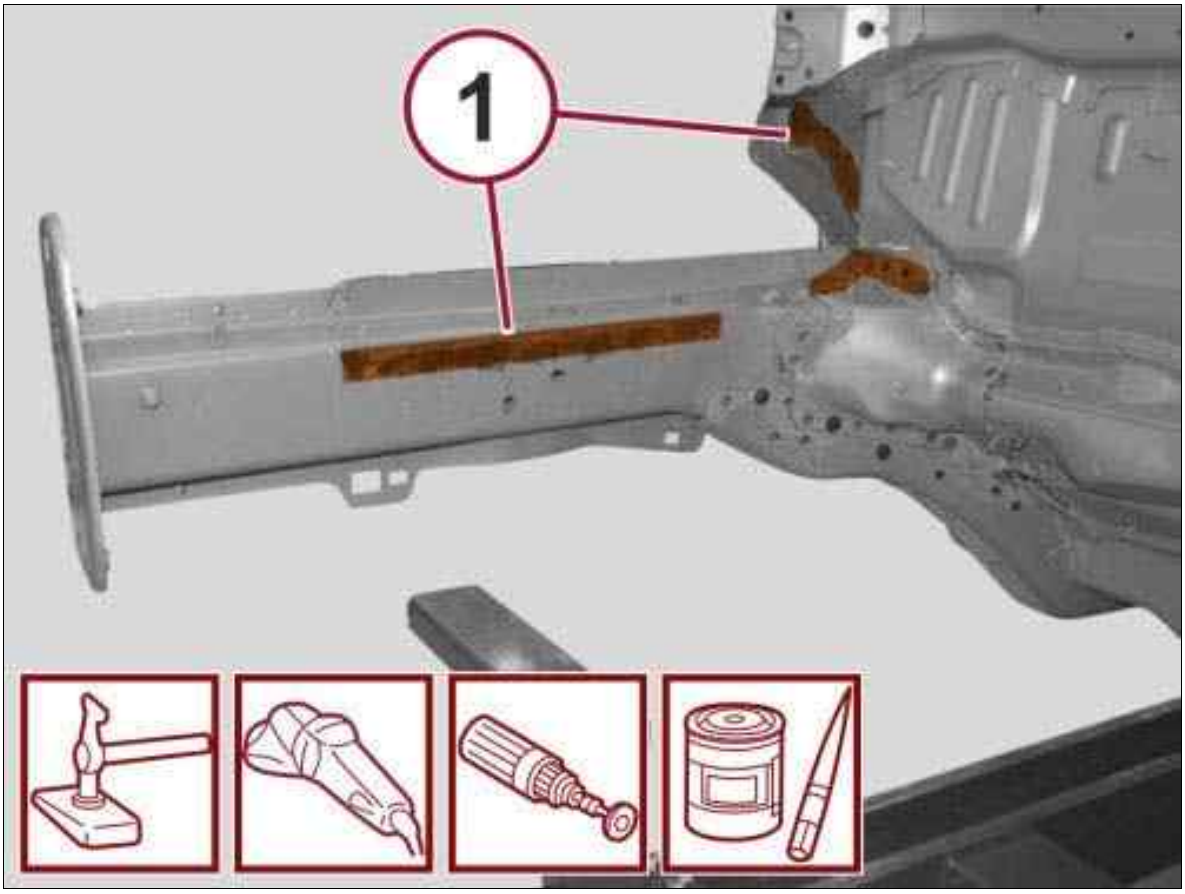
Fig 4: Front Wheelhouse Removal (4 Of 5)



Courtesy of CHRYSLER GROUP, LLC

15. With the use of a hammer and dolly, straighten the edges of the mating components.
16. With the use of a grinding wheel, remove any residue of the spot welds.
17. Use a rotary brush and clean the previously treated areas.
18. Apply electro-weldable paint/weld through primer to the areas shown in the illustration (1).

Fig 5: Front Wheelhouse Removal (5 Of 5)

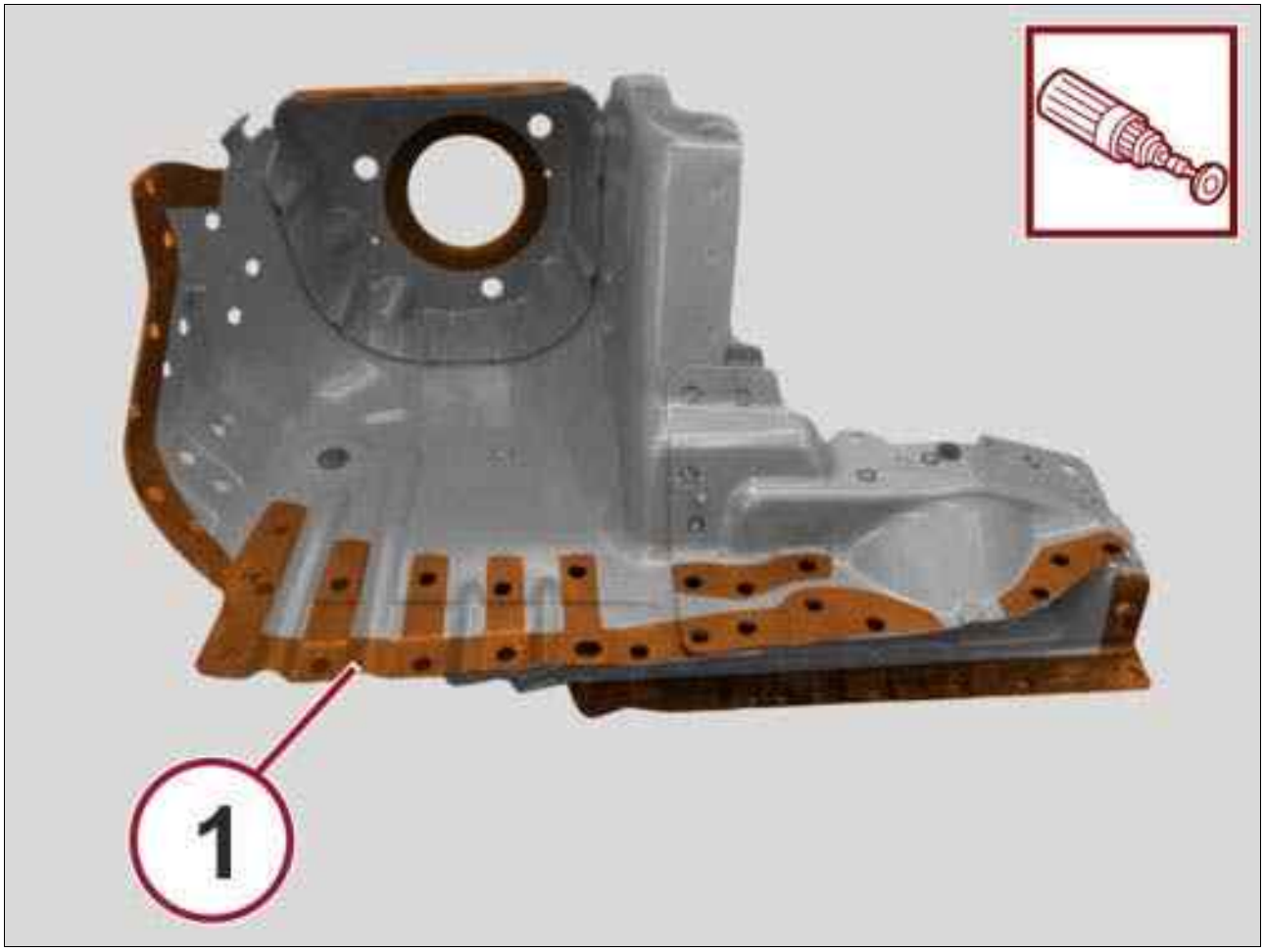


Courtesy of CHRYSLER GROUP, LLC

19. With the use of a hammer and dolly block, straighten the edges of the mating components.
20. With the use of a grinding wheel, remove any residue of the spot welds.
21. Use a rotary brush and clean the previously treated areas.
22. Apply electro-weldable paint/weld through primer to the areas shown in the illustration (1).

BODY STRUCTURE > WHEELHOUSE, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

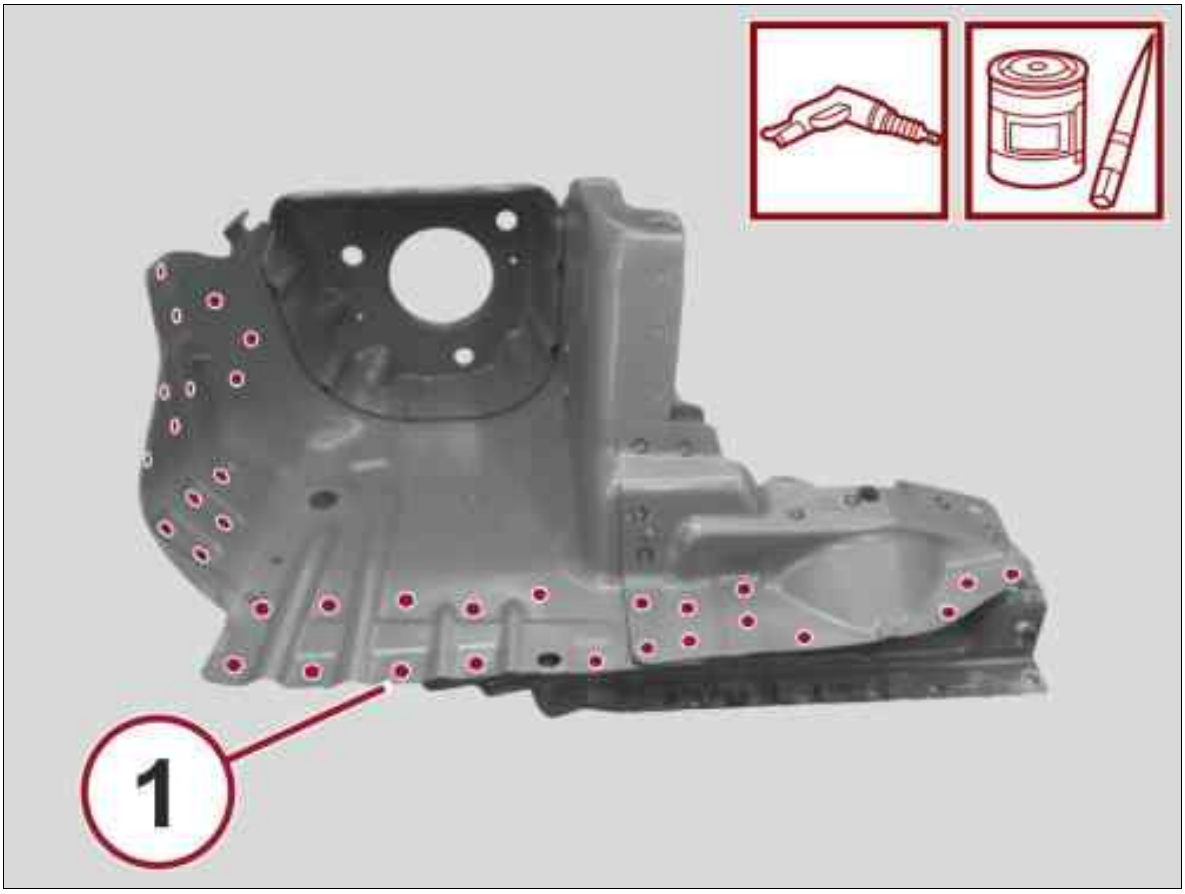
Fig 1: Front Wheelhouse Installation (1 Of 9)



Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the entire perimeter of the inside and outside of the service part using a rotary brush.

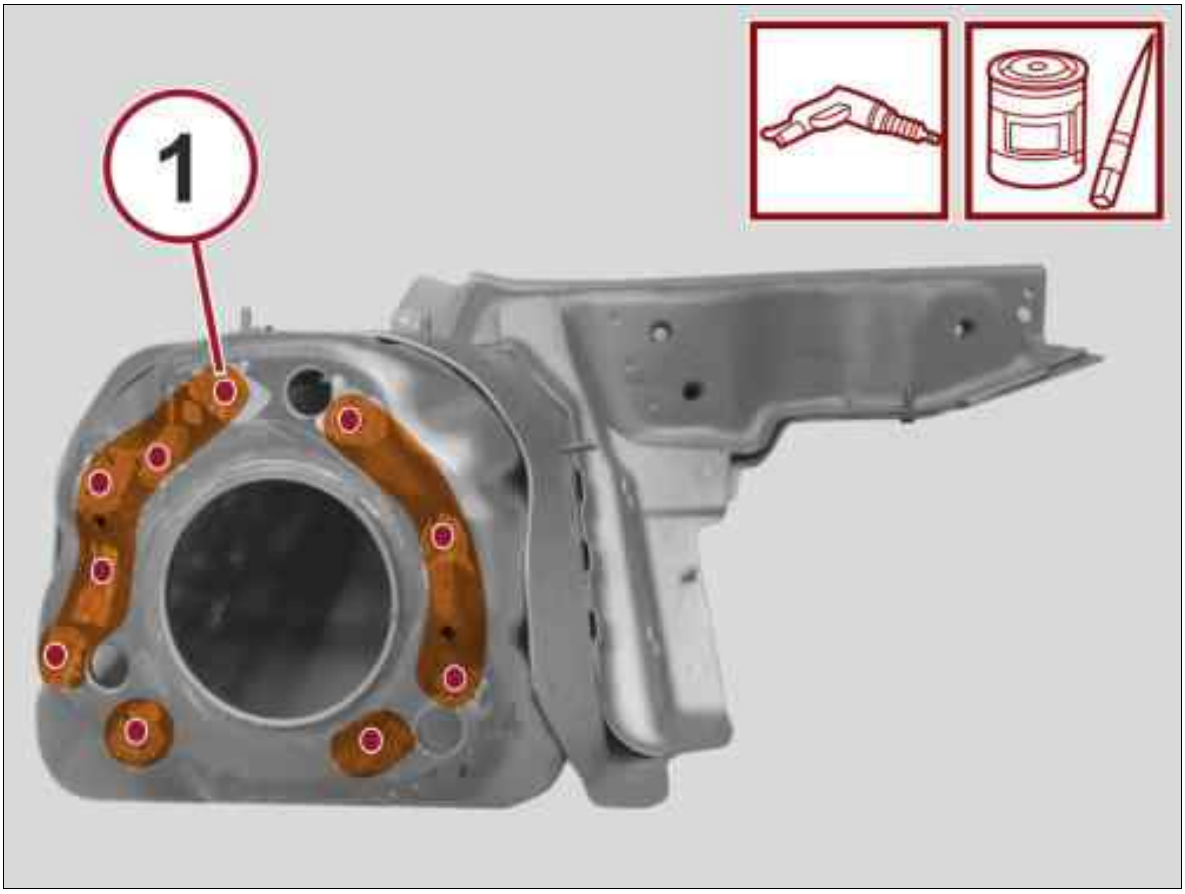
Fig 2: Front Wheelhouse Installation (2 Of 9)



Courtesy of CHRYSLER GROUP, LLC

2. Drill out the part at the indicated points (1).
3. Apply elctro-weldable paint/weld through primer to the areas involved.

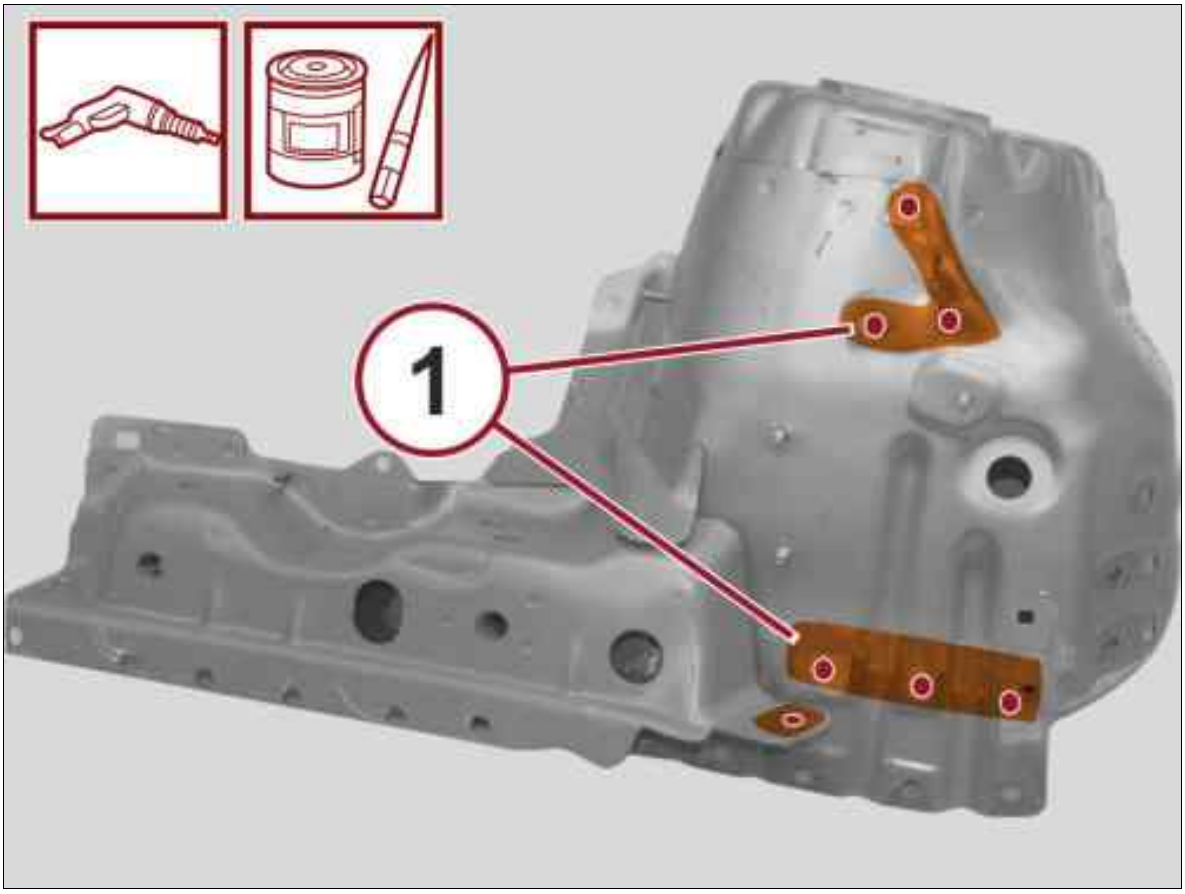
Fig 3: Front Wheelhouse Installation (3 Of 9)



Courtesy of CHRYSLER GROUP, LLC

4. Drill out the part at the indicated points (1).
5. Apply elctro-weldable paint/weld through primer to the areas involved.

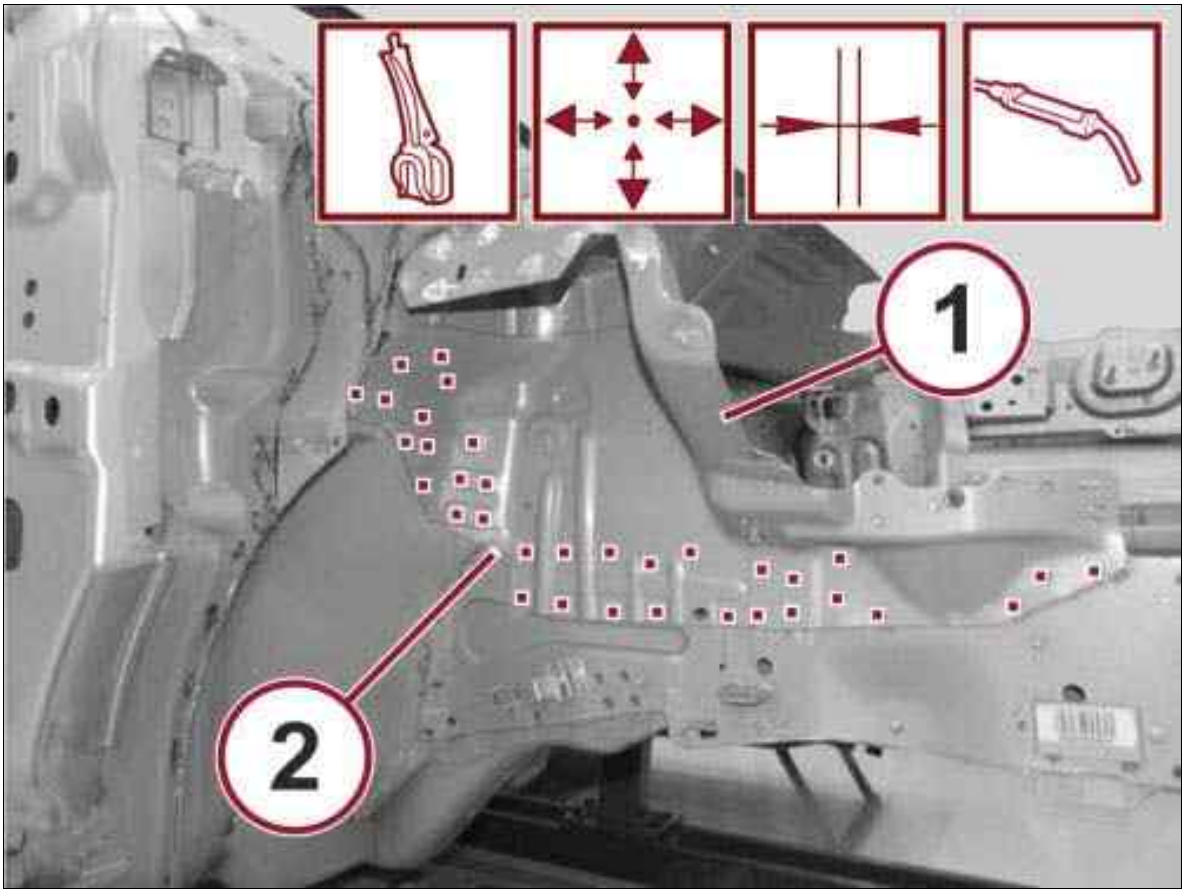
Fig 4: Front Wheelhouse Installation (4 Of 9)



Courtesy of CHRYSLER GROUP, LLC

6. Drill out the part at the indicated points (1).
7. Apply elctro-weldable paint/weld through primer to the areas involved.

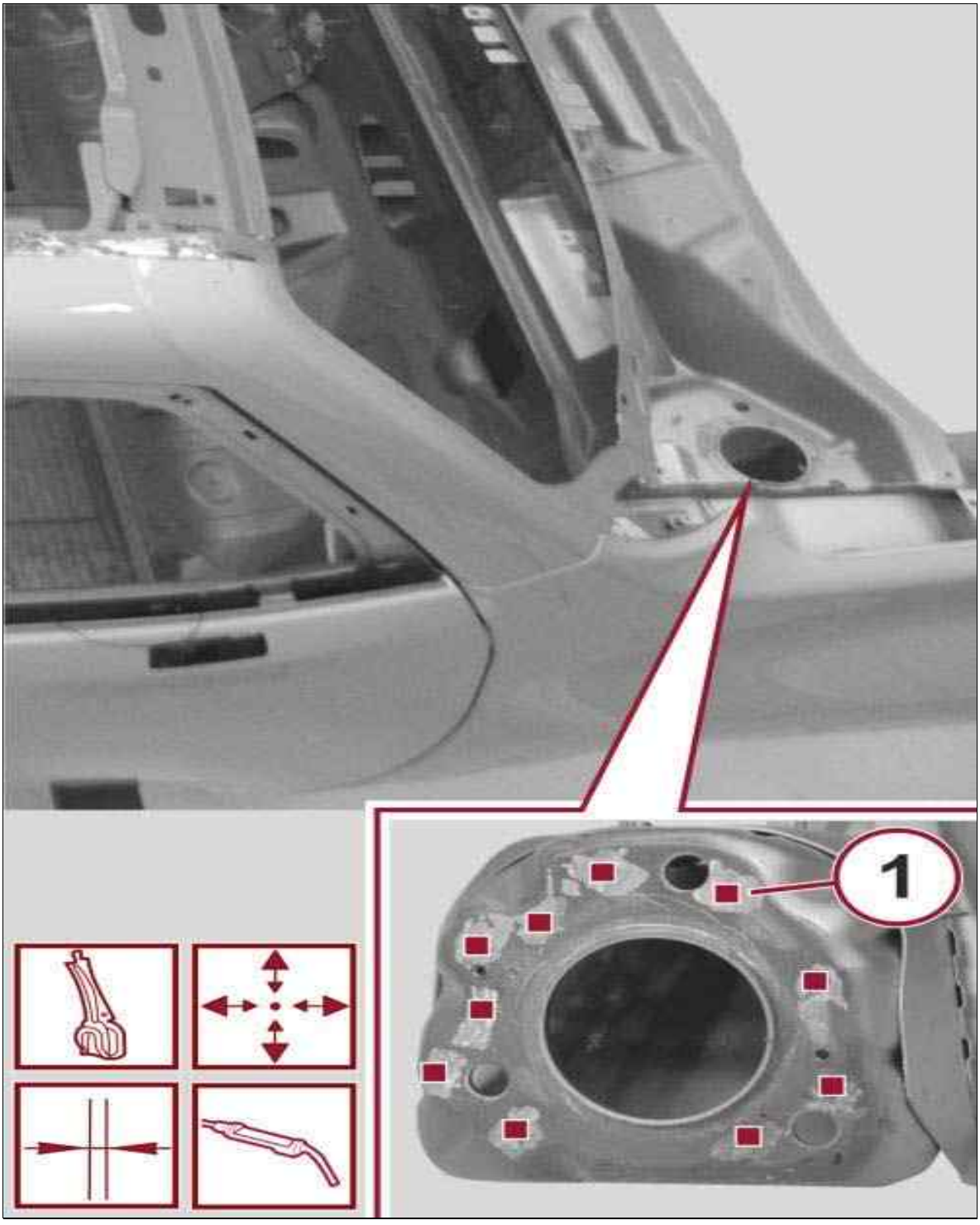
Fig 5: Front Wheelhouse Installation (5 Of 9)



Courtesy of CHRYSLER GROUP, LLC

8. Position the service parts (1) correctly on the vehicle and secure it with the self-locking clamps.
9. Check alignment and surrounding gaps.
10. With the use of a MIG welder, apply plug welds to fill in the holes (2) made previously.

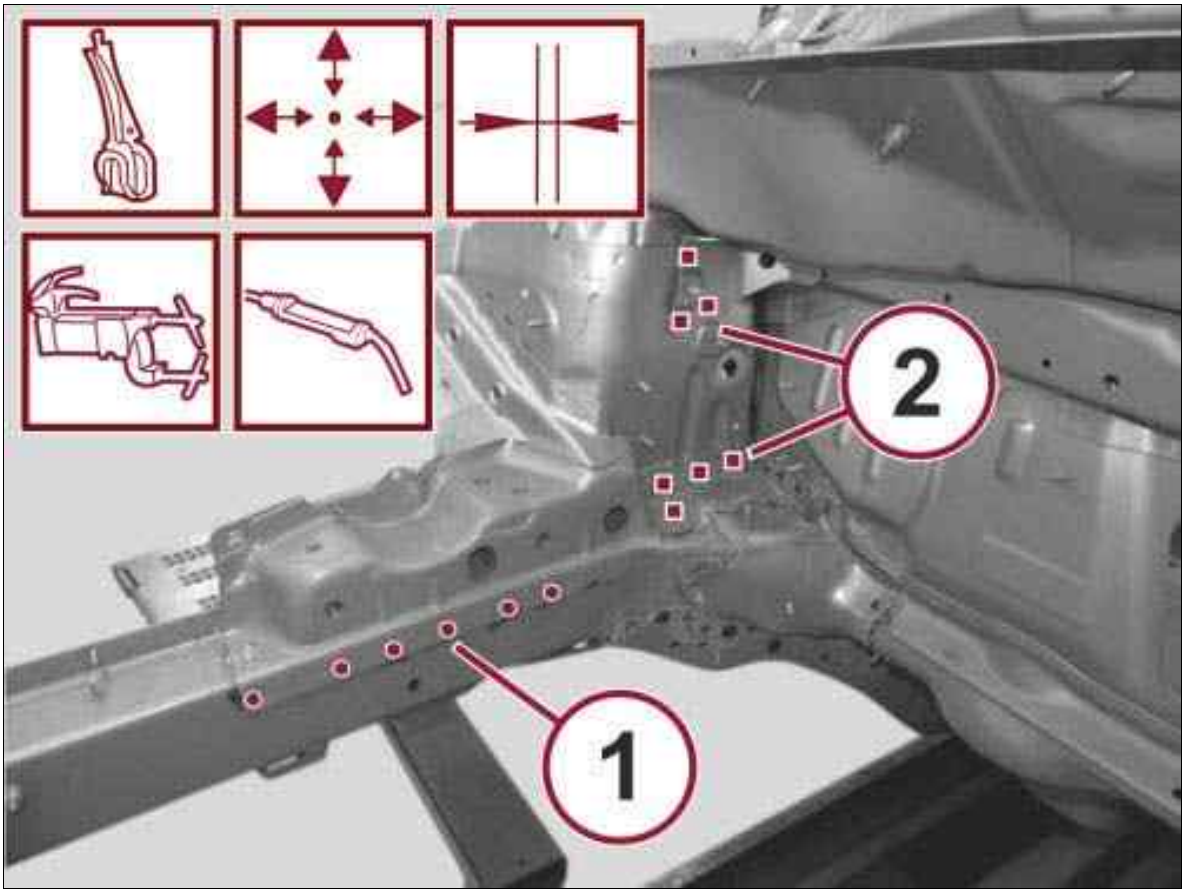
Fig 6: Front Wheelhouse Installation (6 Of 9)



Courtesy of CHRYSLER GROUP, LLC

11. Position the service parts correctly on the vehicle and secure it with the self-locking clamps.
12. Check alignment and surrounding gaps.
13. With the use of a MIG welder, apply plug welds to fill in the holes (1) made previously.

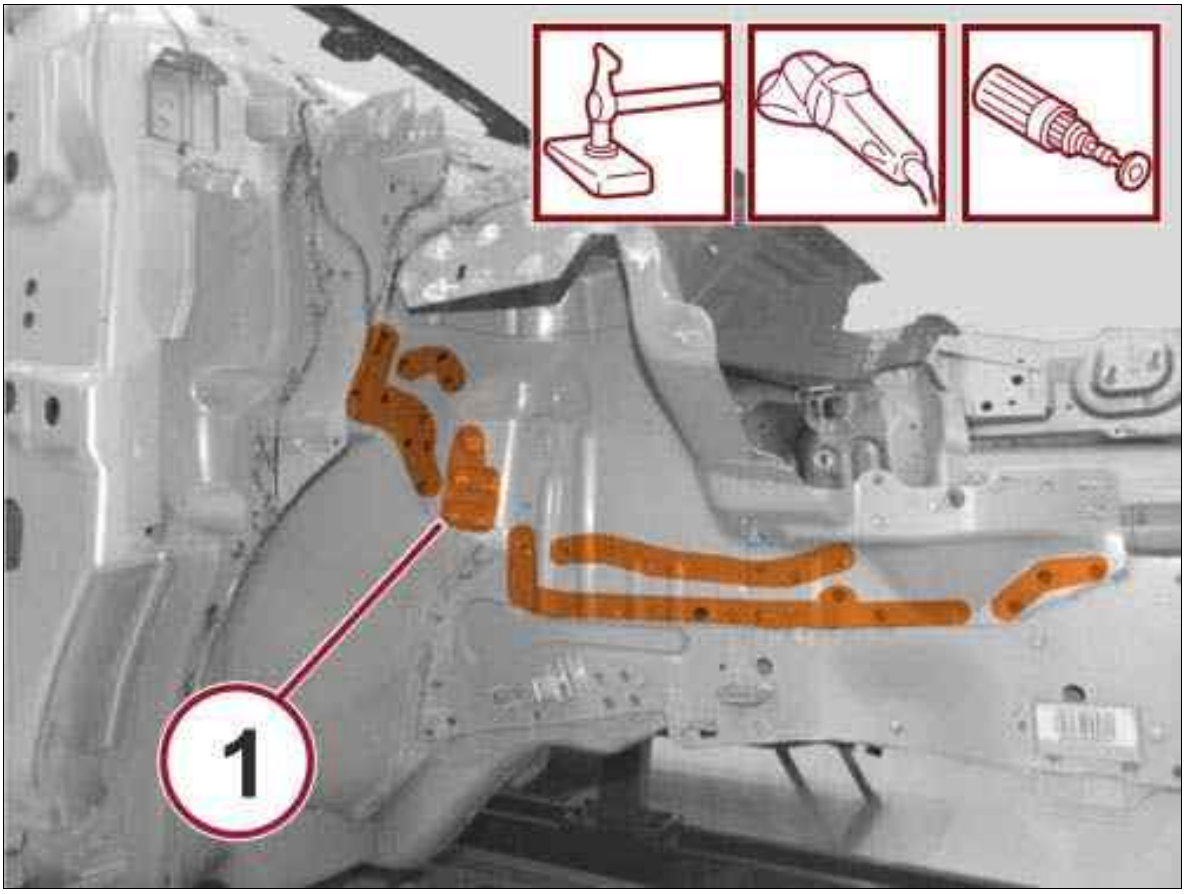
Fig 7: Front Wheelhouse Installation (7 Of 9)



Courtesy of CHRYSLER GROUP, LLC

14. Position the service parts correctly on the vehicle and secure it with the self-locking clamps.
15. Check alignment and surrounding gaps.
16. Use a spot welder to weld the points indicated in the illustration (1).
17. With the use of a MIG welder, apply plug welds to fill in the holes (2) made previously.

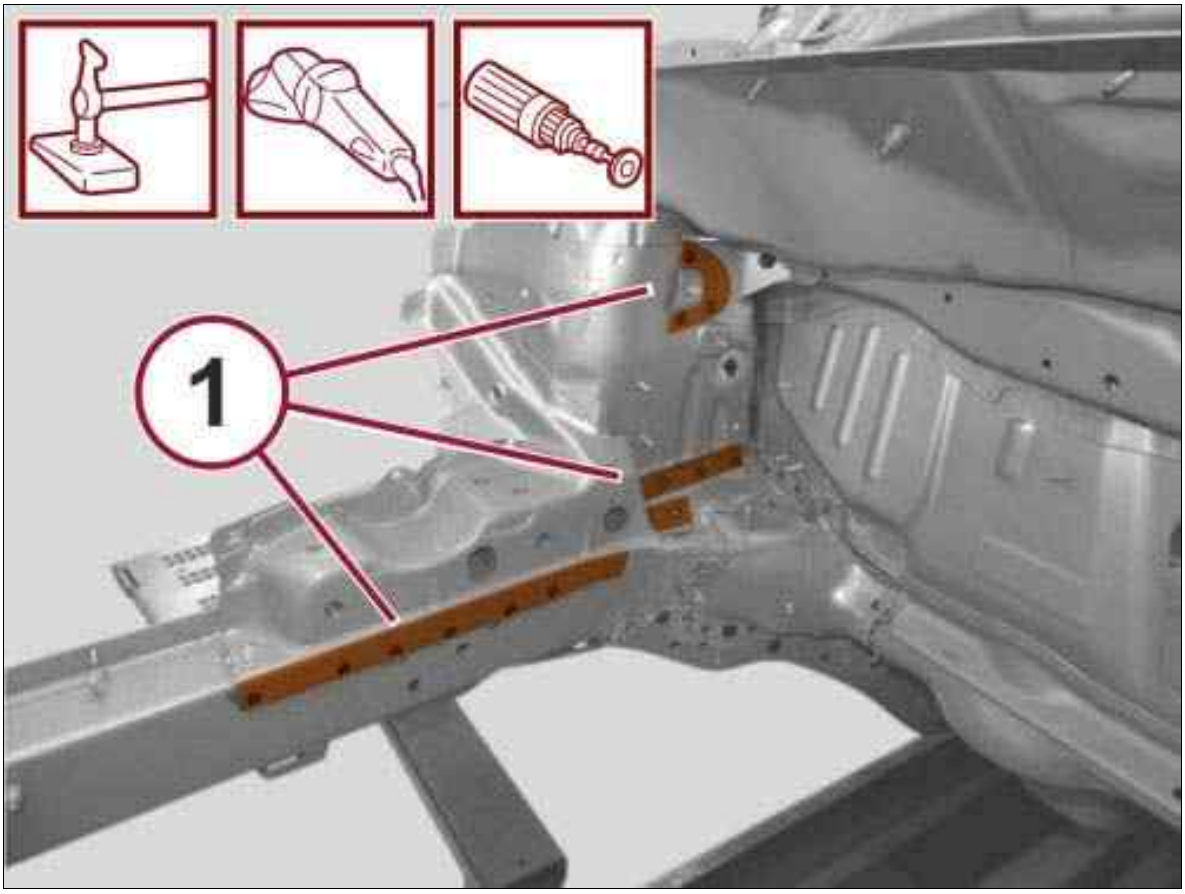
Fig 8: Front Wheelhouse Installation (8 Of 9)



Courtesy of CHRYSLER GROUP, LLC

18. Correct any distortions to the panel using a hammer and dolly block.
19. Use a grinding wheel to smooth the welds (1).
20. Use a rotary brush to clean the previously welded areas.

Fig 9: Front Wheelhouse Installation (9 Of 9)



Courtesy of CHRYSLER GROUP, LLC

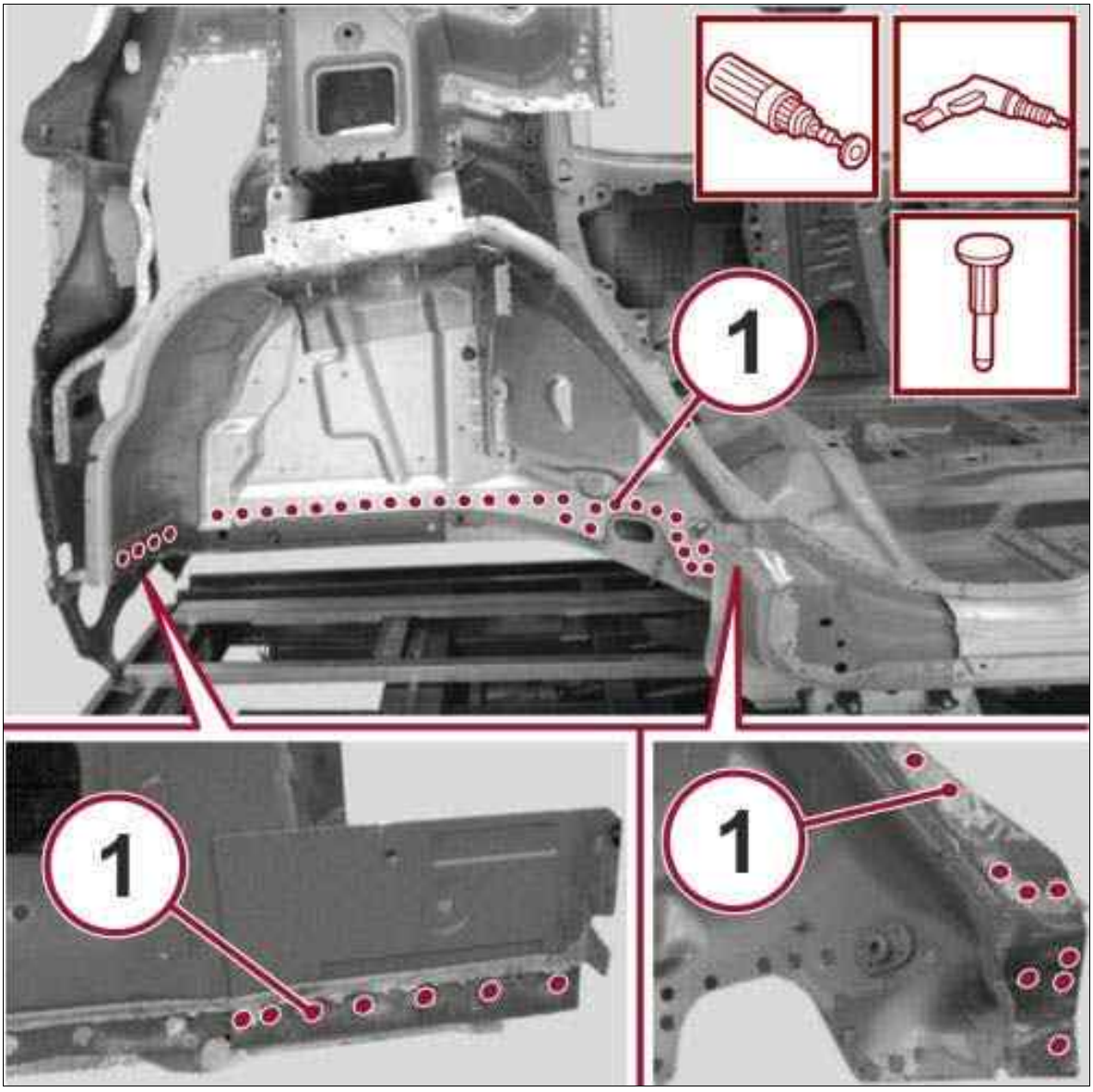
21. Correct any distortions to the panel using a hammer and dolly block.
22. Use a grinding wheel to smooth the welds (1).
23. Use a rotary brush to clean the previously welded areas.
24. Apply corrosion protection to the areas involved in the welding.
25. Seal the seams between the service part and the vehicle.
26. Install the upper load path beam. Refer to BEAM, LOAD PATH, REMOVAL AND INSTALLATION .

BODY STRUCTURE > WHEELHOUSE, REAR > REMOVAL AND INSTALLATION > INNER REAR WHEELHOUSE REMOVAL AND INSTALLATION > REMOVAL

1. Remove the quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .
2. If servicing the right side, remove the fuel door reinforcement. Refer to REINFORCEMENT, FUEL FILLER DOOR, REMOVAL AND INSTALLATION .
3. Remove the quarter panel extension. Refer to QUARTER PANEL EXTENSION REMOVAL AND INSTALLATION .

4. Remove the outer rear wheelhouse. Refer to OUTER REAR WHEELHOUSE REMOVAL AND INSTALLATION .
5. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
6. Straighten the body as necessary.

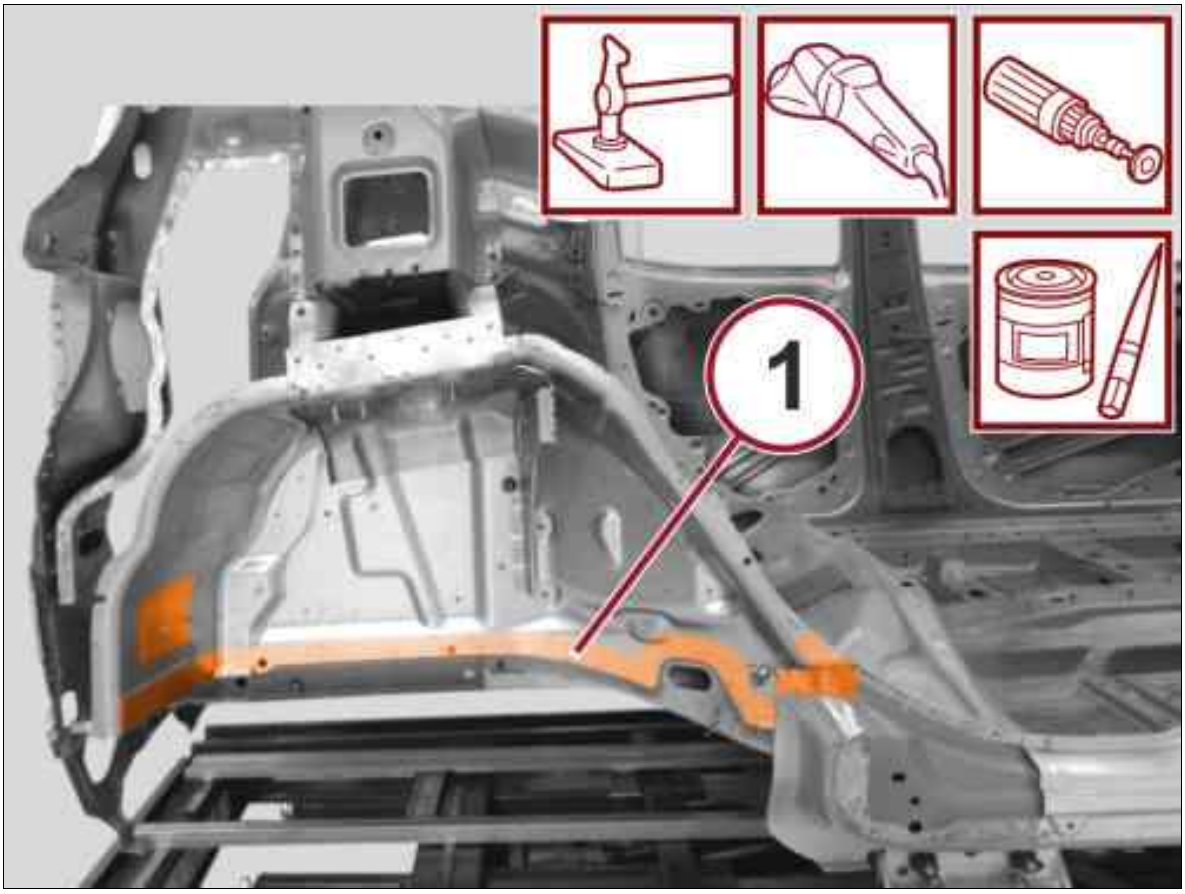
Fig 1: Rear Wheelhouse Removal (1 Of 2)



Courtesy of CHRYSLER GROUP, LLC

7. With the use of a rotary brush, remove the paint and access to the spot welds.
8. With the use of a drill, release the spot welds (1).
9. Use a chisel and hammer to remove the welds previously released.
10. Remove the cutout sheet metal.

Fig 2: Rear Wheelhouse Removal (2 Of 2)



Courtesy of CHRYSLER GROUP, LLC

11. With the use of a hammer and dolly block, straighten the edges of the mating components.
12. With the use of a disc grinder, remove any residue of the spot welds.
13. With the use of a rotary brush, clean the previously treated areas.
14. Apply electro-weldable paint/weld through primer to the highlighted areas (1).

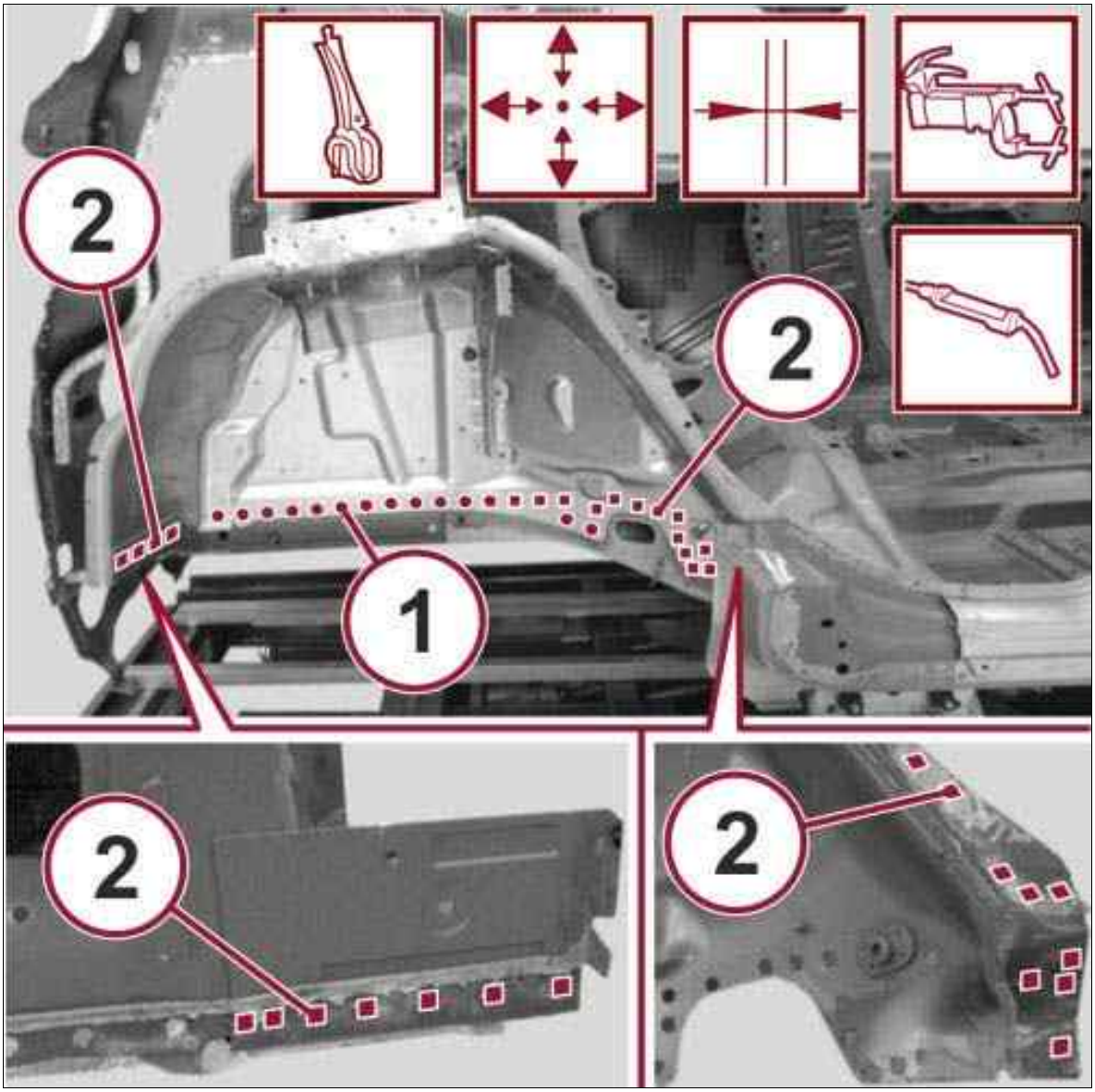
BODY STRUCTURE > WHEELHOUSE, REAR > REMOVAL AND INSTALLATION > INNER REAR WHEELHOUSE REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Rear Wheelhouse Installation (1 Of 4)

Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the entire perimeter of the inner and outer part using a rotary brush.
2. With the use of a drill, drill holes at the indicated points (1).
3. Apply elctro-weldable paint/weld through primer to the edges involved in welding.

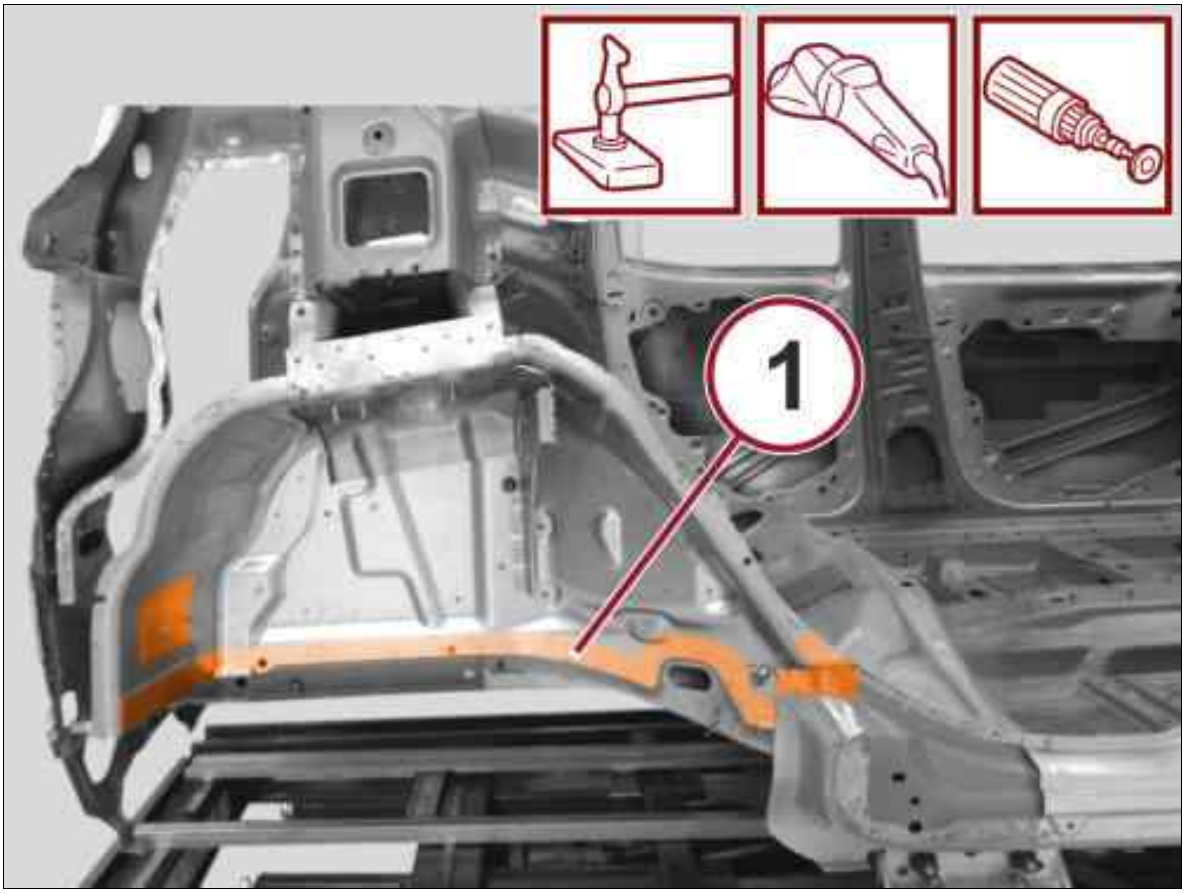
Fig 2: Rear Wheelhouse Installation (2 Of 4)



Courtesy of CHRYSLER GROUP, LLC

4. Position the part correctly on the vehicle and secure it with the self-locking clamps.
5. Check alignment and surrounding gaps.
6. With the use of a spot welder, apply spot welds at the indicated points (1).
7. With the use of a MIG welder, apply plug welds filling in the holes (2) previously made.

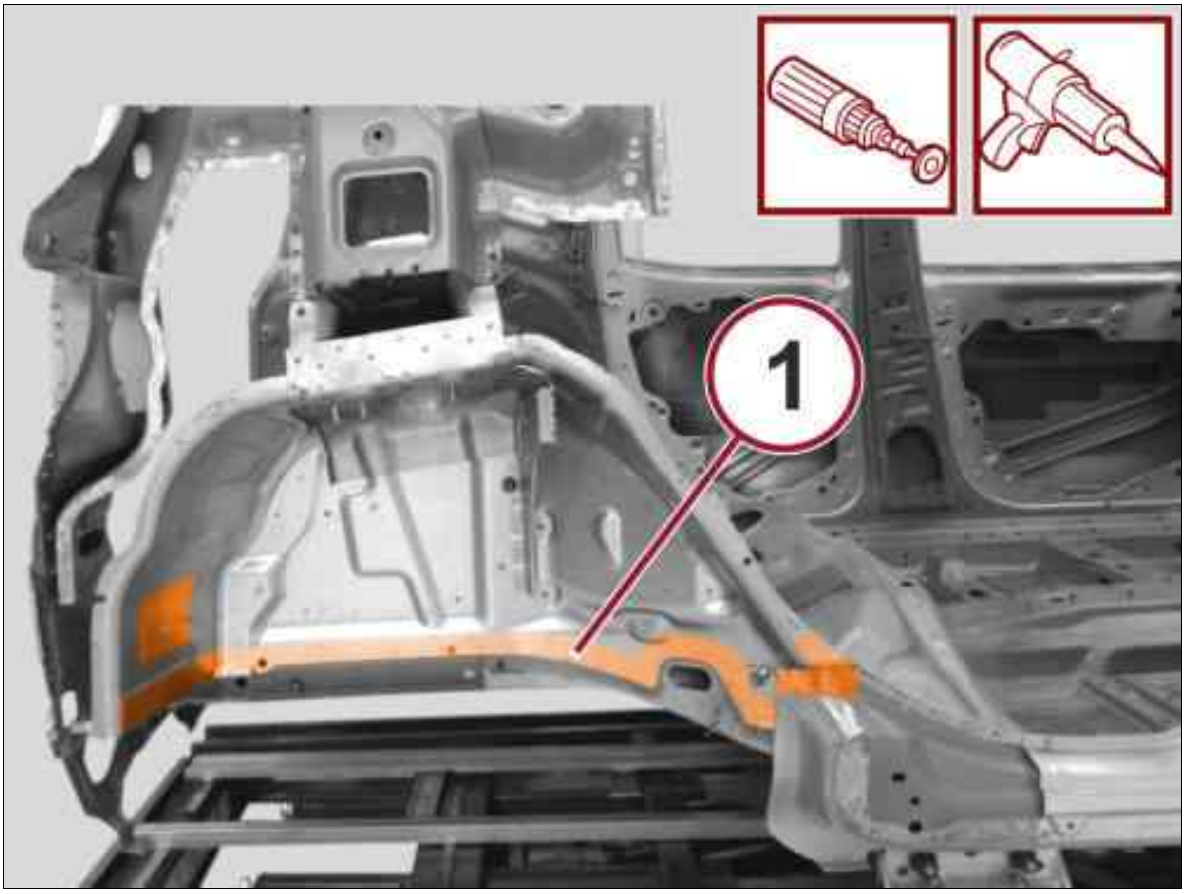
Fig 3: Rear Wheelhouse Installation (3 Of 4)



Courtesy of CHRYSLER GROUP, LLC

8. Correct any distortions to the sheet metal using a hammer and dolly block.
9. Use a grinding disc to smooth the welds in the highlighted area (1).
10. Use a rotary brush to clean the previously welded areas.

Fig 4: Rear Wheelhouse Installation (4 Of 4)



Courtesy of CHRYSLER GROUP, LLC

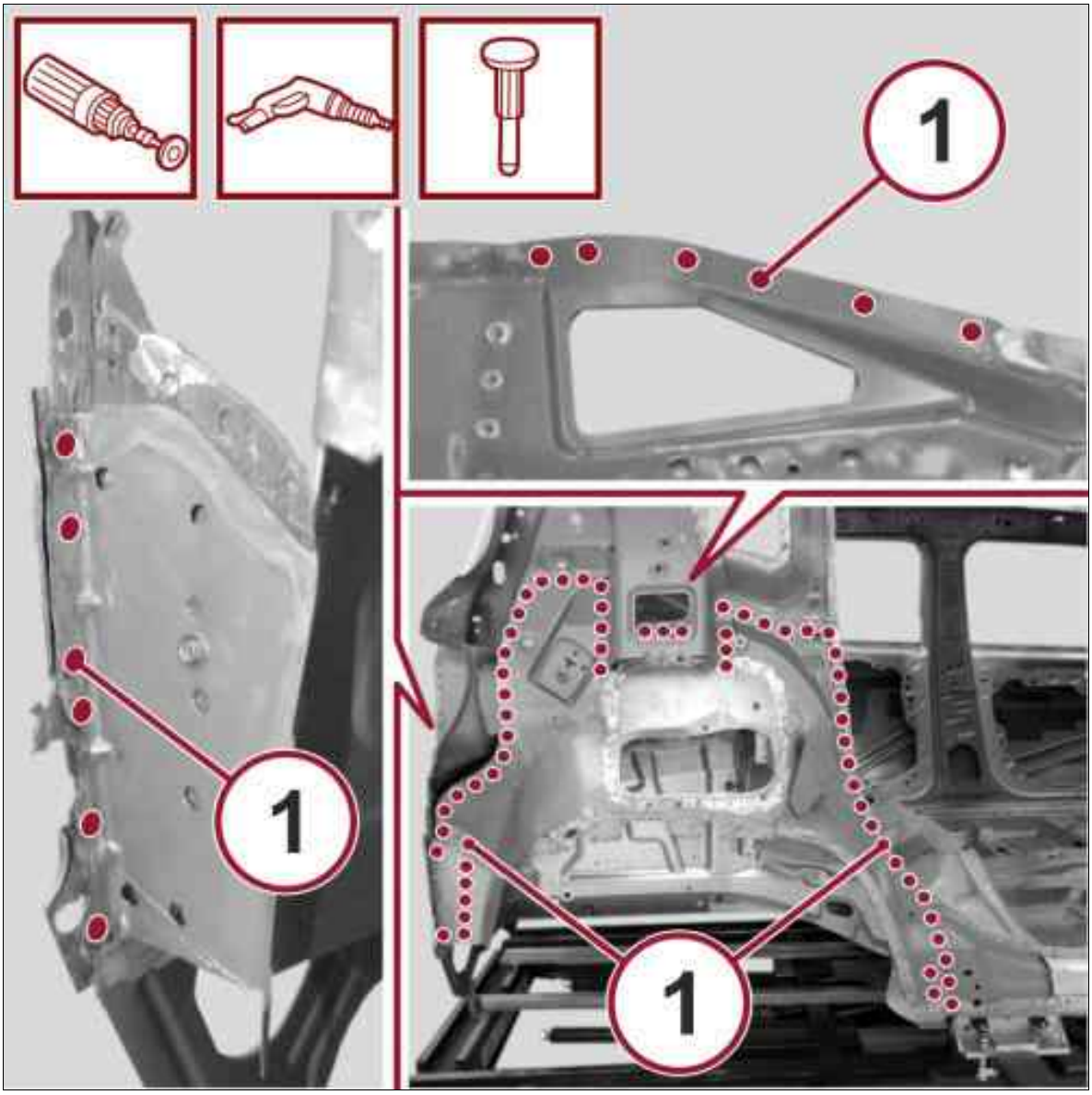
11. Apply corrosion protection to the areas (1) involved in the welding.
12. Seal the seams between the parts and the vehicle.
13. Install the outer rear wheelhouse. Refer to OUTER REAR WHEELHOUSE REMOVAL AND INSTALLATION .
14. Install the quarter panel extension. Refer to QUARTER PANEL EXTENSION REMOVAL AND INSTALLATION .
15. If servicing the right side, install the fuel door reinforcement. Refer to REINFORCEMENT, FUEL FILLER DOOR, REMOVAL AND INSTALLATION .
16. Install the quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .

BODY STRUCTURE > WHEELHOUSE, REAR > REMOVAL AND INSTALLATION > OUTER REAR WHEELHOUSE REMOVAL AND INSTALLATION > REMOVAL

1. Remove the quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .
2. If servicing the right side, remove the fuel door reinforcement. Refer to REINFORCEMENT, FUEL FILLER DOOR, REMOVAL AND INSTALLATION .

3. Remove the quarter panel extension. Refer to QUARTER PANEL EXTENSION REMOVAL AND INSTALLATION .
4. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
5. Straighten the body as necessary.

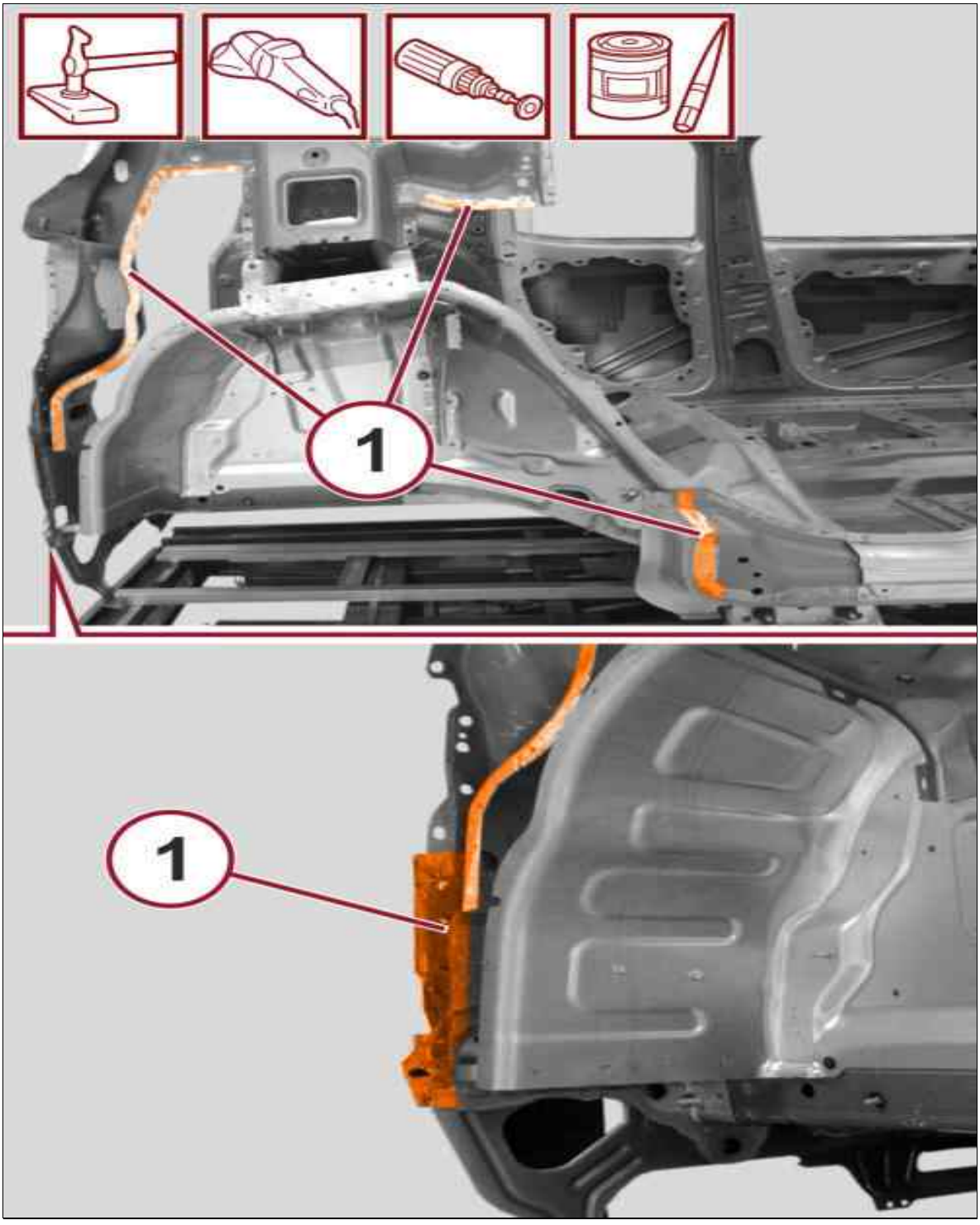
Fig 1: Outer Rear Wheelhouse Removal (1 Of 2)



Courtesy of CHRYSLER GROUP, LLC

6. With the use of a rotary brush, remove the paint and access to the spot welds.
7. With the use of a drill, release the spot welds (1).
8. Use a chisel and hammer to remove the welds previously released.
9. Remove the cutout sheet metal.

Fig 2: Outer Rear Wheelhouse Removal (2 Of 2)

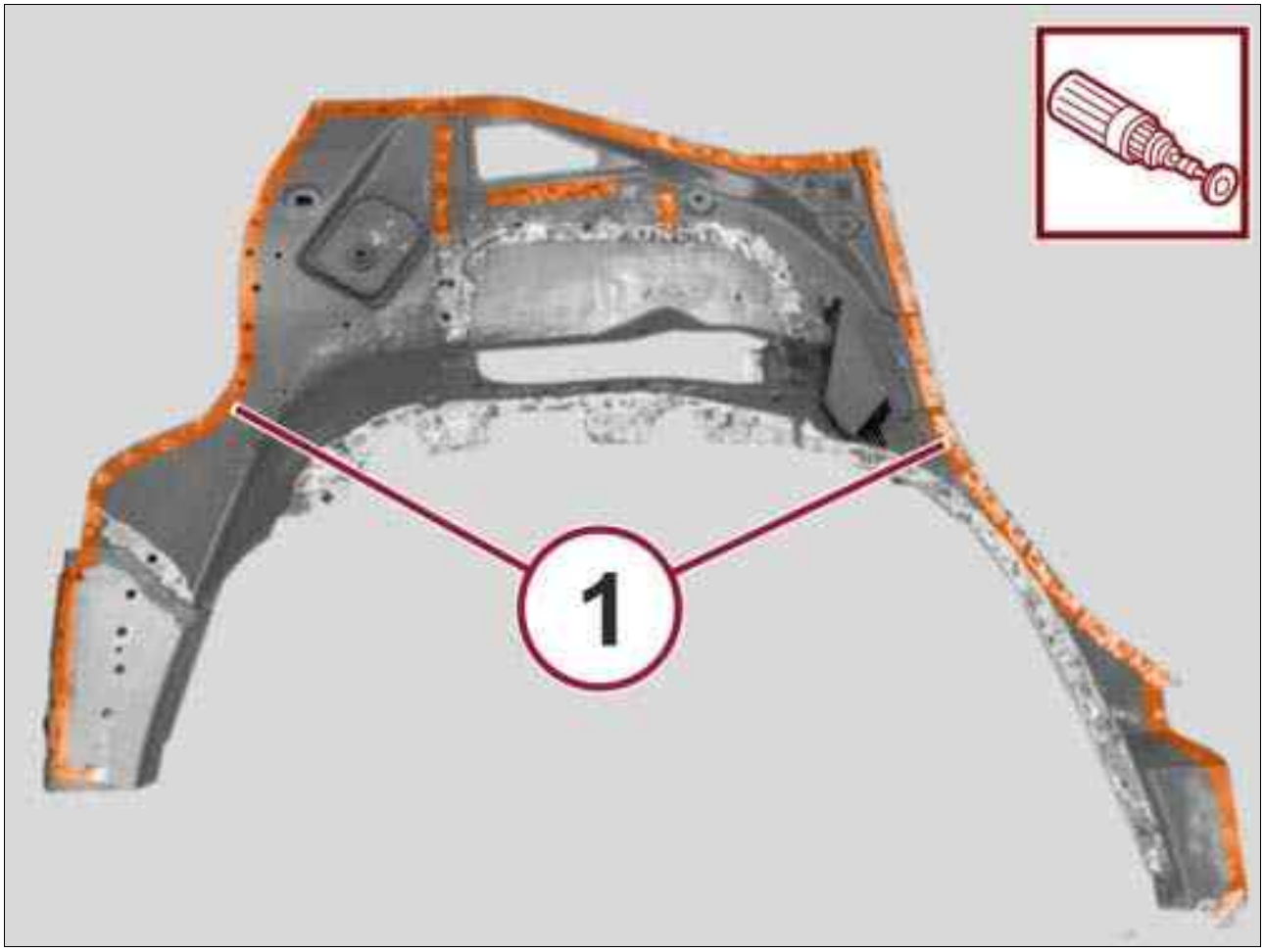


Courtesy of CHRYSLER GROUP, LLC

10. With the use of a hammer and dolly block, straighten the edges of the mating components.
11. With the use of a disc grinder, remove any residue of the spot welds.
12. With the use of a rotary brush, clean the previously treated areas.
13. Apply electro-weldable paint/weld through primer to the highlighted areas (1).

BODY STRUCTURE > WHEELHOUSE, REAR > REMOVAL AND INSTALLATION > OUTER REAR WHEELHOUSE REMOVAL AND INSTALLATION > INSTALLATION

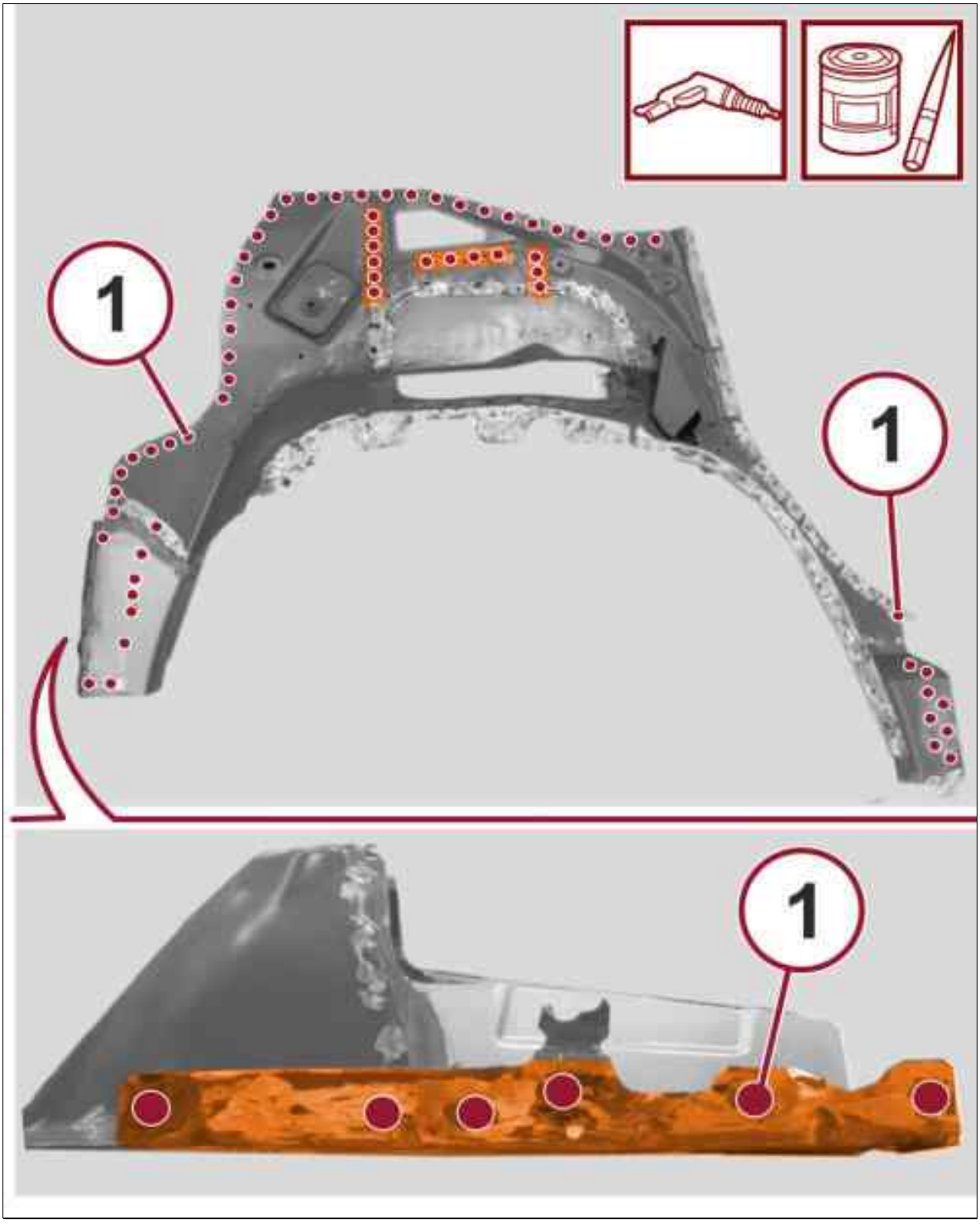
Fig 1: Outer Rear Wheelhouse Installation (1 Of 5)



Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the entire perimeter (1) of the inner and outer part using a rotary brush.

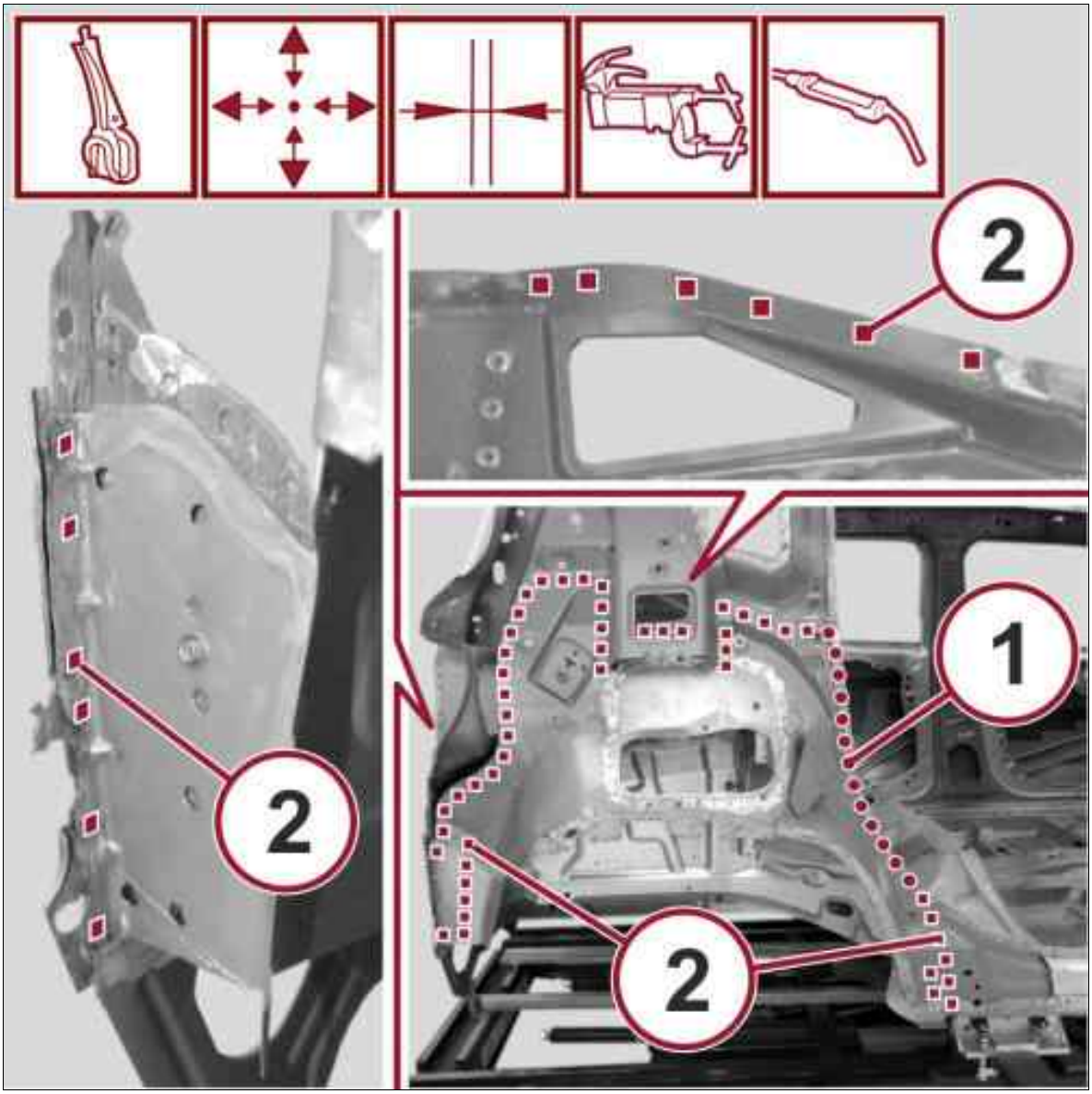
Fig 2: Outer Rear Wheelhouse Installation (2 Of 5)



Courtesy of CHRYSLER GROUP, LLC

2. With the use of a drill, drill holes at the indicated points (1).
3. Apply elctro-weldable paint/weld through primer to the areas involved in welding.

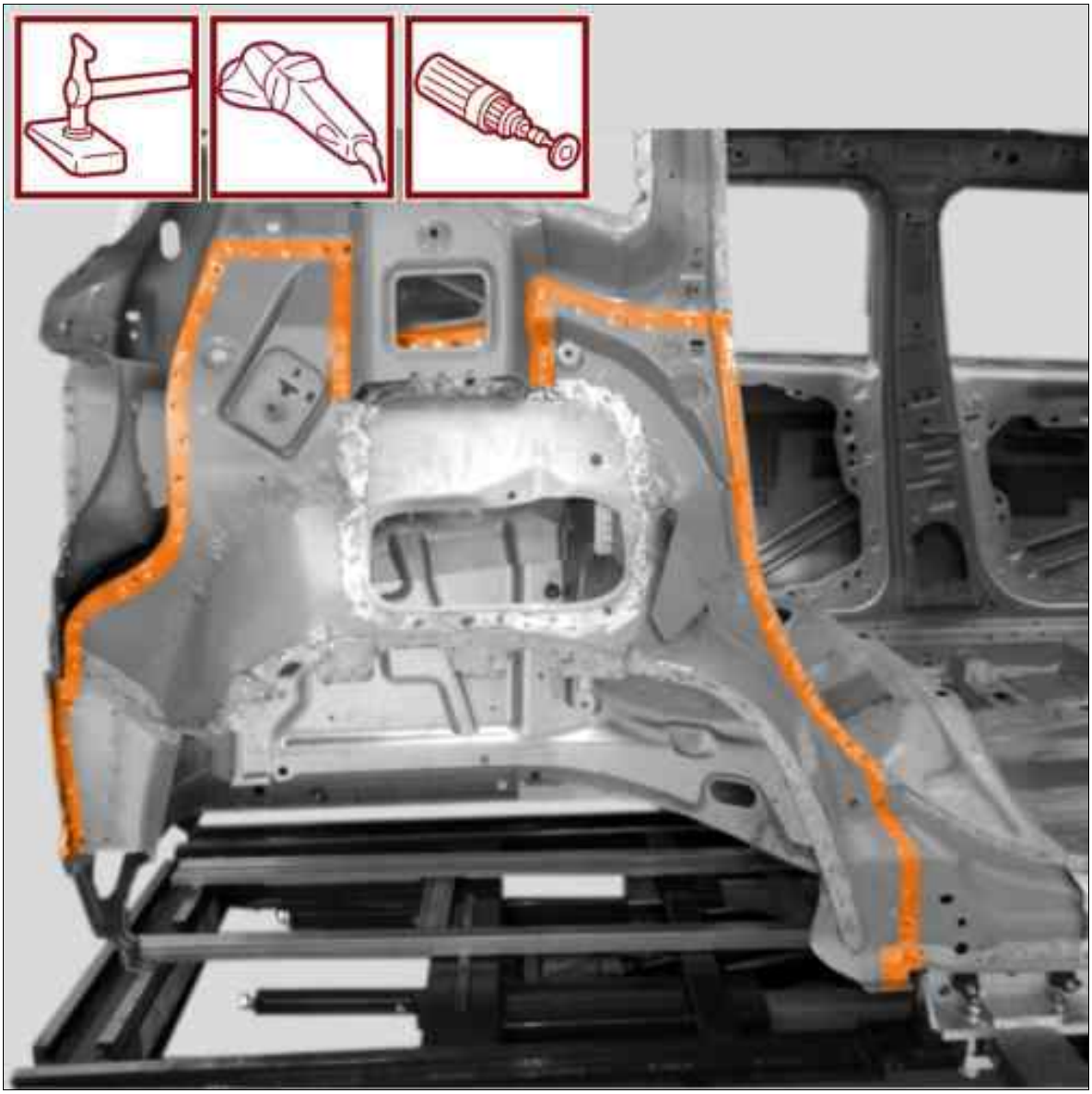
Fig 3: Outer Rear Wheelhouse Installation (3 Of 5)



Courtesy of CHRYSLER GROUP, LLC

4. Position the part correctly on the vehicle and secure it with the self-locking clamps.
5. Check alignment and surrounding gaps.
6. With the use of a spot welder, apply spot welds at the indicated points (1).
7. With the use of a MIG welder, apply plug welds filling in the holes (2) previously made.

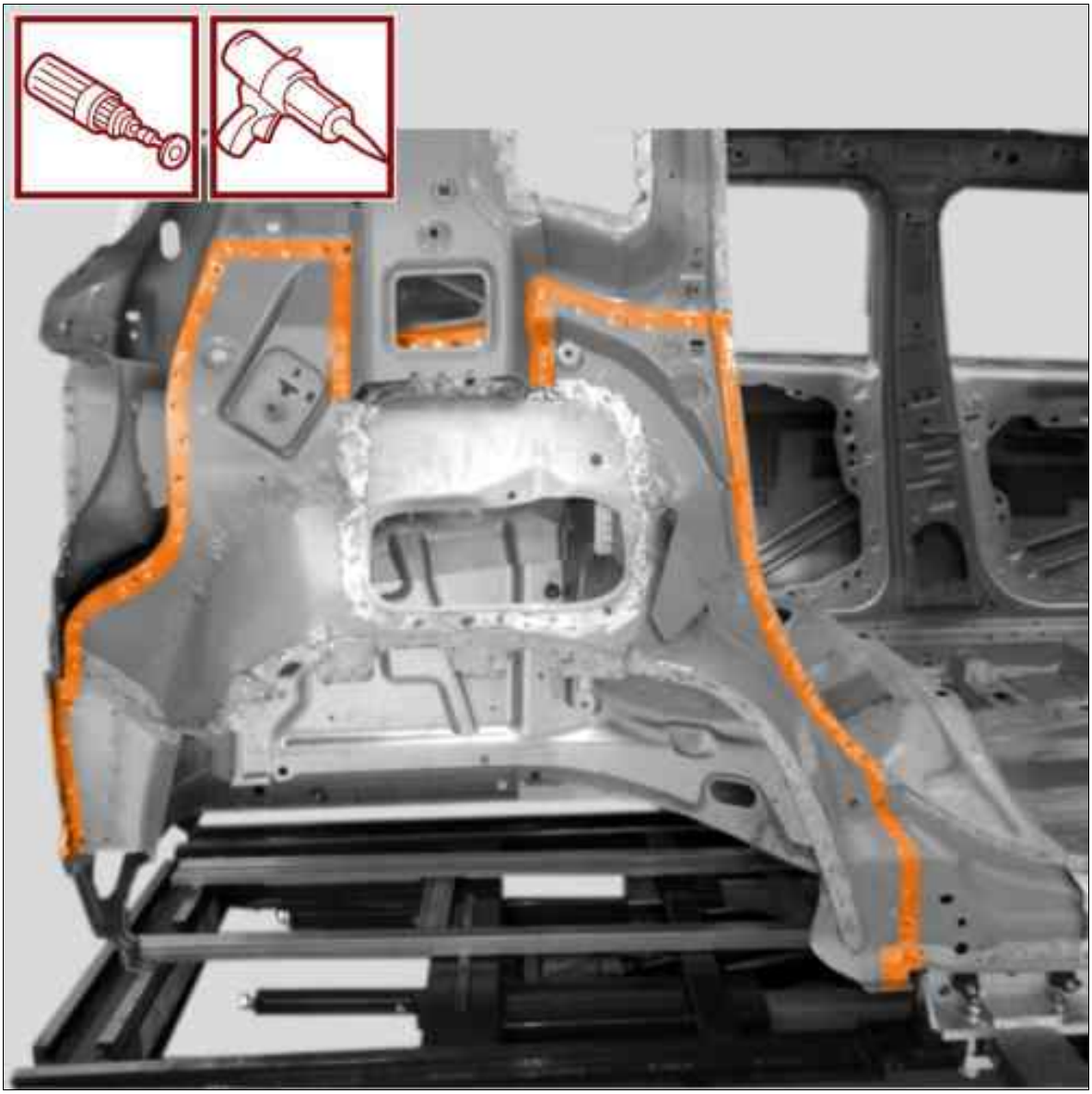
Fig 4: Outer Rear Wheelhouse Installation (4 Of 5)



Courtesy of CHRYSLER GROUP, LLC

8. Correct any distortions to the sheet metal using a hammer and dolly block.
9. Use a grinding disc to smooth the welds.
10. Use a rotary brush to clean the previously welded areas.

Fig 5: Outer Rear Wheelhouse Installation (5 Of 5)



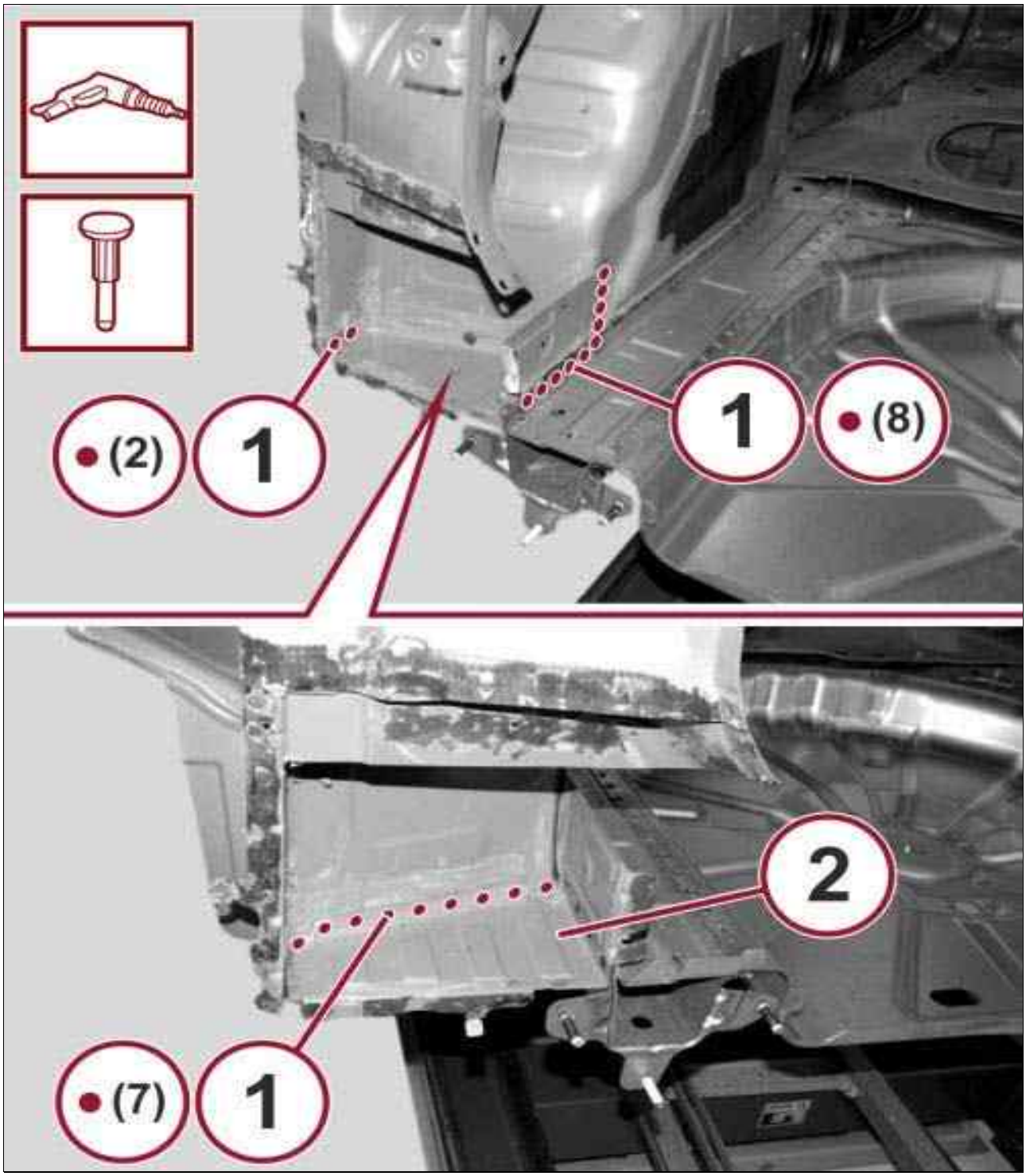
Courtesy of CHRYSLER GROUP, LLC

11. Apply corrosion protection to the areas (1) involved in the welding.
12. Seal the seams between the parts and the vehicle.
13. Install the quarter panel extension. Refer to QUARTER PANEL EXTENSION REMOVAL AND INSTALLATION .
14. If servicing the right side, install the fuel door reinforcement. Refer to REINFORCEMENT, FUEL FILLER DOOR, REMOVAL AND INSTALLATION .
15. Install the quarter panel. Refer to PANEL, QUARTER, REMOVAL AND INSTALLATION .

BODY STRUCTURE > WHEELHOUSE, REAR > REMOVAL AND INSTALLATION >

REINFORCEMENT REAR WHEELHOUSE REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Reinforcement Rear Wheelhouse Removal (1 Of 2)

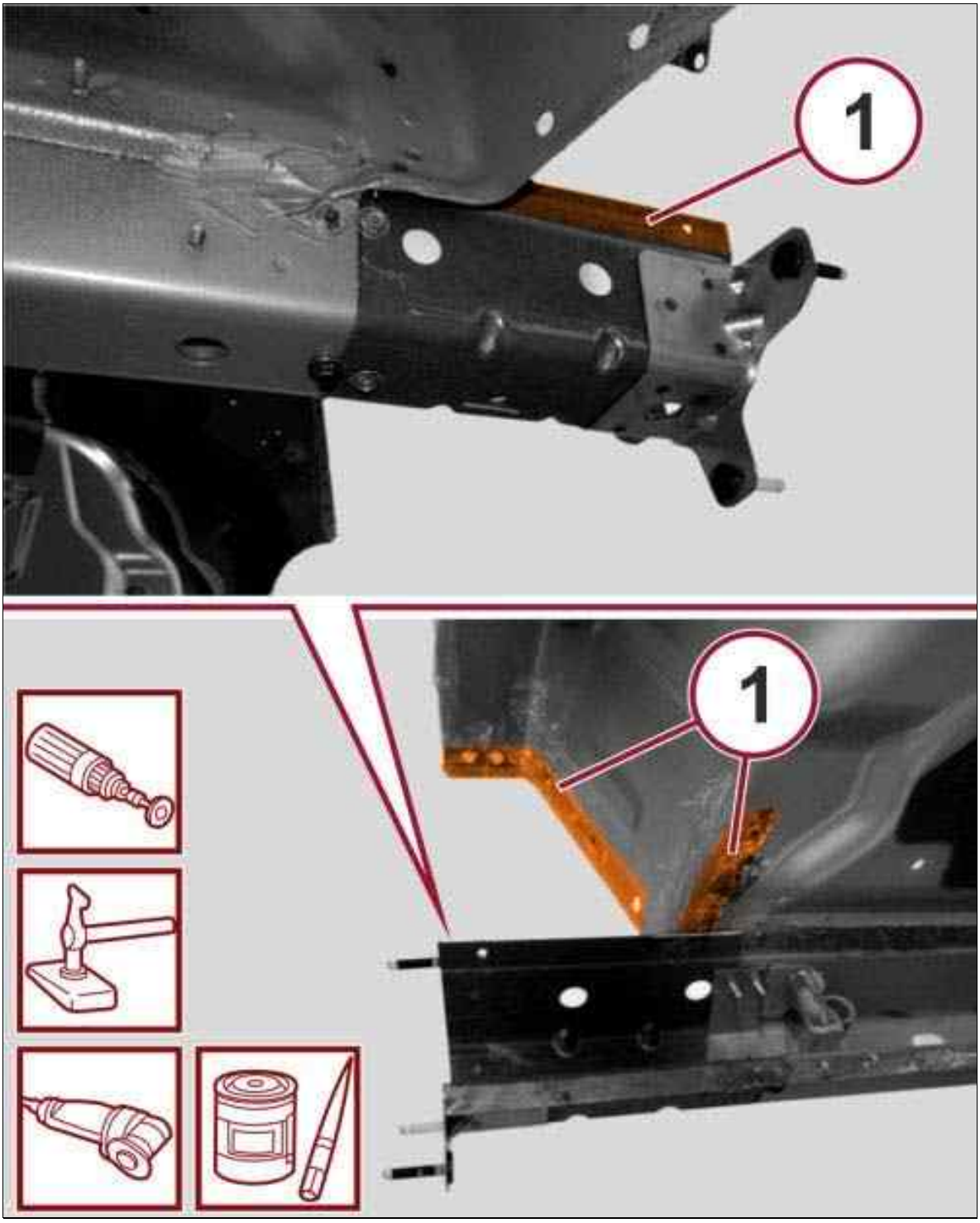


Courtesy of CHRYSLER GROUP, LLC

1. Remove the rear closure panel. Refer to PANEL, REAR CLOSURE, REMOVAL AND INSTALLATION .
2. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).

3. Straighten the body as necessary.
4. With the use of a rotary brush, remove the paint and gain access to the spot welds.
5. With the use of a drill, release the spot welds (1) shown in the illustration.
6. Remove the rear wheelhouse reinforcement (2) from the luggage compartment on the affected side of the vehicle.

Fig 2: Reinforcement Rear Wheelhouse Removal (2 Of 2)



Courtesy of CHRYSLER GROUP, LLC

7. With the use of a rotary brush, clean the previously treated areas.
8. With the use of a hammer and dolly block, straighten the edges of the mating components.
9. With the use of a disc grinder, remove any residue of the spot welds.
10. Apply electro-weldable paint/weld through primer to the areas (1) to be welded.

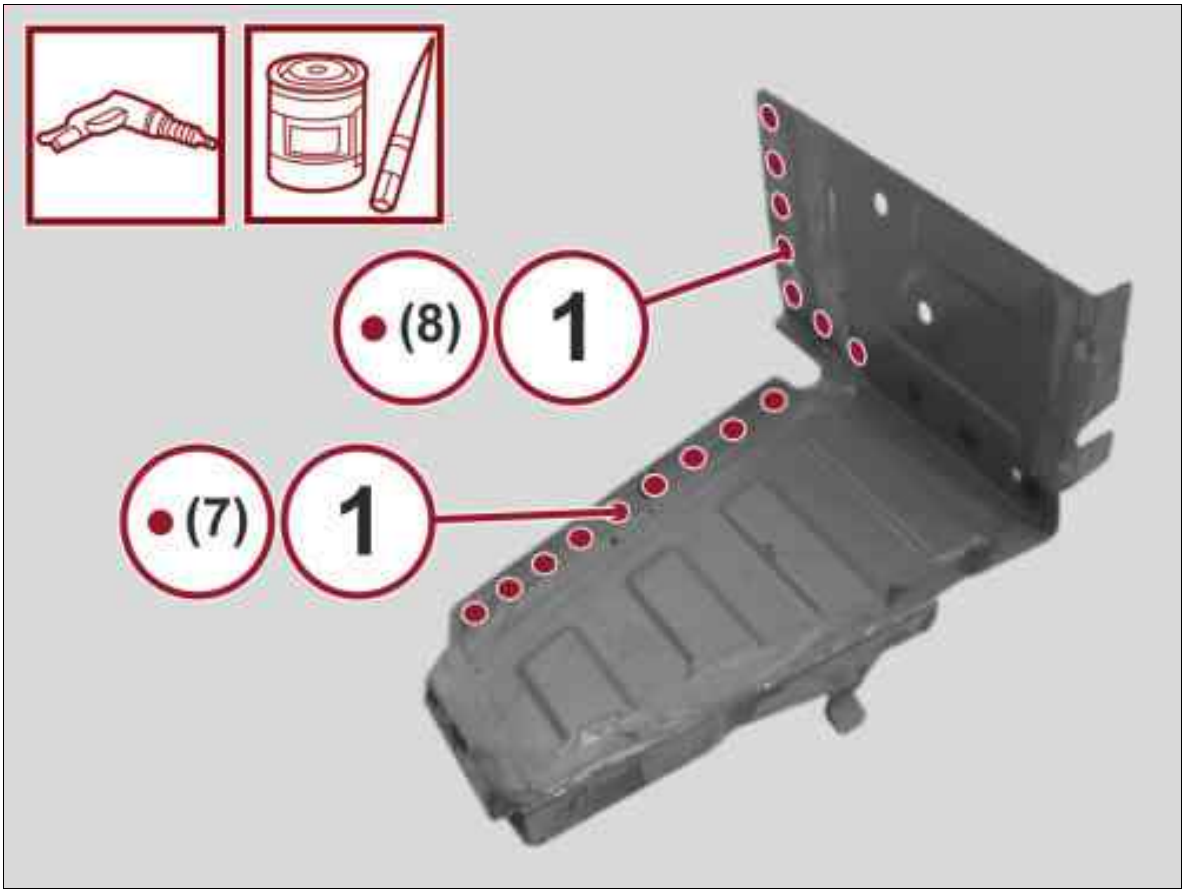
BODY STRUCTURE > WHEELHOUSE, REAR > REMOVAL AND INSTALLATION > REINFORCEMENT REAR WHEELHOUSE REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Reinforcement Rear Wheelhouse Installation (1 Of 3)

Courtesy of CHRYSLER GROUP, LLC

1. Remove the anti-corrosion treatment from the entire perimeter (1) of the inner and outer part using a rotary brush.

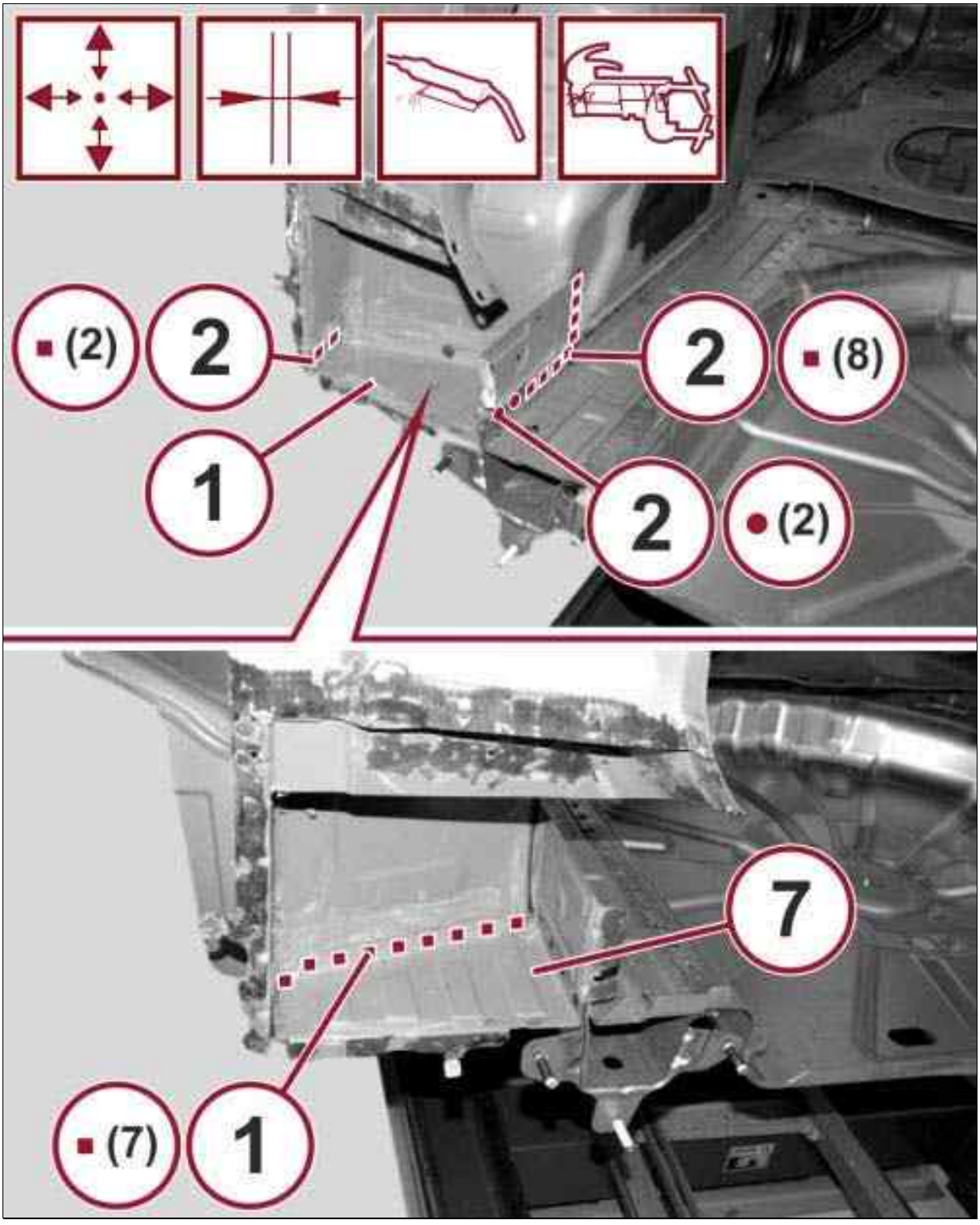
Fig 2: Reinforcement Rear Wheelhouse Installation (2 Of 3)



Courtesy of CHRYSLER GROUP, LLC

2. With the service part placed on a workbench, use a drill to drill holes (1) in the area shown in the illustration.
3. Apply elctro-weldable paint/weld through primer to the boarders involved.

Fig 3: Reinforcement Rear Wheelhouse Installation (3 Of 3)



Courtesy of CHRYSLER GROUP, LLC

4. Position the service part (1) correctly on the rear floor pan extension.
5. Check alignment and surrounding gaps.
6. With the use of a MIG welder, apply plug welds filling the holes (2) previously made.
7. With the use of a spot welder, apply spot welds to the areas (3) indicated in the illustration.

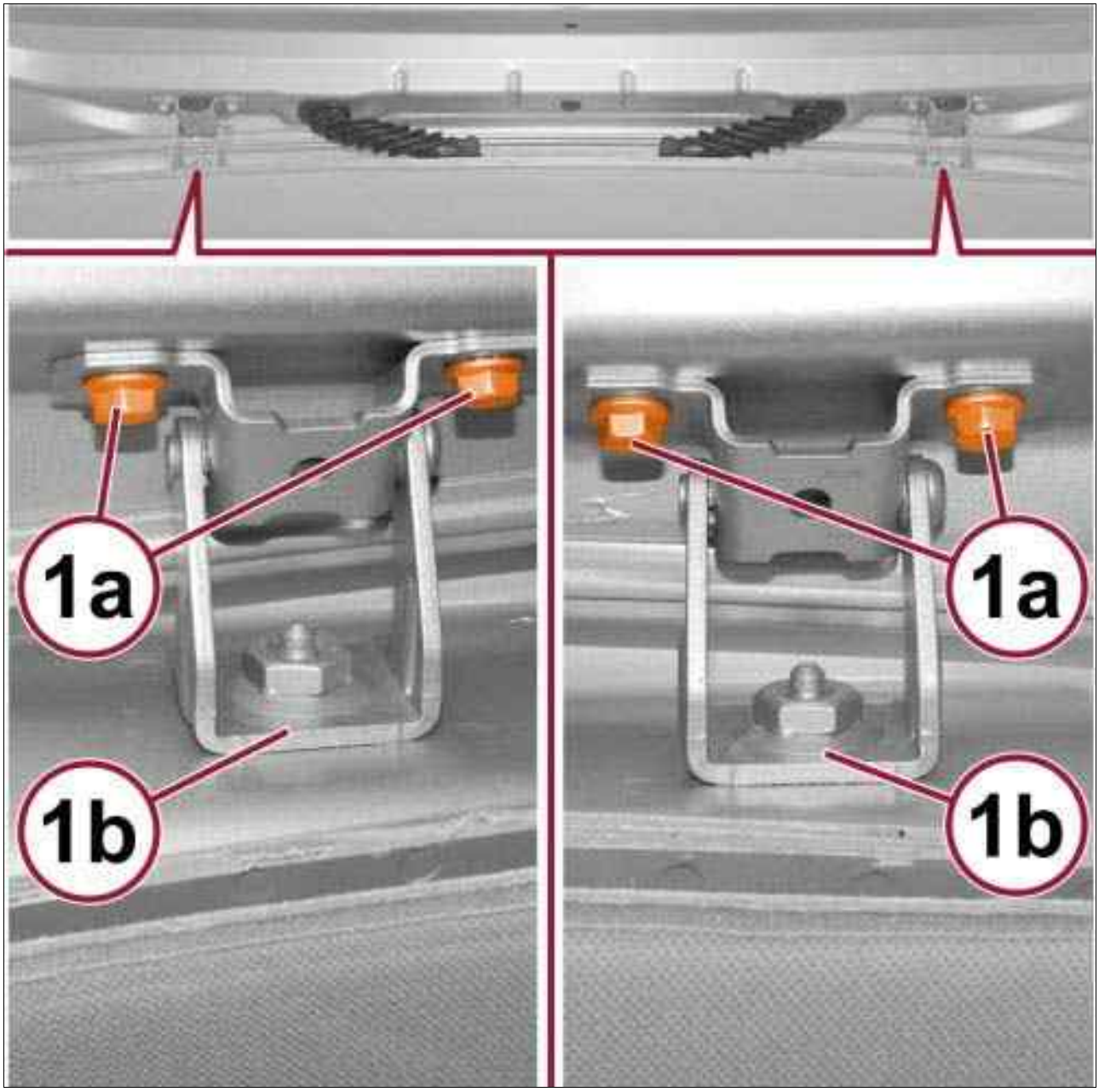
8. Use a grinding disc to smooth the welds in the highlighted area.
9. Use a rotary brush to clean the previously welded areas.
10. Apply corrosion protection to the areas involved in the welding.
11. Install the rear closure panel. Refer to PANEL, REAR CLOSURE, REMOVAL AND INSTALLATION .
12. Seal the seams between the parts and the vehicle.

DECKLID/HATCH/LIFTGATE/TAILGATE > HINGE, LIFTGATE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

NOTE:

It is not necessary to remove the liftgate to replace one or both hinges. The hinges can be replaced one at a time.

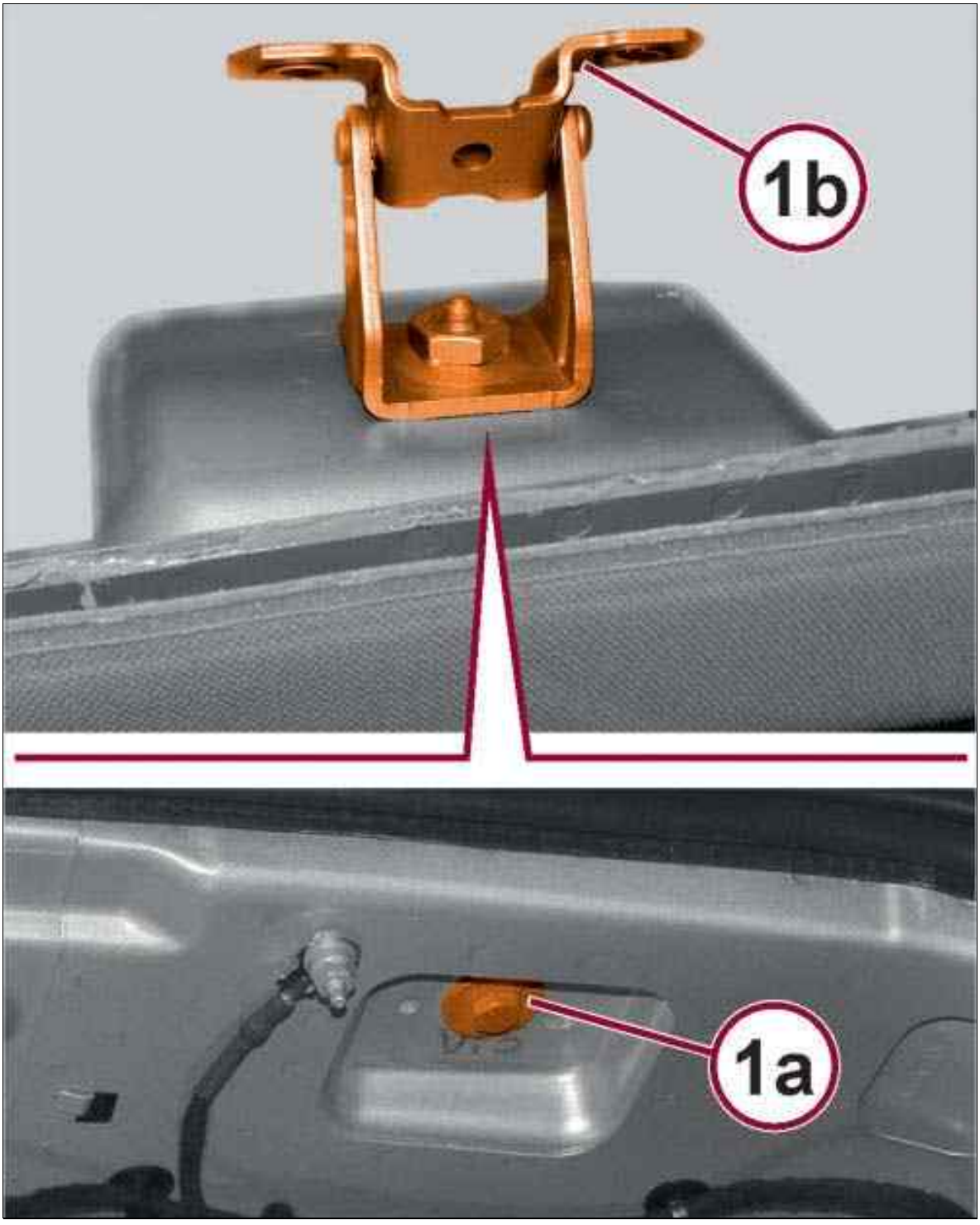
Fig 1: Liftgate Hinge & Bolts



Courtesy of CHRYSLER GROUP, LLC

1. Remove the upper quarter trim panels. Refer to PANEL, QUARTER TRIM, REMOVAL AND INSTALLATION .
2. By hand, carefully lower the rear of the headliner to access the liftgate hinge to body bolts.
3. Using a grease pencil or equivalent, mark the position of the liftgate hinge (1b) on the body and liftgate to aid in installation.
4. With the help of an assistant, support the liftgate and remove the liftgate hinge bolts (1a).

Fig 2: Liftgate Hinge & Body Bolt



Courtesy of CHRYSLER GROUP, LLC

5. Carefully lower the rear of the headliner and remove the liftgate hinge to body bolt (1a), and remove the liftgate hinge (1b).

DECKLID/HATCH/LIFTGATE/TAILGATE > HINGE, LIFTGATE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

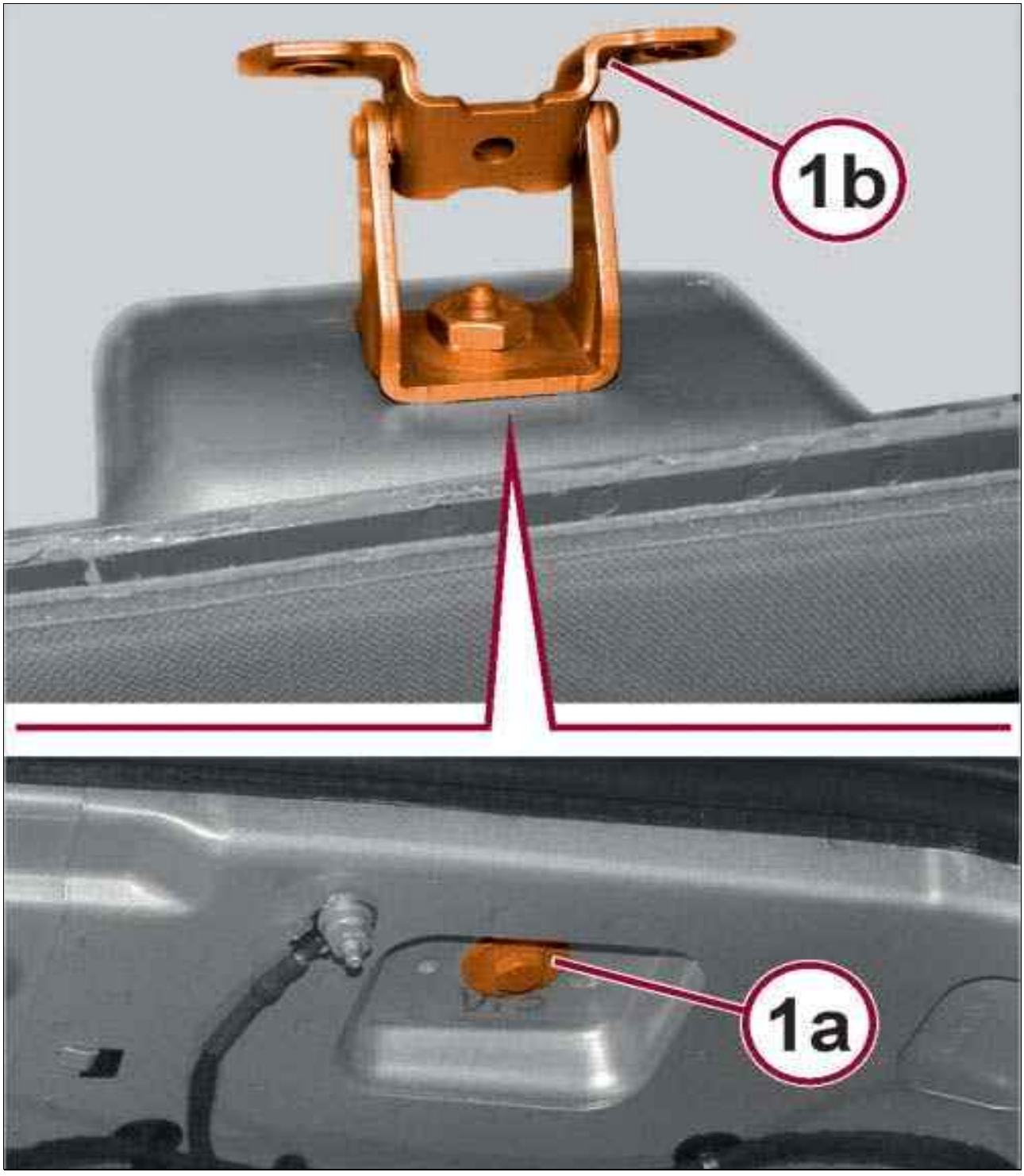
NOTE:

With assistance, support the lift gate while the hinges are being installed.

NOTE:

Use a suitable body sealer on the hinge to body mating surfaces prior to installation.

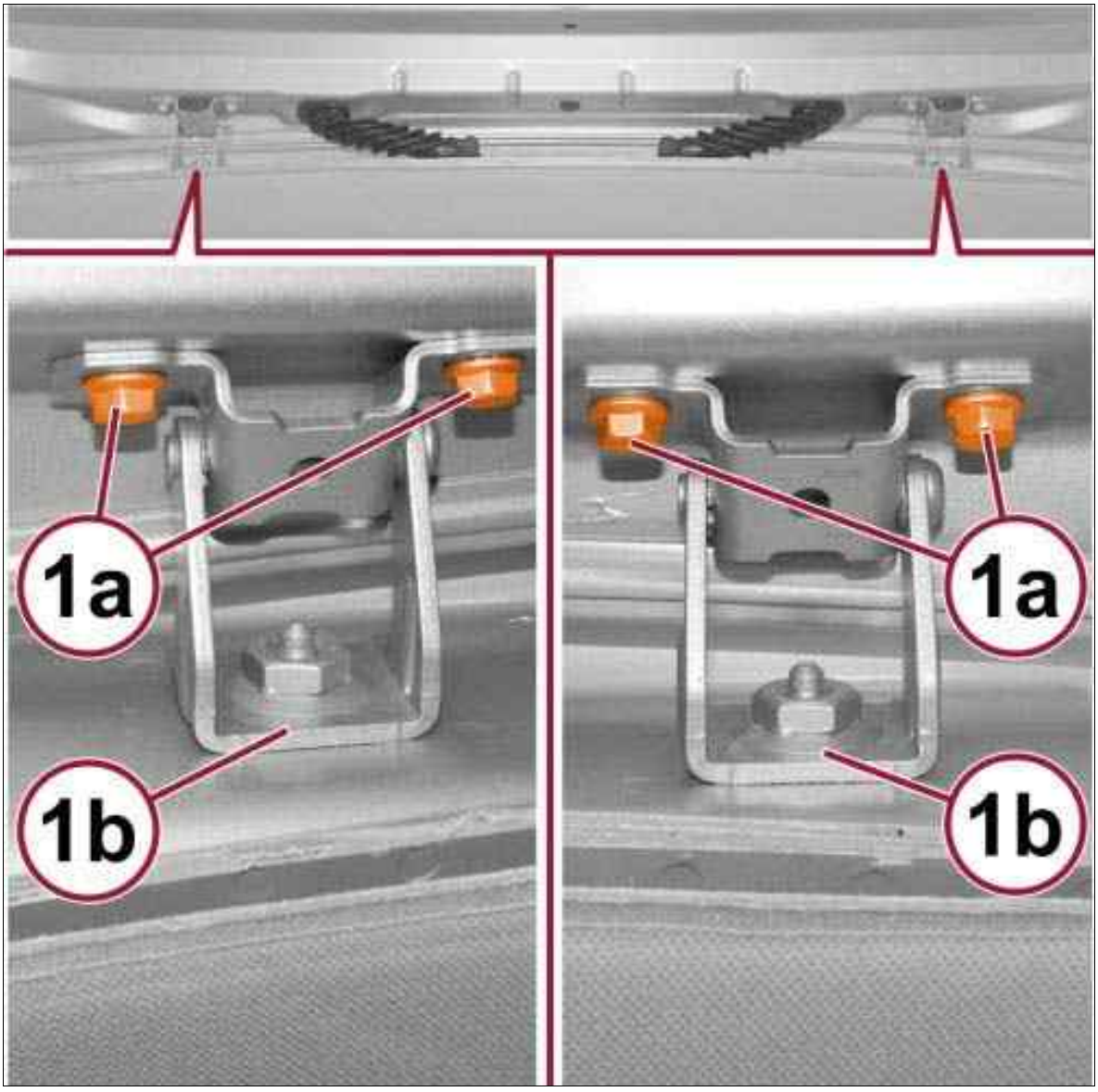
Fig 1: Liftgate Hinge & Body Bolt



Courtesy of CHRYSLER GROUP, LLC

1. Place the liftgate hinge (1b) onto the vehicle and loosely install the bolt (1a) from under the headliner.
2. Align the liftgate hinge with the reference mark made previously and tighten the liftgate hinge to body bolt to the proper specification. Refer to SPECIFICATIONS .

Fig 2: Liftgate Hinge & Bolts

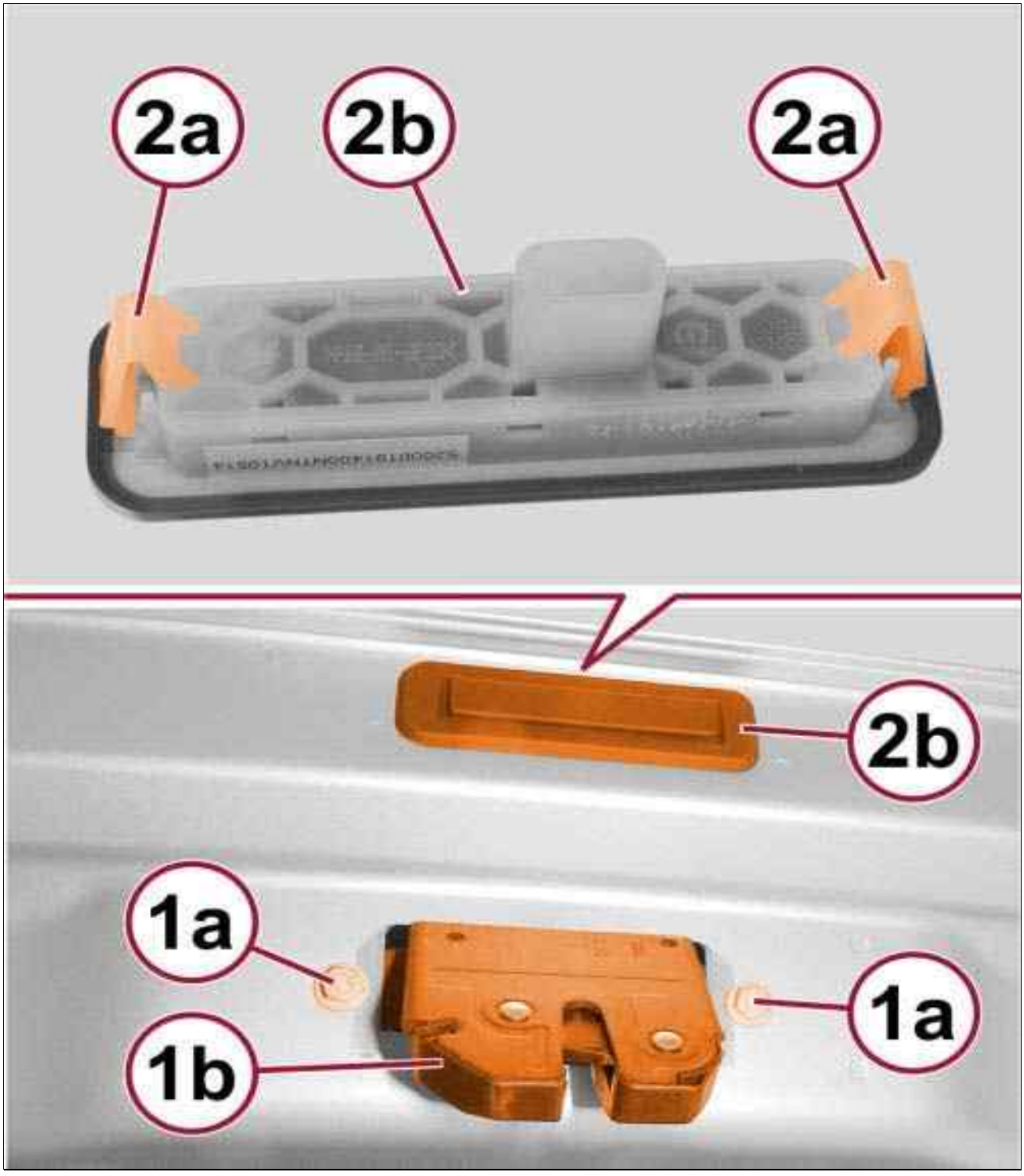


Courtesy of CHRYSLER GROUP, LLC

3. Place the liftgate into the hinge and loosely install the bolts (1a).
4. Align the liftgate with the reference mark made previously and tighten the liftgate hinge to liftgate bolts to the proper specification. Refer to SPECIFICATIONS .
5. Check the liftgate for proper alignment and operation, adjust if necessary.
6. Install the upper quarter trim panels. Refer to PANEL, QUARTER TRIM, REMOVAL AND INSTALLATION .

DECKLID/HATCH/LIFTGATE/TAILGATE > LATCH, LIFTGATE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Liftgate Latch, Switch, Retainers & Screws

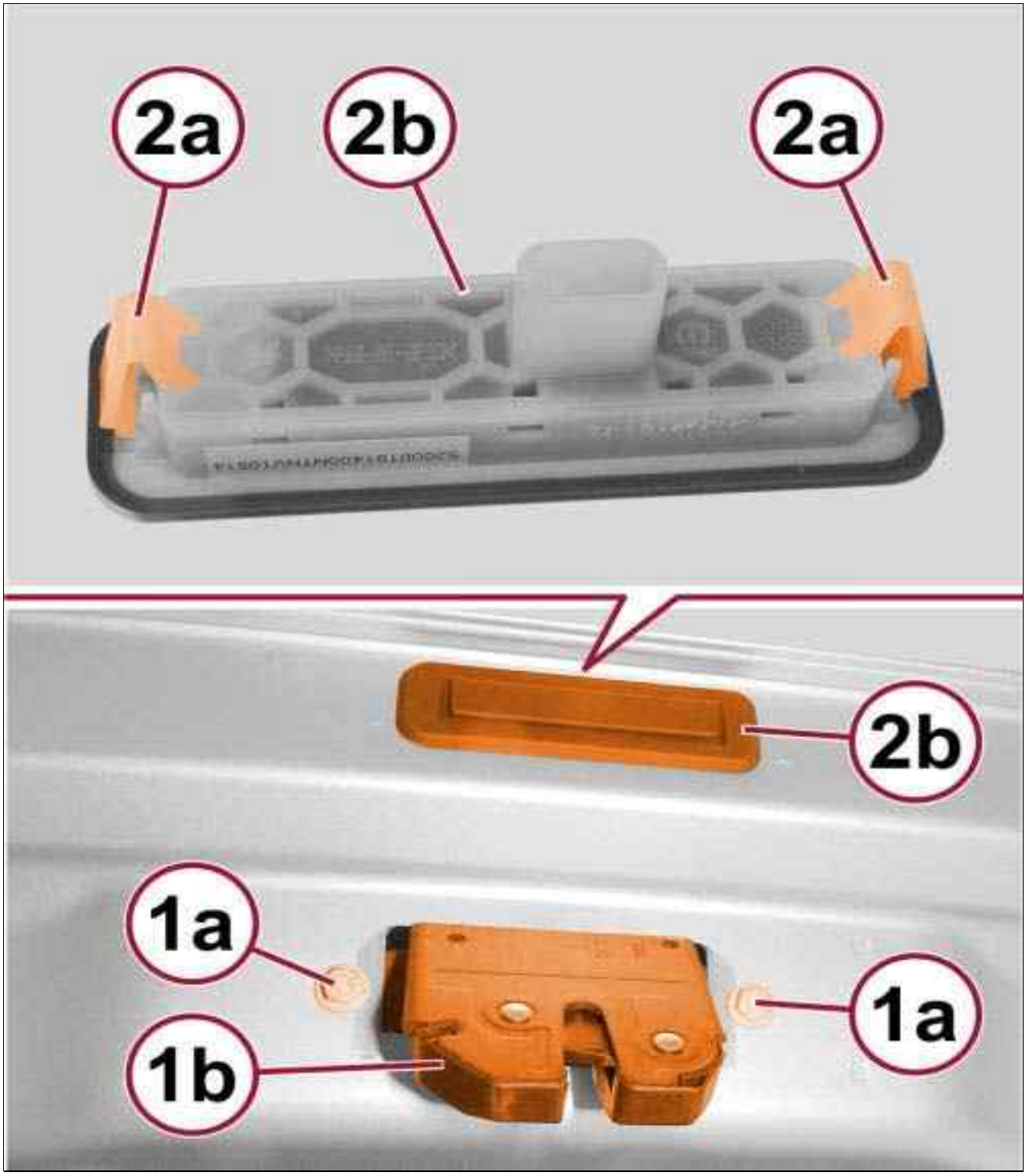


Courtesy of CHRYSLER GROUP, LLC

1. Remove the liftgate trim panel. Refer to PANEL, TRIM, LIFTGATE, REMOVAL AND INSTALLATION .
2. Remove the bolts (1a) and the liftgate latch.
3. Disconnect the wire harness connector from the liftgate latch (1b).

DECKLID/HATCH/LIFTGATE/TAILGATE > LATCH, LIFTGATE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Liftgate Latch, Switch, Retainers & Screws



Courtesy of CHRYSLER GROUP, LLC

1. Connect the wire harness connector to the liftgate latch (1b).
2. Install the liftgate latch and tighten the bolts (1a).

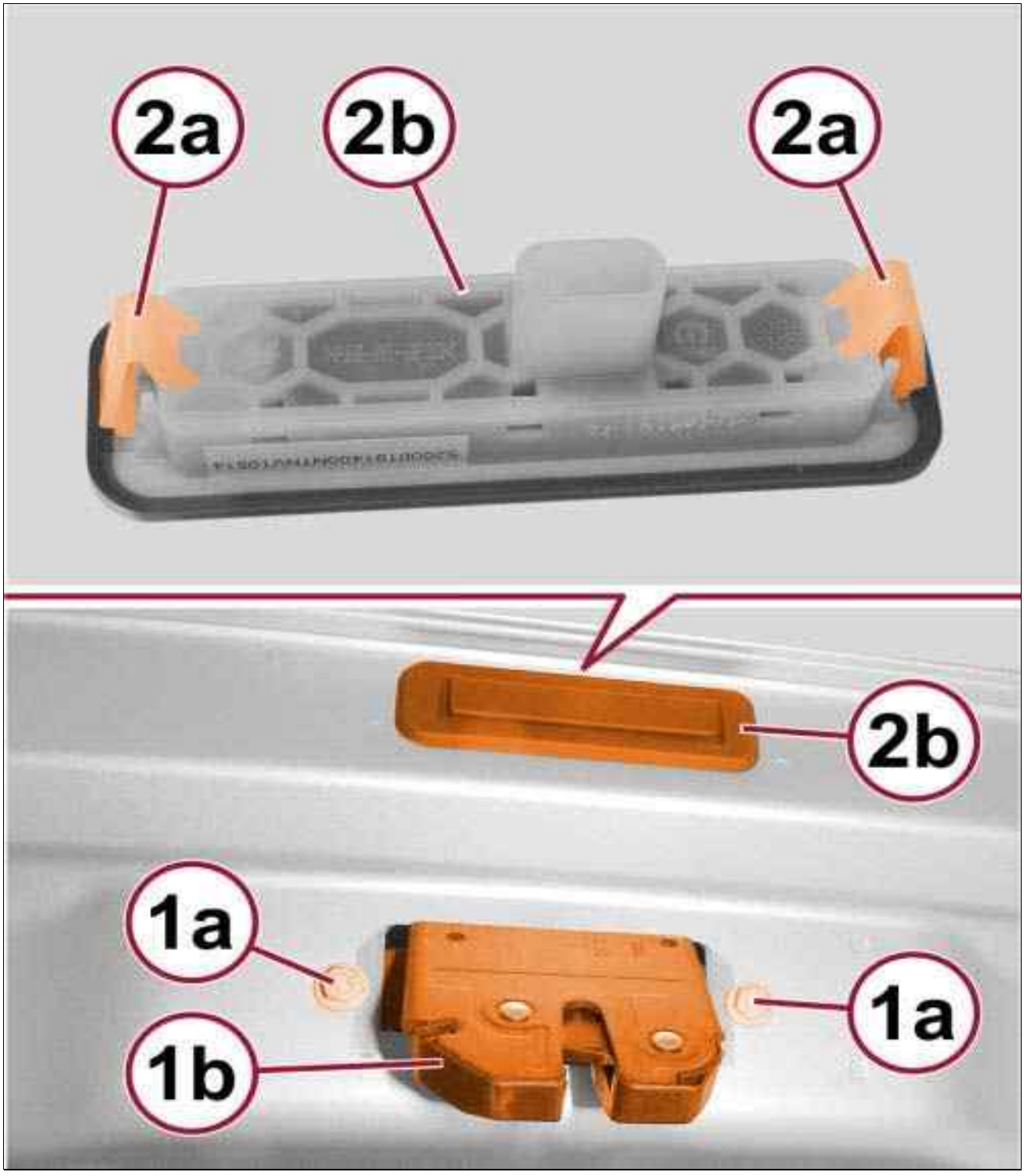
3. Install the liftgate trim panel. Refer to PANEL, TRIM, LIFTGATE, REMOVAL AND INSTALLATION .

DECKLID/HATCH/LIFTGATE/TAILGATE > LIFTGATE > DISASSEMBLY AND ASSEMBLY > DISASSEMBLY AND ASSEMBLY > DISASSEMBLY

NOTE:

The operation should be carried out with the liftgate removed.

Fig 1: Liftgate Latch, Switch, Retainers & Screws

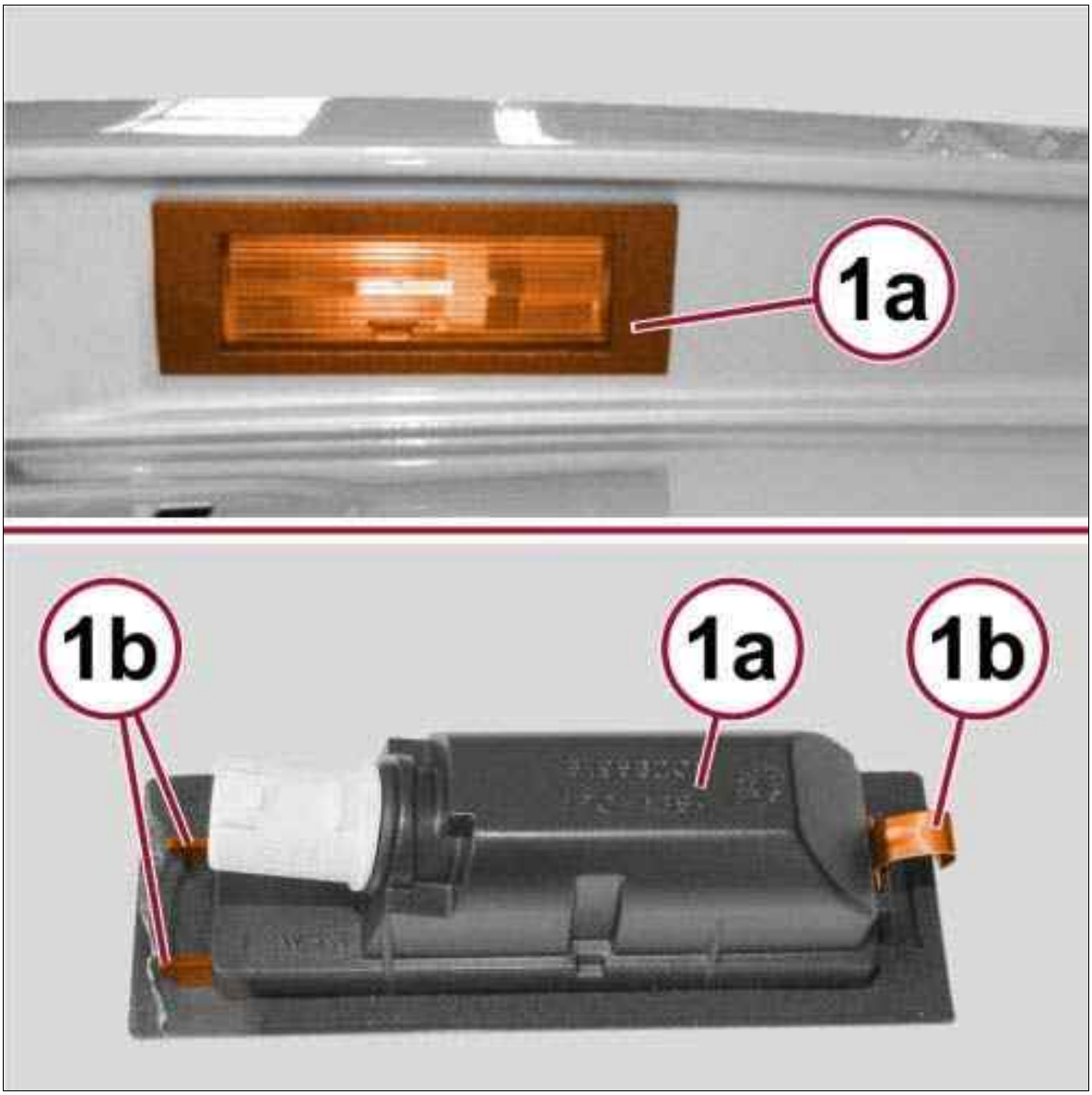


Courtesy of CHRYSLER GROUP, LLC

1. Remove the wiper motor. Refer to MOTOR, WIPER, REMOVAL AND INSTALLATION .
2. Remove the liftgate glass. Refer to GLASS, LIFTGATE, REMOVAL AND INSTALLATION .
3. Remove the liftgate latch screws (1a).
4. Disconnect the wiring connector and remove the liftgate latch (1b).

5. Release the liftgate release switch retainers (2a).
6. Disconnect the wiring connector and remove the liftgate release switch (2b).

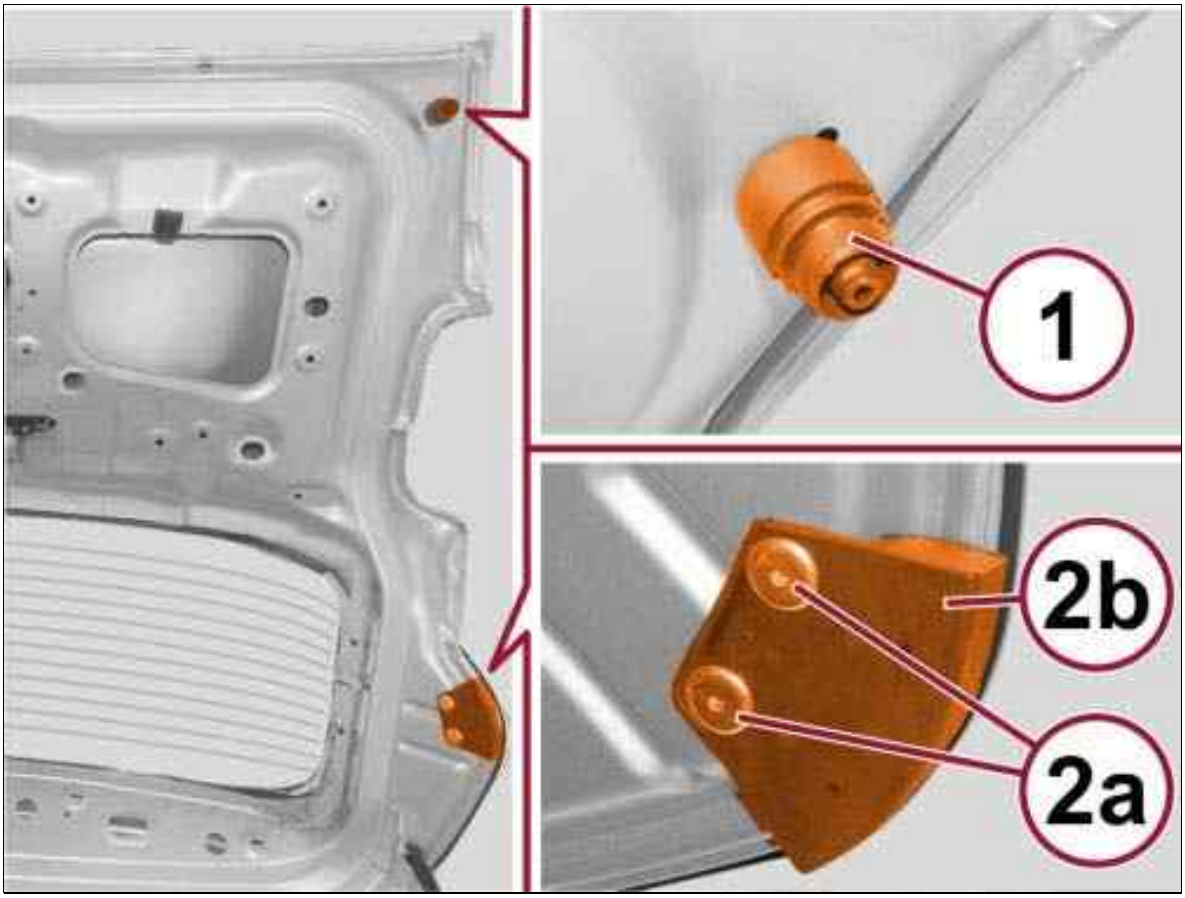
Fig 2: License Plate Lamp & Retainers



Courtesy of CHRYSLER GROUP, LLC

7. Using trim stick (special tool #C-4755, Trim Stick) or equivalent, release the license plate light retainers (1b).
8. Disconnect the license plate lamp wiring connector and remove the lamp (1a).

Fig 3: Rubber Bumper, Taillamp Pad & Rivets

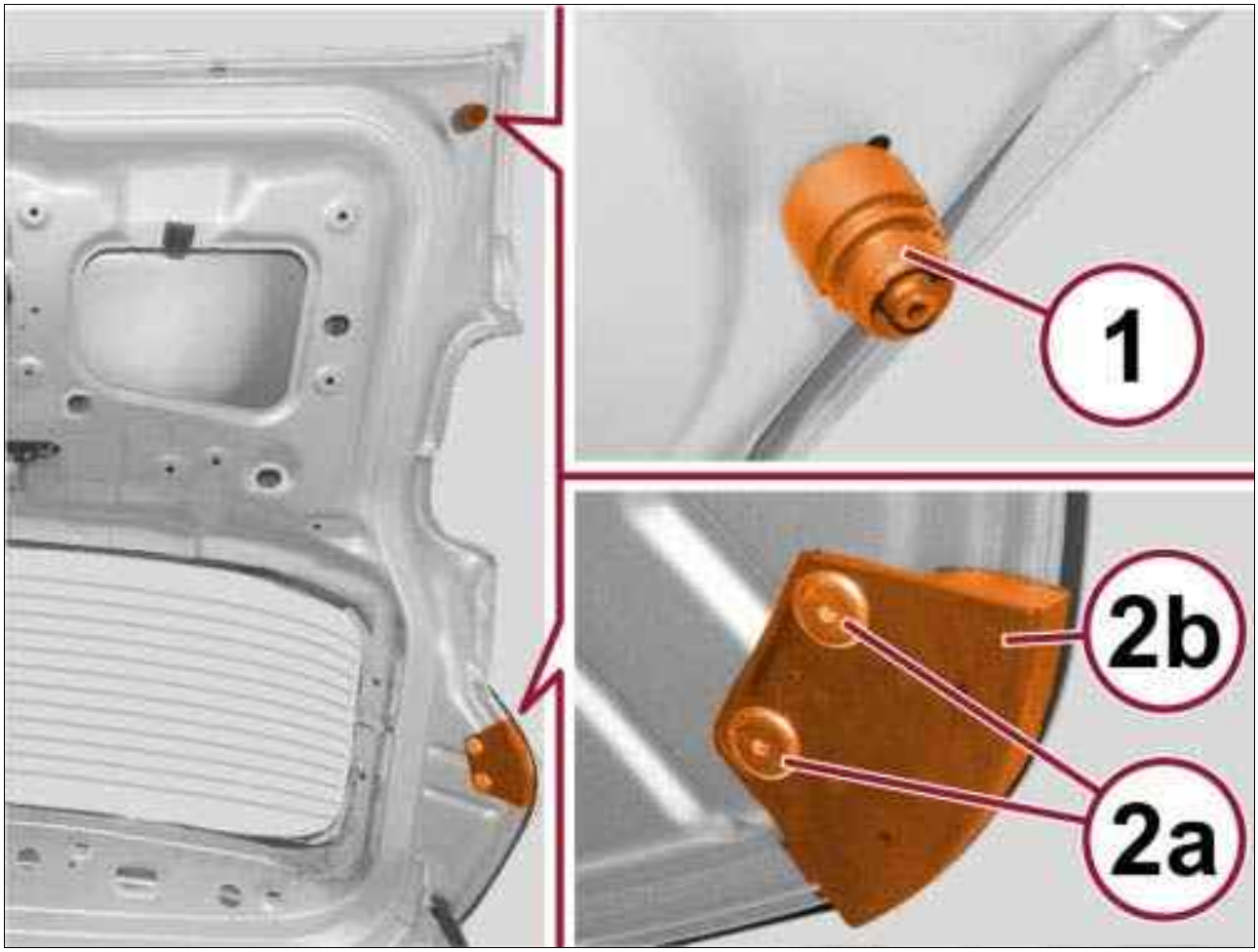


Courtesy of CHRYSLER GROUP, LLC

9. Unscrew the rubber bumper (1) and remove.
10. With the use of a drill equipped with an appropriate tip, remove the rivets (2a).
11. Remove the taillamp pad (2b).

DECKLID/HATCH/LIFTGATE/TAILGATE > LIFTGATE > DISASSEMBLY AND ASSEMBLY > DISASSEMBLY AND ASSEMBLY > ASSEMBLY

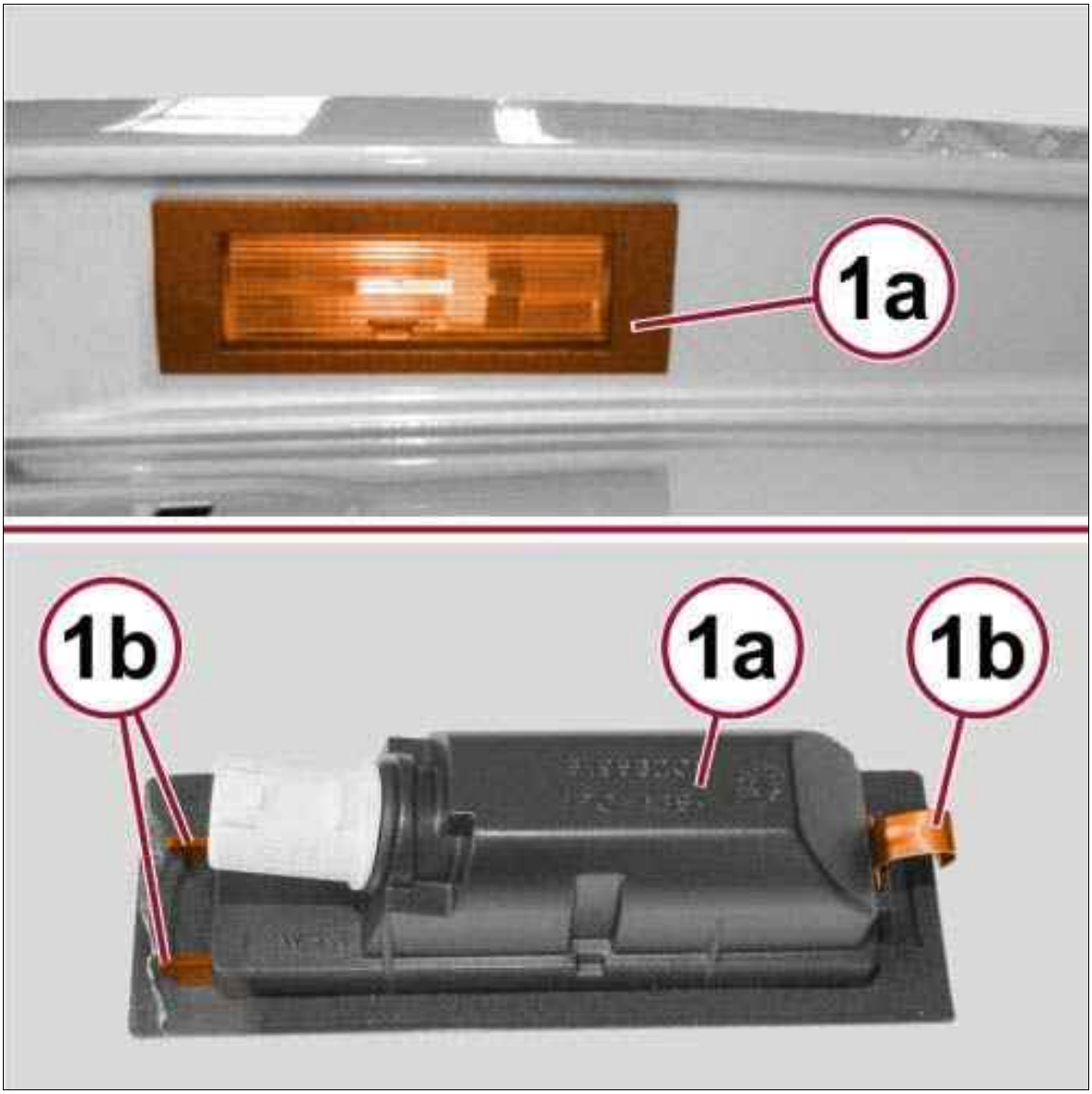
Fig 1: Rubber Bumper, Taillamp Pad & Rivets



Courtesy of CHRYSLER GROUP, LLC

1. Inspect the liftgate to be certain that it is not damaged.
2. Position the taillamp pad (2b) and install two rivets (2a).
3. Install the rubber bumper (1).

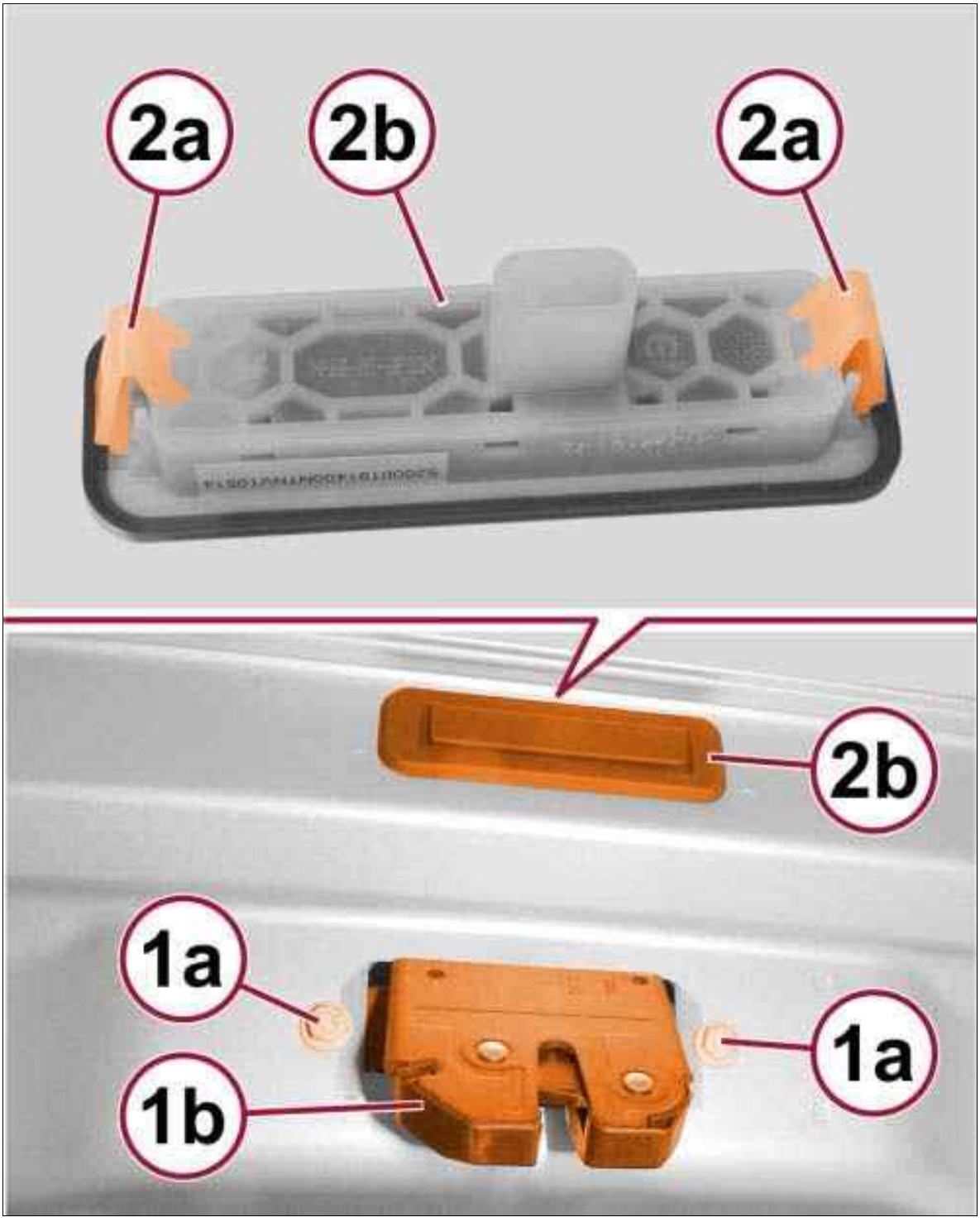
Fig 2: License Plate Lamp & Retainers



Courtesy of CHRYSLER GROUP, LLC

4. Connect the license lamp (1a) wiring connector.
5. Position the license lamp (1a) and insert the retainers (1b) fully.

Fig 3: Liftgate Latch, Switch, Retainers & Screws



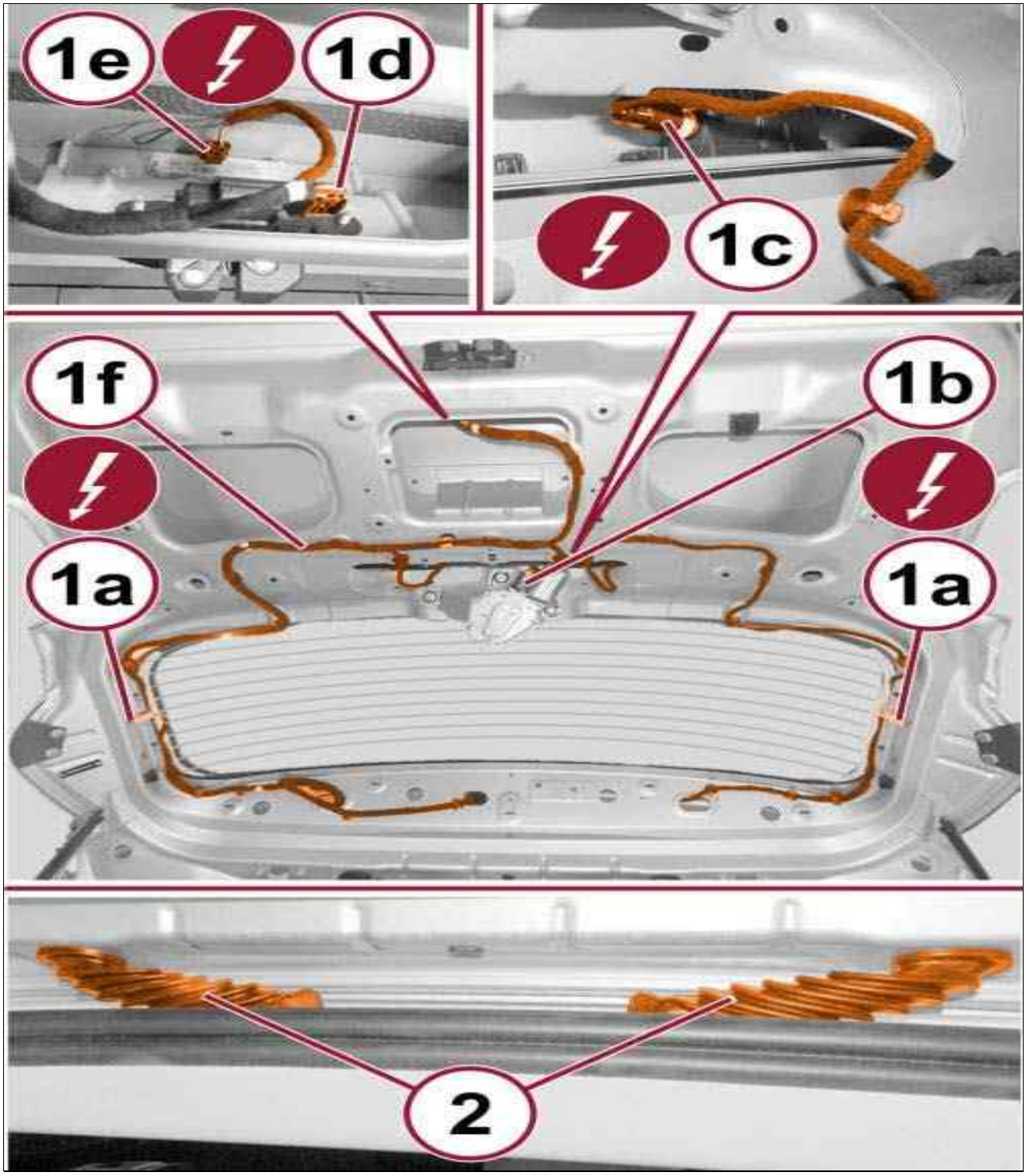
Courtesy of CHRYSLER GROUP, LLC

6. Connect the liftgate release switch (2b) wiring connector.
7. Position and insert the liftgate release switch (2b) engaging the retainers (2a) fully.
8. Position the liftgate latch (1b) and insert the wiring connector fully.
9. Install the liftgate latch screws and tighten securely.

10. Install the liftgate glass. Refer to GLASS, LIFTGATE, REMOVAL AND INSTALLATION .
11. Install the wiper motor. Refer to MOTOR, WIPER, REMOVAL AND INSTALLATION .

DECKLID/HATCH/LIFTGATE/TAILGATE > LIFTGATE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

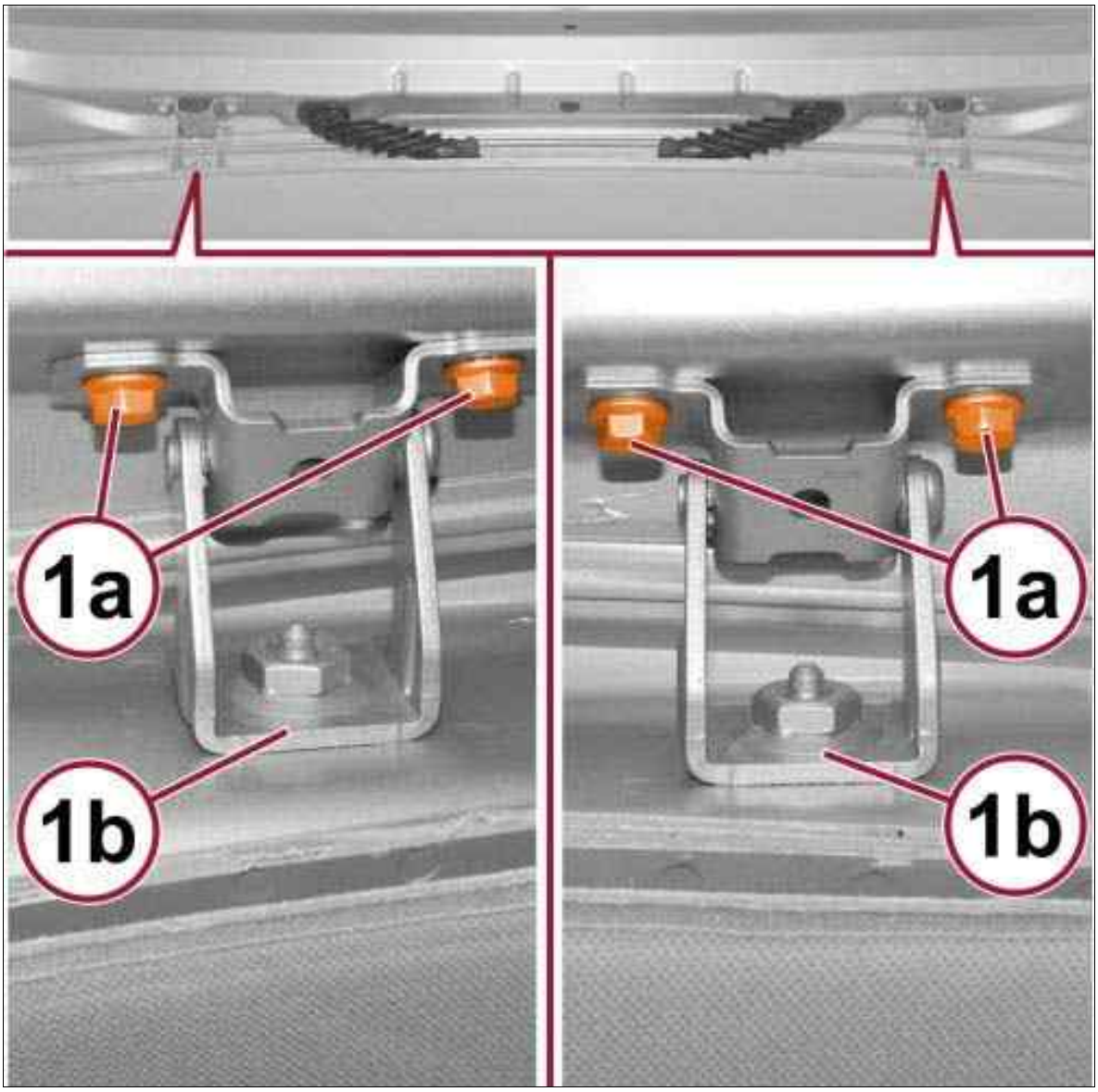
Fig 1: Rubber Boots, Wire Harness & Connectors



Courtesy of CHRYSLER GROUP, LLC

1. Remove the spoiler. Refer to SPOILER, DECKLID, REMOVAL AND INSTALLATION .
2. Open and support the liftgate.
3. Disconnect all the wire harness connectors (1a, 1c, 1d, 1e) and unclip the wire harness (1f) from the liftgate.
4. Remove the gas props. Refer to PROP, GAS, LIFTGATE, REMOVAL AND INSTALLATION .
5. Using a flat bladed tool detach the rubber boots (2) from the liftgate.
6. Remove the wiring harness from the liftgate.

Fig 2: Liftgate Hinge & Bolts

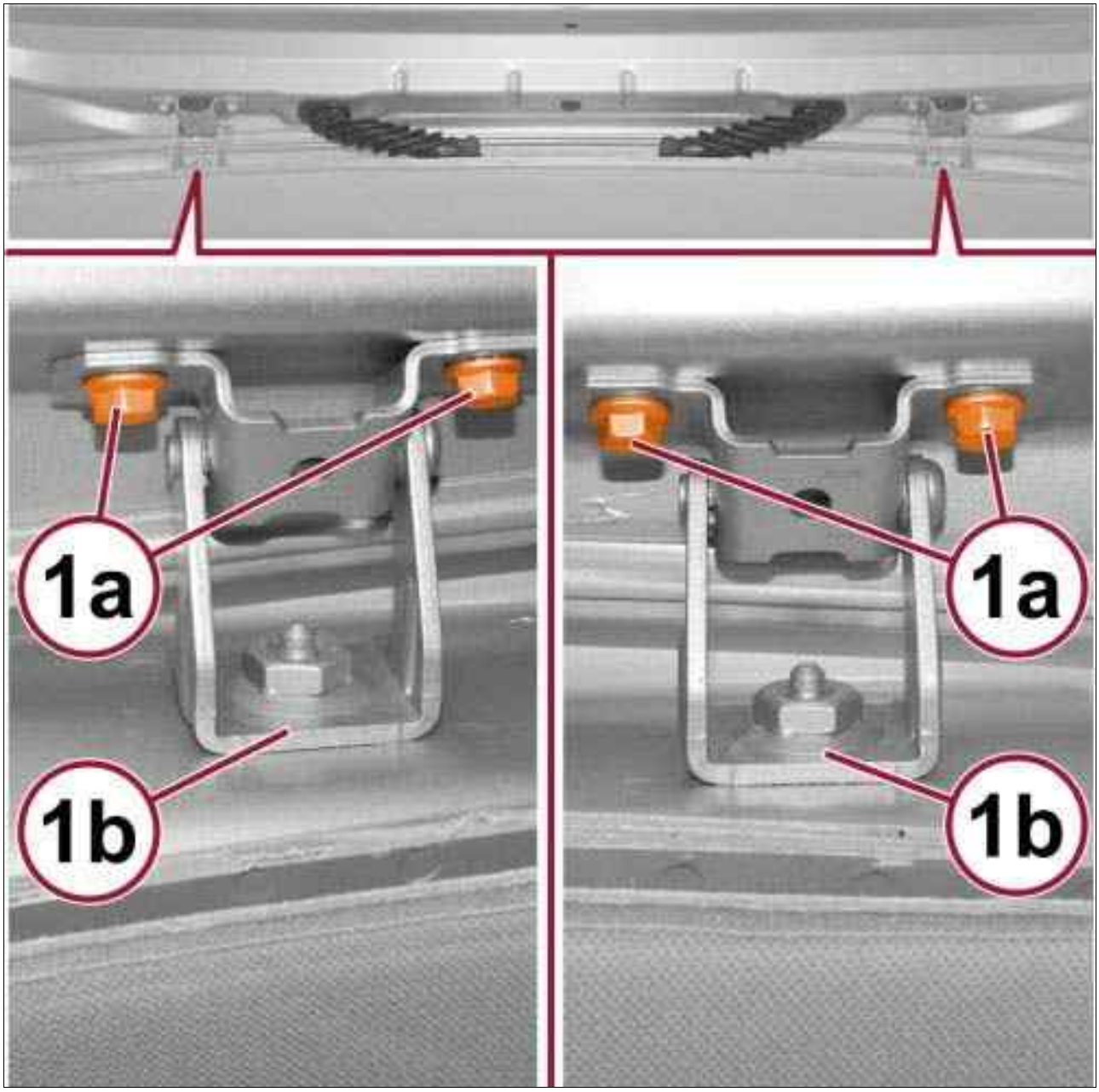


Courtesy of CHRYSLER GROUP, LLC

7. Using a grease pencil or equivalent, mark the hinge location to aid during installation.
8. With the aid of an assistant, remove the bolts (1a) and remove the liftgate.

DECKLID/HATCH/LIFTGATE/TAILGATE > LIFTGATE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Liftgate Hinge & Bolts



Courtesy of CHRYSLER GROUP, LLC

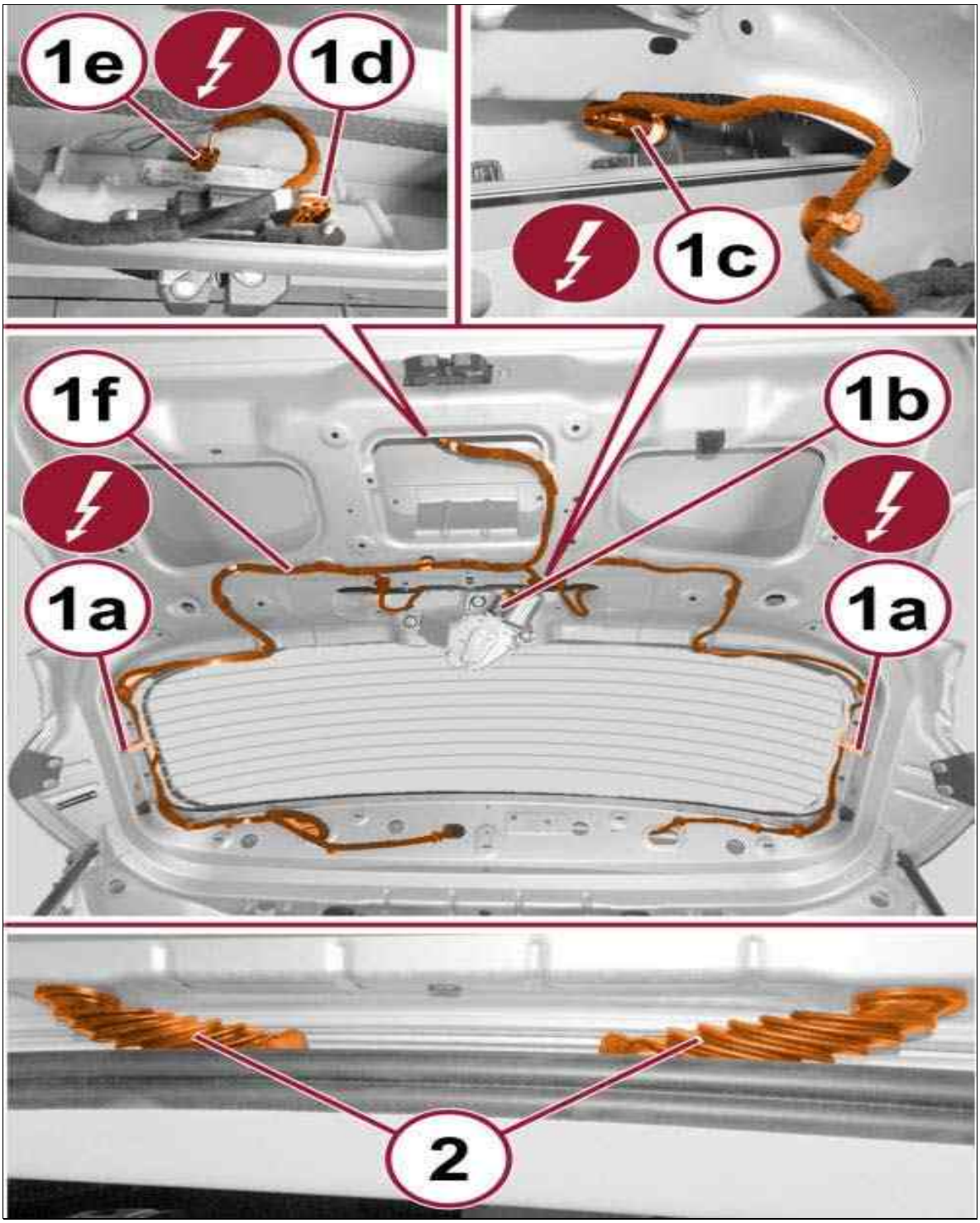
NOTE:

A suitable body sealant should be used when removing or moving the hinges.

1. With aid of an assistant holding the liftgate, position the liftgate and loosely install the bolts (1a).

2. Align the liftgate with the reference mark made previously and tighten the liftgate hinge to liftgate bolts to the proper specification. Refer to SPECIFICATIONS .
3. Install the gas props. Refer to PROP, GAS, LIFTGATE, REMOVAL AND INSTALLATION .

Fig 2: Rubber Boots, Wire Harness & Connectors



Courtesy of CHRYSLER GROUP, LLC

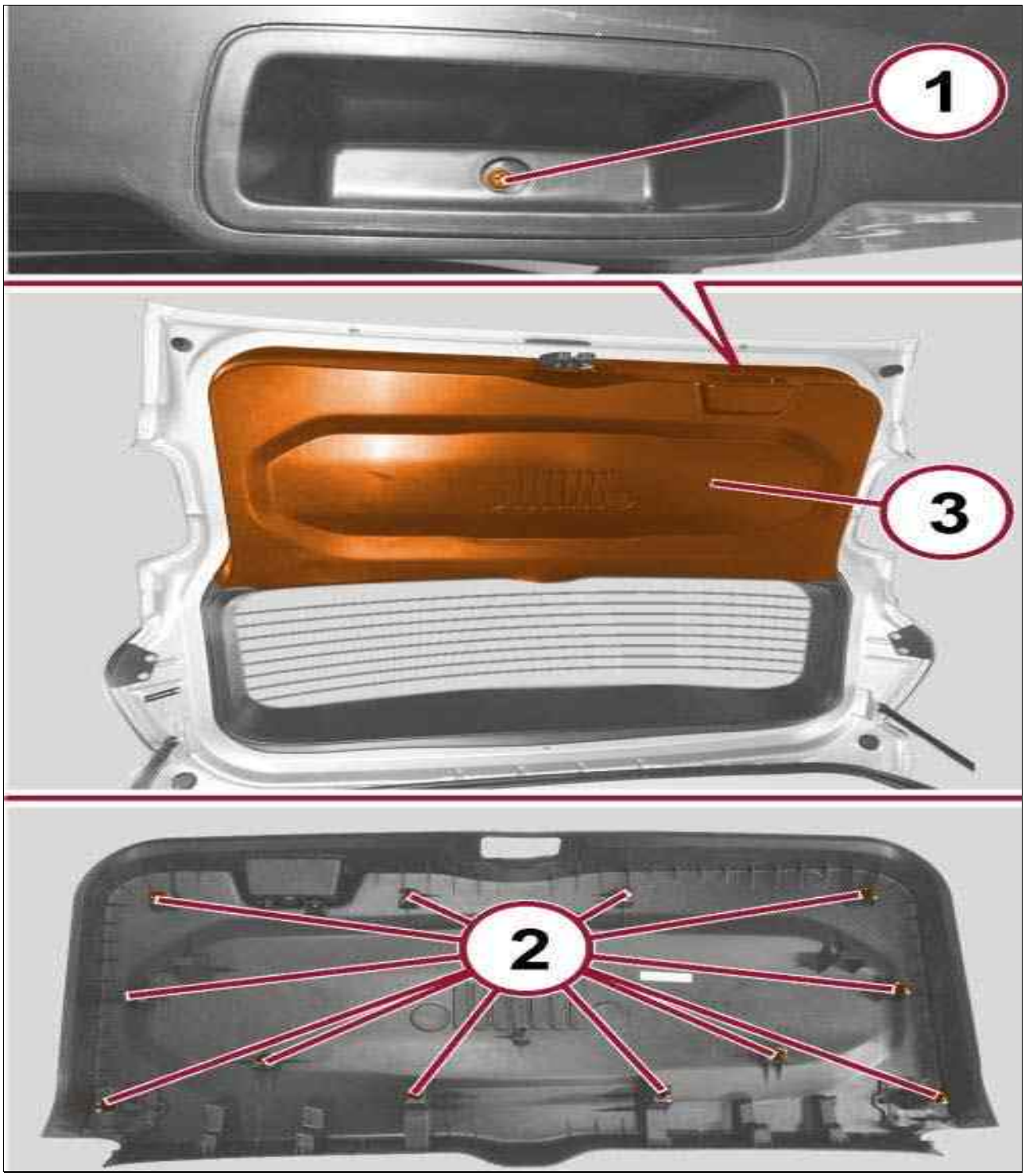
4. Route the wiring harness in the liftgate and attach the rubber boots (2) into the liftgate.
5. Router the wiring harness and connect the wire harness connectors (1a, 1c, 1d, 1e).

6. Check and adjust the liftgate if necessary.

7. Install the spoiler. Refer to SPOILER, DECKLID, REMOVAL AND INSTALLATION .

DECKLID/HATCH/LIFTGATE/TAILGATE > PANEL, TRIM, LIFTGATE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

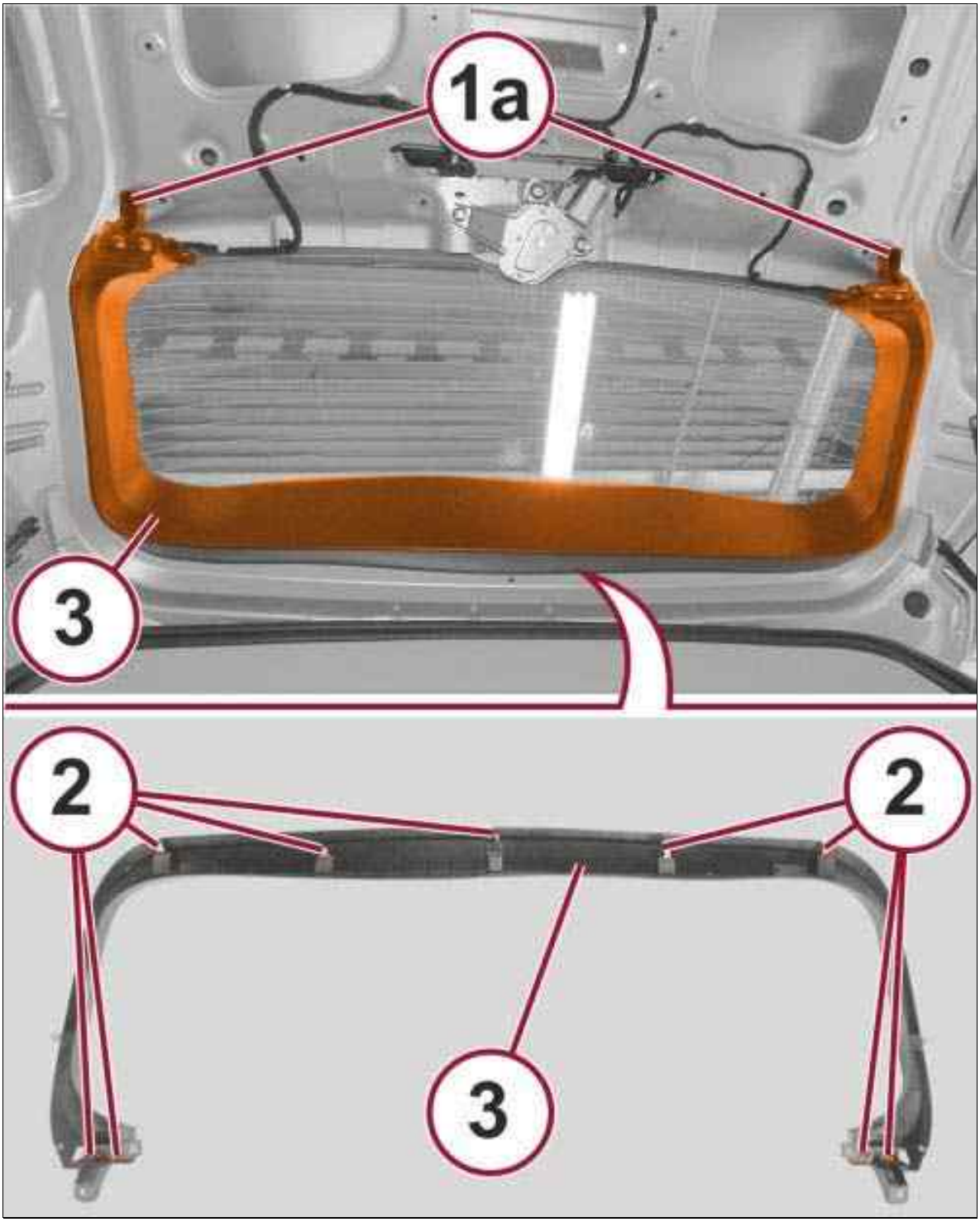
Fig 1: Lower Decklid Trim Panel, Clips & Screw



Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable. If equipped with an Intelligent Battery Sensor (IBS), disconnect the IBS connector first before disconnecting the negative battery cable.
2. Remove the screw (1) from the lower decklid trim panel (3).
3. Using a trim stick or equivalent, release the retaining clips (2) and remove the lower liftgate trim panel.

Fig 2: Upper Decklid Trim Panel, Clips & Screws

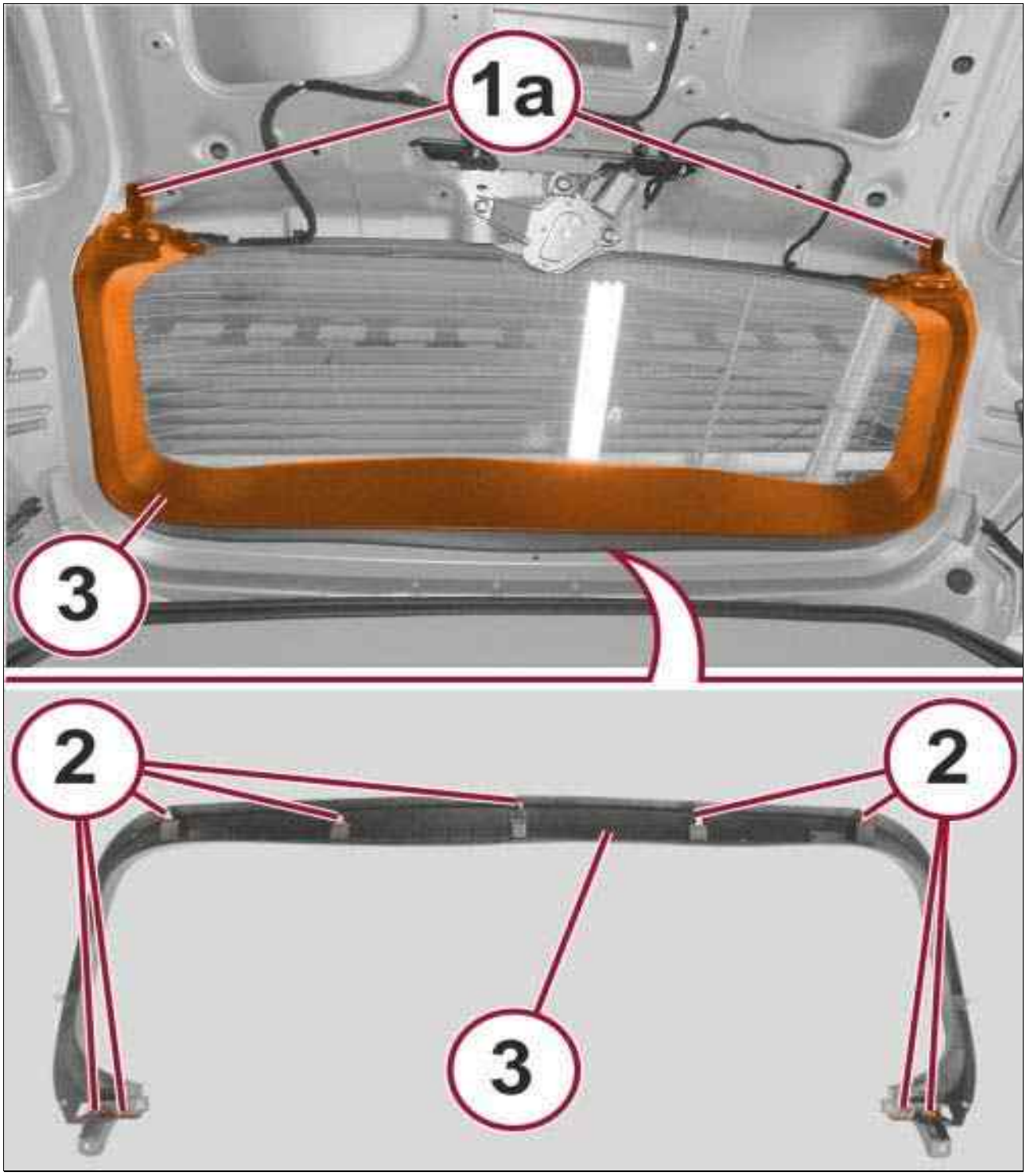


Courtesy of CHRYSLER GROUP, LLC

4. Remove the two screws (1a).
5. Using a trim stick or equivalent, release the retaining clips (2) and remove the upper liftgate trim panel (3).

DECKLID/HATCH/LIFTGATE/TAILGATE > PANEL, TRIM, LIFTGATE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

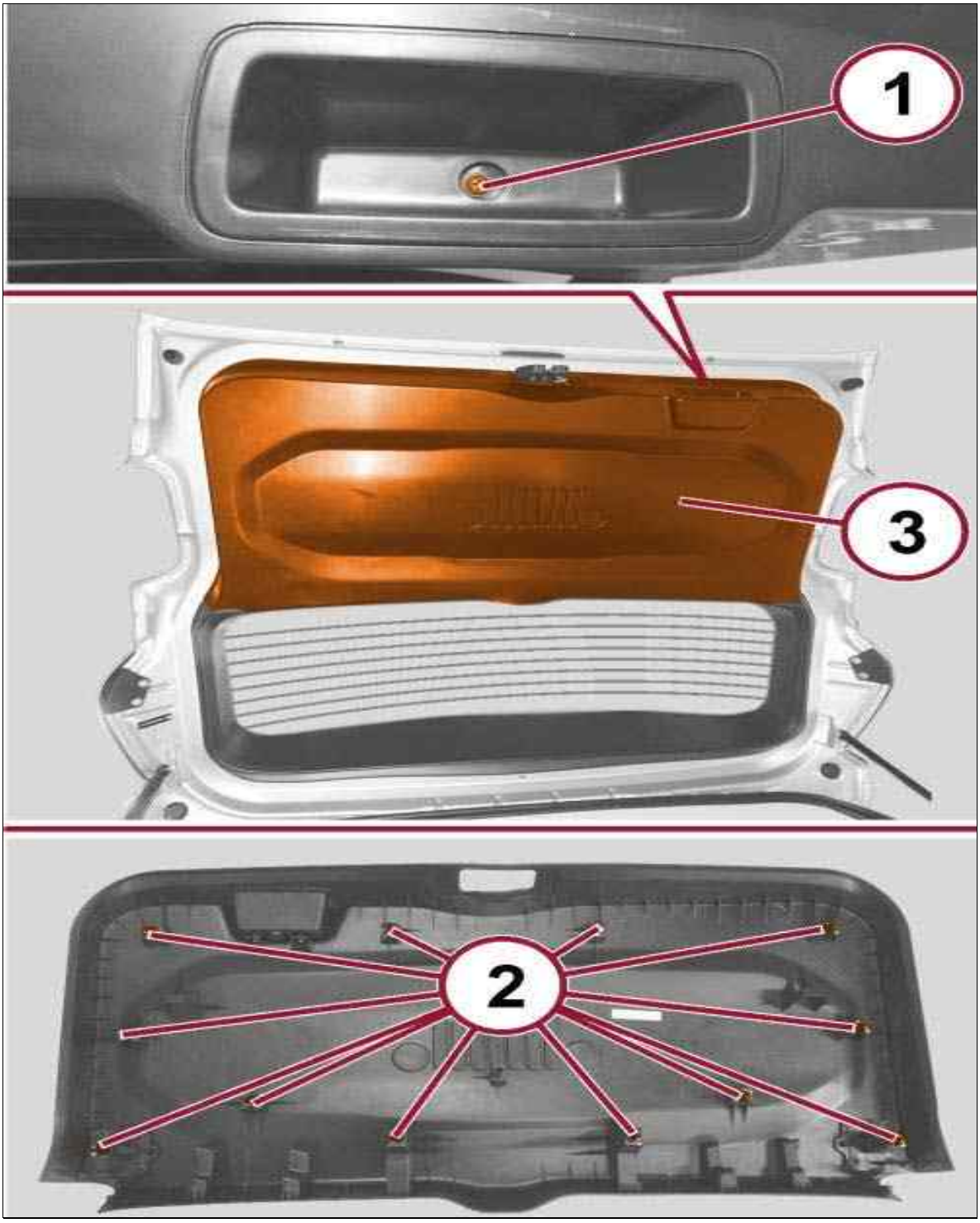
Fig 1: Upper Decklid Trim Panel, Clips & Screws



Courtesy of CHRYSLER GROUP, LLC

1. Position the upper liftgate trim panel (3) onto the liftgate. Using hand pressure, press firmly to engage the retaining clips (2).
2. Install the two screws (1a) and tighten securely.

Fig 2: Lower Decklid Trim Panel, Clips & Screw



Courtesy of CHRYSLER GROUP, LLC

3. Position the lower liftgate trim panel (3) onto the liftgate. Using hand pressure, press firmly to engage the retaining clips (2).
4. Install the screws (1) and tighten securely.

DECKLID/HATCH/LIFTGATE/TAILGATE > PROP, GAS, LIFTGATE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

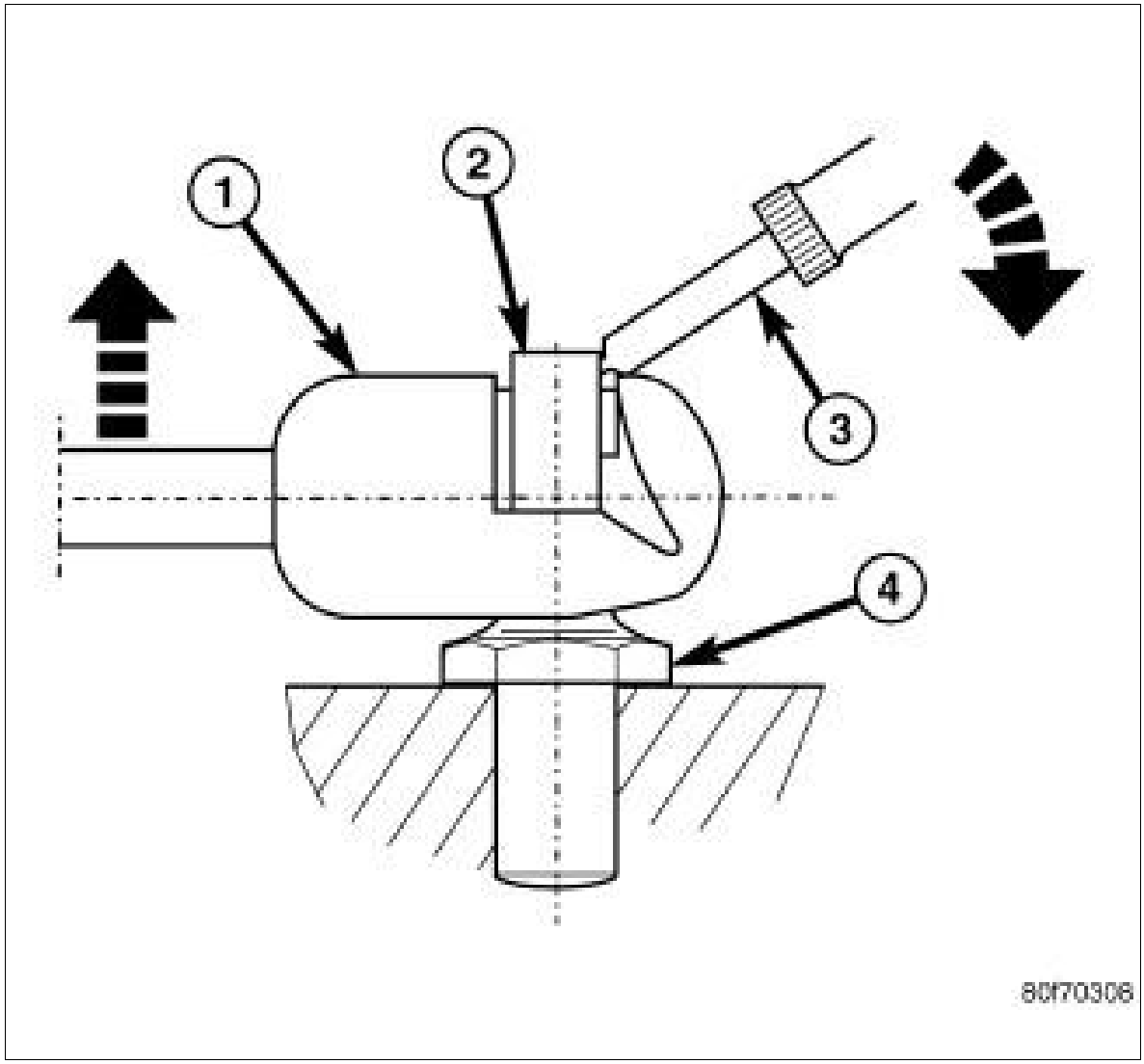
> ⚠ *CAUTION:*
>
> *Do not use any type of pliers on the machined surface of the gas prop to assist in supporting the hood or decklid. Use a proper device for support, or the help of an assistant.*

Fig 1: Incorrect Way To Prop Hood

Courtesy of CHRYSLER GROUP, LLC

1. Open and support the liftgate with a suitable prop or block.

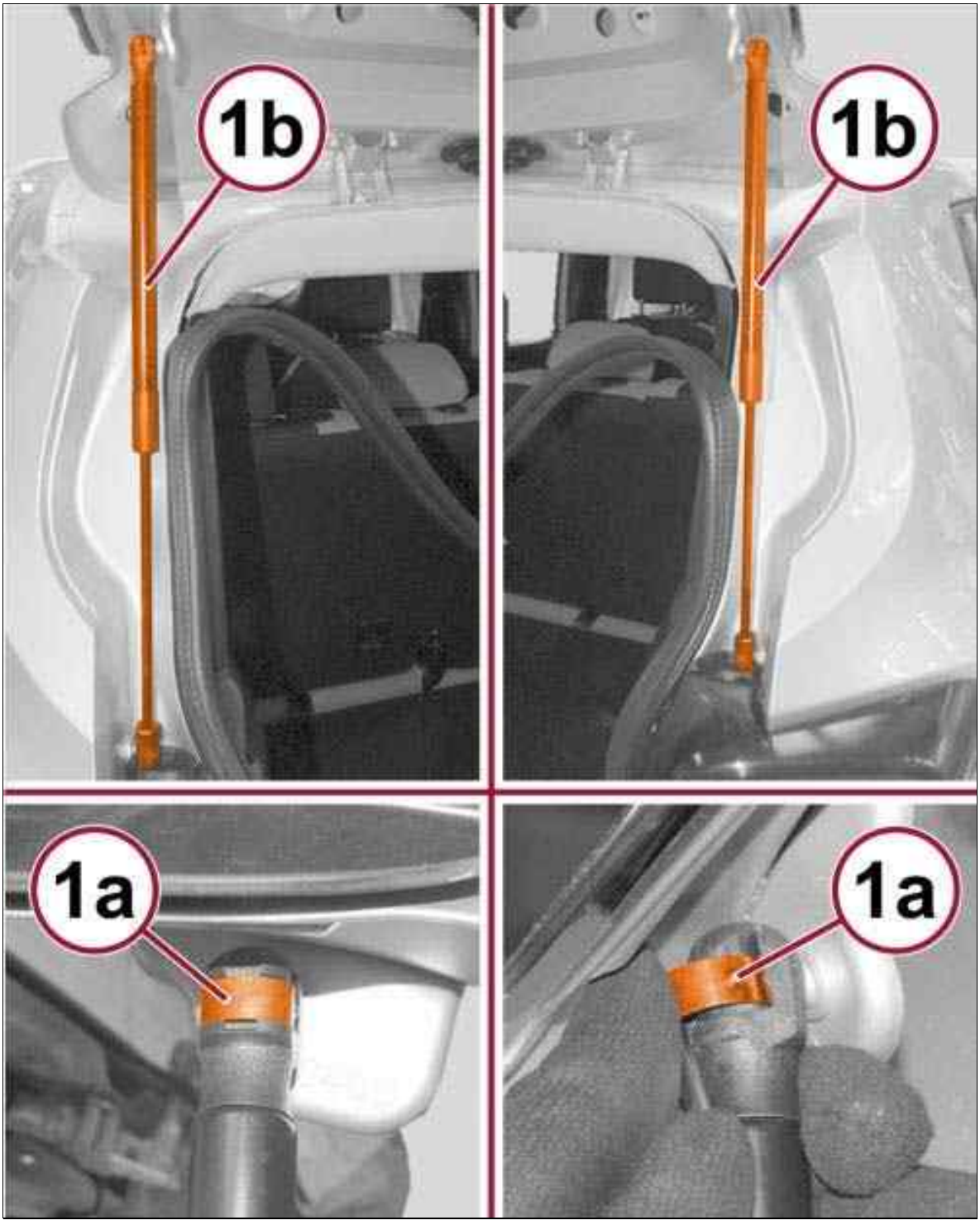
Fig 2: Releasing Retaining Clip



Courtesy of CHRYSLER GROUP, LLC

2. Using a small flat bladed tool (3), or equivalent, release the retaining clip (2) while pulling the ball socket (1) away from the ball stud (4).

Fig 3: Gas Prop & Ends

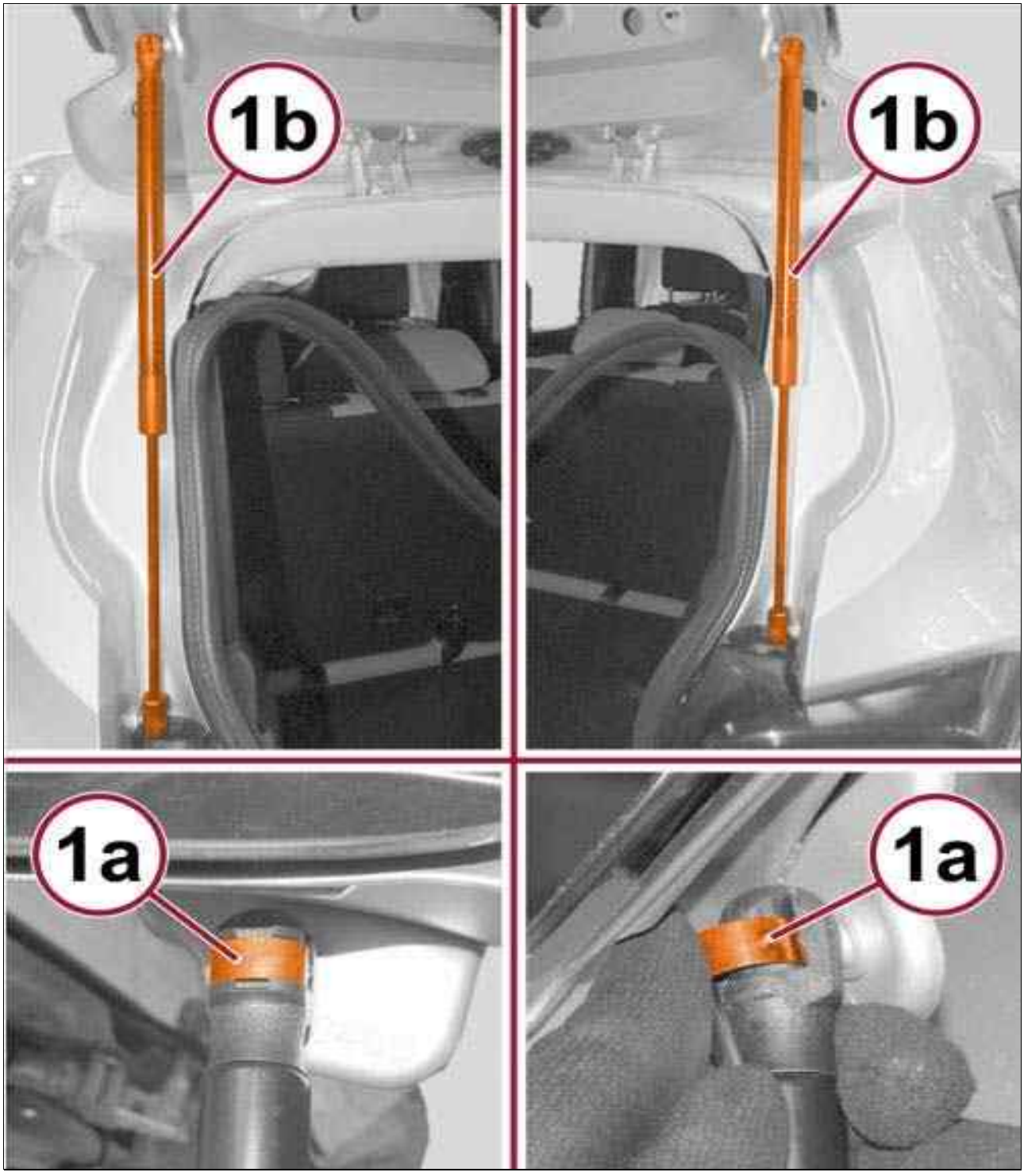


Courtesy of CHRYSLER GROUP, LLC

3. Release the gas prop ends (1a) and remove the gas prop (1b).

DECKLID/HATCH/LIFTGATE/TAILGATE > PROP, GAS, LIFTGATE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Gas Prop & Ends

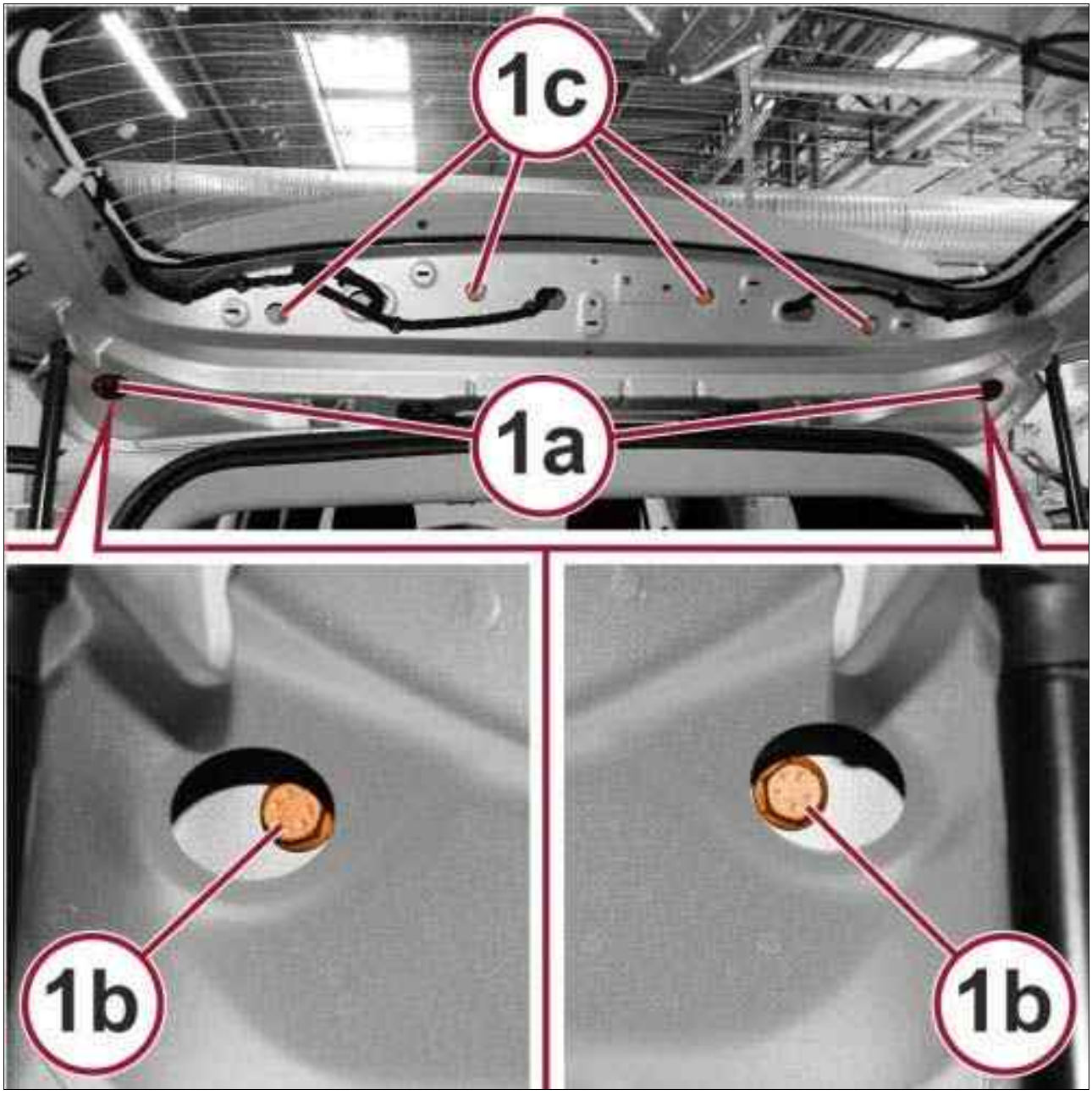


Courtesy of CHRYSLER GROUP, LLC

1. Install the gas prop (1b) over the ball studs and hand tap so that the retaining clips (1a) snap into place.
2. Make sure the retaining clips are seated into the ball socket fully.

DECKLID/HATCH/LIFTGATE/TAILGATE > SPOILER, DECKLID > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

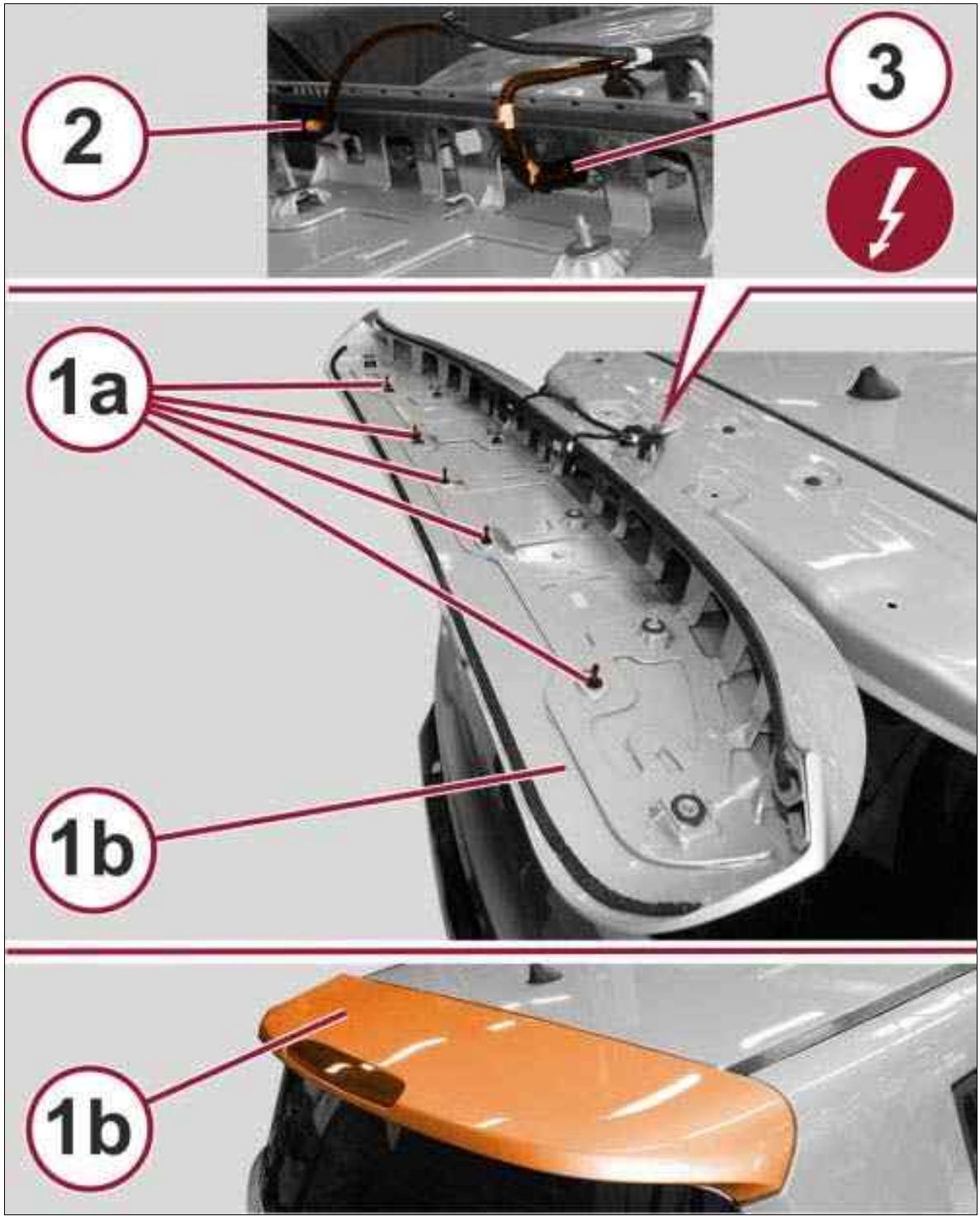
Fig 1: Covers, Bolts & Nuts



Courtesy of CHRYSLER GROUP, LLC

1. Remove liftgate trim panels. Refer to PANEL, TRIM, LIFTGATE, REMOVAL AND INSTALLATION .
2. Remove the bolts covers (1a) and the bolts (1b).
3. Remove the nuts (1c).

Fig 2: Spoiler, Clips, Washer Hose & Connector



Courtesy of CHRYSLER GROUP, LLC

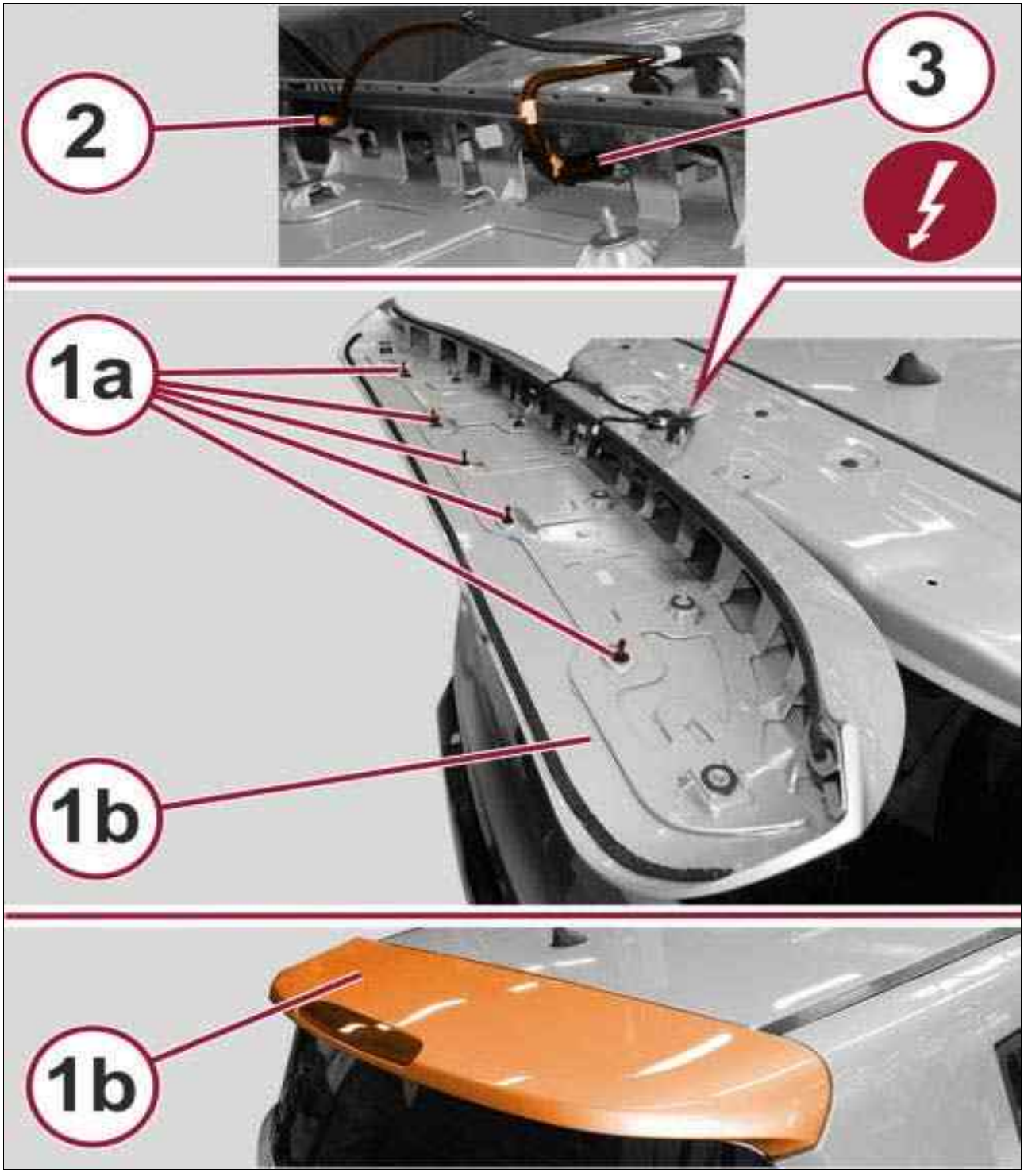
4. Using a trim stick or equivalent, release the retaining clips (1a) lift the spoiler (1b) from the body.
5. Disconnect the washer hose (2) from the washer nozzle.
6. Disconnect the wire harness connector (3) and remove the spoiler.

DECKLID/HATCH/LIFTGATE/TAILGATE > SPOILER, DECKLID > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

NOTE:

When the spoiler is removed for repair or replacement, the gaskets at the spoiler attachment locations should be replaced.

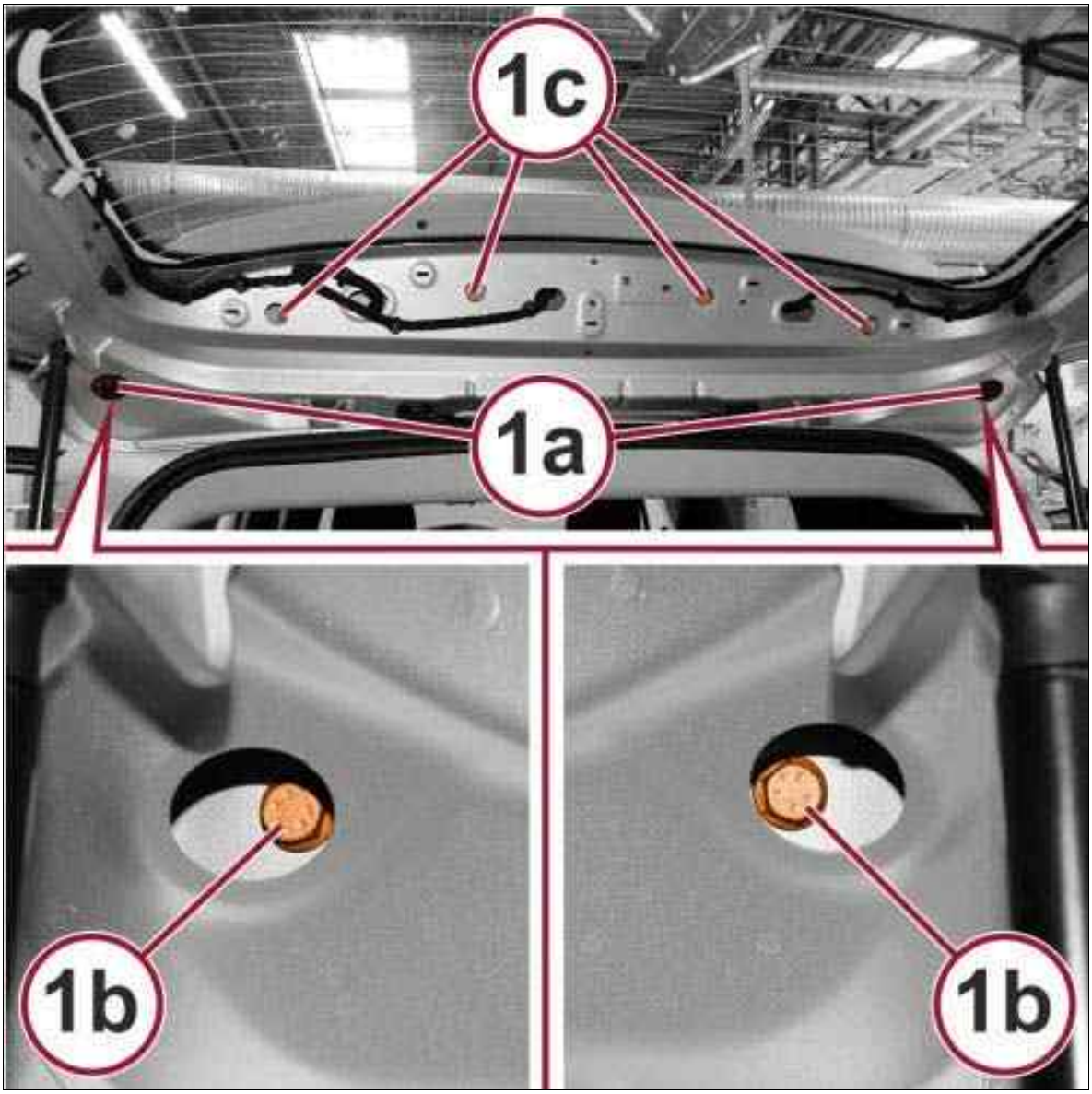
Fig 1: Spoiler, Clips, Washer Hose & Connector



Courtesy of CHRYSLER GROUP, LLC

1. Position spoiler (1b) and connect the washer hose (2) to the washer nozzle. Connect the wire harness connector (3).
2. Align the retaining clips (1a) to the body and hand tap the spoiler to engage.

Fig 2: Covers, Bolts & Nuts



Courtesy of CHRYSLER GROUP, LLC

3. Install the bolts (1b) loosely.
4. Install the nuts (1c) and tighten securely. Start in the center and work your way out to the ends when tightening the nuts and bolts.
5. Install the bolt covers (1a).
6. Install the liftgate trim panels. Refer to PANEL, TRIM, LIFTGATE, REMOVAL AND INSTALLATION .

DECKLID/HATCH/LIFTGATE/TAILGATE > STRIKER, LIFTGATE LATCH > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

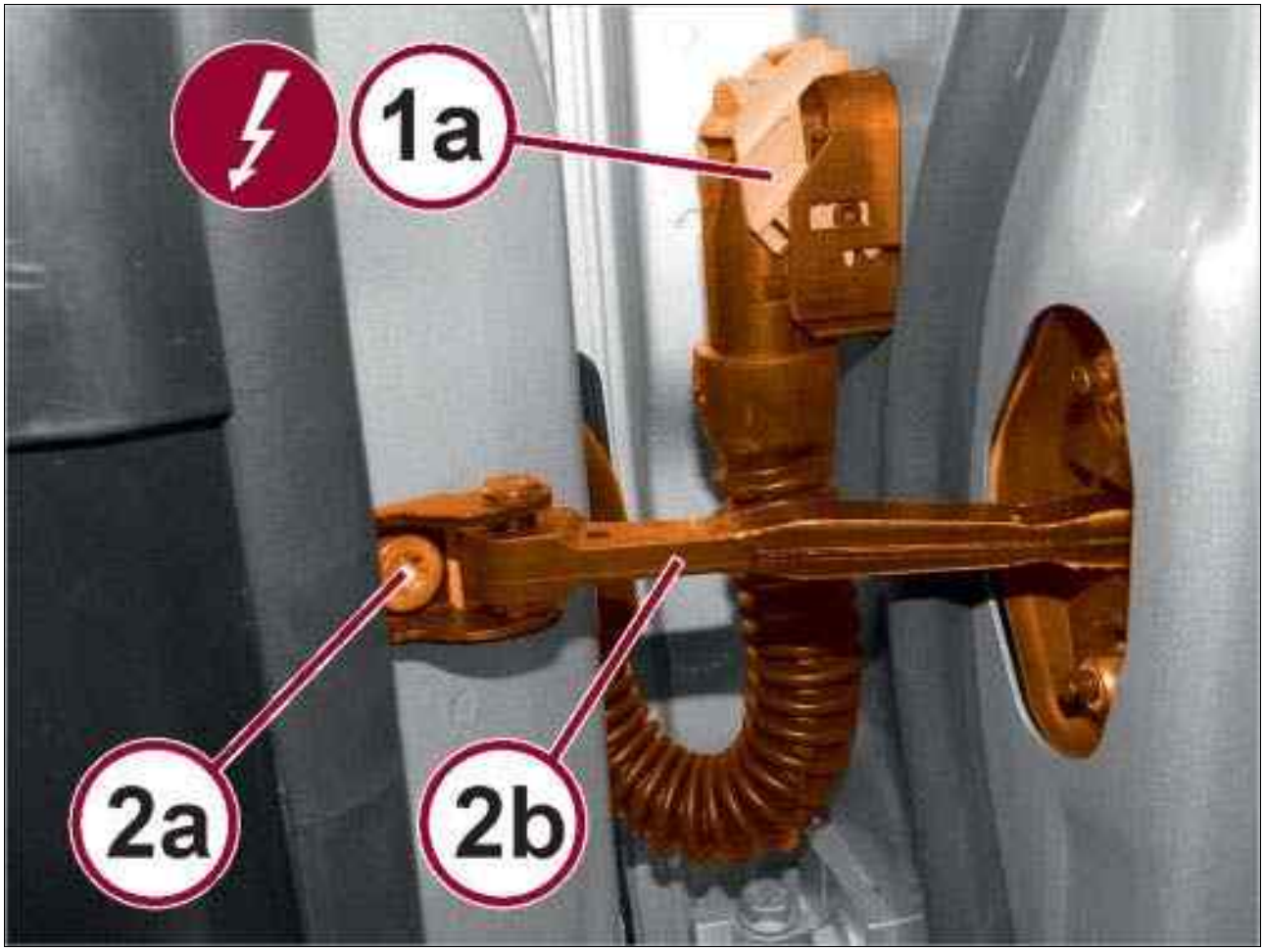
1. Remove the liftgate sill plate. Refer to PLATE, SCUFF, LIFTGATE SILL, REMOVAL AND INSTALLATION .
2. Mark the latch striker location on the inside of the liftgate opening with a grease pencil to aid during installation.
3. Remove the two fasteners that secure the latch striker.
4. Remove the latch striker from the vehicle.

DECKLID/HATCH/LIFTGATE/TAILGATE > STRIKER, LIFTGATE LATCH > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

1. Position the liftgate latch striker to the body and align using the marks made during removal.
2. Install two bolts and tighten the liftgate latch bolts to the proper specification. Refer to SPECIFICATIONS .
3. Adjust the latch striker position as necessary to achieve proper liftgate latch operation.
4. Install the liftgate sill plate. Refer to PLATE, SCUFF, LIFTGATE SILL, REMOVAL AND INSTALLATION .

DOOR - FRONT > CHECK, DOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

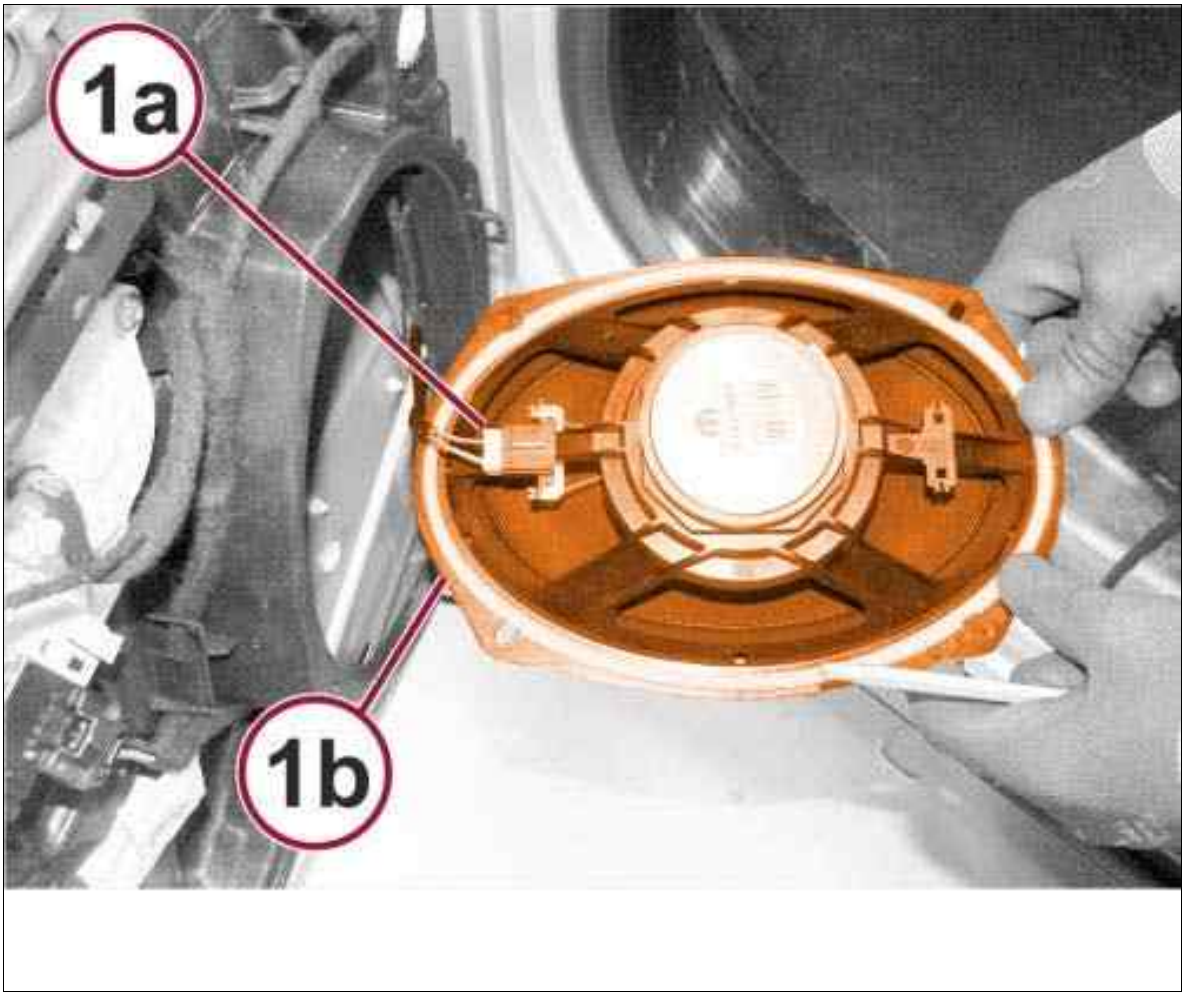
Fig 1: Door Check Arm, Screw & Connector



Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable.
2. Remove the screw (2a) of the door check arm (2b) to the A-pillar and close the door to retract the check itself.

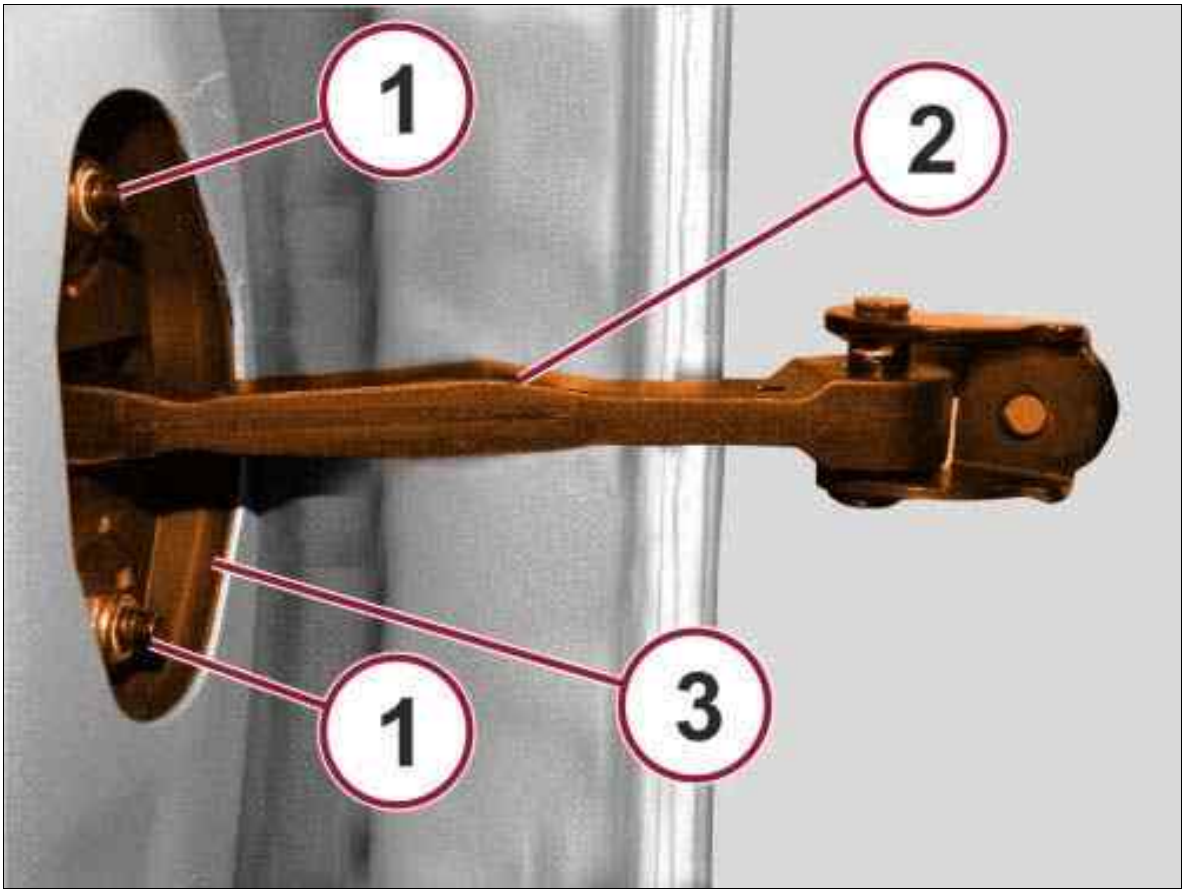
Fig 2: Speaker & Wire Connector



Courtesy of CHRYSLER GROUP, LLC

3. Remove the door trim panel. Refer to PANEL, DOOR TRIM, REMOVAL AND INSTALLATION .
4. Disconnect the wiring connector (1a) from the front speaker (1b).
5. Remove the front speaker.

Fig 3: Door Check Arm, Seal & Nuts

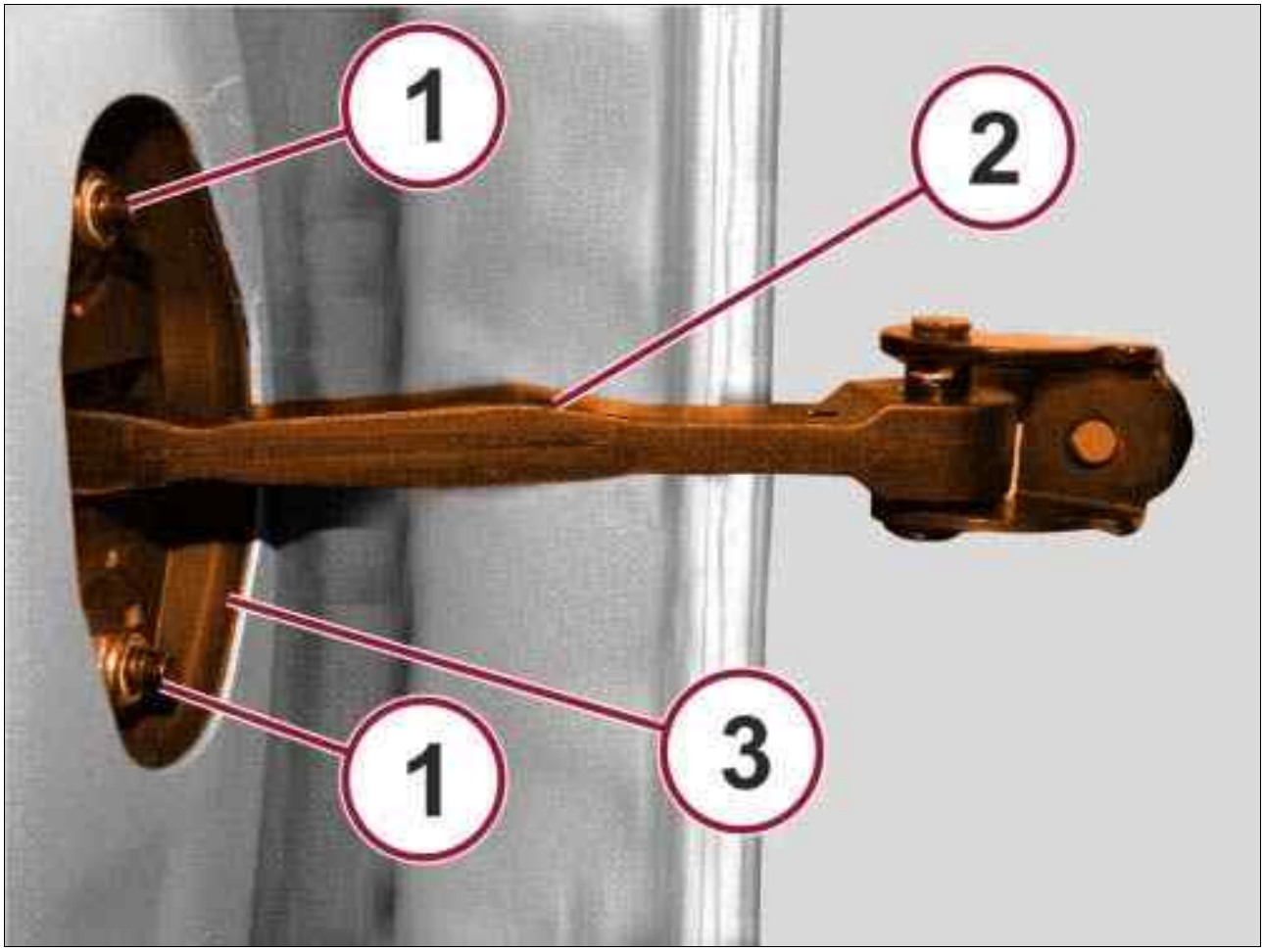


Courtesy of CHRYSLER GROUP, LLC

6. Remove the nuts (1) securing the door check (2) to the door.
7. Remove the door check (2) through the speaker opening.
8. Retrieve the seal (3).

DOOR - FRONT > CHECK, DOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

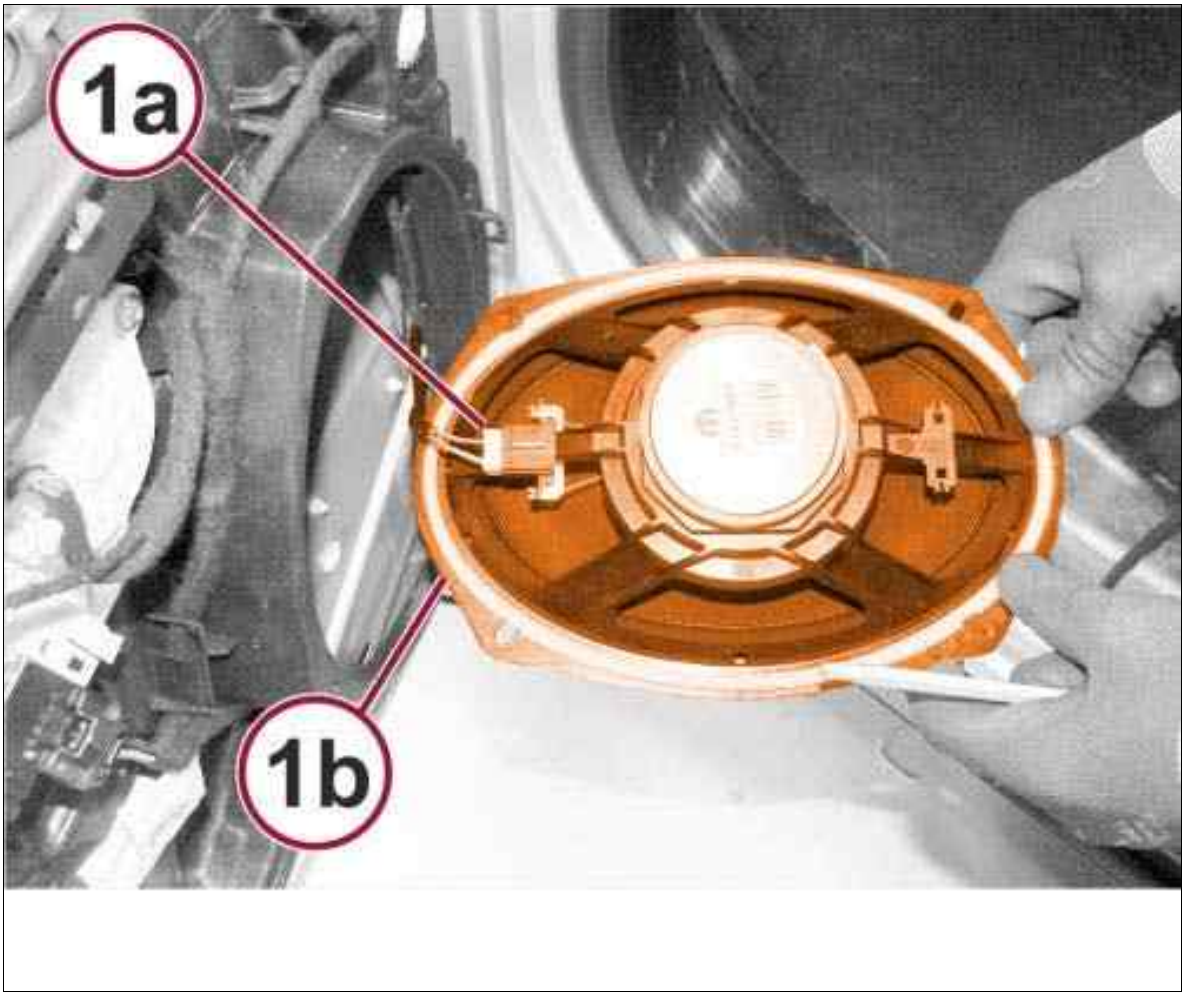
Fig 1: Door Check Arm, Seal & Nuts



Courtesy of CHRYSLER GROUP, LLC

1. Install the door check nuts and tighten the nuts on the door securely.

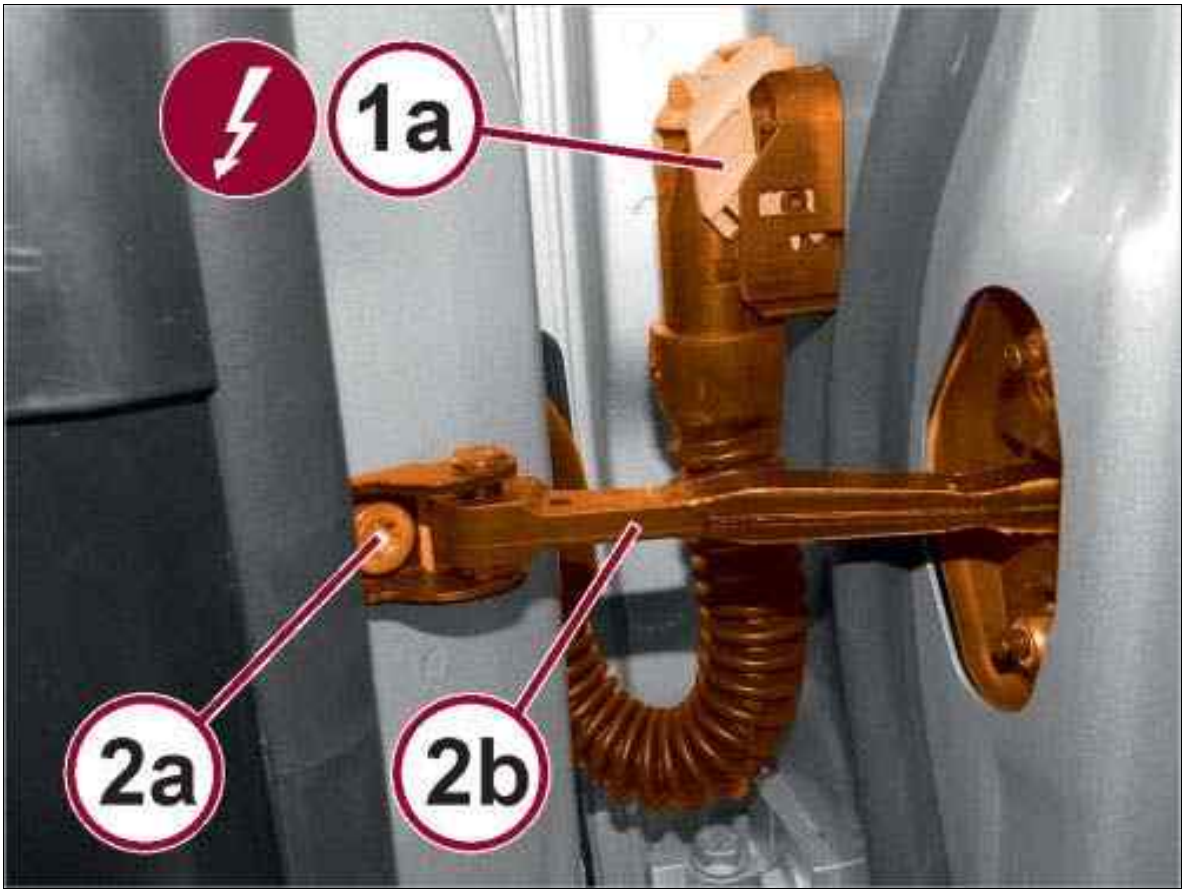
Fig 2: Speaker & Wire Connector



Courtesy of CHRYSLER GROUP, LLC

2. Position the front speaker (1b) and connect the speaker wiring connector (1a).
3. Install front speaker.

Fig 3: Door Check Arm, Screw & Connector

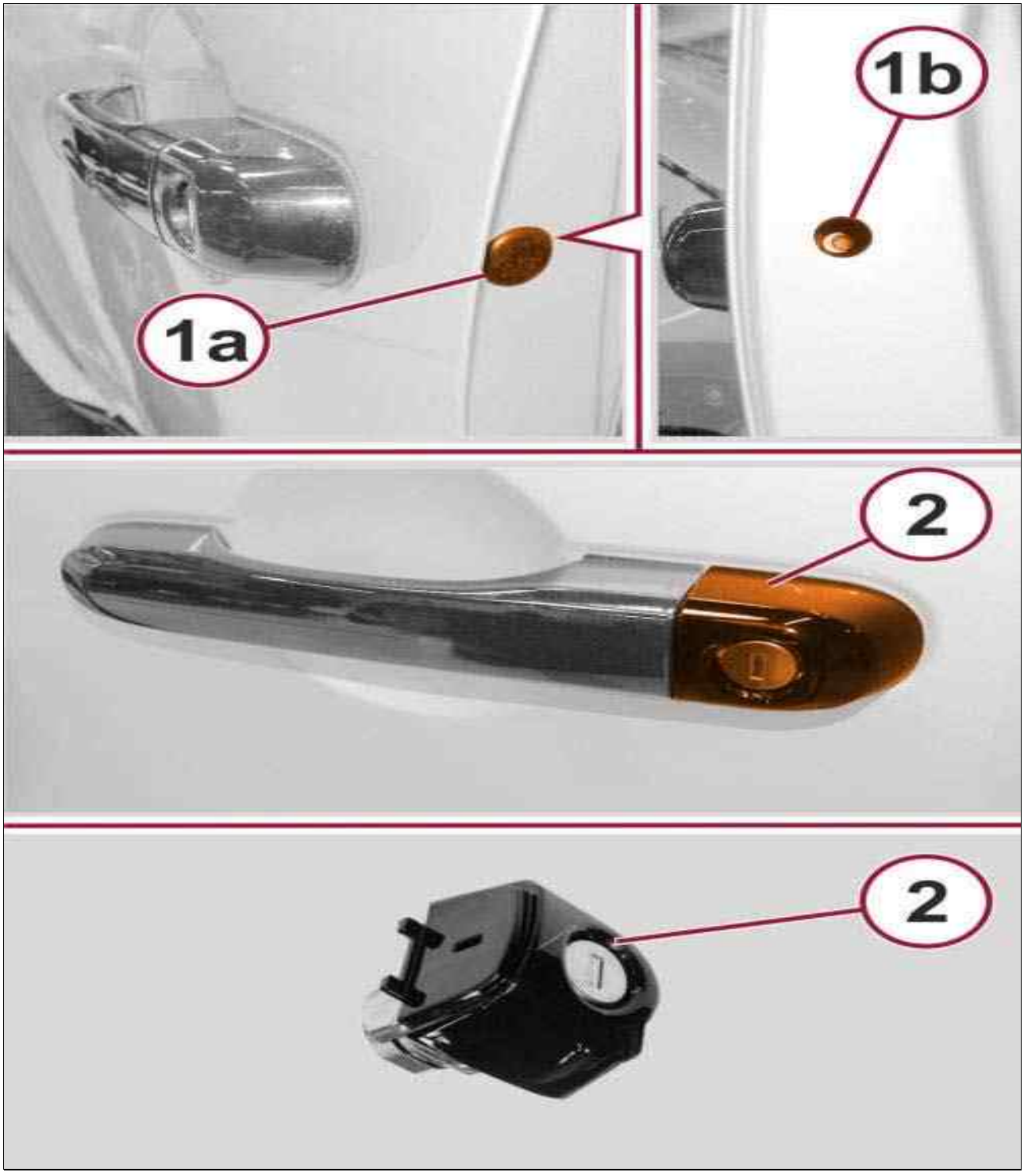


Courtesy of CHRYSLER GROUP, LLC

4. Position the check arm (2b) back and install the screw (2a).
5. Connect the negative battery cable.

DOOR - FRONT > CYLINDER, DOOR LOCK > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Lock Block, Cover & Screw

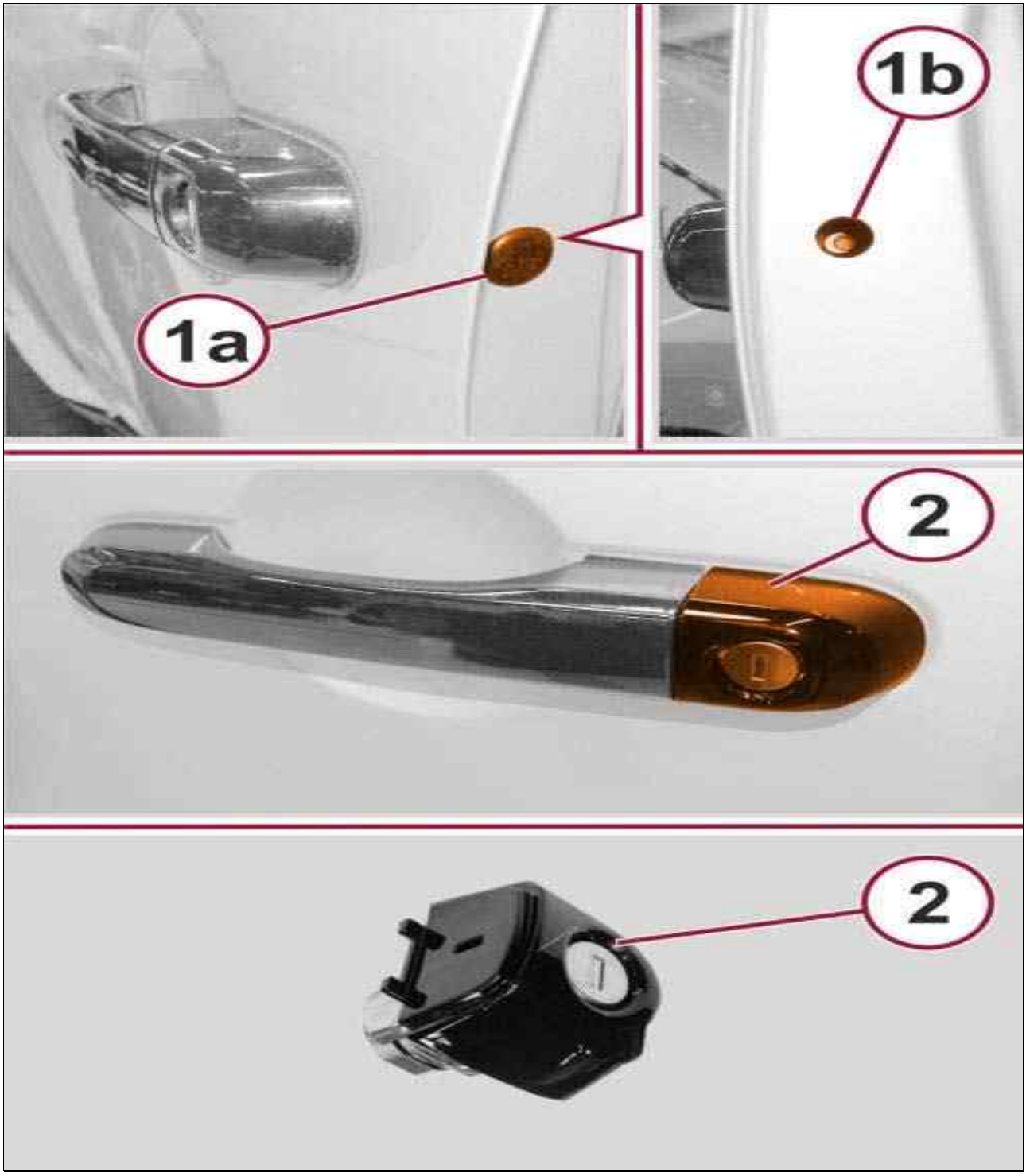


Courtesy of CHRYSLER GROUP, LLC

1. Remove the protective cover (1a).
2. Loosen the screw (1b) by turning clockwise.
3. Remove the lock block (2) from the door.

DOOR - FRONT > CYLINDER, DOOR LOCK > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Lock Block, Cover & Screw



Courtesy of CHRYSLER GROUP, LLC

1. Insert the lock block fully and tighten the screw securely.
2. Instal the protective cap.

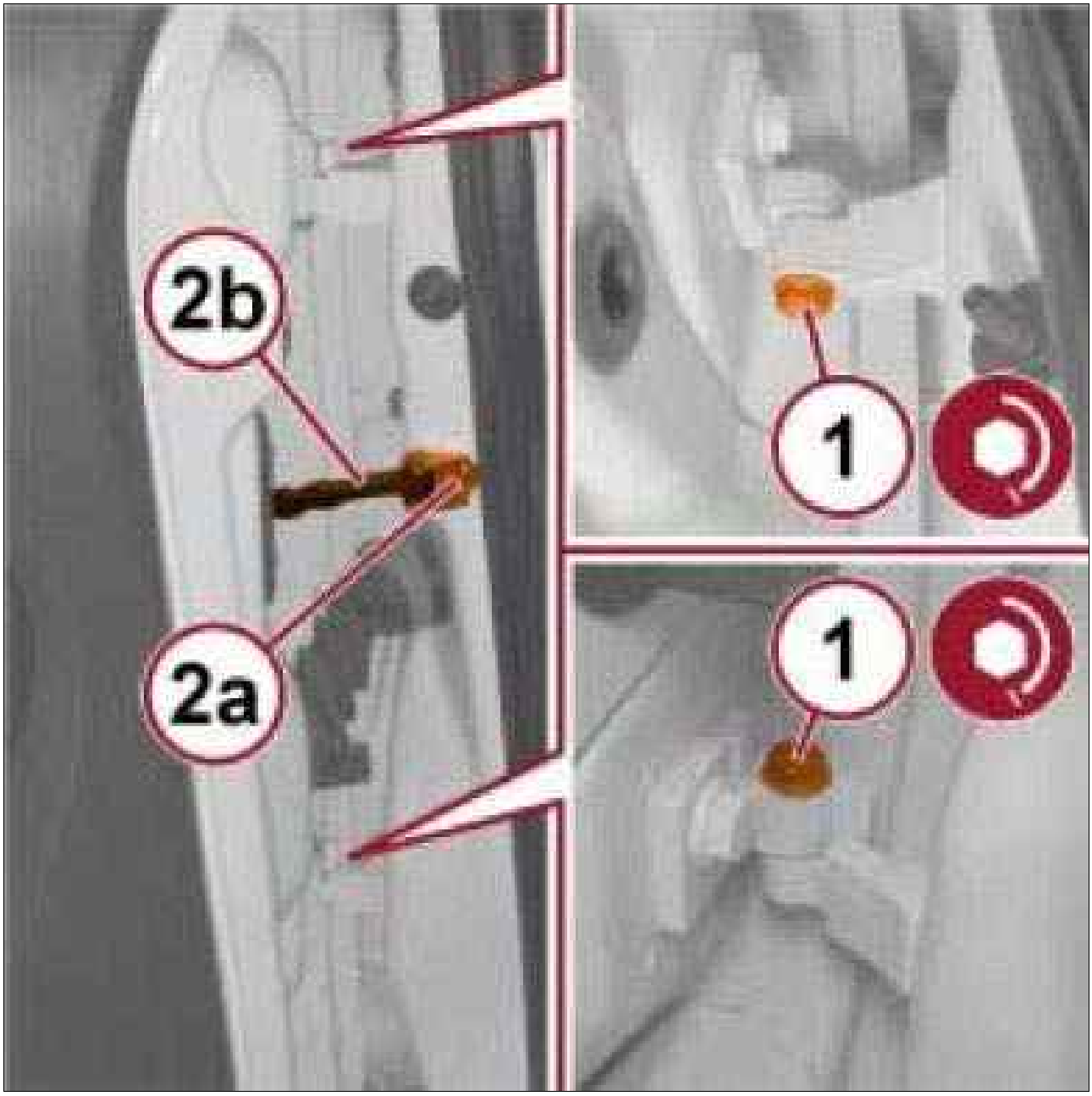
DOOR - FRONT > DOOR > ADJUSTMENTS > ADJUSTMENTS

NOTE:

It is recommended that you adjust the rear door before adjusting the front door. Refer to DOOR, REAR .

- *Door adjustment measurements should be taken from stationary or welded body panels like the roof, rocker or quarter panels.*
- *A suitable body sealant should be used when removing or moving the hinges.*

Fig 1: Link, Strap Bolt & Bolts



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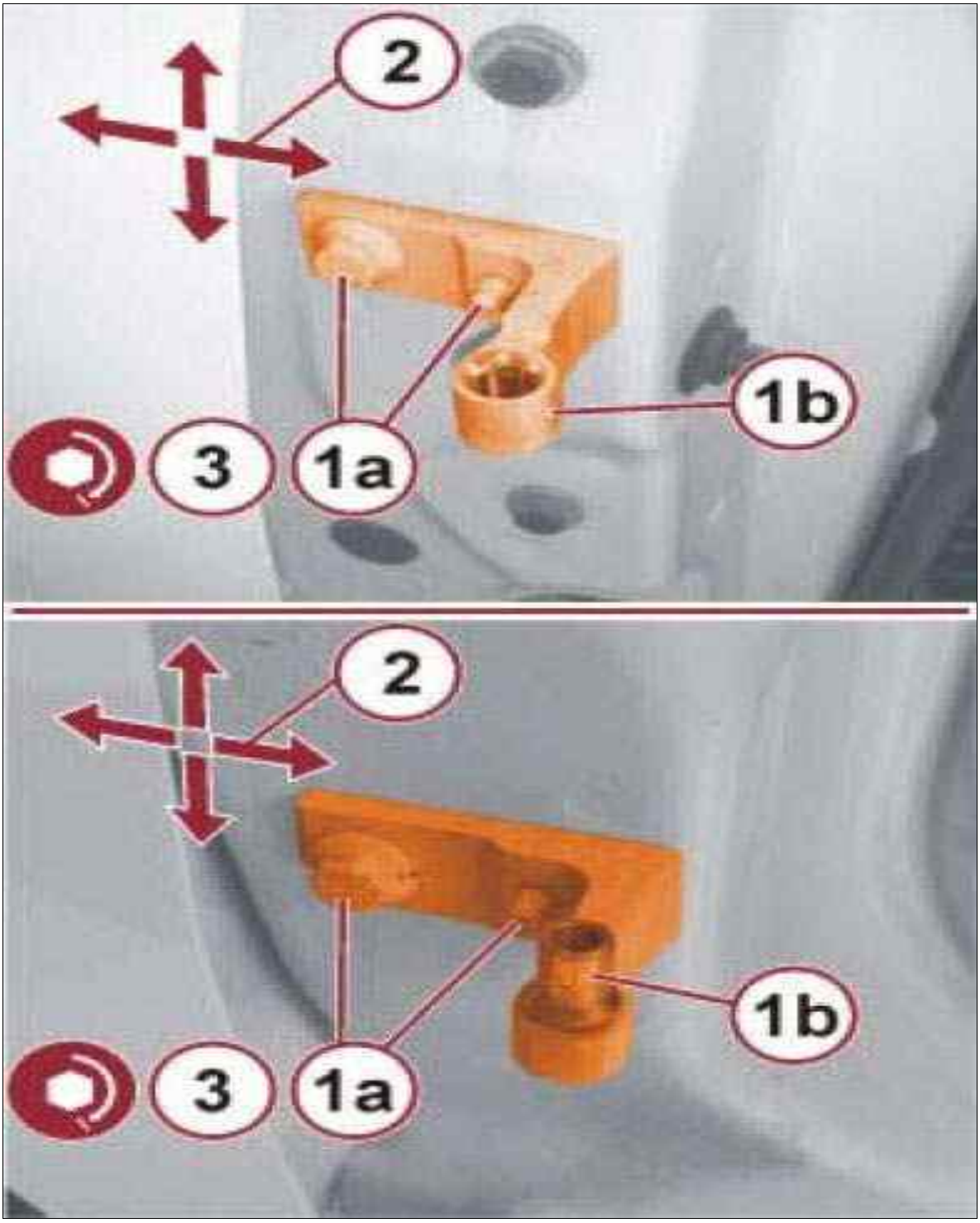
1. When adjustment is carried out after having removed the door, tighten the hinge bolts to the proper specification. Refer to SPECIFICATIONS .
2. Remove the striker. Refer to STRIKER, DOOR LATCH, REMOVAL AND INSTALLATION .
3. If necessary, provisionally tighten the bolts (1) securing the hinges to the door and body.
4. Remove the check strap bolt (2a) and close the door temporarily to return the link (2b).

> *NOTE:*
>
> *Initially adjust the door within the door housing. To do this, the bolts securing the*

hinges to the body must be loosened.

5. For the upper hinges remove the instrument panel assembly, refer to CARRIER, INSTRUMENT PANEL, REMOVAL AND INSTALLATION .
6. For the lower hinges remove the cowl trim panel, refer to PANEL, COWL TRIM, REMOVAL AND INSTALLATION .

Fig 2: Hinges, Bolts & Adjustment Directions



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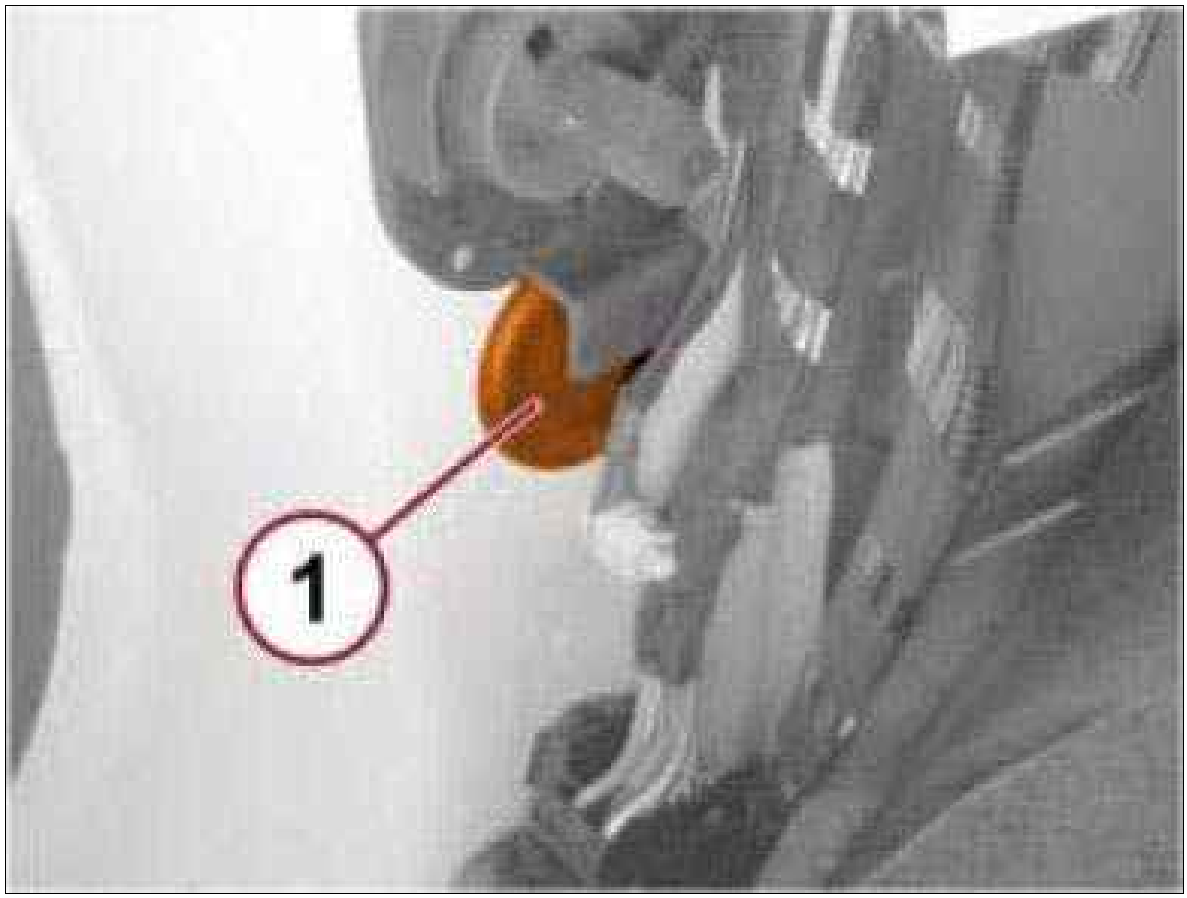
7. Loosen the bolts (1a) securing the hinges (1b) to the body.
8. Adjust the door position by means of the slotted bolt holes until it is correctly aligned in the door housing.

> *NOTE:*
>
> *It is advisable to work on one hinge at a time. The arrows (2) indicate the possible movements for the adjustment.*

9. After adjustment, tighten the bolts (3) to the proper specification. Refer to SPECIFICATIONS .

Fig 3: Rubber Plug



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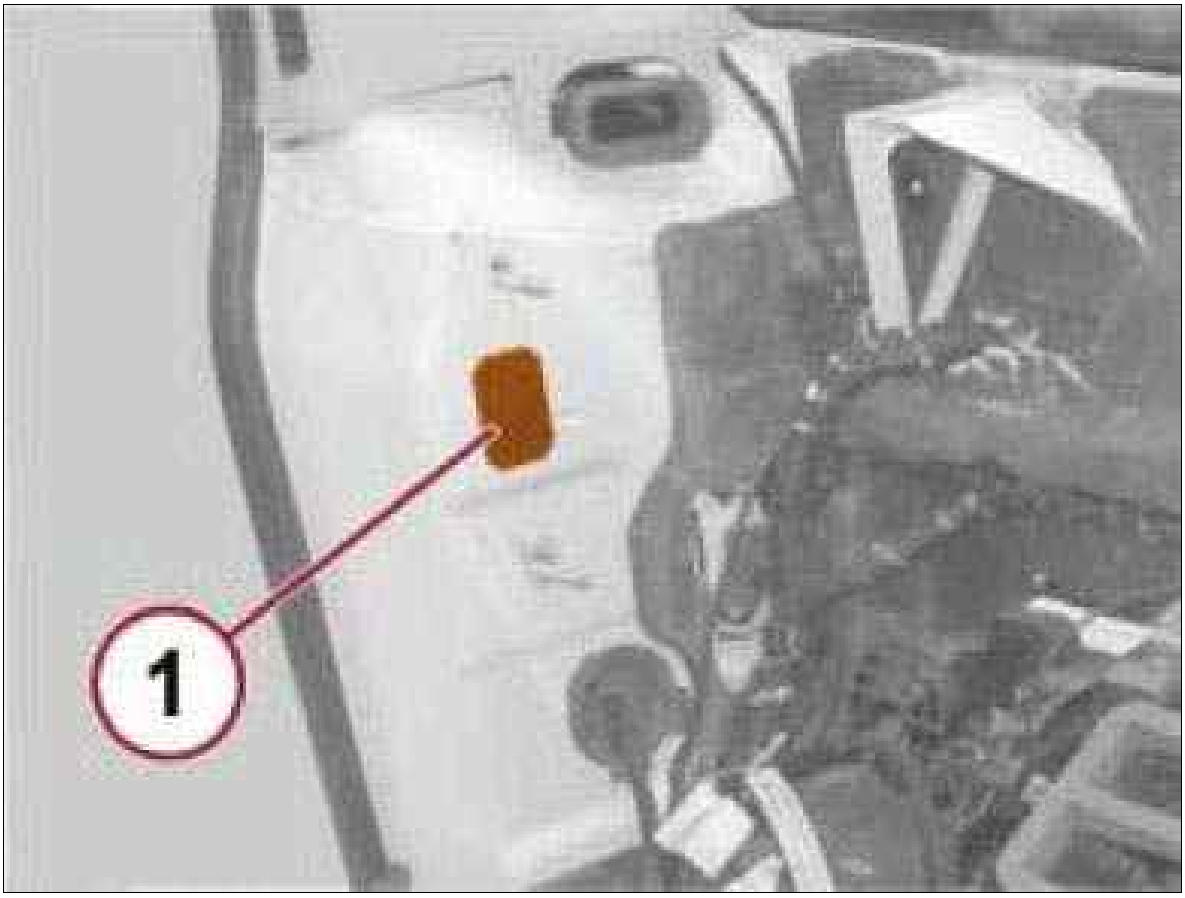
10. If removed, fit the rubber plug (1) for the lower hinge.

Fig 4: Upper Hinge Protection



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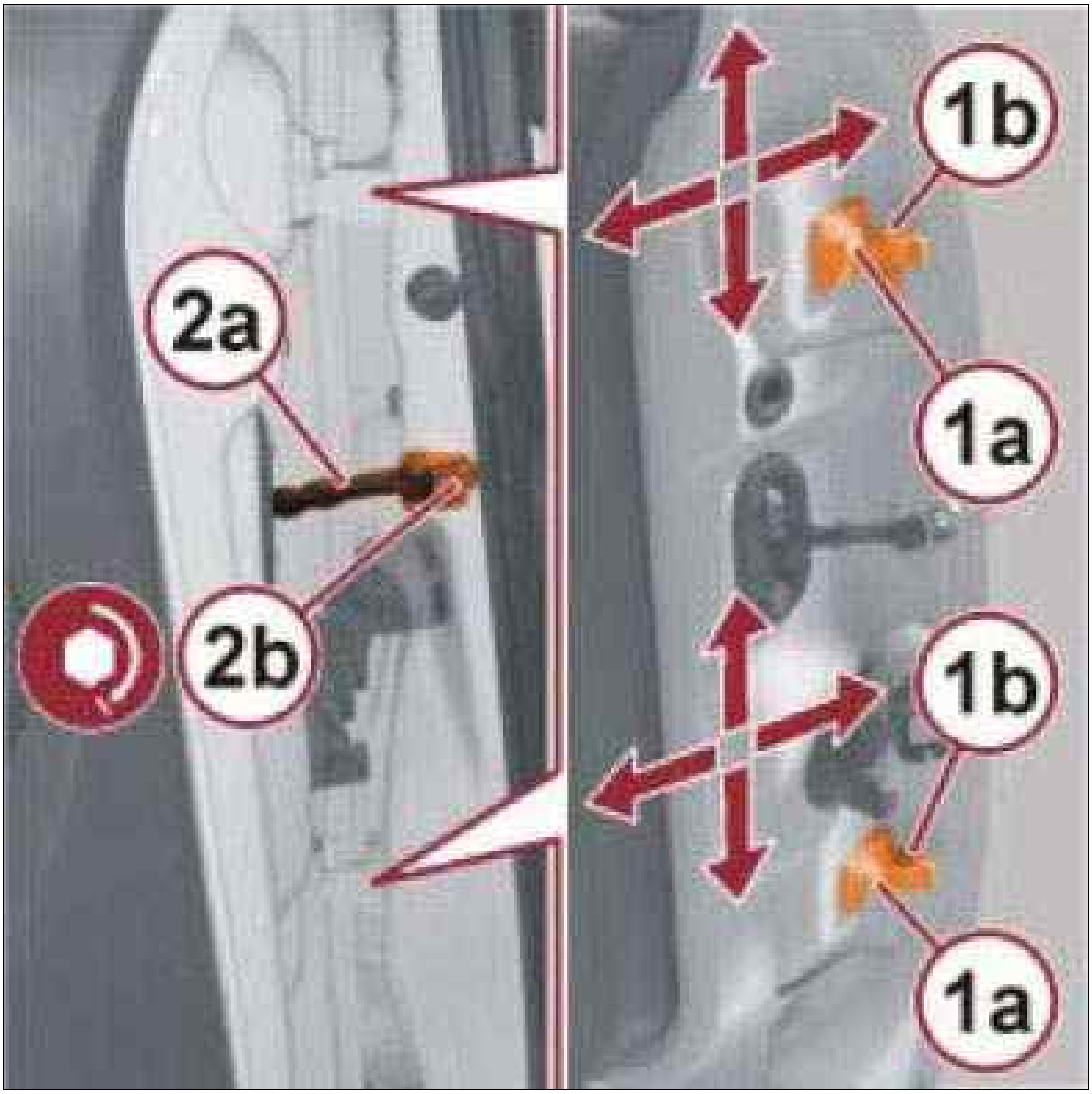
11. If removed, fit the protection (1) for the upper hinge.

Fig 5: Hinges & Bolts



Courtesy of CHRYSLER GROUP, LLC

12. For the upper hinges install the instrument panel assembly, refer to CARRIER, INSTRUMENT PANEL, REMOVAL AND INSTALLATION .
13. For the lower hinges remove the cowl trim panel, refer to PANEL, COWL TRIM, REMOVAL AND INSTALLATION .

> *NOTE:*
>
> *If necessary, adjust the alignment of the door with the fender and the rear door, working as follows.*

14. Open the door.

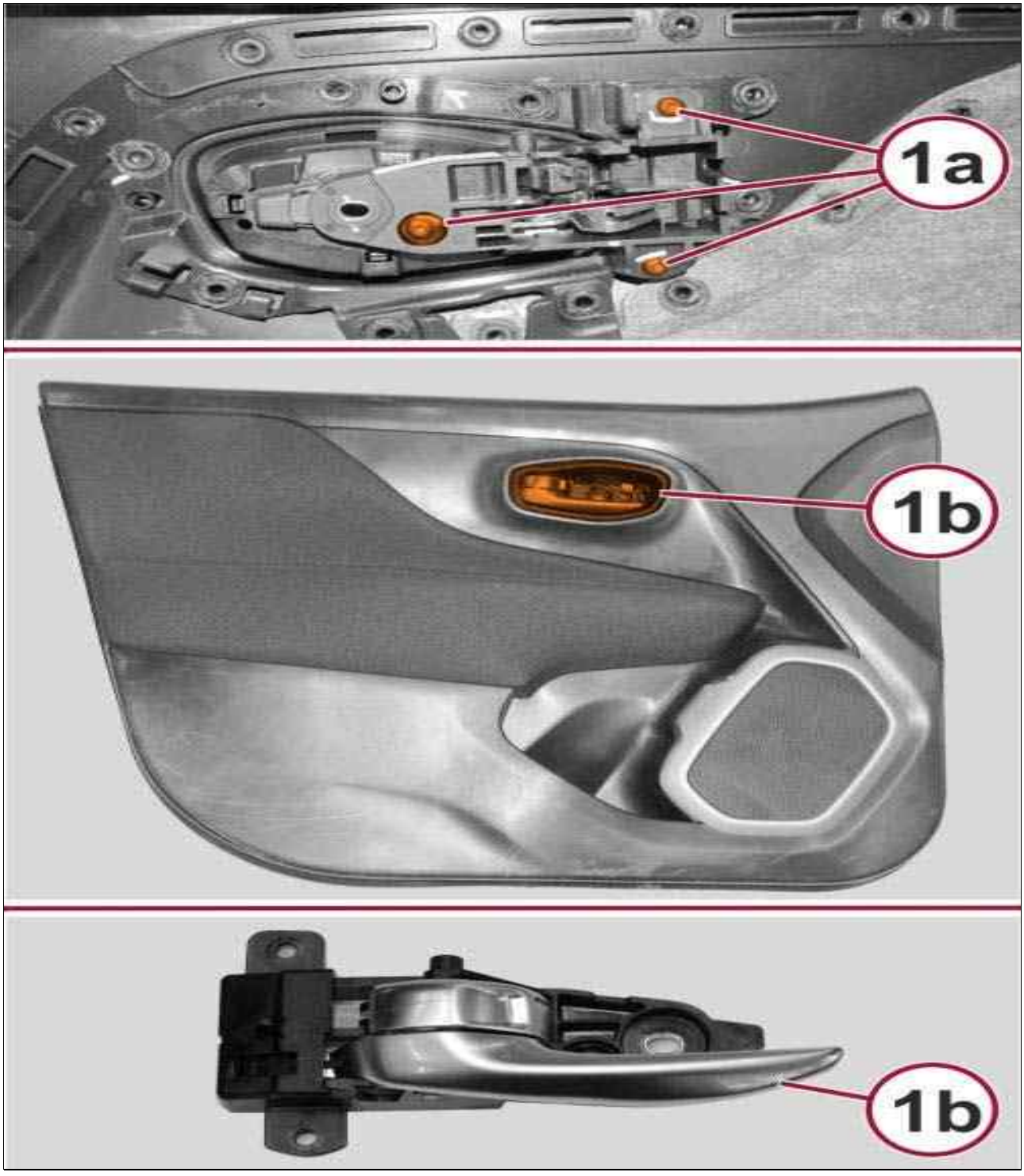
15. Loosen the bolts (1a) securing the hinges (1b) to the door.
16. Adjust the door position by means of the slotted screw holes until it is correctly aligned with the fender and rear door.

> *NOTE:*
>
> *It is advisable to work on one hinge at a time. The arrows indicate the possible movements for the adjustment.*

17. After adjustment, tighten the bolts to the proper specification. Refer to SPECIFICATIONS .
18. Install the striker. Refer to STRIKER, DOOR LATCH, REMOVAL AND INSTALLATION .
19. If necessary, touch up the paint in the half hinge area.
20. Check that the striker and the door lock are correctly matched and that the alignment is correct with the door closed.

DOOR - FRONT > DOOR > DISASSEMBLY AND ASSEMBLY > DISASSEMBLY AND ASSEMBLY > DISASSEMBLY

Fig 1: Handle & Screws

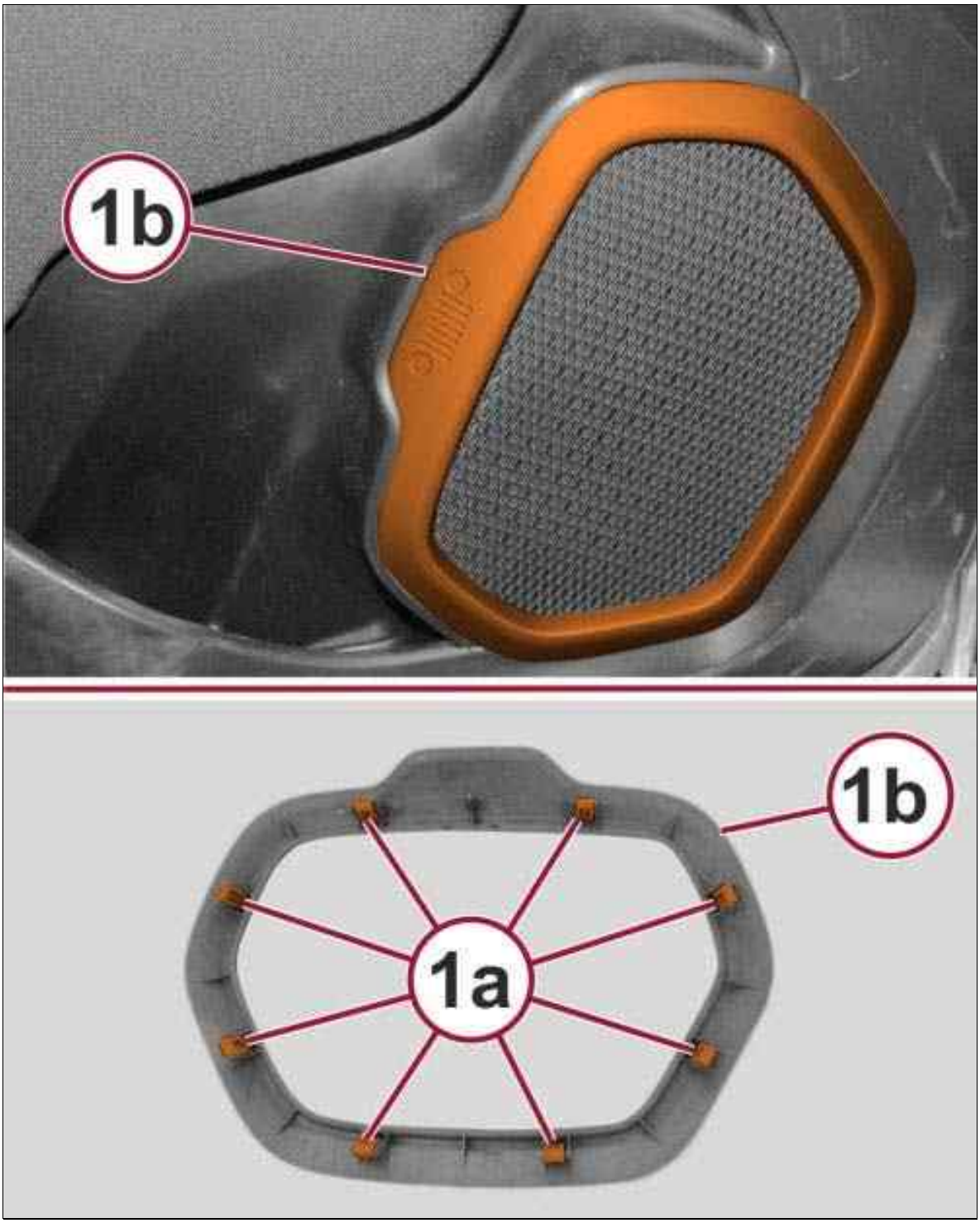


Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the battery negative cable.
2. Remove the outside rearview mirror. Refer to MIRROR, OUTSIDE REARVIEW, REMOVAL AND INSTALLATION .
3. Remove the front door glass. Refer to GLASS, DOOR, REMOVAL AND INSTALLATION .
4. Remove the front door. Refer to DOOR, REMOVAL AND INSTALLATION .

5. Remove the front door hinge. Refer to HINGE, DOOR, REMOVAL AND INSTALLATION .
6. Working from inside of the door trim panel, remove the mounting screws (1a) and remove the handle (1b).

Fig 2: Speaker Trim Bezel & Retainers

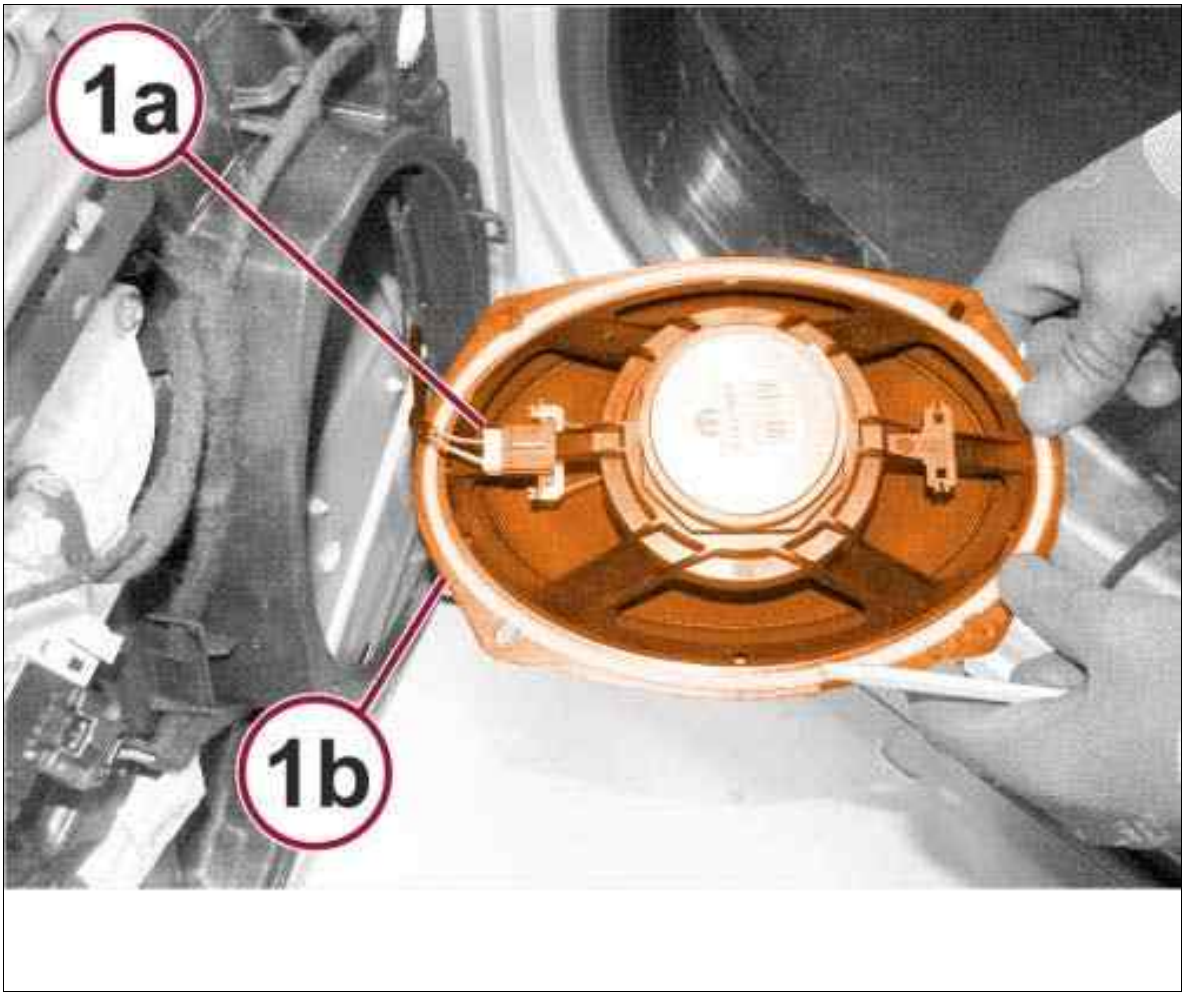


Courtesy of CHRYSLER GROUP, LLC

7. Using trim stick (special tool #C-4755, Trim Stick) or equivalent, release the retainers (1a) securing the speaker trim bezel (1b) to the door trim panel.

8. Remove the speaker trim bezel (1b) from the door trim panel.

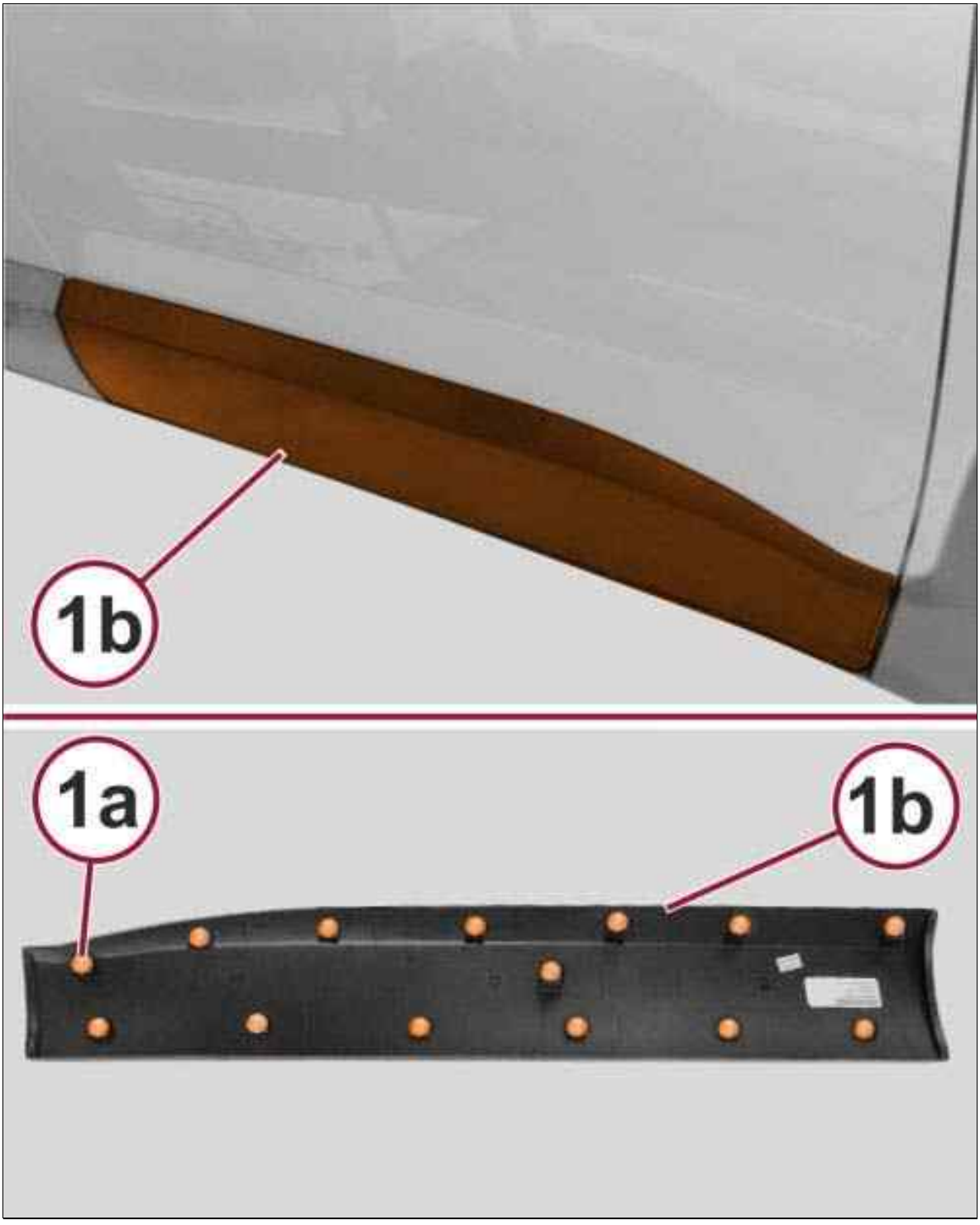
Fig 3: Speaker & Wire Connector



Courtesy of CHRYSLER GROUP, LLC

9. Disconnect the wiring connector (1a) from the front speaker (1b).
10. Remove the front speaker.

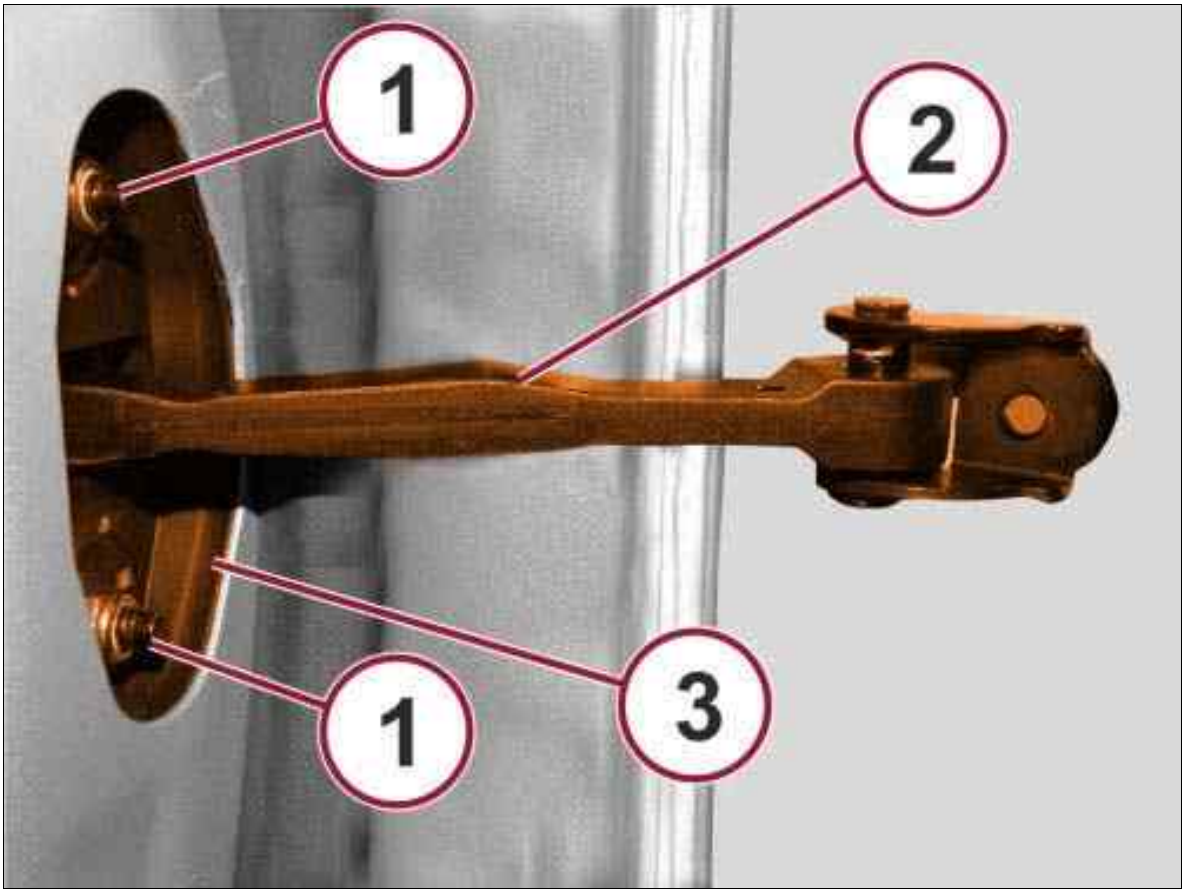
Fig 4: Front Door Lower Molding & Retainers



Courtesy of CHRYSLER GROUP, LLC

11. With the use of a trim stick or equivalent, pry out on the front door lower molding (1b) releasing the retainers (1a).
12. Remove the front door lower molding (1b) from the door.

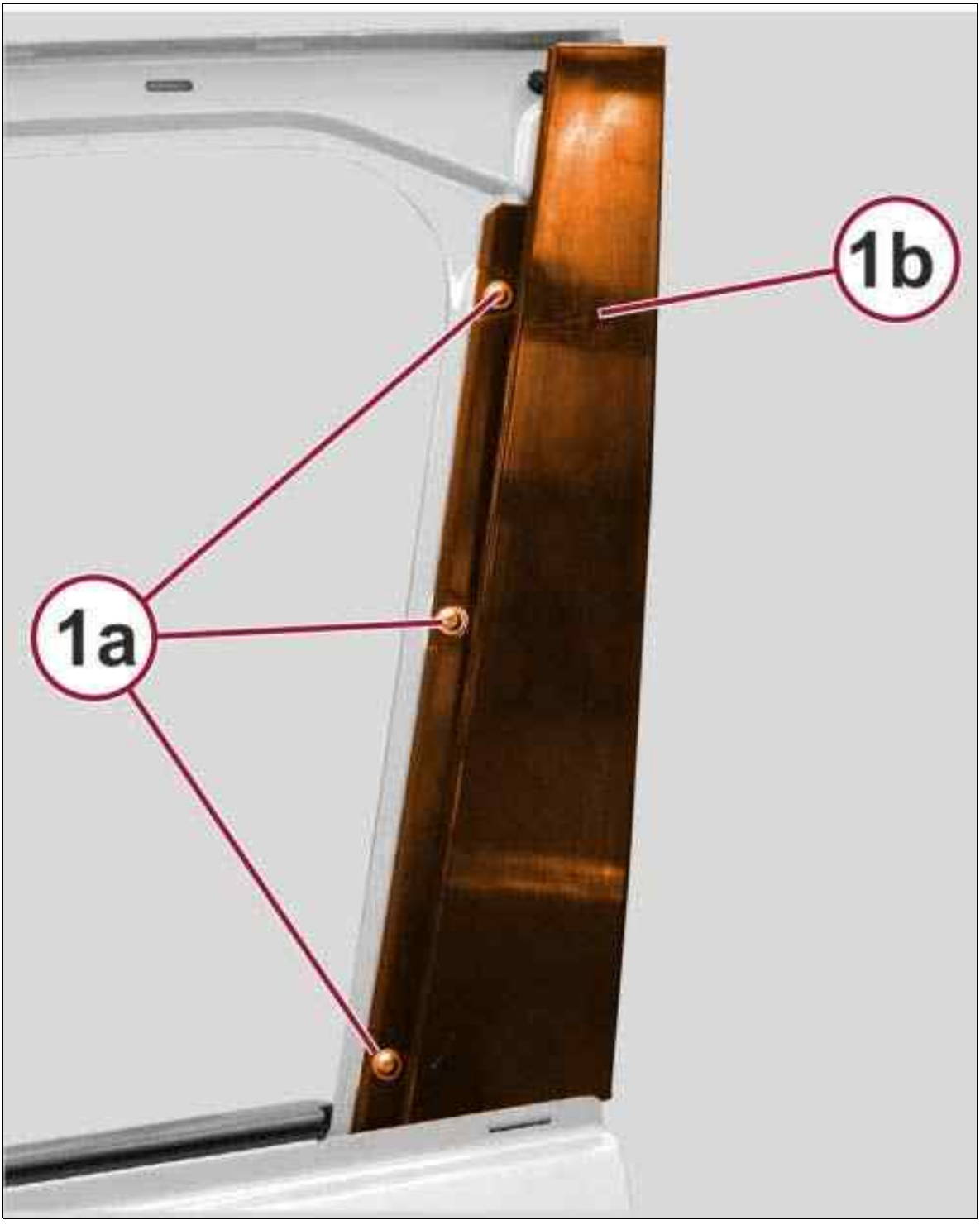
Fig 5: Door Check Arm, Seal & Nuts



Courtesy of CHRYSLER GROUP, LLC

13. Remove the nuts (1) securing the door check (2) to the door.
14. Remove the door check (2) through the speaker opening.
15. Retrieve the seal (3).

Fig 6: Front Door Applique & Screws



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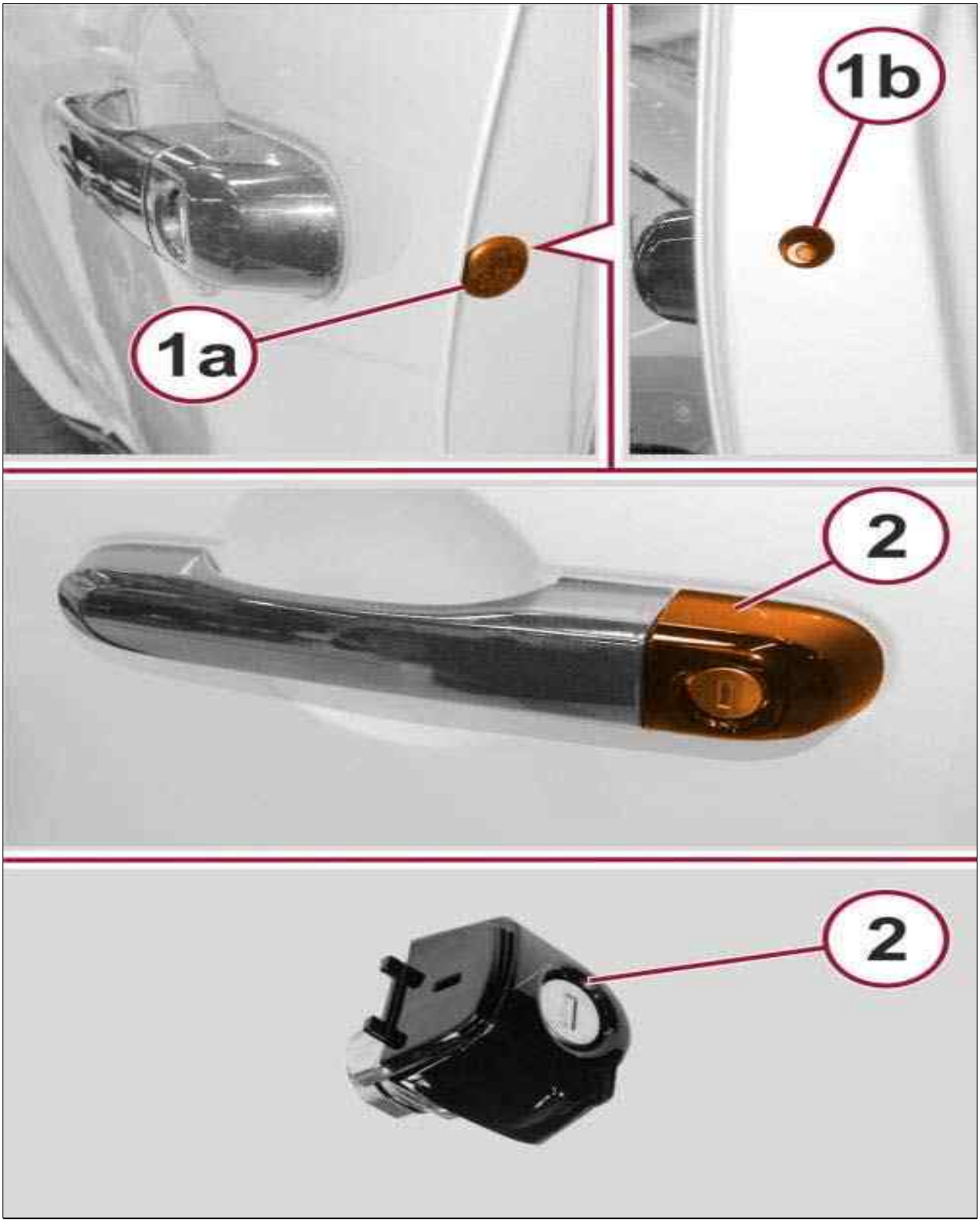
16. Remove the screws (1a) and remove the front door applique (1b), releasing it from the door glass channel.

Fig 7: Lock Block, Cover & Screw



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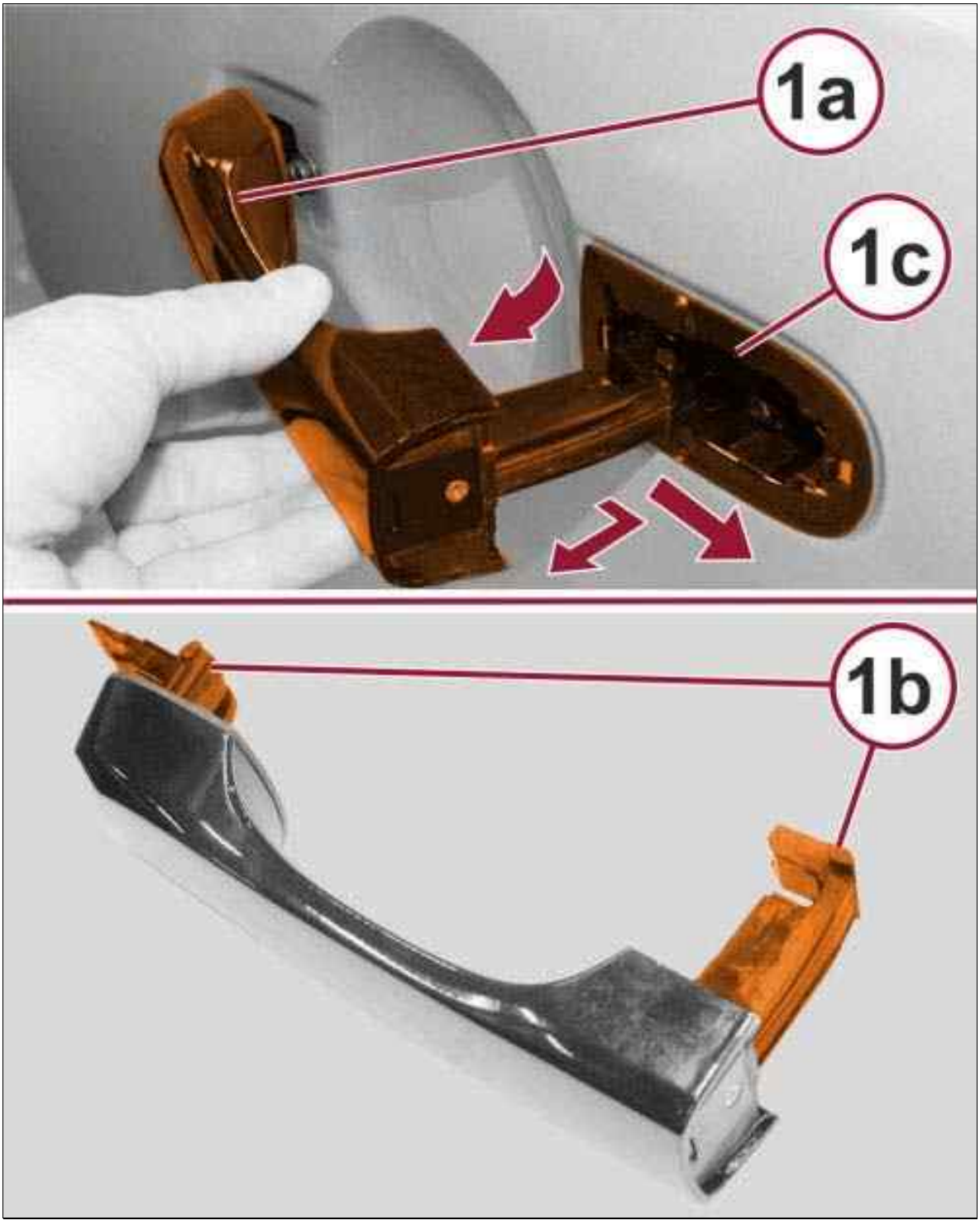
17. Remove the protective cover (1a).
18. Loosen the screw (1b) by turning clockwise.
19. Remove the lock block (2) from the door.

Fig 8: Handle, Support & Hooks



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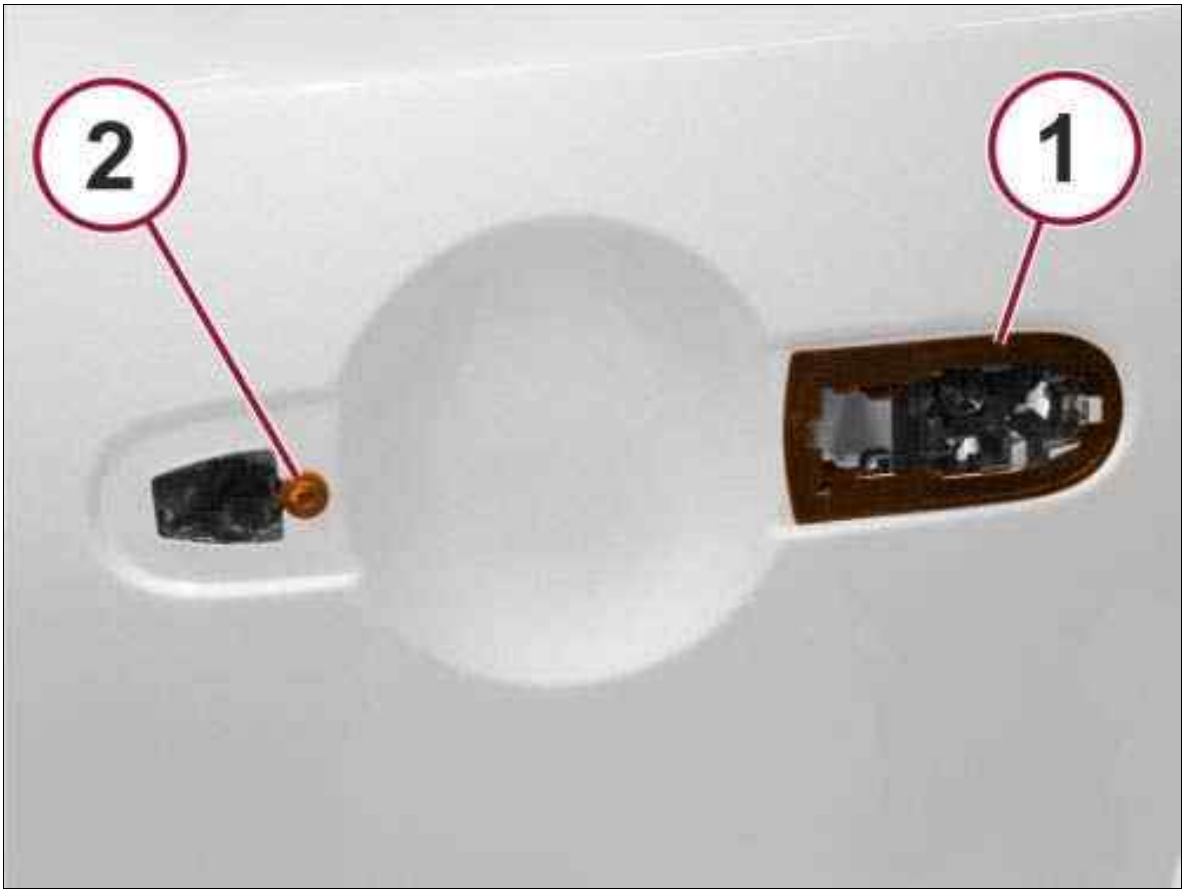
20. Push the handle (1a) in the direction of the arrow, releasing the hooks (1b) from the handle support (1c).
21. Rotate and remove the handle (1a).

Fig 9: Door Gasket & Screw



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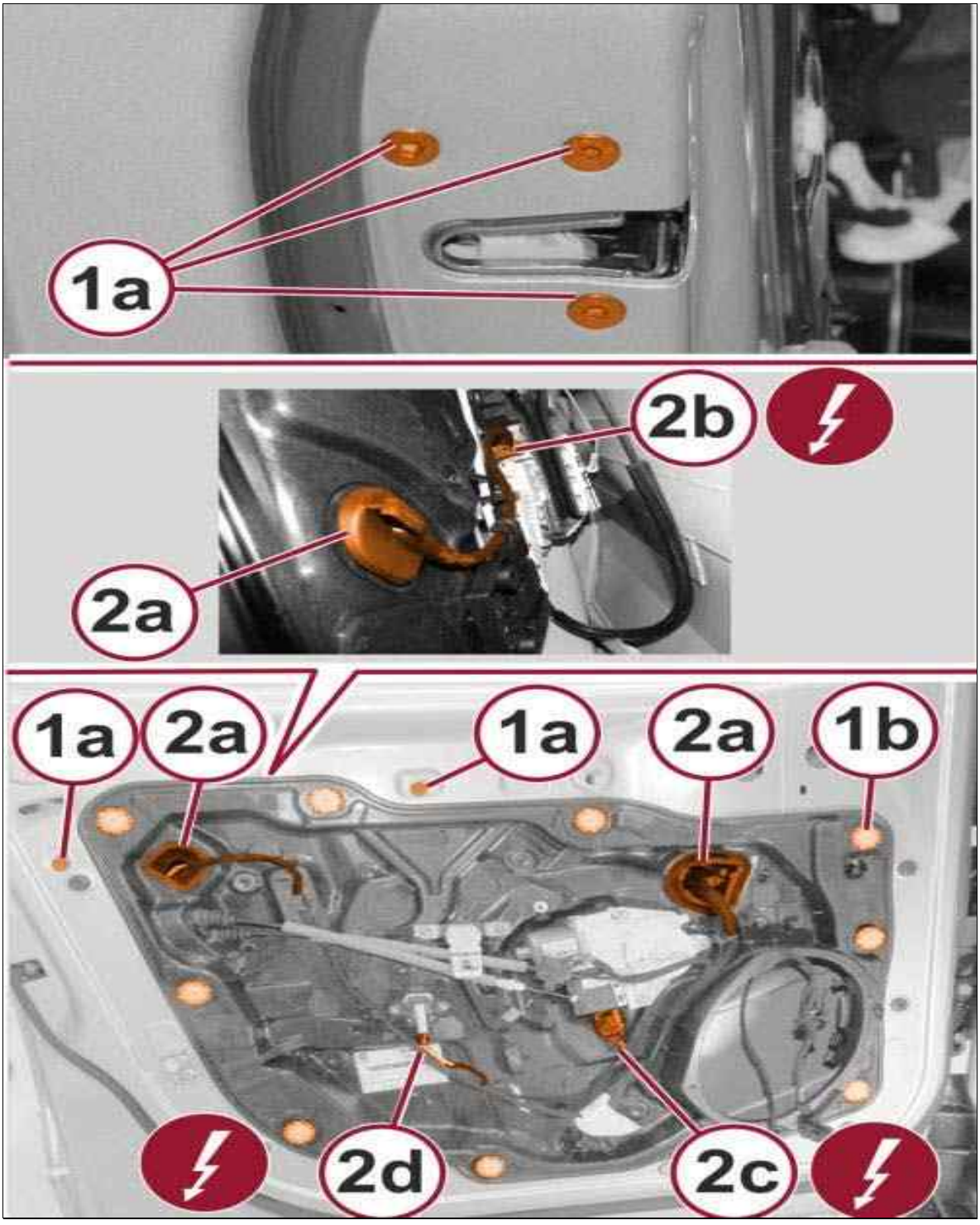
22. Remove the door gasket (1).
23. Loosen the screw (2).

Fig 10: Side Curtain Air Bags Sensor, Screws, Retainers, Grommets & Connectors

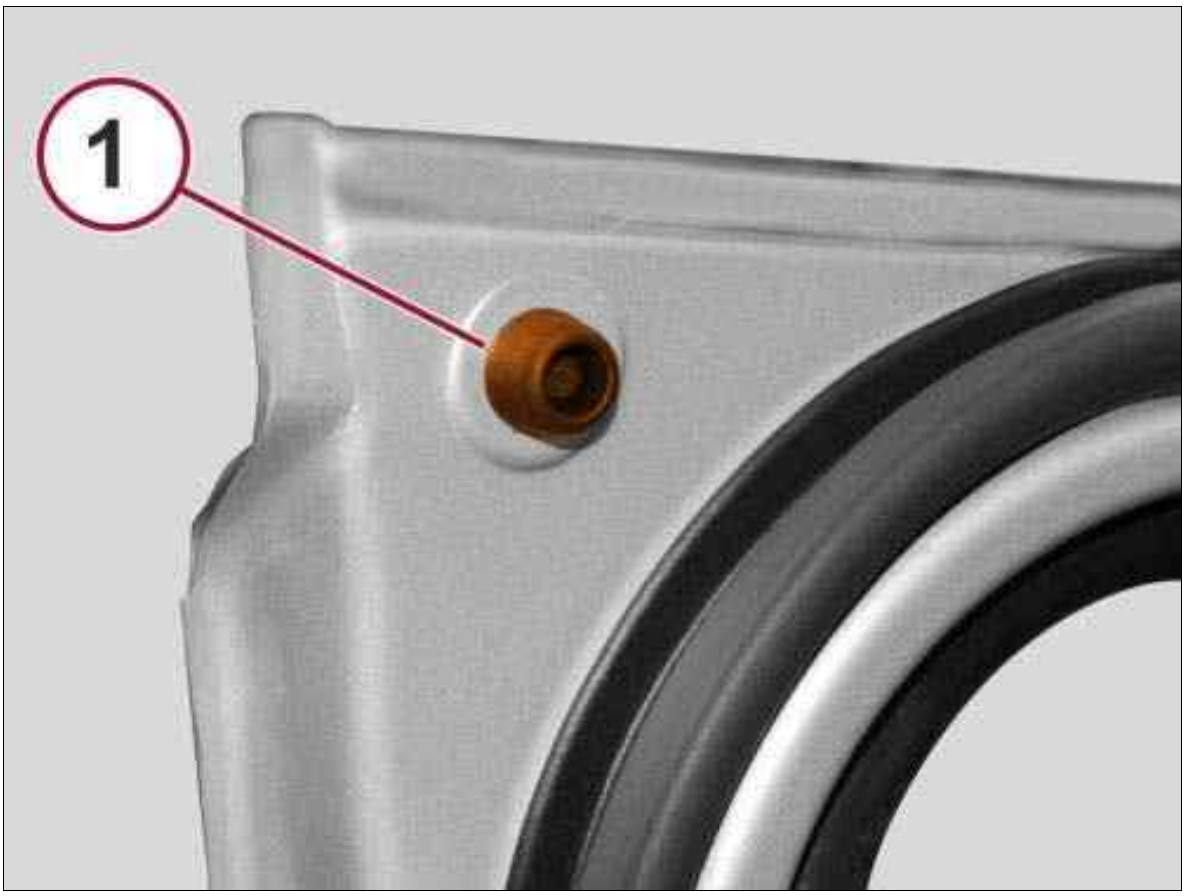


Courtesy of CHRYSLER GROUP, LLC

24. Remove the door latch mounting screws (1a).
25. Release the rotating retainers (1b) securing the carrier plate.
26. Position the carrier plate slightly away from the front door.
27. Release the wiring harness grommets (2a).

28. Disconnect the latch wiring connector (2b), the window motor wiring connector (2c) and the side curtain air bags sensor (2d).
29. Release the wiring harness from the routing retainers.
30. Remove the entire carrier plate including the latch and external handle support.

Fig 11: Rubber Stop Block



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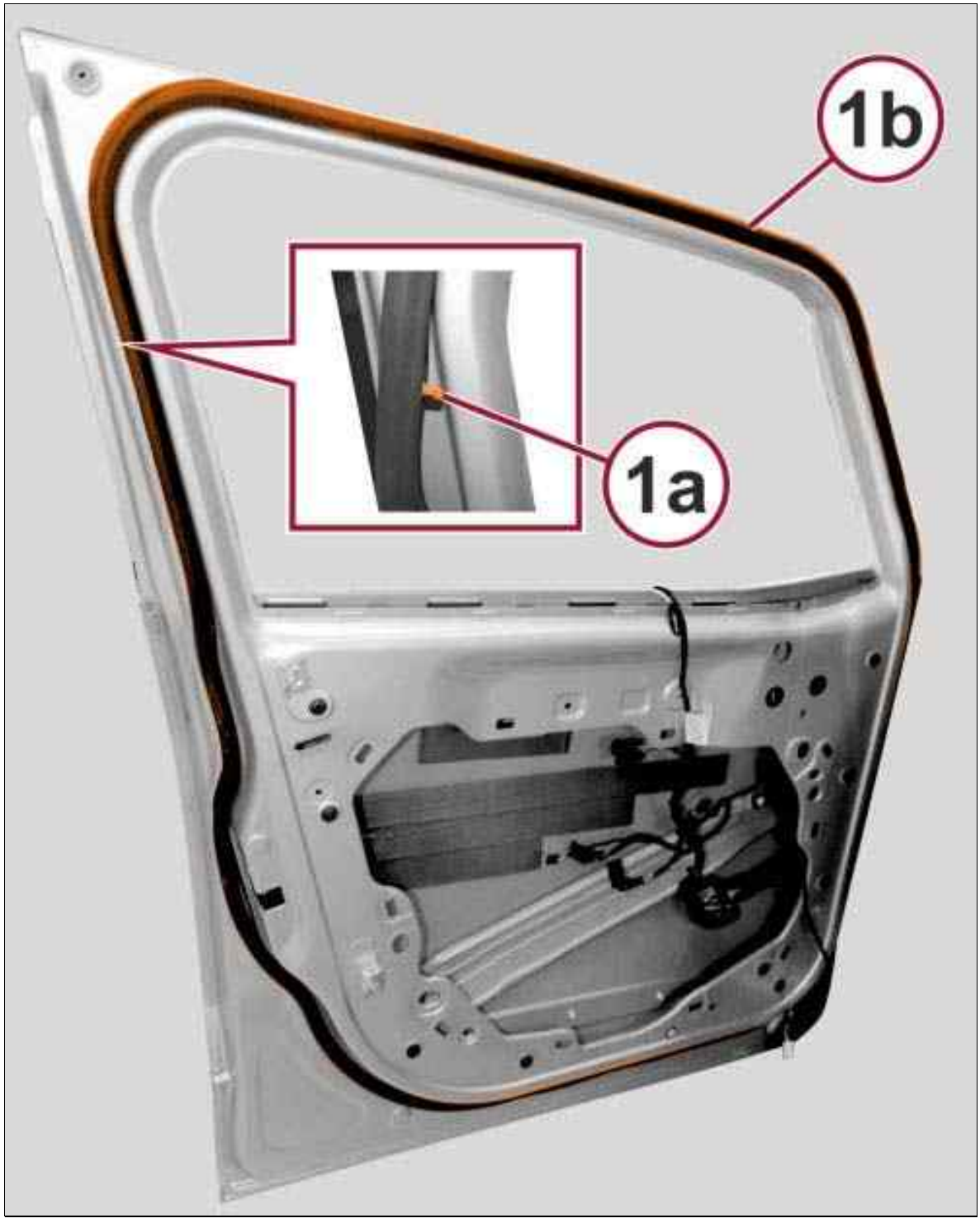
31. Pry off the rubber stop block (1).

Fig 12: Front Door Weatherstrip & Retainers



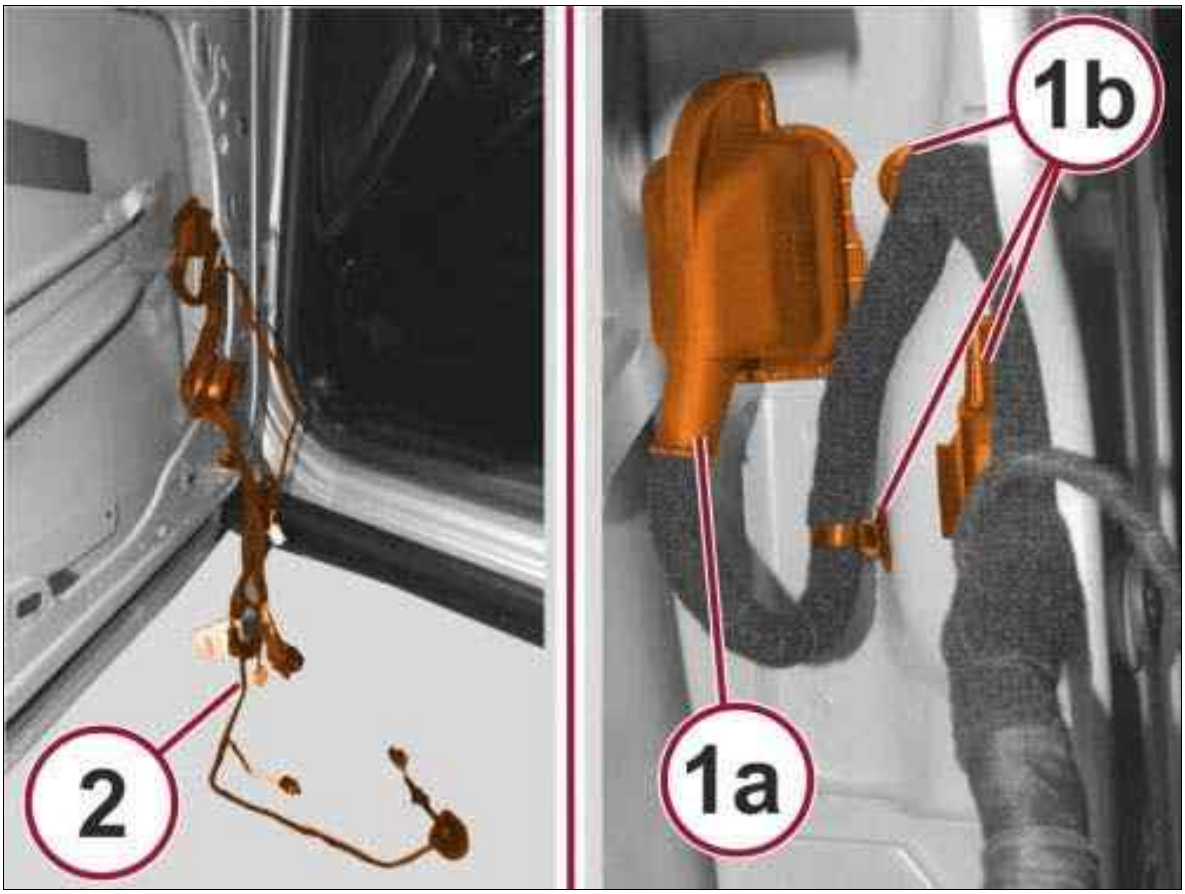
Courtesy of CHRYSLER GROUP, LLC

32. With the use of a trim stick or equivalent, pry out the retainers (1a) and remove the front door weatherstrip (1b).

NOTE:

It is recommended to use masking tape to avoid damaging the weatherstrip.

Fig 13: Front Door Wiring Harness, Connector & Retainers



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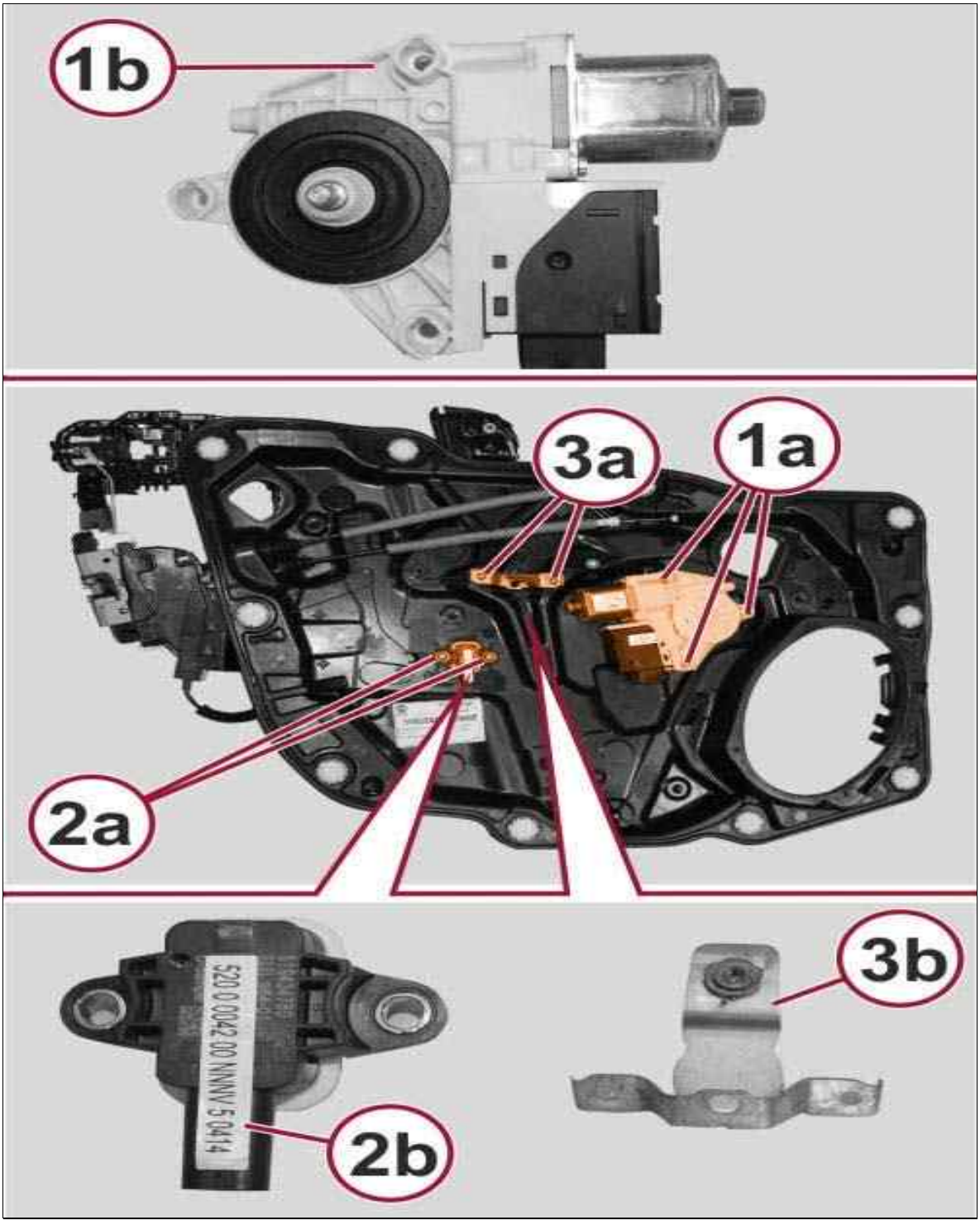
33. Disconnect the wiring connector (1a).
34. Release the wiring retainers (1b).
35. Remove the front door wiring harness (2).

Fig 14: Power Window Motor & Screws

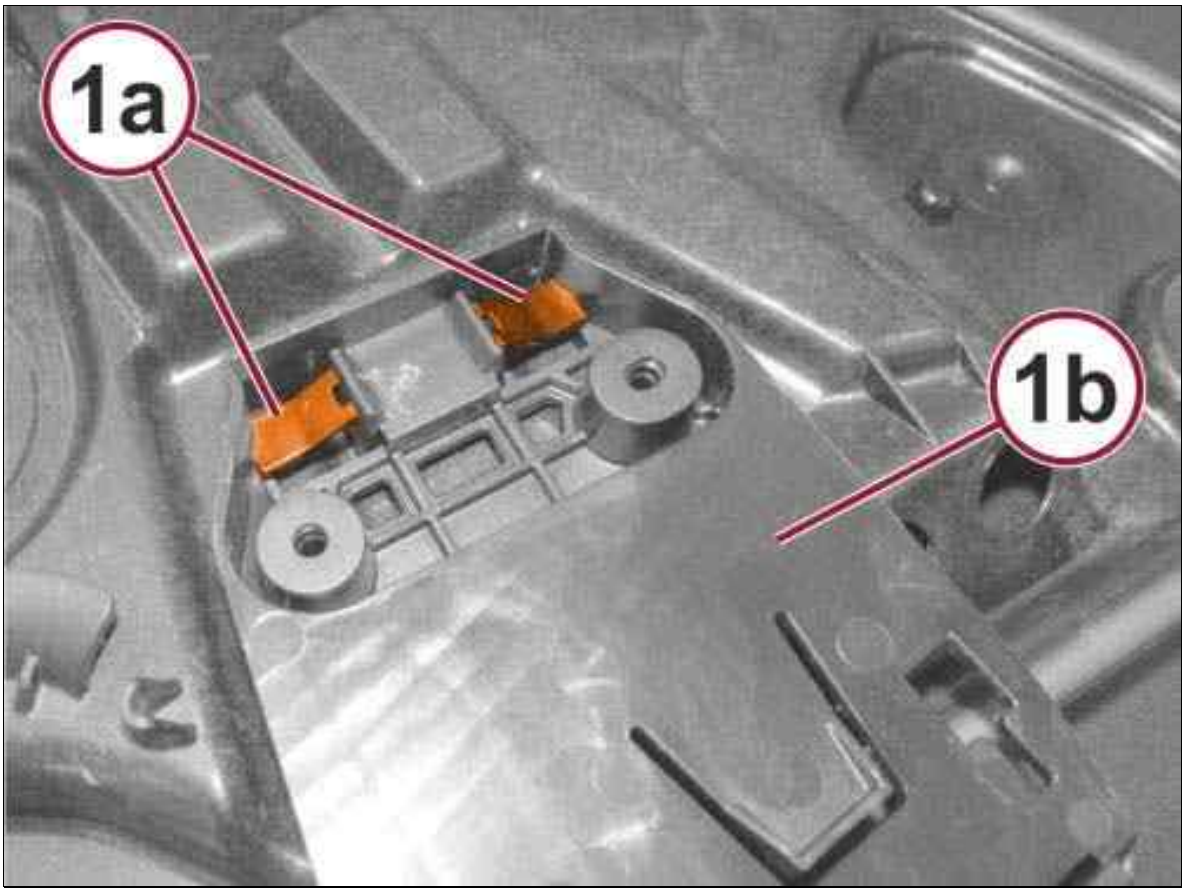


Courtesy of CHRYSLER GROUP, LLC

36. Remove the window motor mounting screws (1a).
37. Remove the window motor (1b) from the carrier plate.
38. Remove the side curtain air bag sensor mounting screws (2a).
39. Remove the side curtain air bag sensor (2b) from the carrier plate.

40. Remove the front door trim grab handle bracket mounting screws (3a).
41. Remove the front door trim grab handle bracket (3b) from the carrier plate.

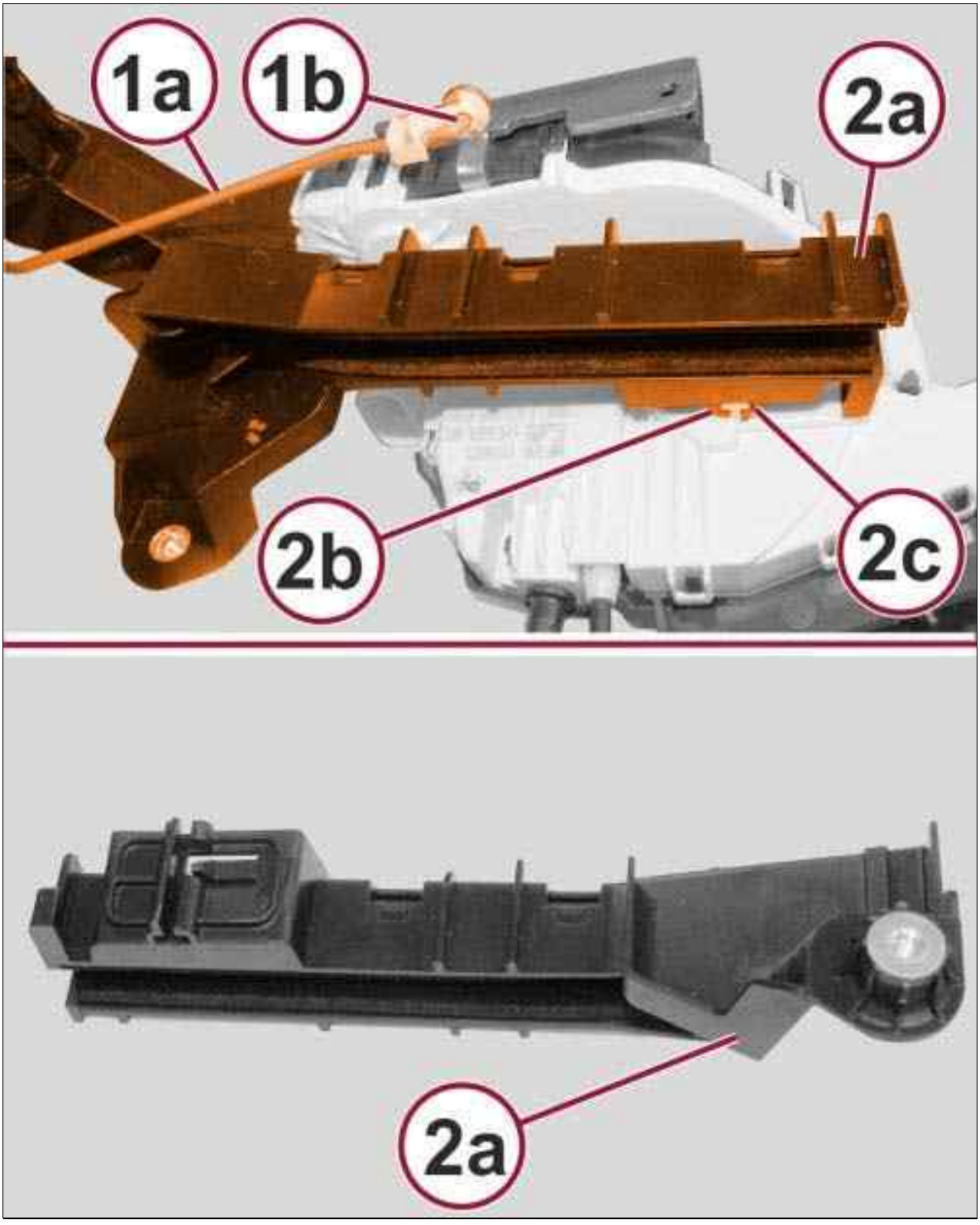
Fig 15: Lock Support & Clips



Courtesy of CHRYSLER GROUP, LLC

42. Disengage the retaining clips (1a) and fold the lock support (1b).

Fig 16: Rear Glass Guide, Bracket, Lock Cover & Clip



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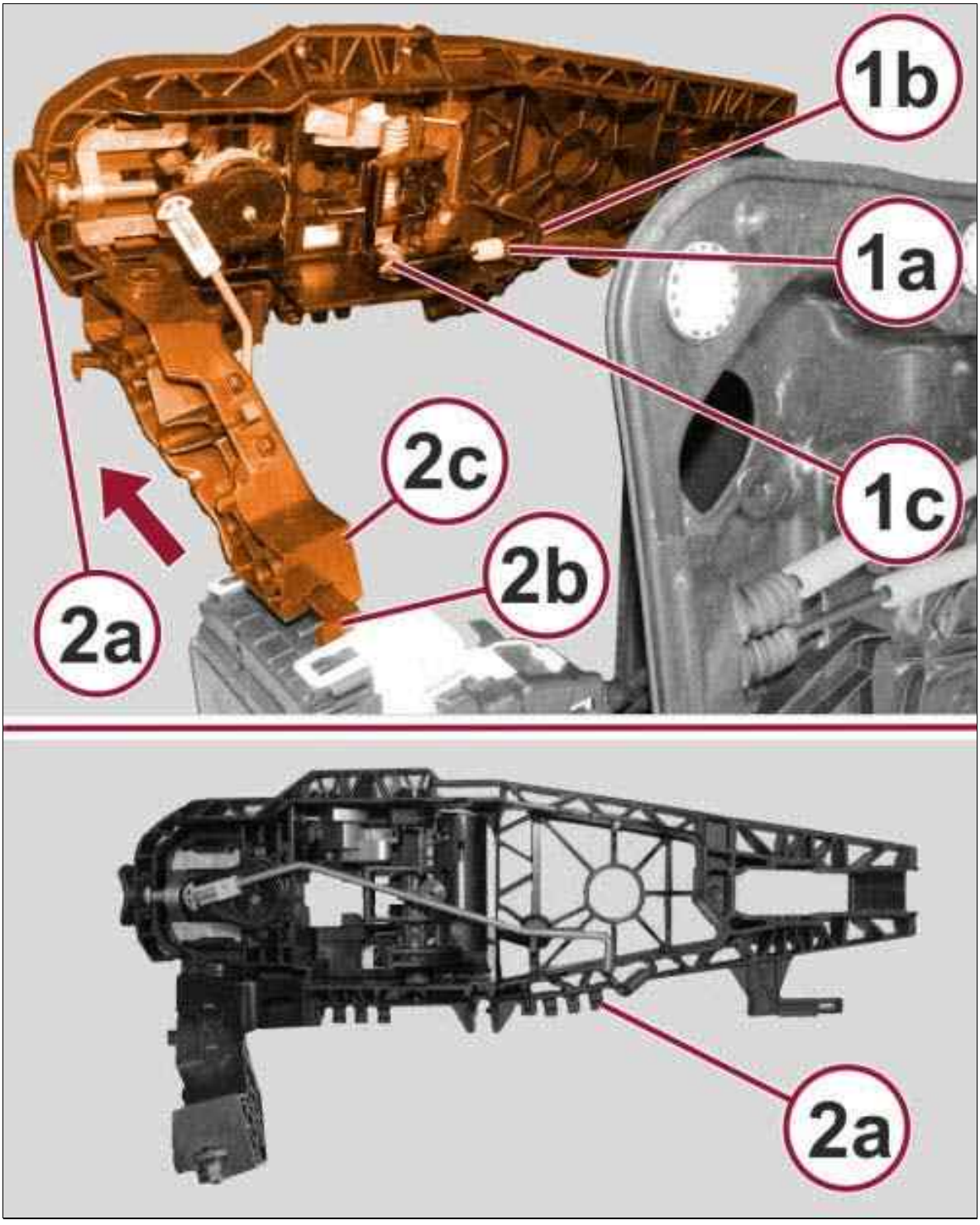
43. Separate the linkage by disengaging the clip (1b).
44. Remove the rear glass guide (2a) from the guide on the lock cover (2b) by pulling in the direction of the arrow, disengaging the bracket (2c).

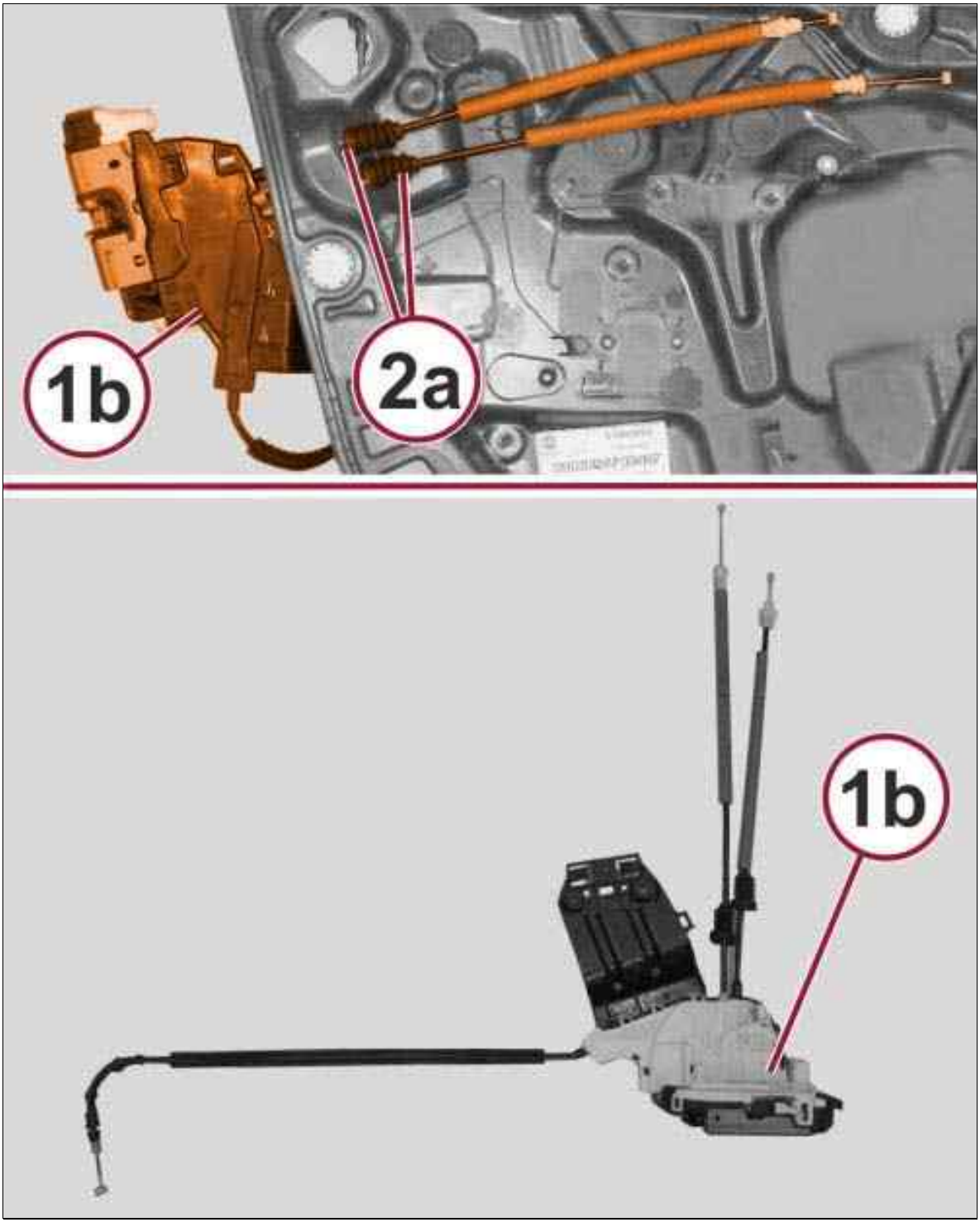
Fig 17: Outside Door Handle Front Support, Guide, Bracket, Retainer, Latch Cable & Outer End



Courtesy of CHRYSLER GROUP, LLC

45. Release the retainer (1a) of the latch cable (1b) and disconnect the outer end (1c).
46. Remove the outside door handle front support (2a) from the guide (2b) by pulling in the direction of the arrow, disengaging the bracket (2c).

Fig 18: Latch & Grommets



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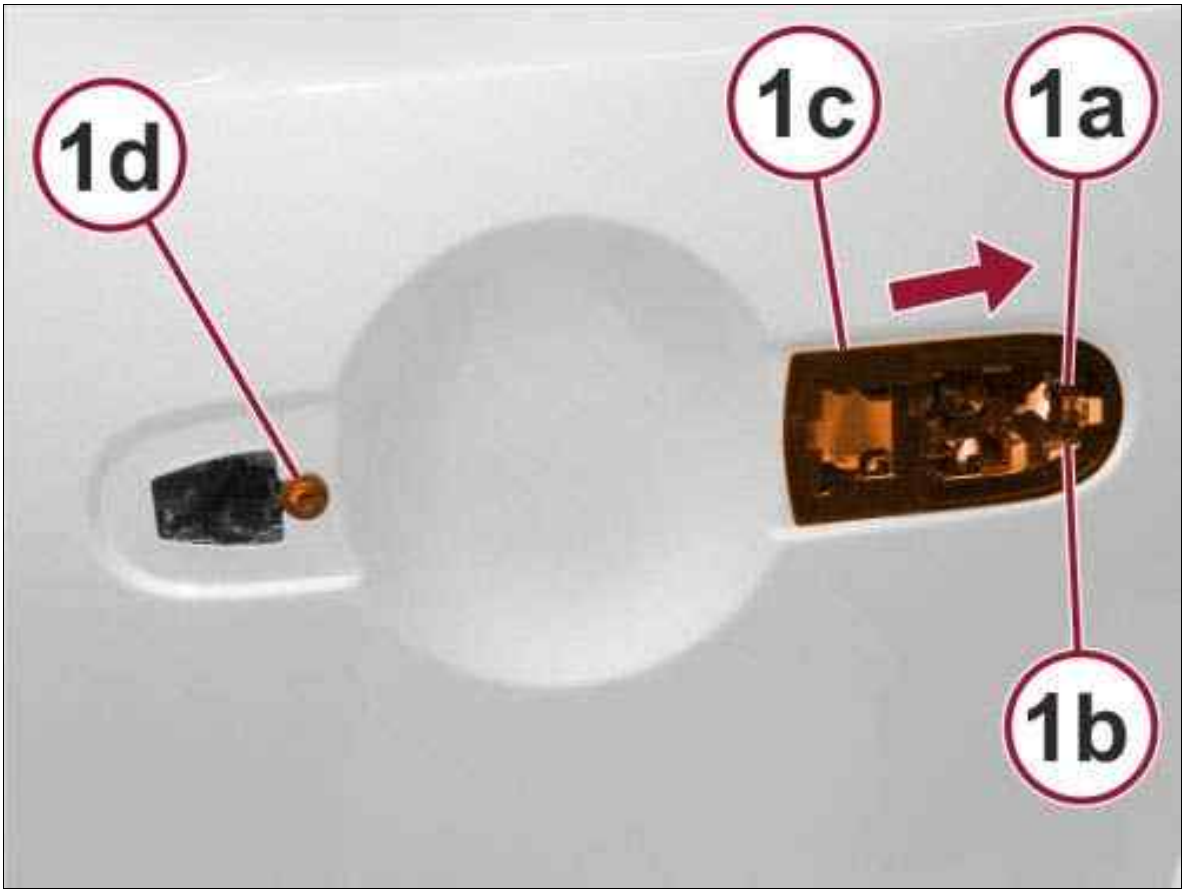
47. Release the cables grommets (2a).
48. Remove the latch (1b) complete with control cables from the carrier plate.

DOOR - FRONT > DOOR > DISASSEMBLY AND ASSEMBLY > DISASSEMBLY AND

ASSEMBLY > ASSEMBLY

1. Position the latch complete with the control cables and insert the cable grommets onto the carrier plate.
2. Engage the clips and attach insert the latch support.
3. Insert the outside door handle bracket onto the front guide.
4. Connect the end of the latch cable and secure the clip.
5. Position the power window motor, insert the screws and tighten securely.
6. Position side curtain air bag sensor, insert the screws and tighten securely.
7. Position the door trim panel grab handle bracket, insert the screws and tighten securely.
8. Position the front door wiring harness, engage the routing retainers and connect the wiring connector.
9. Position the door latch, insert the screws and tighten securely.
10. Insert the rubber stop block.
11. Position the front door weatherstrip and insert the retainers fully.
12. Connect the door latch wiring connector.
13. Connect the window motor wiring connector.
14. Connect the side air bag sensor wiring connector.
15. Position and insert the wiring harness grommets.

Fig 1: Outer Handle Support Bracket, Handle Hole, Gasket & Screw



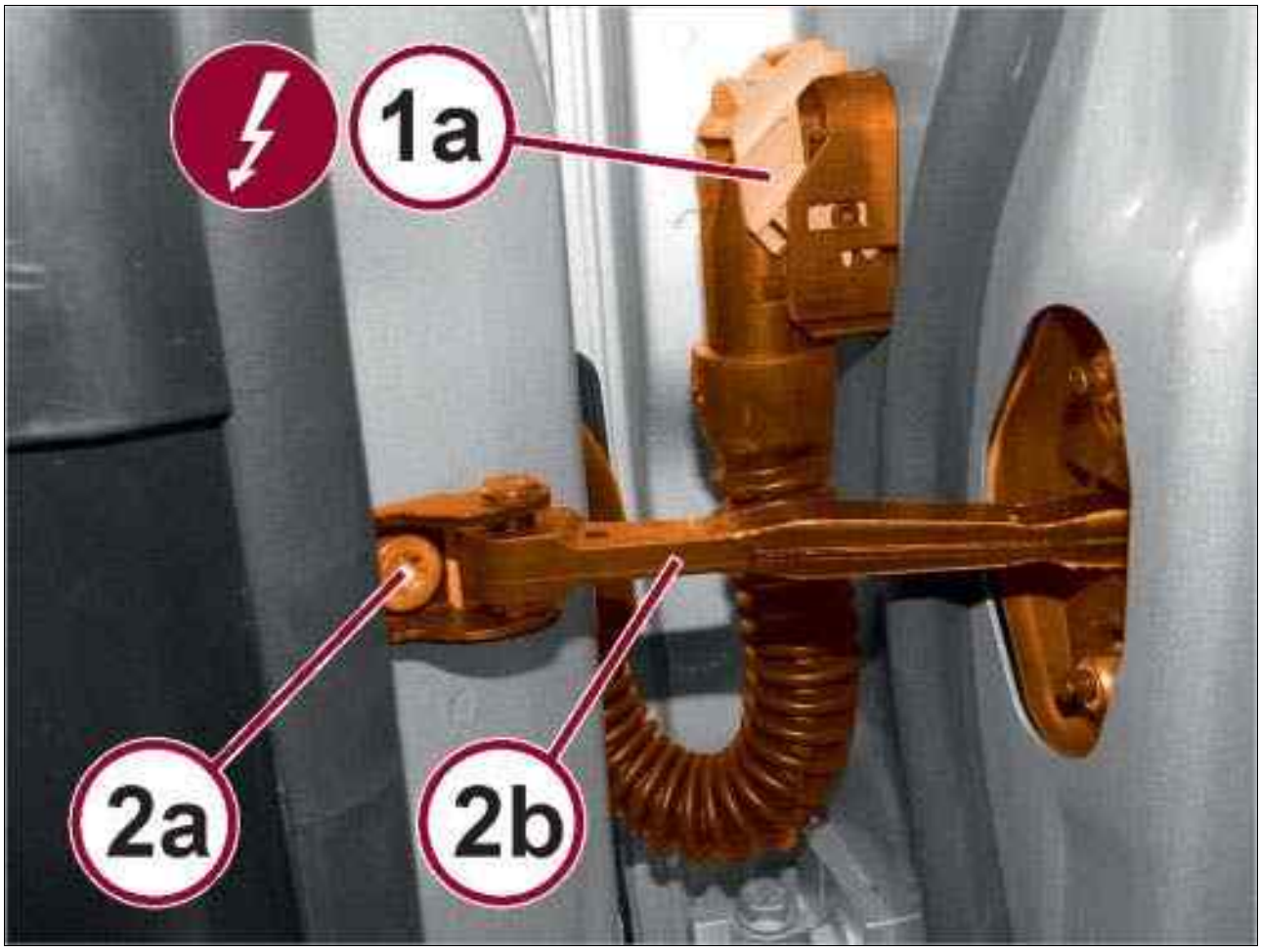
Courtesy of CHRYSLER GROUP, LLC

16. Position the outer handle support bracket (1a) inside the door.
17. Push in the direction of the arrow, connecting it to the handle hole (1b) on the door.
18. Install the gasket (1c).
19. Tighten the screw (1d) securely.
20. Position the carrier plate and secure by tightening the rotating retainers.
21. Install the exterior handle, engaging the hooks to the handle support.
22. Insert the lock block fully and tighten the screw securely.
23. Instal the protective cap.
24. Position the front door applique within the door glass channel. Insert the screws and tighten securely.
25. Position the door check, including the seal, inserting it through the speaker opening.
26. Install the door check nuts and tighten the nuts on the door securely.
27. Position the lower molding on the door and insert the retainers fully.
28. Position the front speaker and connect the speaker wiring connector.

29. Working from inside the front door trim panel, install the speaker trim bezel by aligning and inserting the retainers fully.
30. Working from inside of the door trim panel, position the interior handle and install the screws securely.
31. Install the front door upper and lower half hinges. Refer to HINGE, DOOR, REMOVAL AND INSTALLATION .
32. Install the front door. Refer to DOOR, REMOVAL AND INSTALLATION .
33. Install the front door glass. Refer to GLASS, DOOR, REMOVAL AND INSTALLATION .
34. Install the outside rearview mirror. Refer to MIRROR, OUTSIDE REARVIEW, REMOVAL AND INSTALLATION .
35. Connect the battery negative cable.

DOOR - FRONT > DOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Door Check Arm, Screw & Connector



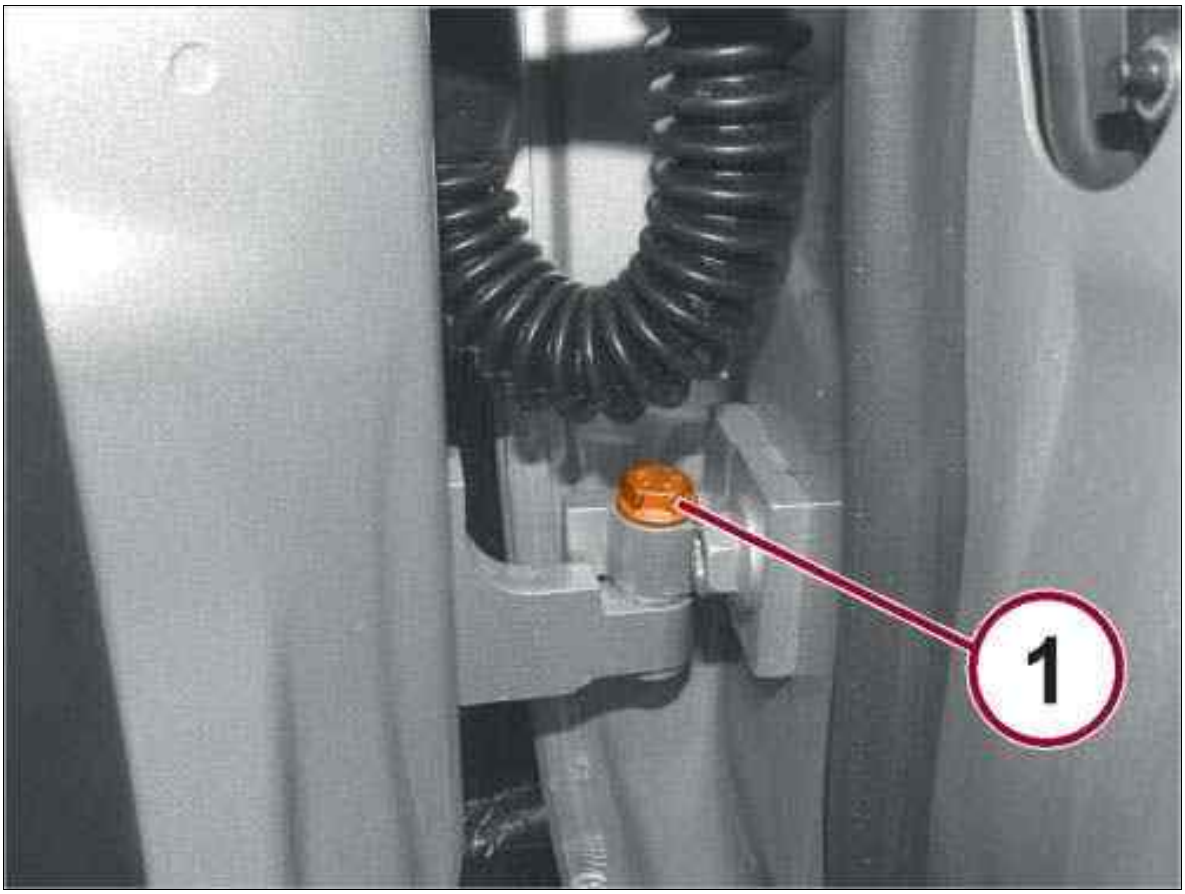
Courtesy of CHRYSLER GROUP, LLC

NOTE:

To protect the vehicle finish, apply several layers of masking tape on the front edges of the door and the front fender prior to loosening the hinges.

1. Disconnect and isolate the negative battery cable.
2. Disconnect the electrical connector (1a).
3. Remove the screw (2a) of the door check arm (2b) to the A-pillar and close the door to retract the check itself.

Fig 2: Lower Hinge Pivot Bolt



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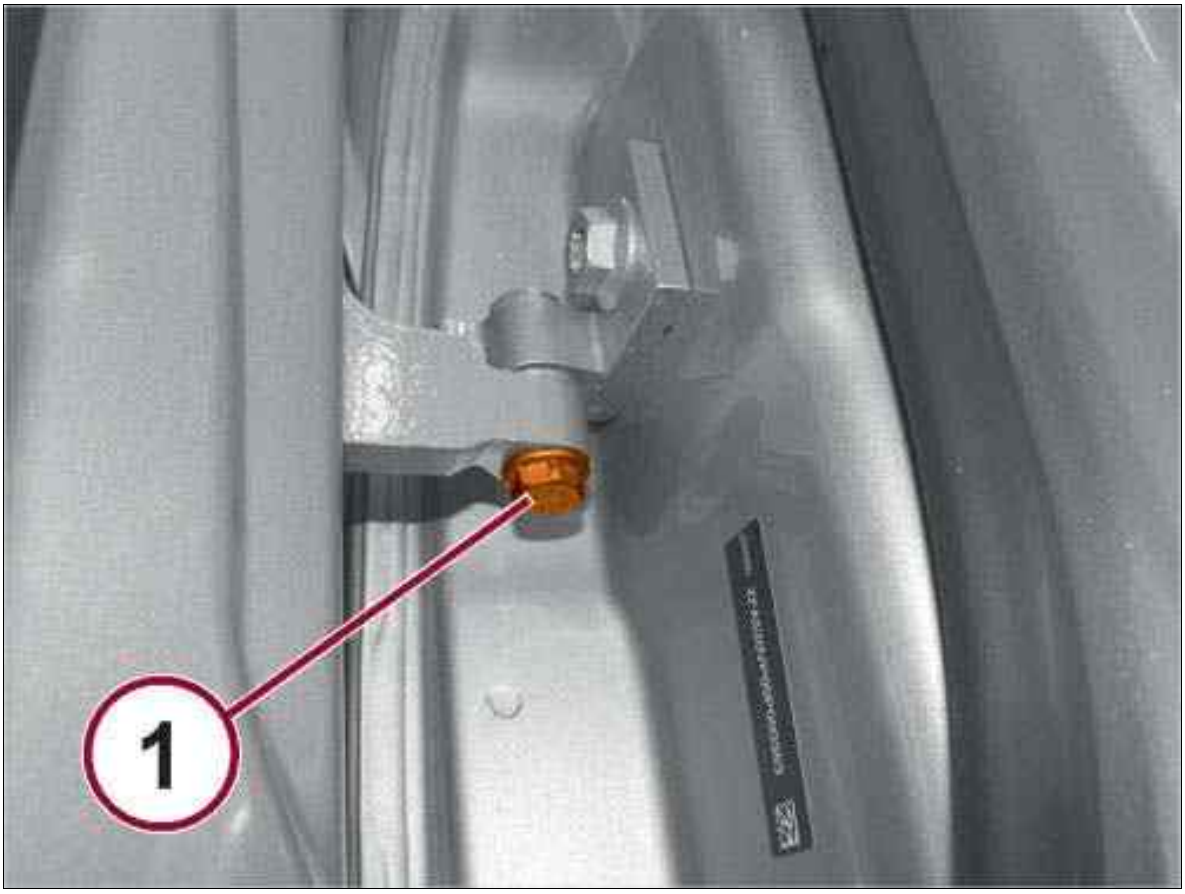
4. Remove the lower hinge pivot bolt (1).

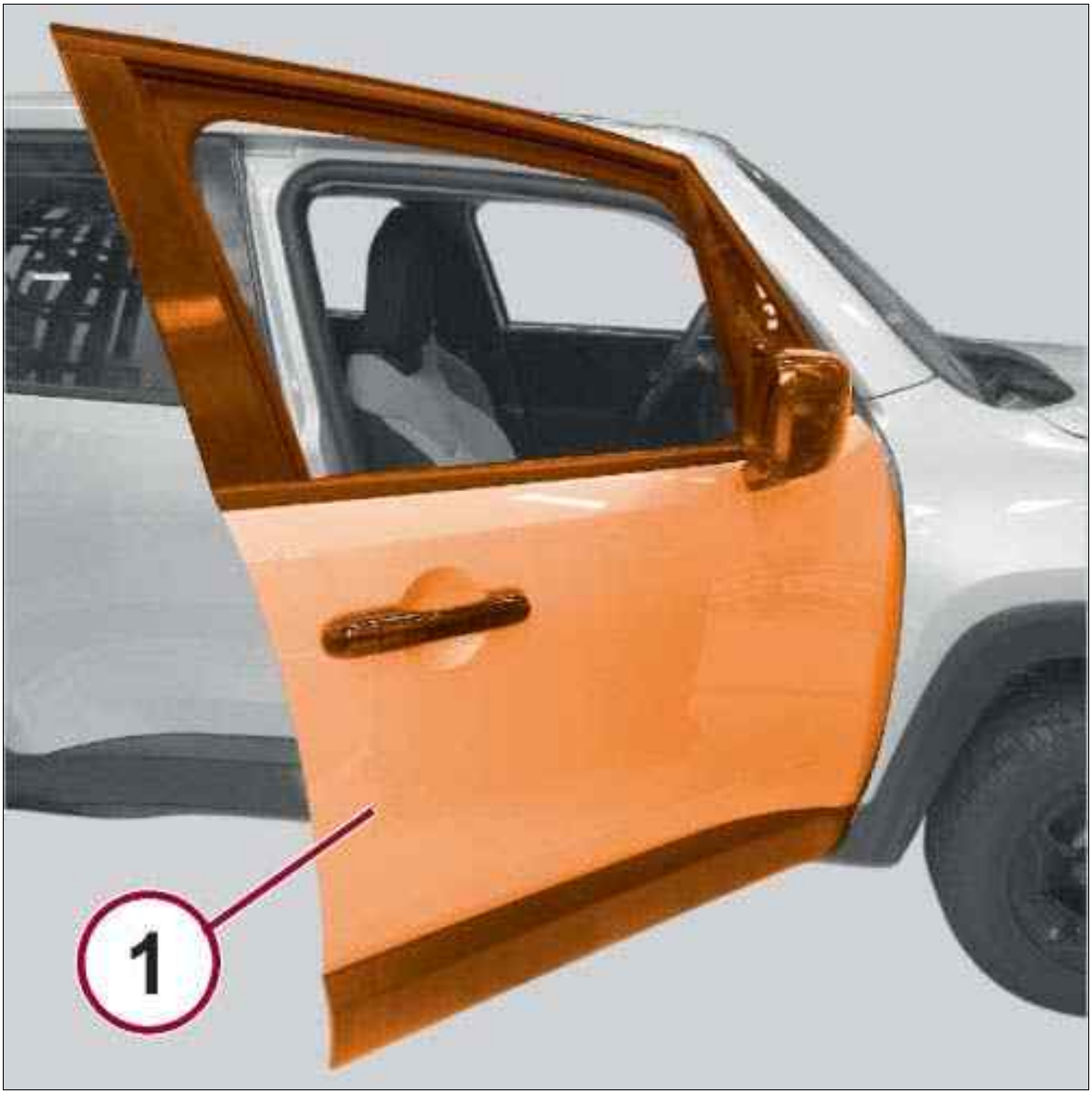
Fig 3: Upper Hinge Bolt



Courtesy of CHRYSLER GROUP, LLC

5. Remove the upper hinge bolt (1).

Fig 4: Front Door



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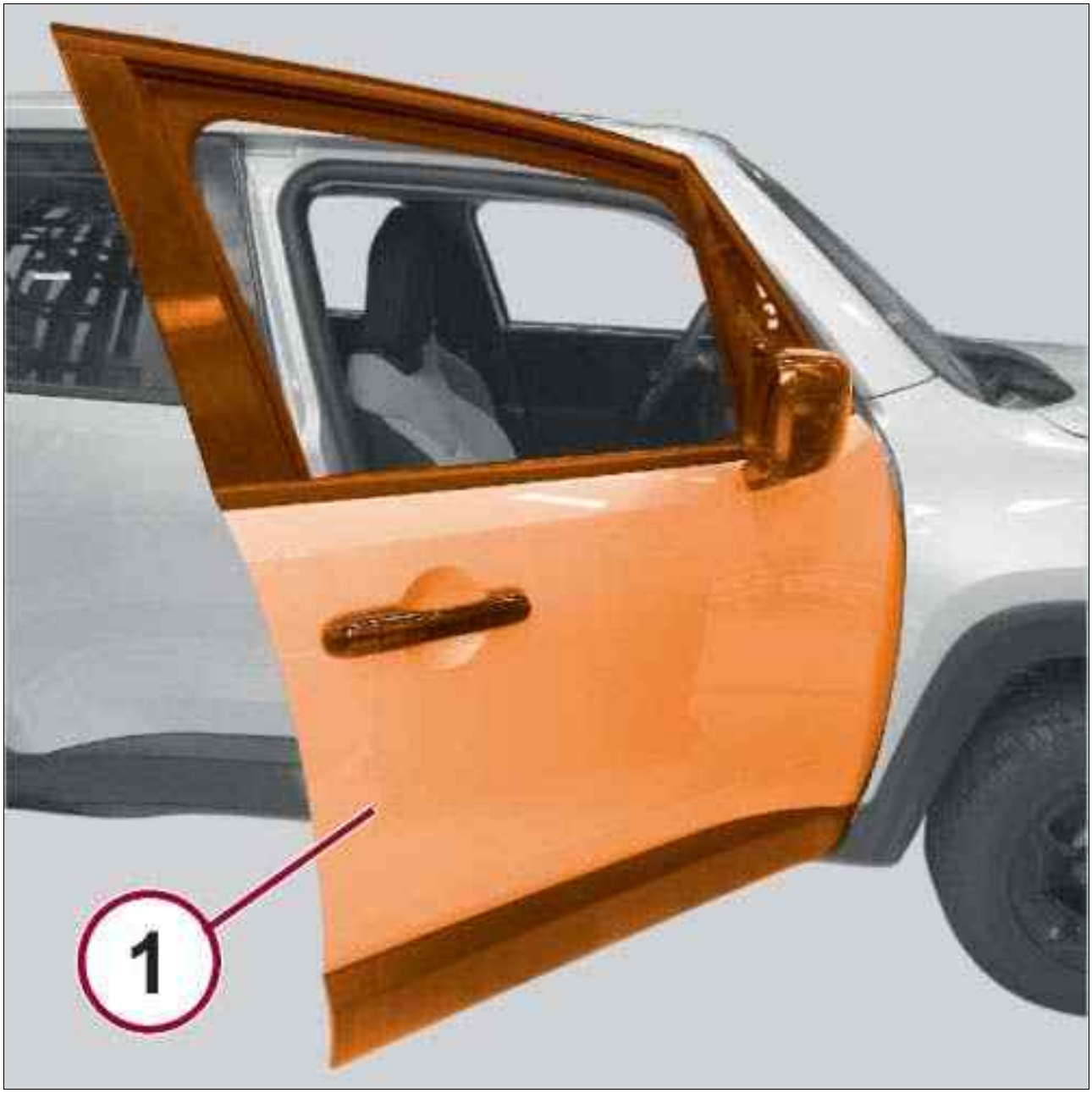
6. Lift and remove the door (1).

DOOR - FRONT > DOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Front Door



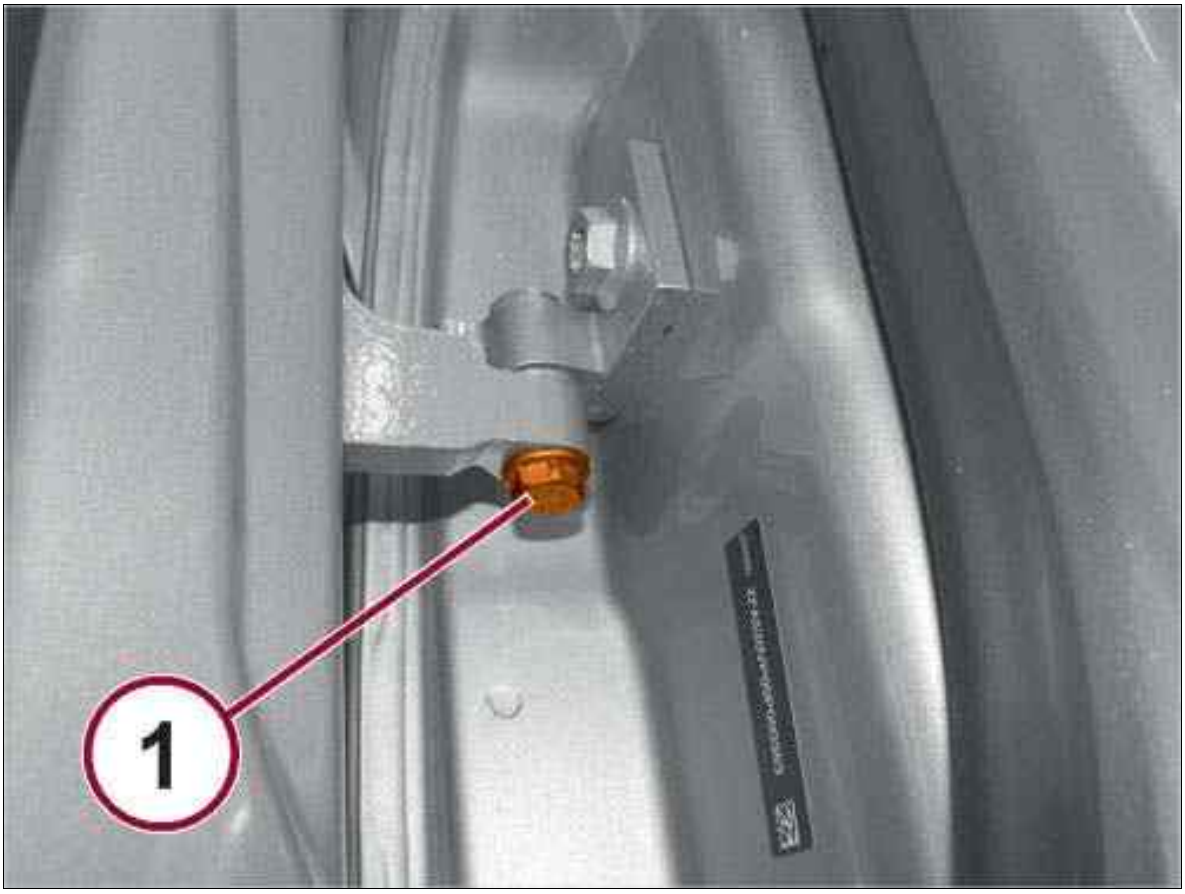
Courtesy of CHRYSLER GROUP, LLC

NOTE:

A suitable body sealant should be used when removing or moving the hinges.

1. Position the door (1) on the hinges.

Fig 2: Upper Hinge Pivot Bolt



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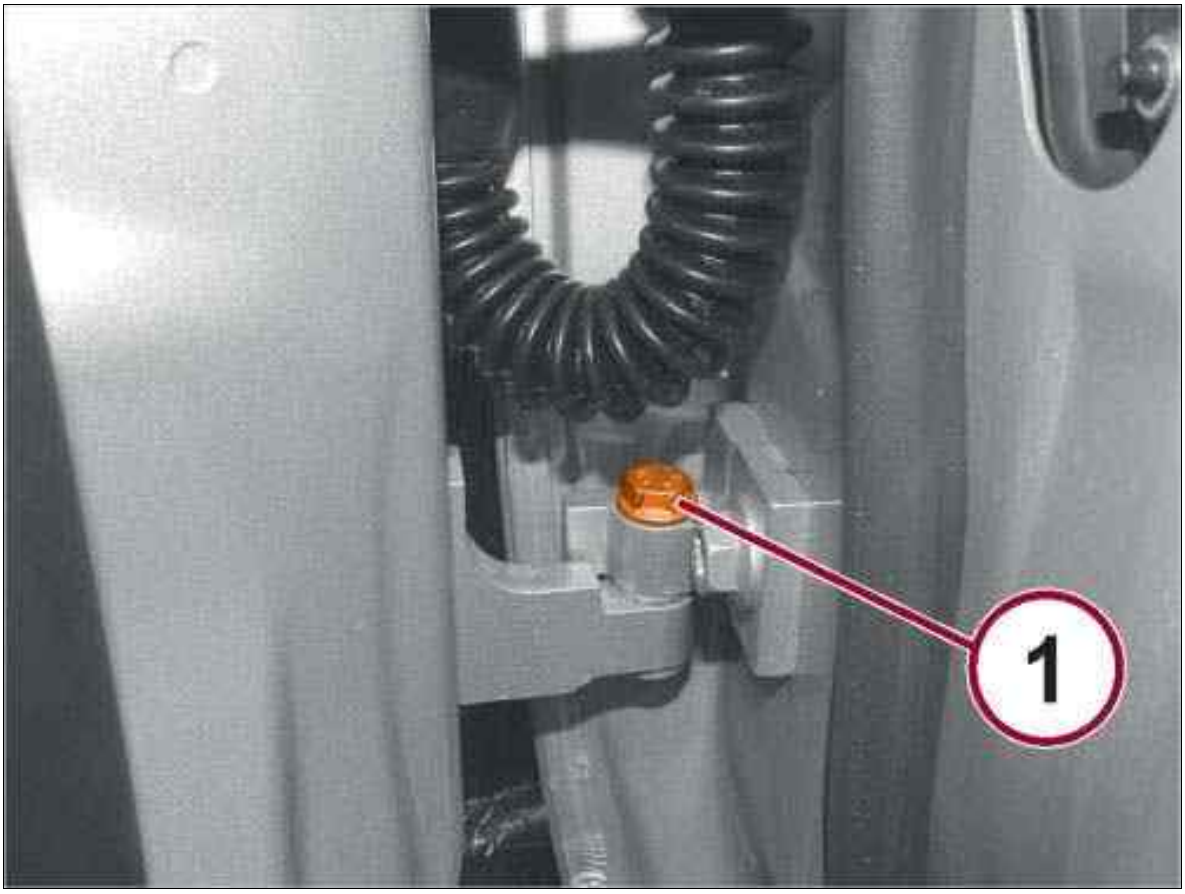
2. Install the upper hinge pivot bolt (1) and hand tighten only.

Fig 3: Lower Hinge Pivot Bolt



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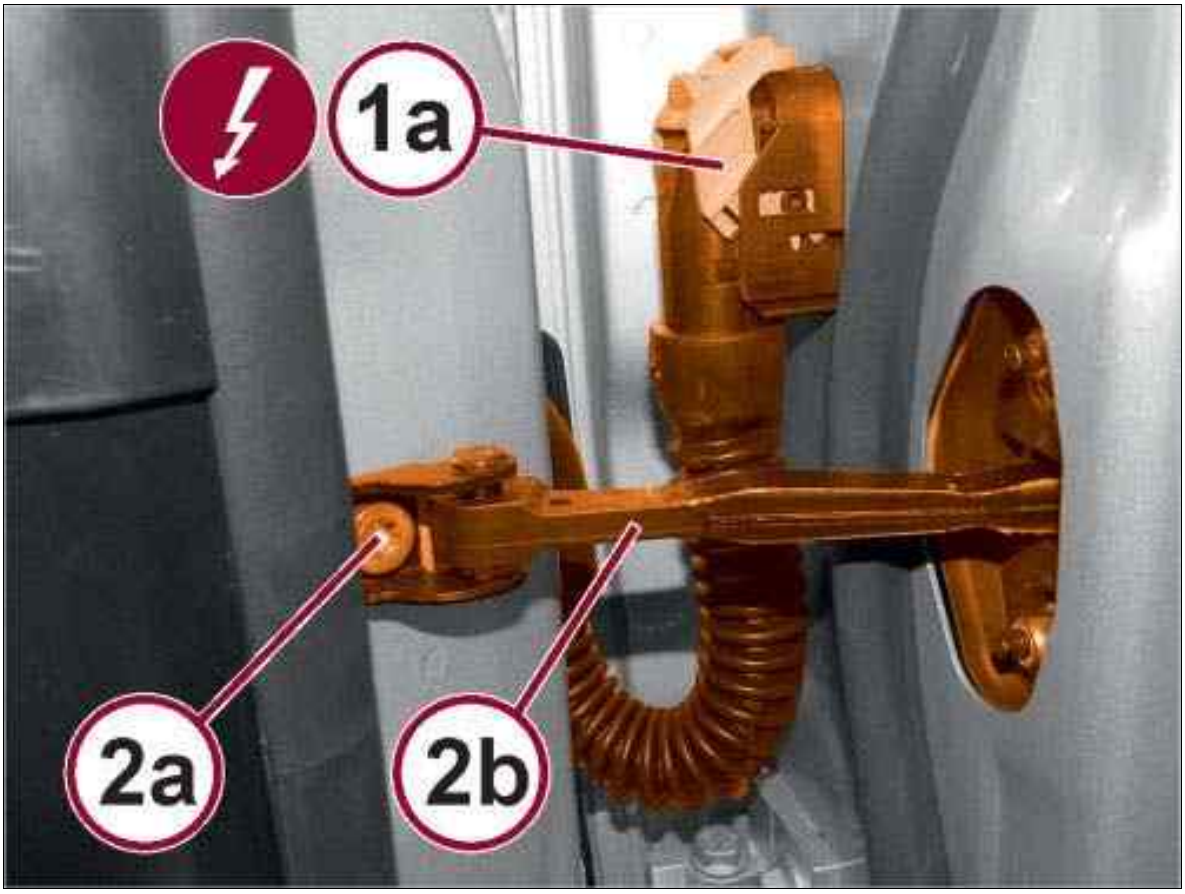
3. Install the lower hinge pivot bolt (1) and hand tighten only.

Fig 4: Door Check Arm, Screw & Connector

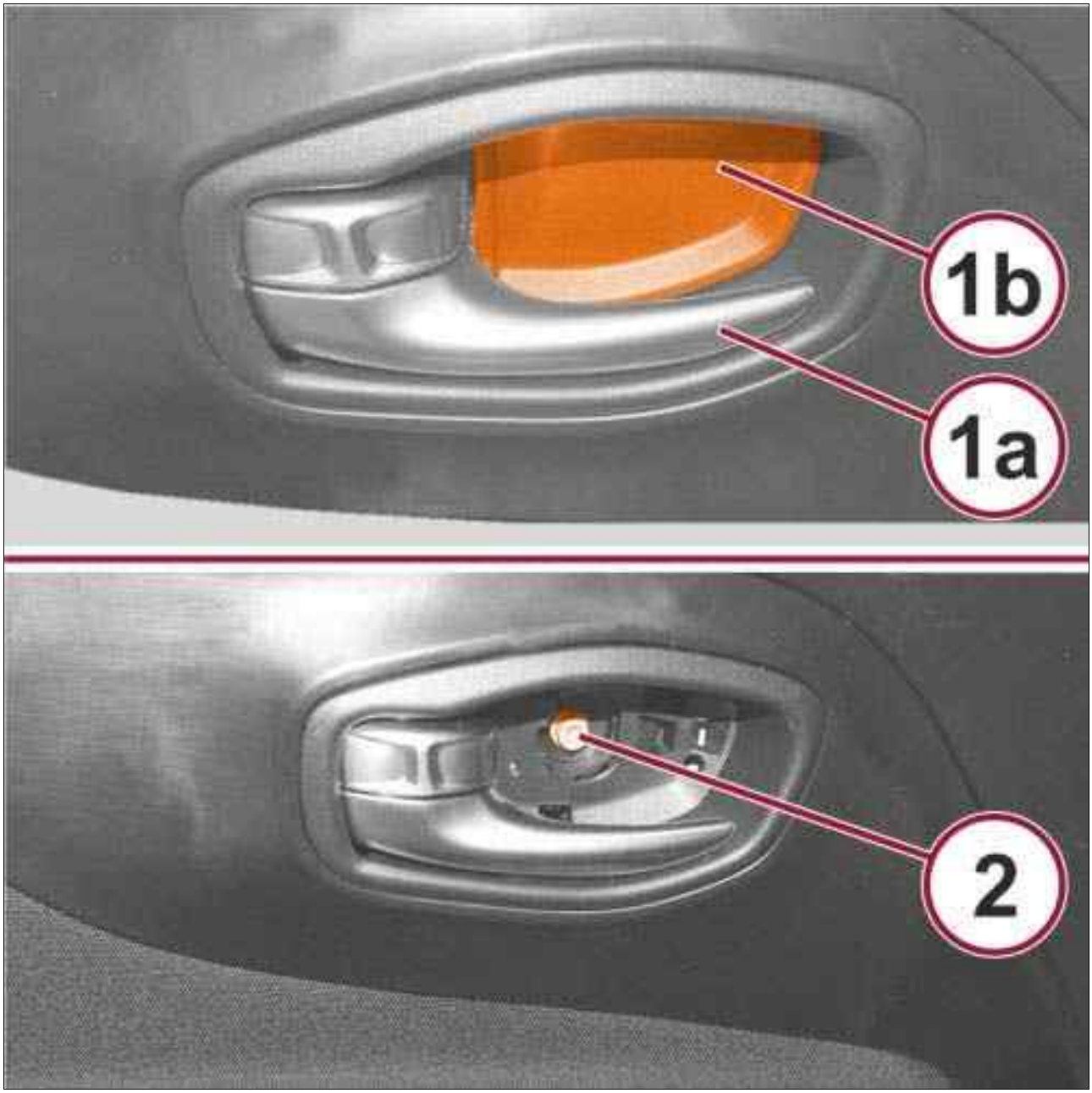


Courtesy of CHRYSLER GROUP, LLC

4. Connect the electrical connector (1a).
5. Position the check arm (2b) back and install the screw (2a).
6. Connect the negative battery cable.
7. Check door electrical systems to make sure they are functioning properly.
8. Adjust the door striker as necessary. Refer to STRIKER, DOOR LATCH, ADJUSTMENTS .
9. Tighten the upper and lower hinge pivot bolts to the proper specification. Refer to SPECIFICATIONS .

DOOR - FRONT > GLASS, DOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

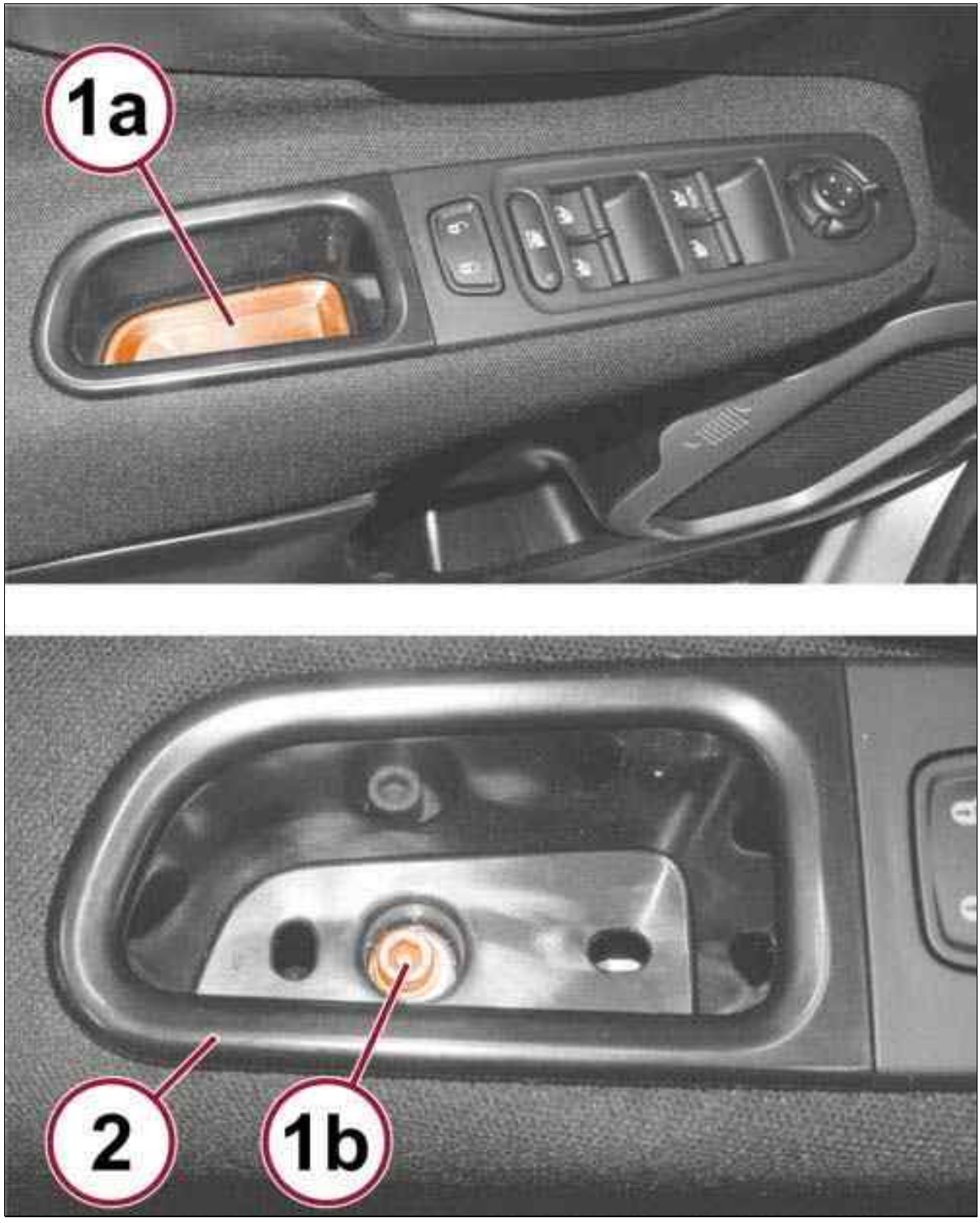
Fig 1: Inside Handle, Trim Cover & Screw



Courtesy of CHRYSLER GROUP, LLC

1. Pull the inside handle (1a) of the front side door and using trim stick (special tool #C-4755, Trim Stick) or equivalent, remove the trim cover (1b).
2. Pull the inside handle and remove the screw (2).

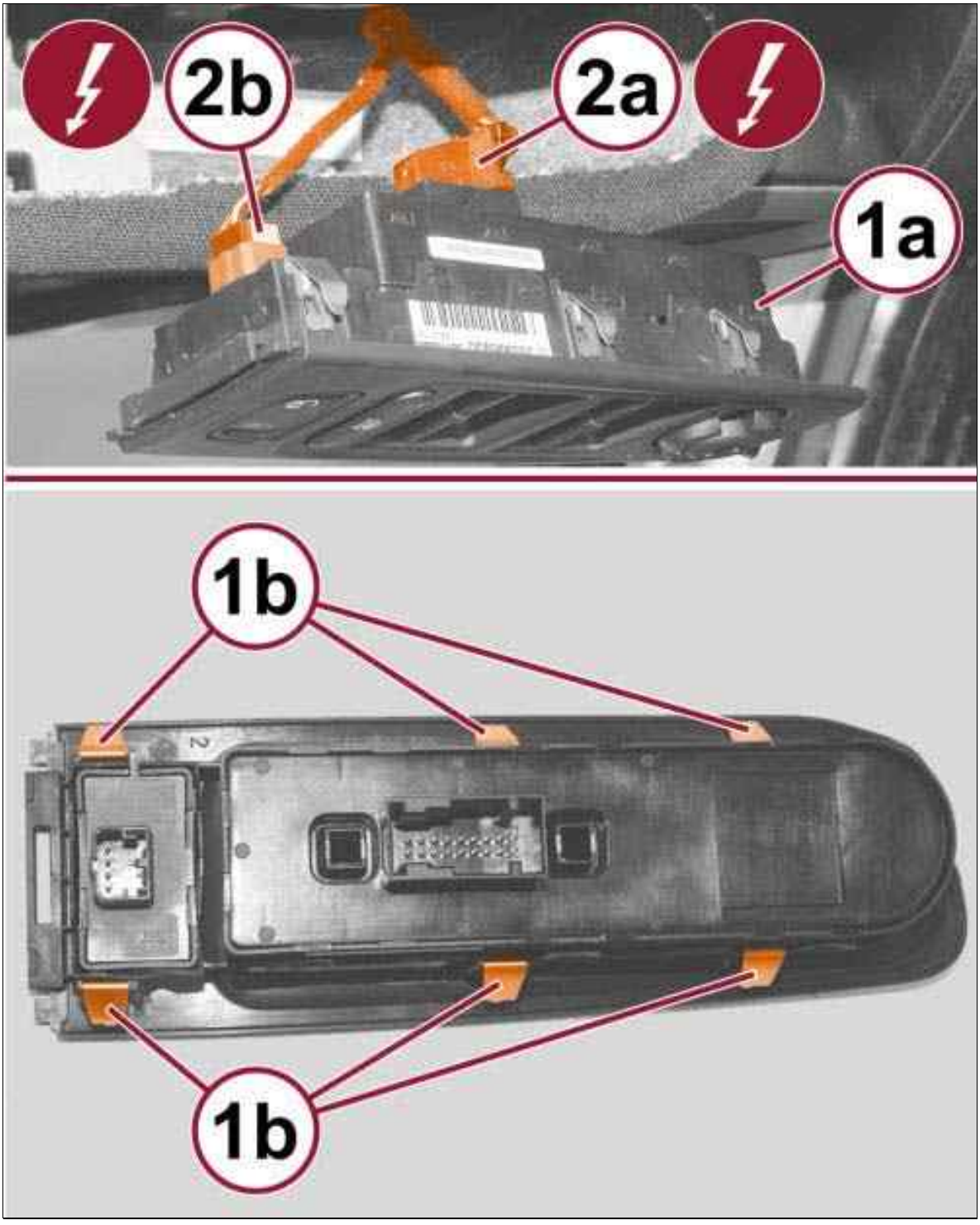
Fig 2: Pad & Screw



Courtesy of CHRYSLER GROUP, LLC

3. Using a trim stick or equivalent, remove the pull cup trim (1a) and remove the screw (1b).
4. Remove the pull cup (2).

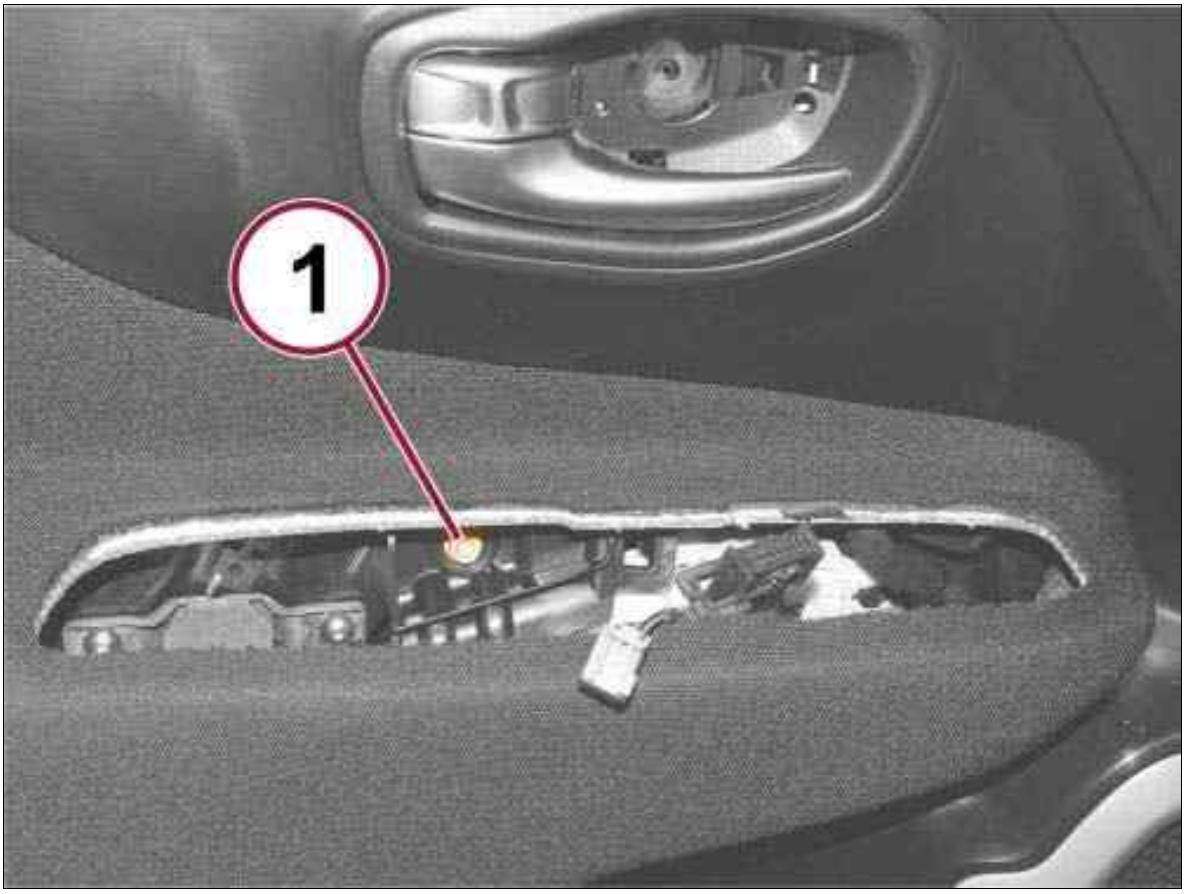
Fig 3: Switch Assembly, Clips & Connectors



Courtesy of CHRYSLER GROUP, LLC

5. Using a trim stick or equivalent, release the retaining clips (1b) and remove the switch pod (1a).
6. Disconnect the electrical connectors (2a, 2b).

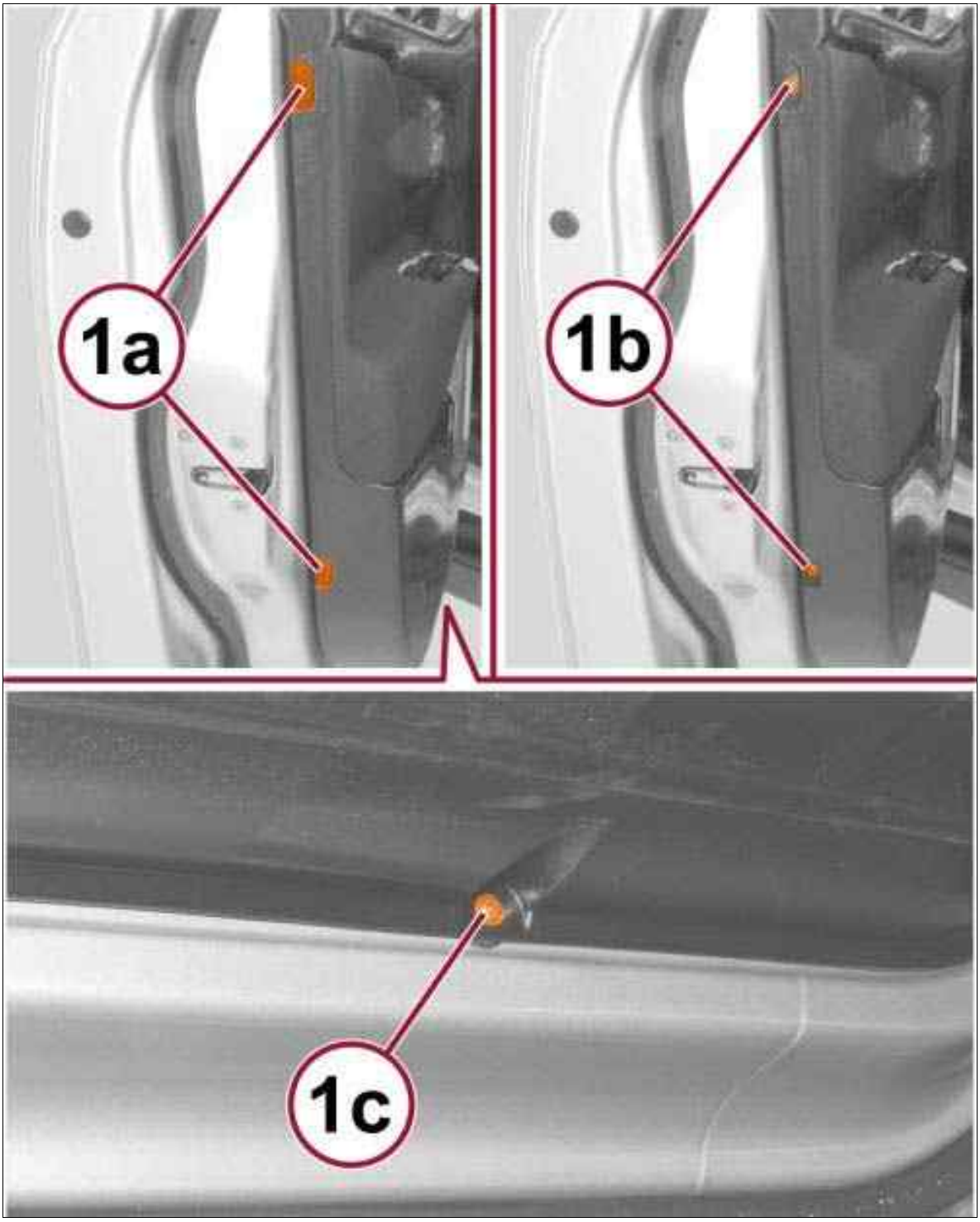
Fig 4: Door Trim Panel Screw



Courtesy of CHRYSLER GROUP, LLC

7. Remove the screw (1) on the inside of the front armrest on the door trim panel.

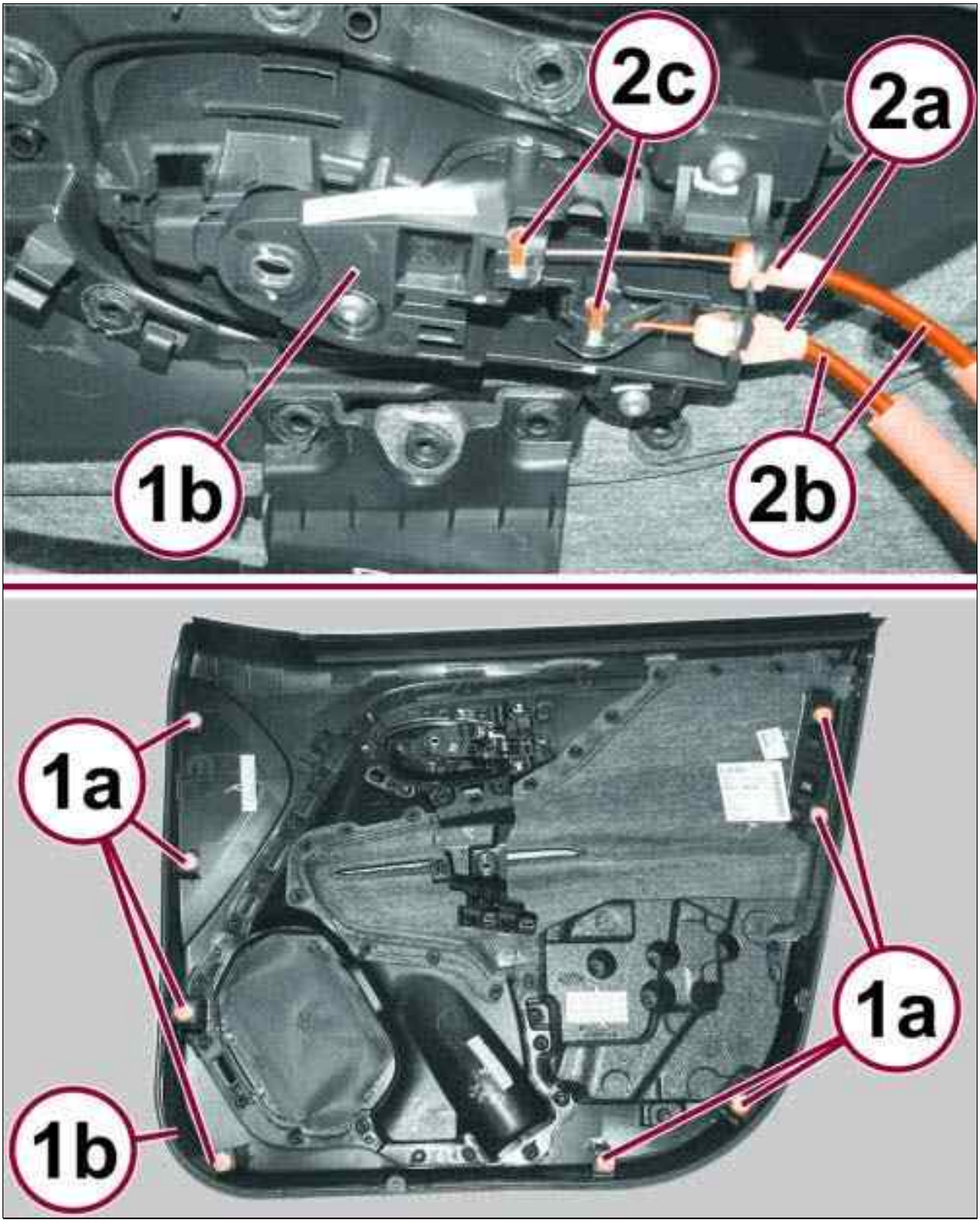
Fig 5: Trim Panel Screws & Covers



Courtesy of CHRYSLER GROUP, LLC

8. Pry off the covers (1a), remove the screws attaching the trim panel (1b) and the screw at the bottom of the panel (1c).

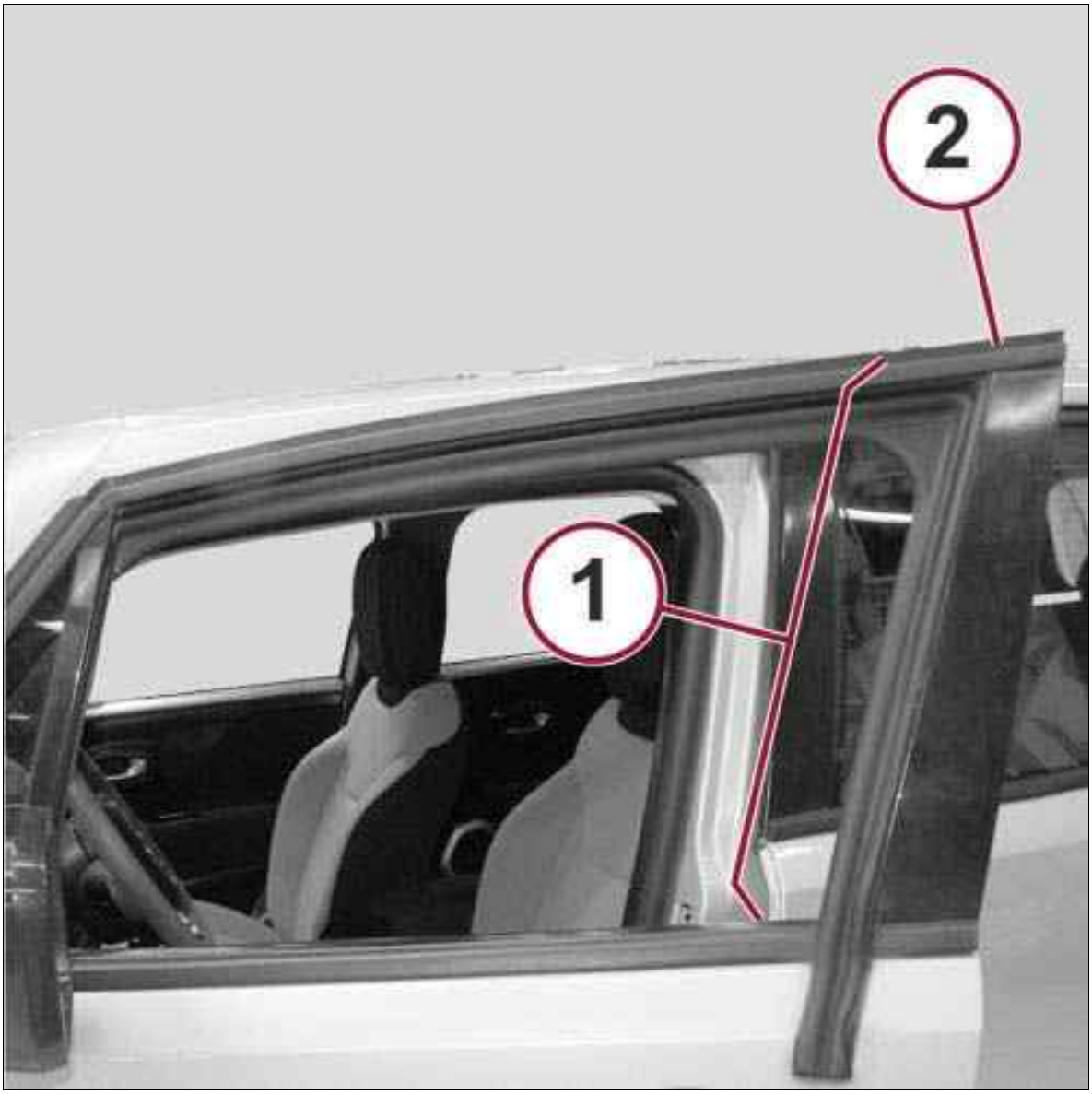
Fig 6: Inner Door Panel, Cables & Retainers



Courtesy of CHRYSLER GROUP, LLC

9. Using a trim stick or equivalent, release the push pin retainers (1a) and separate the door trim panel.
10. Release the retainers (2a) of the cables (2b) and release the ends (2c) and remove the inner door panel (1b).

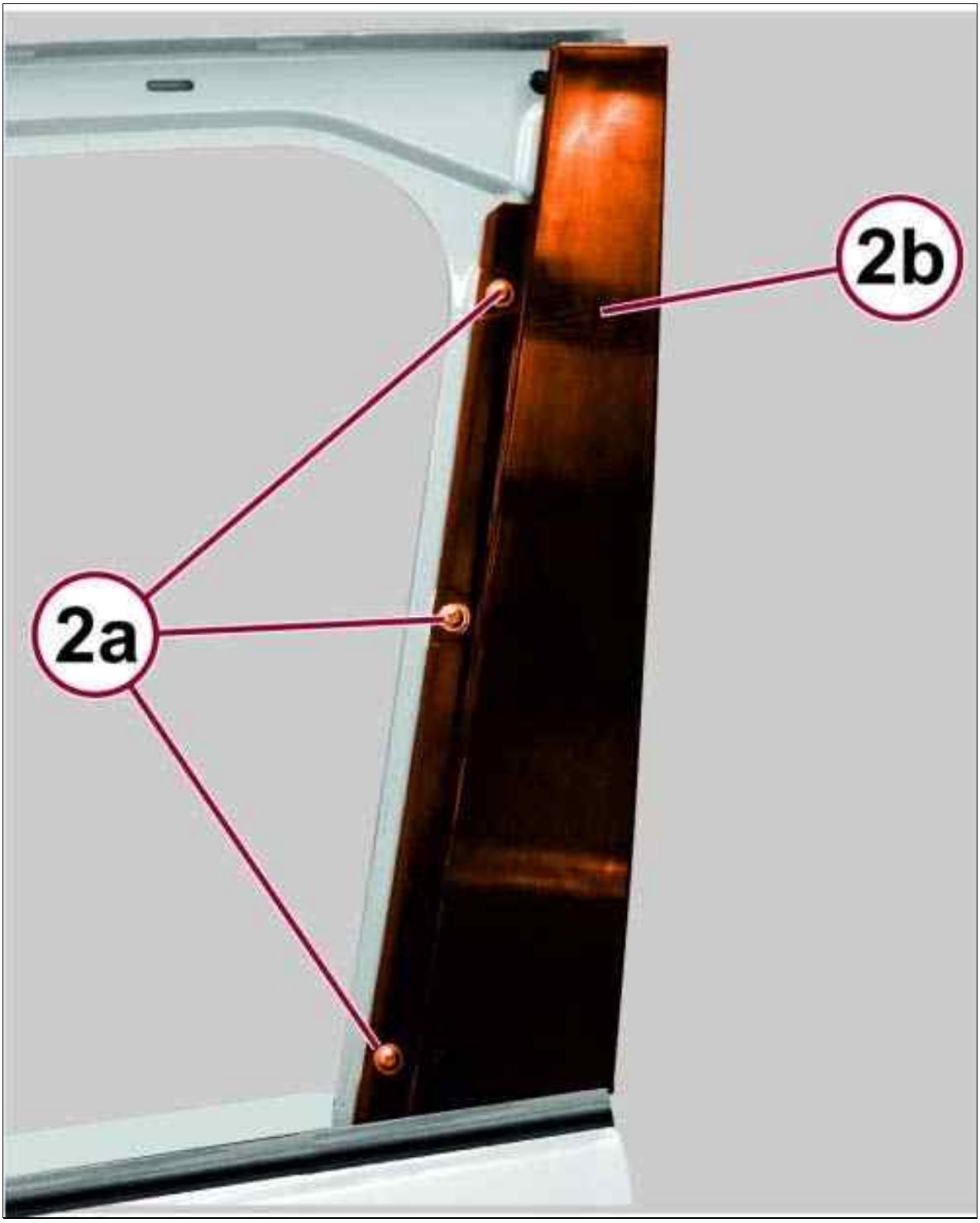
Fig 7: Glass Run & Groove



Courtesy of CHRYSLER GROUP, LLC

11. Pry the glass run (1) from the back rail of the glass run channel.
12. Release the run from the upper corner of the rear groove (2).

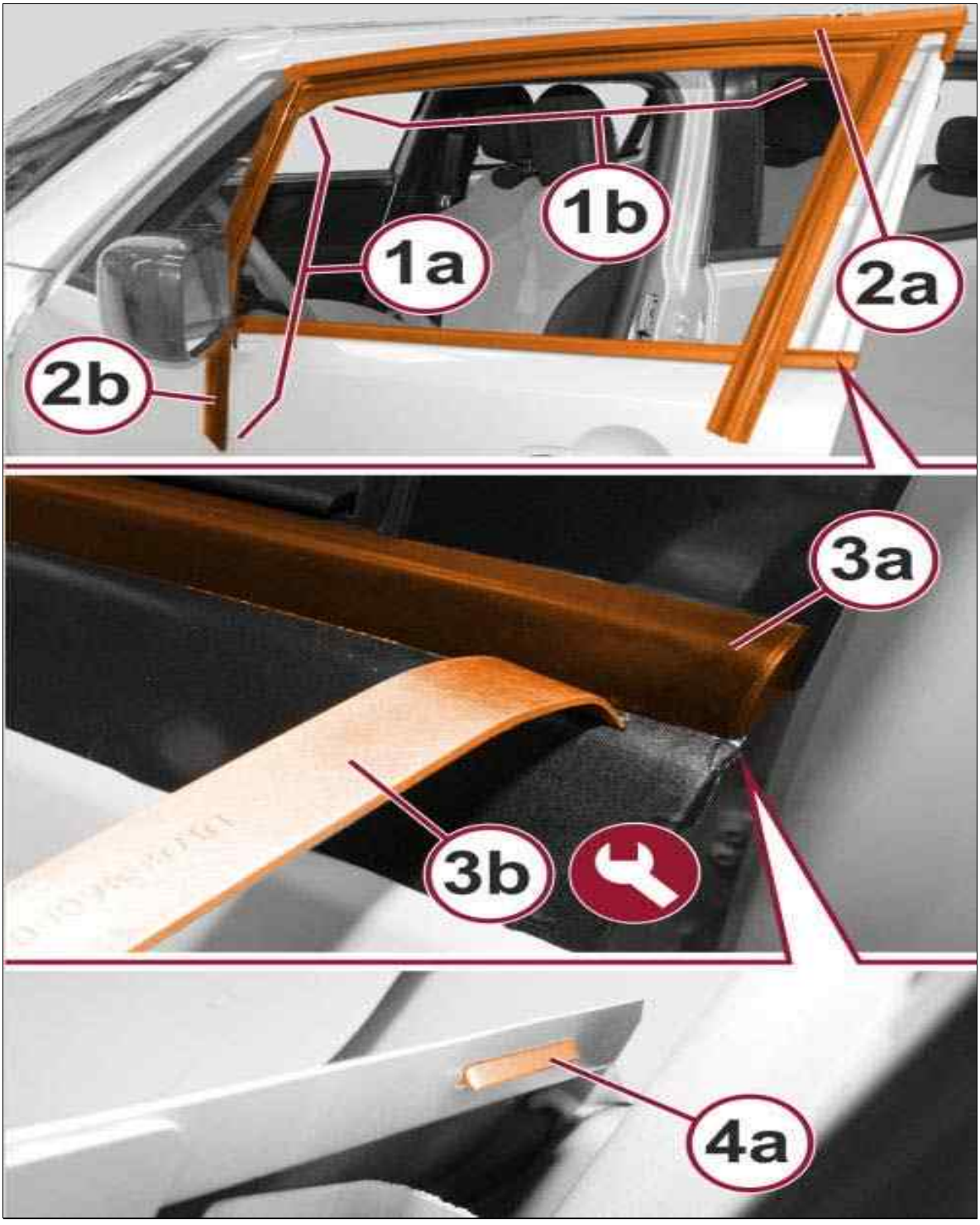
Fig 8: Applique & Screws



Courtesy of CHRYSLER GROUP, LLC

13. Remove the screws (2a) and remove applique (2b).

Fig 9: Glass Run, Gasket, Outer Belt Molding & Retainers



Courtesy of CHRYSLER GROUP, LLC

14. Disengage from the seat the front part (1a) and then the upper part (1b) of the channel.
15. Remove the full glass run (2a) and release the gasket (2b) from the front rail of the glass run channel.

NOTE:

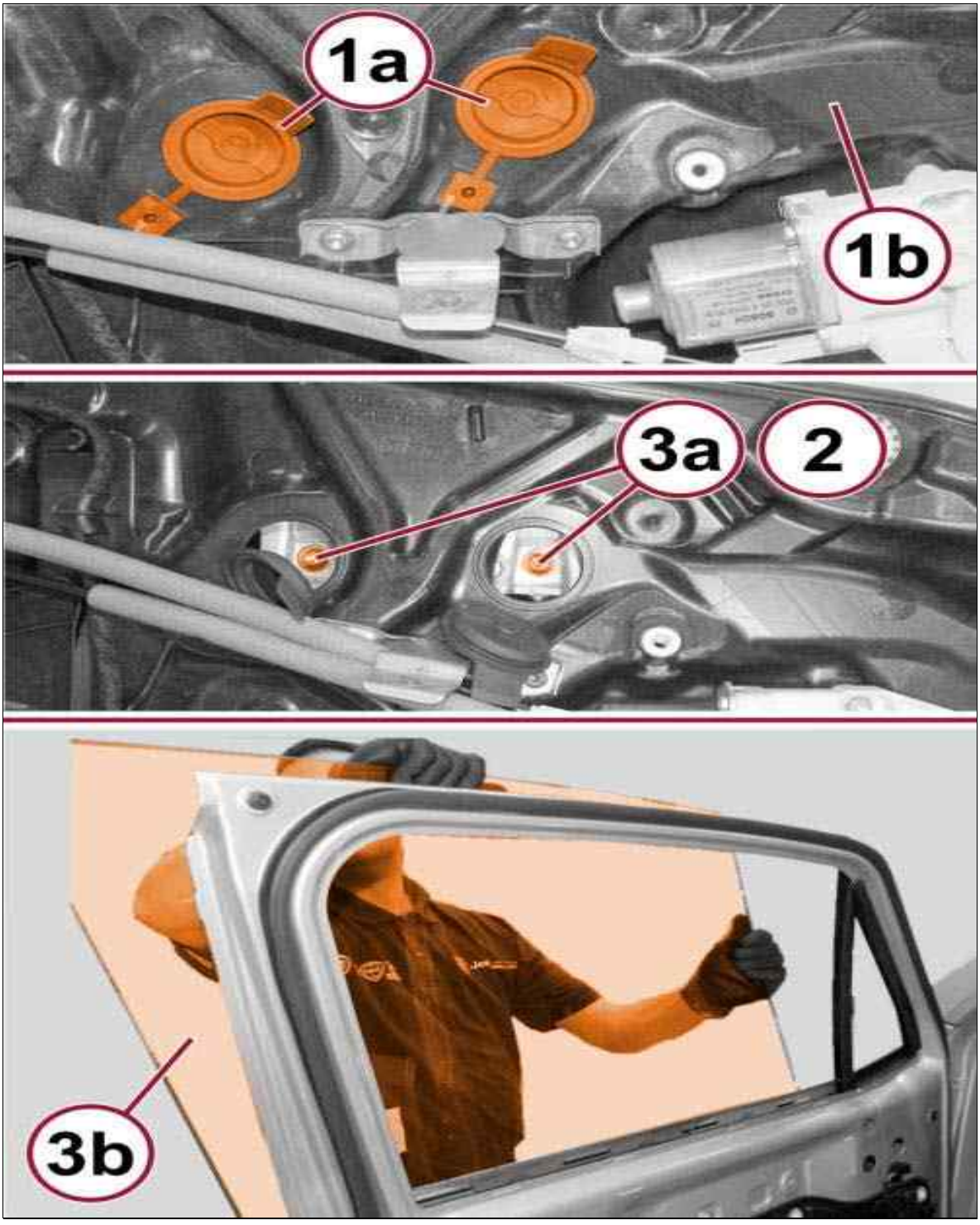
Work carefully trying to avoid bending and to prevent damage to the glass run channel.

16. Lift the outer belt molding (3a) starting from the rear end, disengaging from the seat using the special tool #1878086000 (3b).
17. Remove the outer belt molding (3a) disengaging from the retainers (4a) on the body.

> *NOTE:*
>
> *Masking tape is recommend to prevent damage to the body.*

> *NOTE:*
>
> *If outer belt molding must be reused, be careful not to deform.*

Fig 10: Front Door, Glass, Caps, Holes & Screws



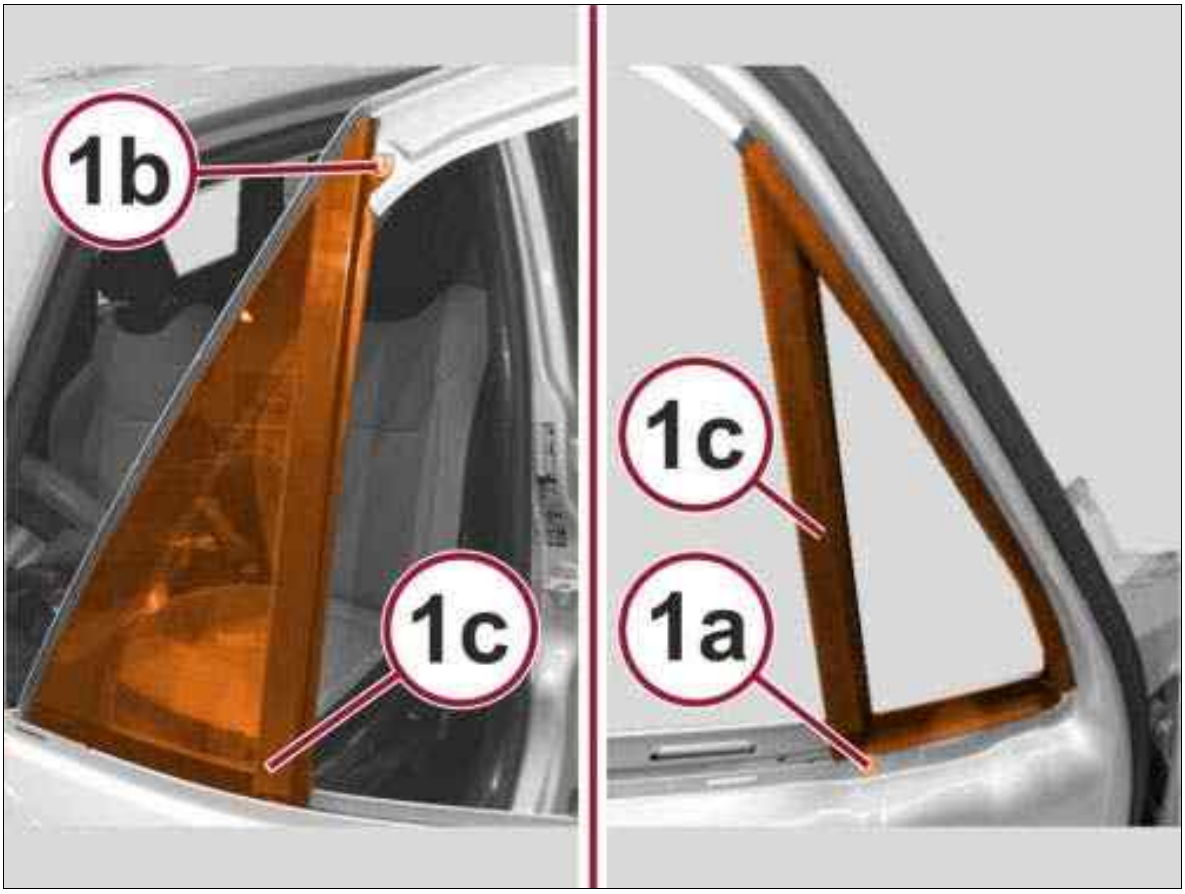
Courtesy of CHRYSLER GROUP, LLC

WARNING:

Use care when removing the door glass to prevent breakage. Do not force the glass out of the door. Failure to follow this warning may result in serious injury.

18. Pry the caps (1a) on the carrier plate inside the front side door (1b).
19. Temporarily connect the switches on the door and connect the negative terminal of the battery.
20. Position the glass down until the attachment screws (3a) are accessible through the holes (2) under the plugs.
21. Remove the screws (3a) and remove the glass (3b).

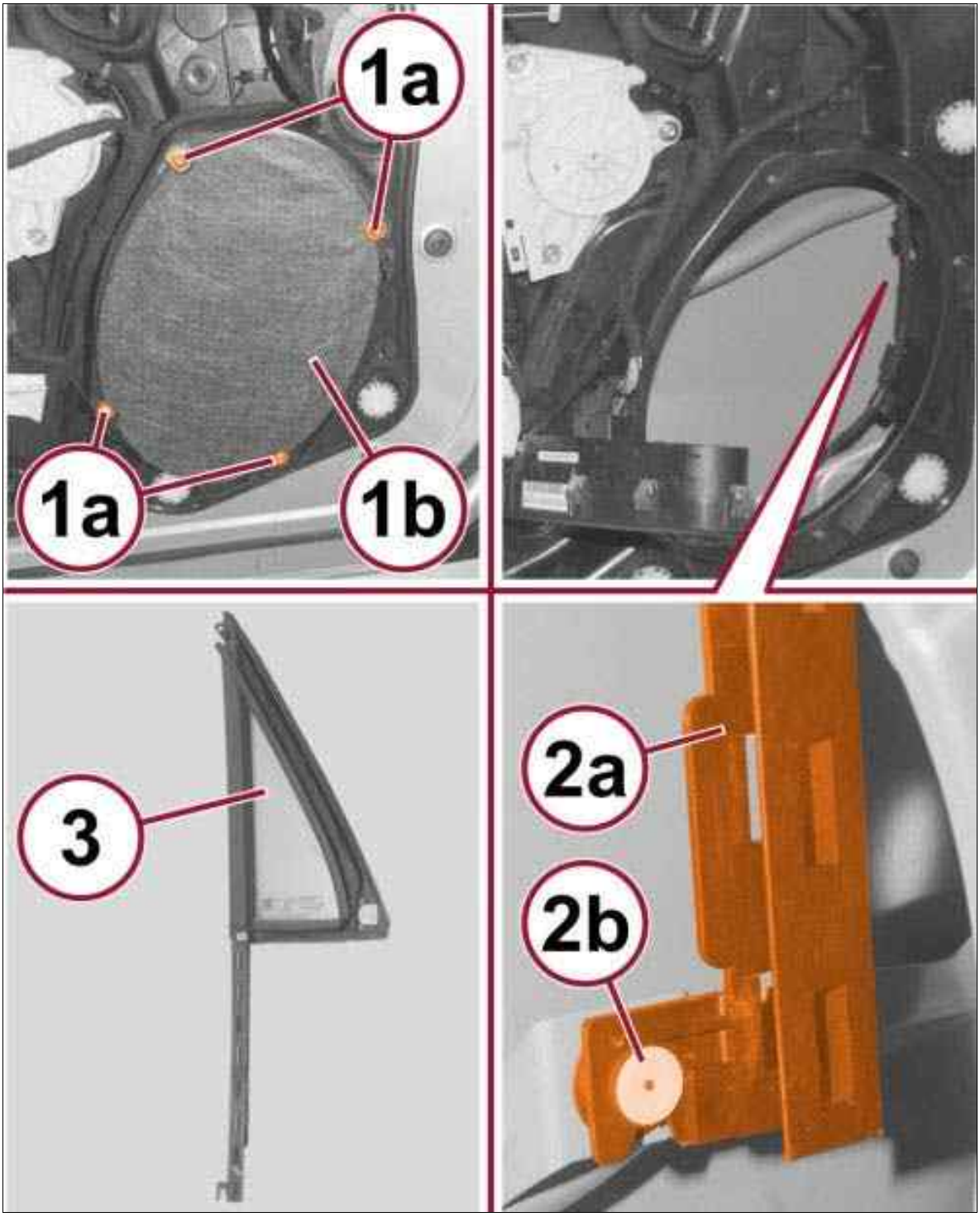
Fig 11: Fixed Front Door Glass & Screws



Courtesy of CHRYSLER GROUP, LLC

22. Remove the inner (1a) and outer (1b) screws of the fixed front door glass (1c)

Fig 12: Fixed Glass/Glass Run Channel Assembly, Bracket, Speaker & Screws



Courtesy of CHRYSLER GROUP, LLC

23. Remove the screws (1a) and remove the front speaker (1b).
24. Working from inside the speaker opening release the run channel (2a) from the bracket (2b).
25. Remove the fixed glass/glass run channel assembly (3) from the door.

DOOR - FRONT > GLASS, DOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

NOTE:

If the door glass did not move in the door using with power window switch, replace the regulator and/or the regulator motor or repair the electrical concern prior to installing the door glass.

1. Check that the fixed front door glass is not damaged.
2. Position the fixed glass/glass run channel assembly back into the door glass opening.
3. Working from inside the speaker opening secure the run channel to the bracket.
4. Install the speaker and install the screws.
5. Install the inner and outer screws of the fixed front door glass.

   WARNING:

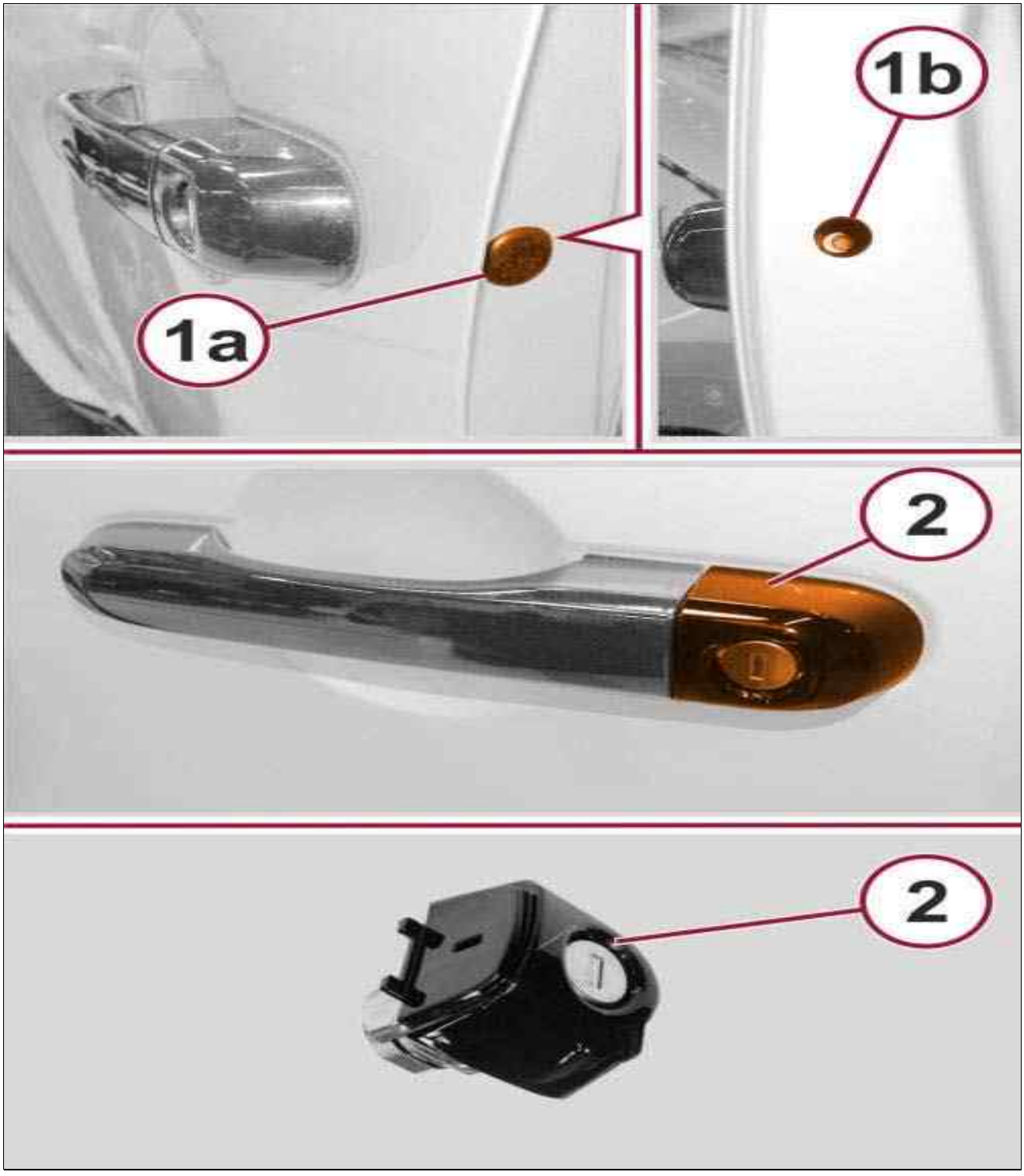
   Use care when removing the door glass to prevent breakage. Do not force the glass out of the door. Failure to follow this warning may result in serious injury.

6. Install the glass (3b) into the glass opening.
7. Position the glass down until the attachment screws are accessible through the holes under the plugs.
8. Tighten the screws.
9. Seat the access caps fully.
10. Position the glass run seal back into the glass opening.
11. Install the applique and install the screws.
12. Starting from the lower part, seat the glass run seal into the channel and seat fully.
13. Seat the remaining top and then front of the seal fully.
14. Install the outer belt molding taking care not to damage.
15. Verify that all carrier plate fasteners are in tact and replace if necessary.
16. Position the trim panel into place and connect the cables.
17. Install the trim panel and seat the push pin fasteners fully.
18. Install the trim panel screws and install the trim covers.
19. Install the screw into the armrest opening.

20. Connect the switch pod electrical connections.
21. Install the switch pod and seat the clips fully.
22. Install the pull cup and install the screw. Install the pull cup trim.
23. Install the release handle screw and install the trim.
24. Connect the negative battery cable.
25. Operate the glass and check for interference between the guides and outer belt molding.

DOOR - FRONT > HANDLE, EXTERIOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

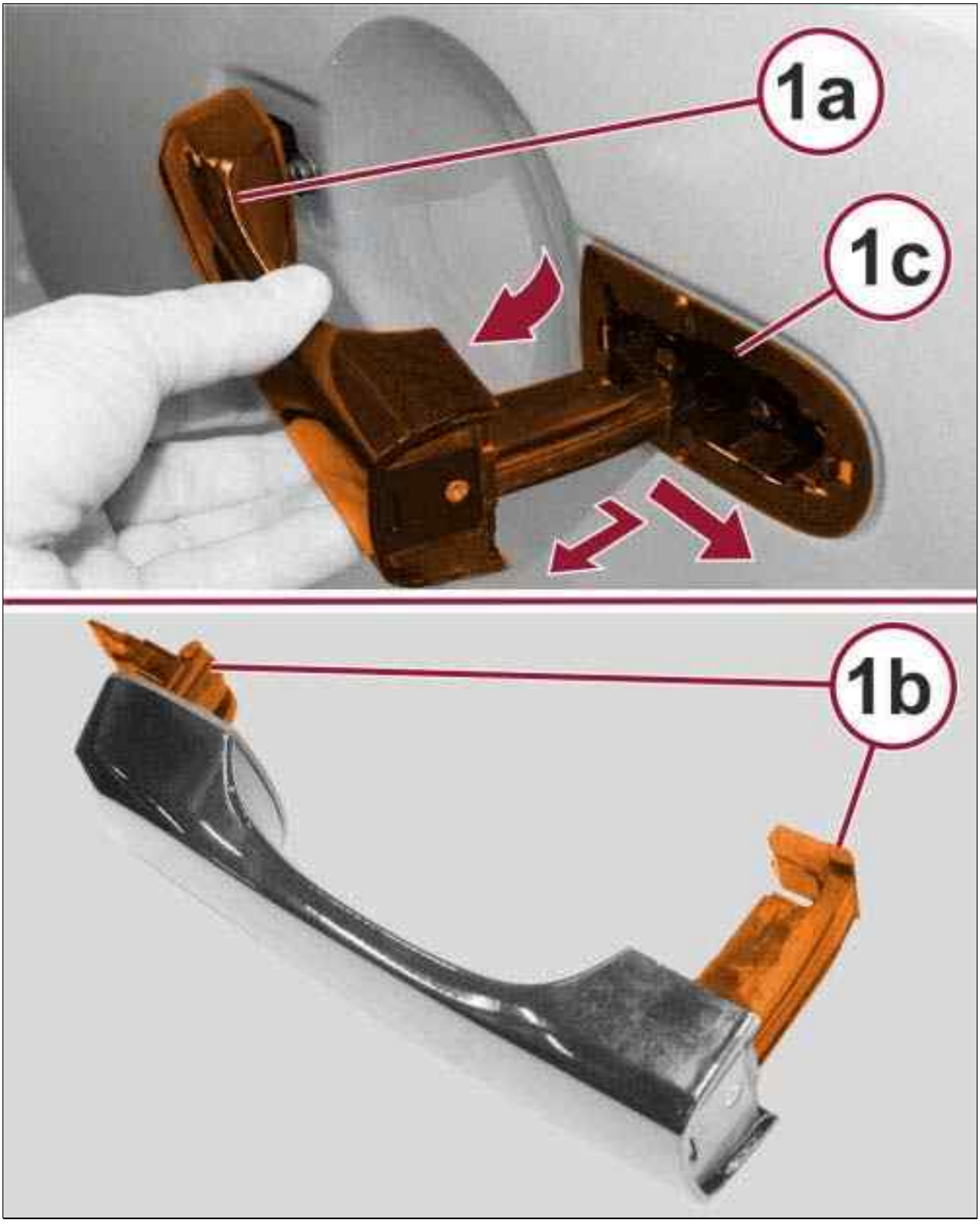
Fig 1: Lock Block, Cover & Screw



Courtesy of CHRYSLER GROUP, LLC

1. Remove the protective cover (1a).
2. Loosen the screw (1b) by turning clockwise.
3. Remove the lock block (2) from the door.

Fig 2: Handle, Support & Hooks

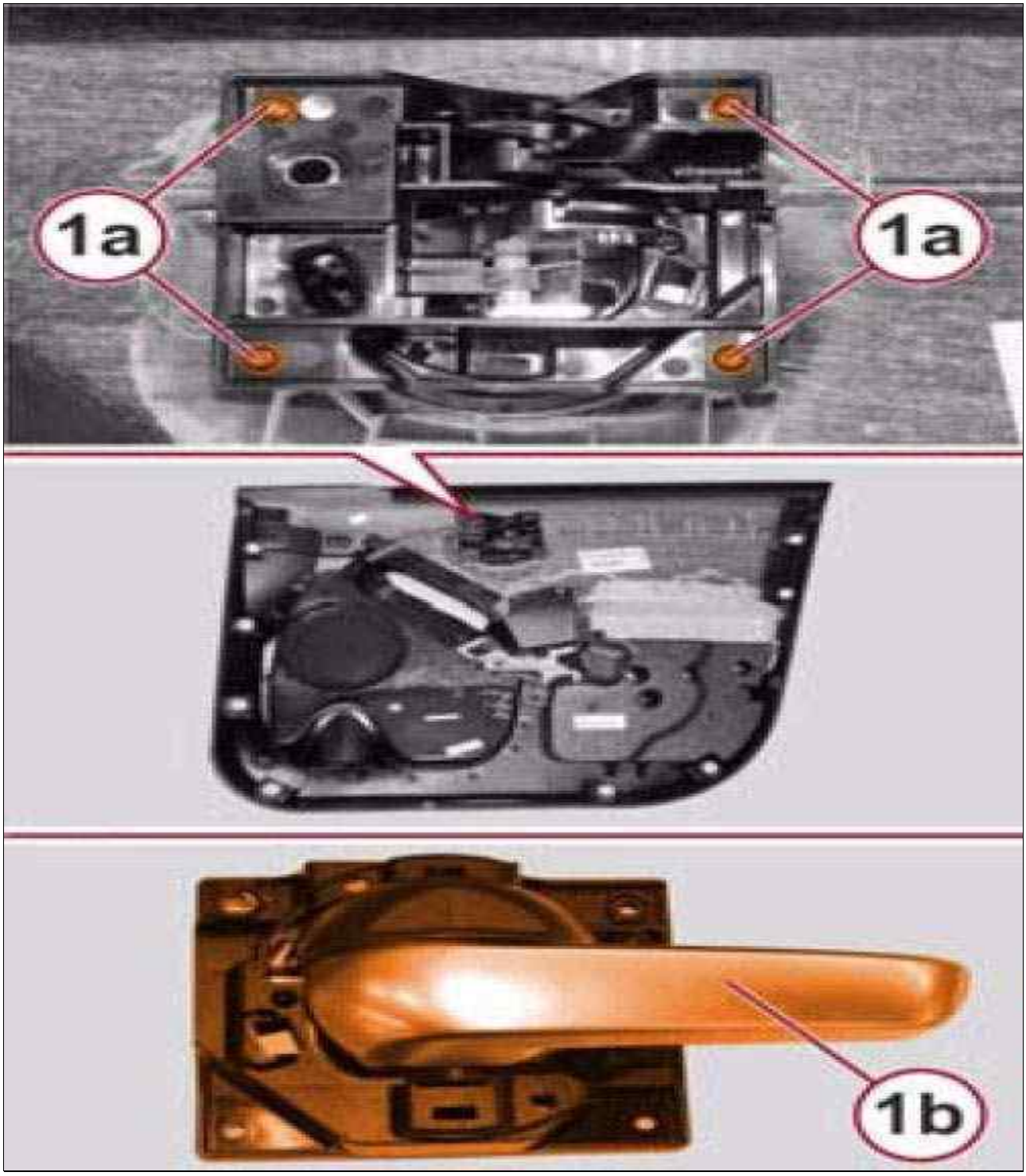


Courtesy of CHRYSLER GROUP, LLC

4. Push the handle (1a) in the direction of the arrow, releasing the hooks (1b) from the handle support (1c).
5. Rotate and remove the handle (1a).

DOOR - FRONT > HANDLE, EXTERIOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Interior Handle & Screws



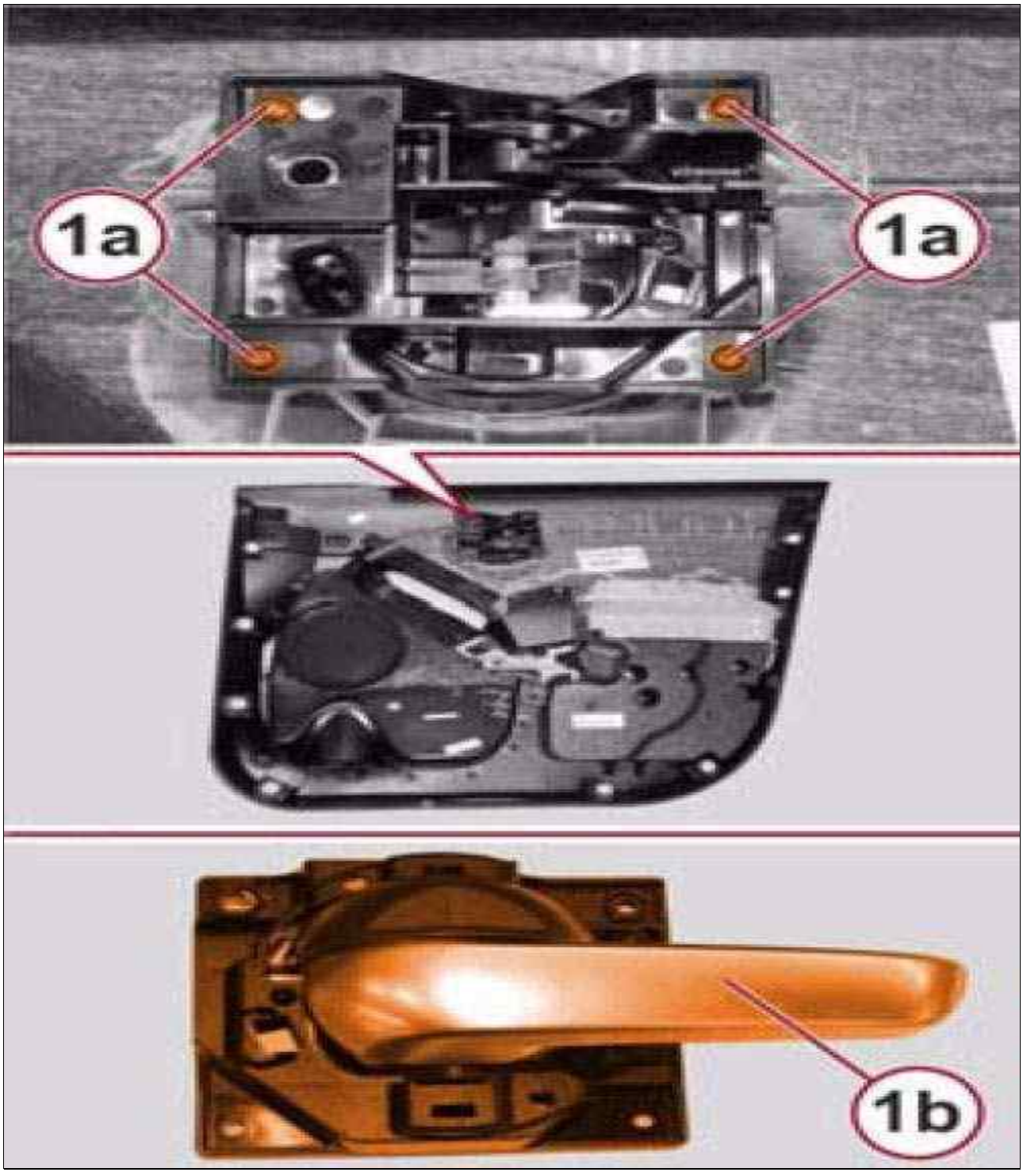
Courtesy of CHRYSLER GROUP, LLC

1. Working from inside of the door trim panel, position the interior handle (1b) and install the screws (1a) securely.
2. Install the trim panel. Refer to PANEL, DOOR TRIM, REMOVAL AND INSTALLATION .

3. Connect the negative battery cable. If equipped with an Intelligent Battery Sensor (IBS), connect the IBS connector to the negative battery cable.

DOOR - FRONT > HANDLE, INTERIOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Interior Handle & Screws

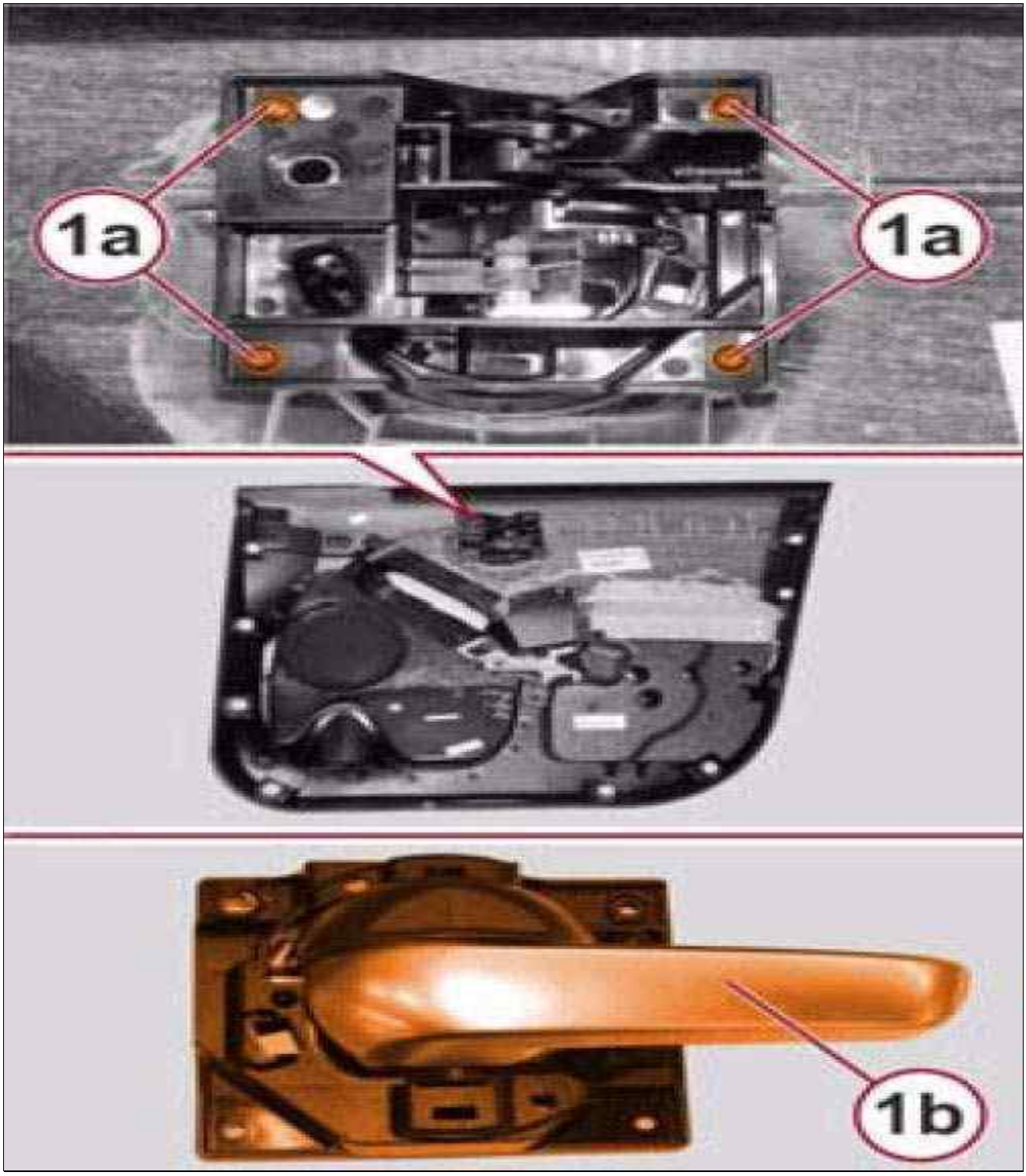


Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable. If equipped with an Intelligent Battery Sensor (IBS), disconnect the IBS connector first before disconnecting the negative battery cable.
2. Remove the trim panel. Refer to PANEL, DOOR TRIM, REMOVAL AND INSTALLATION .
3. Working from inside of the door trim panel, remove the mounting screws (1a) and remove the handle (1b).

DOOR - FRONT > HANDLE, INTERIOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Interior Handle & Screws

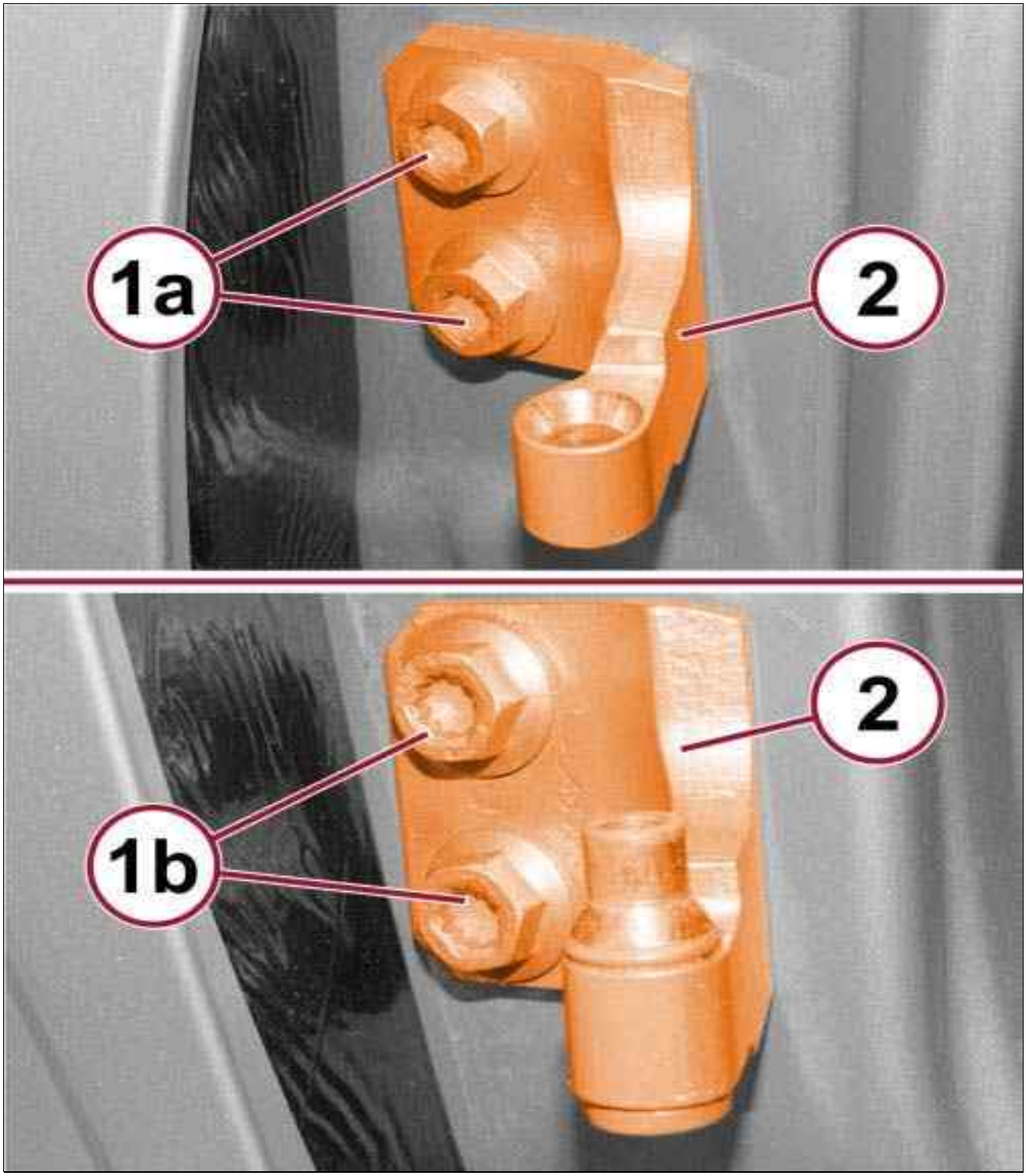


Courtesy of CHRYSLER GROUP, LLC

1. Working from inside of the door trim panel, position the interior handle (1b) and install the screws (1a) securely.
2. Install the trim panel. Refer to PANEL, DOOR TRIM, REMOVAL AND INSTALLATION .
3. Connect the negative battery cable. If equipped with an Intelligent Battery Sensor (IBS), connect the IBS connector to the negative battery cable.

DOOR - FRONT > HINGE, DOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Body Side Hinge Half & Bolts



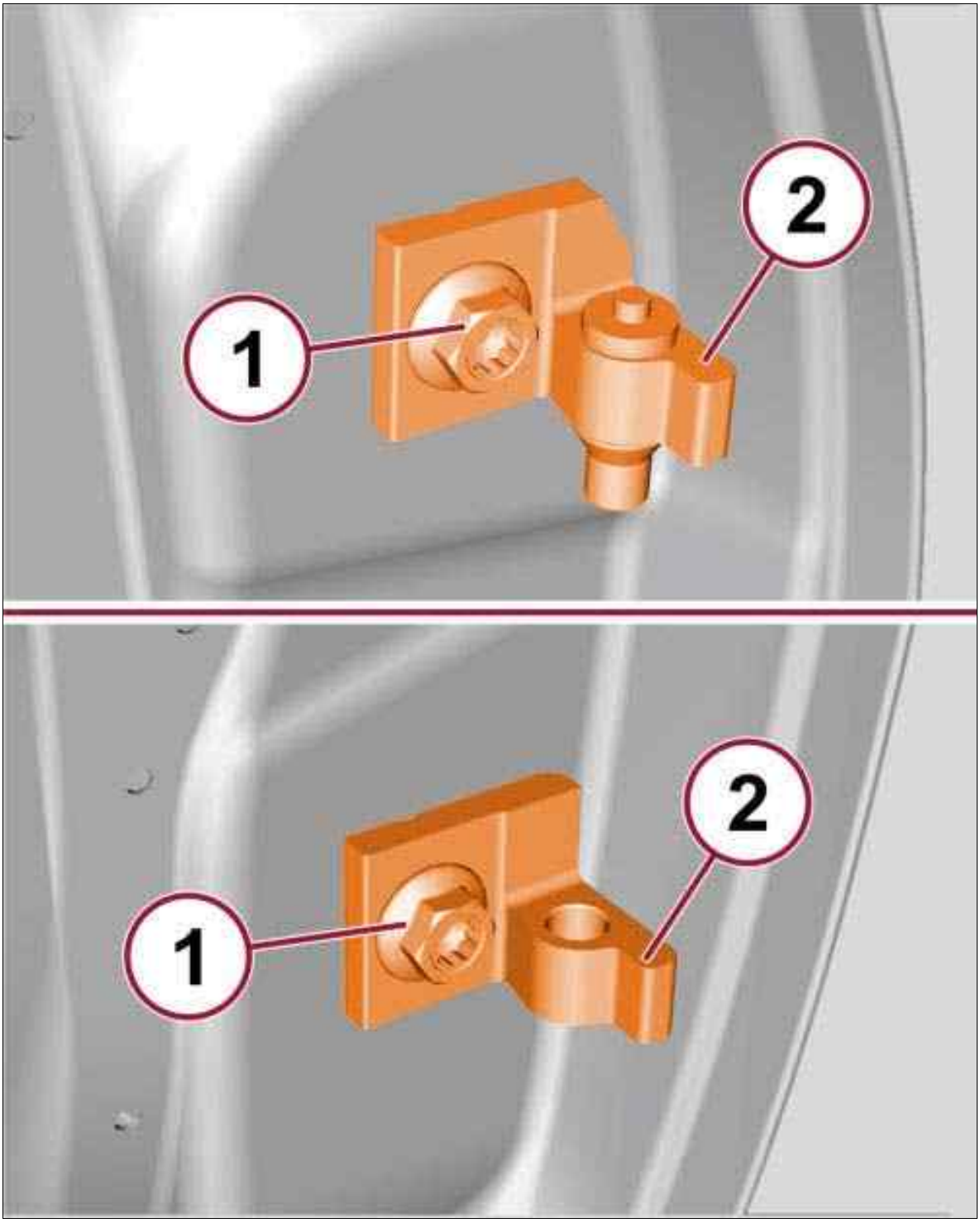
Courtesy of CHRYSLER GROUP, LLC

NOTE:

To protect the vehicle finish, apply several layers of masking tape on the front edges of the door and the front fender prior to loosening the hinges.

1. Disconnect and isolate the negative battery cable.
2. Remove the front door. Refer to DOOR, REMOVAL AND INSTALLATION .
3. Remove the bolts (1a, 1b) and remove the body side hinge half (2).

Fig 2: Door Hinge Half & Bolt

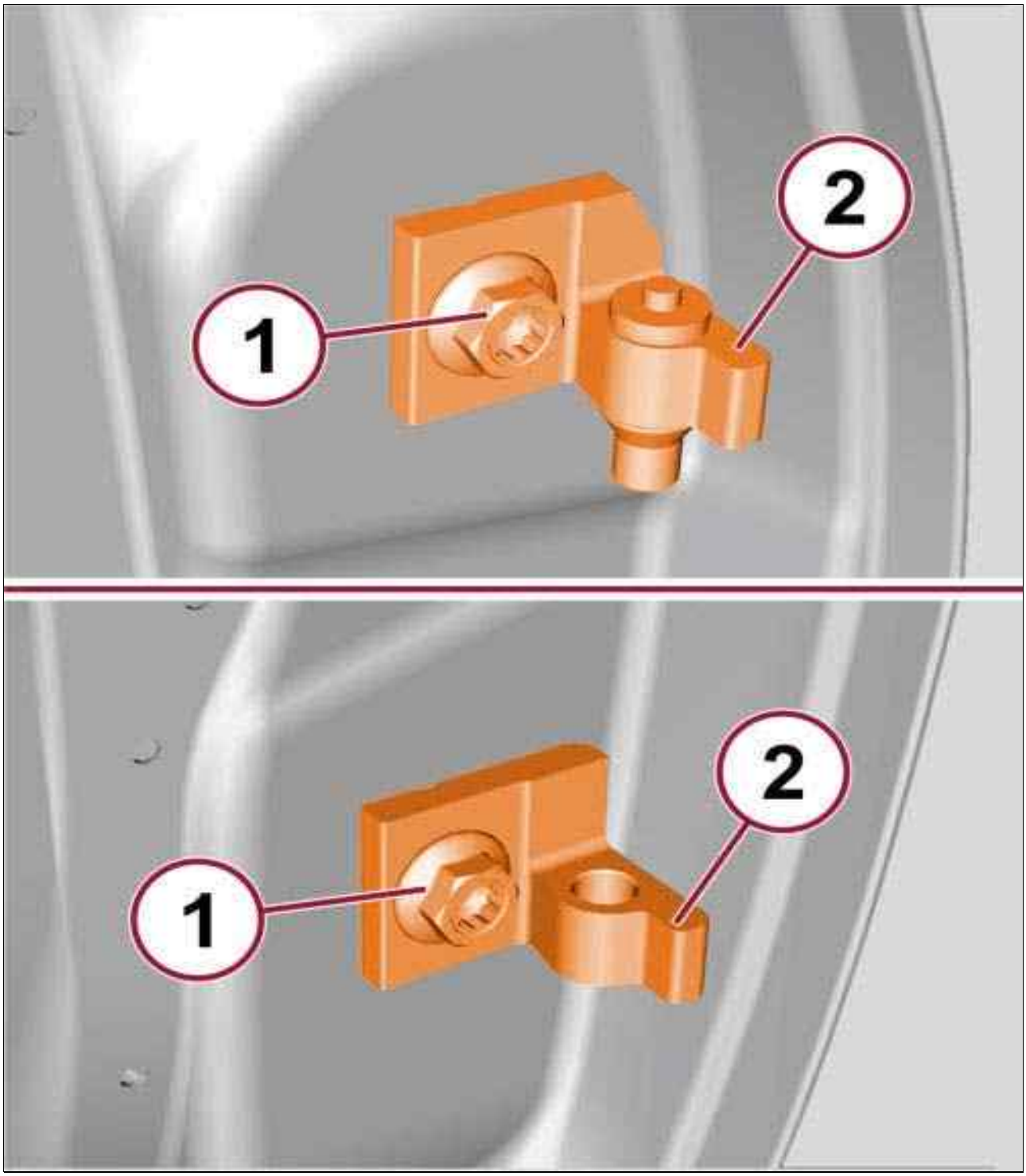


Courtesy of CHRYSLER GROUP, LLC

4. Remove the bolt (1) and remove the door hinge half (2).

DOOR - FRONT > HINGE, DOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Door Hinge Half & Bolt



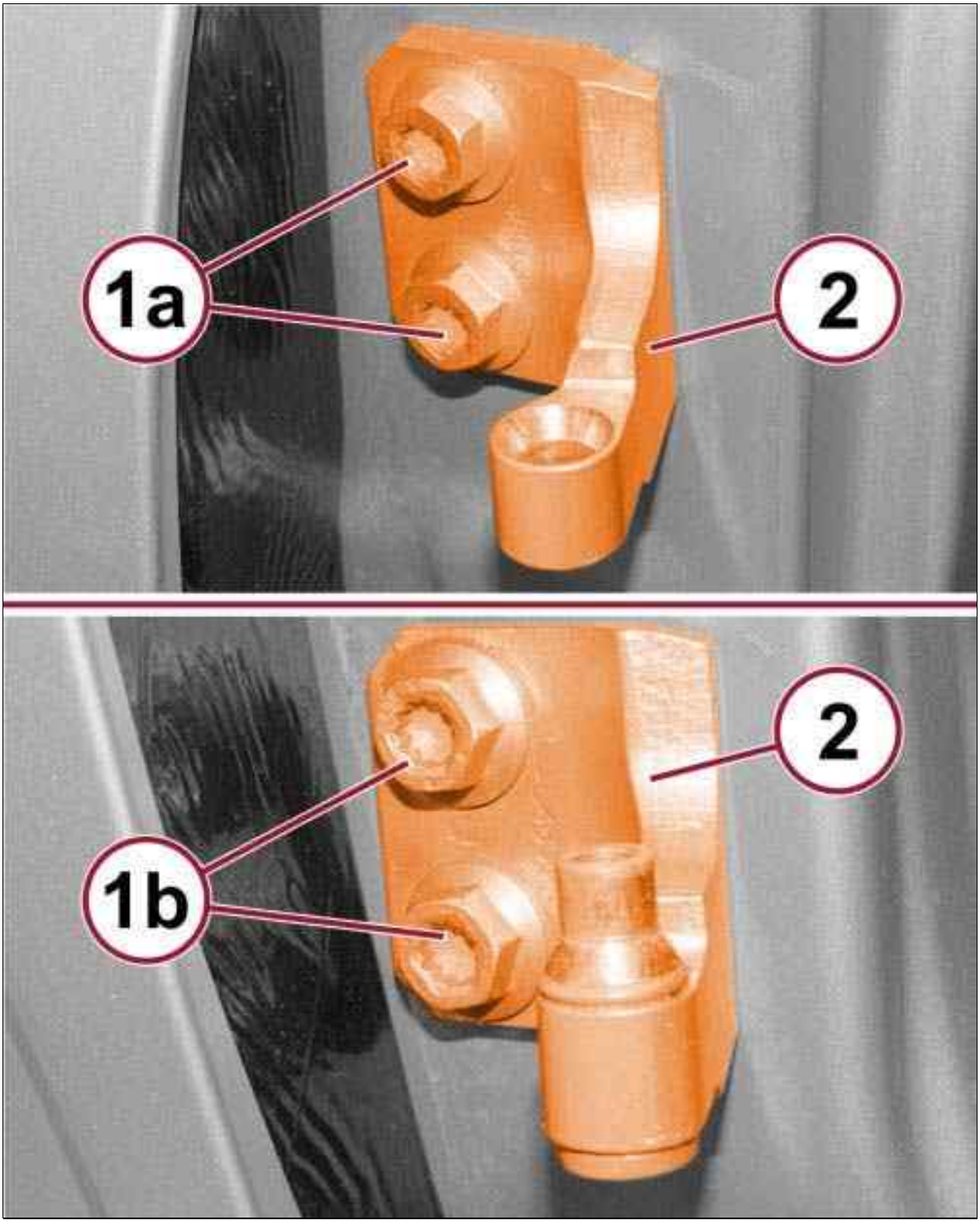
Courtesy of CHRYSLER GROUP, LLC

NOTE:

A suitable body sealant should be used when removing or moving the hinges.

1. Install the door hinge half (2).
2. Install the bolt (1) and hand tighten only.

Fig 2: Body Side Hinge Half & Bolts

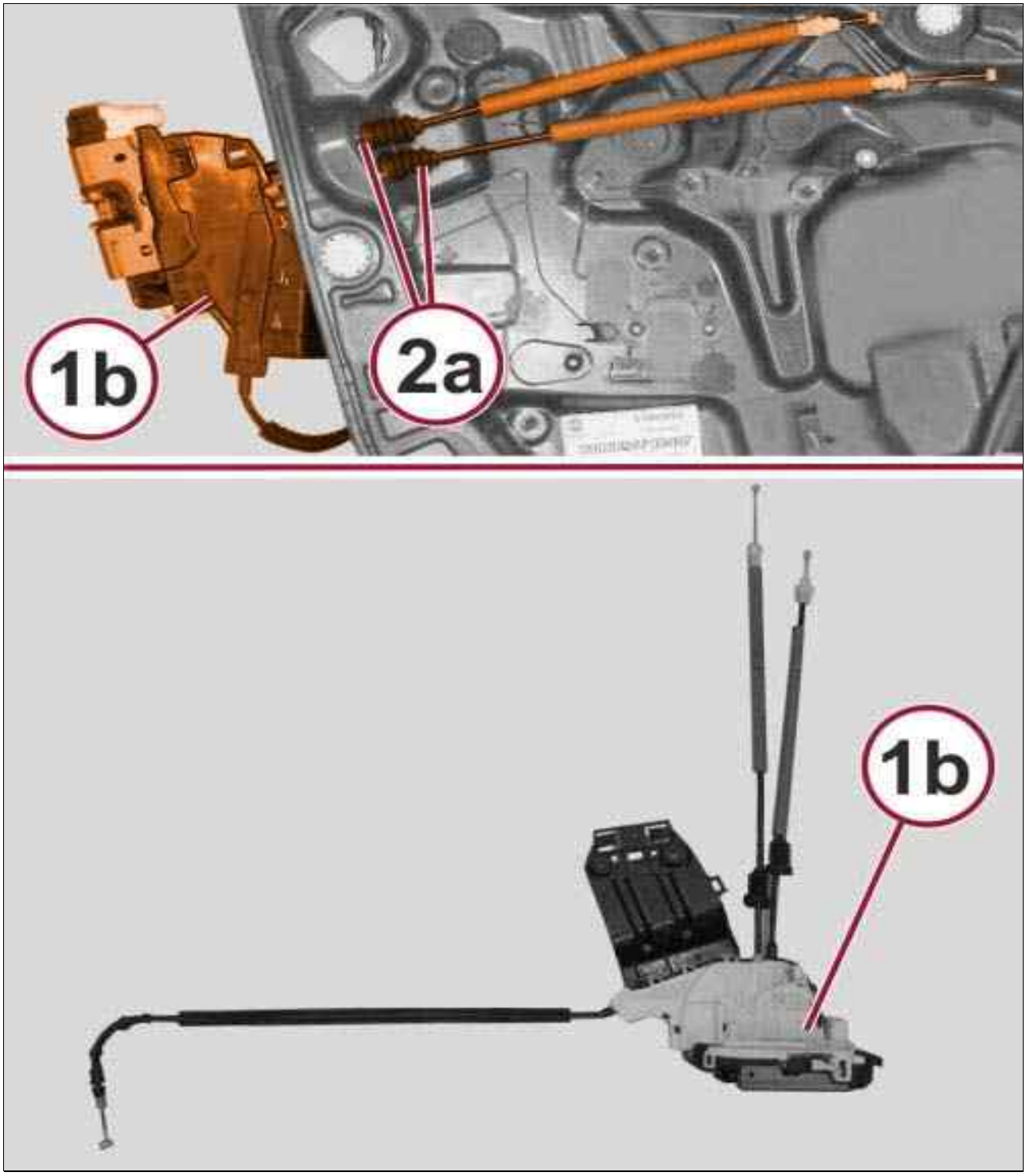


Courtesy of CHRYSLER GROUP, LLC

3. Install the body side hinge half (2).
4. Install the bolts (1a, 1b) and hand tighten only.
5. Install the door. Refer to DOOR, REMOVAL AND INSTALLATION .

DOOR - FRONT > LATCH, DOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Latch & Grommets



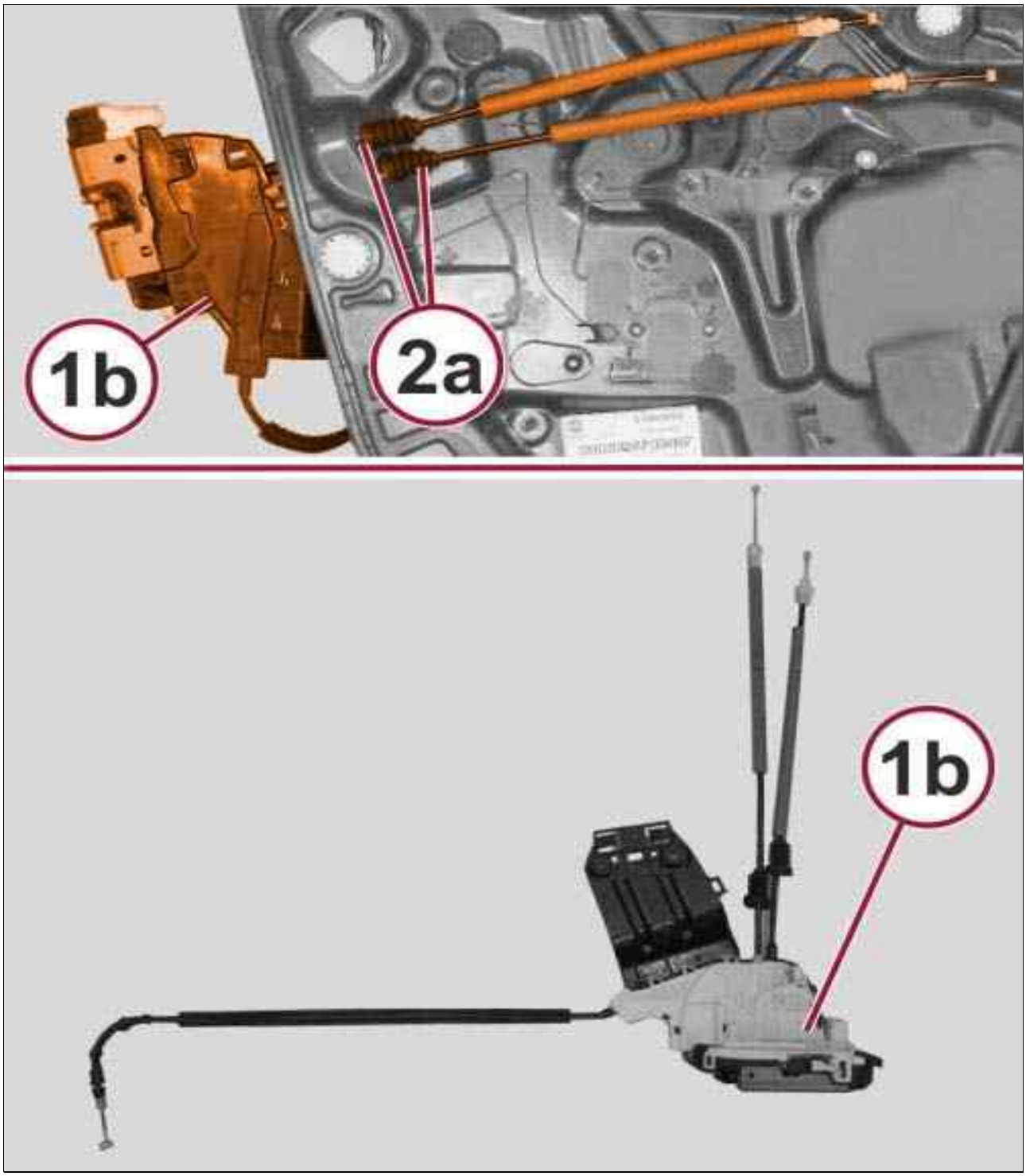
Courtesy of CHRYSLER GROUP, LLC

1. Remove the carrier plate. Refer to PLATE, CARRIER, REMOVAL AND INSTALLATION .
2. Release the cables grommets (2a).

3. Remove the latch (1b) complete with control cables from the carrier plate.

DOOR - FRONT > LATCH, DOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Latch & Grommets

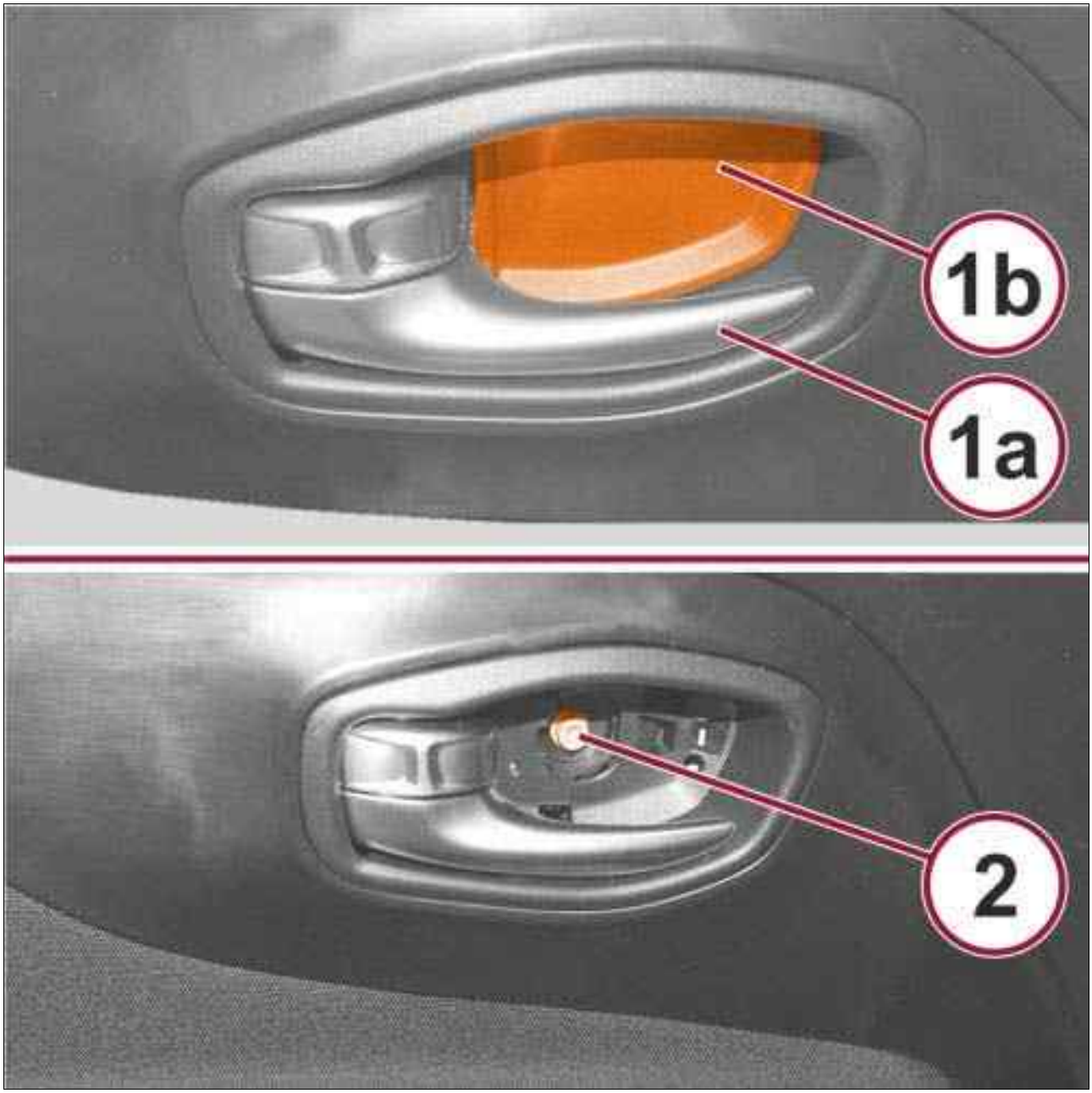


Courtesy of CHRYSLER GROUP, LLC

1. Position the latch (1b) complete with the control cables and insert the cable grommets (2a) onto the carrier plate.
2. Install the carrier plate. Refer to PLATE, CARRIER, REMOVAL AND INSTALLATION .

DOOR - FRONT > PANEL, DOOR TRIM > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Inside Handle, Trim Cover & Screw

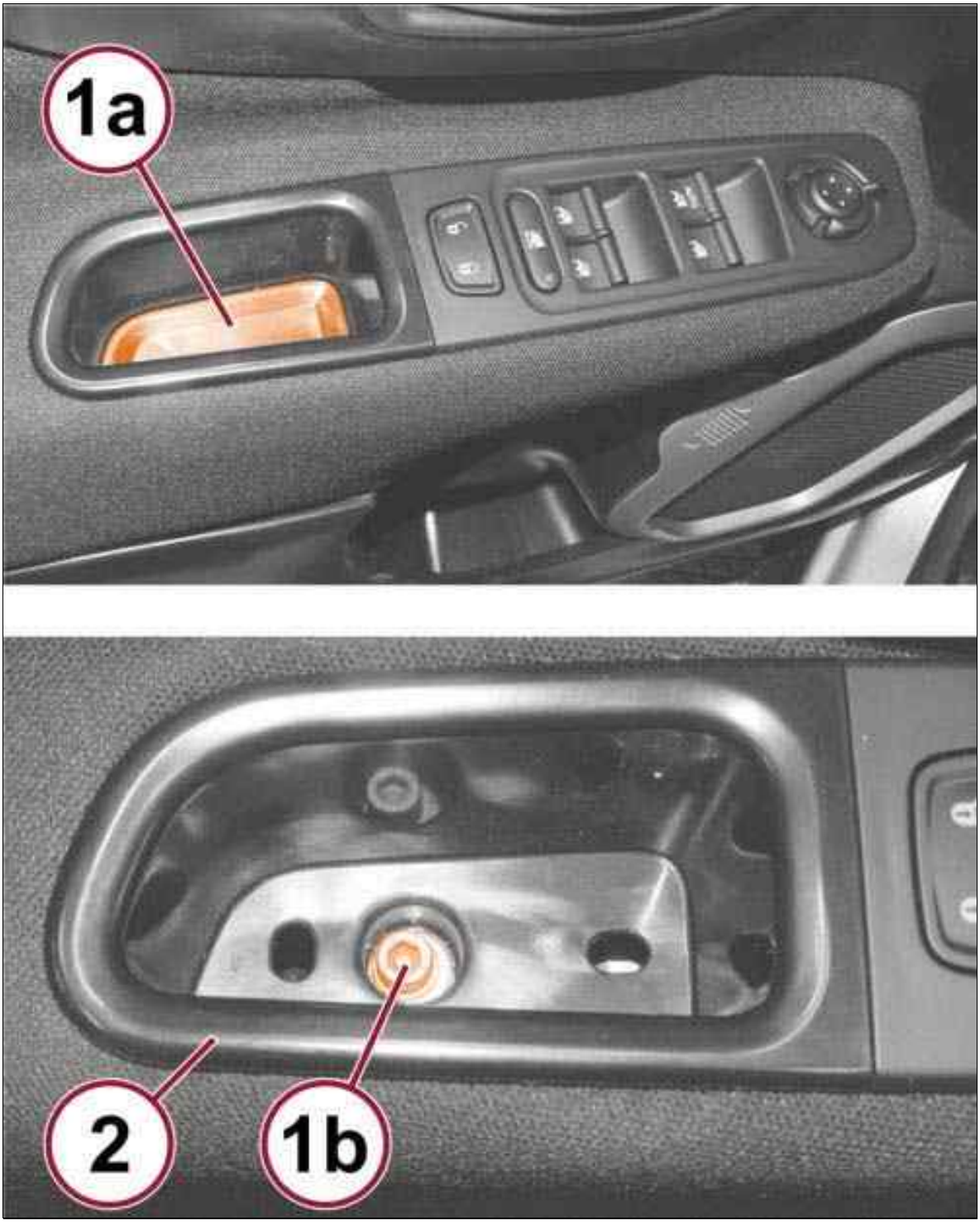


Courtesy of CHRYSLER GROUP, LLC

1. Pull the inside handle (1a) of the front side door and using trim stick (special tool #C-4755, Trim Stick) or equivalent, remove the trim cover (1b).

2. Pull the inside handle and remove the screw (2).

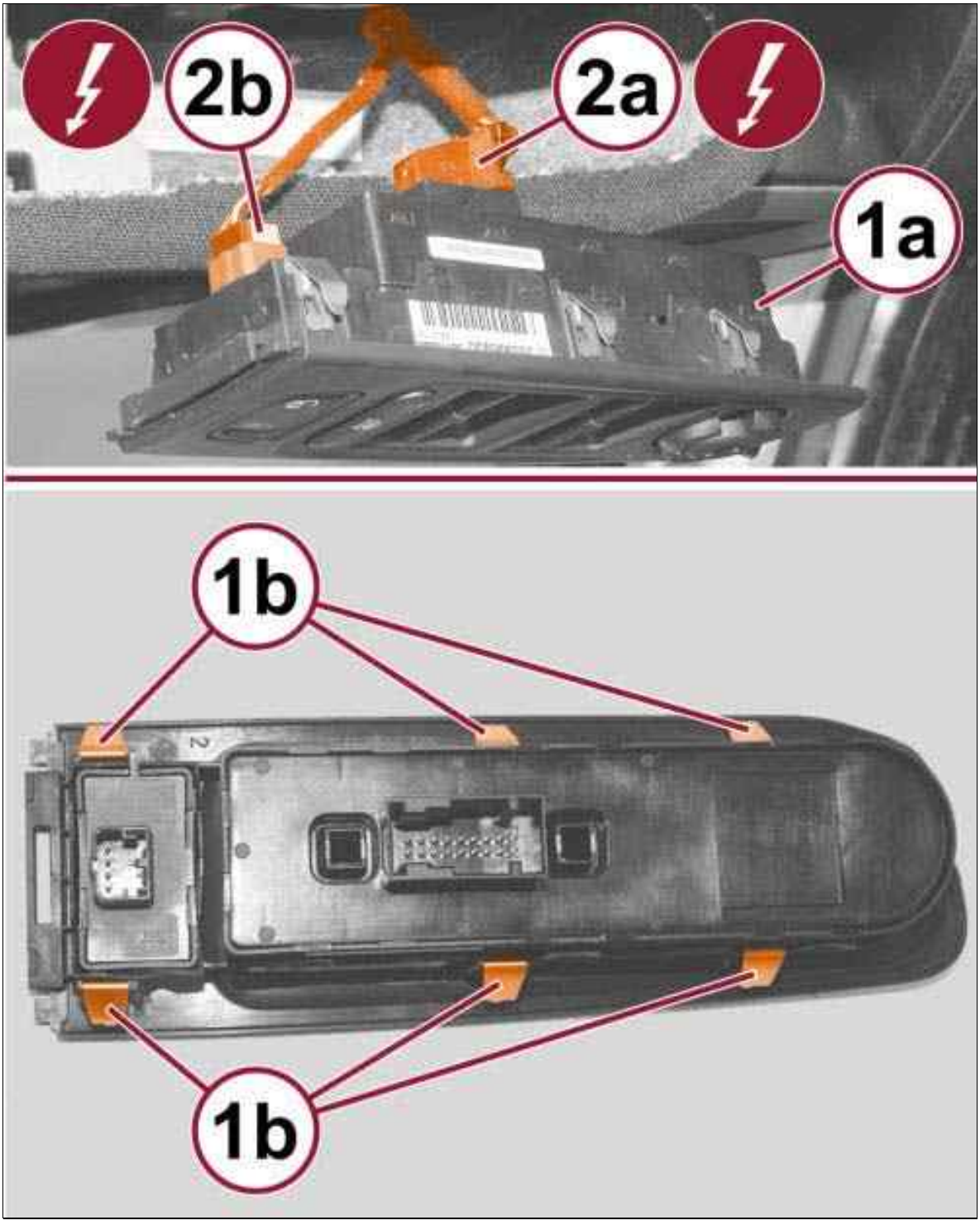
Fig 2: Pad & Screw



Courtesy of CHRYSLER GROUP, LLC

3. Using a trim stick or equivalent, remove the pull cup trim (1a) and remove the screw (1b).
4. Remove the pull cup (2).

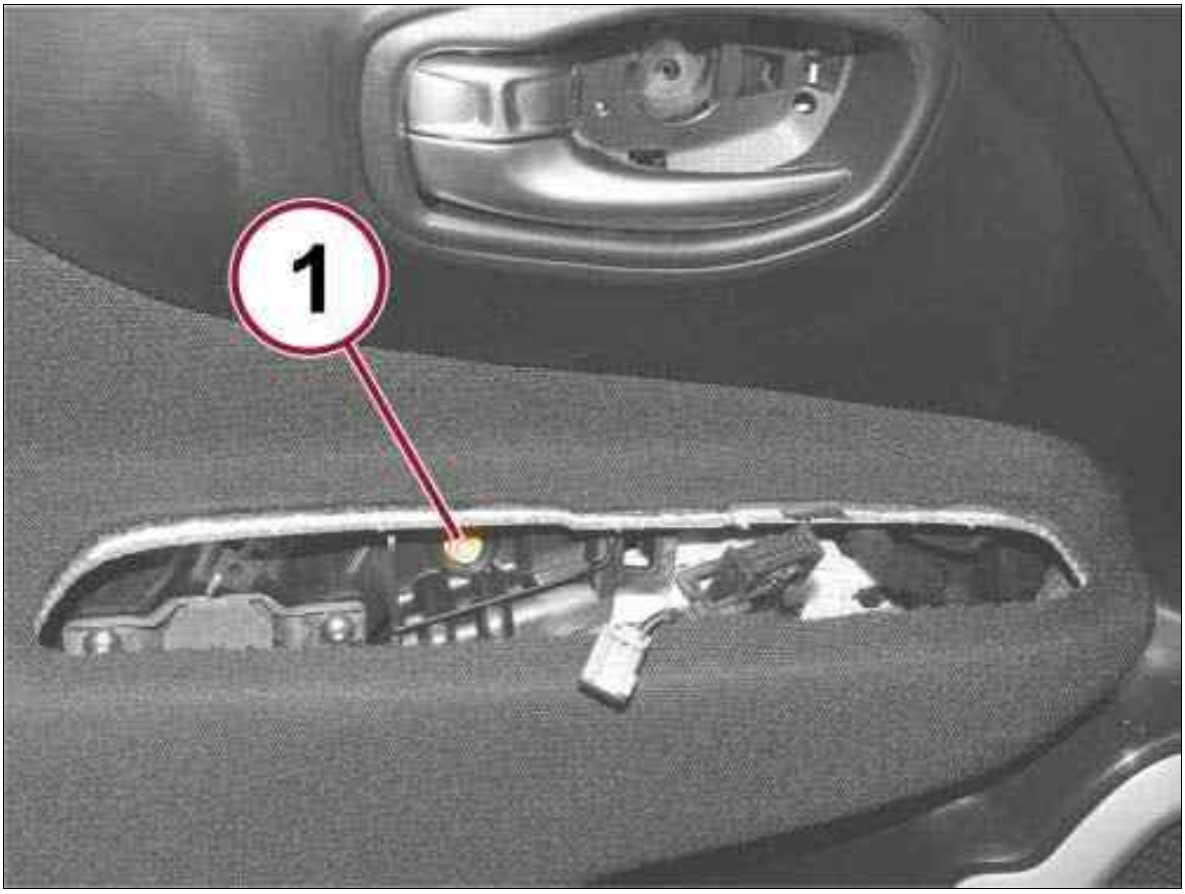
Fig 3: Switch Assembly, Clips & Connectors



Courtesy of CHRYSLER GROUP, LLC

5. Using a trim stick or equivalent, release the retaining clips (1b) and remove the switch pod (1a).
6. Disconnect the electrical connectors (2a, 2b).

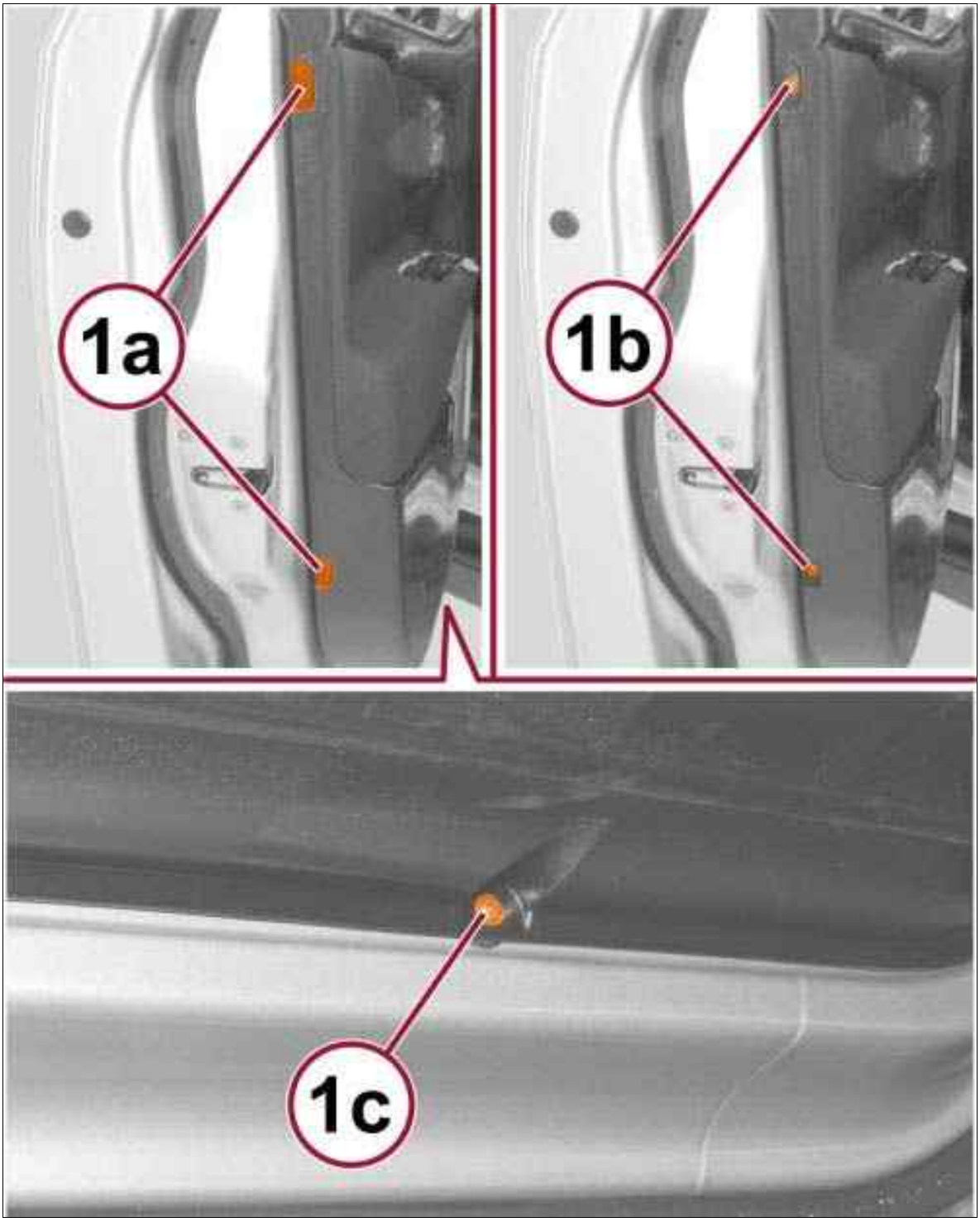
Fig 4: Door Trim Panel Screw



Courtesy of CHRYSLER GROUP, LLC

7. Remove the screw (1) on the inside of the front armrest on the door trim panel.

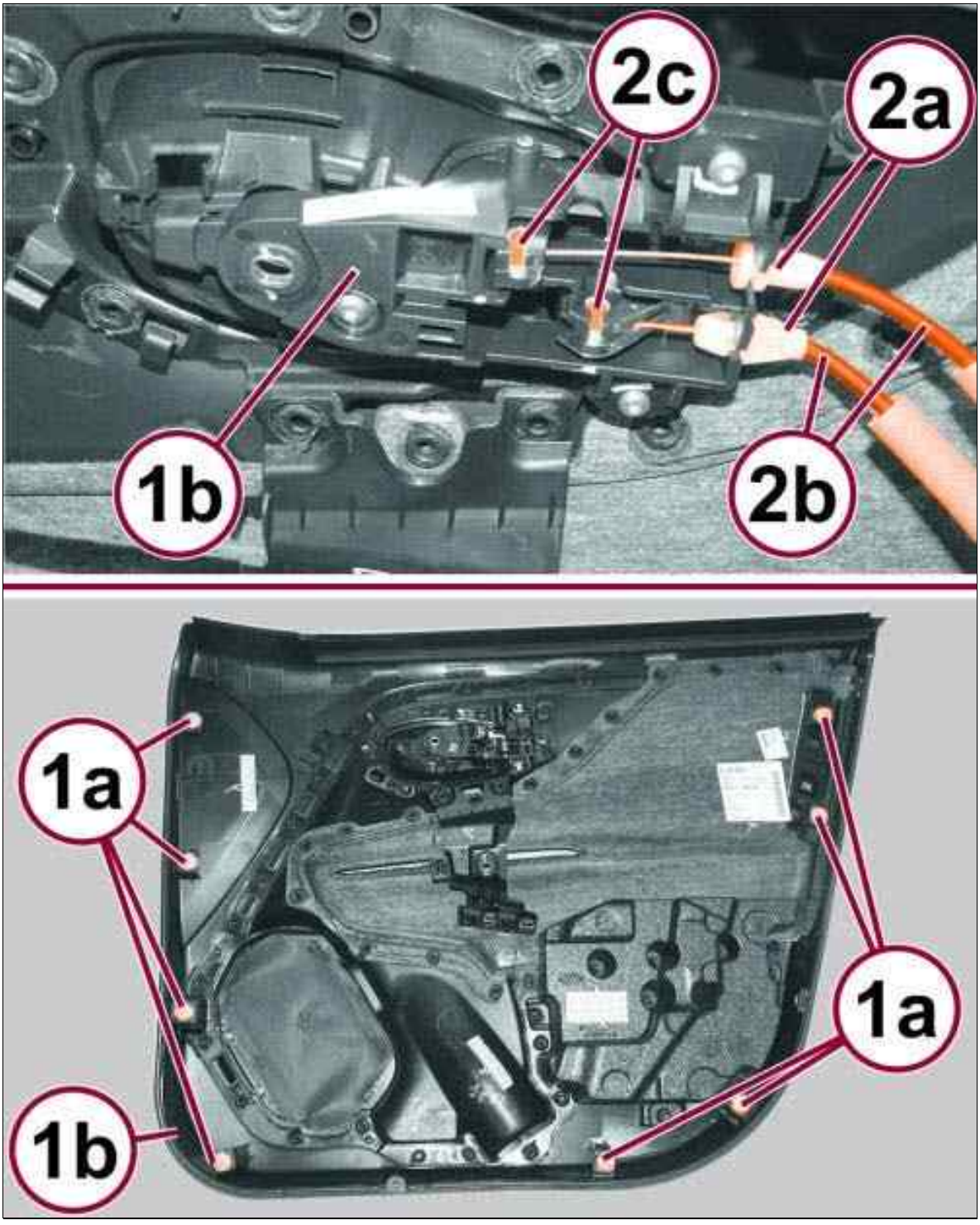
Fig 5: Trim Panel Screws & Covers



Courtesy of CHRYSLER GROUP, LLC

8. Pry off the covers (1a), remove the screws attaching the trim panel (1b) and the screw at the bottom of the panel (1c).

Fig 6: Inner Door Panel, Cables & Retainers



Courtesy of CHRYSLER GROUP, LLC

9. Using a trim stick or equivalent, release the push pin retainers (1a) and separate the door trim panel.
10. Release the retainers (2a) of the cables (2b) and release the ends (2c) and remove the inner door panel (1b).

DOOR - FRONT > PANEL, DOOR TRIM > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

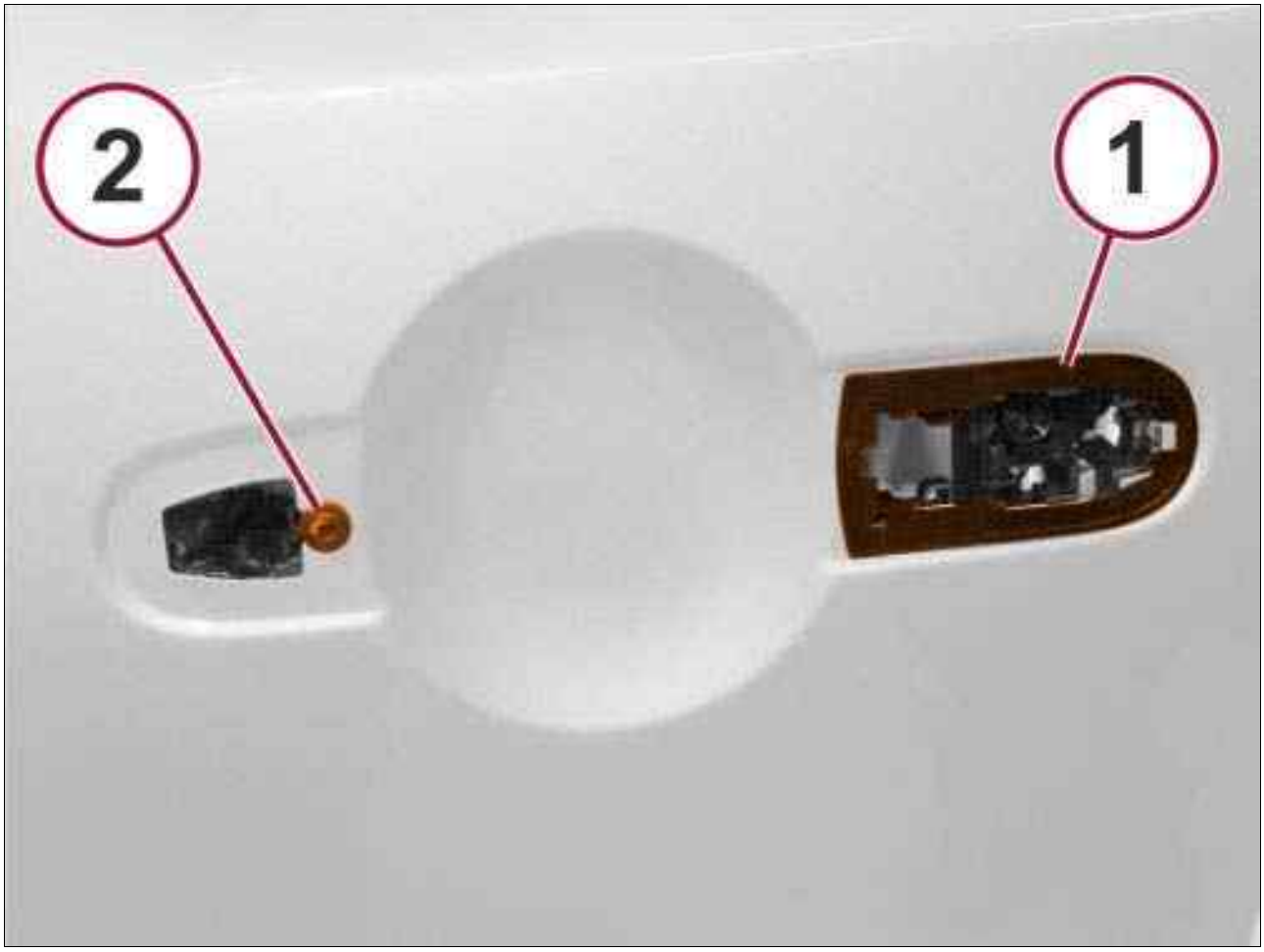
NOTE:

Prior to reinstalling the door trim panel, replace any trim panel retaining clips that may have been damaged during the removal process.

1. Verify that all carrier plate fasteners are in tact and replace if necessary.
2. Position the trim panel into place and connect the cables.
3. Install the trim panel and seat the push pin fasteners fully.
4. Install the trim panel screws and install the trim covers.
5. Install the screw into the armrest opening.
6. Connect the switch pod electrical connections.
7. Install the switch pod and seat the clips fully.
8. Install the pull cup and install the screw. Install the pull cup trim.
9. Install the release handle screw and install the trim.
10. Connect the negative battery cable.
11. Operate the glass and check for interference between the guides and outer belt molding.

DOOR - FRONT > PLATE, CARRIER > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

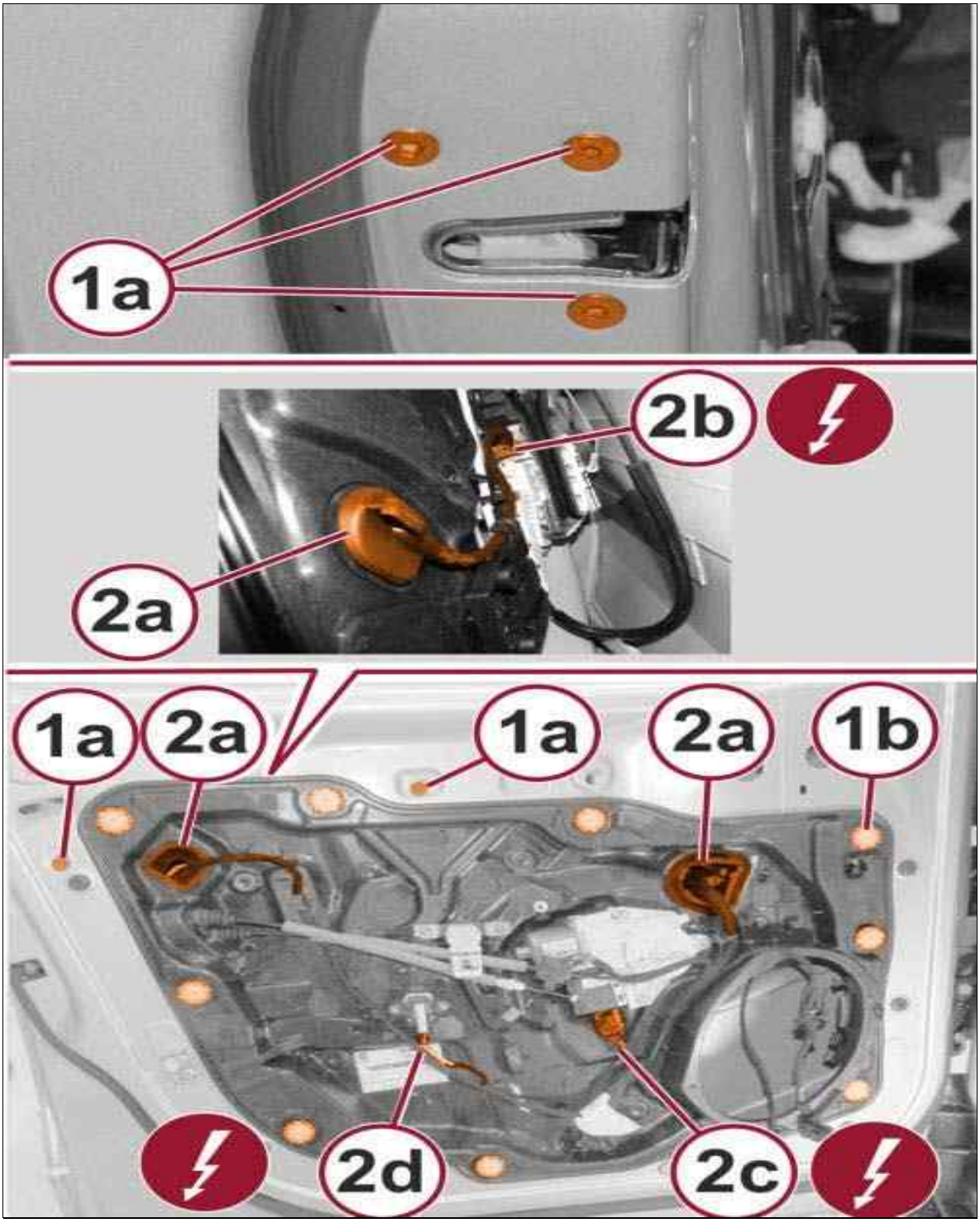
Fig 1: Door Gasket & Screw



Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable.
2. Remove the front door glass. Refer to GLASS, DOOR, REMOVAL AND INSTALLATION .
3. Remove the exterior handle. Refer to HANDLE, EXTERIOR, REMOVAL AND INSTALLATION .
4. Remove the door gasket (1).
5. Loosen the screw (2).

Fig 2: Side Curtain Air Bags Sensor, Screws, Retainers, Grommets & Connectors



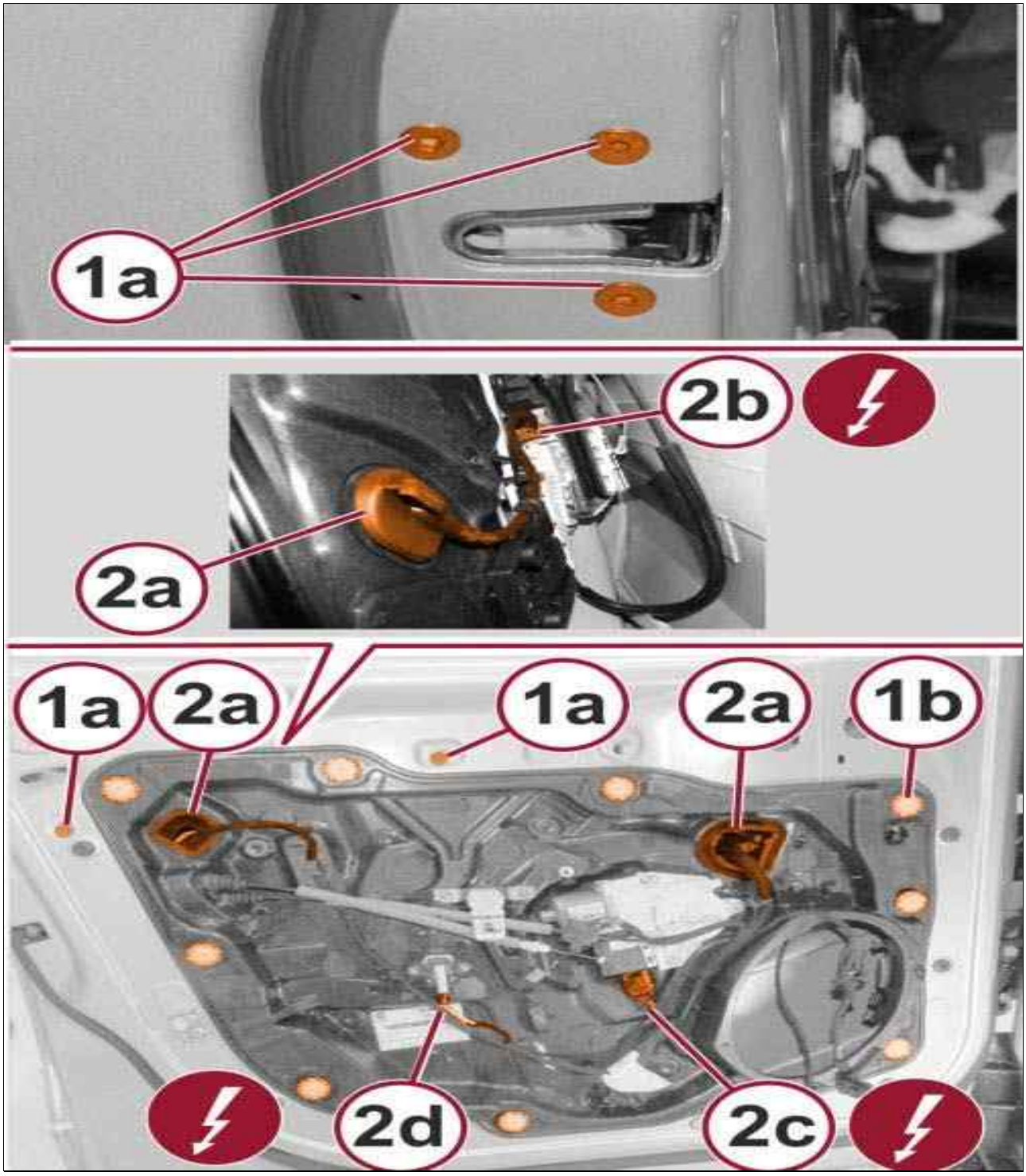
Courtesy of CHRYSLER GROUP, LLC

6. Remove the door latch mounting screws (1a).
7. Release the rotating retainers (1b) securing the carrier plate.
8. Position the carrier plate slightly away from the front door.
9. Release the wiring harness grommets (2a).

10. Disconnect the latch wiring connector (2b), the window motor wiring connector (2c) and the side curtain air bags sensor (2d).
11. Release the wiring harness from the routing retainers.
12. Remove the entire carrier plate including the latch and external handle support.

DOOR - FRONT > PLATE, CARRIER > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Side Curtain Air Bags Sensor, Screws, Retainers, Grommets & Connectors

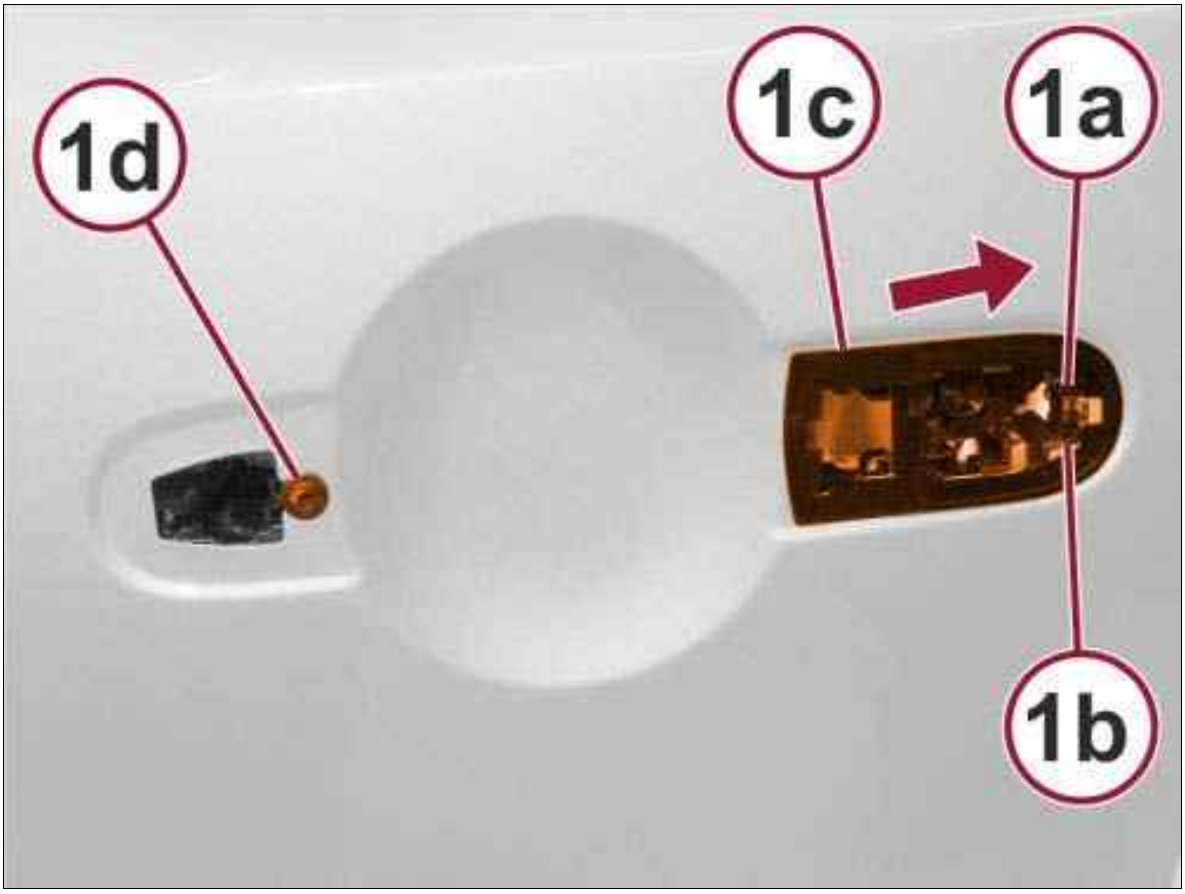


Courtesy of CHRYSLER GROUP, LLC

1. Position the outer handle support bracket (1a) inside the door.
2. Push in the direction of the arrow, connecting it to the handle hole (1b) on the door.
3. Install the gasket (1c).
4. Tighten the screw (1d) securely.

5. Position the carrier plate and secure by tightening the rotating retainers.

Fig 2: Outer Handle Support Bracket, Handle Hole, Gasket & Screw

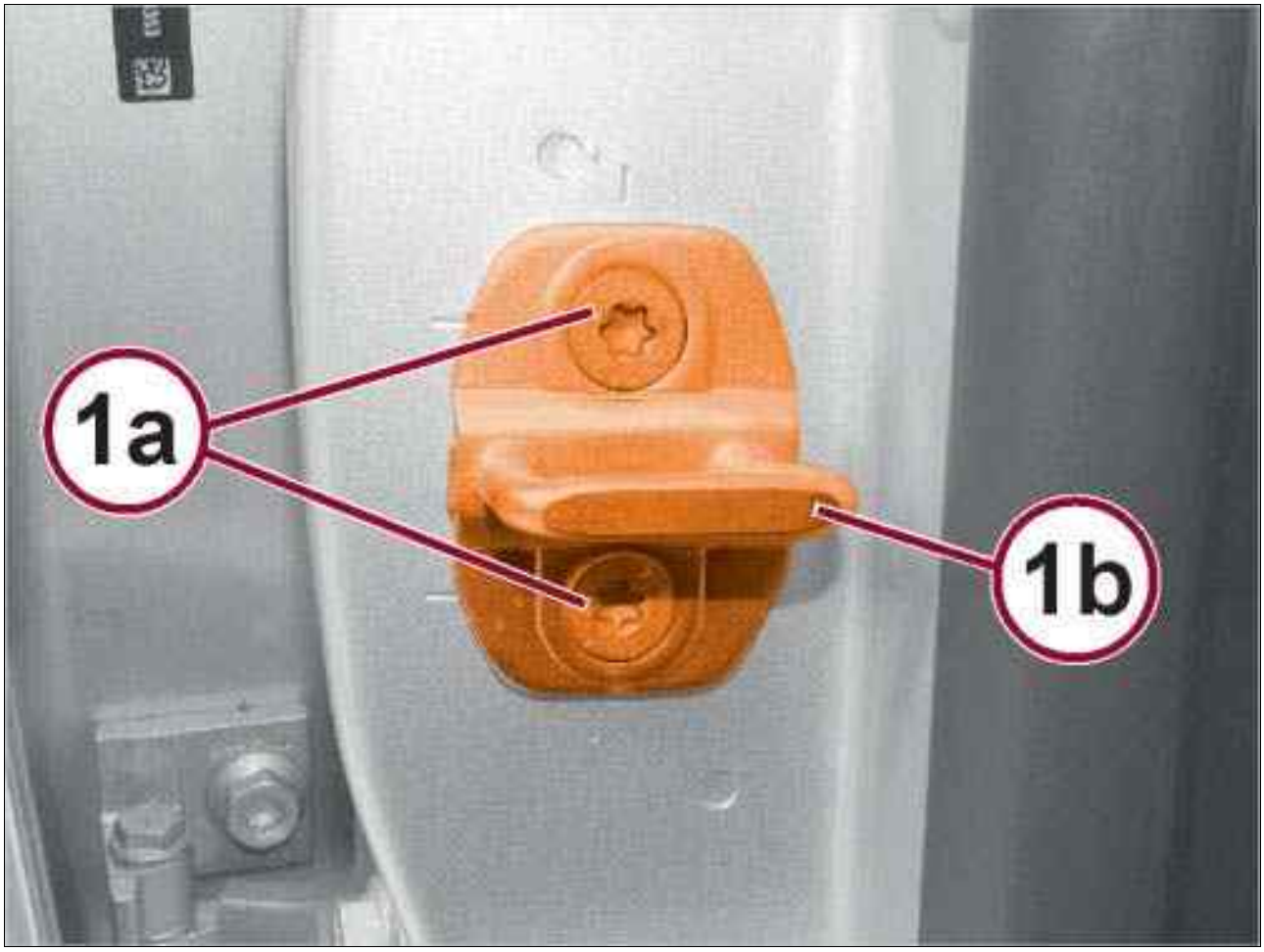


Courtesy of CHRYSLER GROUP, LLC

6. Position the outer handle support bracket (1a) inside the door.
7. Push in the direction of the arrow, connecting it to the handle hole (1b) on the door.
8. Install the gasket (1c).
9. Tighten the screw (1d) securely.
10. Install the exterior handle. Refer to HANDLE, EXTERIOR, REMOVAL AND INSTALLATION .
11. Install the front door glass. Refer to GLASS, DOOR, REMOVAL AND INSTALLATION .
12. Connect the battery negative cable.

DOOR - FRONT > STRIKER, DOOR LATCH > ADJUSTMENTS

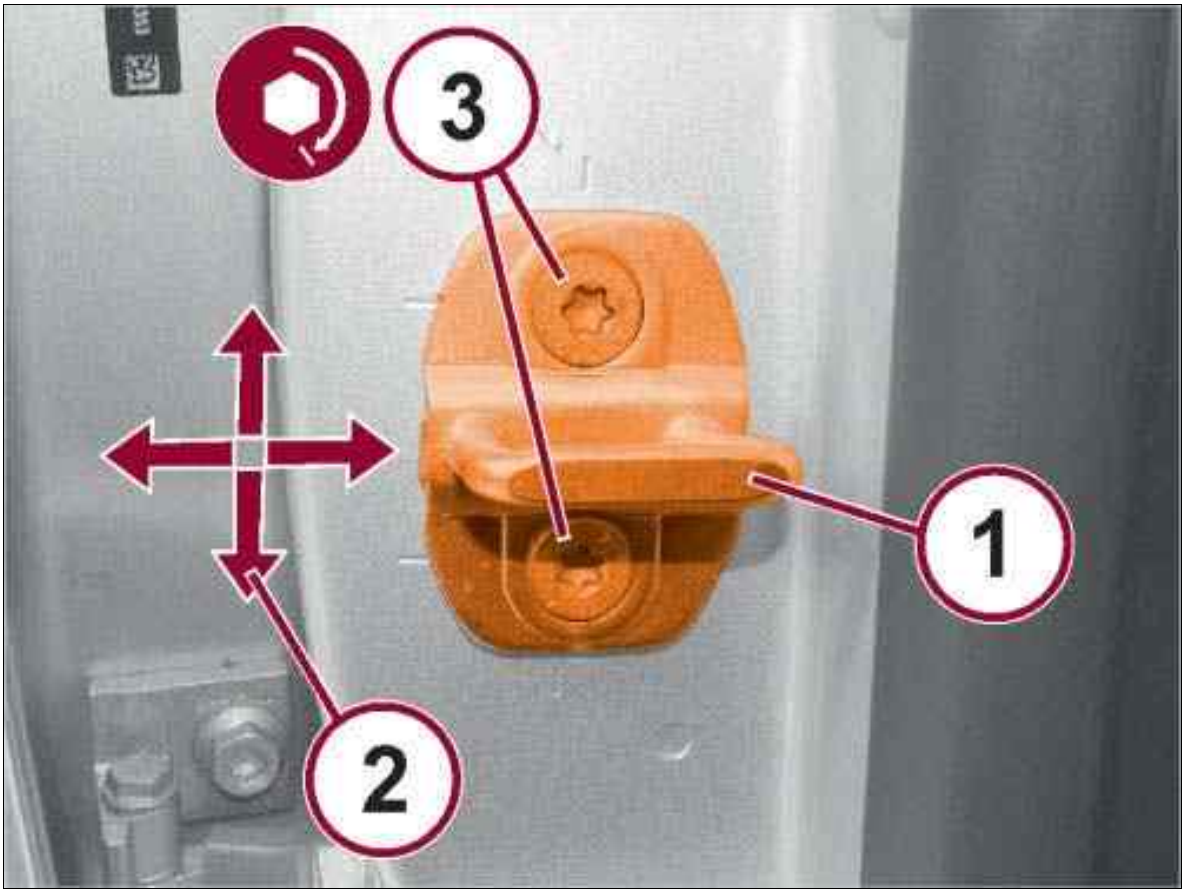
Fig 1: Striker & Screws



Courtesy of CHRYSLER GROUP, LLC

1. Loosen the screws (1a) of the striker (1b).

Fig 2: Striker Adjustment

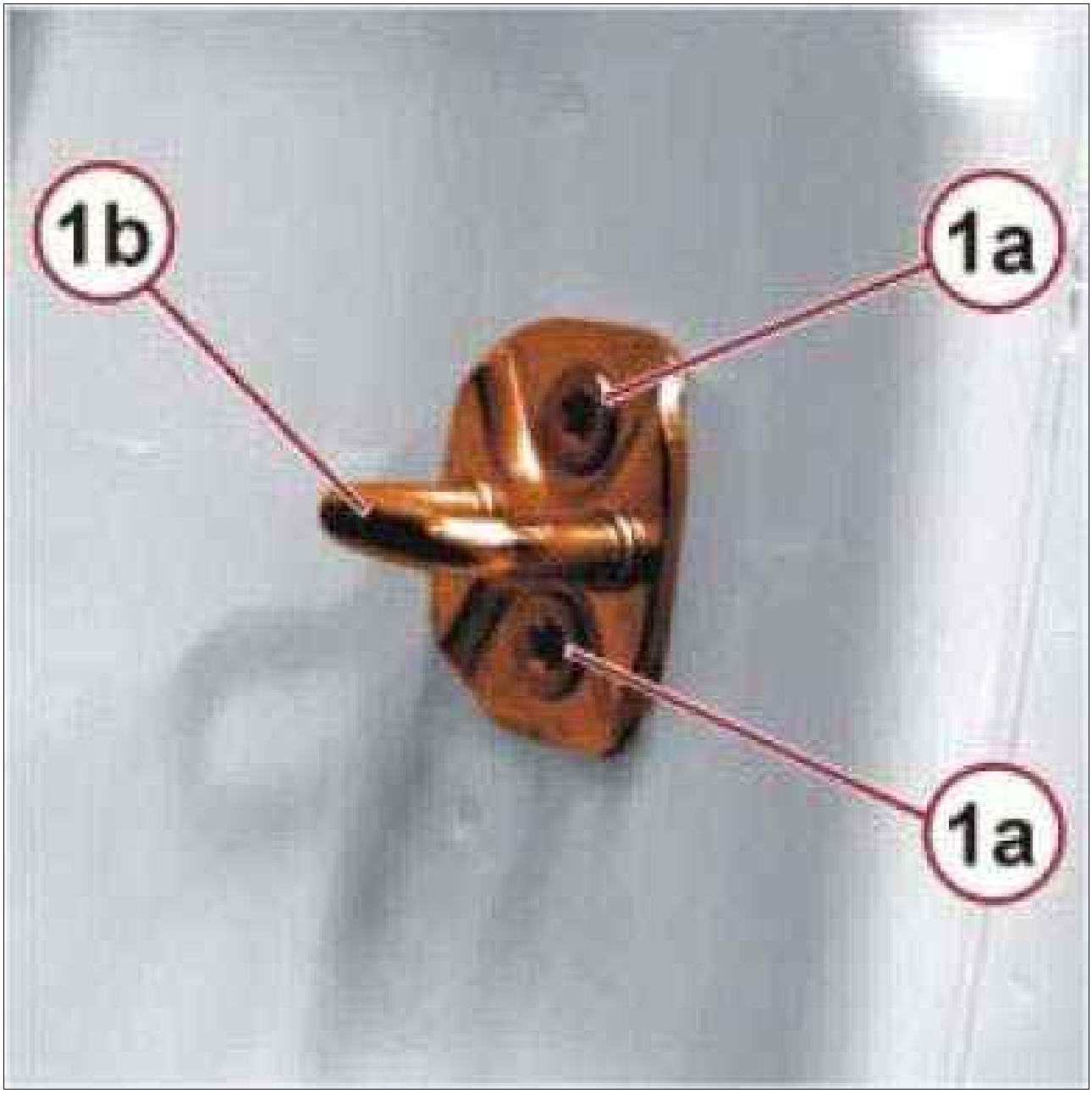


Courtesy of CHRYSLER GROUP, LLC

2. Move the striker (1) into the correct position.
3. The arrows (2) indicated the allowable movements.
4. Tighten the screws (3) to the proper specification. Refer to SPECIFICATIONS .
5. Check the operation of the door and repeat adjustments as necessary.

DOOR - FRONT > STRIKER, DOOR LATCH > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Striker & Bolts

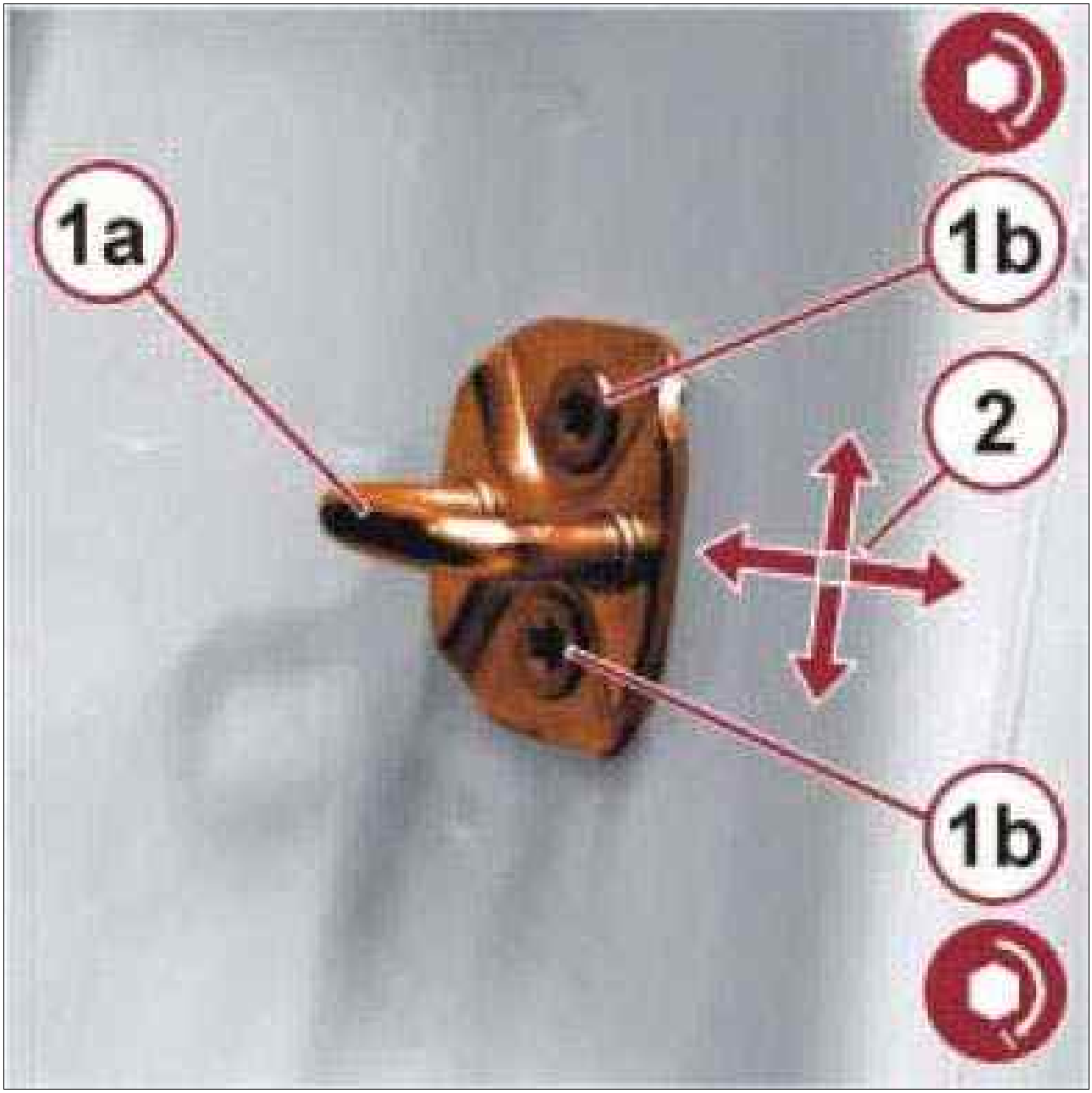


Courtesy of CHRYSLER GROUP, LLC

1. Using a grease pencil or equivalent, mark the installed position of the door latch striker (1b) in relationship to the B-pillar to aid installation.
2. Remove the bolts (1a) and remove the striker (1b).

DOOR - FRONT > STRIKER, DOOR LATCH > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Striker Adjustment



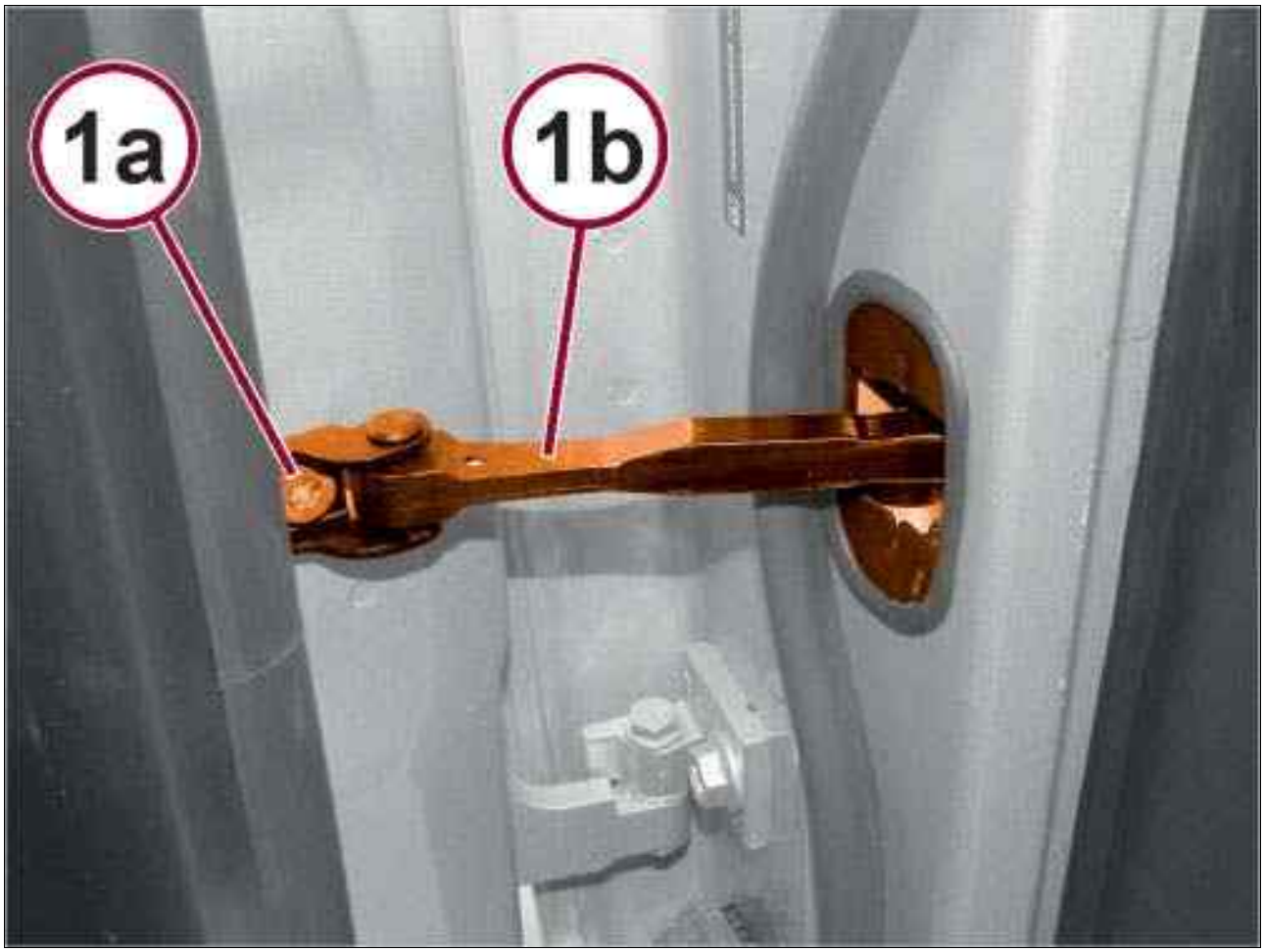
Courtesy of CHRYSLER GROUP, LLC

1. Place the striker (1a) in position and partially tighten the bolts (1b).
2. Move the striker into the correct position, using the slotted openings in the bolts. The arrows (2) indicate the possible movements for the adjustment.
3. Tighten the bolts (1b) to the proper specification. Refer to SPECIFICATIONS .
4. Check that the striker and the door lock are correctly coupled and that the alignment is correct with the door closed.

DOORS - REAR > CHECK, DOOR > REMOVAL AND INSTALLATION > REMOVAL AND

INSTALLATION > REMOVAL

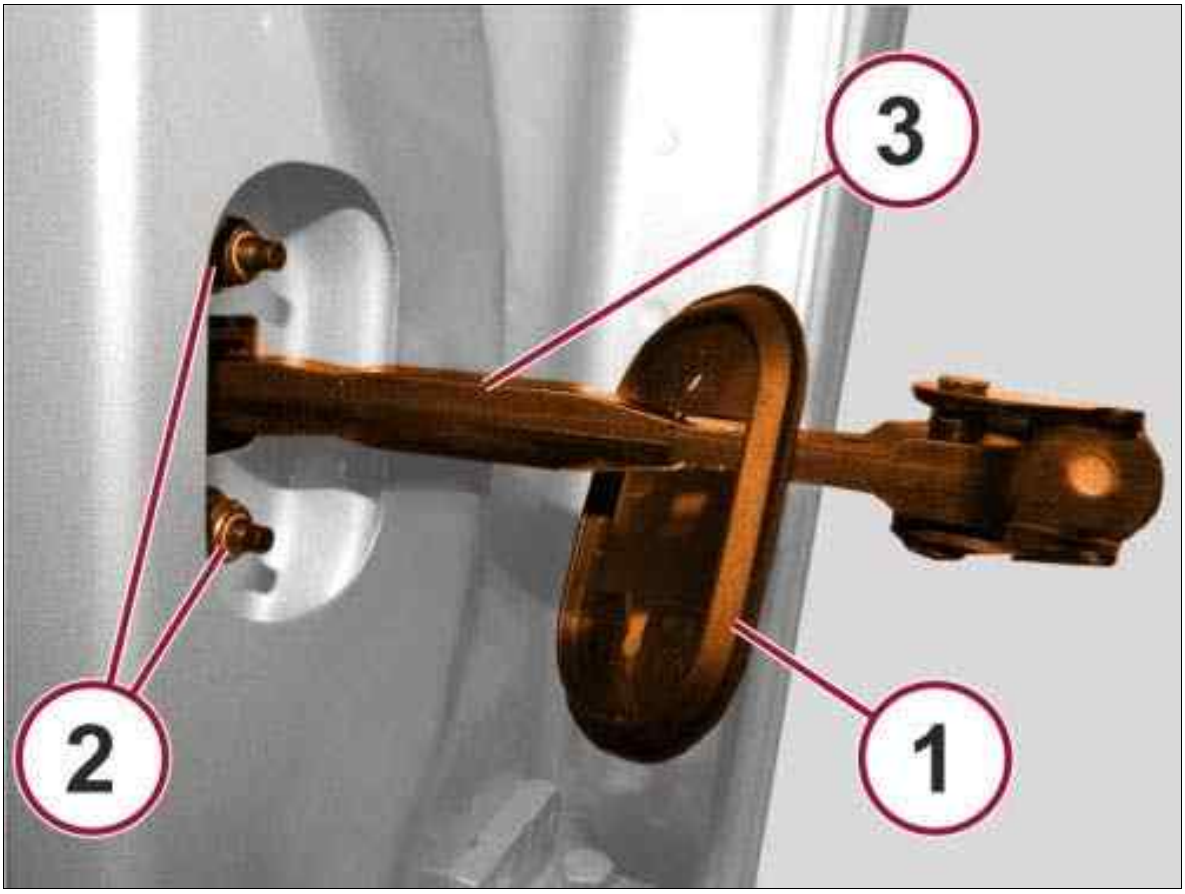
Fig 1: Door Check & Screw



Courtesy of CHRYSLER GROUP, LLC

1. Remove the screw (1a) securing the door check (1b) to the B-pillar.
2. Close the door to retract the door check (1b).

Fig 2: Door Check, Seal & Nuts

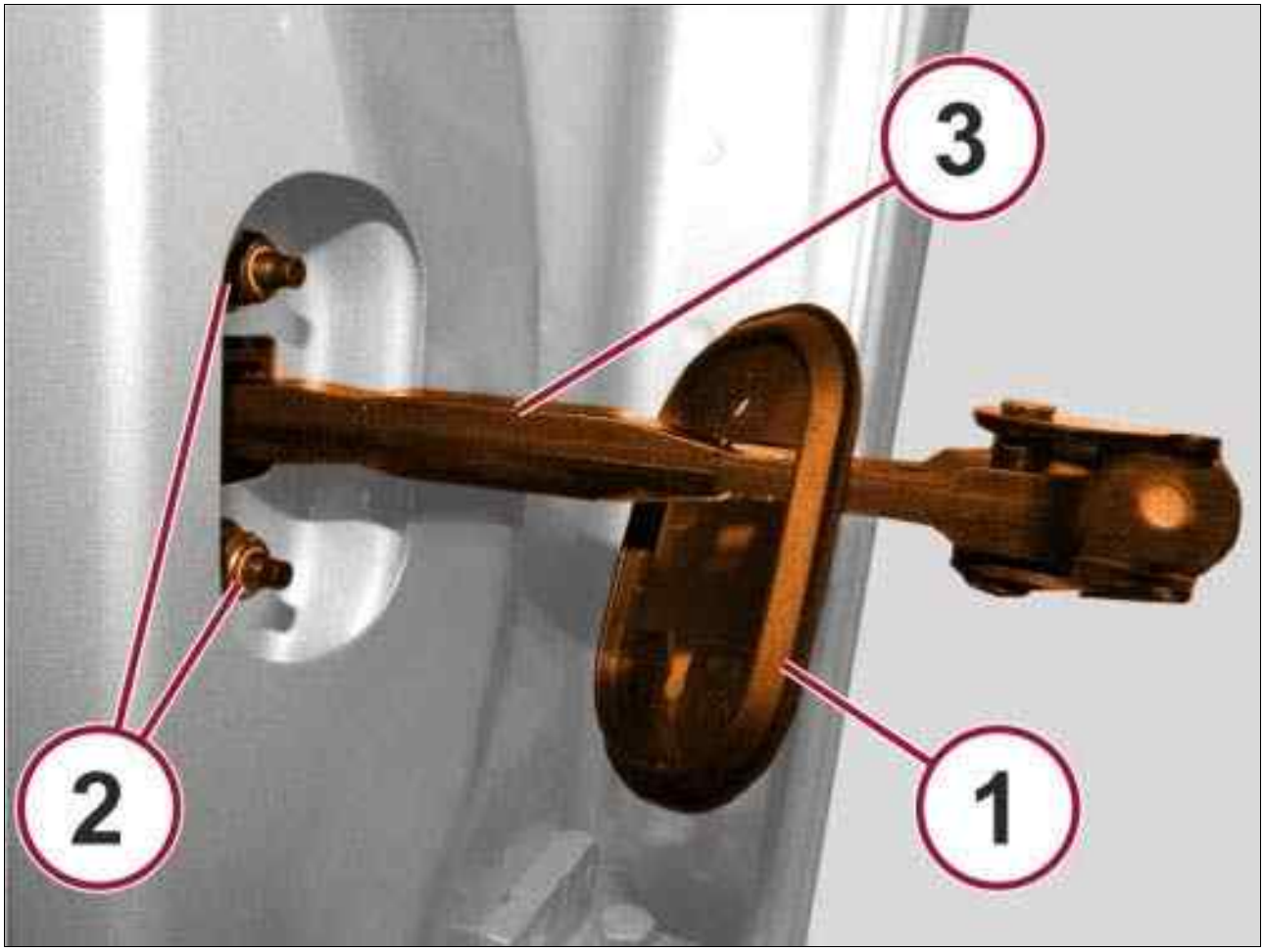


Courtesy of CHRYSLER GROUP, LLC

3. Remove the door trim panel.
4. Remove the seal (1) from the door.
5. Remove the mounting nuts (2) securing the door check (3) to the door.
6. Remove the door check (3) from the door.

DOORS - REAR > CHECK, DOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

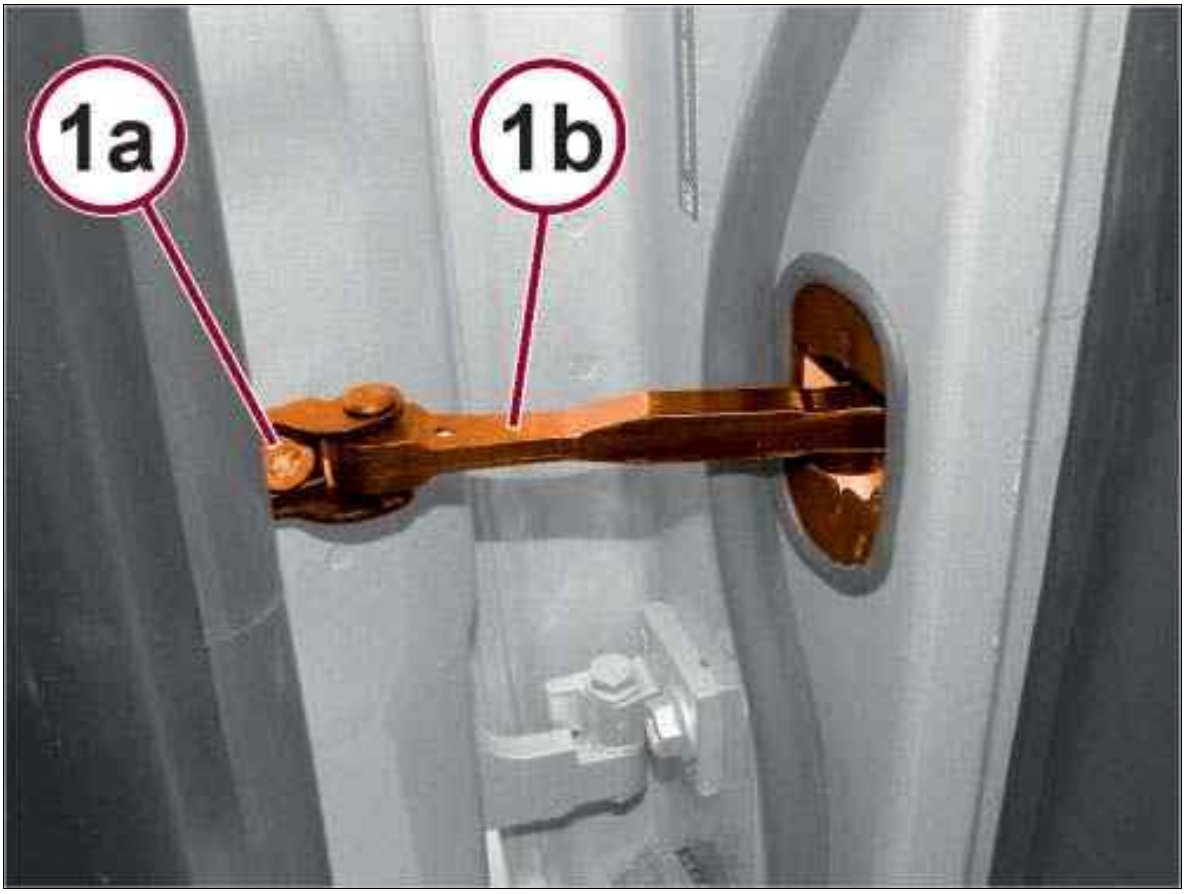
Fig 1: Door Check, Seal & Nuts



Courtesy of CHRYSLER GROUP, LLC

1. Position the door check (3), tighten the mounting nuts (2) securely and insert the seal (1).
2. Install the door trim panel.

Fig 2: Door Check & Screw

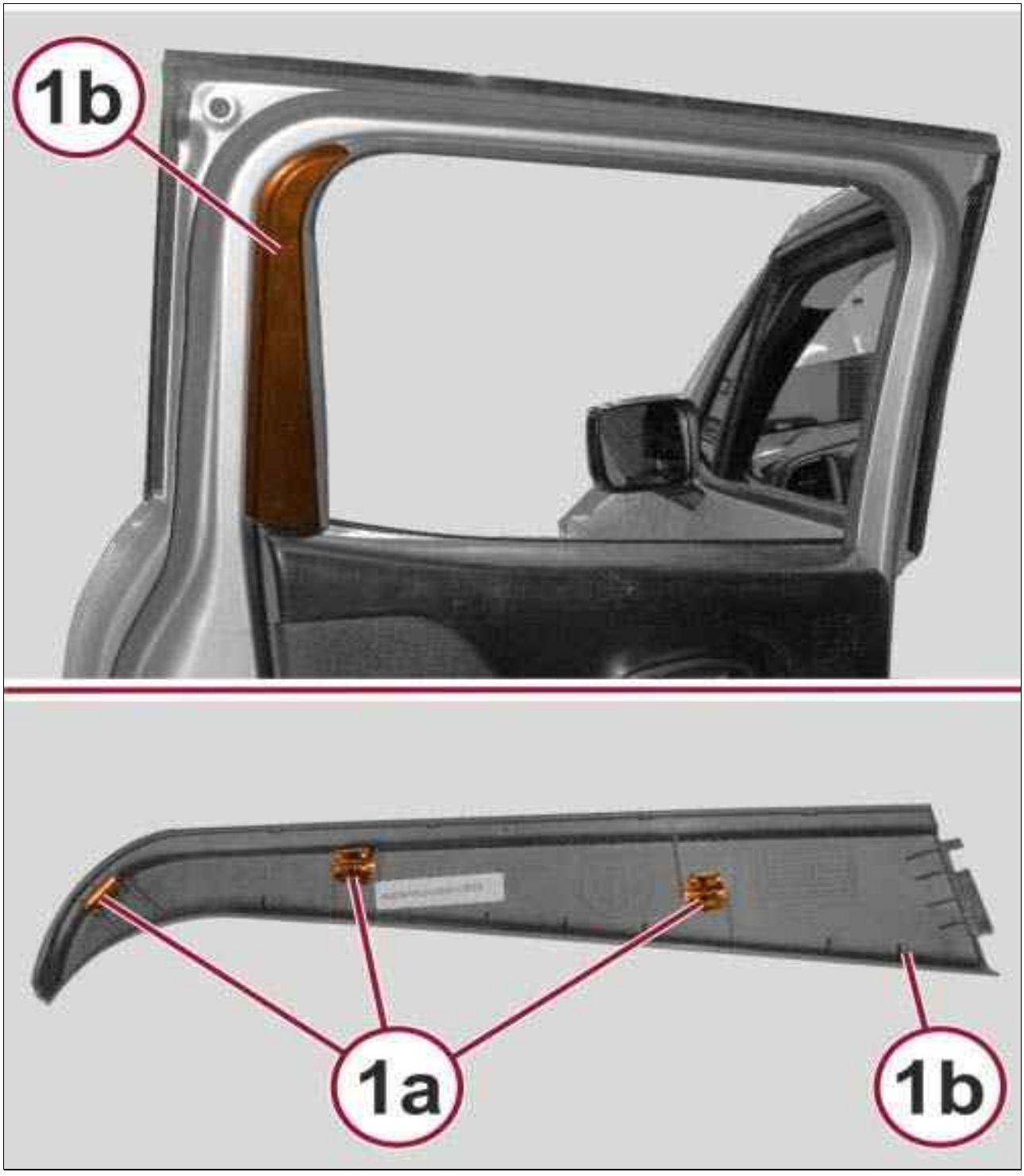


Courtesy of CHRYSLER GROUP, LLC

3. Position the check arm (1b) back into place and install the bolt (1a).

DOORS - REAR > DOOR, REAR > DISASSEMBLY AND ASSEMBLY > DISASSEMBLY AND ASSEMBLY > DISASSEMBLY

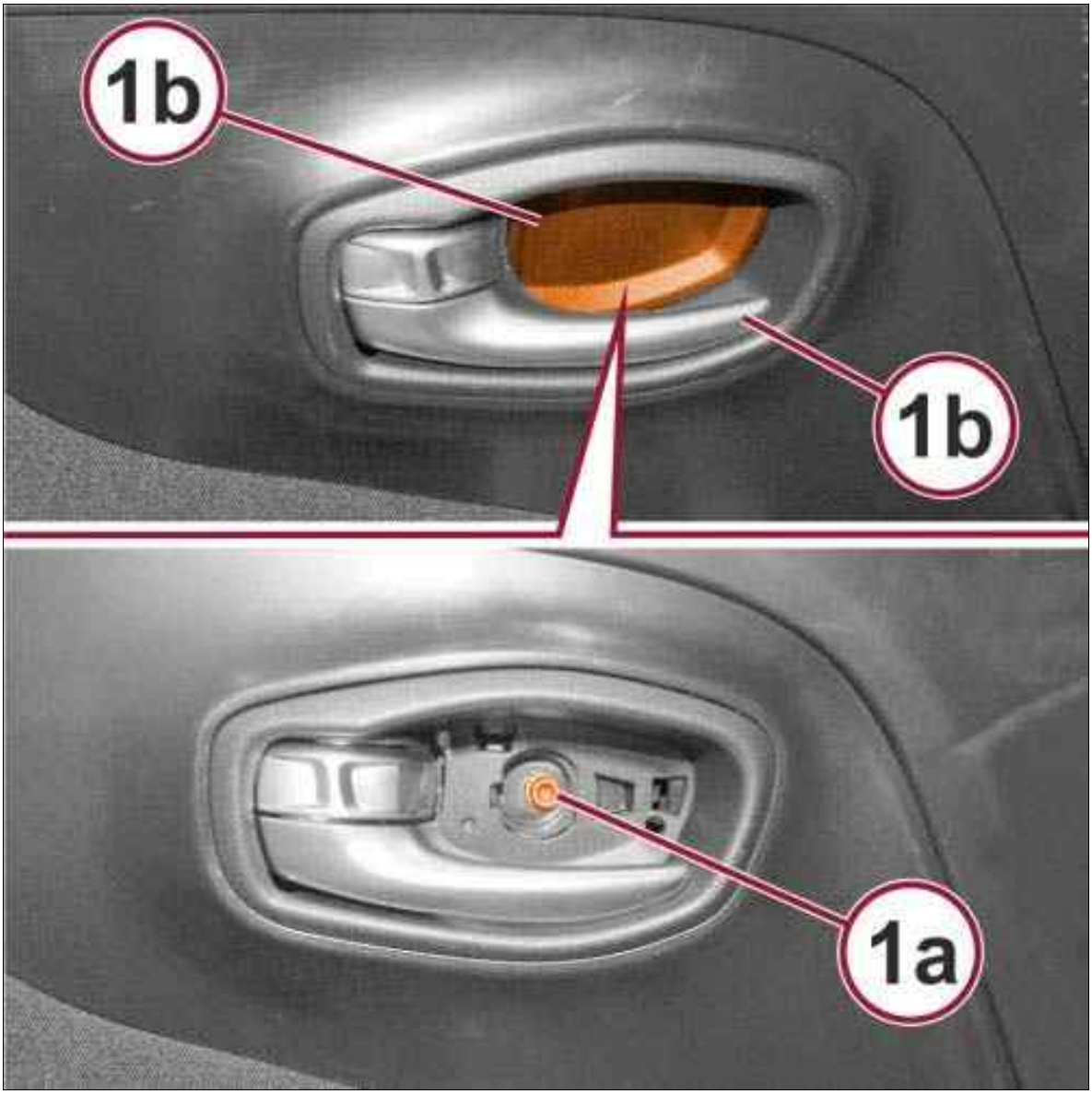
Fig 1: Inner Door Trim & Retainers



Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the battery negative cable.
2. Using trim stick (special tool #C-4755, Trim Stick) or equivalent, release the retainers (1a).
3. Remove the inner door trim (1b) from the rear door.

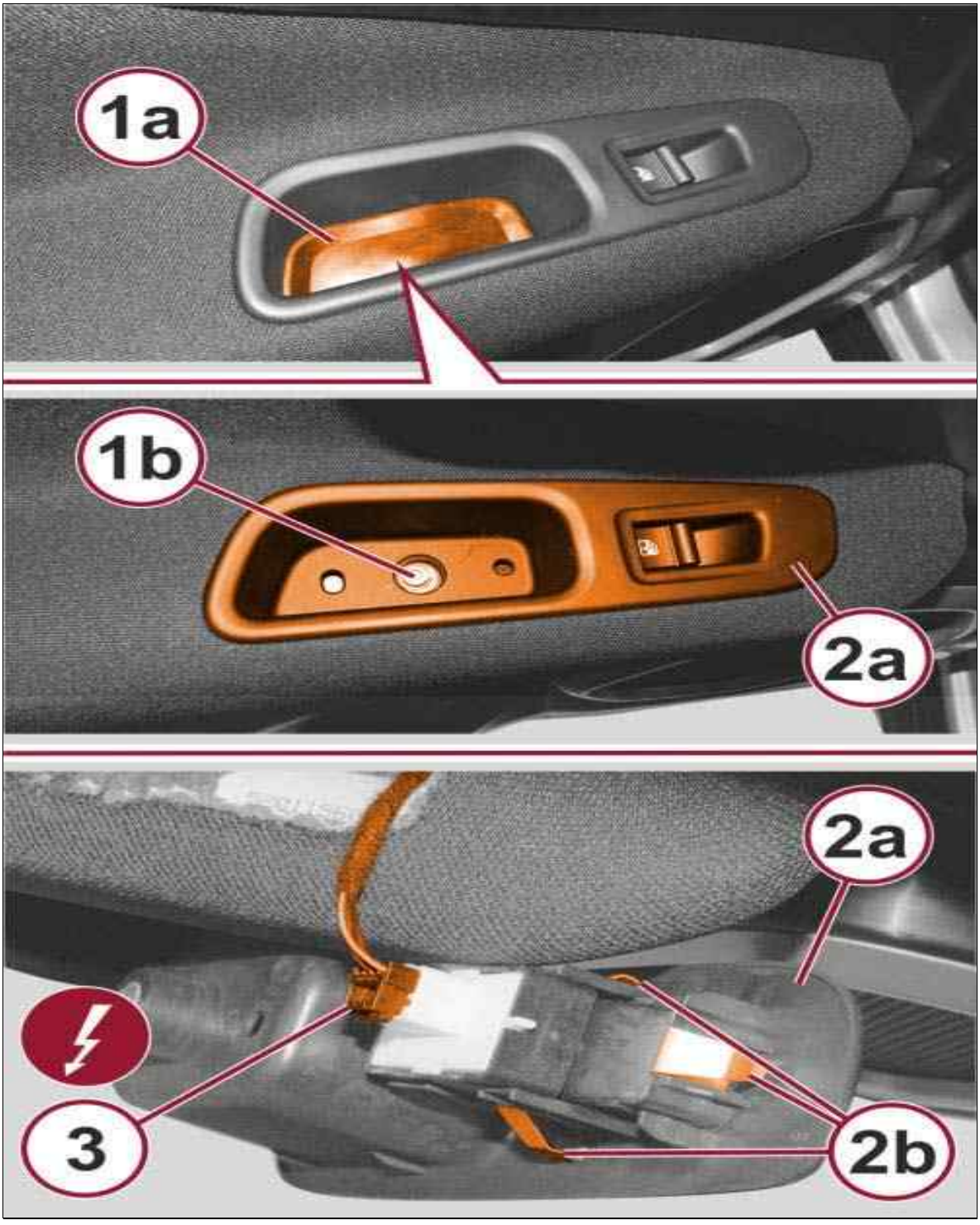
Fig 2: Inside Handle, Cover & Screw



Courtesy of CHRYSLER GROUP, LLC

4. Pull the inside handle and with the use of an appropriate tool, remove the cover (1b).
5. Remove the screw (1a).

Fig 3: Power Window Switch Bezel, Grab Handle Pad, Fastener, Retainers & Connector

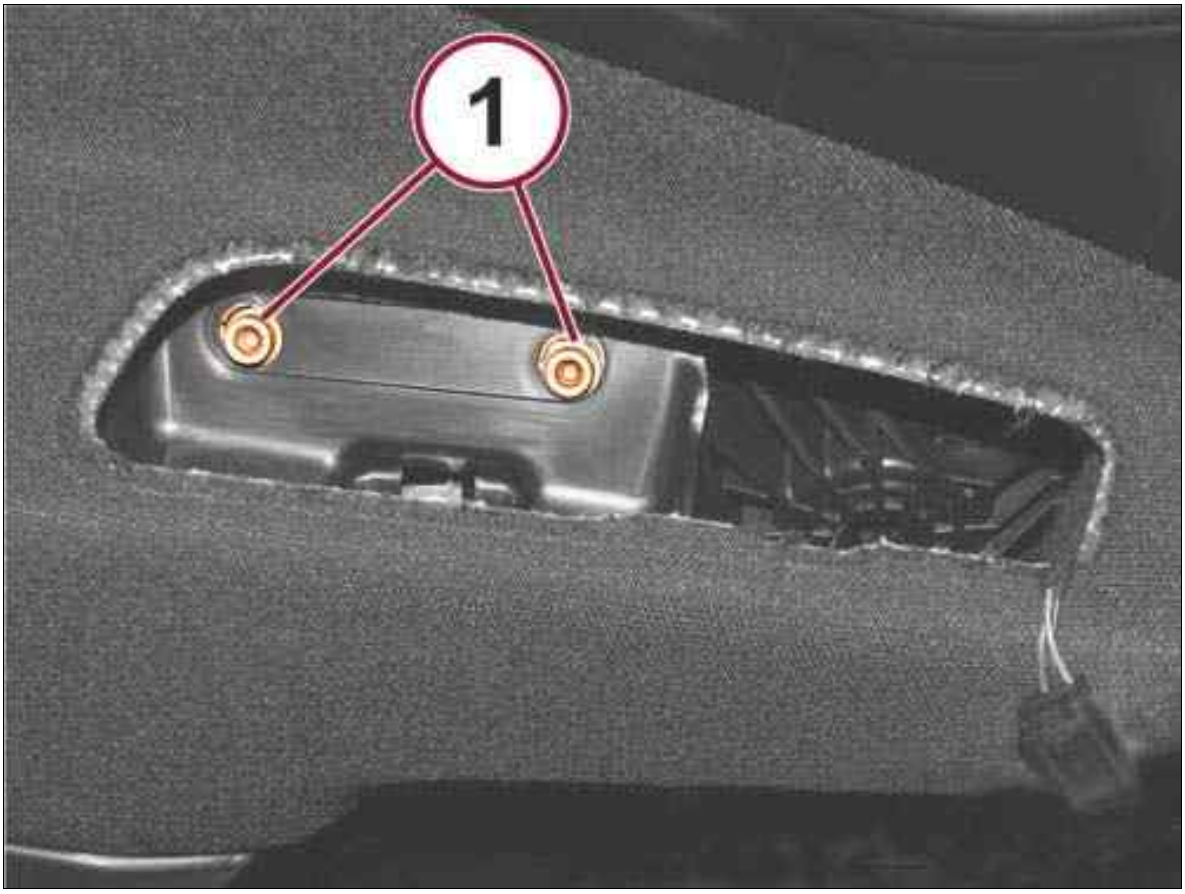


Courtesy of CHRYSLER GROUP, LLC

6. Remove the grab handle pad (1a).
7. Remove the fastener (1b).
8. With the use of a trim stick or equivalent, release the retainers (2b) securing the power window switch bezel (2a) to the door trim pad.
9. Disconnect the power window switch electrical connector (3).

10. Remove the power window switch bezel (2a).

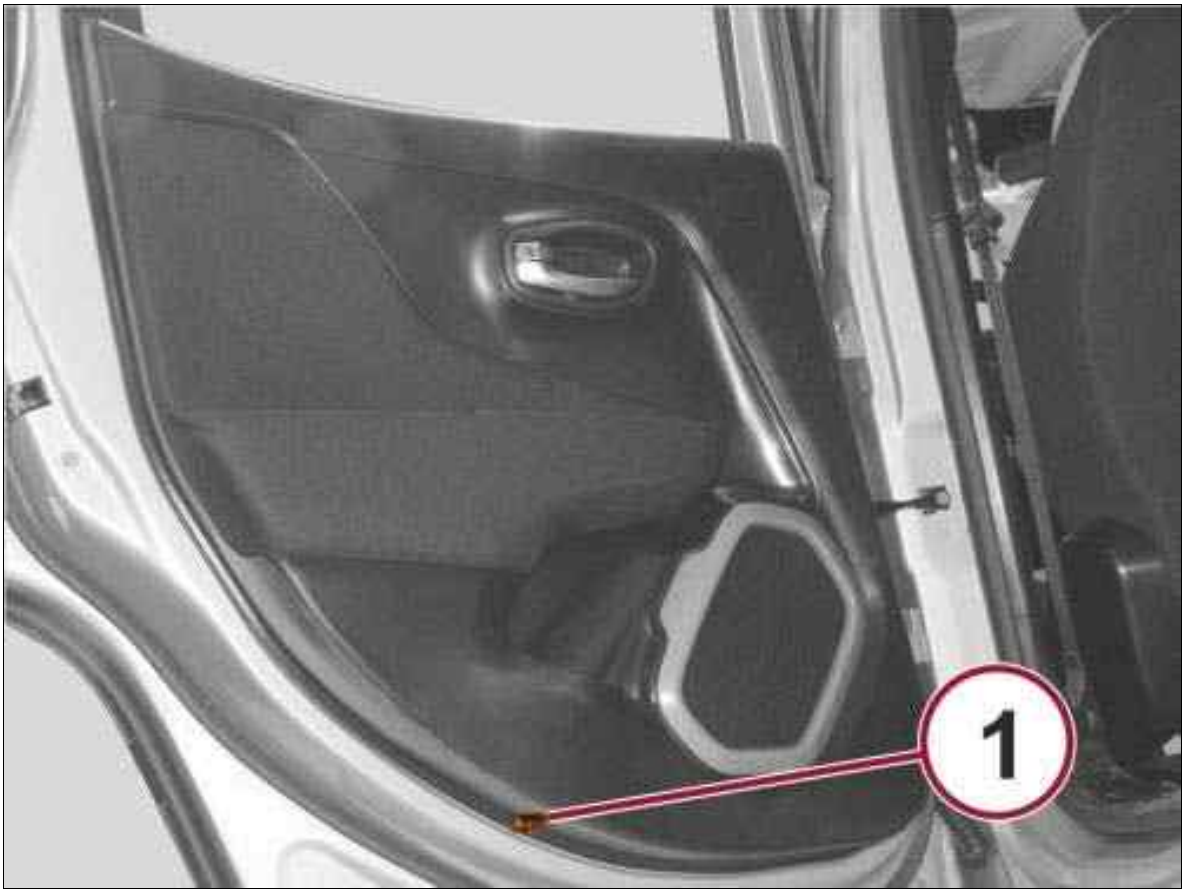
Fig 4: Rear Door Armrest Screws



Courtesy of CHRYSLER GROUP, LLC

11. Remove the screws (1) from inside the rear door armrest.

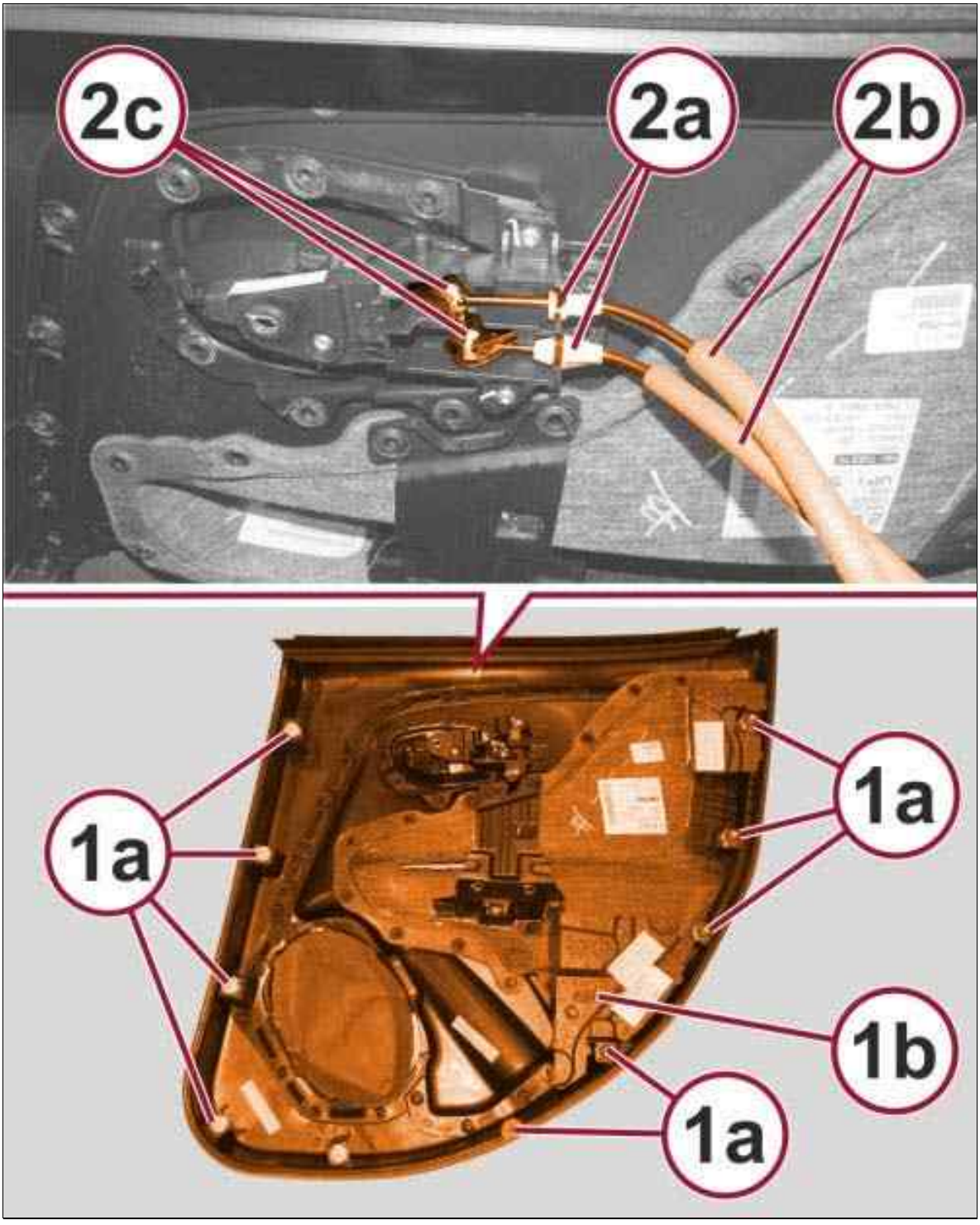
Fig 5: Door Trim Panel Screw



Courtesy of CHRYSLER GROUP, LLC

12. Remove the screw (1) from the bottom of the door trim panel.

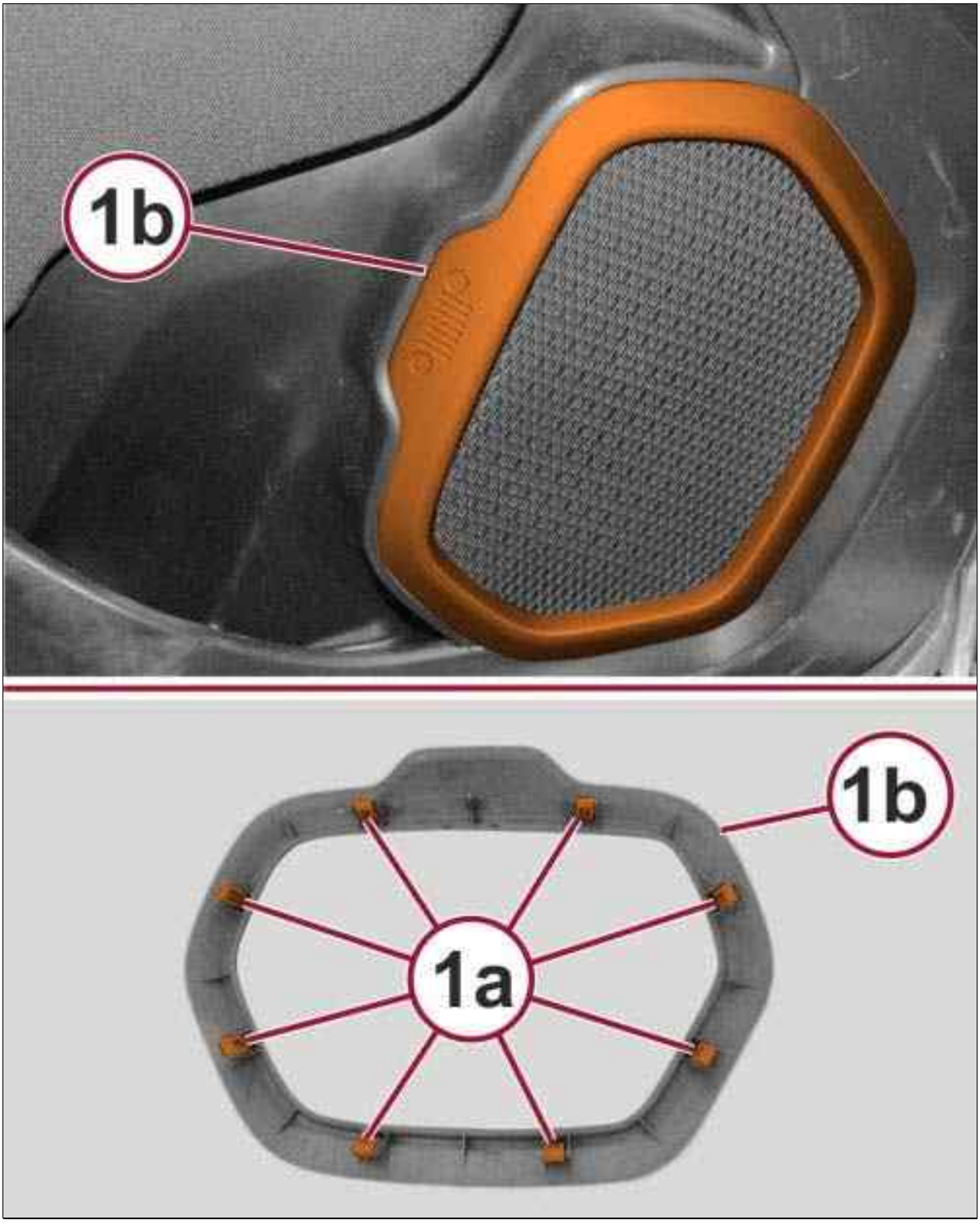
Fig 6: Door Trim Panel, Retainers, Clips & Cables



Courtesy of CHRYSLER GROUP, LLC

13. With the use of a trim stick or equivalent, release the door trim panel retainers (1a).
14. Position the door trim panel (1b) slightly away from the door.
15. Release the clips (2a) securing the cables (2b) and remove the cable ends (2c).
16. Remove the door trim panel (1b).

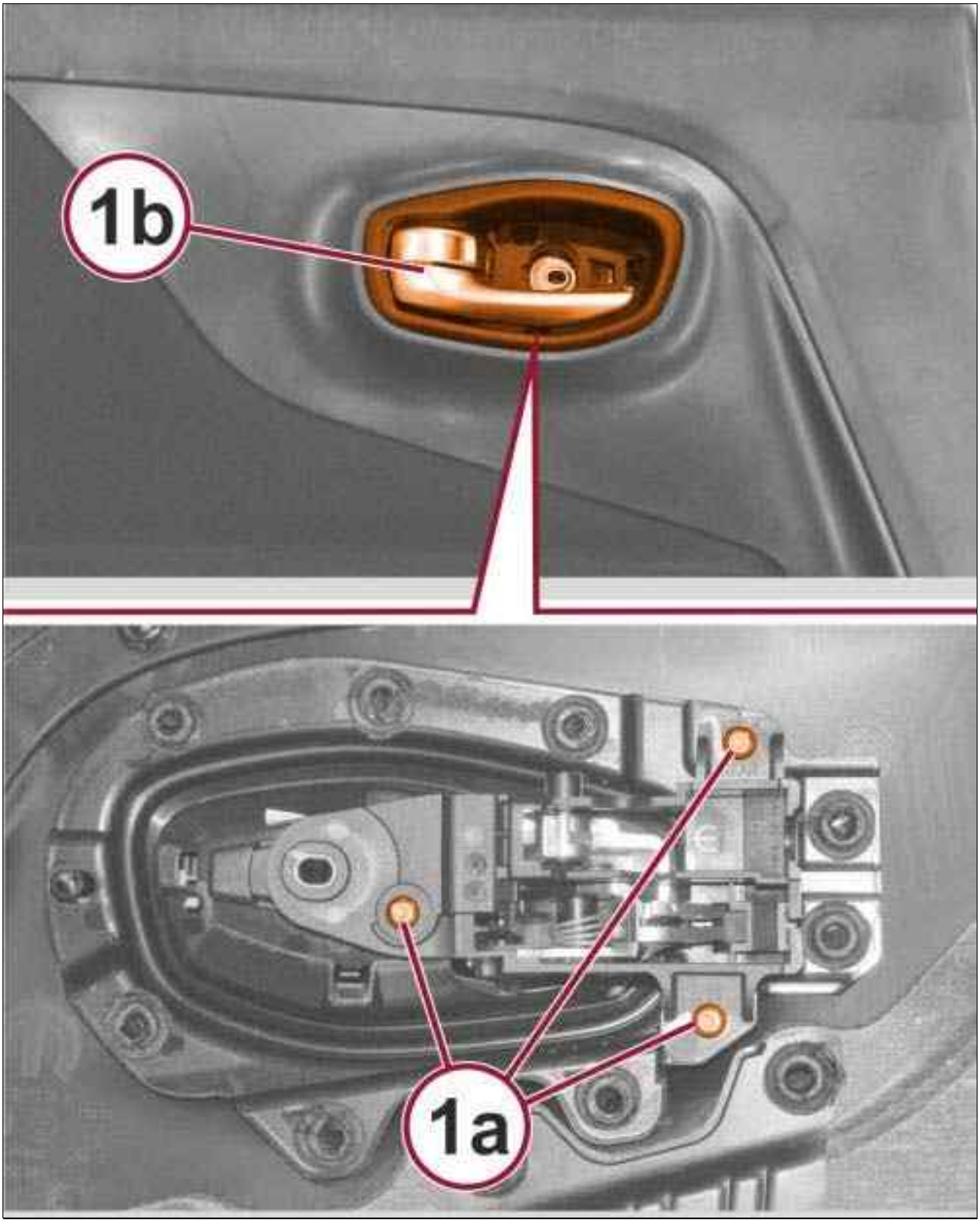
Fig 7: Speaker Trim Bezel & Retainers



Courtesy of CHRYSLER GROUP, LLC

17. With the use of a trim stick or equivalent, release the retainers (1a) securing the speaker trim bezel (1b) to the door trim panel.
18. Remove the speaker trim bezel (1b) from the door trim panel.

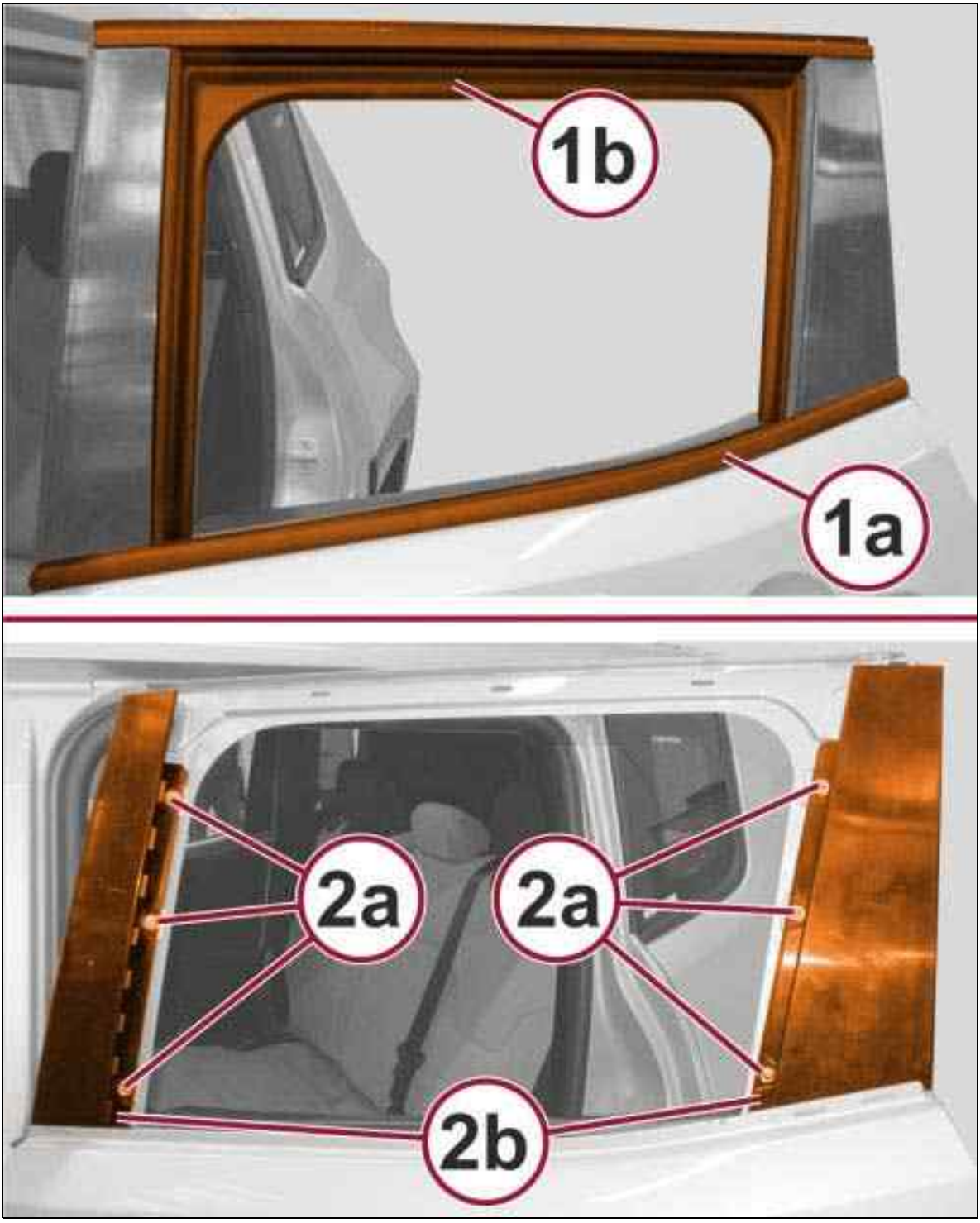
Fig 8: Inner Door Handle & Screws



Courtesy of CHRYSLER GROUP, LLC

19. Working from the inside of the door trim panel, remove the three screws (1a) and remove the inner door handle.

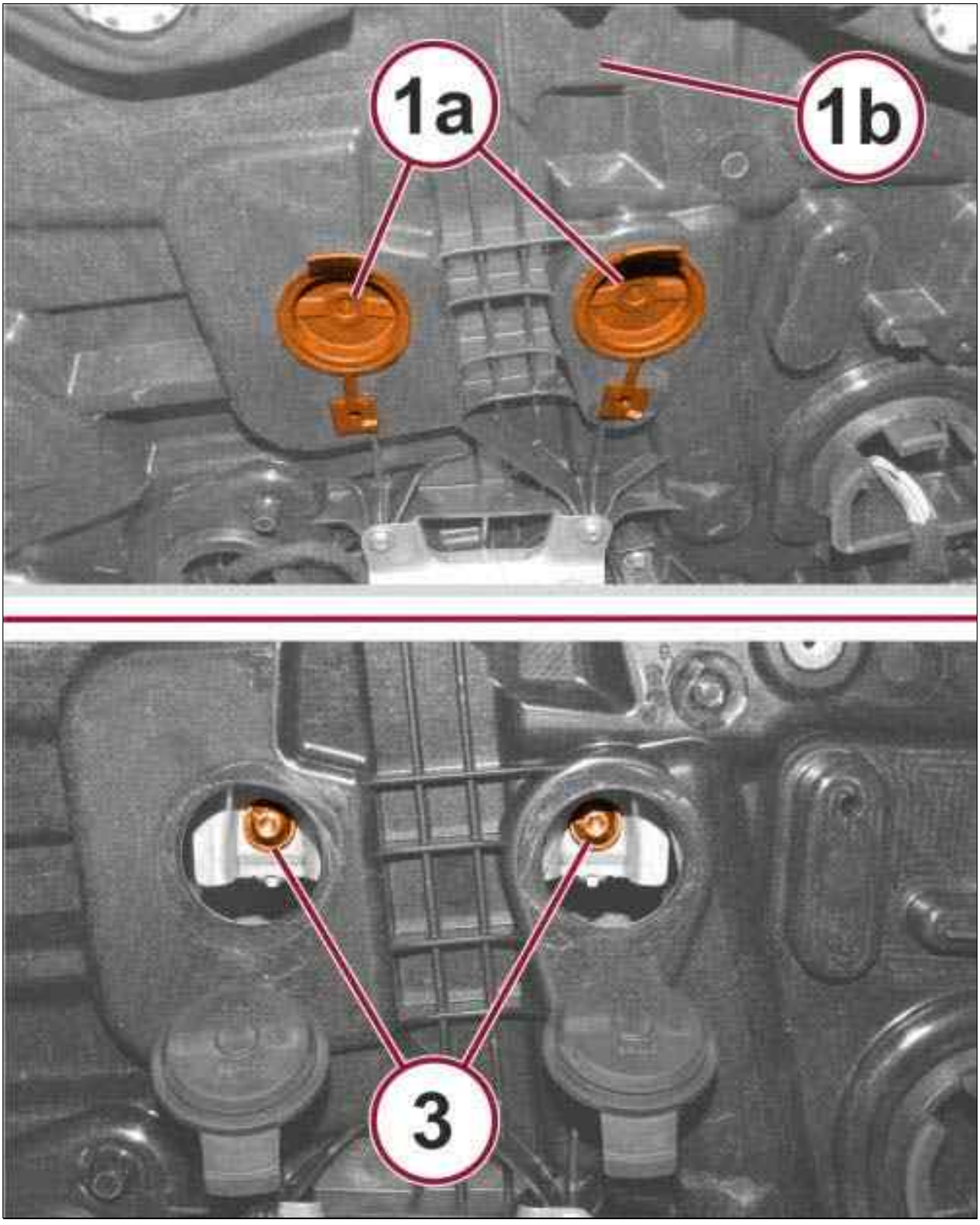
Fig 9: Outer Door Belt Molding, Glass Channel, Rear Appliques & Screws



Courtesy of CHRYSLER GROUP, LLC

20. With the use of a trim stick or equivalent, pry up on the outer door belt molding (1a).
21. Remove the door glass channel (1b).
22. Remove the screws (2a) and remove the rear door front and rear appliques (2b), releasing them from the door glass guides.

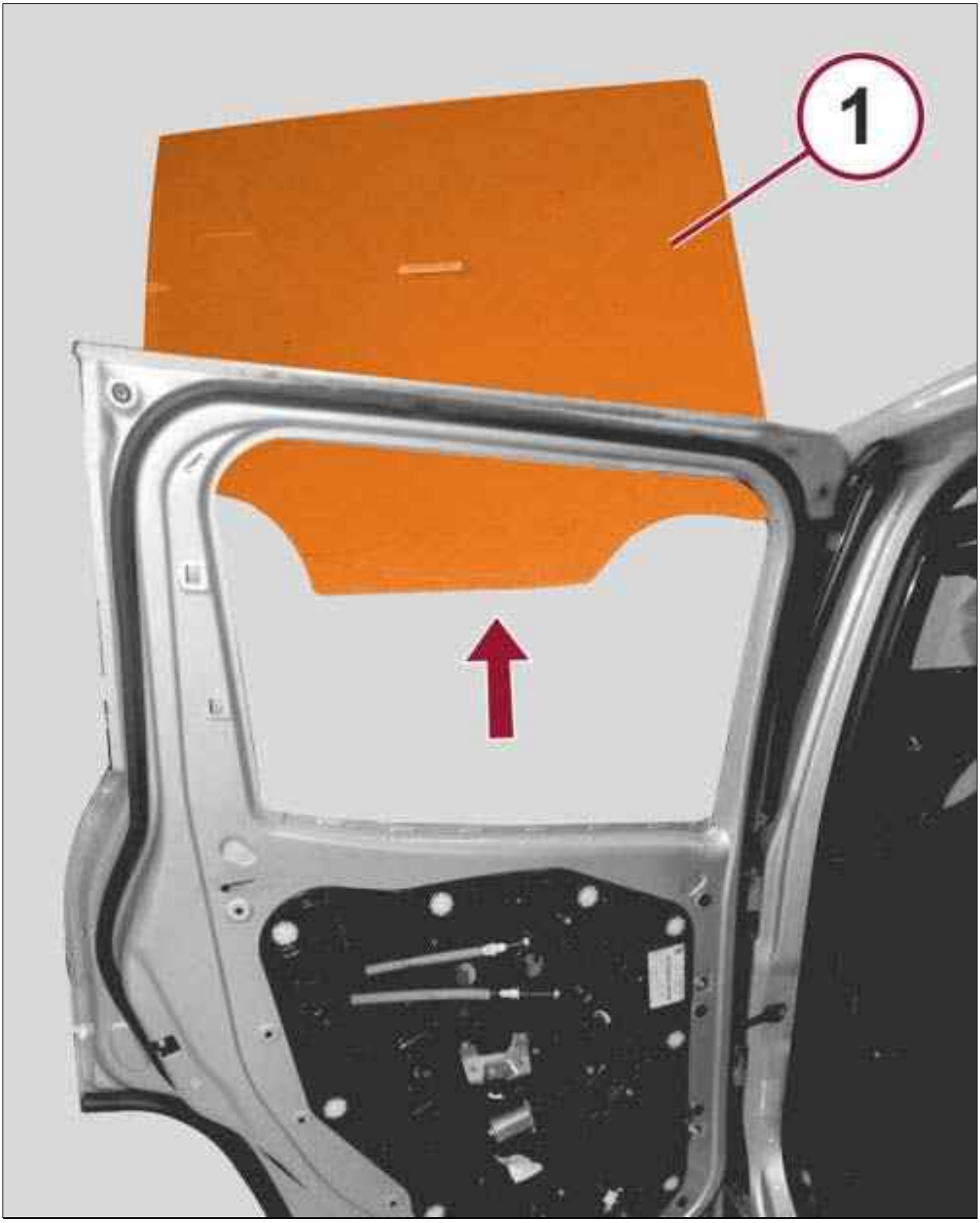
Fig 10: Rear Door Carrier Plate, Covers & Fasteners



Courtesy of CHRYSLER GROUP, LLC

23. Open the access covers (1a) located on the rear door carrier plate (1b).
24. Temporarily connect the window switch and the negative battery cable.
25. Position the glass so that the mounting fasteners (3) are aligned within the access holes.
26. Remove the mounting screws (3).

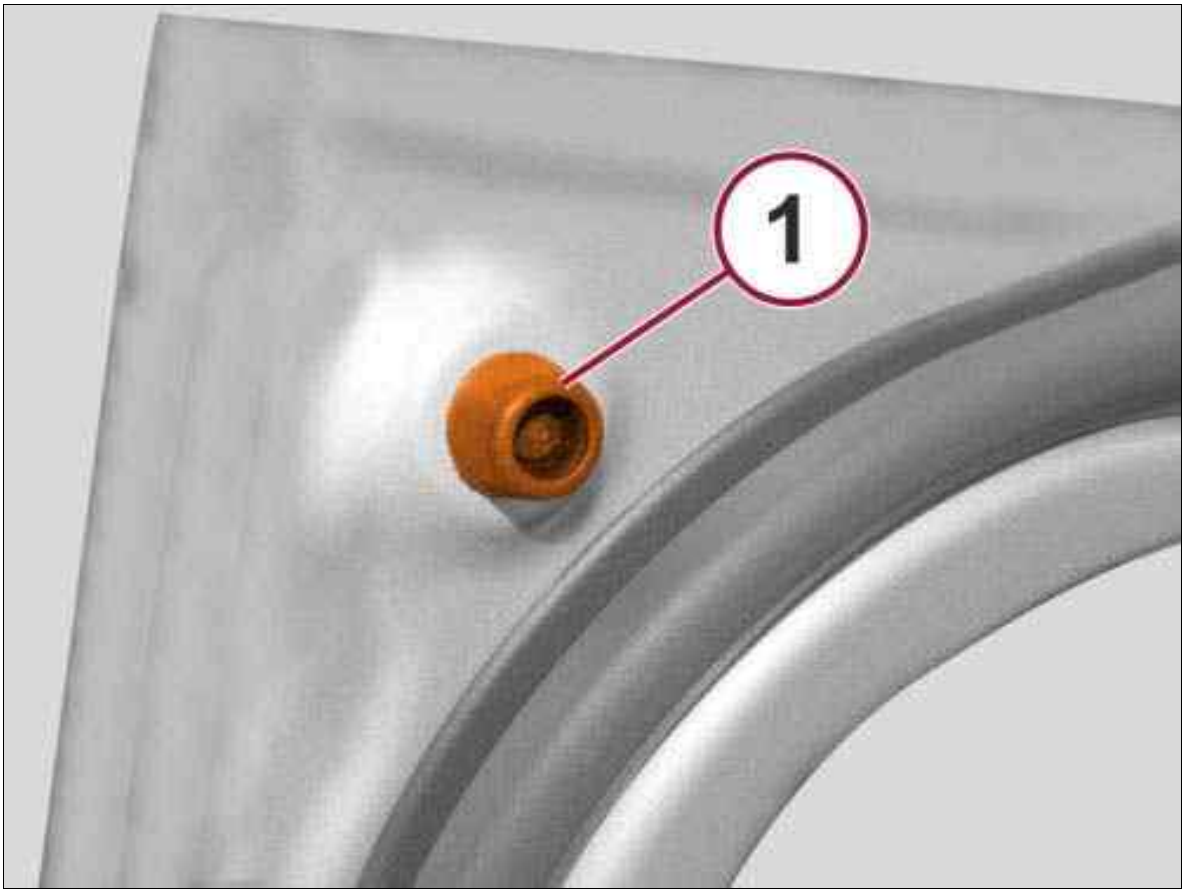
Fig 11: Rear Door Glass



Courtesy of CHRYSLER GROUP, LLC

27. Remove the rear door glass (1).

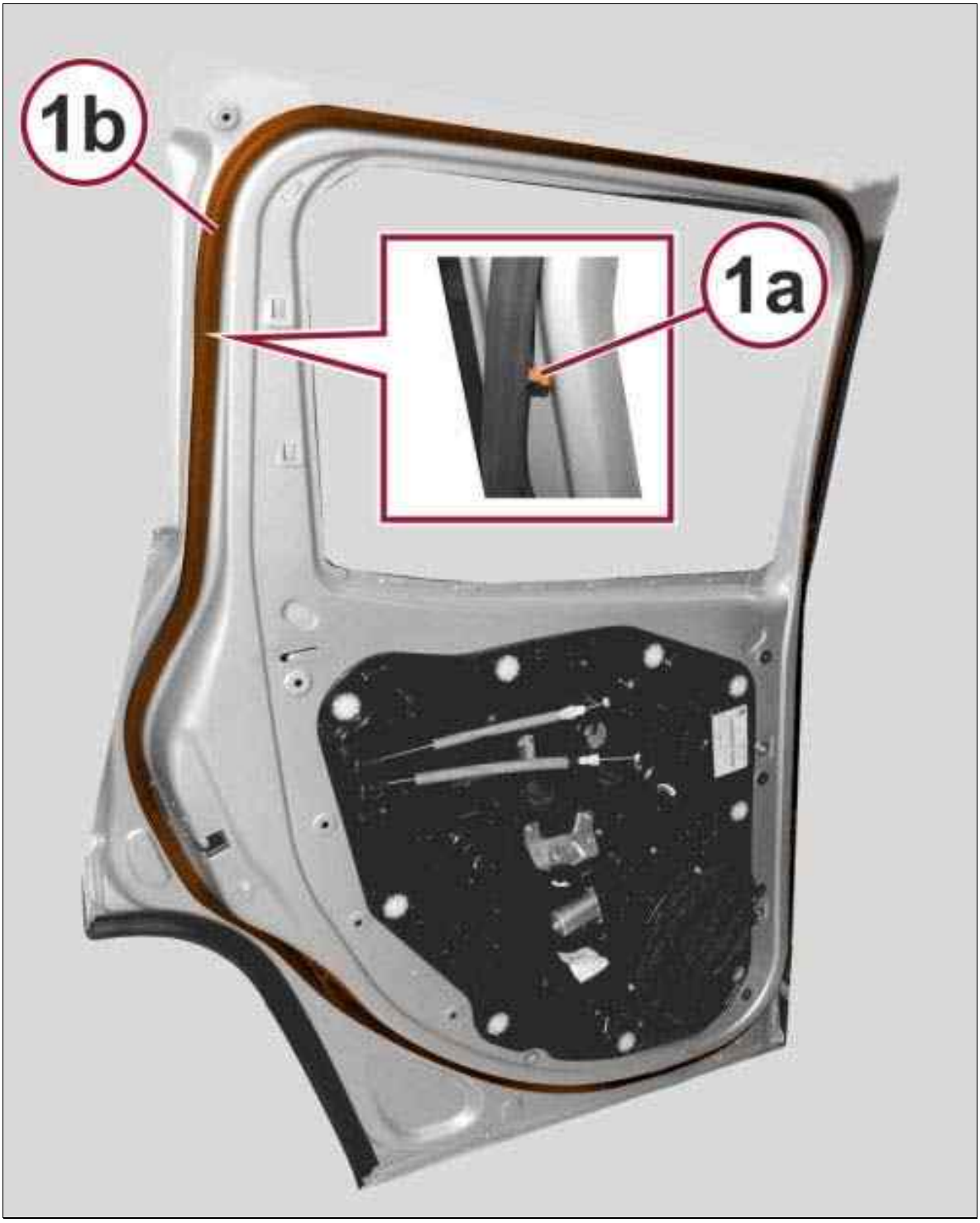
Fig 12: Rubber Stop Block



Courtesy of CHRYSLER GROUP, LLC

28. Pry off the rubber stop block.

Fig 13: Rear Door Weatherstrip & Retainers



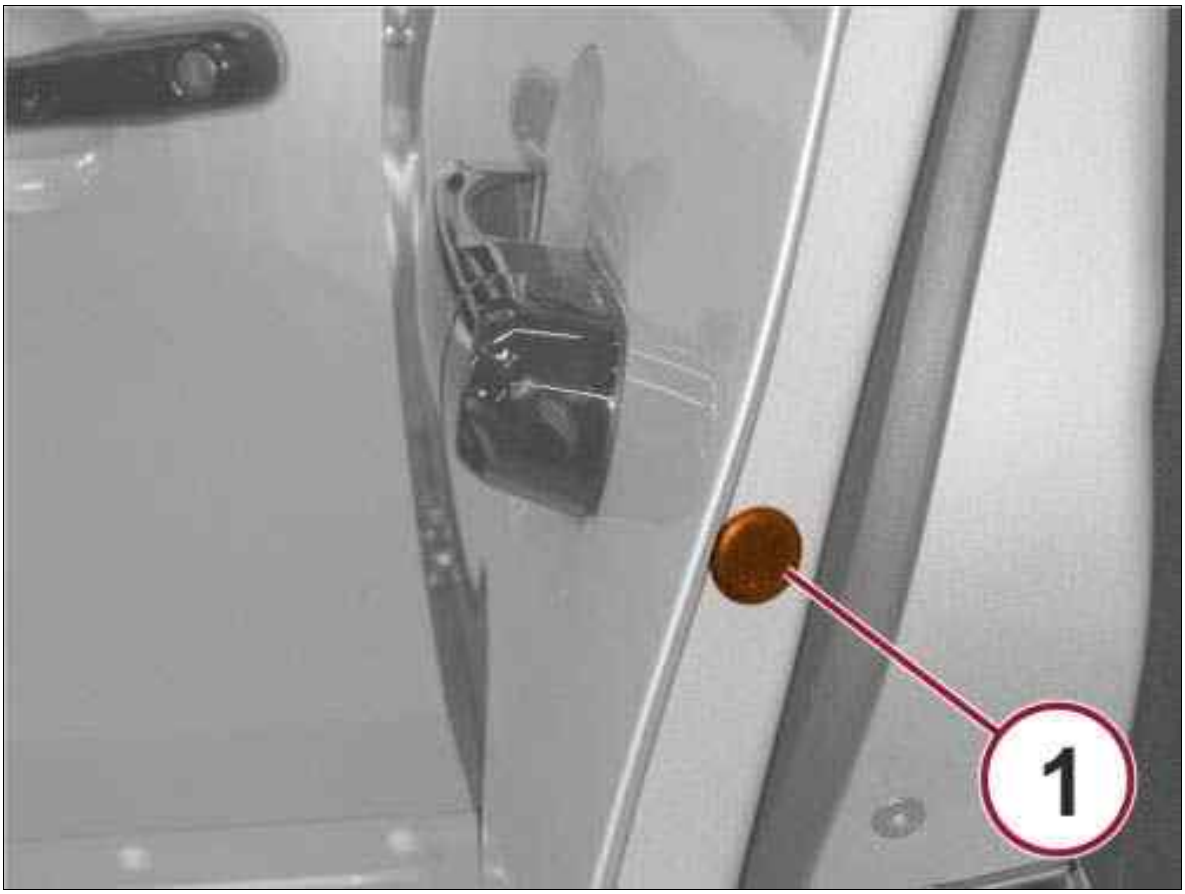
Courtesy of CHRYSLER GROUP, LLC

29. With the use of a trim stick or equivalent, pry out the retainers (1a) and remove the rear door weatherstrip (1b).

NOTE:

It is recommended to use masking tape to avoid damaging the weatherstrip.

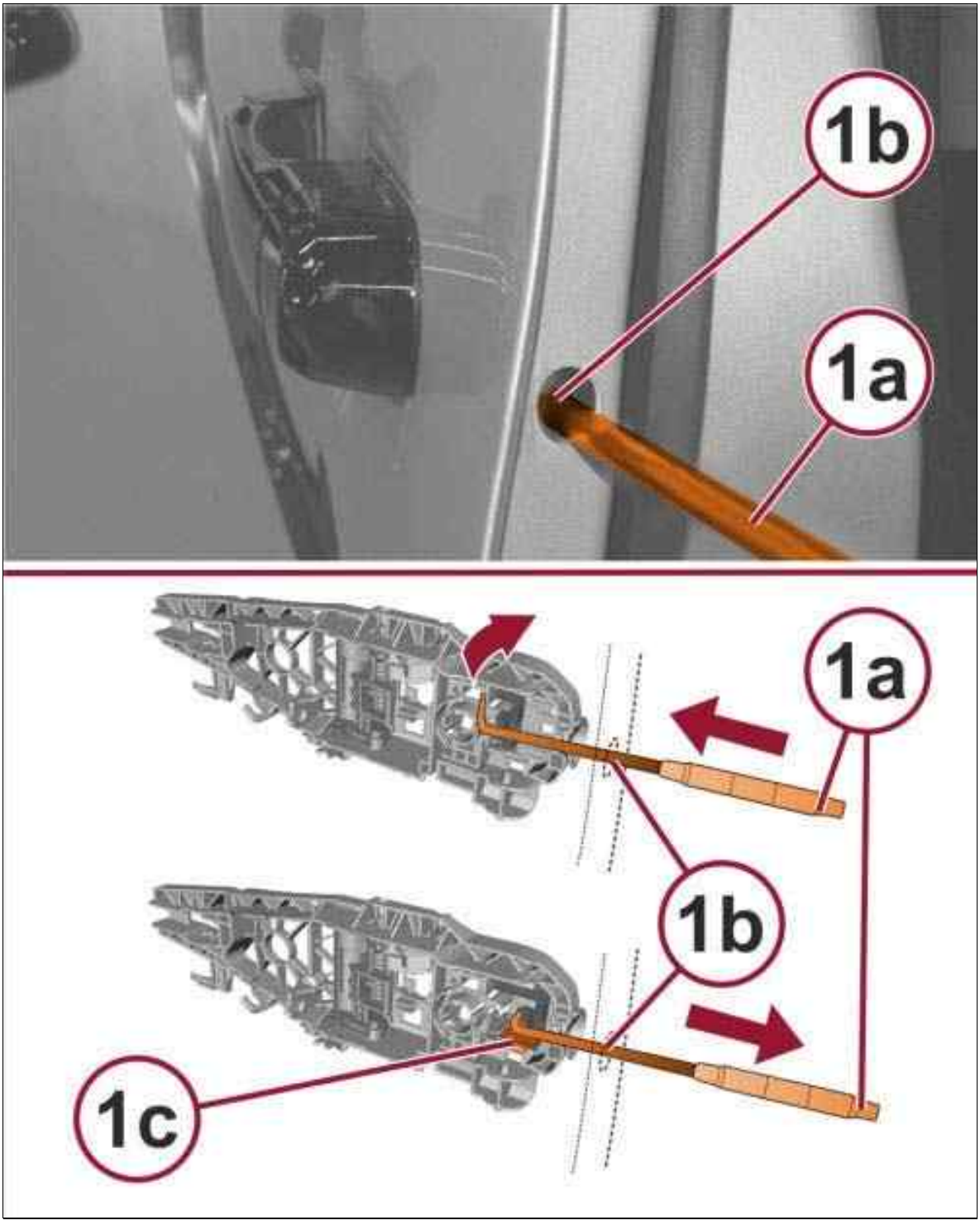
Fig 14: Protective Cover



Courtesy of CHRYSLER GROUP, LLC

30. Remove the protective cover (1).

Fig 15: Tool, Hole & Side Plate

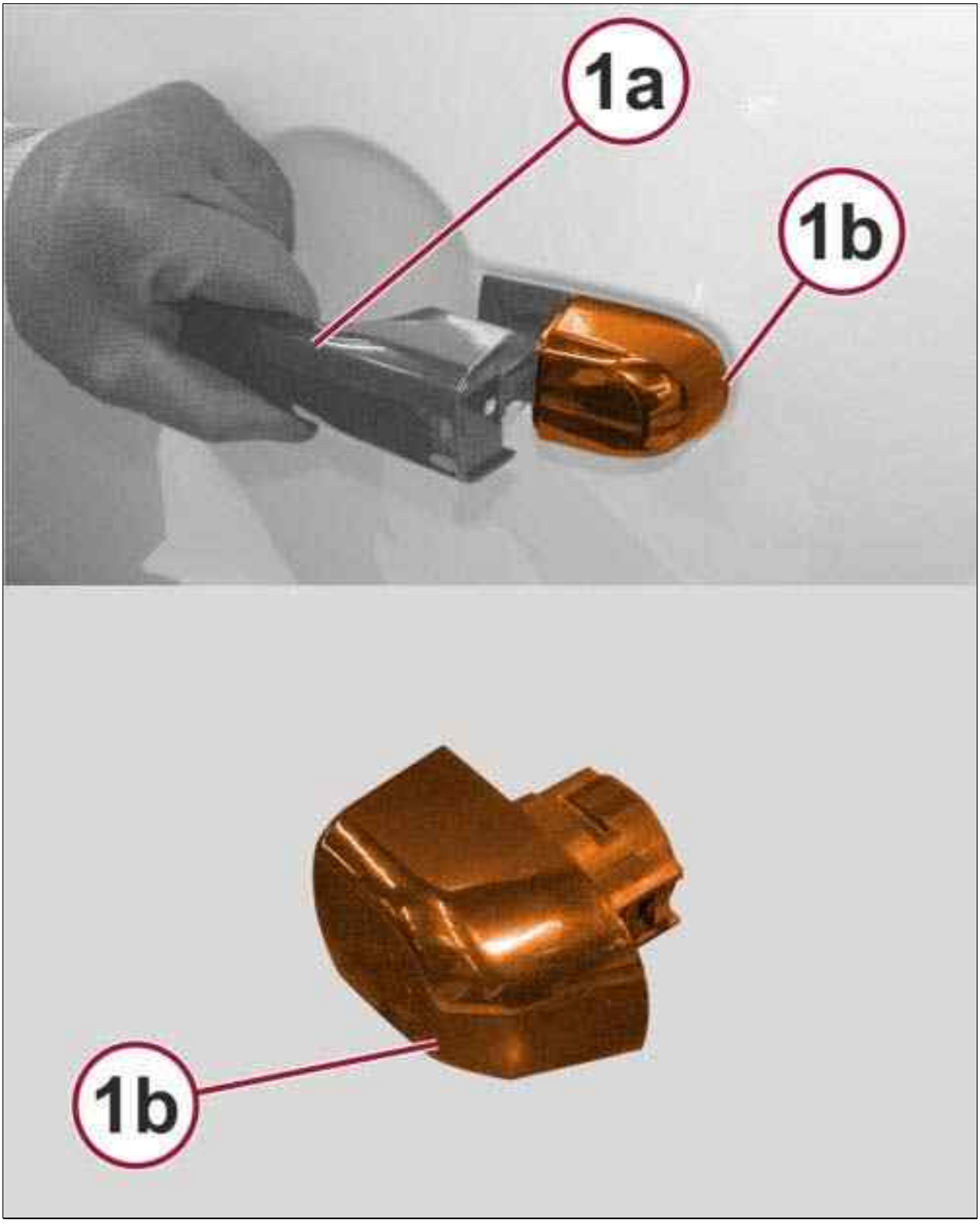


Courtesy of CHRYSLER GROUP, LLC

31. Insert an appropriate tool (1a) through the hole (1b) and turn in the direction of the arrow hooking the slide plate (1c).

32. Pull the tool in the direction of the arrow moving the slide plate (1c) rearward.

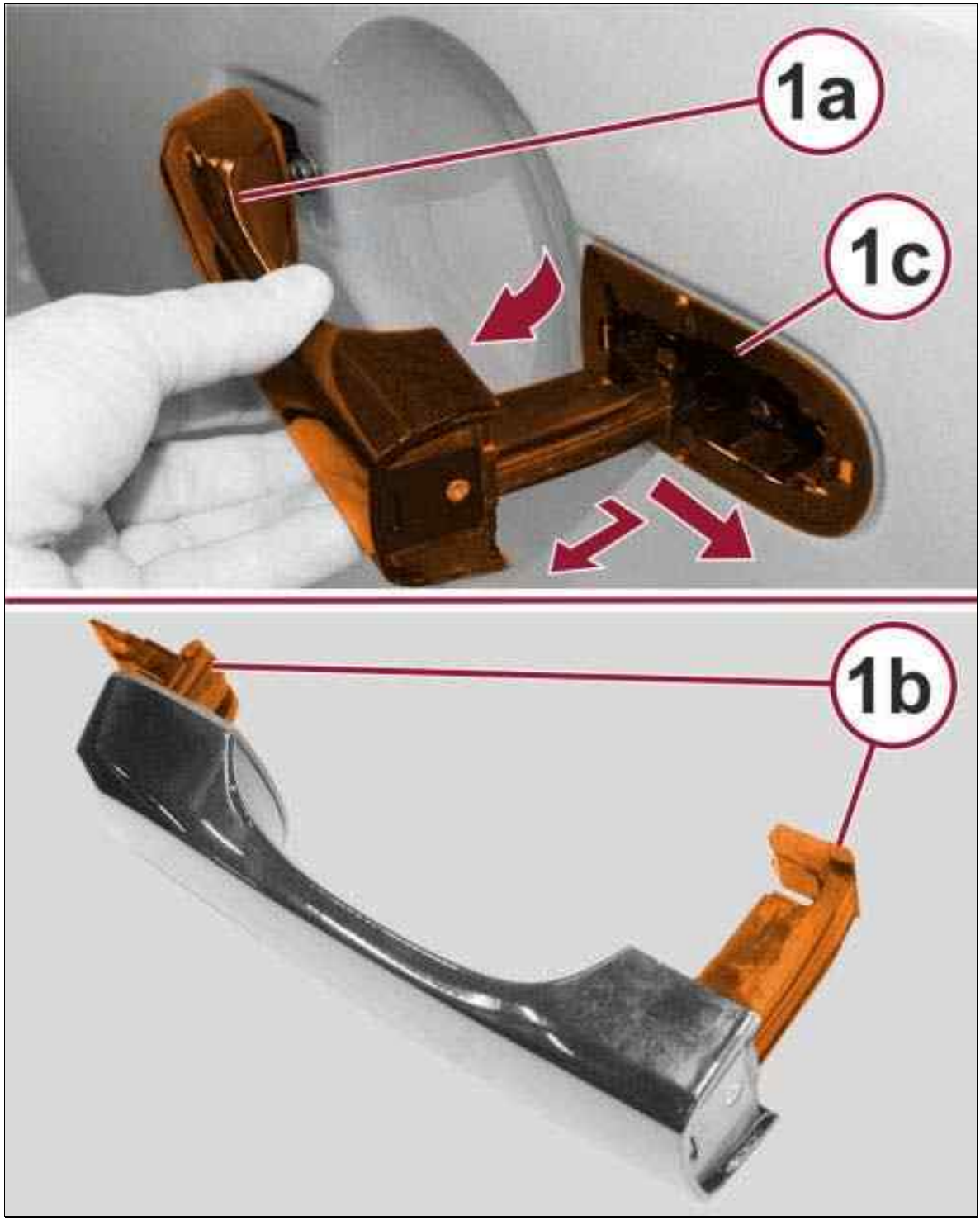
Fig 16: Exterior Door Handle & Cap-Block



Courtesy of CHRYSLER GROUP, LLC

33. Pull and hold the exterior door handle (1a) outward and then remove the cap-block (1b).

Fig 17: Handle, Support & Hooks

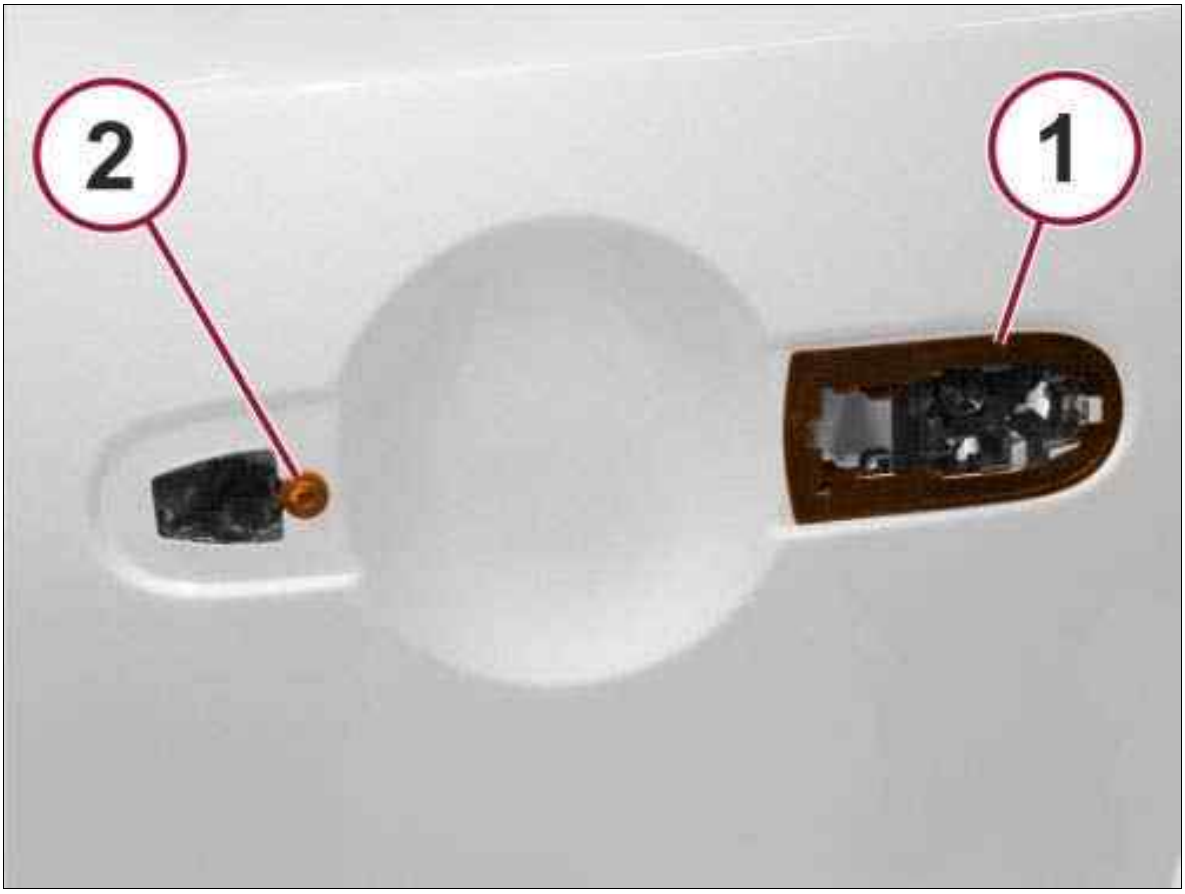


Courtesy of CHRYSLER GROUP, LLC

34. Push the handle (1a) in the direction of the arrow and release the hooks (1b) from the handle support (1c).

35. Rotate and remove the handle.

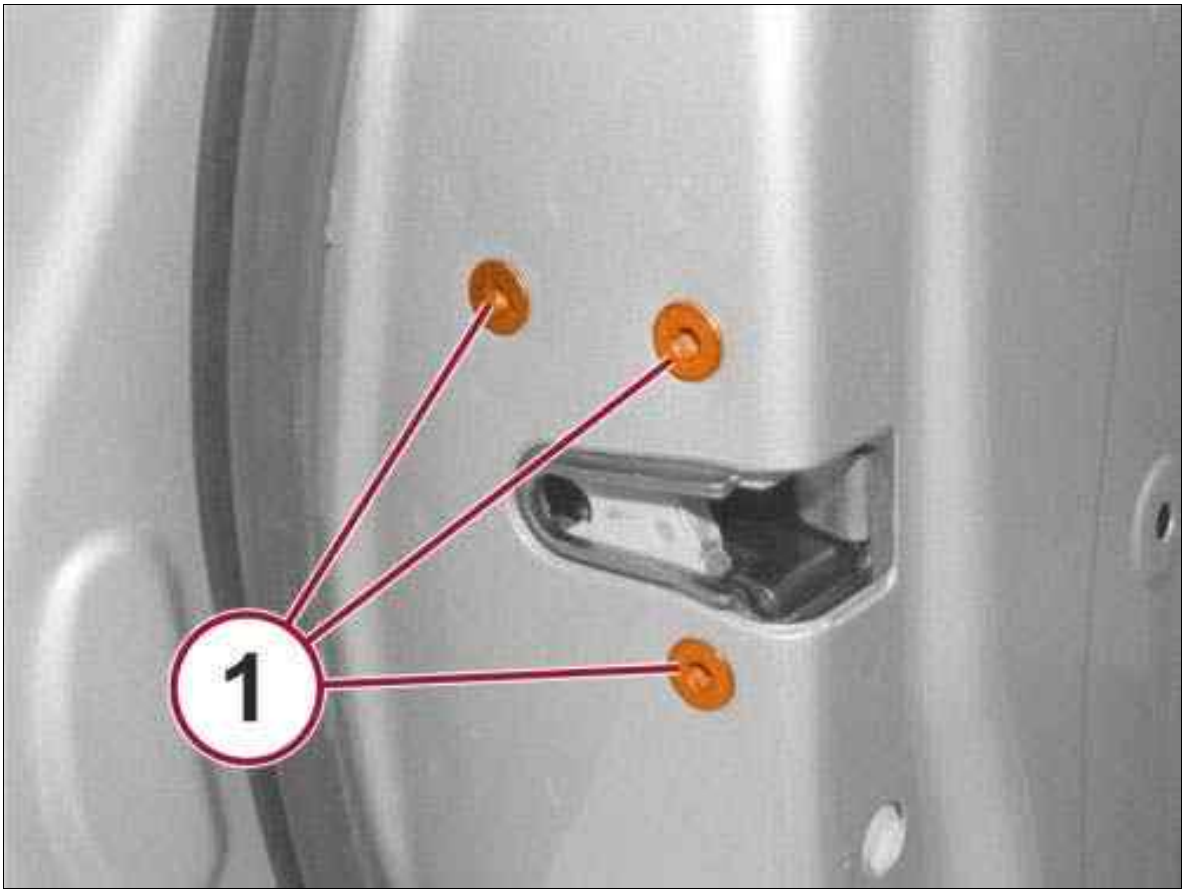
Fig 18: Door Handle Gasket & Screw



Courtesy of CHRYSLER GROUP, LLC

36. Remove the door handle gasket (1).
37. Remove the screw (2).

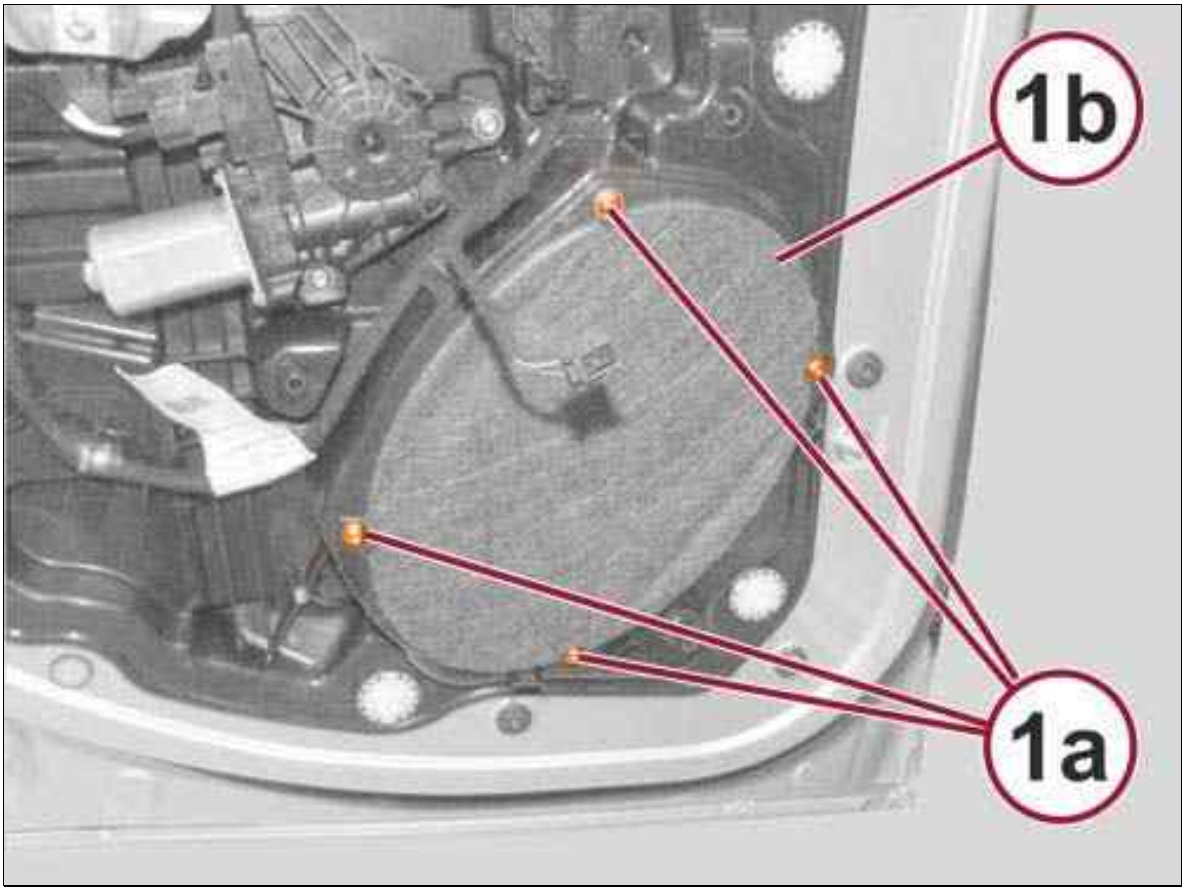
Fig 19: Door Latch Screws



Courtesy of CHRYSLER GROUP, LLC

38. Remove the screws (1) securing the door latch.

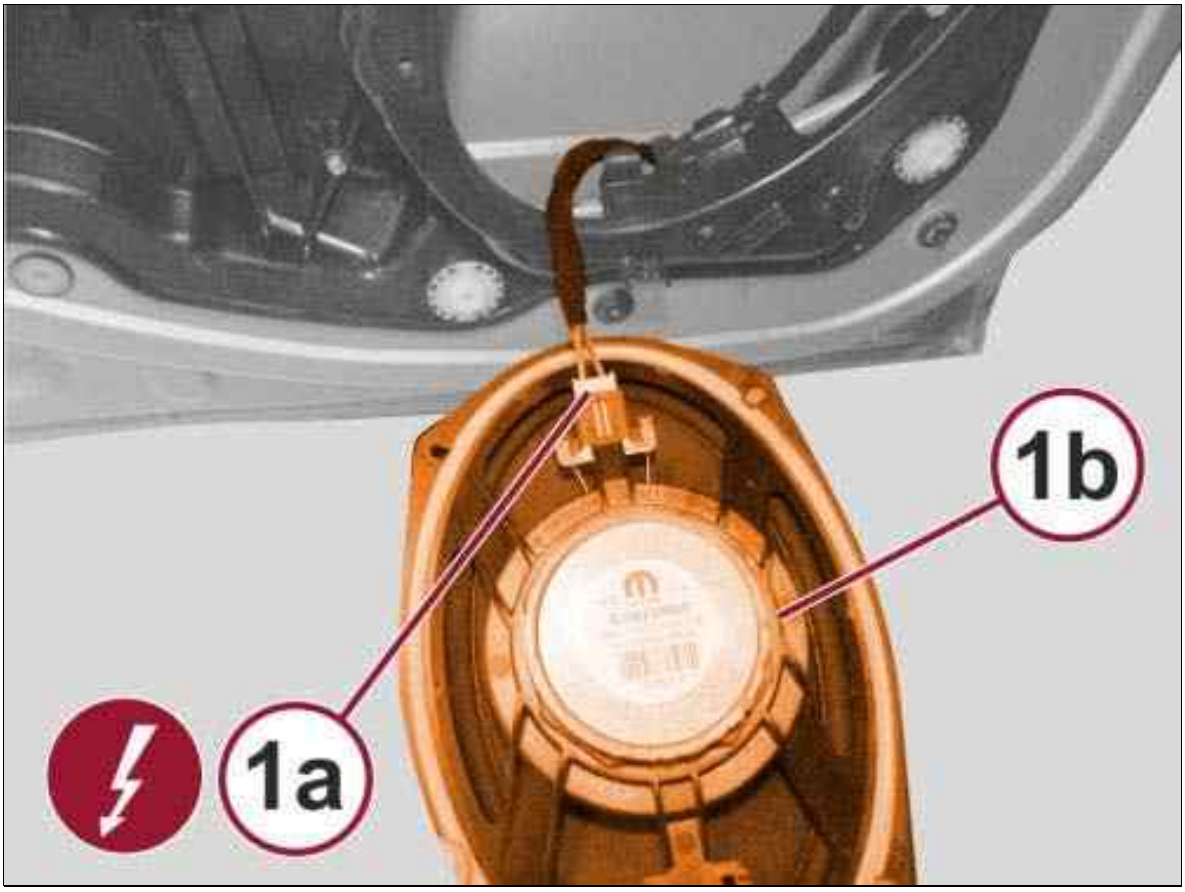
Fig 20: Speaker & Screws



Courtesy of CHRYSLER GROUP, LLC

39. Remove the speaker mounting screws (1a).
40. Remove the speaker (1b) from the carrier plate.

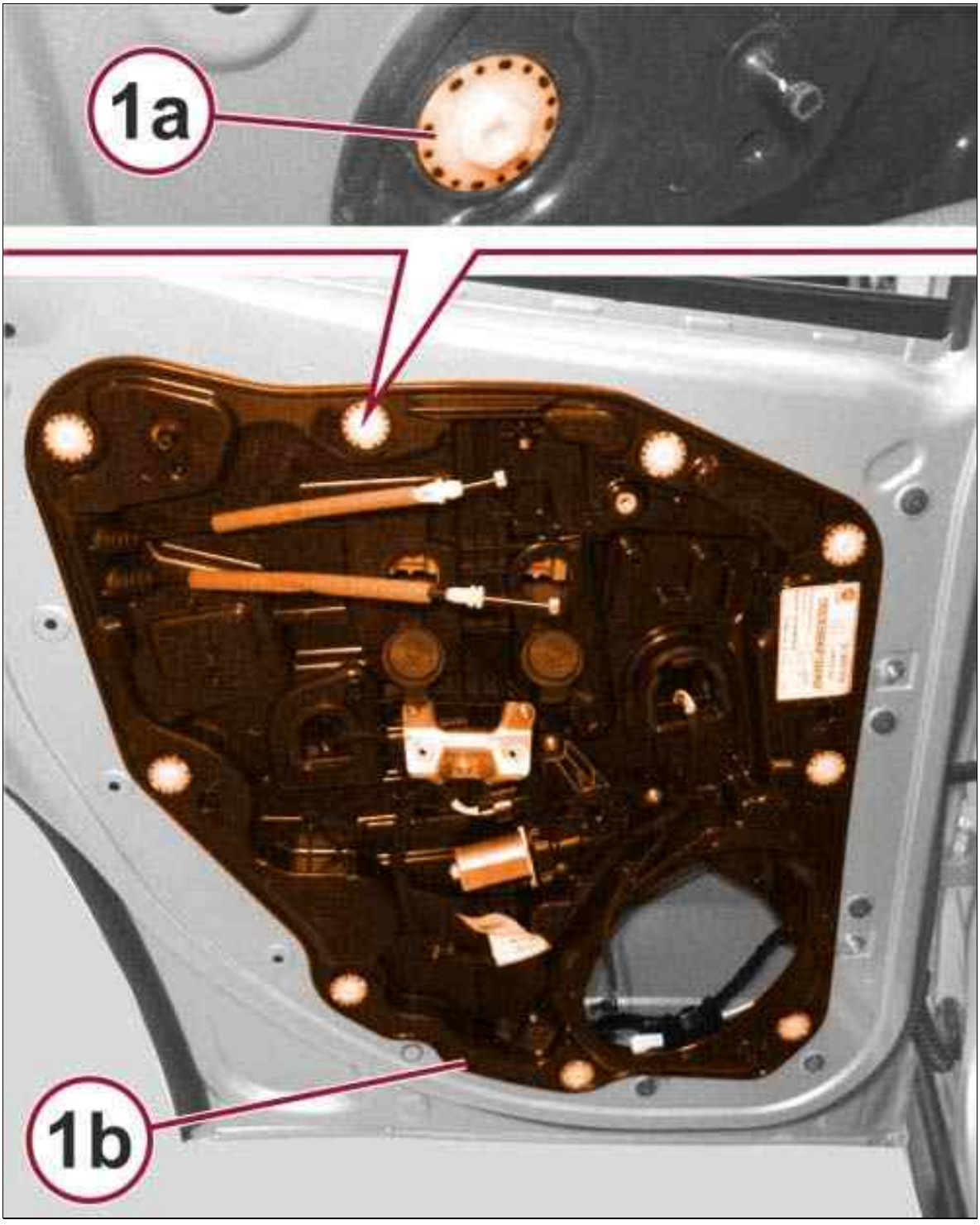
Fig 21: Speaker & Connector



Courtesy of CHRYSLER GROUP, LLC

41. Disconnect the wiring connector (1a).
42. Remove the speaker from the carrier plate.

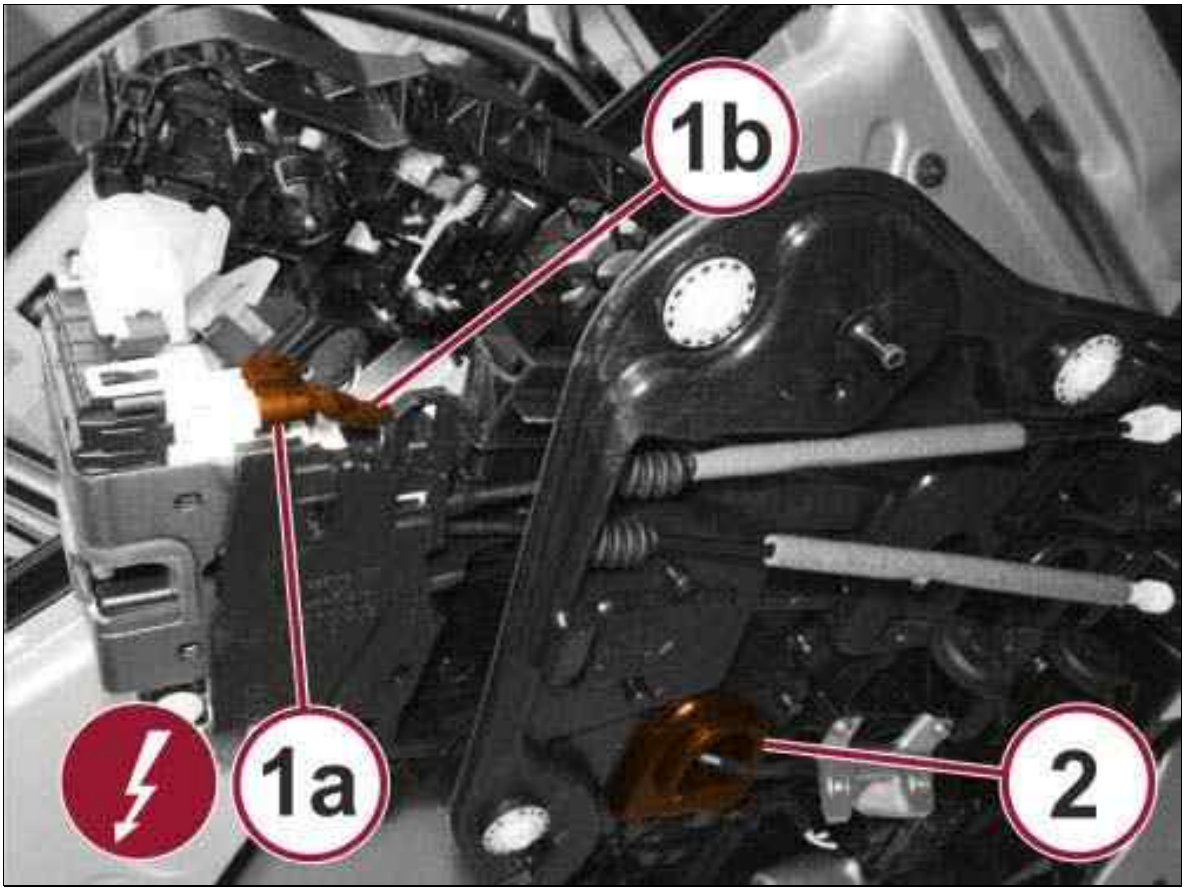
Fig 22: Carrier Plate & Clamps



Courtesy of CHRYSLER GROUP, LLC

43. Turn the clamps (1a) and remove the entire carrier plate (1b) including the latch and external handle support.

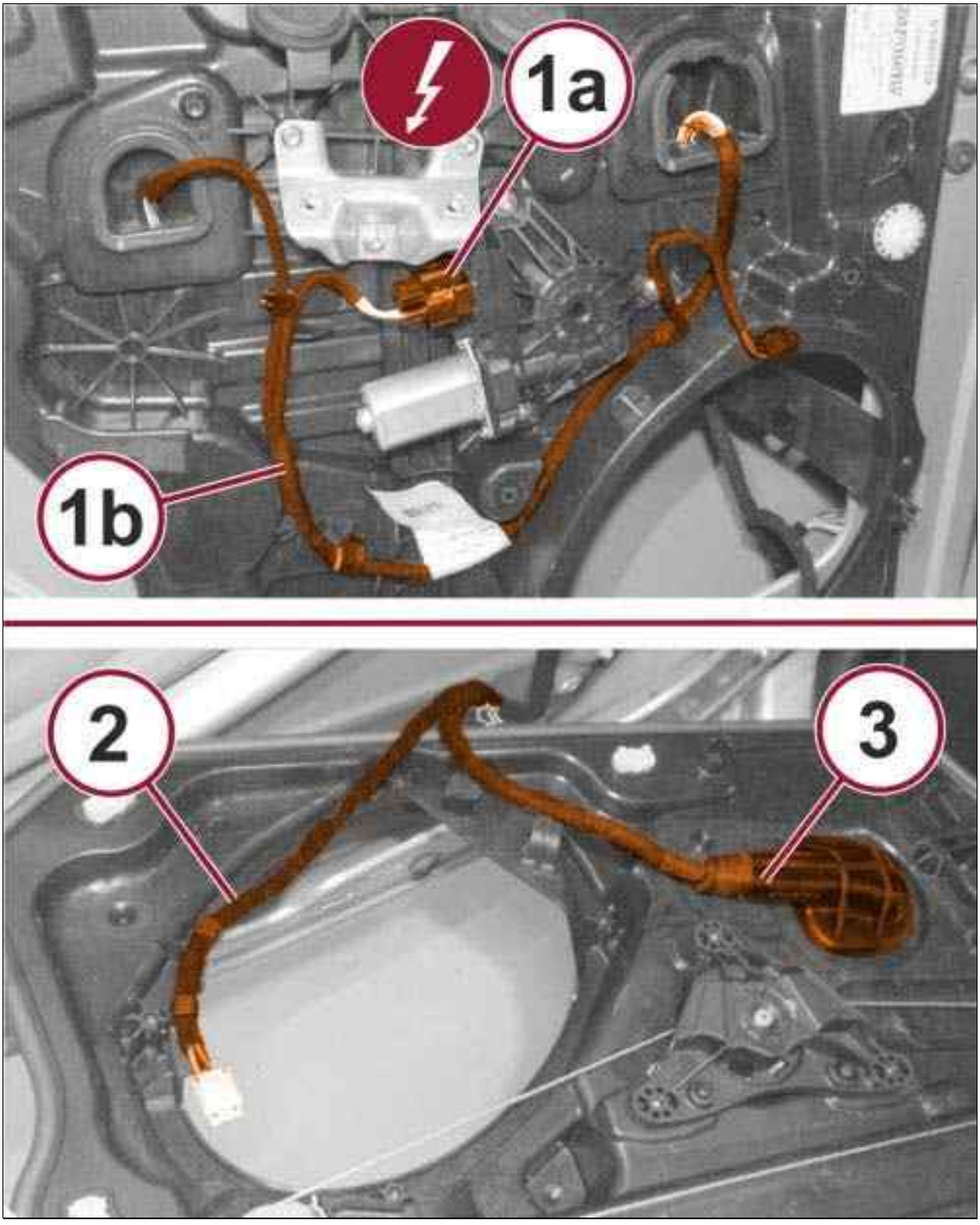
Fig 23: Connector, Retainer & Grommet



Courtesy of CHRYSLER GROUP, LLC

44. Disconnect the latch wiring connector (1a).
45. Release the wiring from the retainer (1b).
46. Pry off the wiring harness grommet (2).

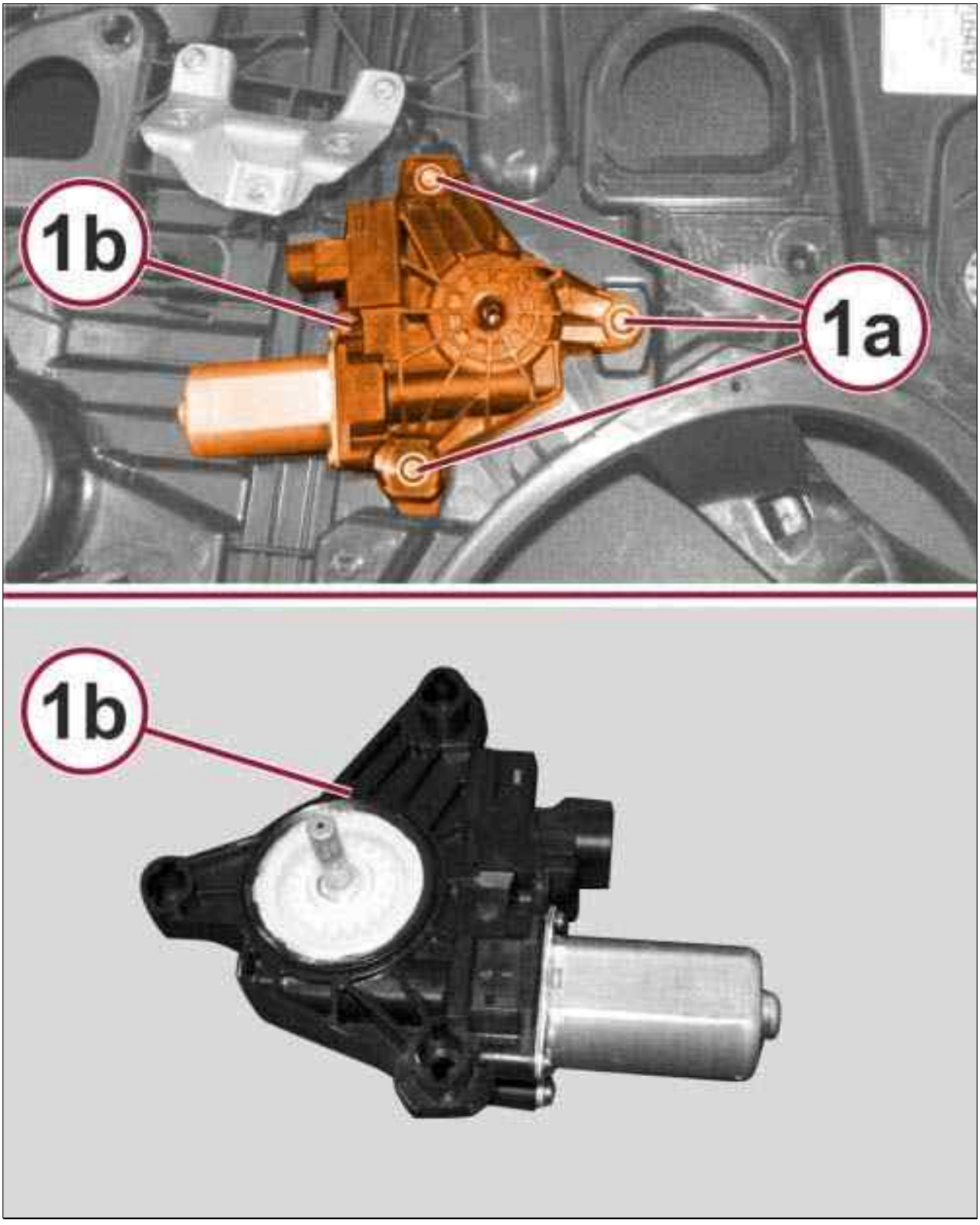
Fig 24: Grommet, Connector & Wiring Harness



Courtesy of CHRYSLER GROUP, LLC

47. Disconnect the window motor wiring connector (1a).
48. Release the wiring harness (1b) from the retainers.
49. Release the speaker wiring harness (2) from the retainers.
50. Pry off the grommet (3).

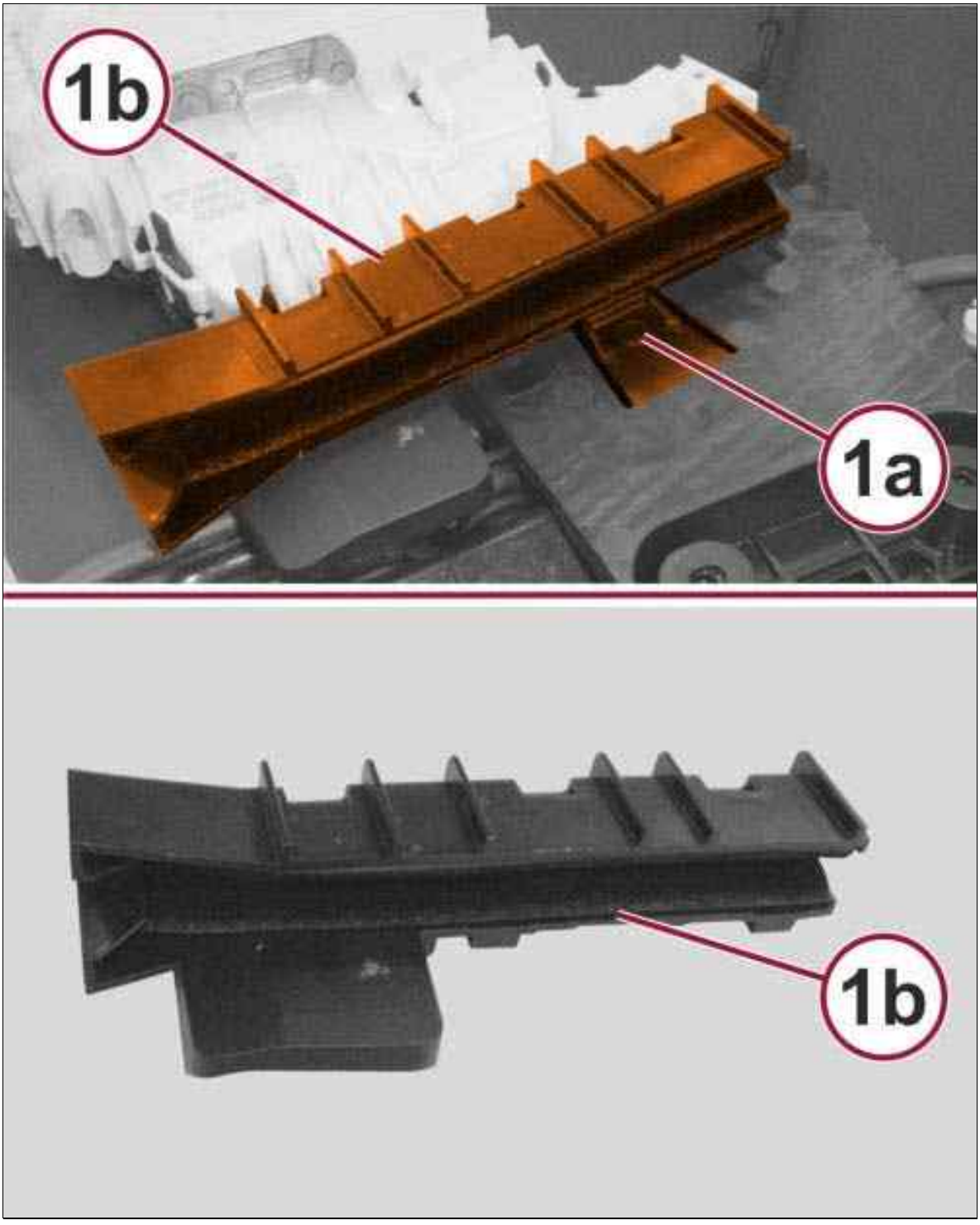
Fig 25: Window Motor & Screws



Courtesy of CHRYSLER GROUP, LLC

51. Remove the window motor mounting screws (1a).
52. Remove the window motor (1b) from the carrier plate.
53. Remove the screws from the grab handle bracket and remove the bracket.

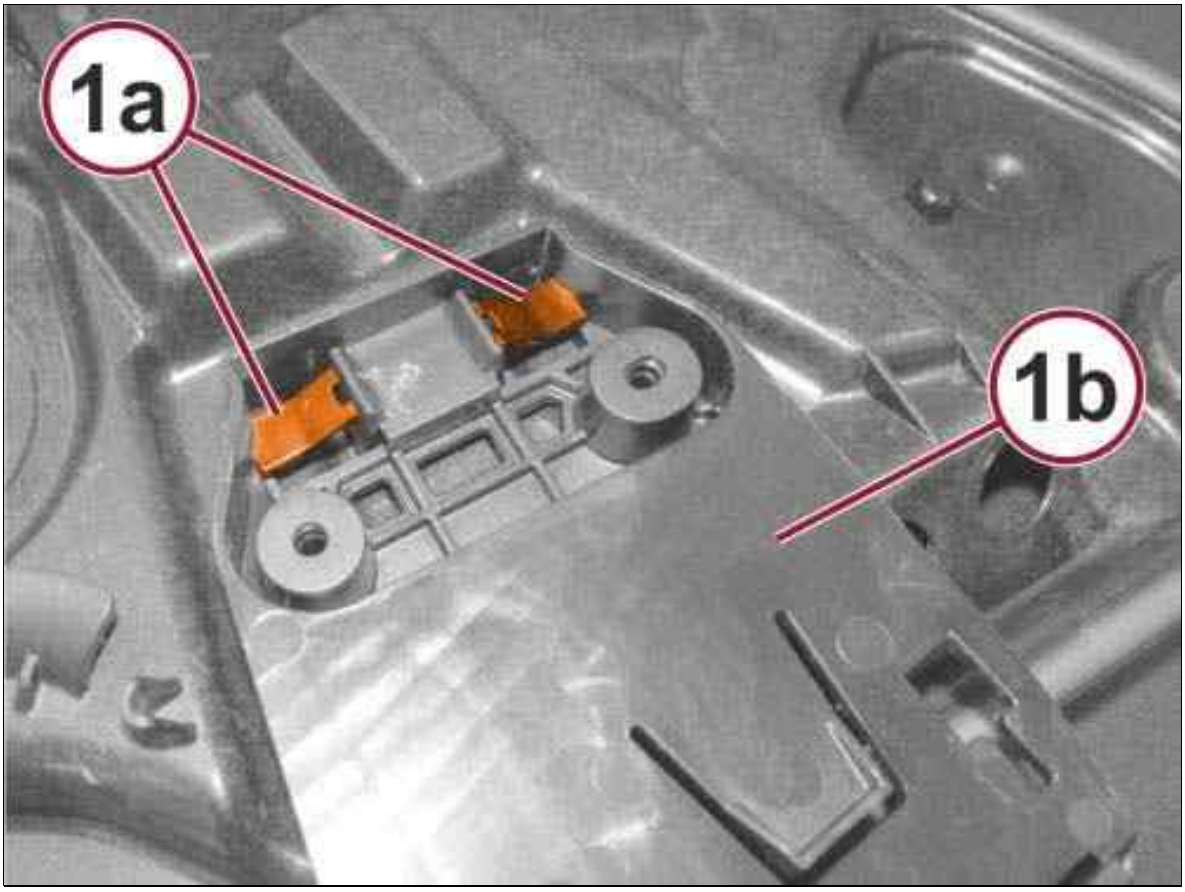
Fig 26: Door Glass Rear Guide & Retainer



Courtesy of CHRYSLER GROUP, LLC

54. Press the spring retainer (1a) and remove the door glass rear guide (1b).

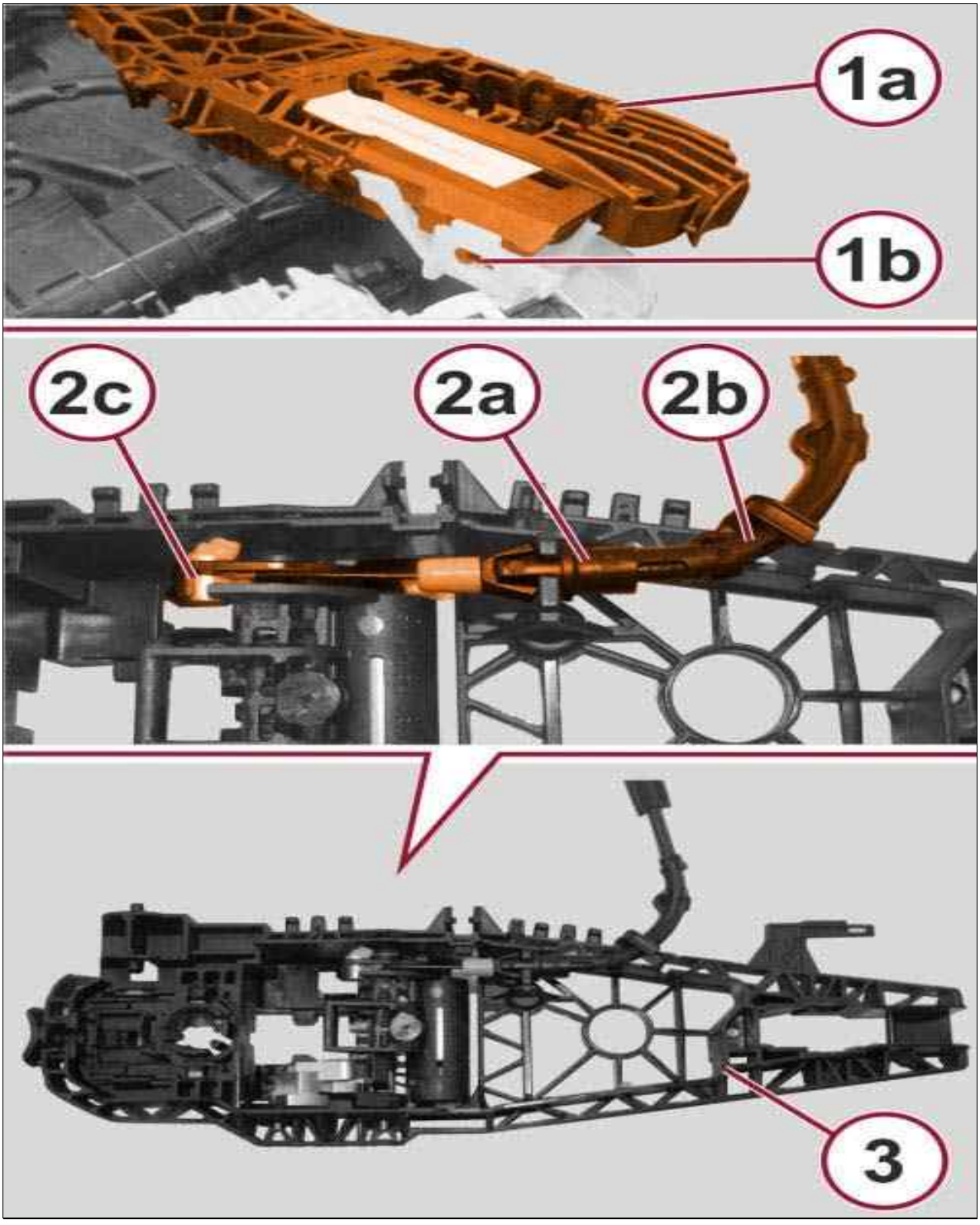
Fig 27: Lock Support & Clips



Courtesy of CHRYSLER GROUP, LLC

55. Disengage the retaining clips (1a) and fold the lock support (1b).

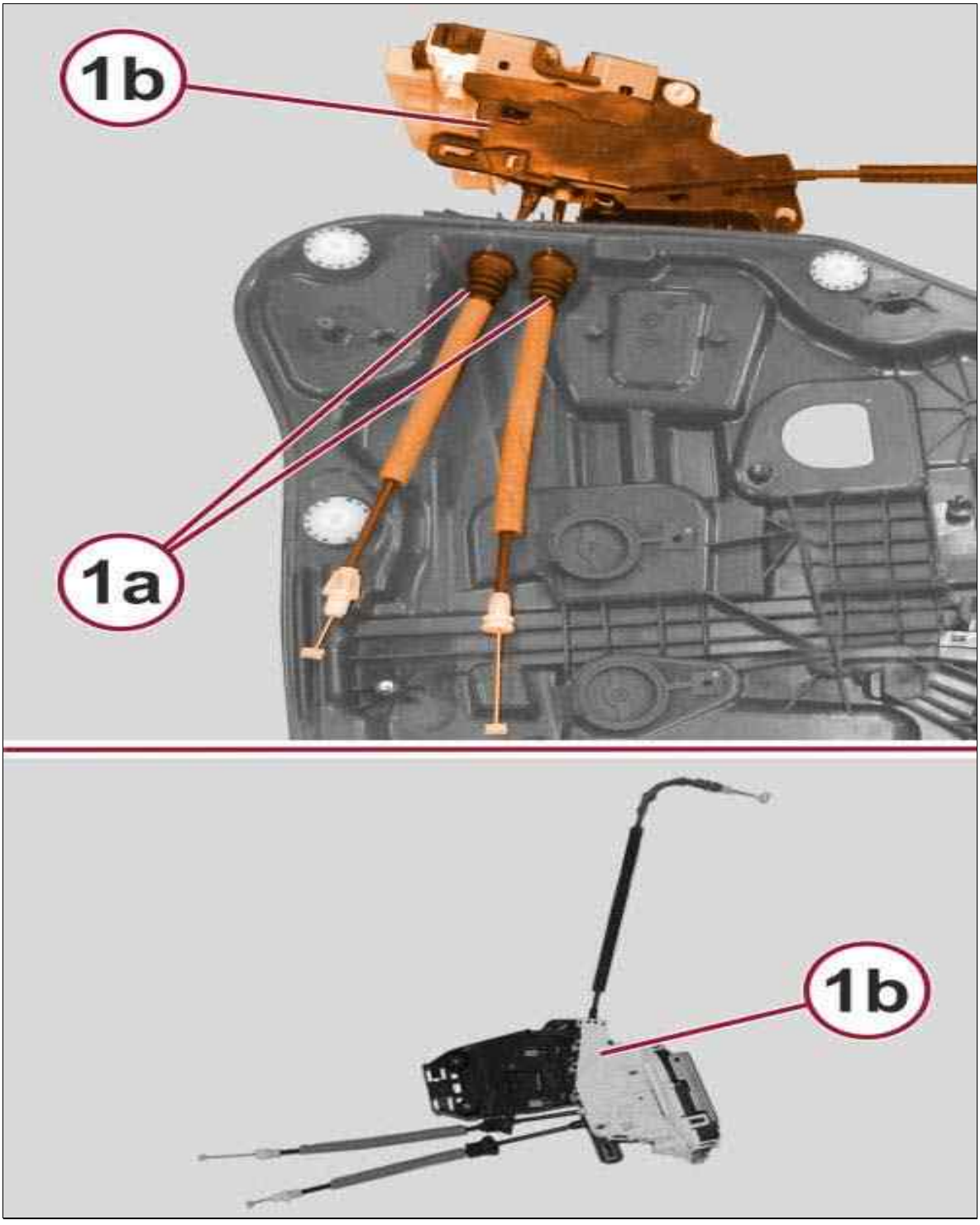
Fig 28: Exterior Door Handle Support, Cable & Retainer



Courtesy of CHRYSLER GROUP, LLC

56. Release the external handle support from the lock by disengaging the retaining part (1b).
57. Remove the latch cable (2b) by releasing the latch cable retainer (2a) and disconnecting the end (2c).
58. Remove the exterior door handle support (3).

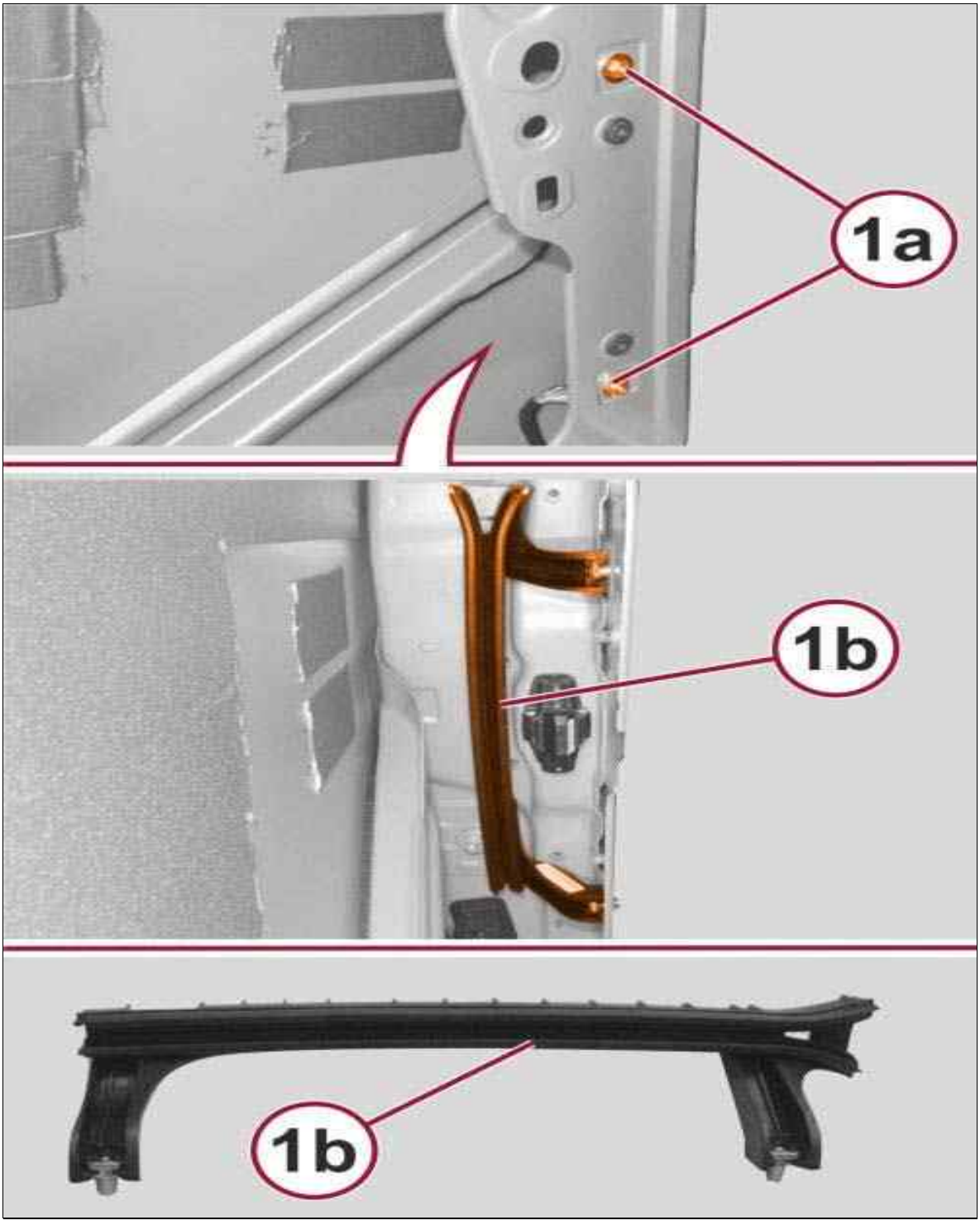
Fig 29: Rear Door Latch & Grommets



Courtesy of CHRYSLER GROUP, LLC

59. Release the cable grommets (1a).
60. Remove the rear door latch (1b), complete with control cables.

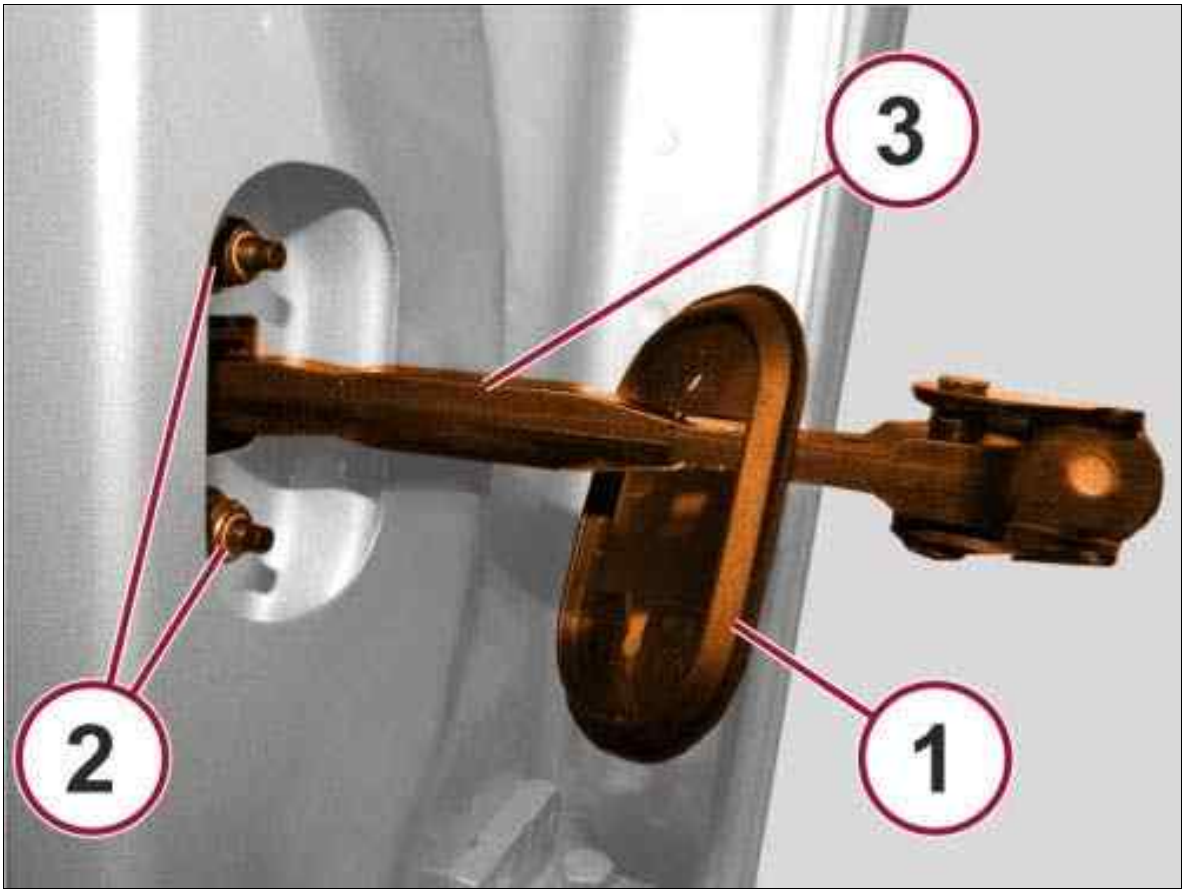
Fig 30: Front Glass Guide & Nuts



Courtesy of CHRYSLER GROUP, LLC

61. Remove the nuts (1a) and remove the front glass guide (1b).

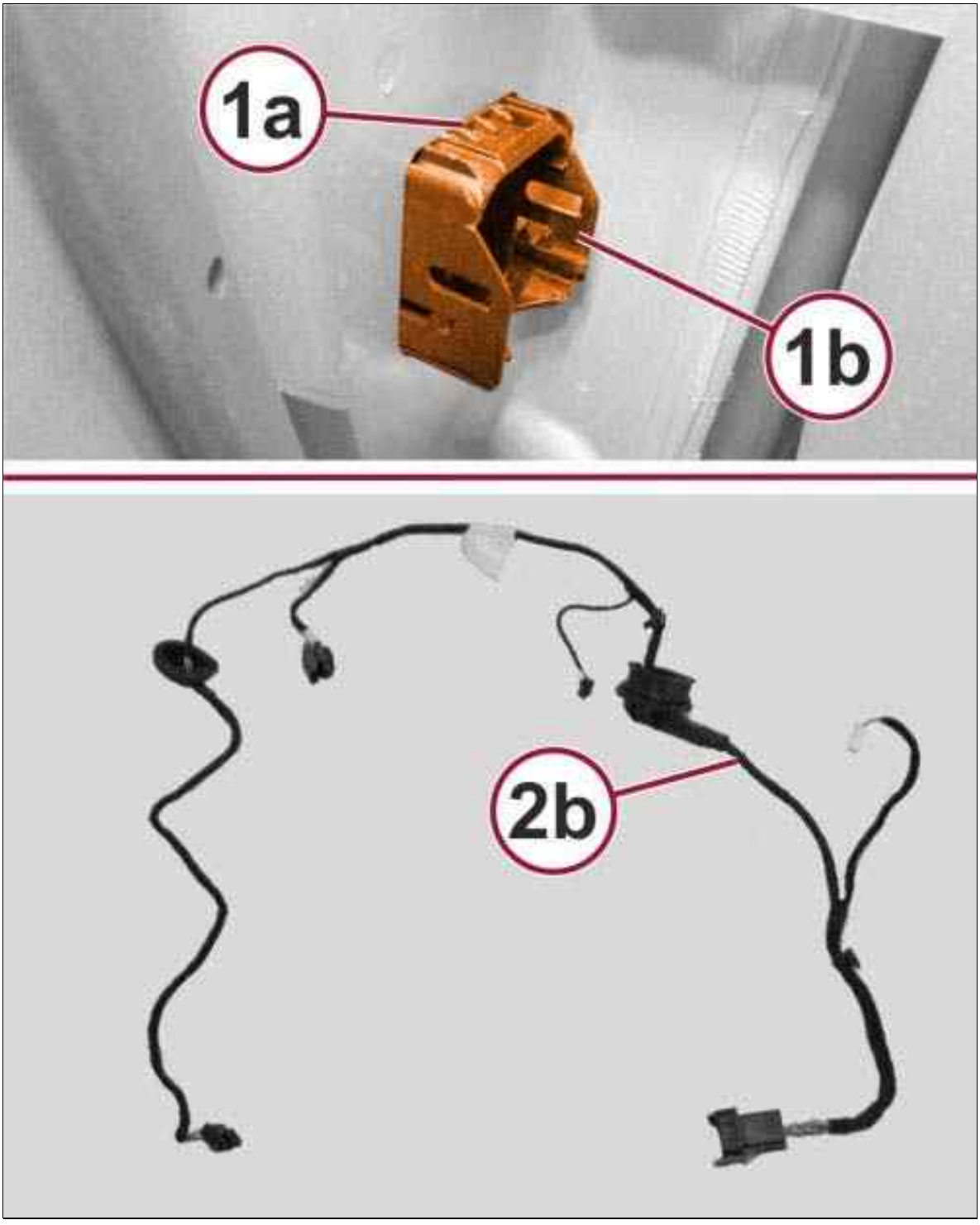
Fig 31: Door Check, Seal & Nuts



Courtesy of CHRYSLER GROUP, LLC

62. Remove the seal (1) from the door.
63. Remove the mounting nuts (2) securing the door check (3) to the door.
64. Remove the door check (3) from the door.

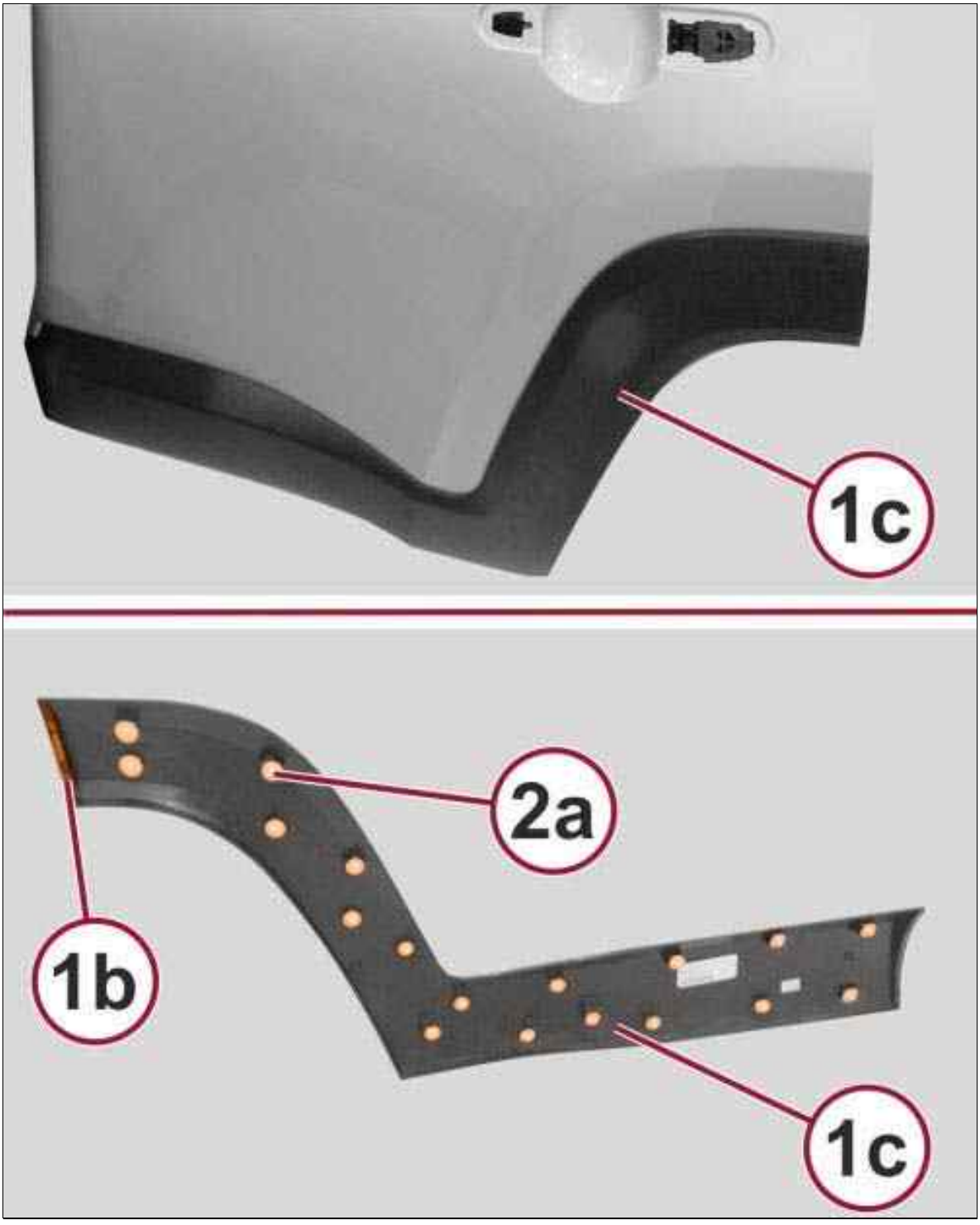
Fig 32: Harness, Clips & Connector



Courtesy of CHRYSLER GROUP, LLC

65. Press the retaining clips (1a) and release the electrical connection (1b) from the door.
66. Remove the wiring port and harness (2b).

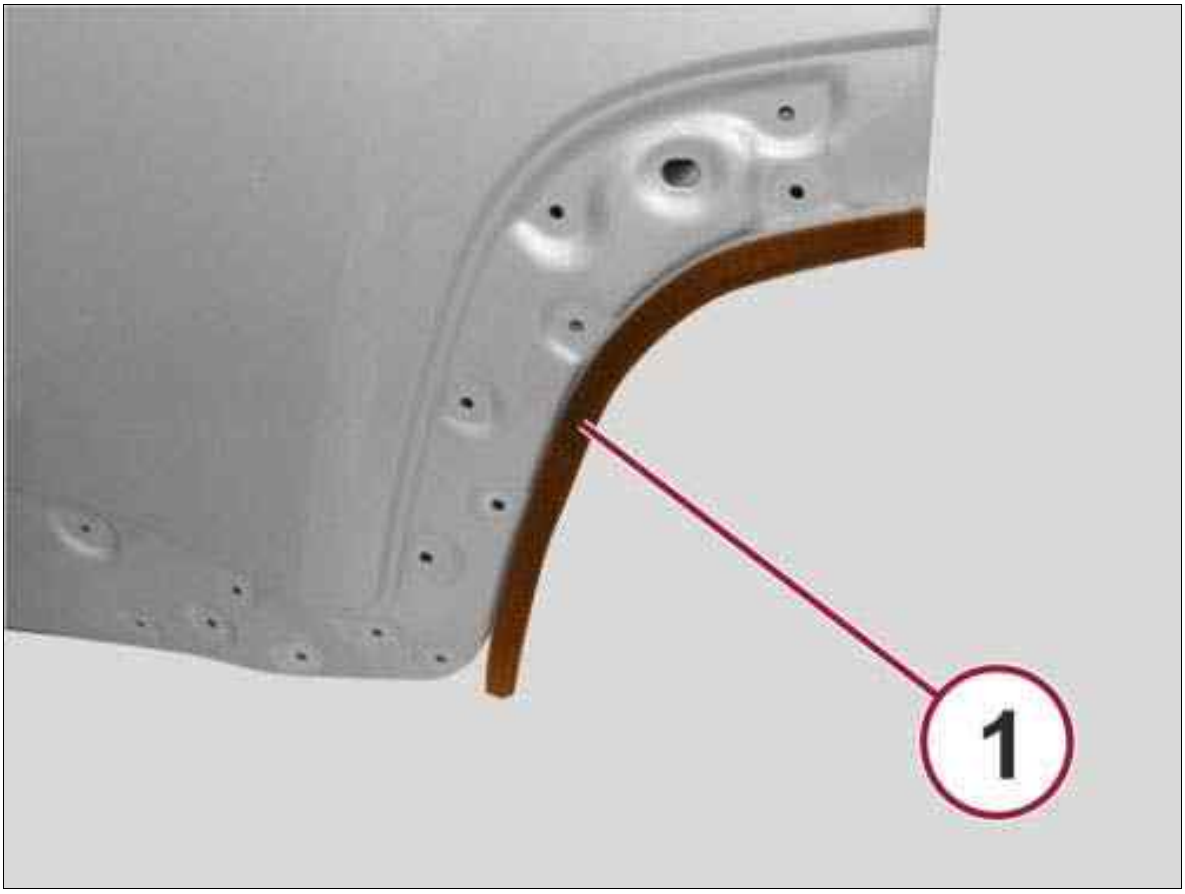
Fig 33: Rear Door Outer Molding, Tape & Clips



Courtesy of CHRYSLER GROUP, LLC

67. Release the retaining clips (2a) and double sided tape (1b).
68. Remove the rear door outer molding (1c) from the door.

Fig 34: Bottom Seal



Courtesy of CHRYSLER GROUP, LLC

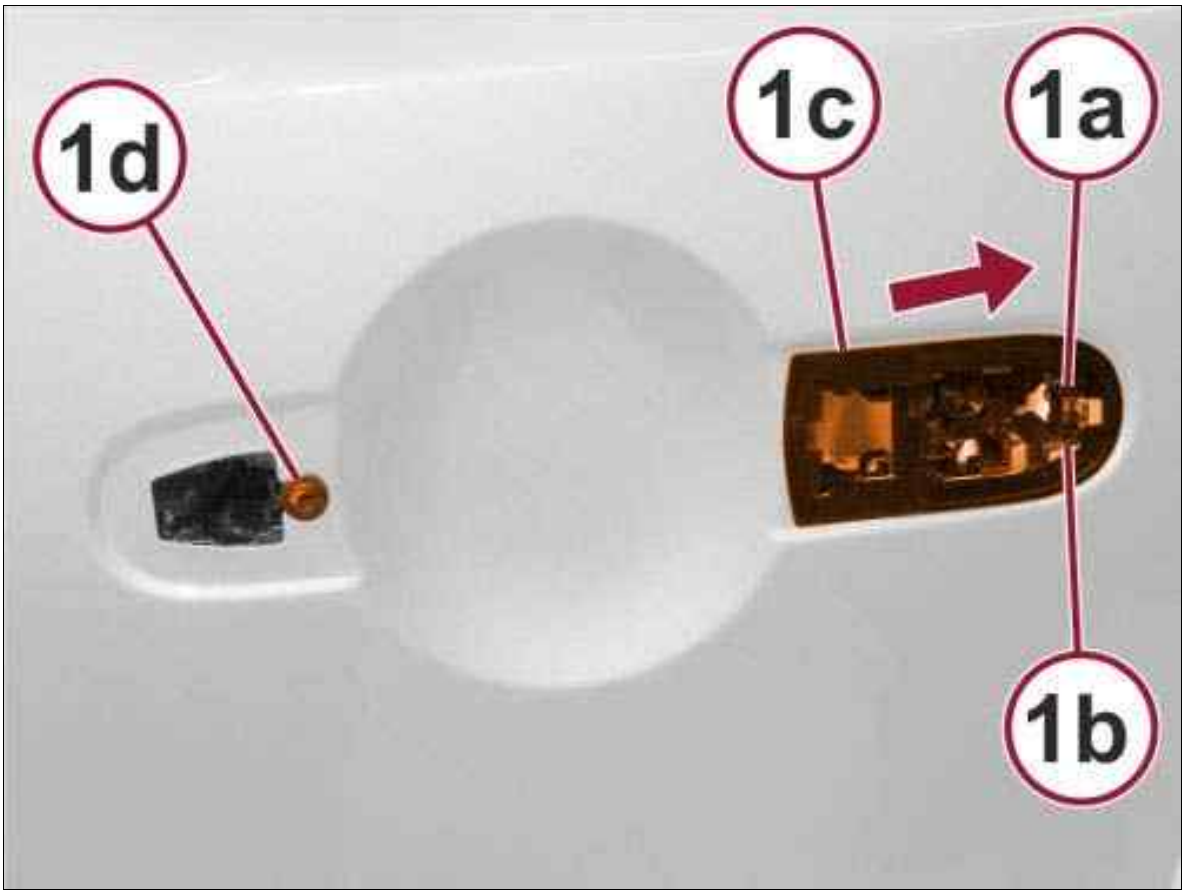
69. Release and remove the bottom seal (1) on the rear door.

DOORS - REAR > DOOR, REAR > DISASSEMBLY AND ASSEMBLY > DISASSEMBLY AND ASSEMBLY > ASSEMBLY

1. Align and insert the bottom seal on the rear door.
2. Position the rear door outer molding and engage the retainers fully.
3. Place the wiring harness into the door, fasten the retainers and engage the harness connector fully.
4. Position the door check, tighten the mounting nuts securely and insert the seal.
5. Position the front glass guide, install the nuts and tighten securely.
6. Position the latch, complete with control cables, to the carrier plate and insert the cable grommets.
7. Engage the retainer for the exterior handle support.
8. Install the rear glass guide by engaging the spring retainer.

9. Engage the latch rod to the external handle support.
10. Position the power window motor to the carrier plate, install the screws and tighten securely.
11. Position the grab handle bracket to the carrier plate, install the screws and tighten securely.
12. Route the speaker wiring and engage the harness retainers.
13. Route the window motor wiring, insert the wiring connector and engage the harness retainers.
14. Engage the latch wiring connector and secure the harness to the wiring retainers.

Fig 1: Exterior Handle Support Bracket, Hole, Gasket & Screw



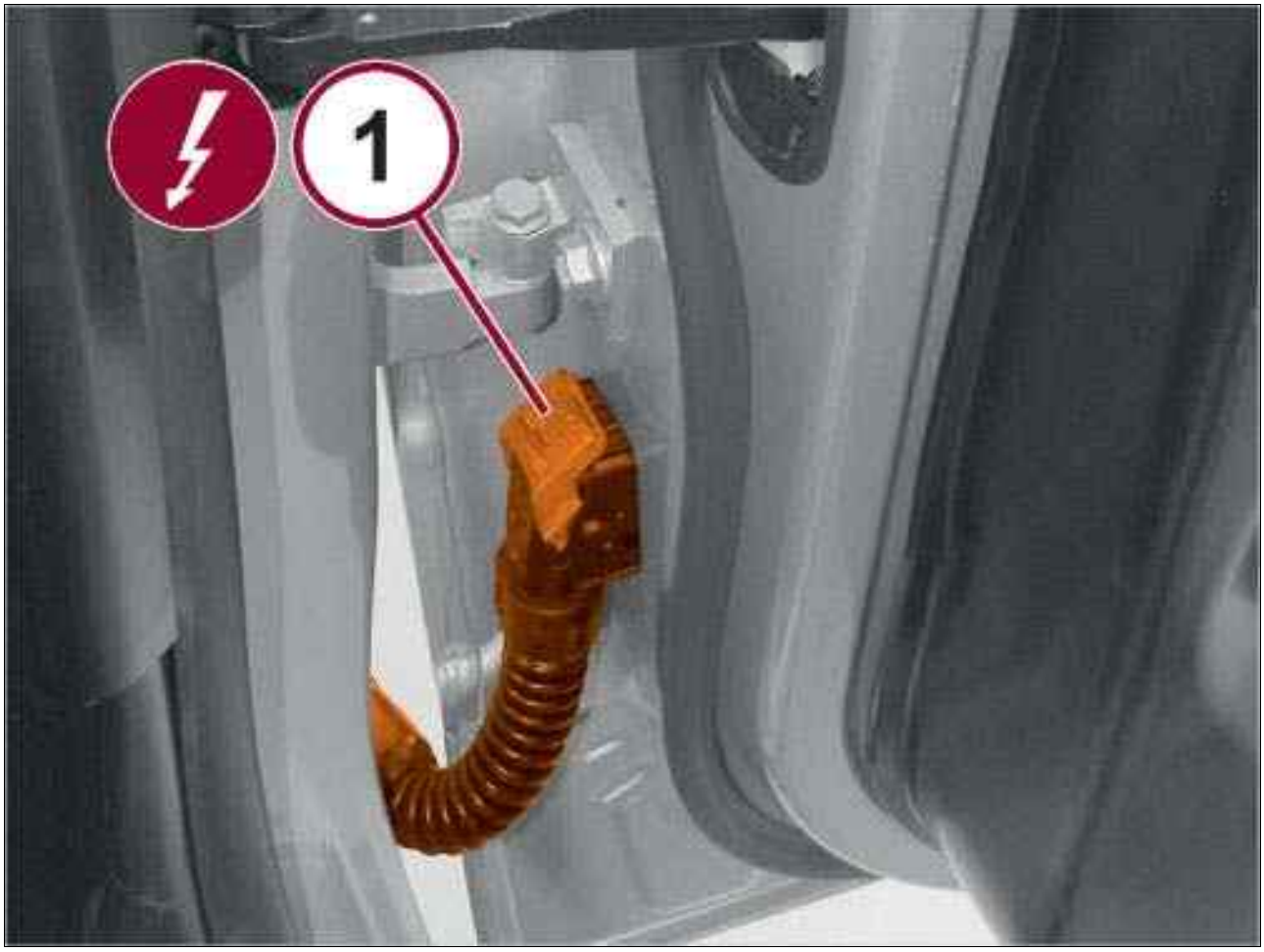
Courtesy of CHRYSLER GROUP, LLC

15. Position the carrier plate near the door and position the exterior handle support bracket (1a) to the handle hole (1b).
16. Slide the bracket in the direction of the arrow.
17. Install the door handle gasket (1c).
18. Install the screw (1d) and tighten securely.
19. Position the latch to the door and install the screws securely.
20. Position the carrier plate and turn the clamps securing it to the inner door fully.
21. Install the exterior door handle, engaging the hook portion of the handle to the handle support.

22. Insert the cap-block and through the side hole insert an appropriate tool to push the slide plate inward engaging the slide plate fully.
23. Install the protective cover to the inner door.
24. Connect the speaker wiring connector to the speaker.
25. Position the speaker and install the screws securely.
26. Install the rubber stop block.
27. Install the rear door weatherstrip, engaging the retaining clips fully.
28. Insert and position the door glass through the opening on the top of the rear door.
29. Install the door glass screws and tighten securely.
30. Close the access covers on the carrier plate.
31. Install the rear door front and rear appliques and tighten the screws.
32. Install the door glass channel.
33. Install the belt molding.
34. Temporarily connect the control switches on the door and connect the battery negative cable.
35. Move the door glass up and down to check that there is no interference in the guides.
36. Before installing the door trim panel, inspect the inner door and carrier plate to be certain that parts are undamaged and operating properly. Replace as necessary.
37. Position the door trim panel near the door but do not attach it to the door at this stage.
38. Connect the inner door handle lock and latch cables by inserting the ends and engaging the retainers.
39. Align the door trim panel to the door and with use of sufficient pressure install the clips on the door trim panel into the corresponding retainers on the door.
40. Install and tighten the mounting screw, on the bottom of the trim panel, securely.
41. Install and tighten the mounting screws inside the armrest pocket, securely.
42. Connect the power window switch wiring connector.
43. Position the window switch bezel into the door trim panel engaging the retainers fully.
44. Install the screw into the grab handle pocket and tighten securely.
45. Install the pad into the pocket.
46. Pull the inside door handle, install the screw and tighten securely.
47. Install the cover into the door handle pocket.
48. Position the inner door trim and engage the retainers fully.
49. Connect the battery negative battery cable.

DOORS - REAR > DOOR, REAR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

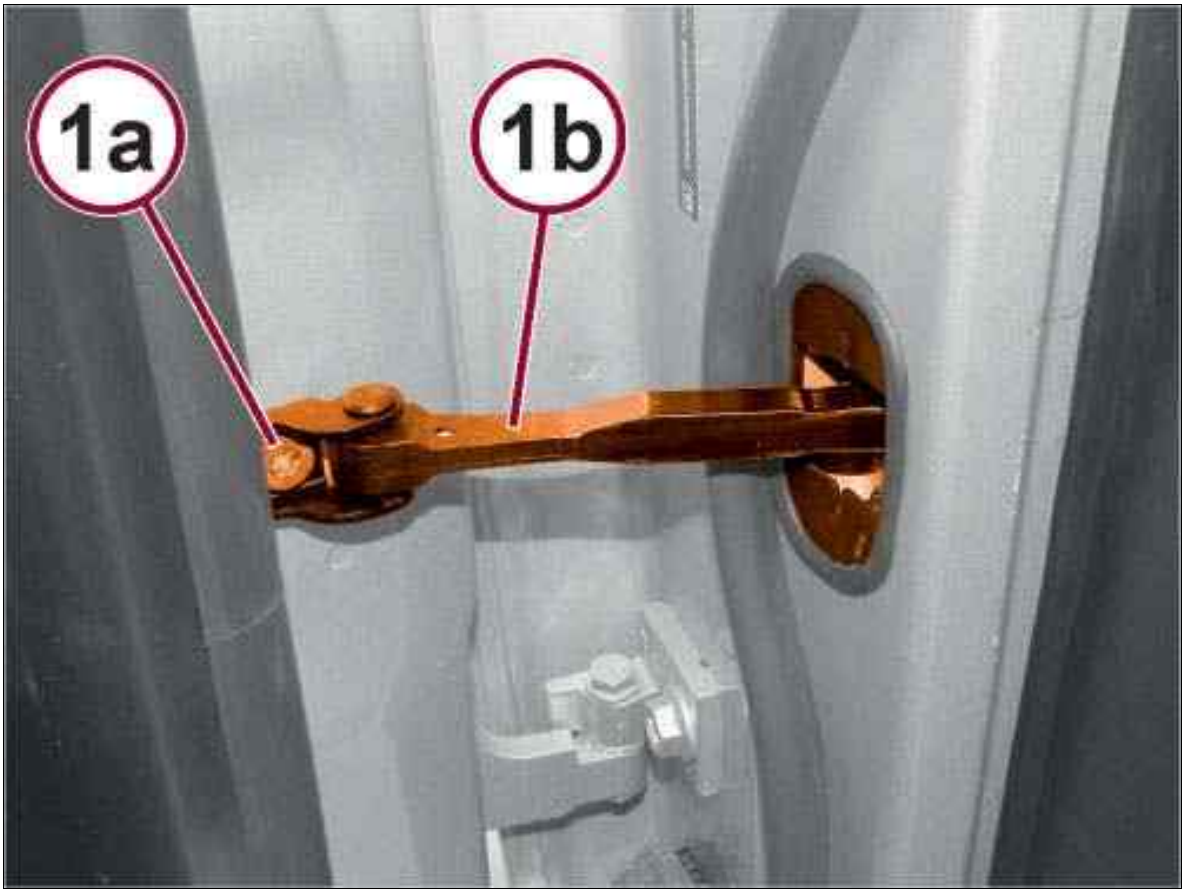
Fig 1: Rear Door Wiring Connector



Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the battery negative cable.
2. Disconnect the rear door wiring connector (1).

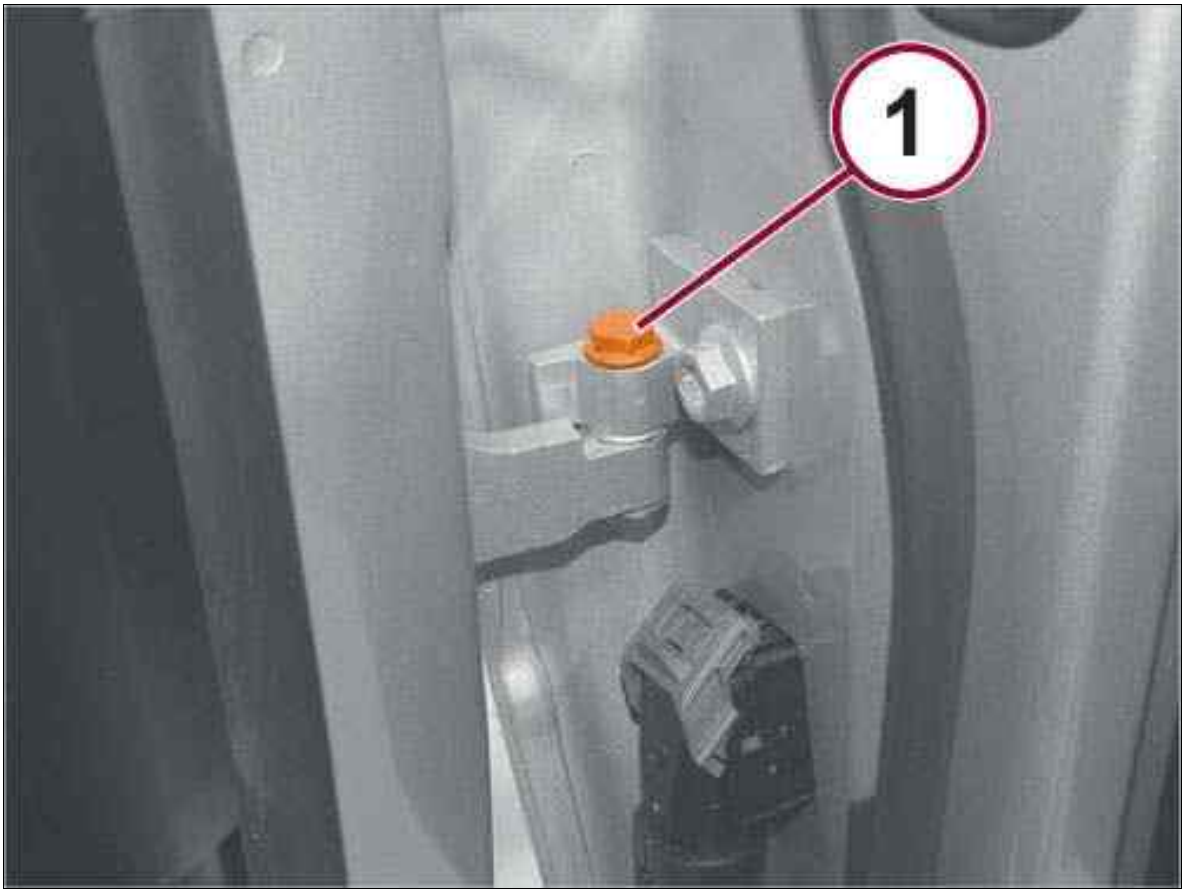
Fig 2: Door Check & Screw



Courtesy of CHRYSLER GROUP, LLC

3. Remove the screw (1a) securing the door check (1b) to the B-pillar.
4. Close the door to retract the door check (1b).

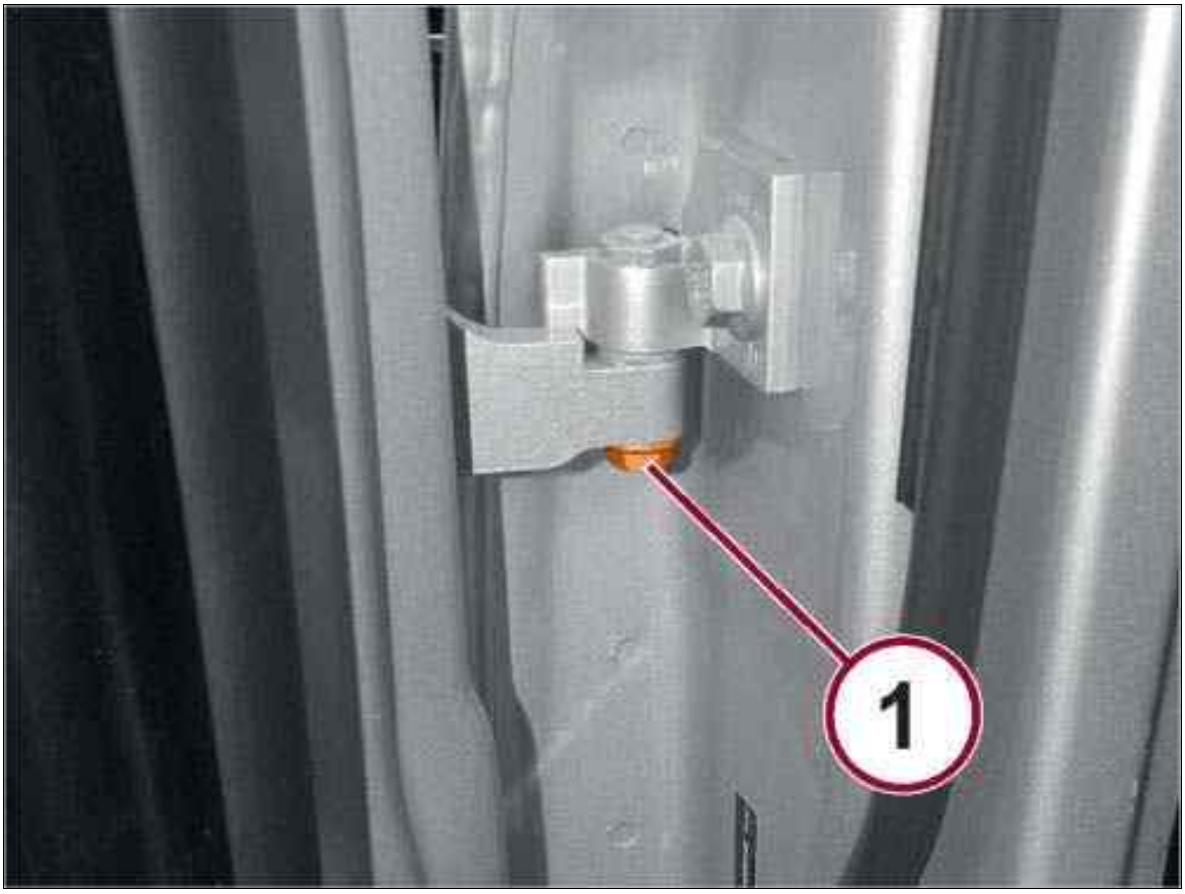
Fig 3: Bottom Hinge Bolt



Courtesy of CHRYSLER GROUP, LLC

5. Remove the bolt (1) securing the bottom hinge.

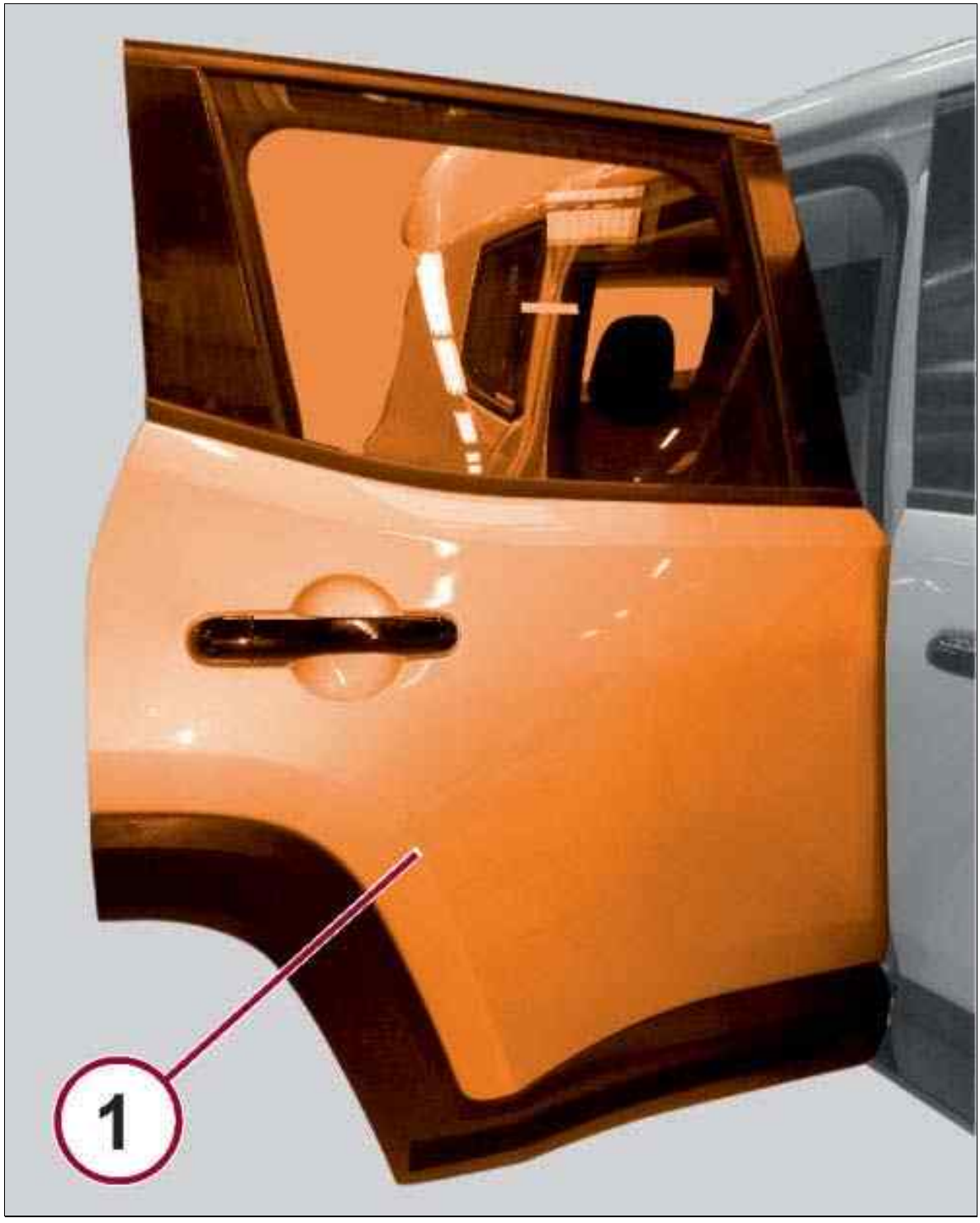
Fig 4: Top Hinge Bolt



Courtesy of CHRYSLER GROUP, LLC

6. Remove the bolt (1) securing the top hinge.

Fig 5: Rear Door



Courtesy of CHRYSLER GROUP, LLC

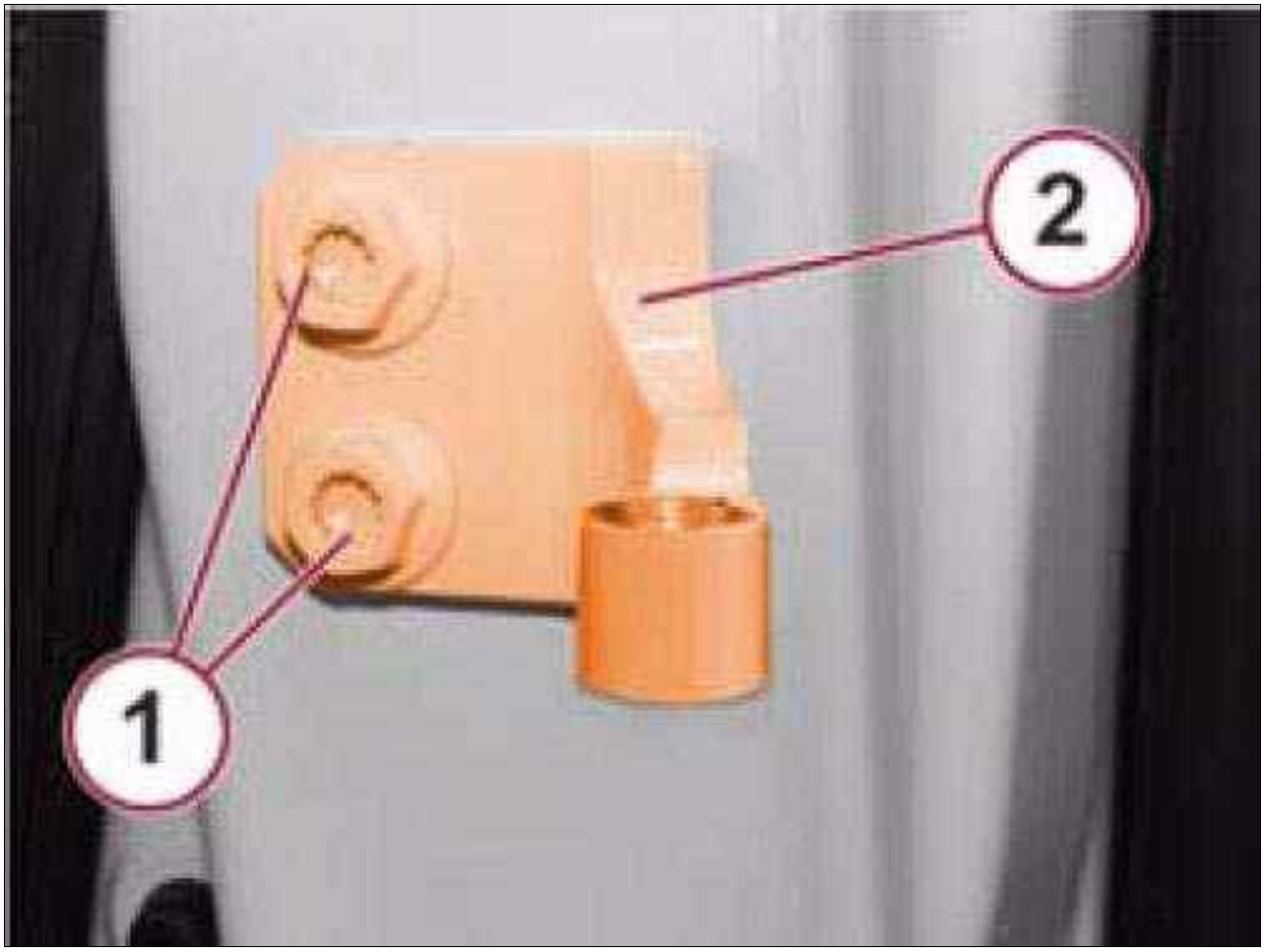
7. Lift and remove the rear door (1).

DOORS - REAR > DOOR, REAR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

1. Position the rear door onto the vehicle.
2. Loosely install the upper hinge bolt.
3. Loosely install the lower hinge bolt.
4. Connect the rear door wiring connector.
5. Pull the door check to the open position.
6. Loosely install the door check screw.
7. Connect the negative battery cable.
8. Check the various systems on the door to verify proper functioning.
9. Tighten the upper and lower hinge bolt to the proper torque specifications. Refer to SPECIFICATIONS .
10. Tighten the door check securely.

DOORS - REAR > HINGE, DOOR > REMOVAL AND INSTALLATION > REMOVAL > UPPER HINGE

Fig 1: Body Hinge & Bolts



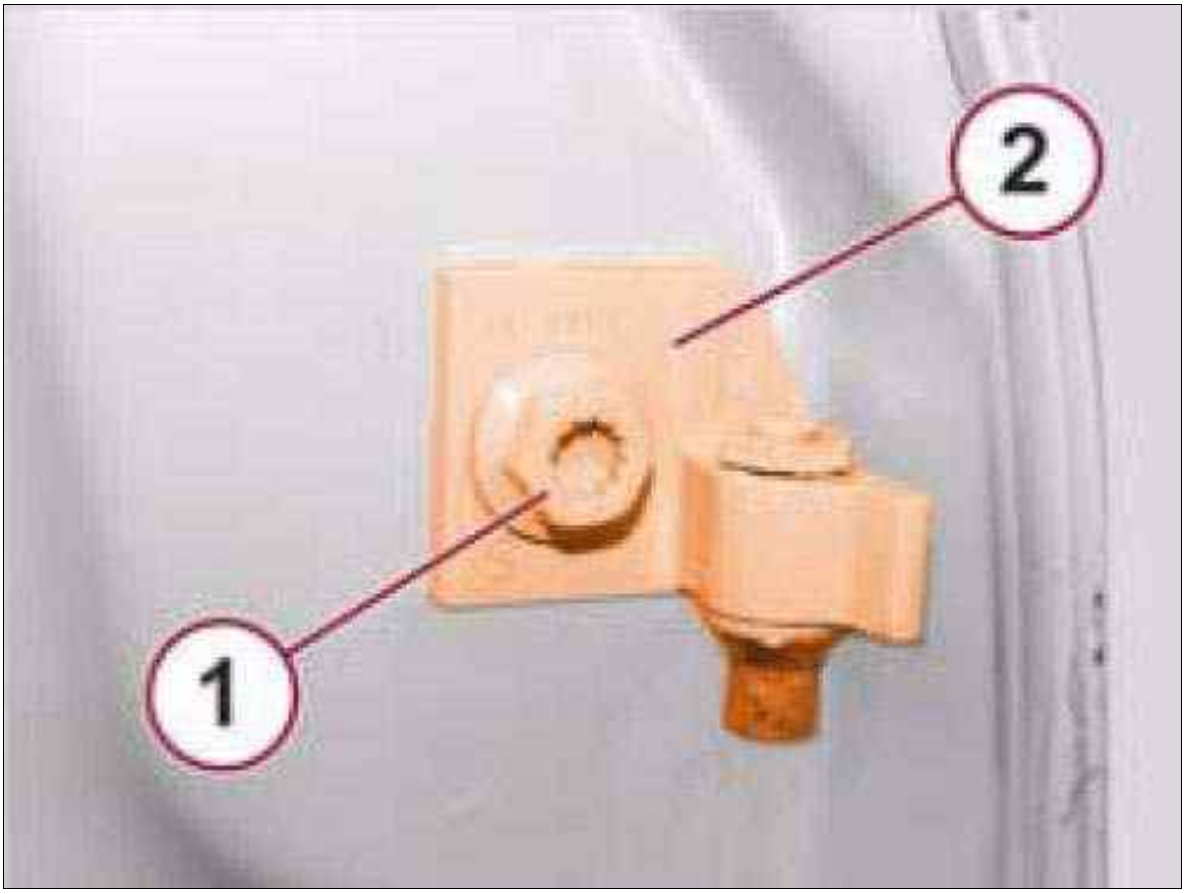
Courtesy of CHRYSLER GROUP, LLC

NOTE:

To protect the vehicle finish, apply several layers of masking tape on the front edges of the door and the front fender prior to loosening the hinges.

1. Disconnect and isolate the negative battery cable. If equipped with an Intelligent Battery Sensor (IBS), disconnect the IBS connector first before disconnecting the negative battery cable.
2. Remove the door. Refer to REMOVAL AND INSTALLATION .
3. Remove the screws (1) securing the hinge (2) to the body.
4. Remove the fixed hinge (2).

Fig 2: Door Hinge & Bolt

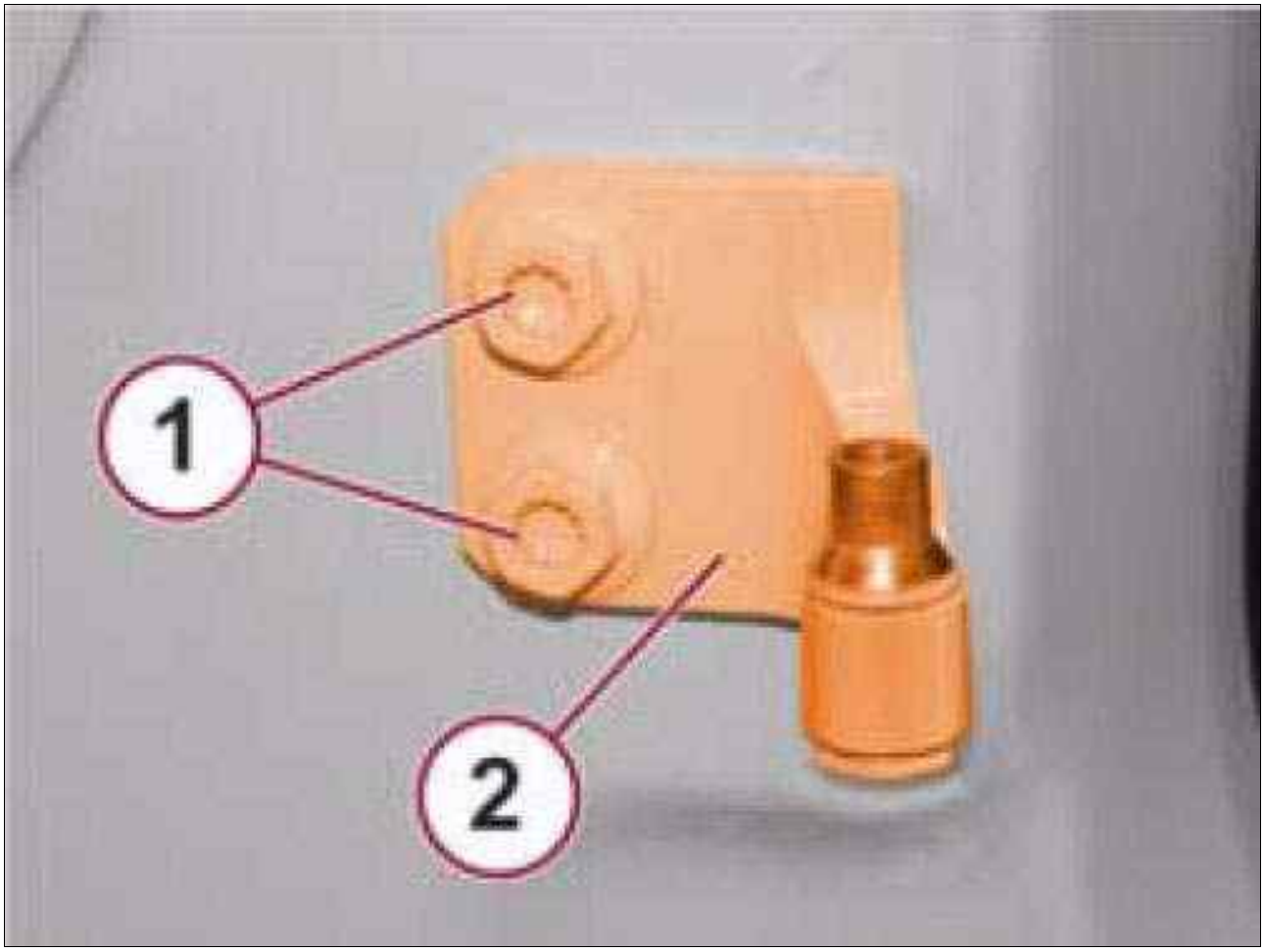


Courtesy of CHRYSLER GROUP, LLC

5. Remove the screw (1) securing the hinge (2) to the door.
6. Remove the movable hinge (2).

DOORS - REAR > HINGE, DOOR > REMOVAL AND INSTALLATION > REMOVAL > LOWER HINGE

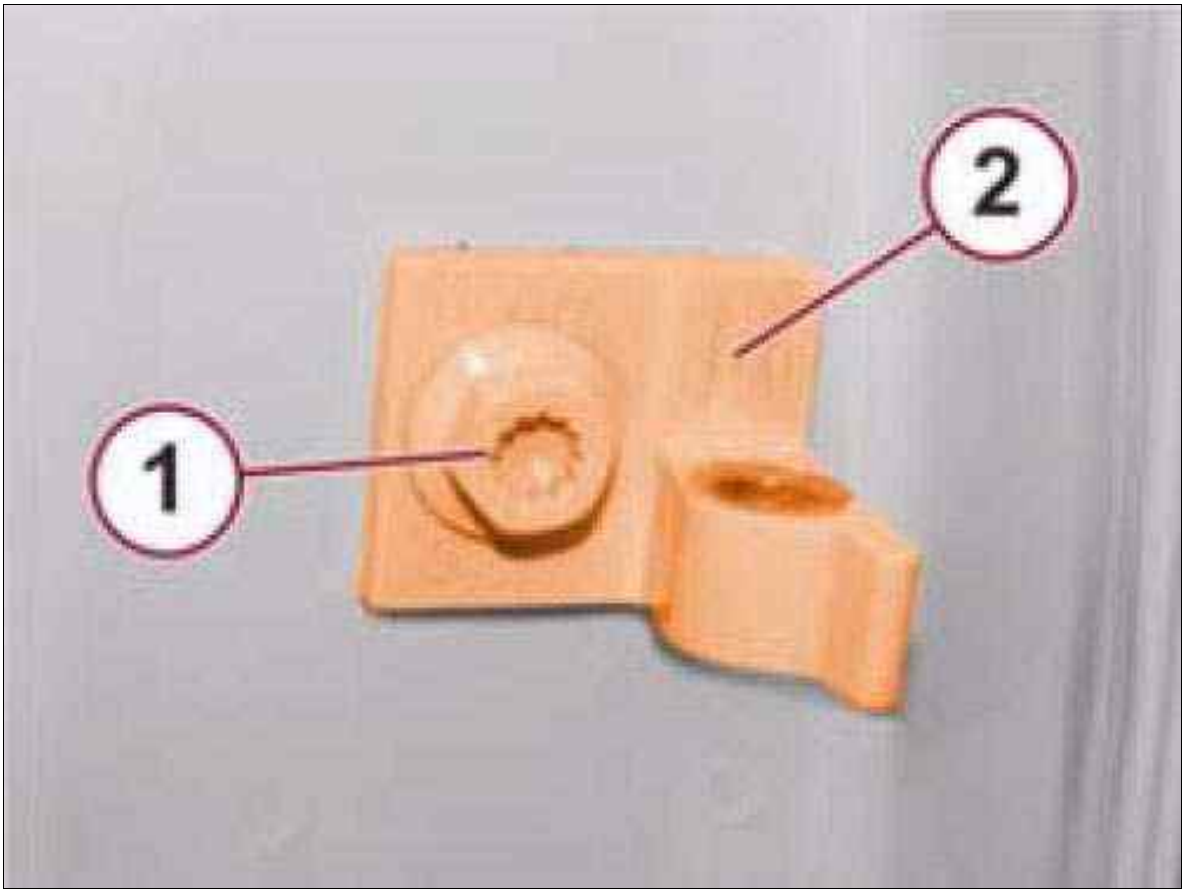
Fig 1: Fixed Body Hinge & Bolt



Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable. If equipped with an Intelligent Battery Sensor (IBS), disconnect the IBS connector first before disconnecting the negative battery cable.
2. Remove the door. Refer to REMOVAL AND INSTALLATION .
3. Remove the screws (1) securing the hinge (2) to the body.
4. Remove the fixed hinge (2).

Fig 2: Movable Door Hinge & Bolts

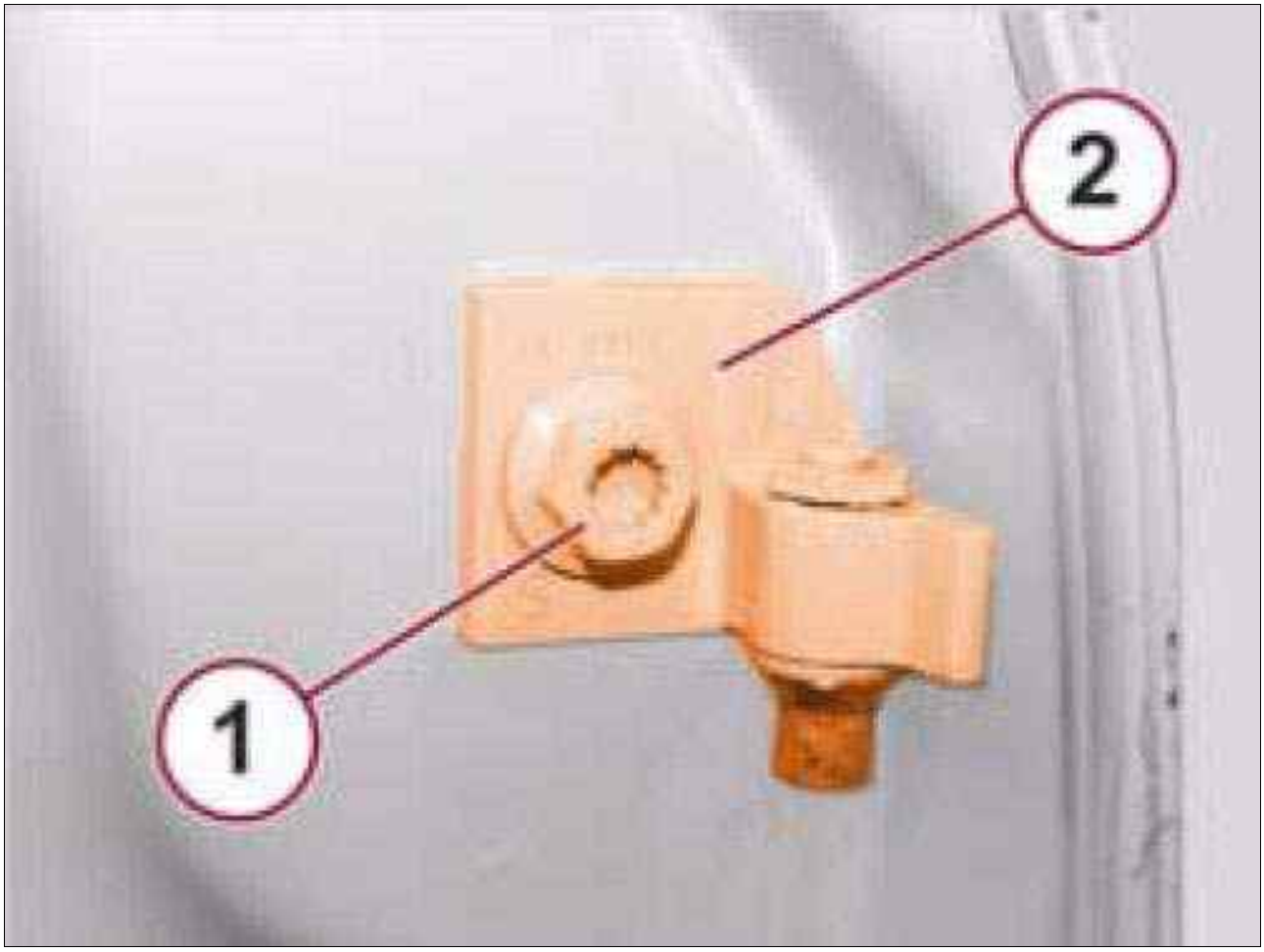


Courtesy of CHRYSLER GROUP, LLC

5. Remove the screw (1) securing the hinge (2) to the door.
6. Remove the movable hinge (2).

DOORS - REAR > HINGE, DOOR > REMOVAL AND INSTALLATION > INSTALLATION > UPPER HINGE

Fig 1: Door Hinge & Bolt



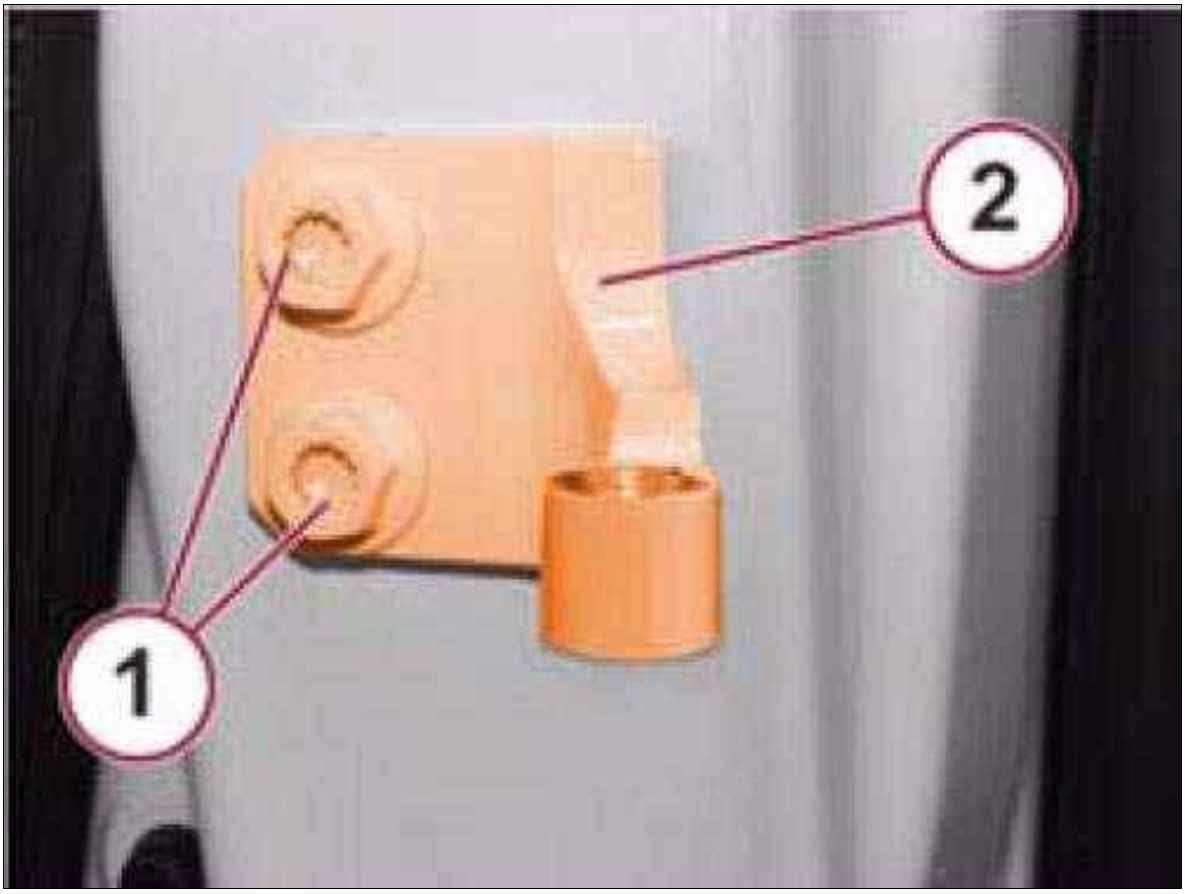
Courtesy of CHRYSLER GROUP, LLC

NOTE:

A suitable body sealant should be used when removing or moving the hinges.

1. Install the door hinge half (2).
2. Install the bolt (1) and hand tighten only.

Fig 2: Body Hinge & Bolts

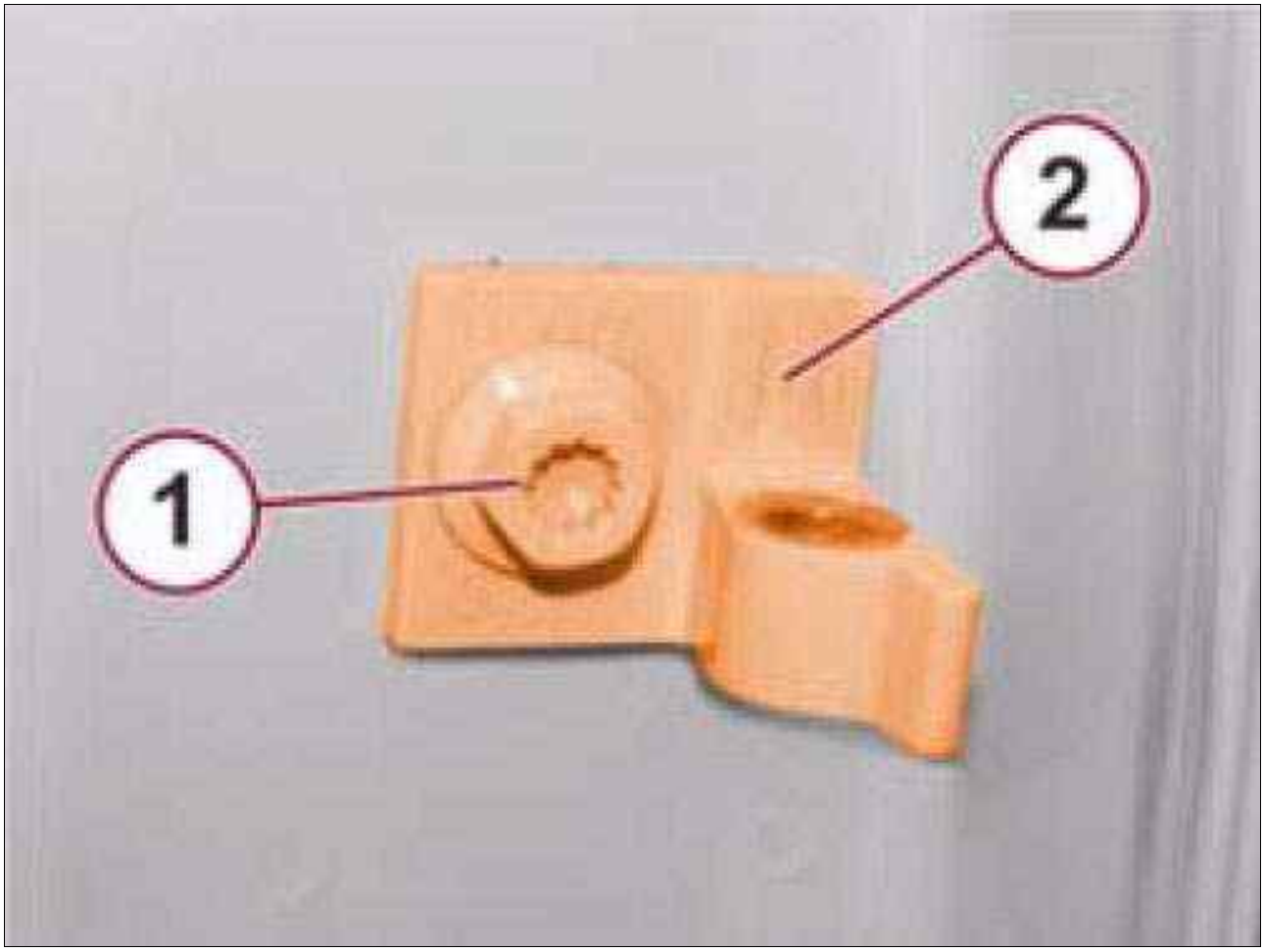


Courtesy of CHRYSLER GROUP, LLC

3. Install the body side hinge half (2).
4. Install the bolts (1) and hand tighten only.
5. Install the door. Refer to REMOVAL AND INSTALLATION .

DOORS - REAR > HINGE, DOOR > REMOVAL AND INSTALLATION > INSTALLATION > LOWER HINGE

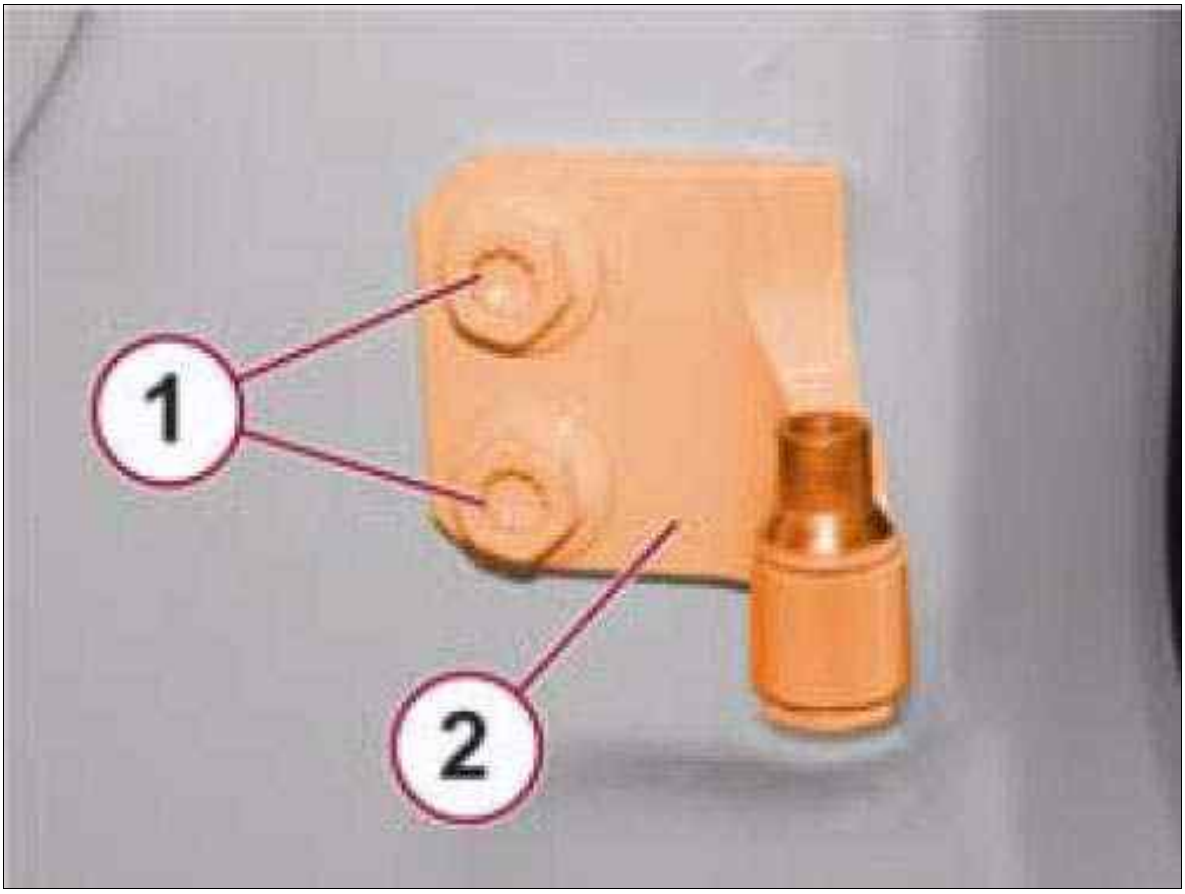
Fig 1: Movable Door Hinge & Bolts



Courtesy of CHRYSLER GROUP, LLC

1. Install the door hinge half (2).
2. Install the bolt (1) and hand tighten only.

Fig 2: Fixed Body Hinge & Bolt

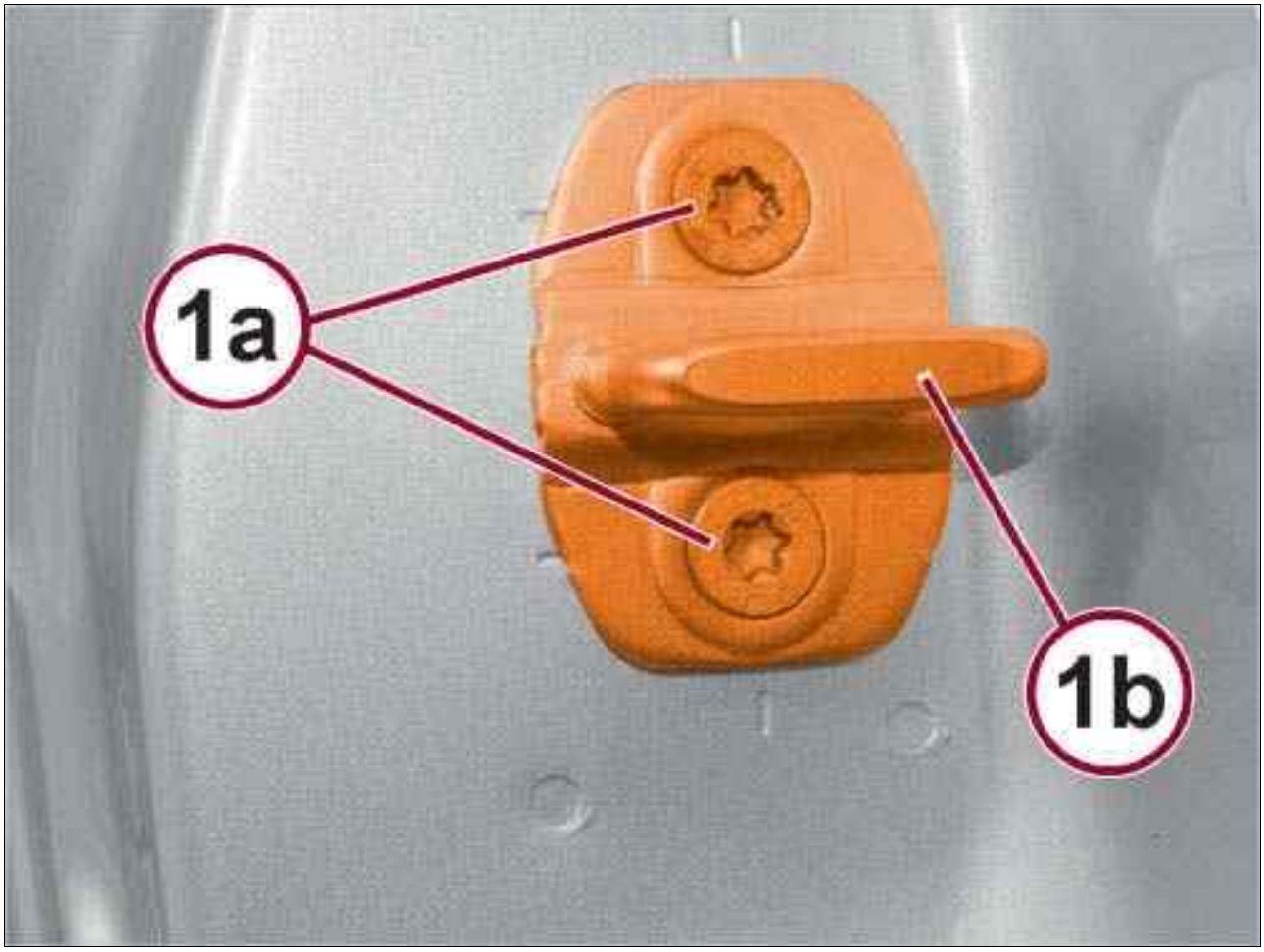


Courtesy of CHRYSLER GROUP, LLC

3. Install the body side hinge half (2).
4. Install the bolts (1) and hand tighten only.
5. Install the door. Refer to REMOVAL AND INSTALLATION .

DOORS - REAR > STRIKER, DOOR LATCH > ADJUSTMENTS > REMOVAL

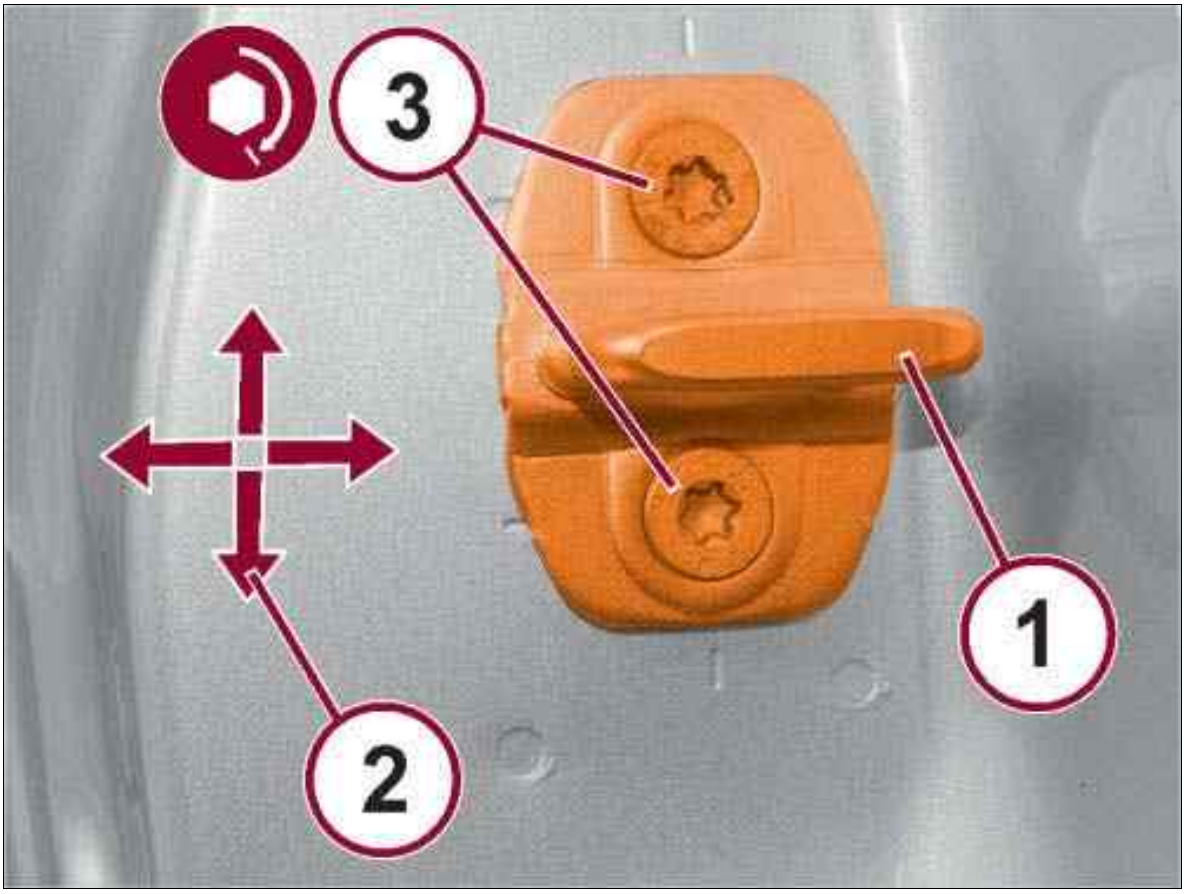
Fig 1: Striker & Screws



Courtesy of CHRYSLER GROUP, LLC

1. Loosen the screws (1a) of the striker (1b).

Fig 2: Striker Adjustments

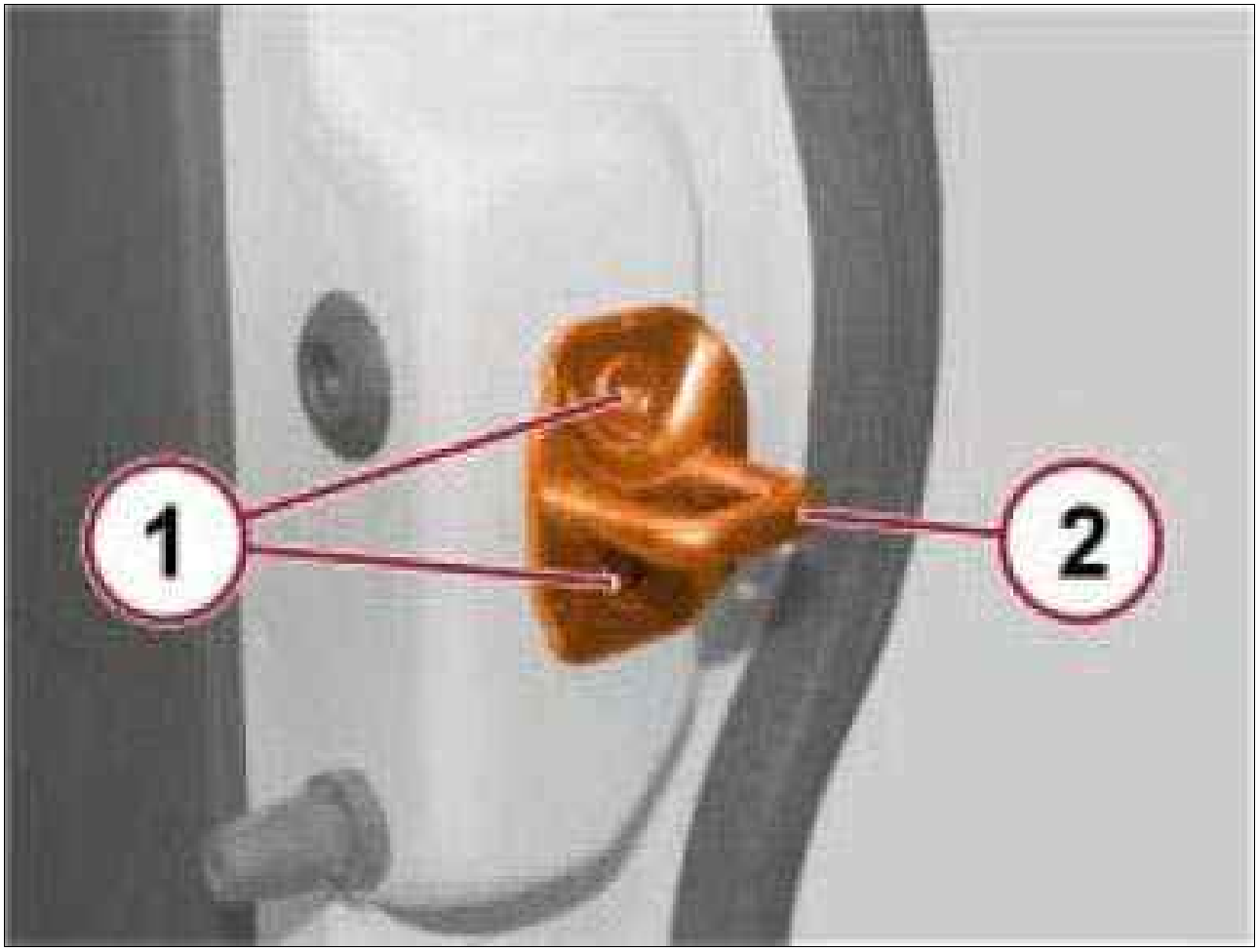


Courtesy of CHRYSLER GROUP, LLC

2. Move the striker (1) into the correct position.
3. The arrows (2) indicated the allowable movements.
4. Tighten the screws (3) to the proper specification. Refer to SPECIFICATIONS .
5. Check the operation of the door and repeat adjustments as necessary.

DOORS - REAR > STRIKER, DOOR LATCH > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Striker & Bolts

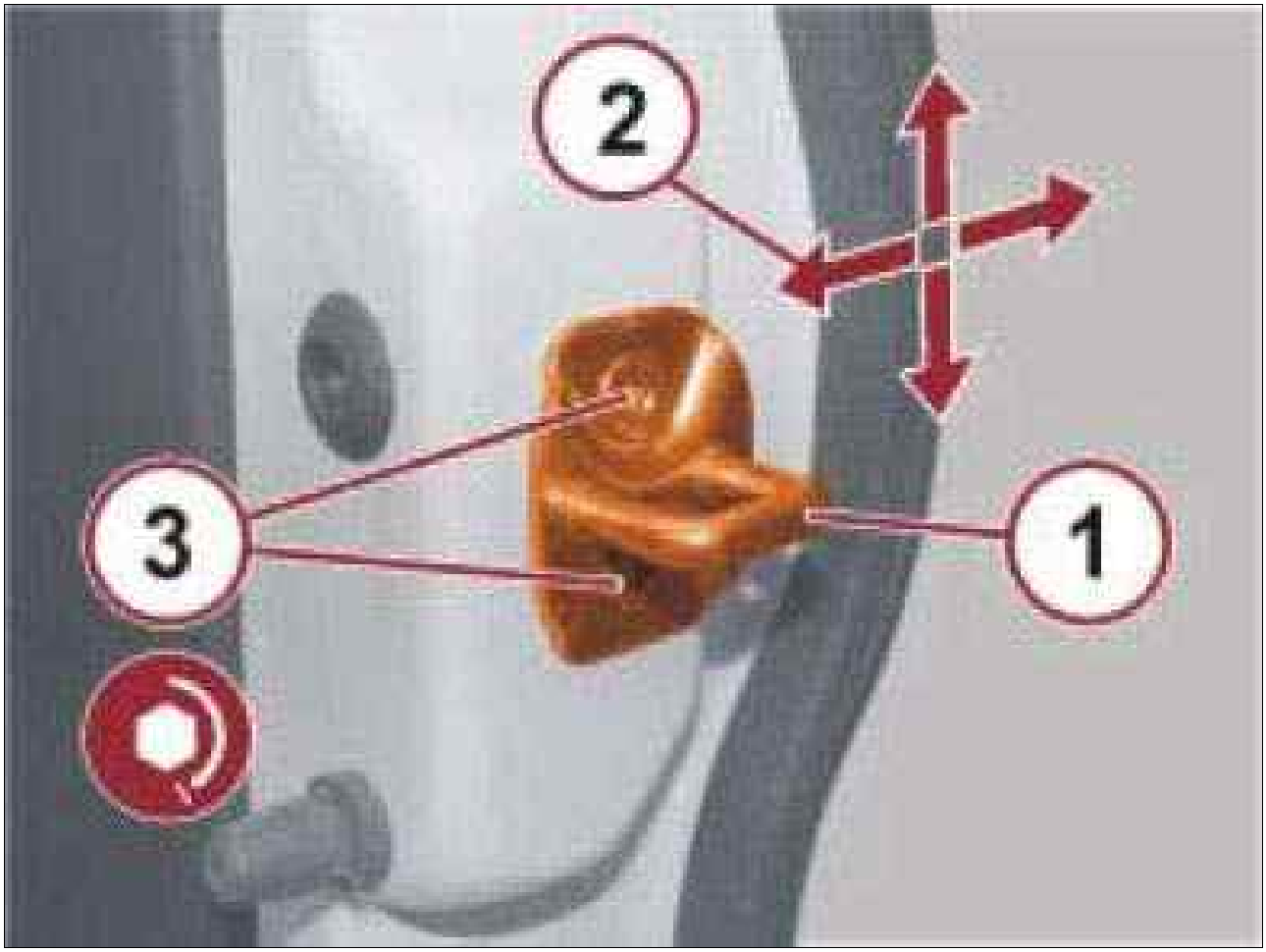


Courtesy of CHRYSLER GROUP, LLC

1. Using a grease pencil or equivalent, mark the location of the striker (2) on the door to aid in installation.
2. Remove the bolts (1) and remove the striker (2).

DOORS - REAR > STRIKER, DOOR LATCH > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Striker, Bolts & Adjustments

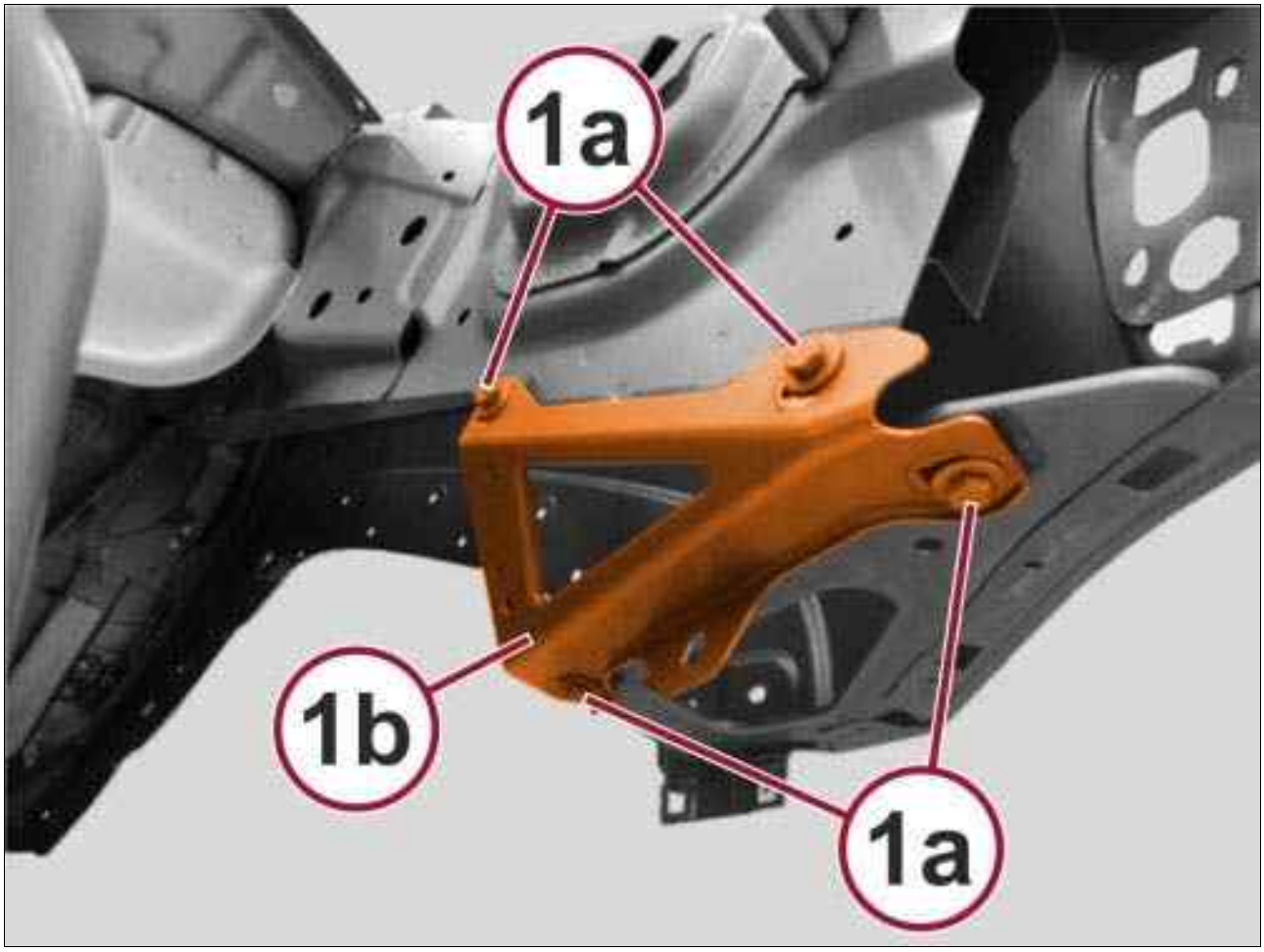


Courtesy of CHRYSLER GROUP, LLC

1. Place the striker (1) into position using the marks made during removal.
2. Install the bolts (3) without tightening them.
3. Adjust the position of the striker; the arrows (2) show the possible movements.
4. Tighten the bolts (3) to the proper specification. Refer to SPECIFICATIONS .

EXTERIOR > BRACKET, FENDER MOUNTING > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Bracket & Bolts

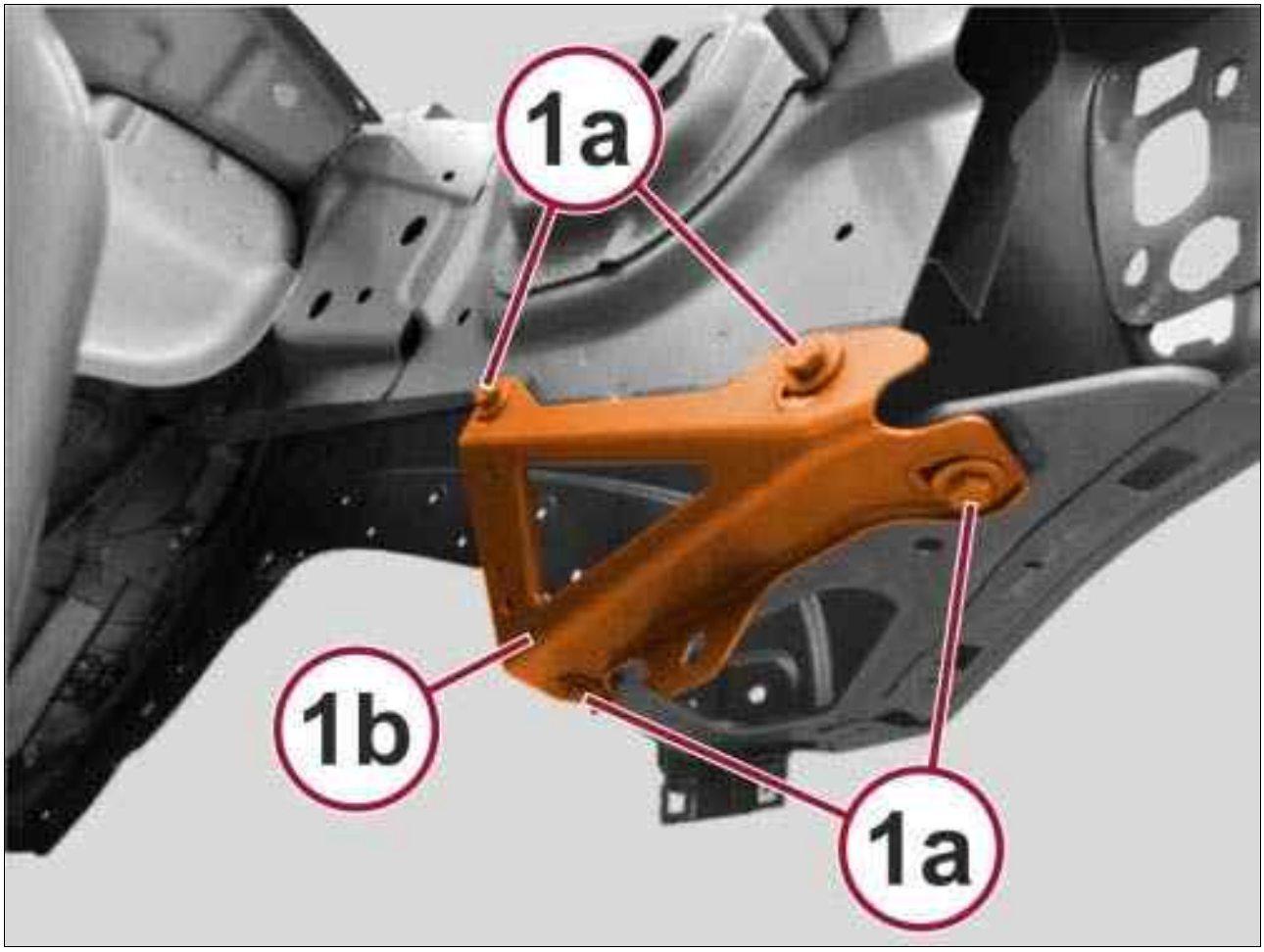


Courtesy of CHRYSLER GROUP, LLC

1. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
2. Straighten the body as necessary.
3. Remove the bolts (1a).
4. Remove the bracket (1b).

EXTERIOR > BRACKET, FENDER MOUNTING > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Bracket & Bolts

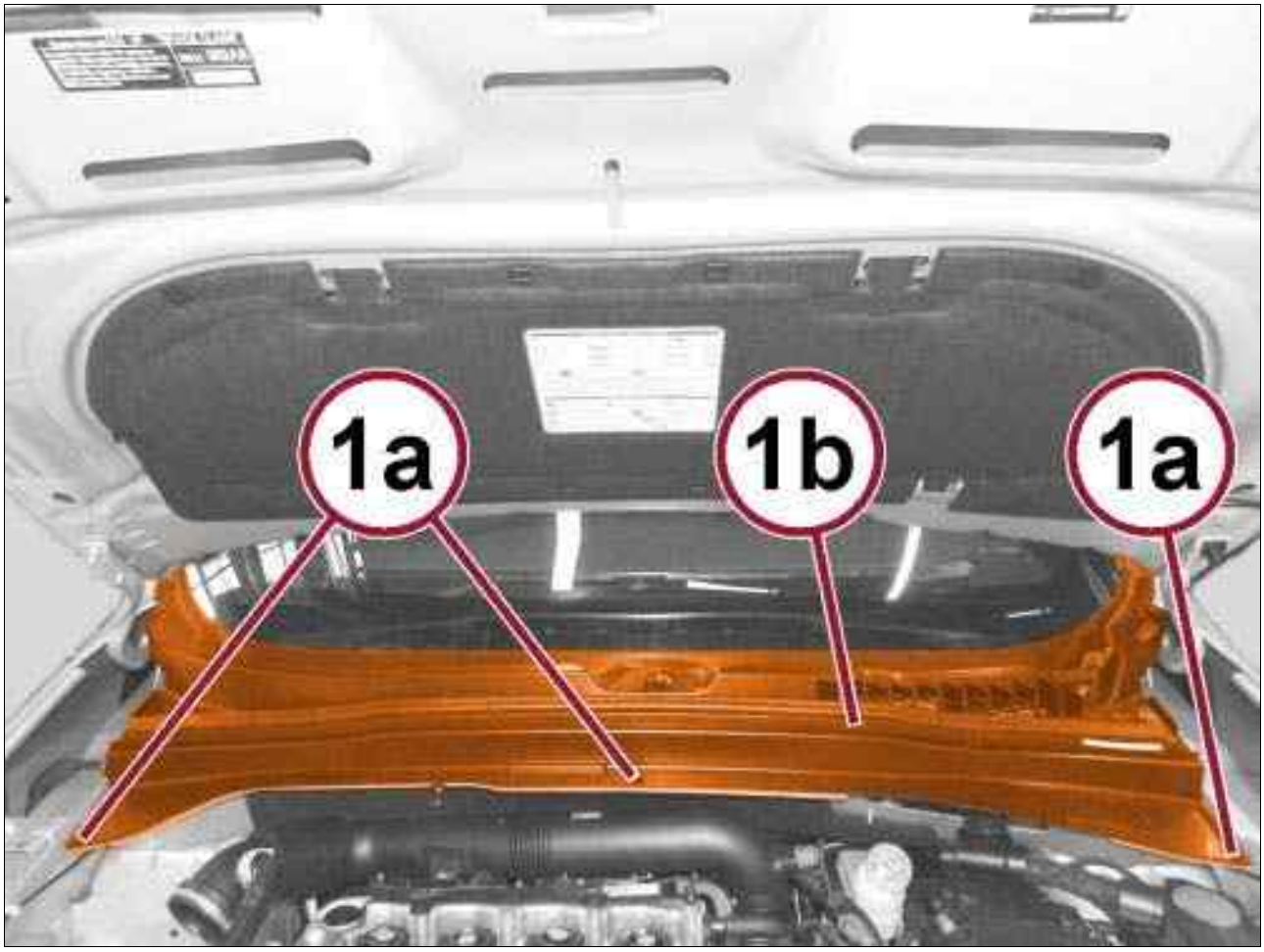


Courtesy of CHRYSLER GROUP, LLC

1. Check that the front fender mounting surface is not damaged.
2. Position the fender bracket (1b).
3. Install the bolts (1a) and tighten securely.

EXTERIOR > COVER, COWL PANEL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

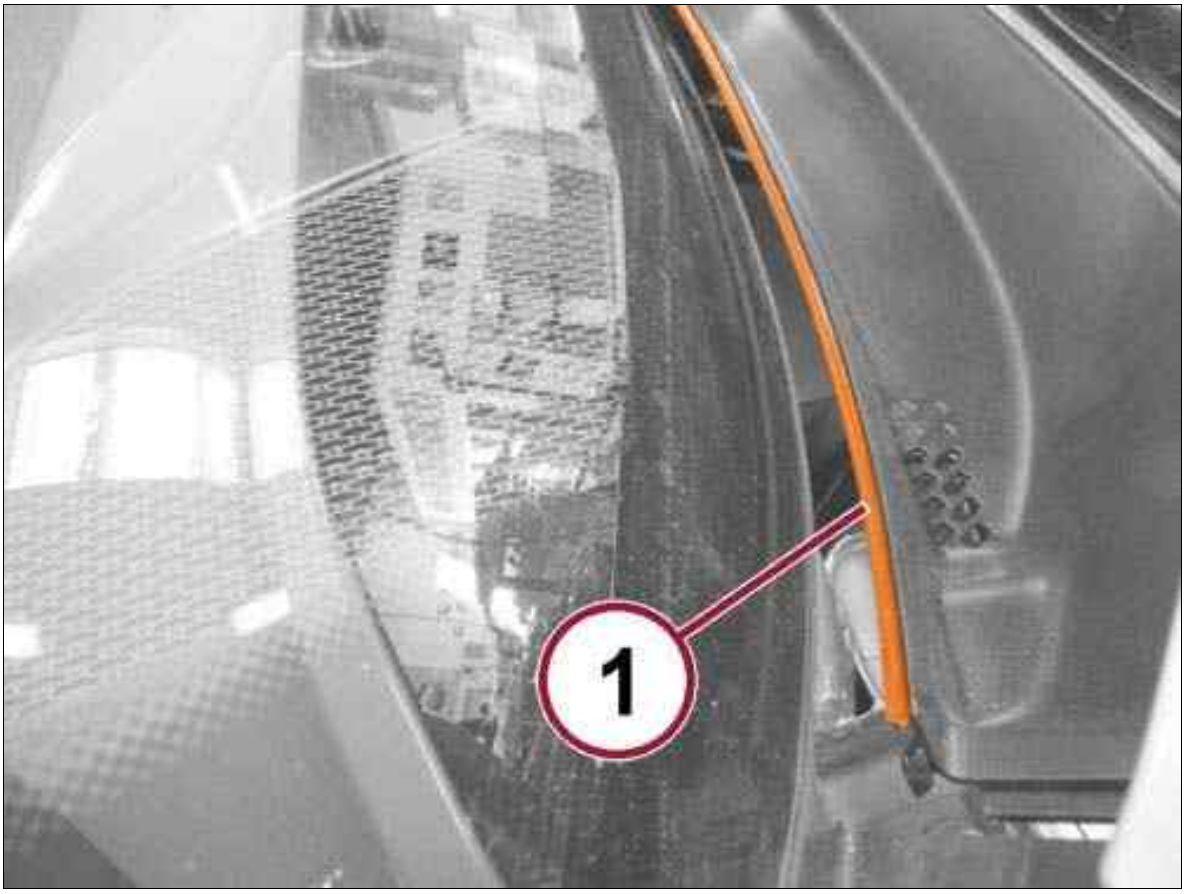
Fig 1: Cowl Panel & Retainers



Courtesy of CHRYSLER GROUP, LLC

1. Remove the wiper arms. Refer to ARM, WIPER, REMOVAL AND INSTALLATION .
2. Using trim stick (special tool #C-4755, Trim Stick) or equivalent, release the retainers (1a) and the central side of the cowl panel (1b).

Fig 2: Cowl Panel

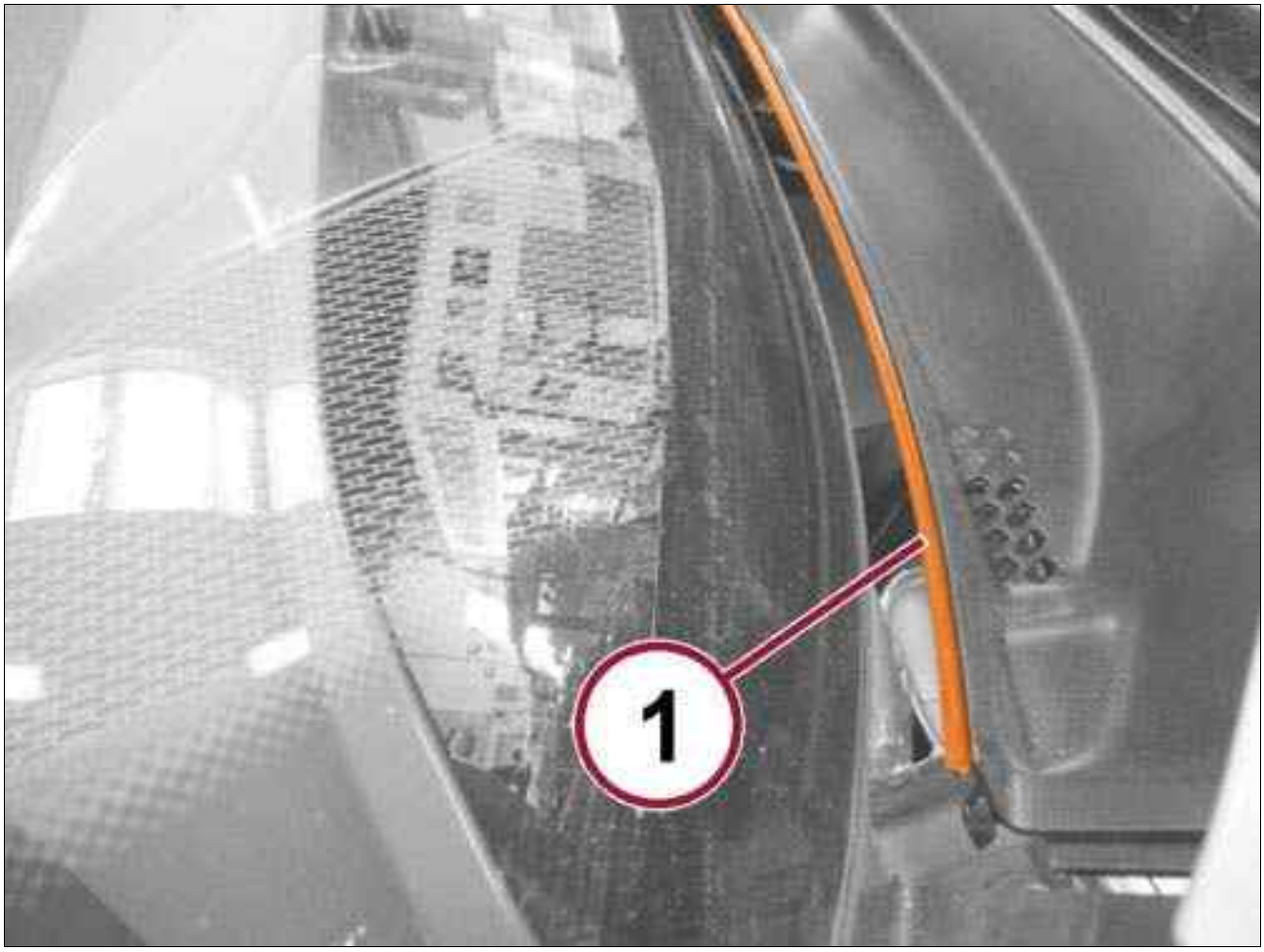


Courtesy of CHRYSLER GROUP, LLC

3. Release the upper portion of the cowl panel (1) from the conduit on the windshield and remove the cowl panel.

EXTERIOR > COVER, COWL PANEL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

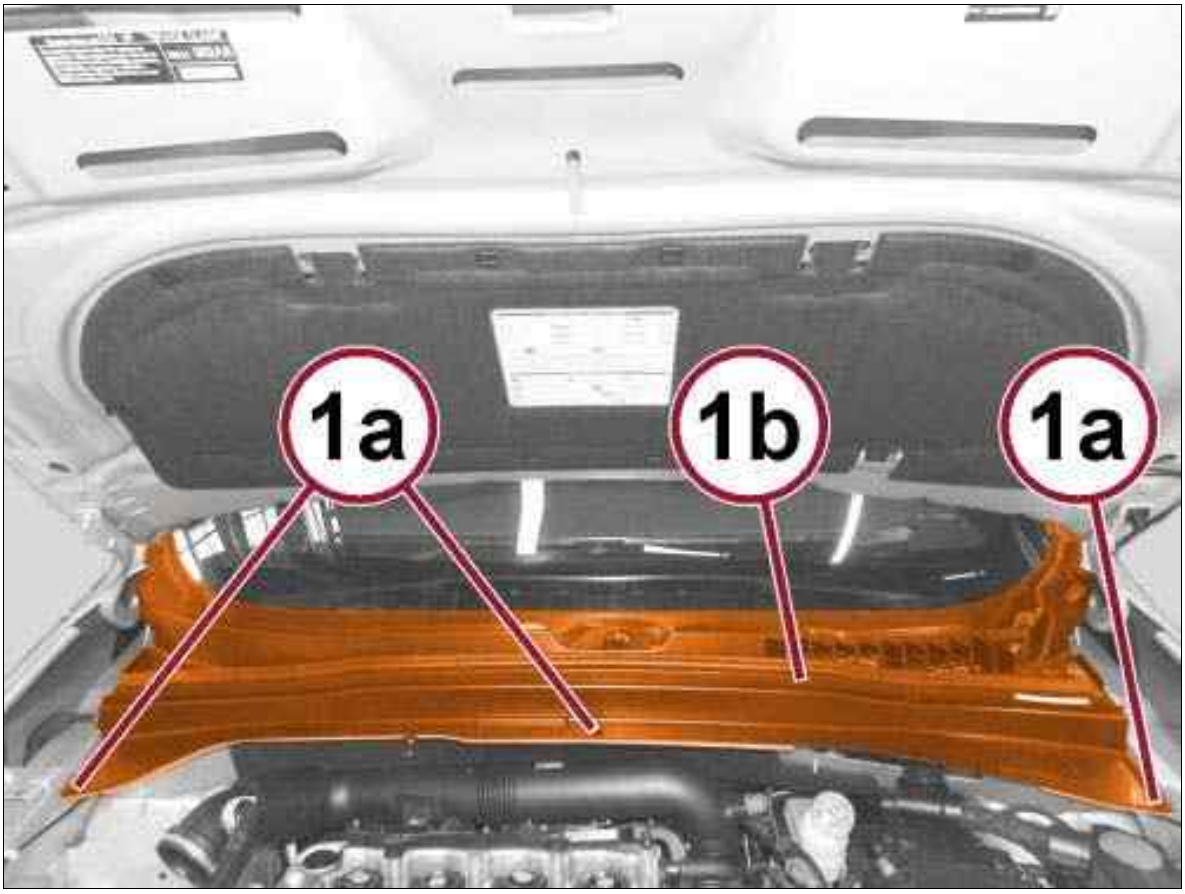
Fig 1: Cowl Panel



Courtesy of CHRYSLER GROUP, LLC

1. Install the cowl panel and secure the upper portion of the cowl panel (1) to the conduit on the windshield.

Fig 2: Cowl Panel & Retainers

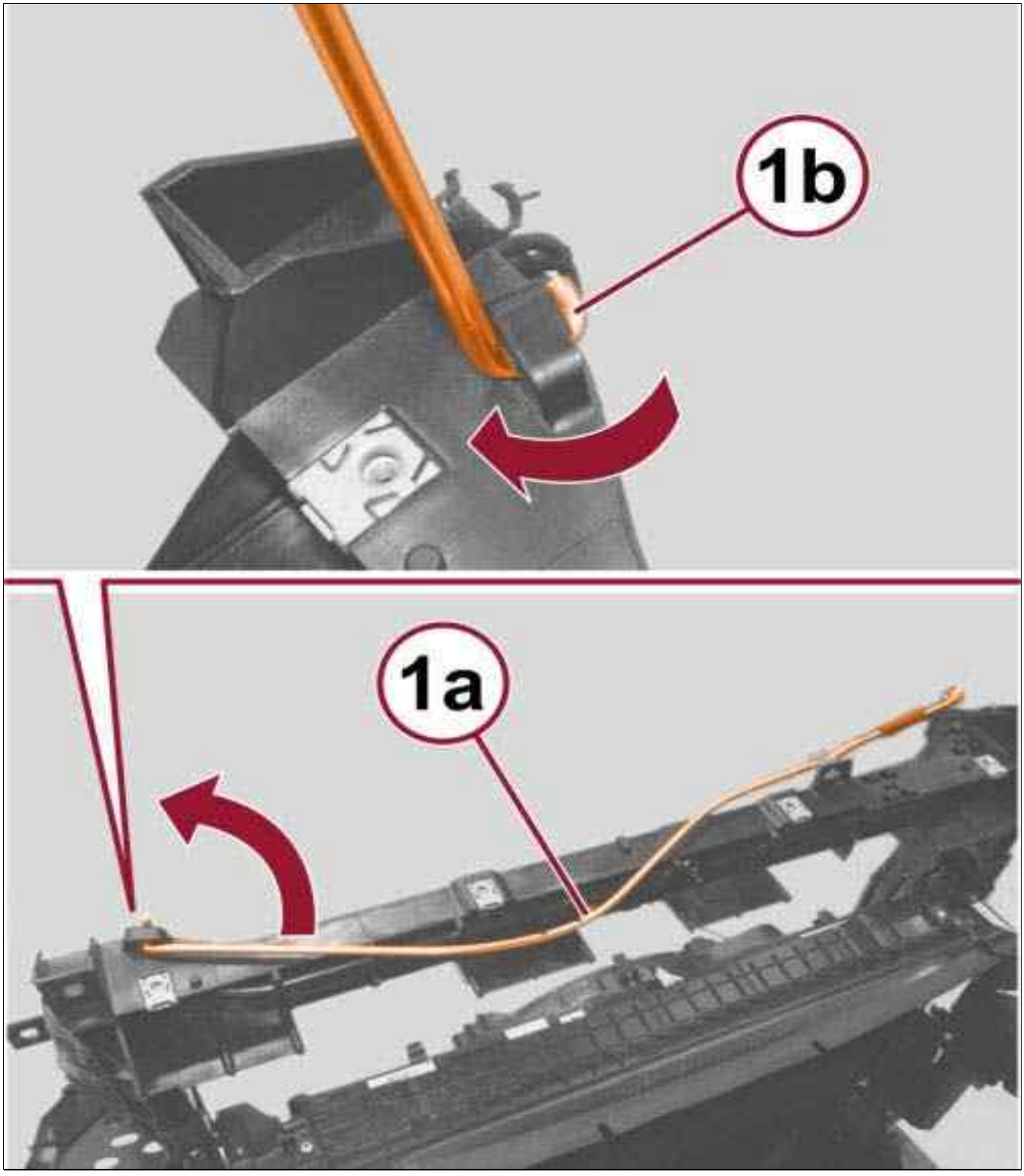


Courtesy of CHRYSLER GROUP, LLC

2. Install the retainers (1a) and seat fully.
3. Install the wiper arms. Refer to ARM, WIPER, REMOVAL AND INSTALLATION .

EXTERIOR > CROSSMEMBER, HEADLAMP MOUNTING > DISASSEMBLY AND ASSEMBLY > DISASSEMBLY > 1.4L TURBO MULTIAIR, 1.6L TURBO DIESEL, 2.0L TURBO DIESEL 120CV / 140C

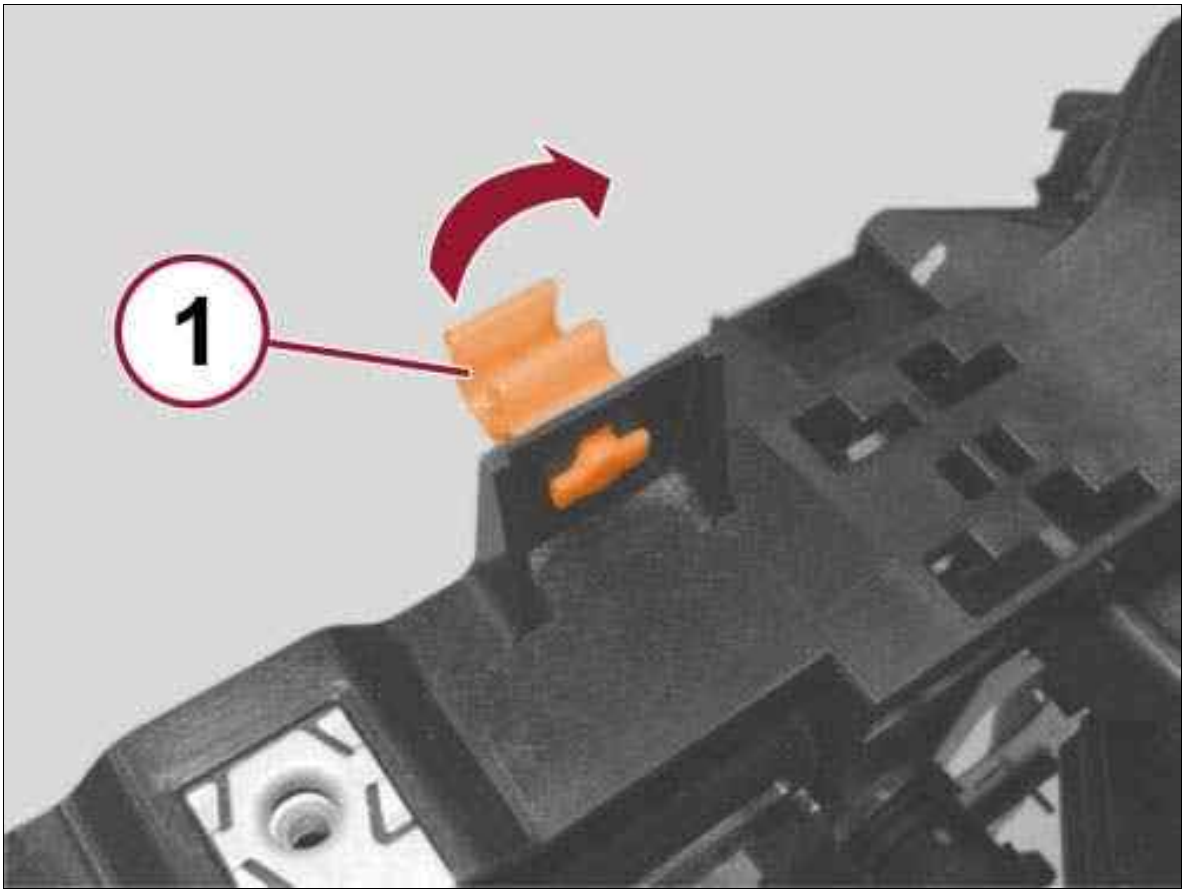
Fig 1: Prop Rod & End



Courtesy of CHRYSLER GROUP, LLC

1. Remove the headlamp mounting crossmember. Refer to CROSSMEMBER, HEADLAMP MOUNTING, REMOVAL AND INSTALLATION .
2. Raise the rod (1a) supporting the engine compartment lid open, turn the end (1b) and remove it from its seat releasing it on the front end.

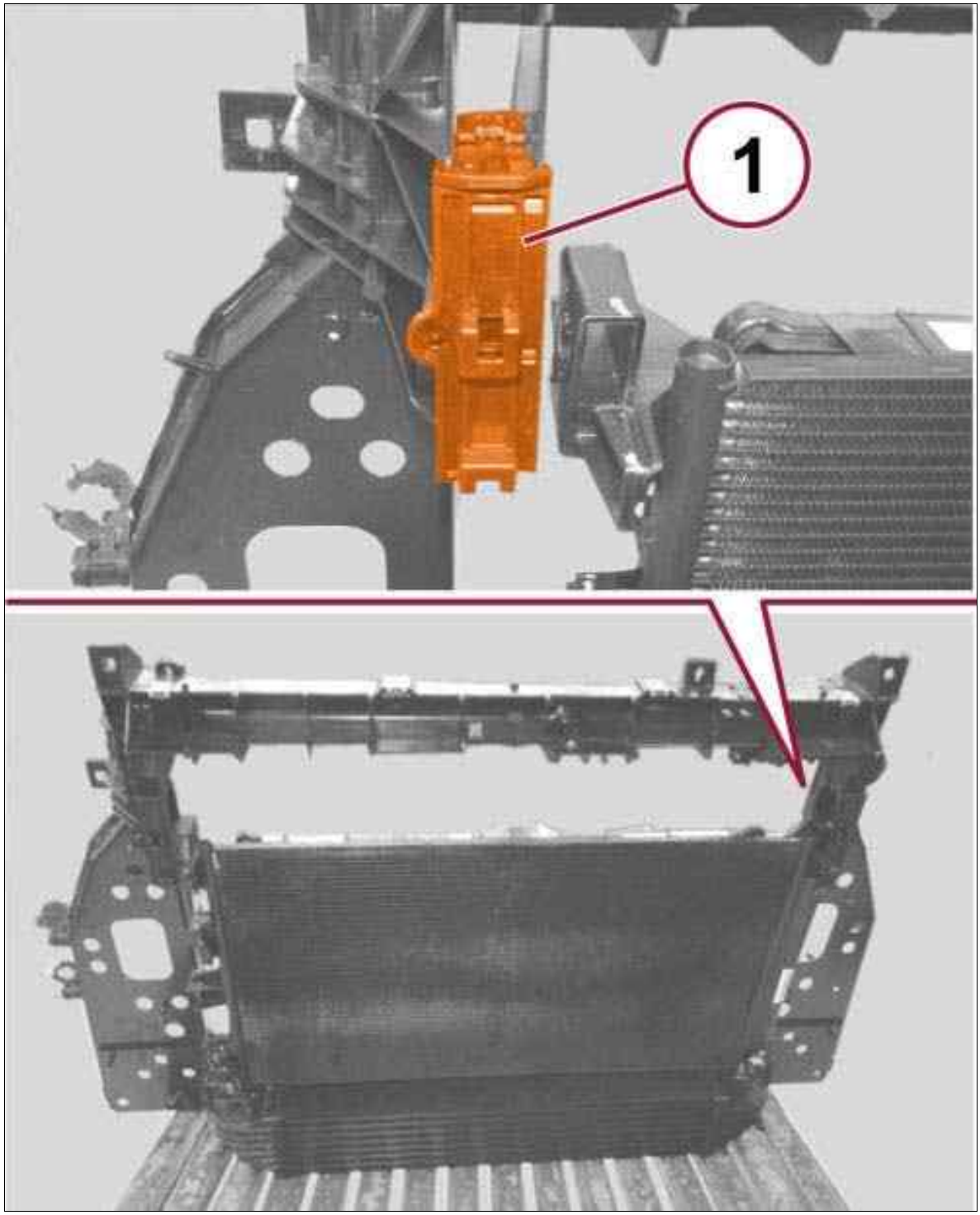
Fig 2: Rod Support



Courtesy of CHRYSLER GROUP, LLC

3. Rotate and remove the latch rod support (1).

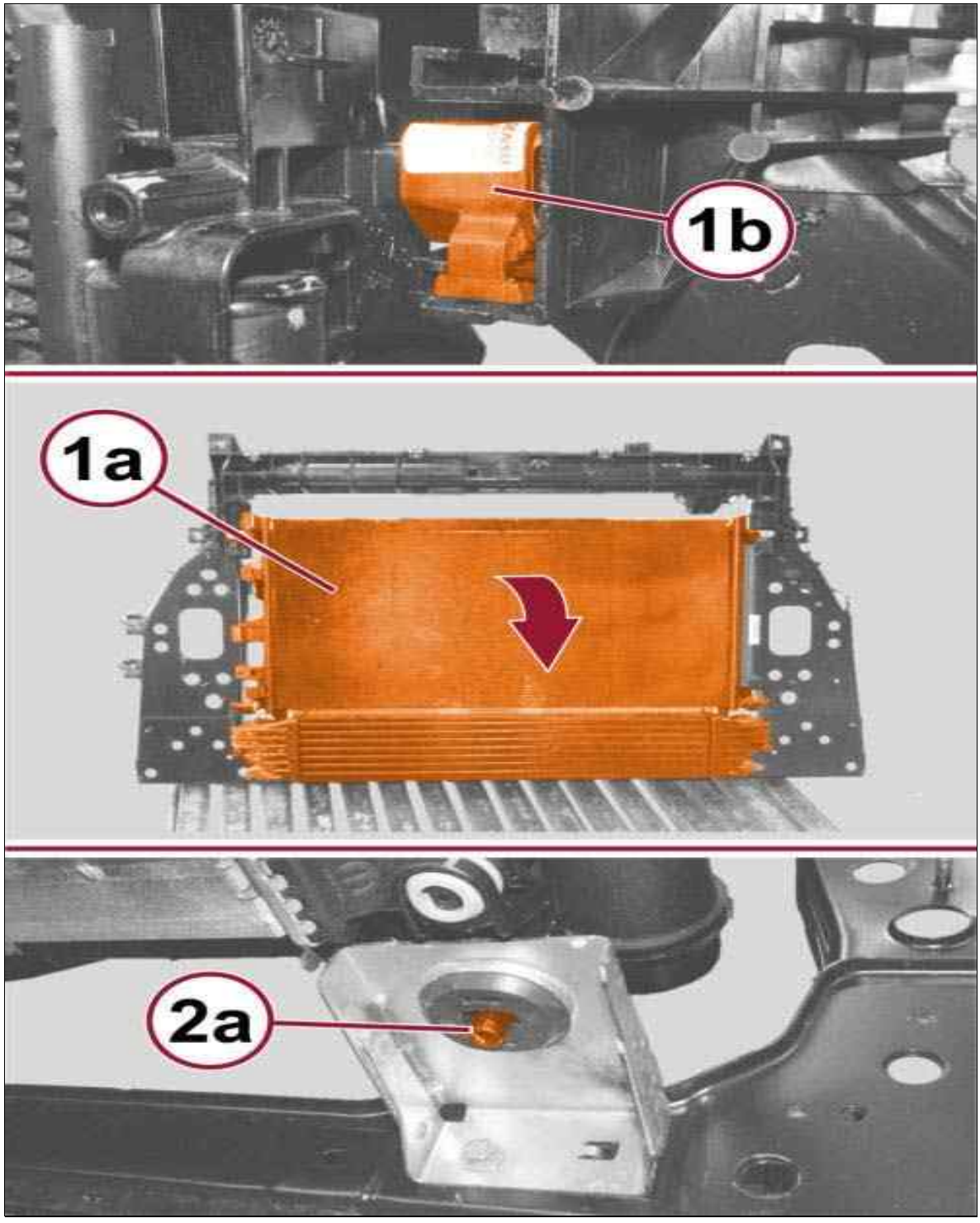
Fig 3: Covers



Courtesy of CHRYSLER GROUP, LLC

4. Release the upper radiator retainer covers and remove the covers (1).

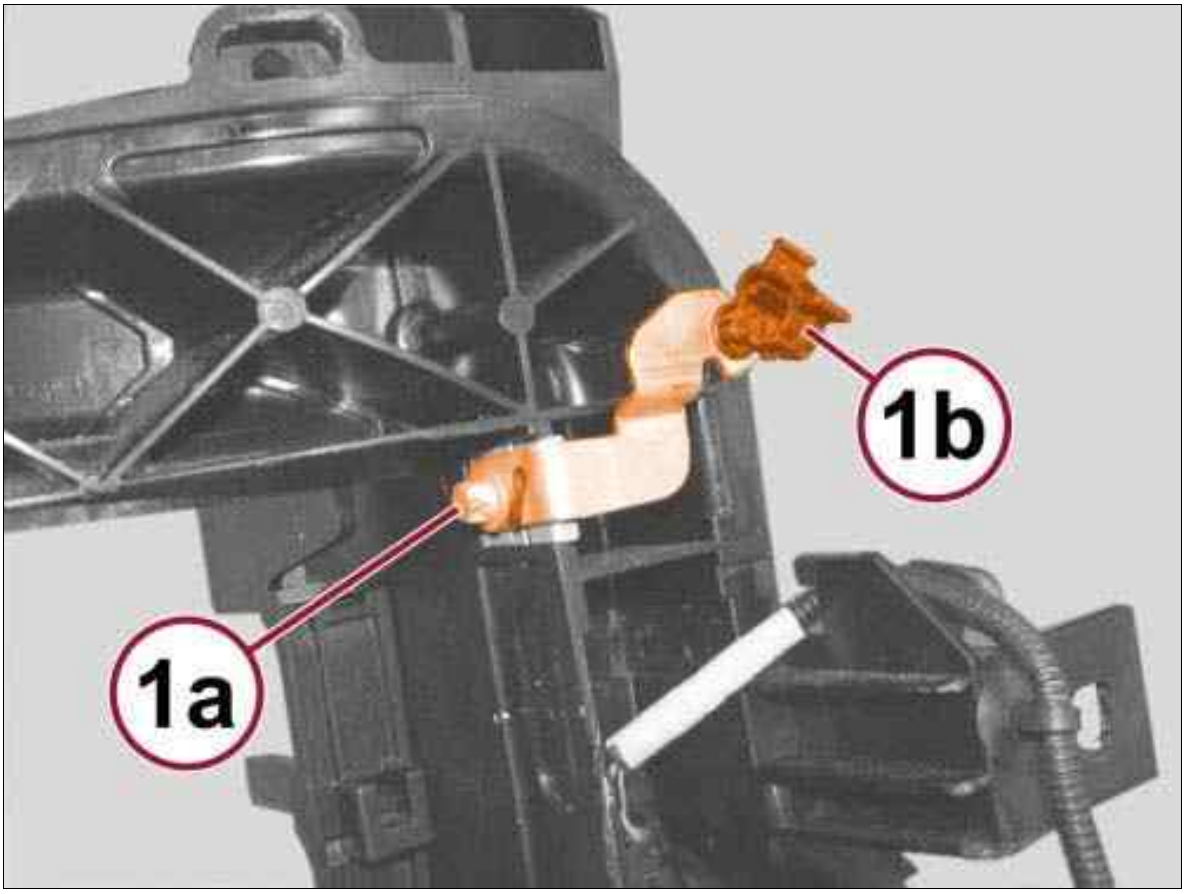
Fig 4: Radiator, Retainers & Pins



Courtesy of CHRYSLER GROUP, LLC

5. Rotate the radiator (1a) down and remove the upper retainers (1b).
6. Lift the radiator assembly up and off of the lower pins (2a) and remove.

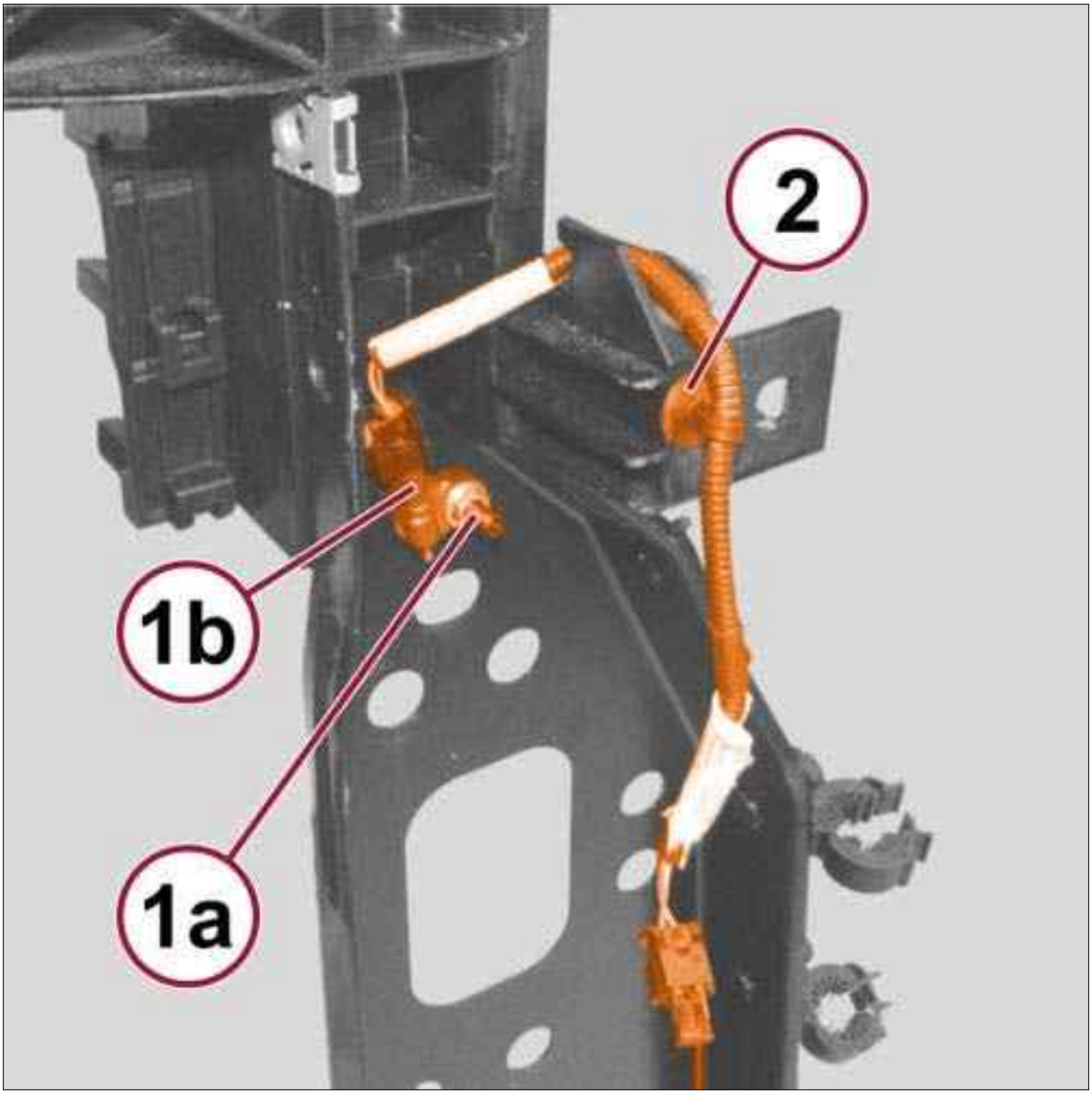
Fig 5: Bracket & Screw



Courtesy of CHRYSLER GROUP, LLC

7. Remove the screw (1a) and remove the bracket (1b) of the valve support charging of the air conditioning.

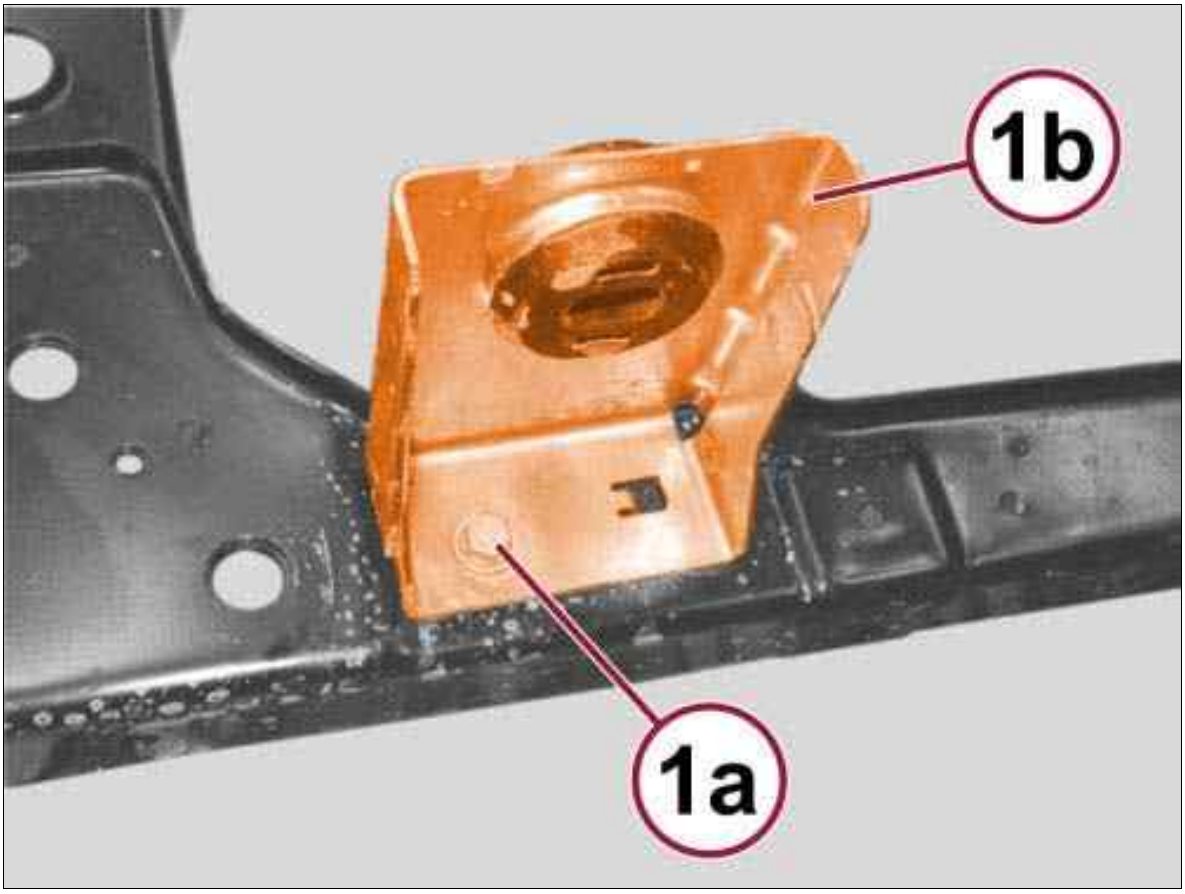
Fig 6: Airbag Sensor, Clip & Nut



Courtesy of CHRYSLER GROUP, LLC

8. Remove the nuts (1a) and remove the front Air Bag sensors (1b).
9. On the right side, release the clip (2) retaining the wiring.

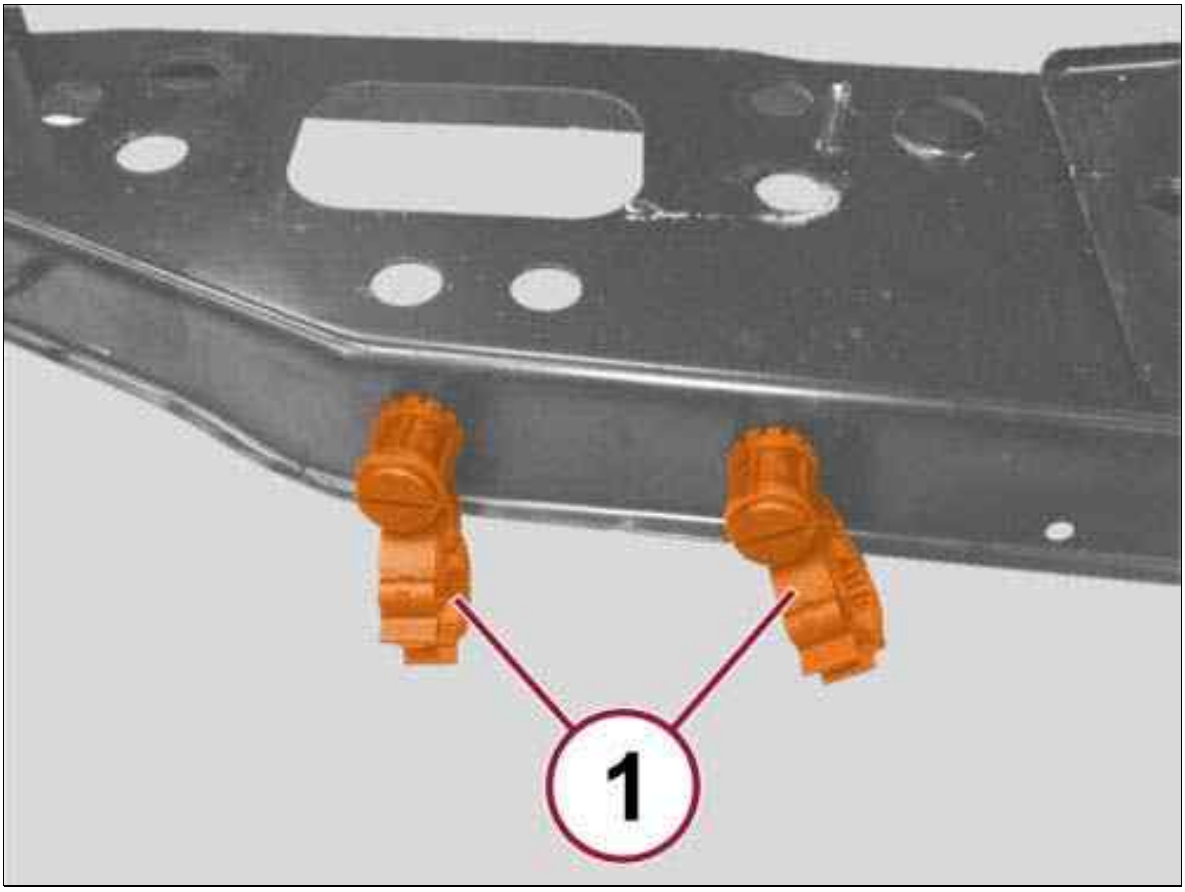
Fig 7: Retainer & Bolt



Courtesy of CHRYSLER GROUP, LLC

10. Remove the screws (1a), release the retainers (1b) and remove the radiator mounting brackets.

Fig 8: Retainers

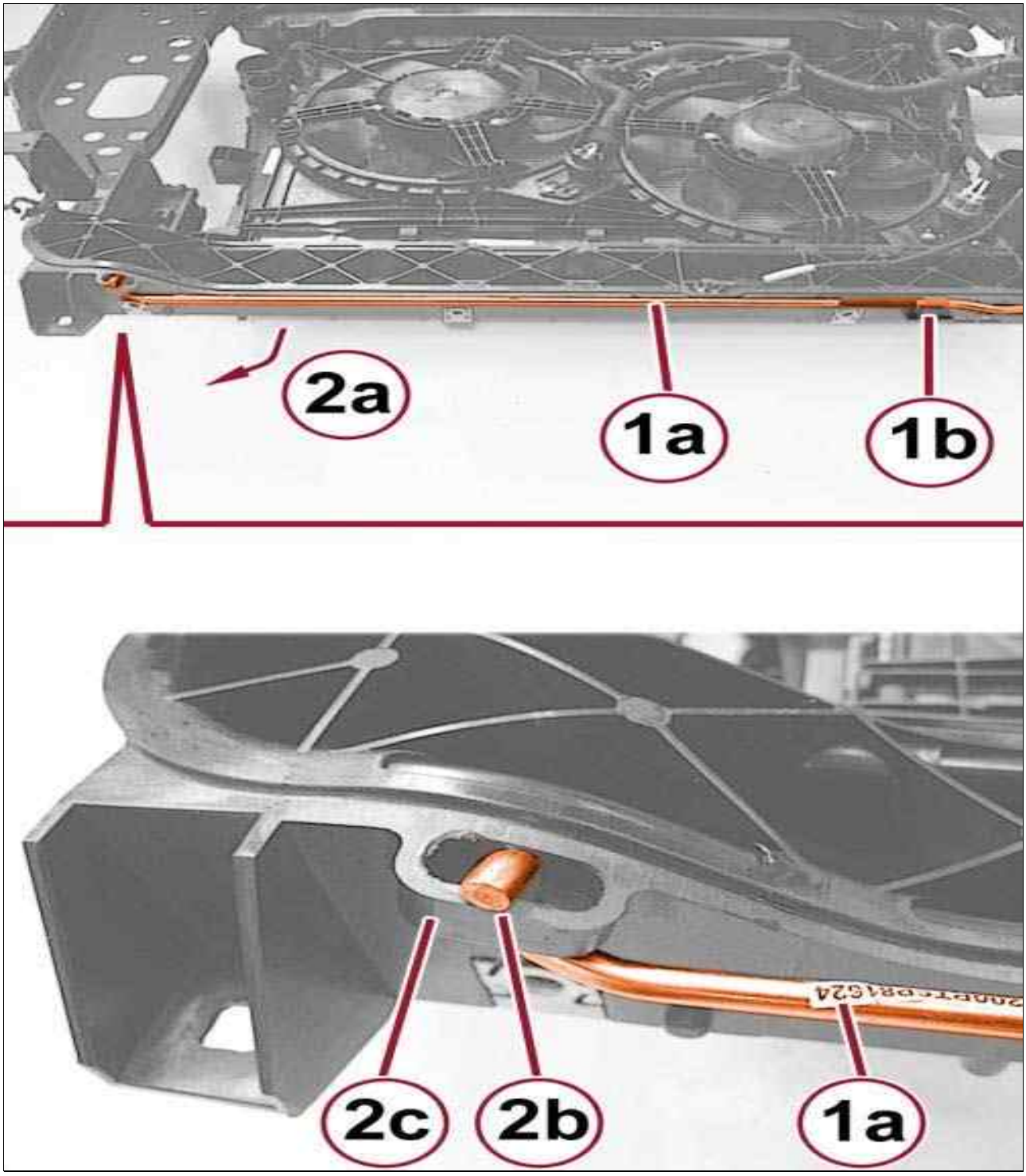


Courtesy of CHRYSLER GROUP, LLC

11. Release and remove retainers (1).

EXTERIOR > CROSSMEMBER, HEADLAMP MOUNTING > DISASSEMBLY AND ASSEMBLY > DISASSEMBLY > 2.0L TURBO DIESEL 170 CV

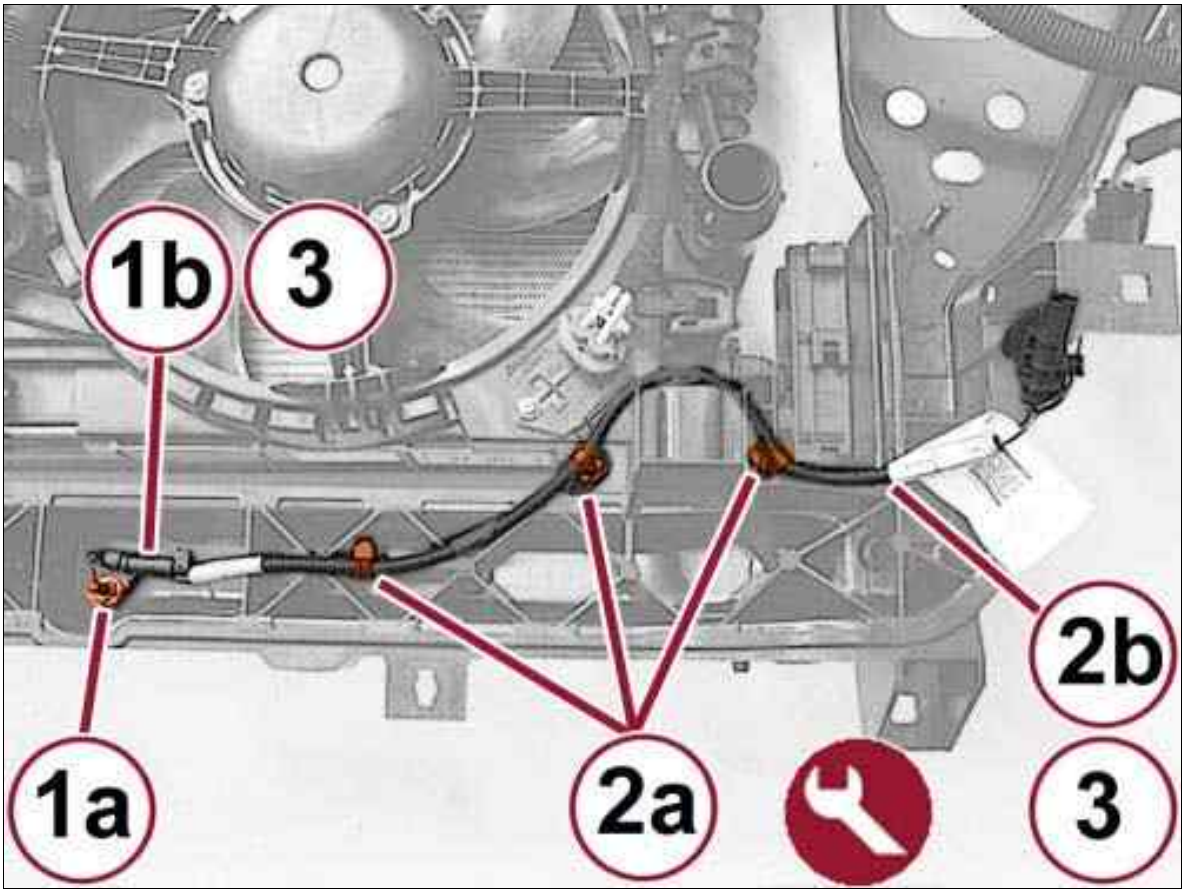
Fig 1: Prop Rod



Courtesy of CHRYSLER GROUP, LLC

1. Remove the headlamp mounting crossmember. Refer to CROSSMEMBER, HEADLAMP MOUNTING, REMOVAL AND INSTALLATION .
2. Remove the nut (1a) and remove Air Bag deceleration sensor (1b).
3. Release the front-end retainers (2a) of the wiring (2b) of the sensor, with the appropriate tool.
4. Remove the sensor (1b) with wiring (2b).

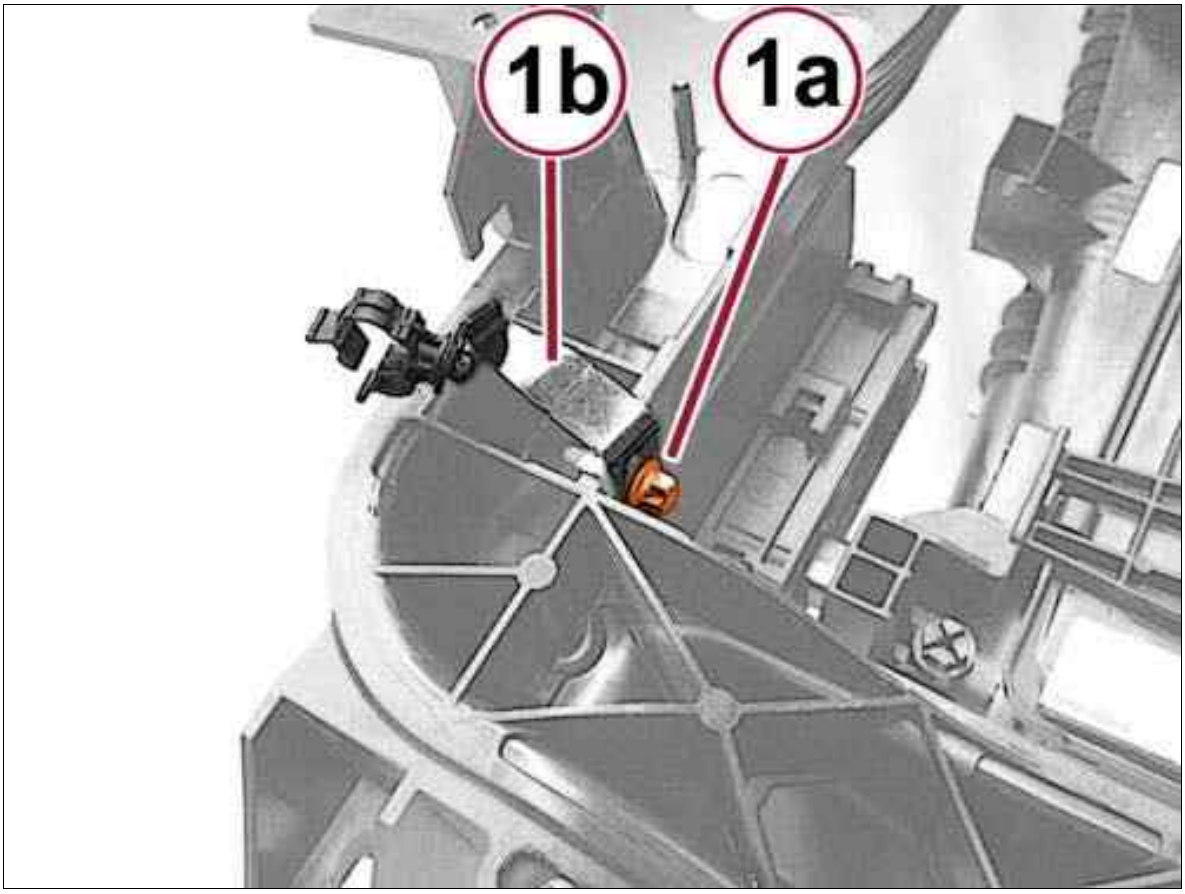
Fig 2: Sensor, Bracket, Screw, Wiring & Retainers



Courtesy of CHRYSLER GROUP, LLC

5. Remove the screw (1a) and remove the bracket (1b) of the support pipe of the air conditioning.
6. Detach the front-end retainers (2a) of the wiring (2b) of the sensor, with the appropriate tool.
7. Remove the sensor (1b) with wiring (2b).

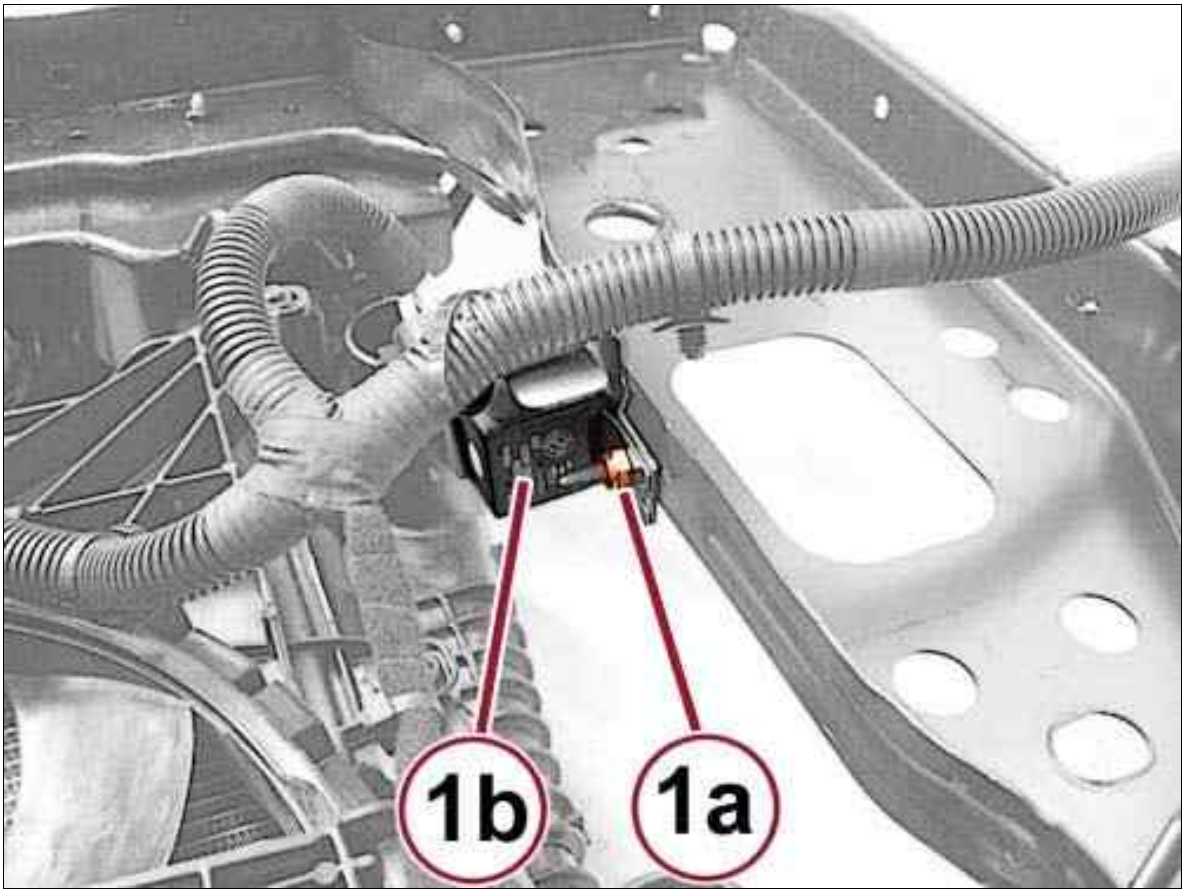
Fig 3: Bracket & Bolt



Courtesy of CHRYSLER GROUP, LLC

8. Remove the screw (1a) and remove the bracket (1b) for the air conditioning pipe support.

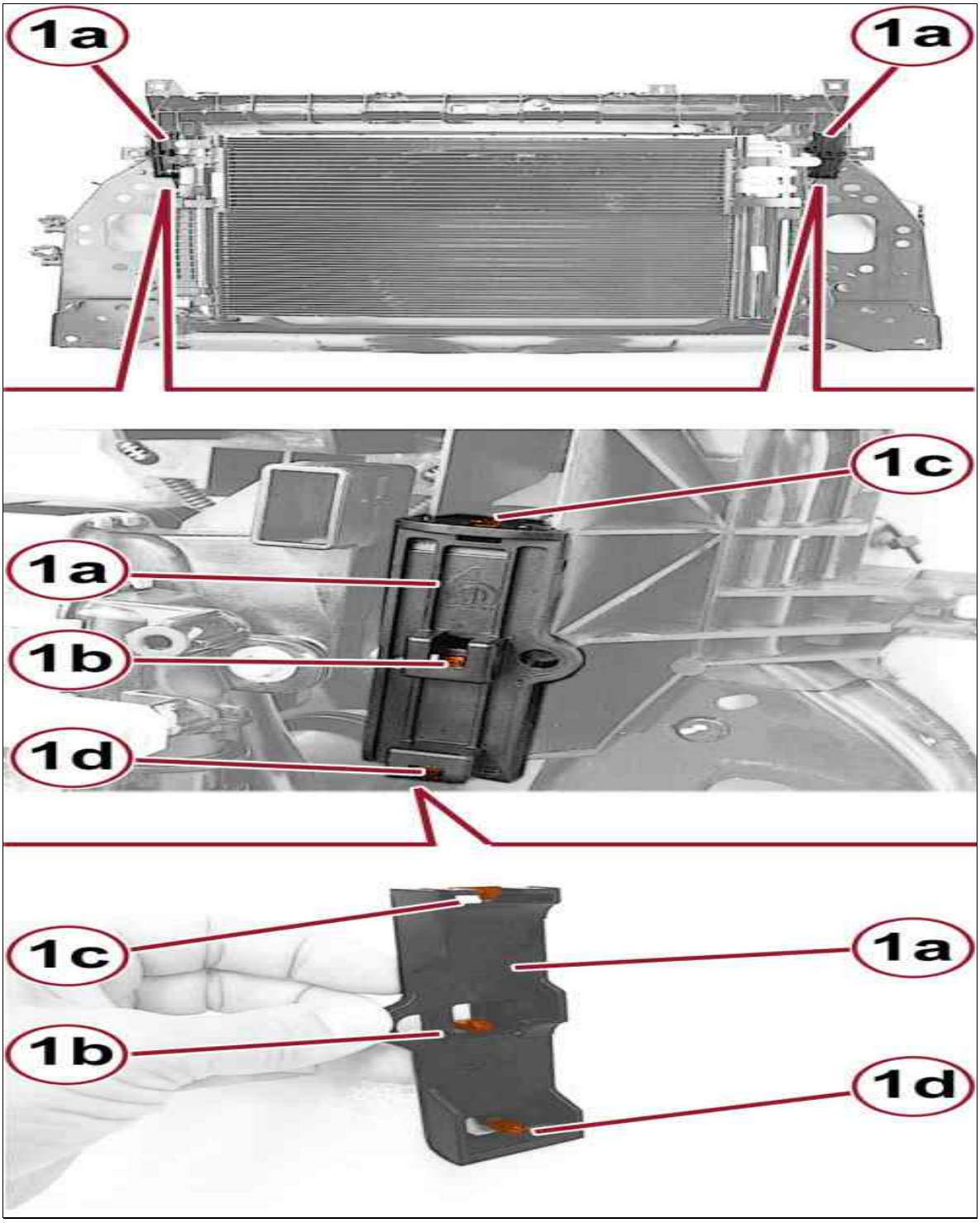
Fig 4: Relay & Nut



Courtesy of CHRYSLER GROUP, LLC

9. Remove the nut (1a) and remove the relay (1b).

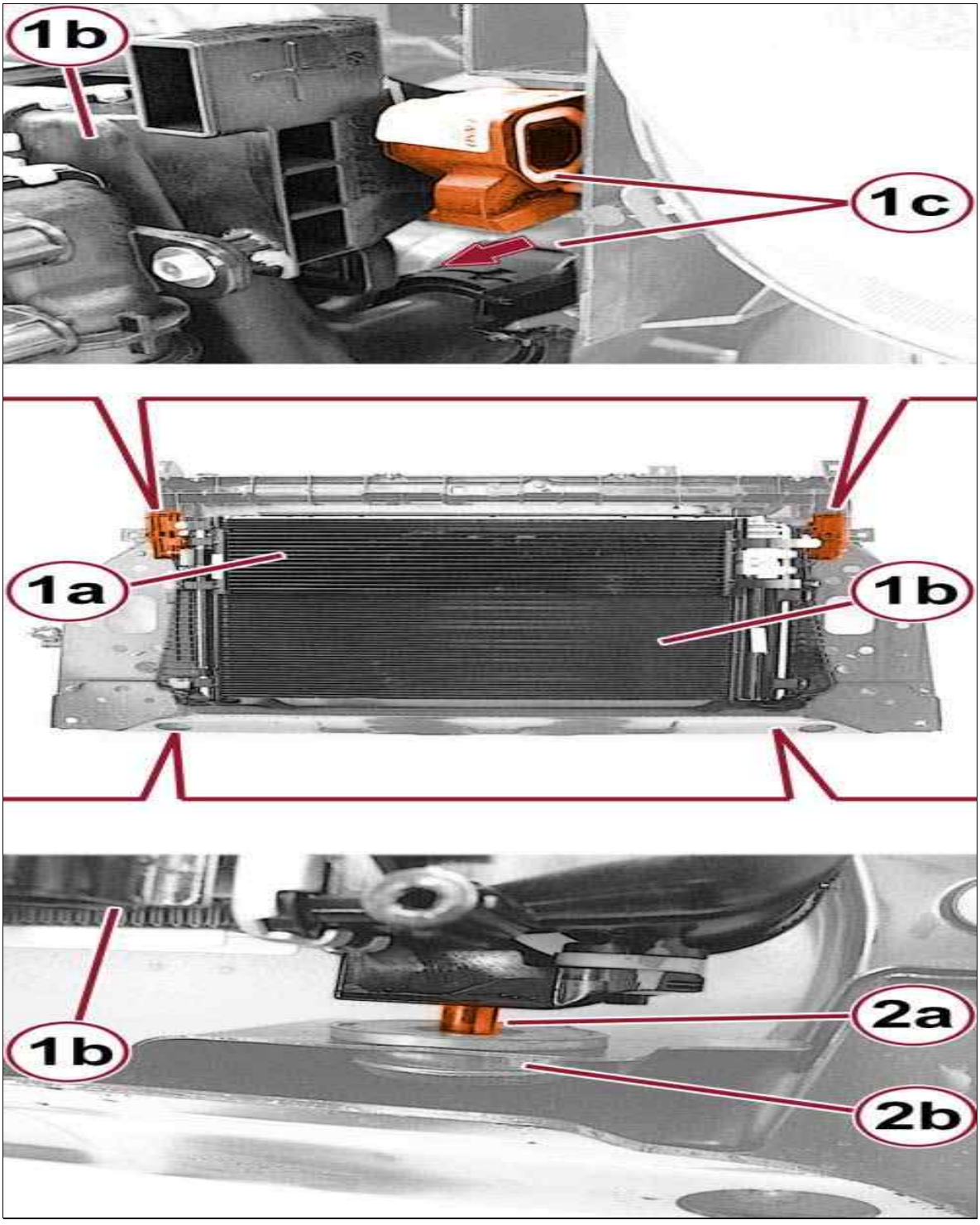
Fig 5: Cover & Retainers



Courtesy of CHRYSLER GROUP, LLC

10. Remove covers (1a) for the upper radiator retaining, after having disengaged the central retaining (1b) and upper and lower (1d) retainers (1c).

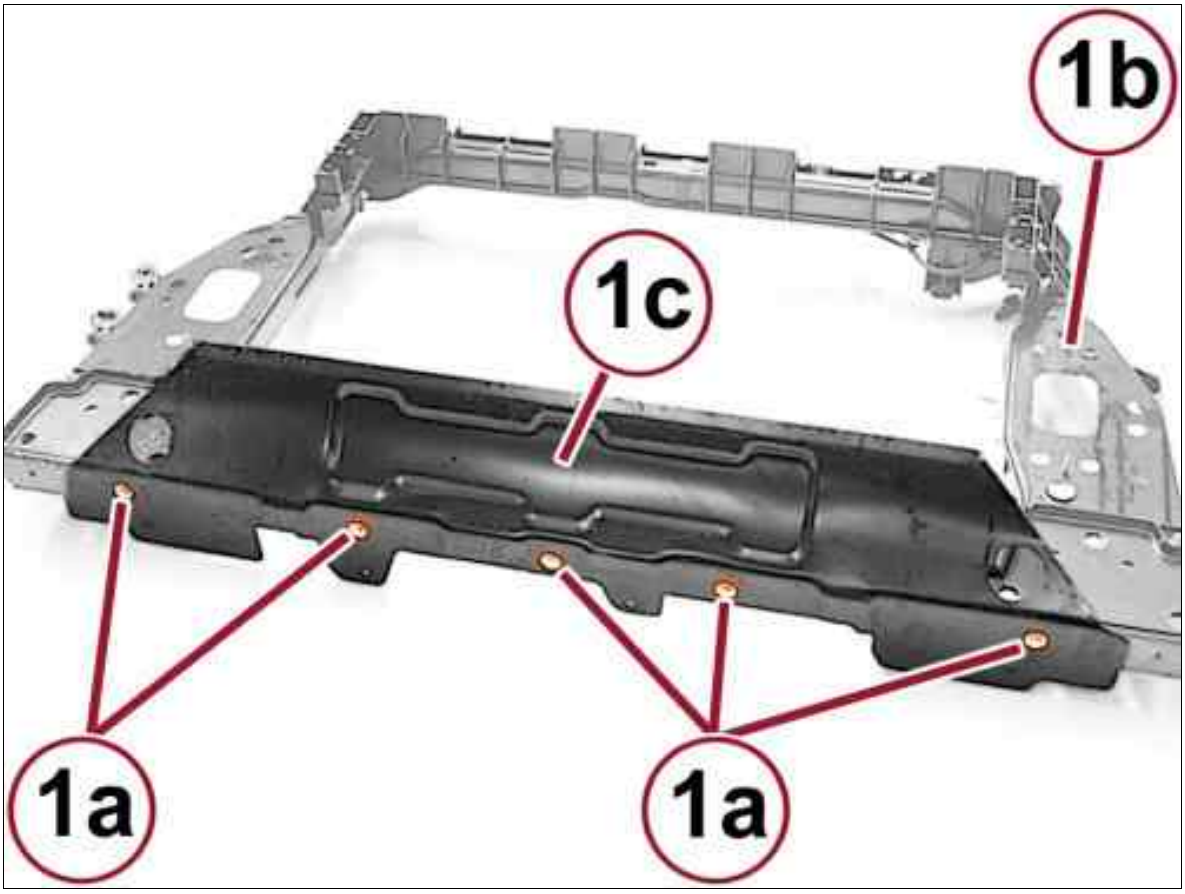
Fig 6: Radiator Assembly, Supports, Pins & Seats



Courtesy of CHRYSLER GROUP, LLC

11. Move the upper part (1a) of the radiator assembly (1b) by disengaging the elastic supports (1c) from the seats.
12. Lift and remove the radiator (1b) disengaging its lower pins (2a) from the seats (2b) of the crossmember.

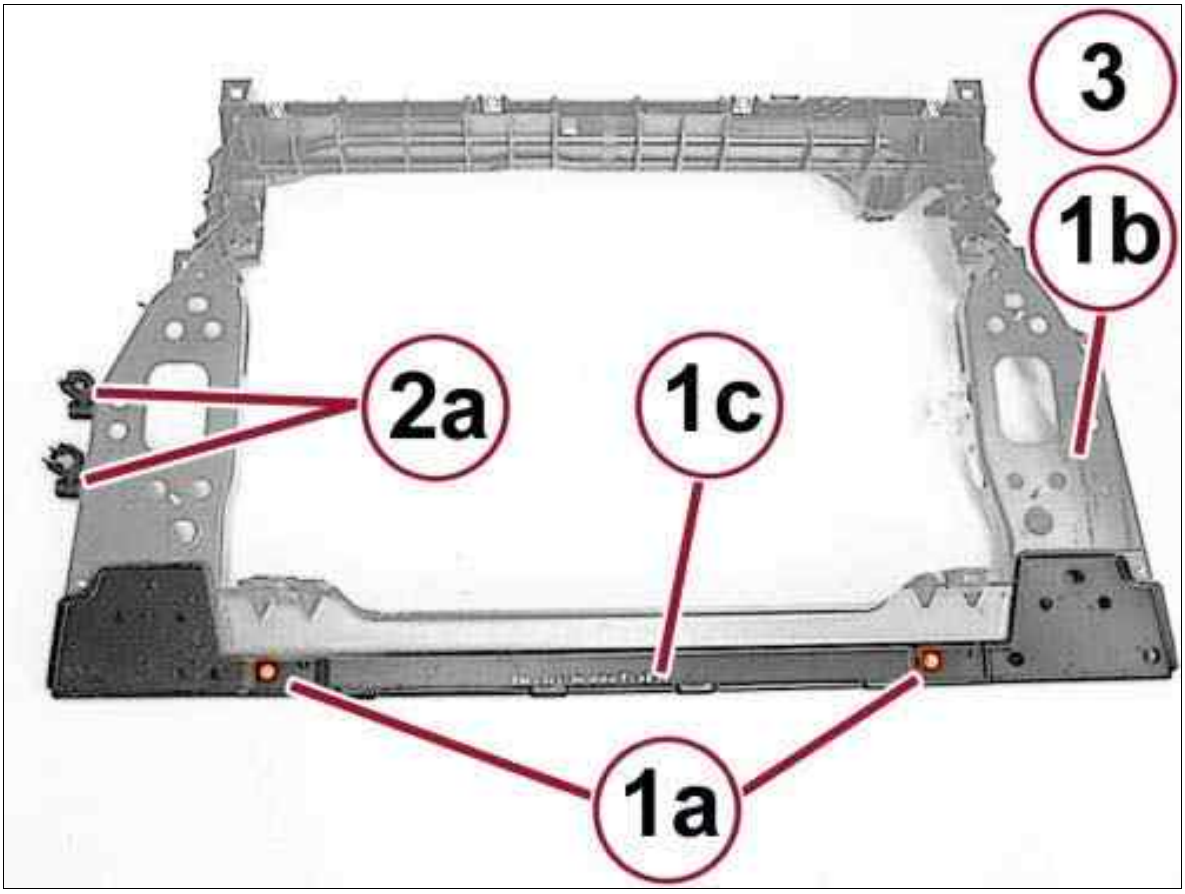
Fig 7: Crossmember, Bracket & Screws



Courtesy of CHRYSLER GROUP, LLC

13. Remove the screws (1a) and remove the reinforcement bracket (1c) from the crossmember (1b).

Fig 8: Crossmember, Bracket, Clamp & Screws

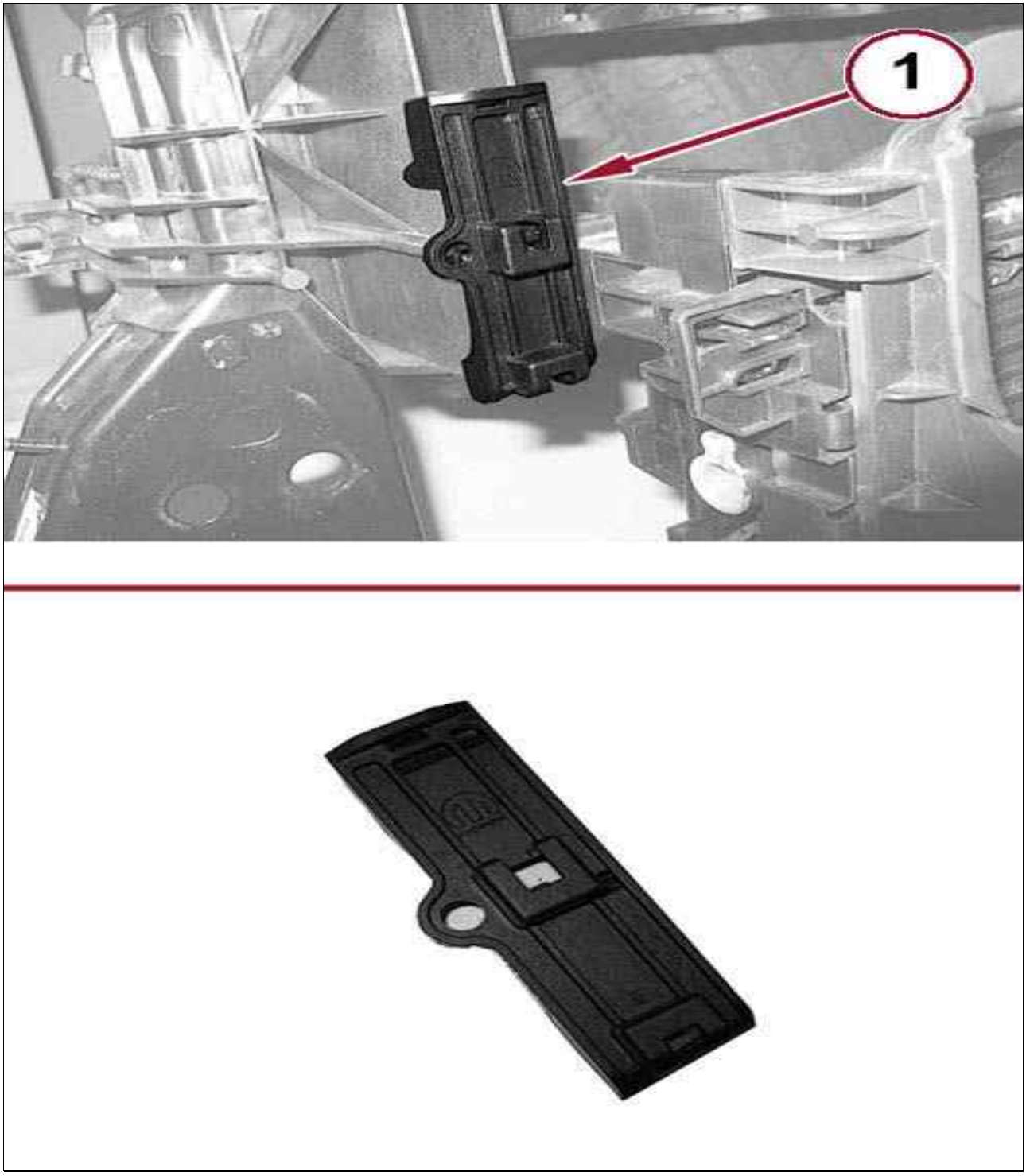


Courtesy of CHRYSLER GROUP, LLC

14. Remove the screws (1a) and remove the bracket (1c) from the crossmember (1b).
15. Move the hose clamp (2a).
16. Remove the front-end (1b).

EXTERIOR > CROSSMEMBER, HEADLAMP MOUNTING > DISASSEMBLY AND ASSEMBLY > DISASSEMBLY > 2.4L MULTIAIR2

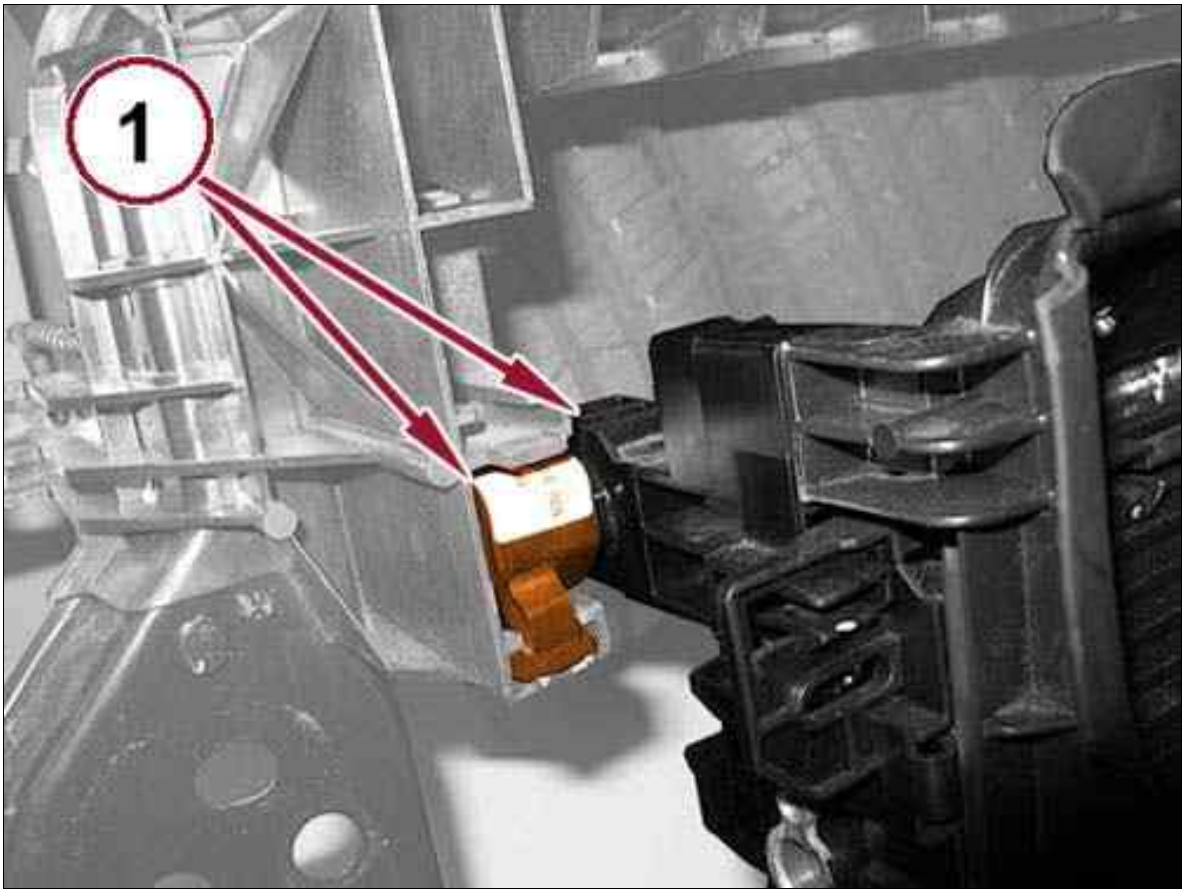
Fig 1: Flange



Courtesy of CHRYSLER GROUP, LLC

1. Remove the headlamp mounting crossmember. Refer to CROSSMEMBER, HEADLAMP MOUNTING, REMOVAL AND INSTALLATION .
2. Remove the flange (1), left and right side, retaining elastic block the radiator.

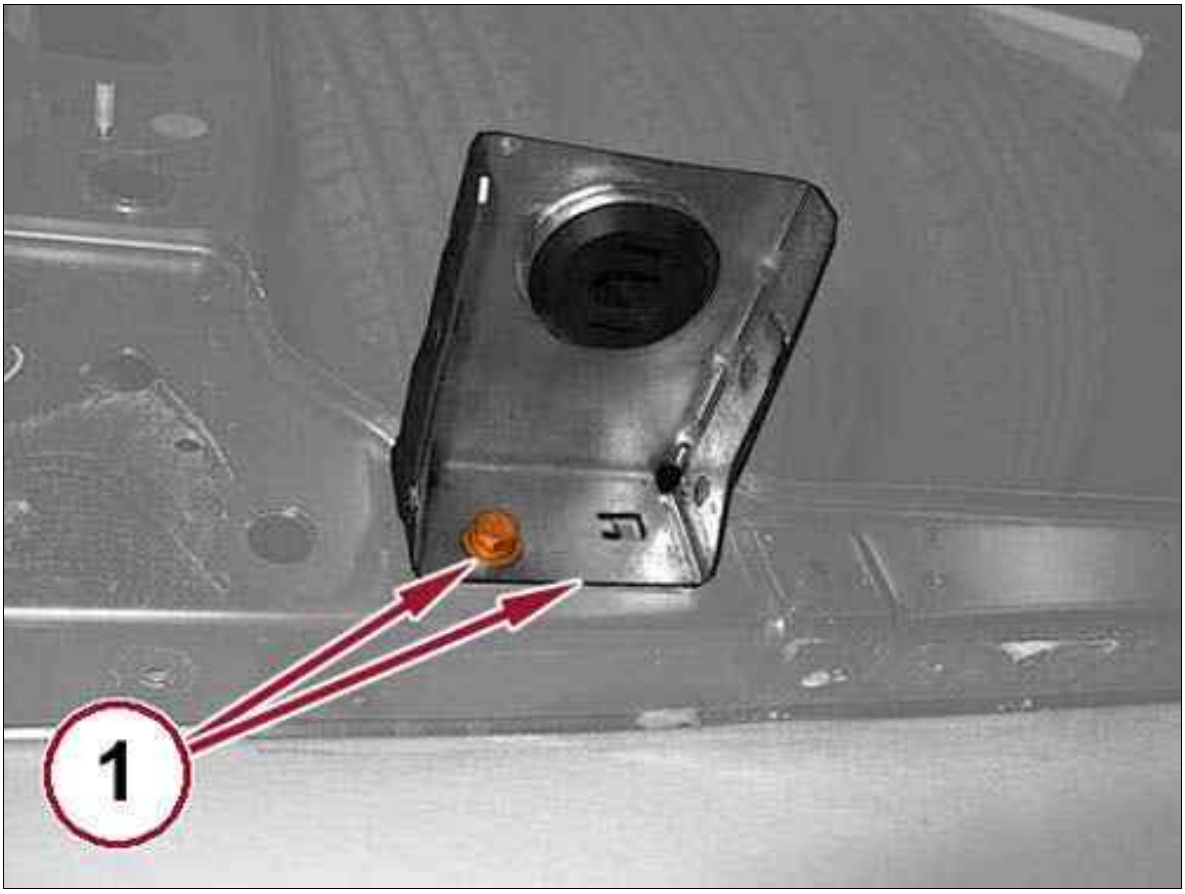
Fig 2: Flexible Blocks



Courtesy of CHRYSLER GROUP, LLC

3. Release the flexible blocks (1), left and right sides and remove the radiator from the crossmember.

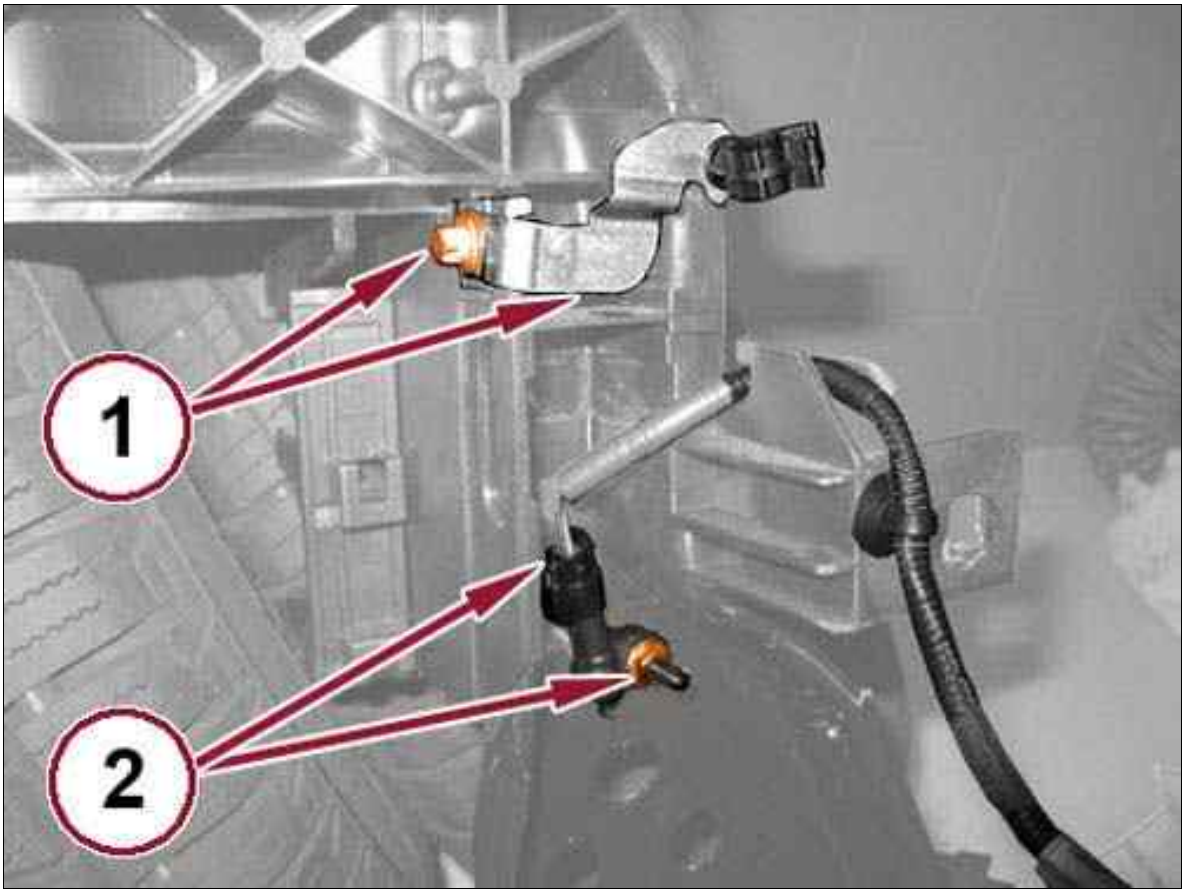
Fig 3: Radiator Support Brackets Screws



Courtesy of CHRYSLER GROUP, LLC

4. Remove the screws (1) and remove the radiator support brackets complete with dowel.

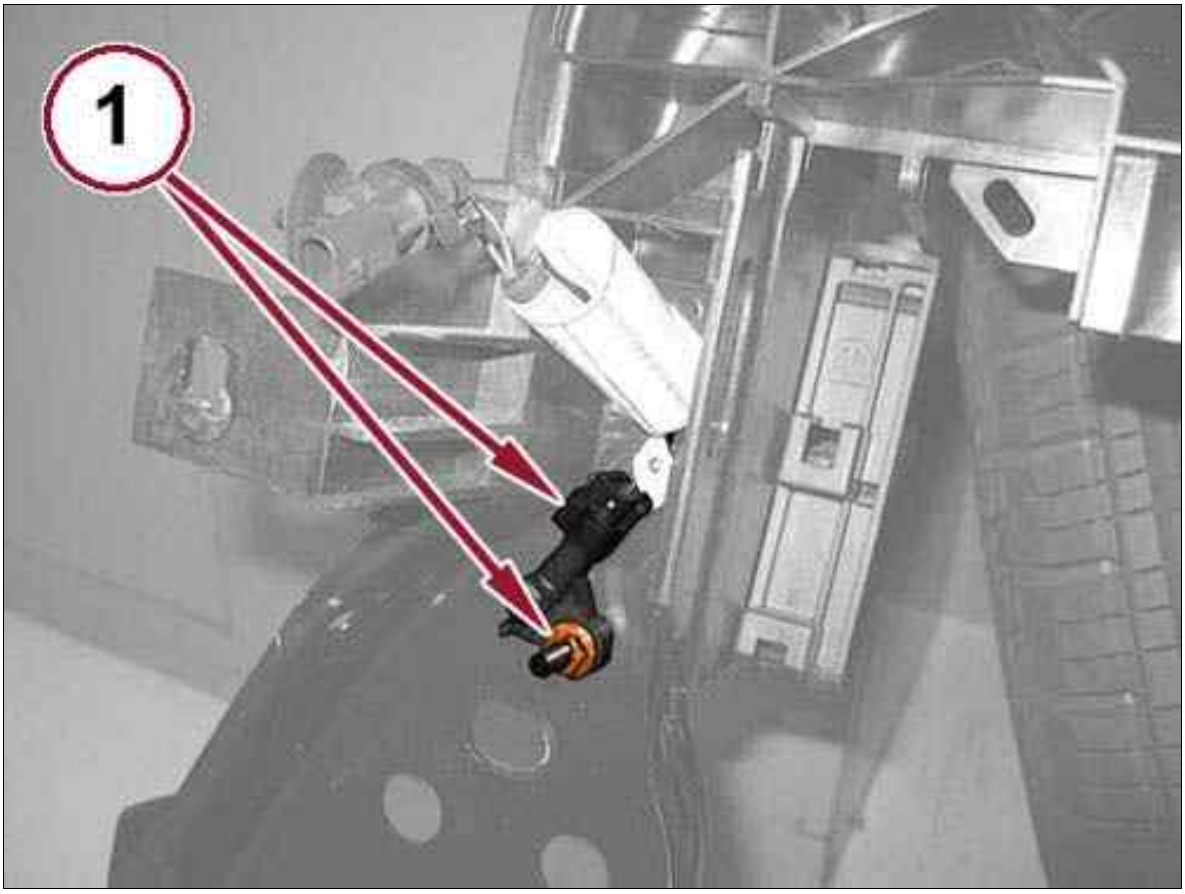
Fig 4: Front Air Bags Sensor Wiring & Support Bracket



Courtesy of CHRYSLER GROUP, LLC

5. Remove the screw and remove the support bracket (1).
6. Disconnect the wiring (2), remove the nut and remove the front air bags sensor, right side.

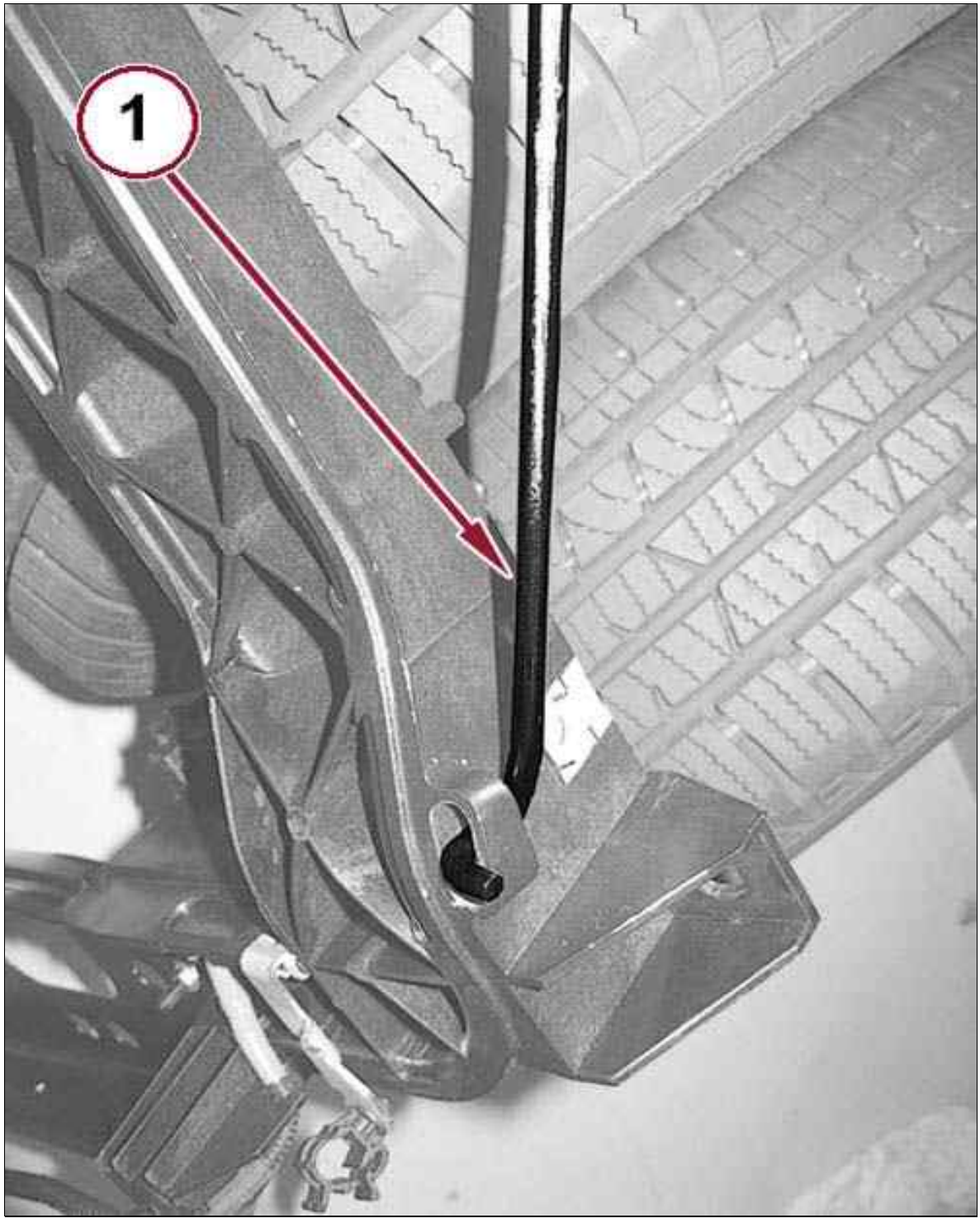
Fig 5: Front Air Bags Sensor Nut



Courtesy of CHRYSLER GROUP, LLC

7. Remove the nut (1) and remove the front air bags sensor, left side.

Fig 6: Hood Support Rod



Courtesy of CHRYSLER GROUP, LLC

8. Release and remove the hood support rod (1).

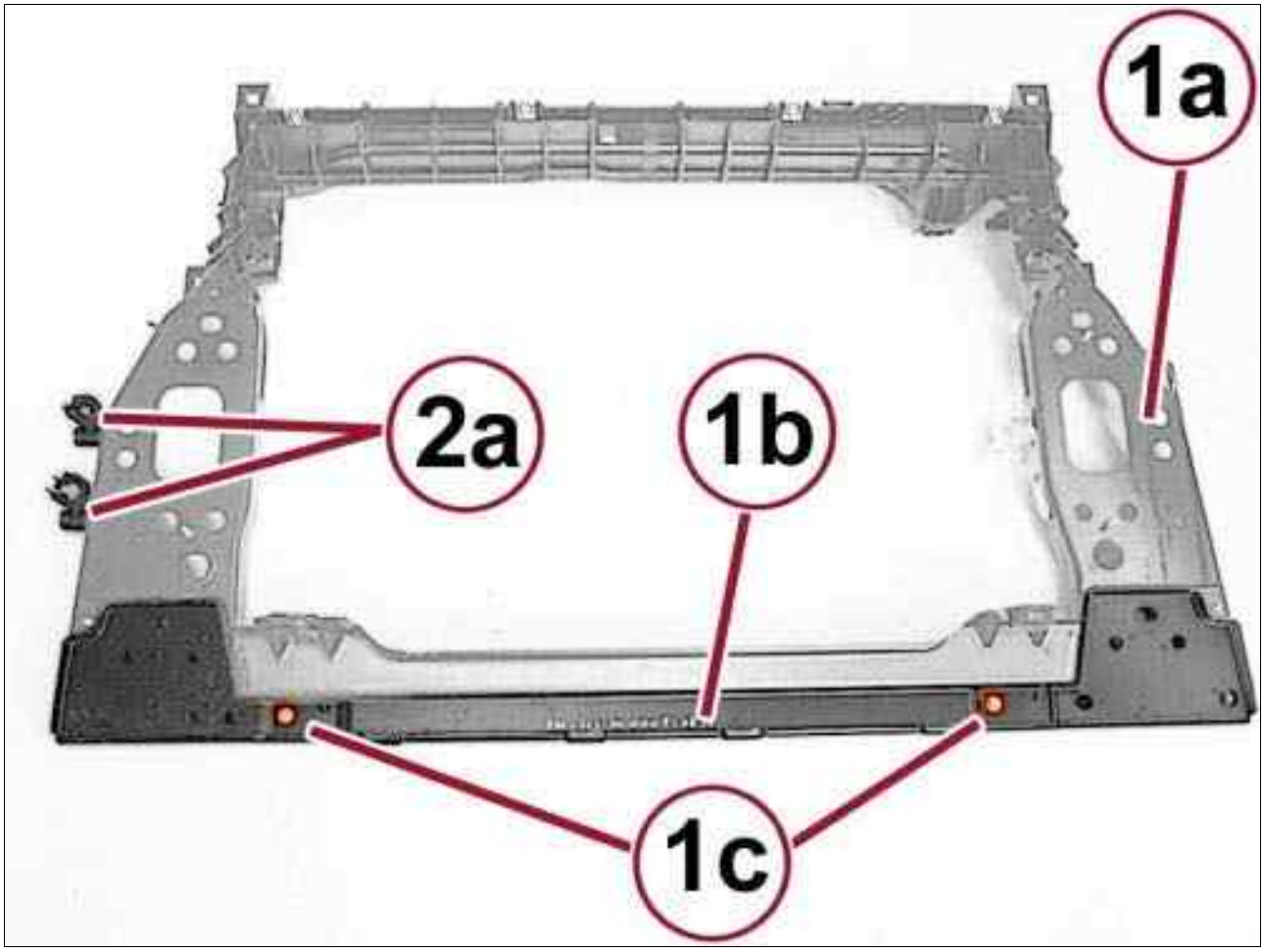
EXTERIOR > CROSSMEMBER, HEADLAMP MOUNTING > DISASSEMBLY AND ASSEMBLY > ASSEMBLY > 1.4L TURBO MULTIAIR, 1.6L TURBO DIESEL, 2.0L

TURBO DIESEL 120CV / 140C

1. Check the crossmember for damage and repair as necessary.
2. Secure the A/C lines to the crossmember.
3. Install the radiator support brackets and install the screws.
4. Install the air bag sensors and install the nuts.
5. Install the wiring retaining clip on the right side.
6. Install the A/C refill valve support bracket and install the screw.
7. Install the radiator assembly onto the lower support brackets and seat the upper supports fully.
8. Install the upper support covers.
9. Install the hood support rod support bracket.
10. Install the hood support rod.
11. Install the headlamp mounting crossmember. Refer to CROSSMEMBER, HEADLAMP MOUNTING, REMOVAL AND INSTALLATION .

EXTERIOR > CROSSMEMBER, HEADLAMP MOUNTING > DISASSEMBLY AND ASSEMBLY > ASSEMBLY > 2.0L TURBO DIESEL 170 CV

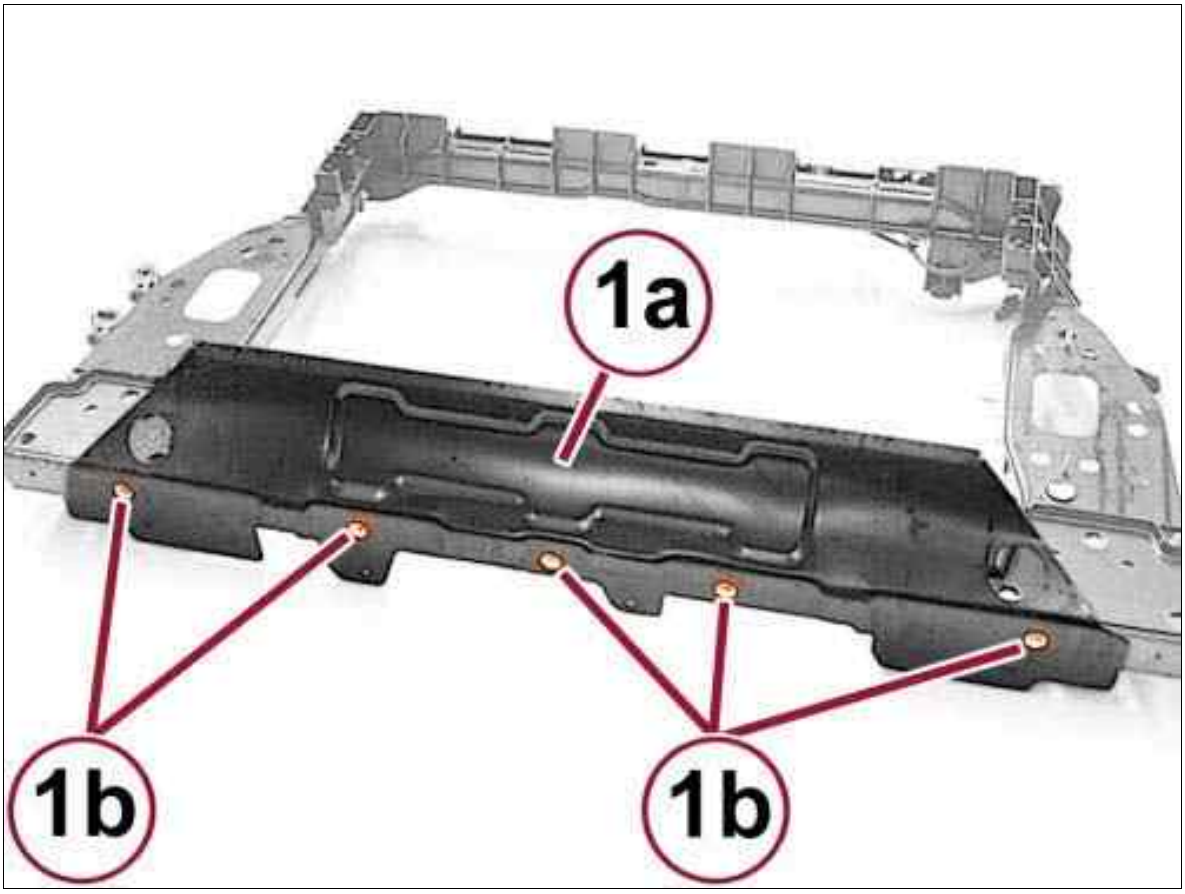
Fig 1: Bracket, Screws & Clips



Courtesy of CHRYSLER GROUP, LLC

1. Check the crossmember for damage and repair as necessary.
2. Position the bracket (1b) onto the crossmember and install the screws (1c).
3. Install the retaining clips (2a).

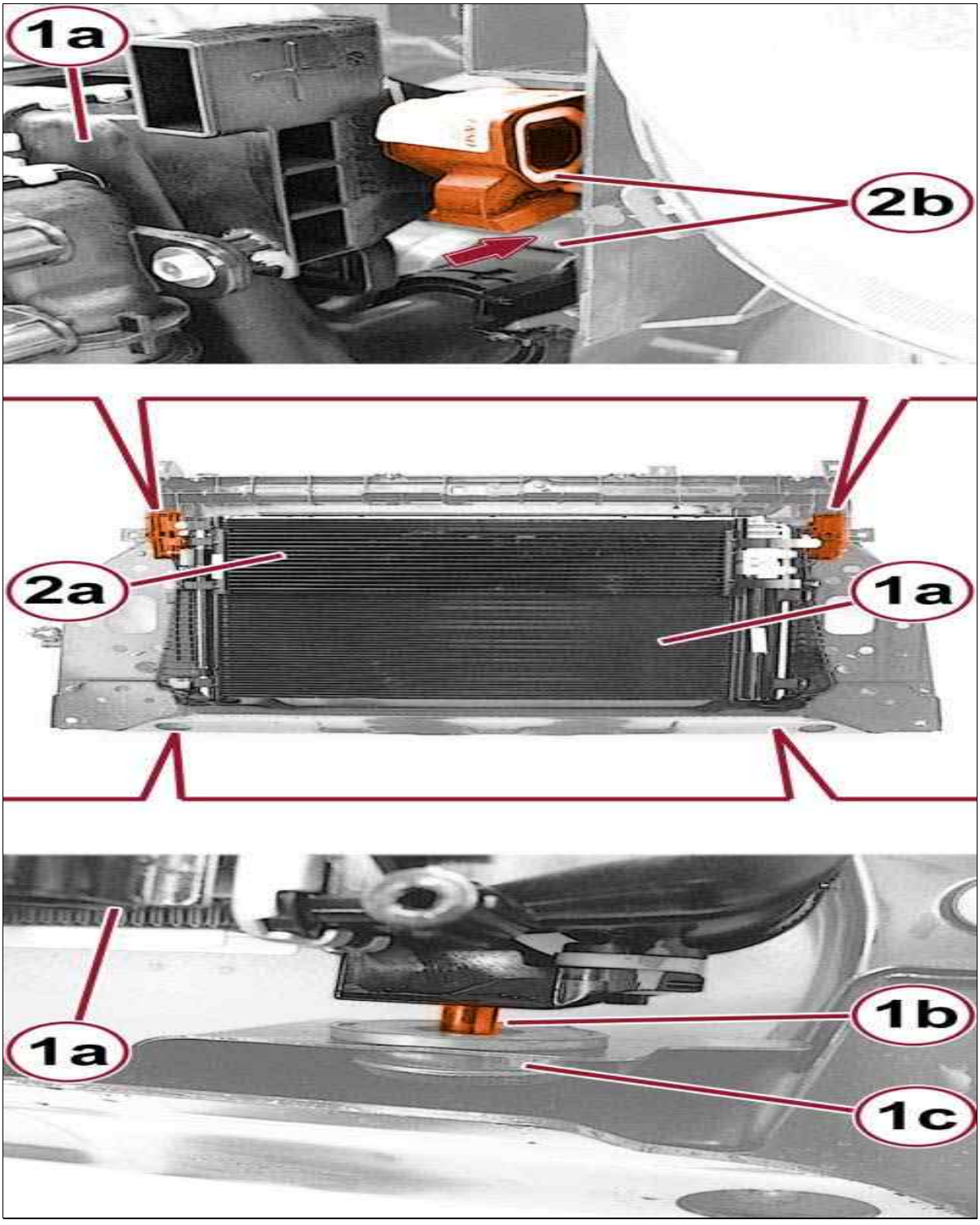
Fig 2: Bracket & Screws



Courtesy of CHRYSLER GROUP, LLC

4. Install the reinforcement bracket (1a) onto the crossmember and install the screws (1b).

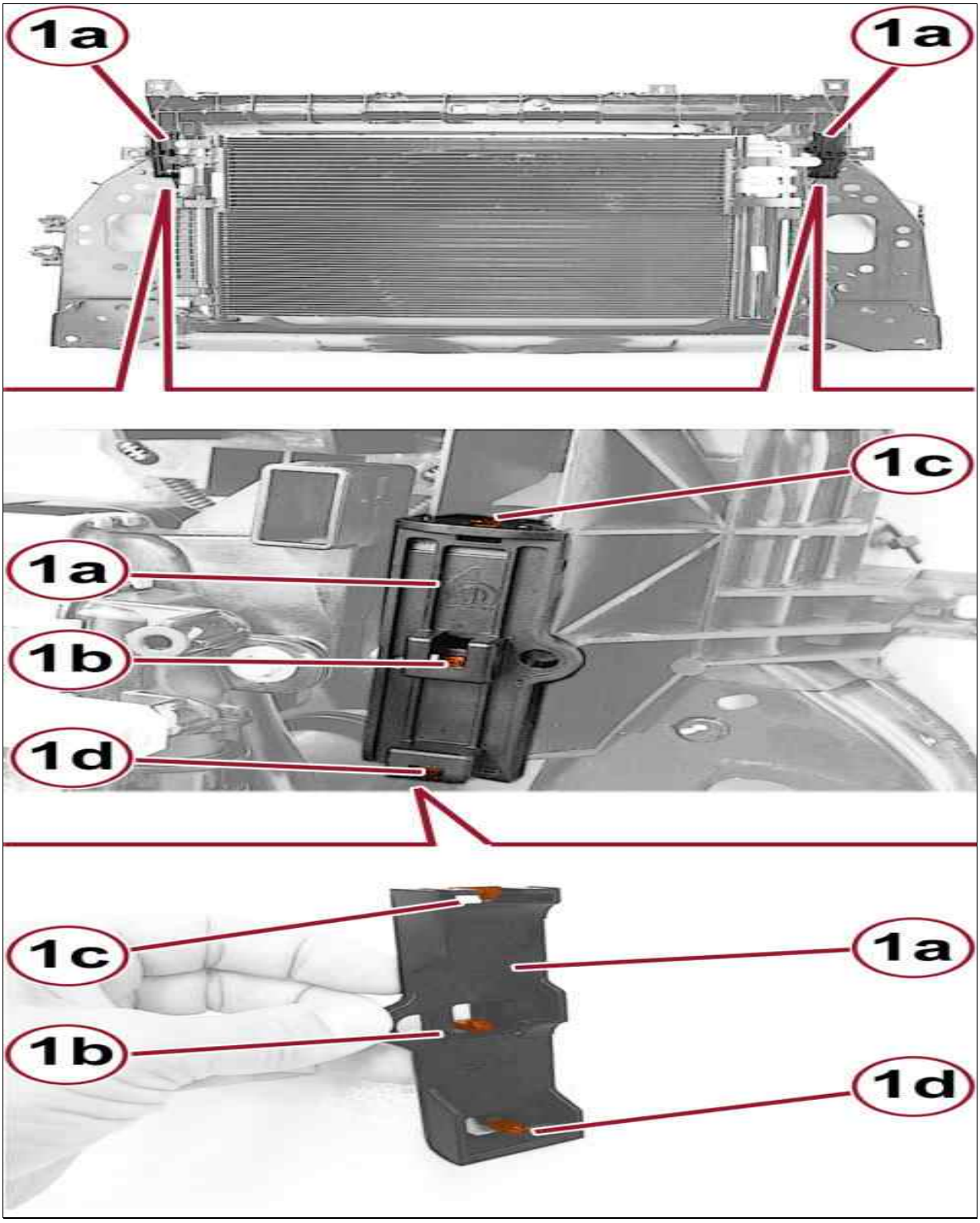
Fig 3: Radiator Assembly, Pins & Bushings



Courtesy of CHRYSLER GROUP, LLC

5. Install the radiator assembly (1a) and seat the lower pins (1b) into the lower bushings (1c) and seat fully.
6. Position the upper radiator (2a) back onto the crossmember and seat the upper support bushings (2b) fully.

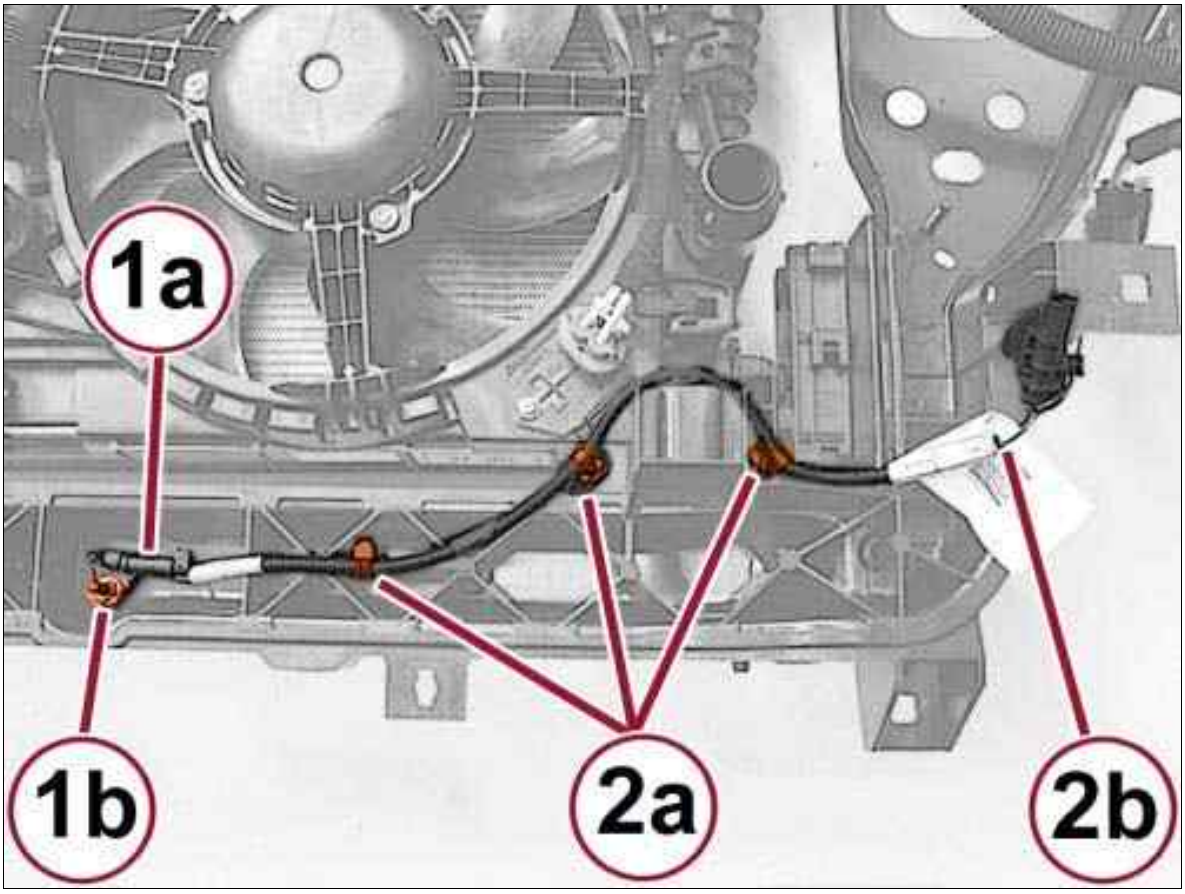
Fig 4: Retaining Covers & Clips



Courtesy of CHRYSLER GROUP, LLC

7. Install the retaining covers (1a) and seat the center retaining clip (1b), the upper clip (1c) and the lower clips (1d) fully.

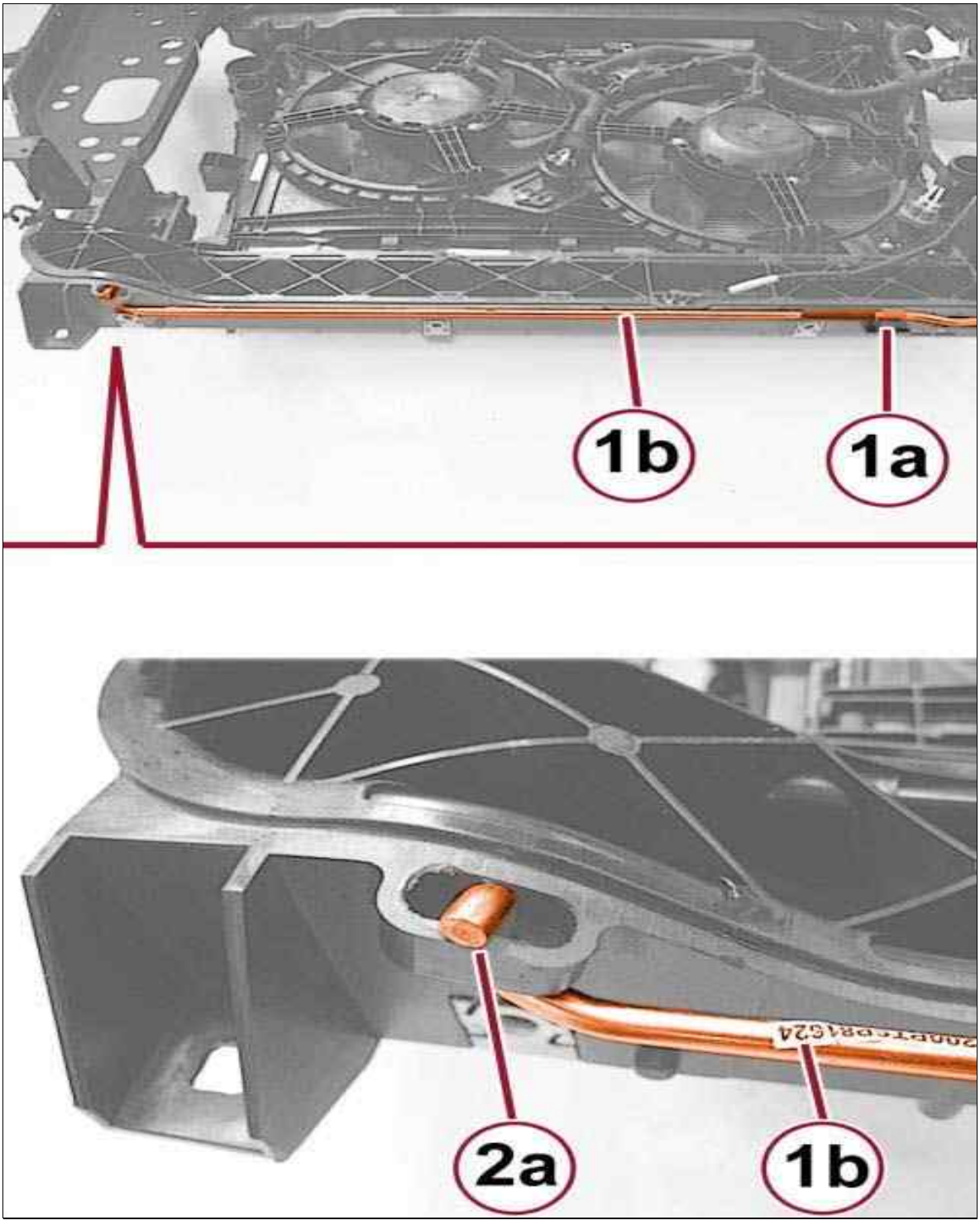
Fig 5: Air Bag Deceleration Sensor, Nut, Wiring & Support Brackets



Courtesy of CHRYSLER GROUP, LLC

8. Install the relay and install the nut.
9. Install the A/C line mounting bracket and install the screw.
10. Install the Air Bag deceleration sensor (1a) and install the nut (1b).
11. Position the wiring (2b) back into the support brackets (2a) and seat fully.

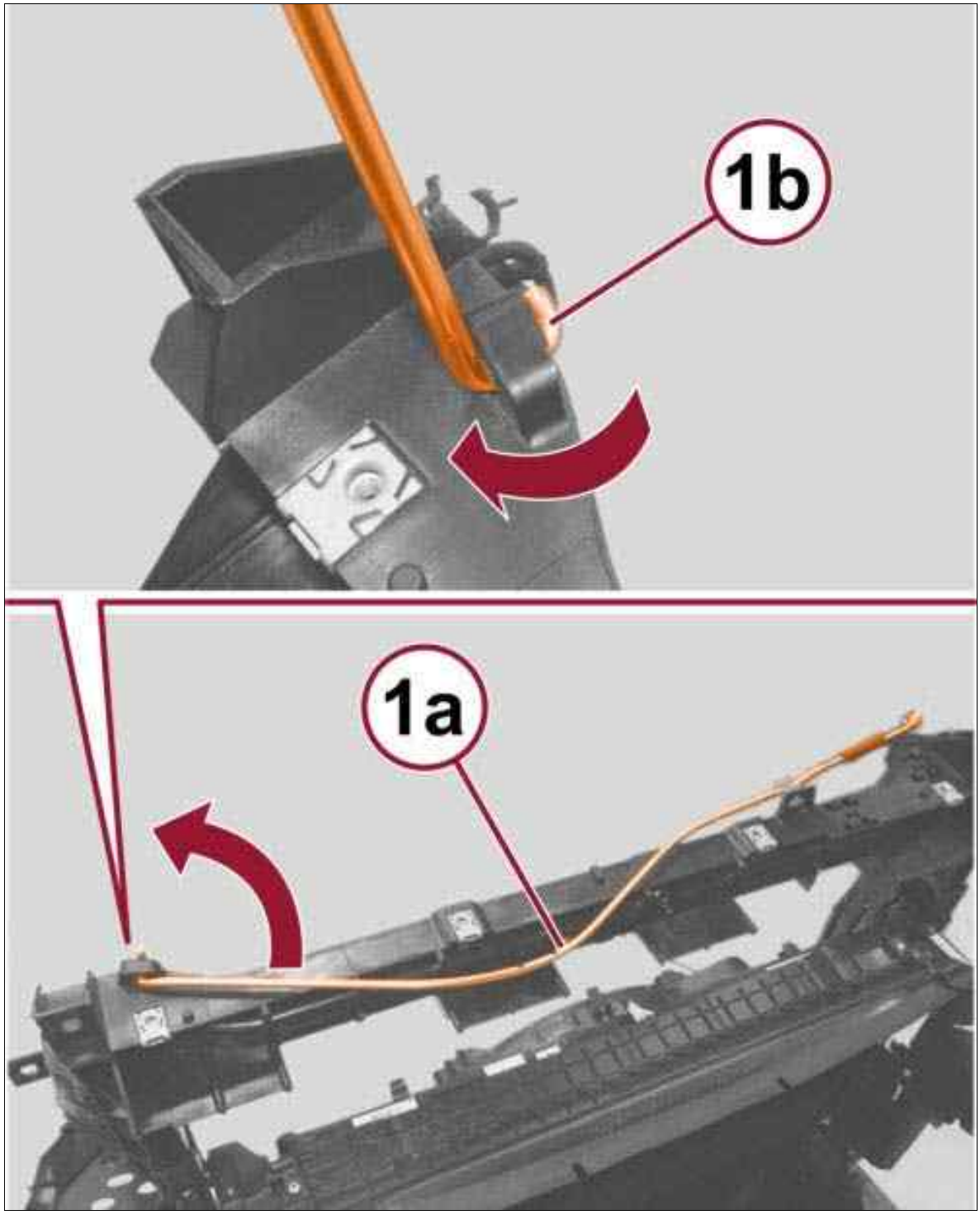
Fig 6: Prop Rod & Support Bracket



Courtesy of CHRYSLER GROUP, LLC

12. Position the rod (1b) back onto the crossmember.
13. Secure the rod end (2a) in the support hole.
14. Secure the rod (1b) into the support bracket (1a).

Fig 7: Prop Rod & End



Courtesy of CHRYSLER GROUP, LLC

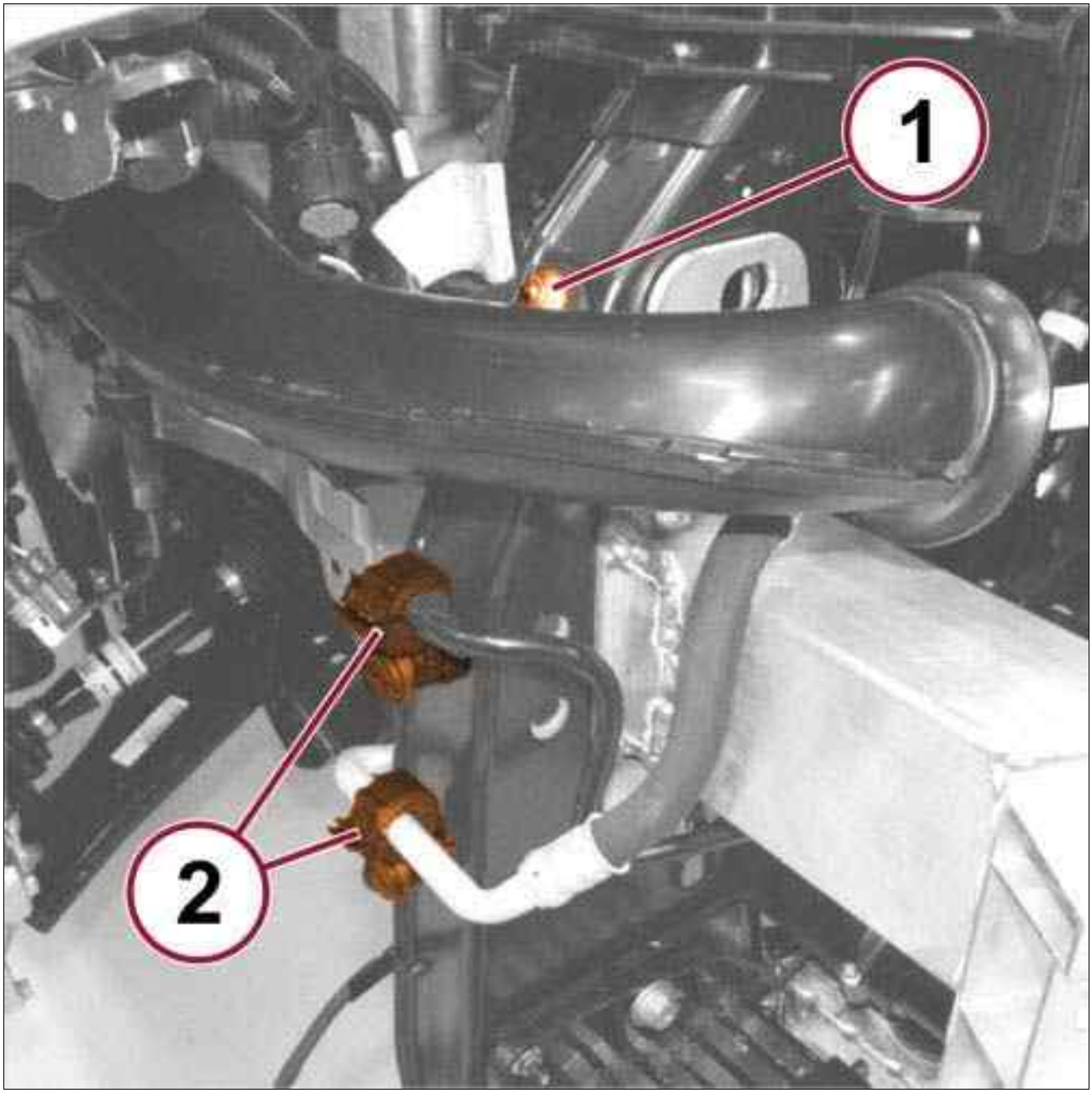
15. Raise the rod (1a) supporting the hood open, turn the end (1b) and remove it from its seat releasing it on the front end.
16. Remove the headlamp mounting crossmember. Refer to CROSSMEMBER, HEADLAMP MOUNTING, REMOVAL AND INSTALLATION .

EXTERIOR > CROSSMEMBER, HEADLAMP MOUNTING > DISASSEMBLY AND ASSEMBLY > ASSEMBLY > 2.4L MULTIAIR2

1. Install the hood support rod.
2. Install the front air bag sensors and install the nuts.
3. Install the A/C line support bracket and install the screw.
4. Install the lower radiator support brackets and install the screws.
5. Install the radiator assembly and seat the lower pins into the lower bushings and seat fully.
6. Position the upper radiator back onto the crossmember and seat the upper support bushings fully.
7. Install the retaining covers, left and right side, retaining the upper support bushings.
8. Remove the headlamp mounting crossmember. Refer to CROSSMEMBER, HEADLAMP MOUNTING, REMOVAL AND INSTALLATION .

EXTERIOR > CROSSMEMBER, HEADLAMP MOUNTING > REMOVAL AND INSTALLATION > REMOVAL > 1.4L TURBO MULTIAIR, 1.6L TURBO DIESEL

Fig 1: Intake Air Tube Nut & Clips

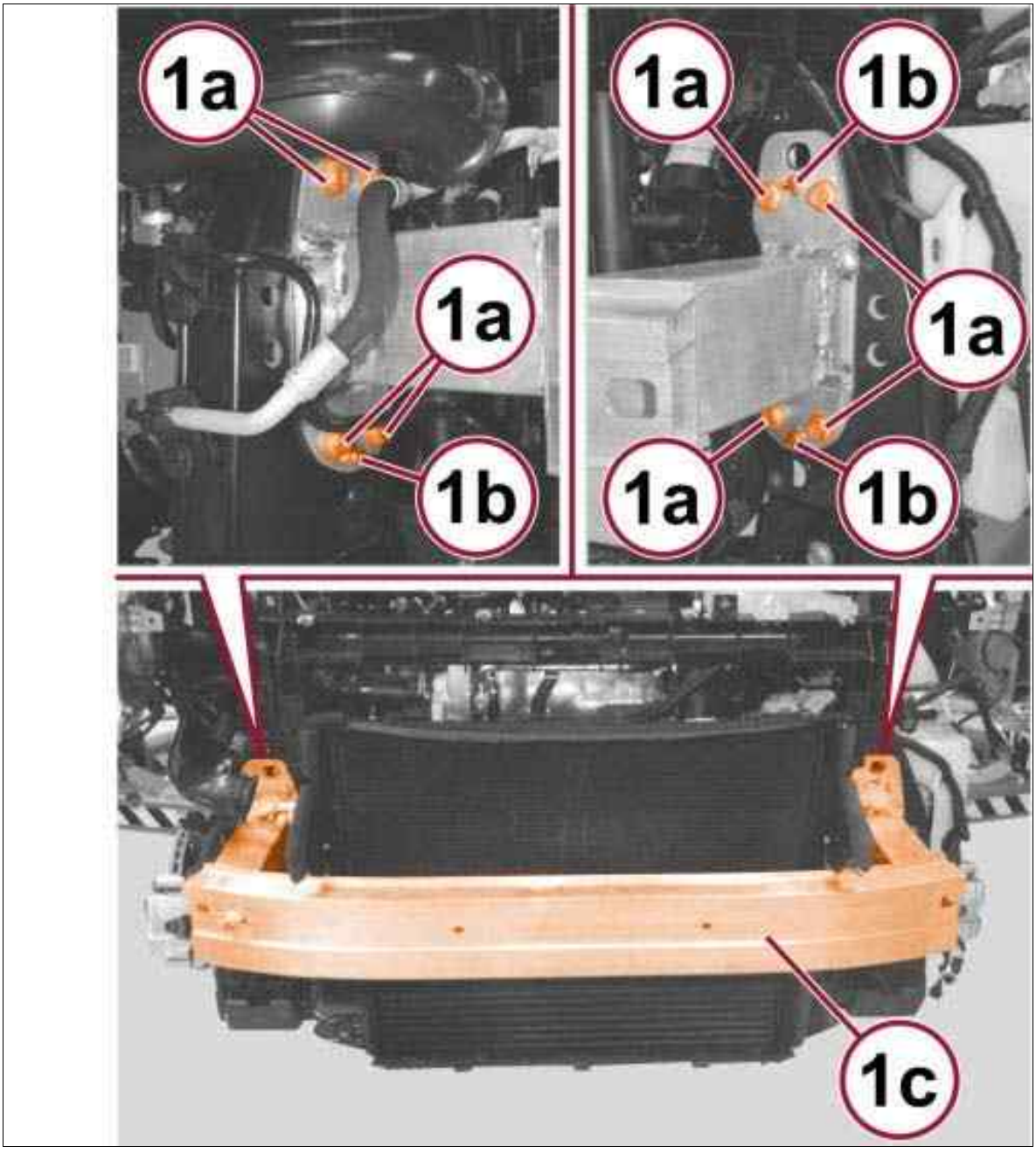


Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable.
2. Raise and support the vehicle. Refer to HOISTING, STANDARD PROCEDURE .
3. Remove the engine cover. For 1.6/2.0L, refer to COVER, ENGINE, REMOVAL AND INSTALLATION . For 1.4L, refer to COVER, ENGINE, REMOVAL AND INSTALLATION .
4. Drain the engine coolant. Refer to STANDARD PROCEDURE .
5. Recover the refrigerant from the refrigerant system. Refer to PLUMBING, STANDARD PROCEDURE .
6. Remove the front fascia. Refer to FASCIA, FRONT, REMOVAL AND INSTALLATION .

7. Remove the headlight assemblies. Refer to UNIT, FRONT LAMP, REMOVAL AND INSTALLATION .
8. Remove the intake air tube nut (1).
9. Open the retaining clips (2).

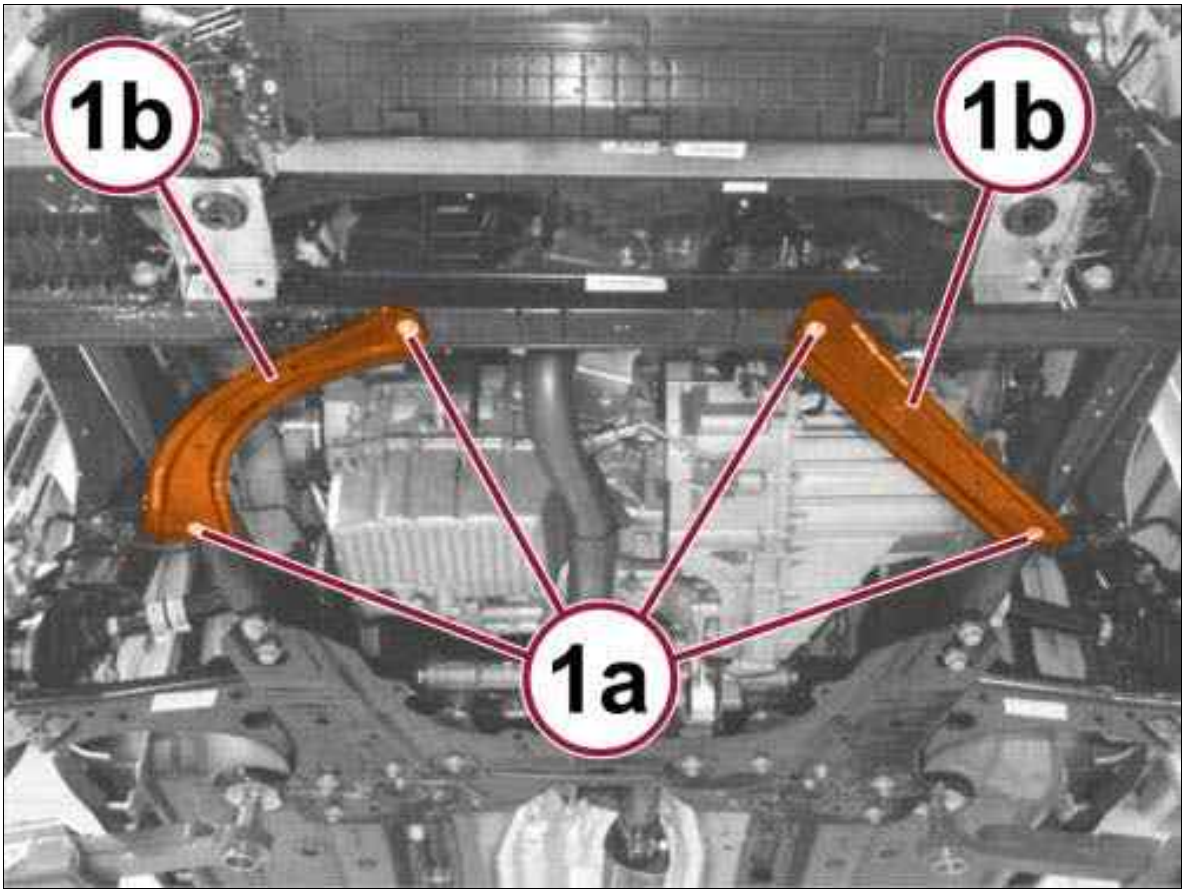
Fig 2: Bumper, Screws & Nuts



Courtesy of CHRYSLER GROUP, LLC

10. Remove the screws (1a), nuts (1b) and remove the bumper (1c).

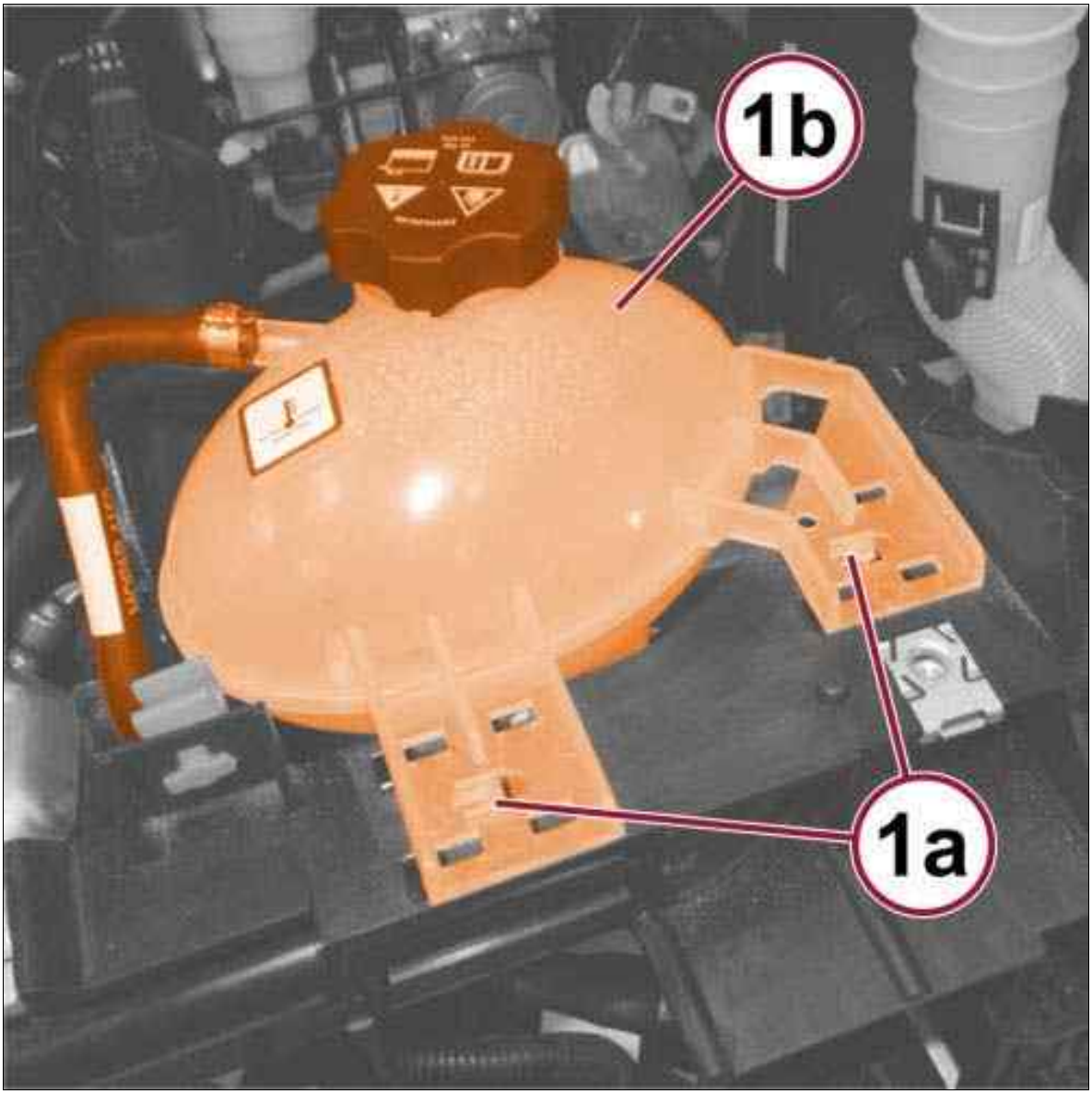
Fig 3: Brackets & Bolts



Courtesy of CHRYSLER GROUP, LLC

11. Remove the screws (1a) and remove the brackets (1b).

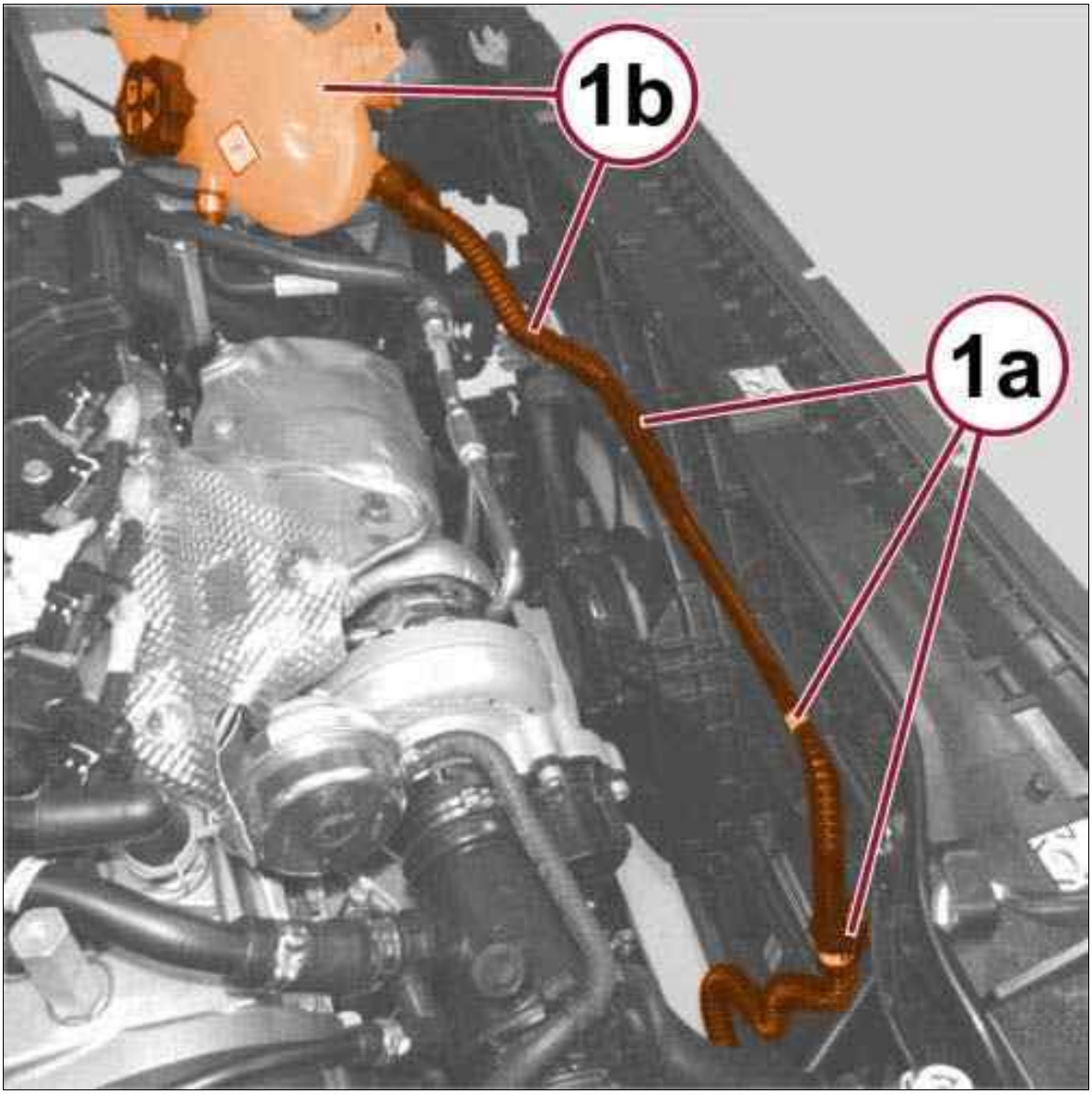
Fig 4: Coolant Tank & Retaining Clips



Courtesy of CHRYSLER GROUP, LLC

12. Release the retaining clips (1a) and position the coolant tank (1b) aside freeing the lower pin.

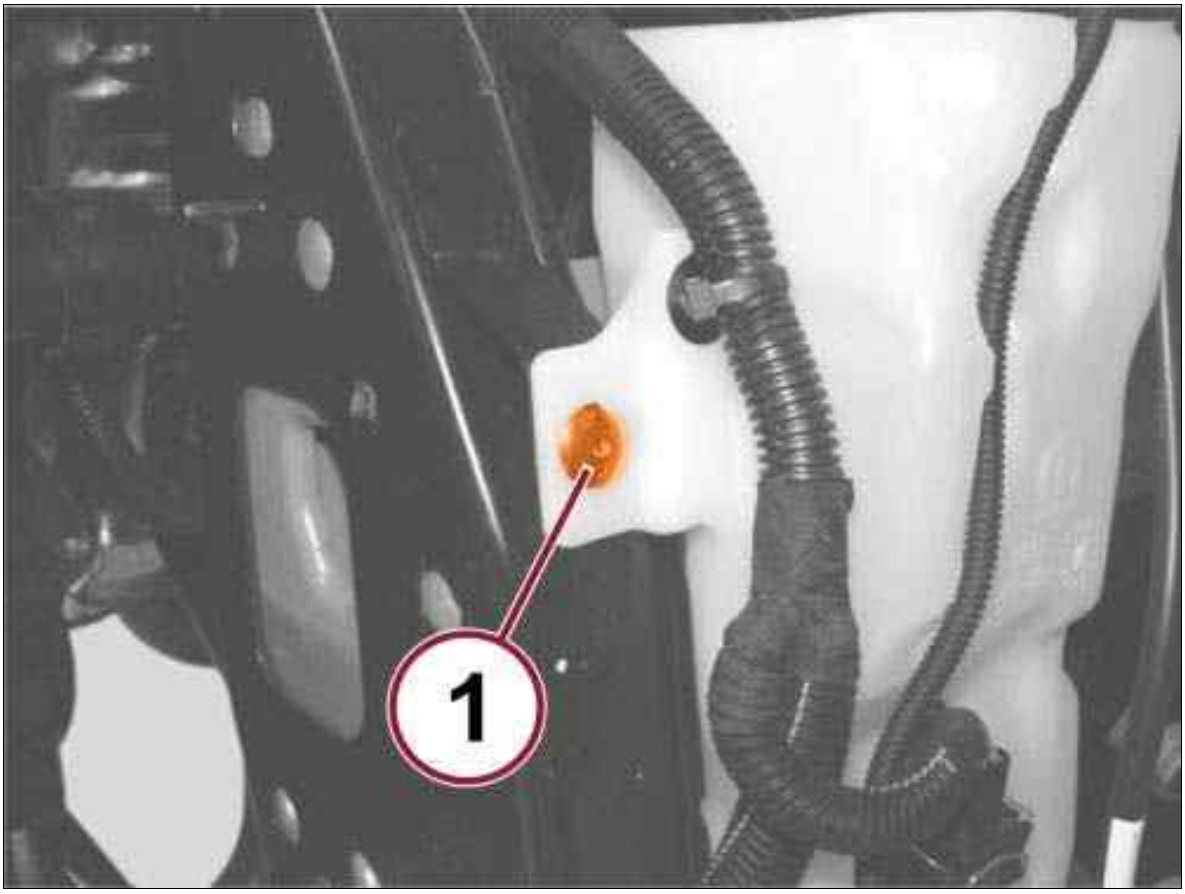
Fig 5: Coolant Line & Clips



Courtesy of CHRYSLER GROUP, LLC

13. Release the engine coolant line (1b) from the retaining clips (1a).

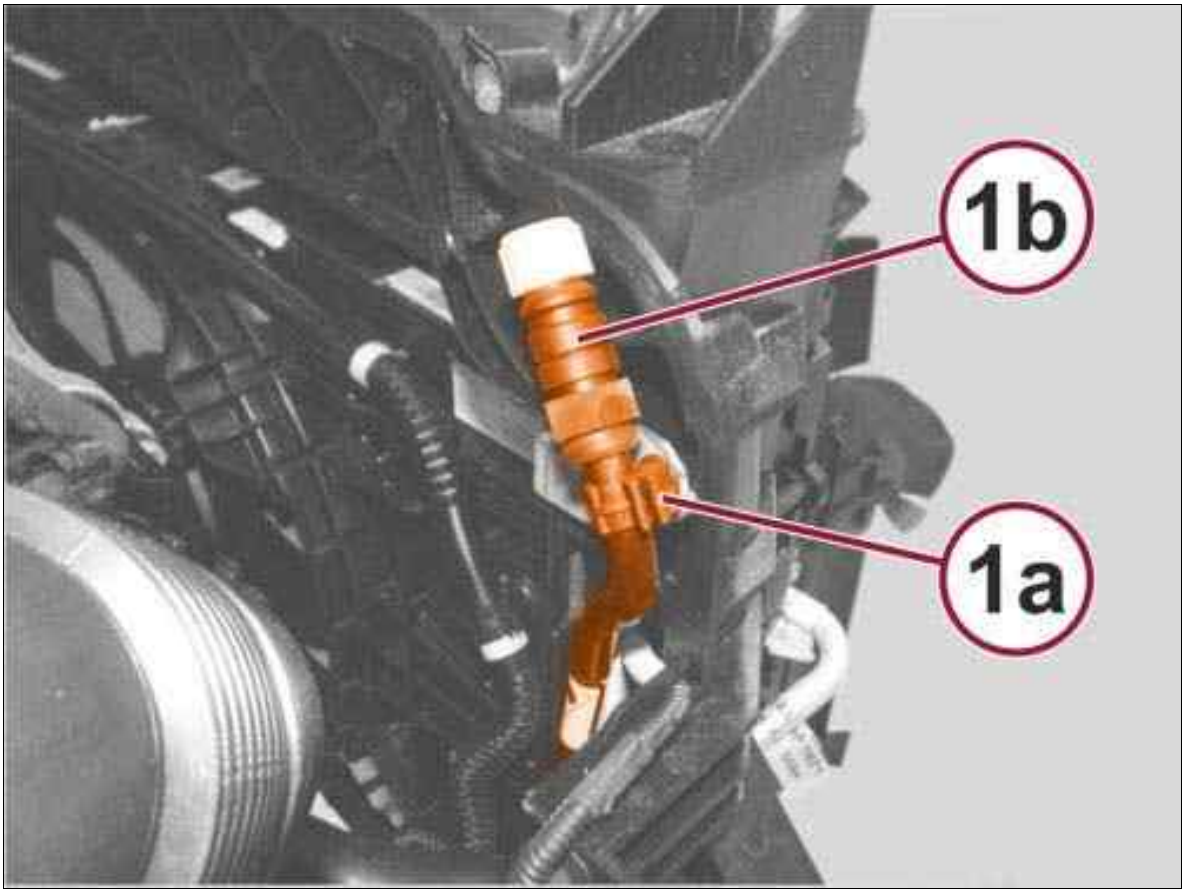
Fig 6: Washer Bottle Retaining Rivet



Courtesy of CHRYSLER GROUP, LLC

14. Remove the washer bottle retaining rivet (1).

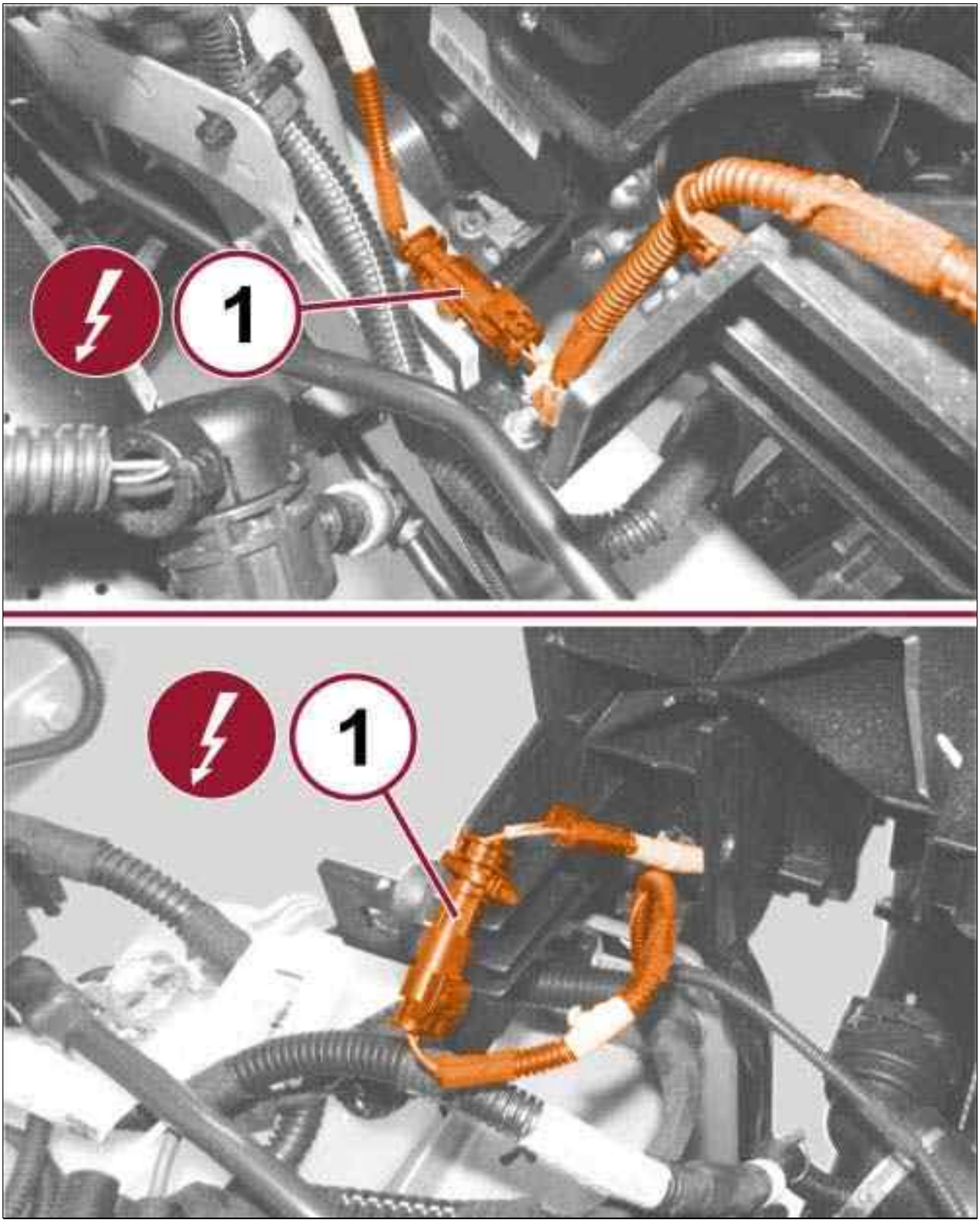
Fig 7: A/C Refill Valve & Clip



Courtesy of CHRYSLER GROUP, LLC

15. Open the retaining clip (1a) and position the A/C refill valve (1b) aside.

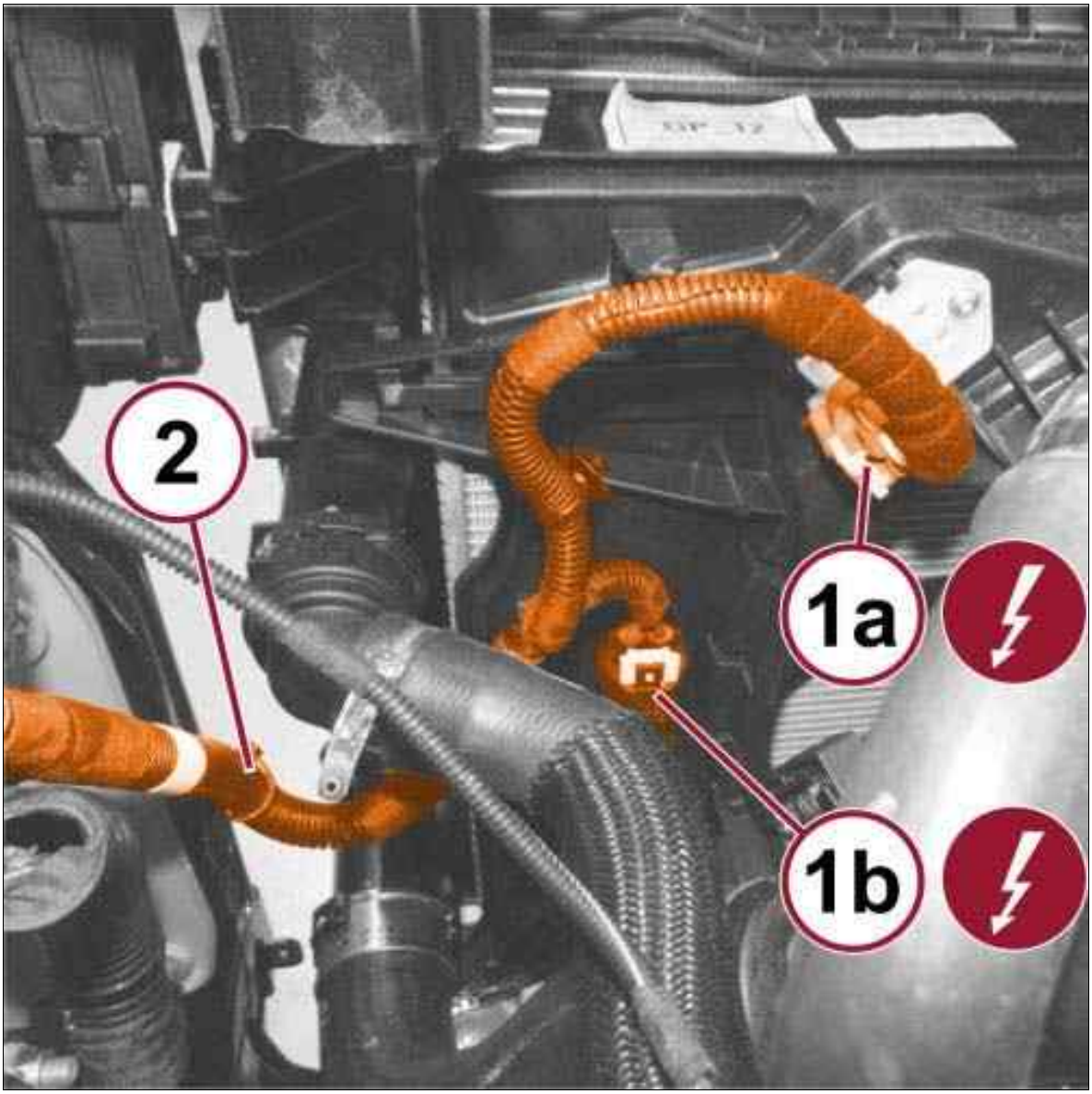
Fig 8: Front Air Bag Sensor Electrical Connectors



Courtesy of CHRYSLER GROUP, LLC

16. Disconnect the front air bag sensor electrical connectors (1).

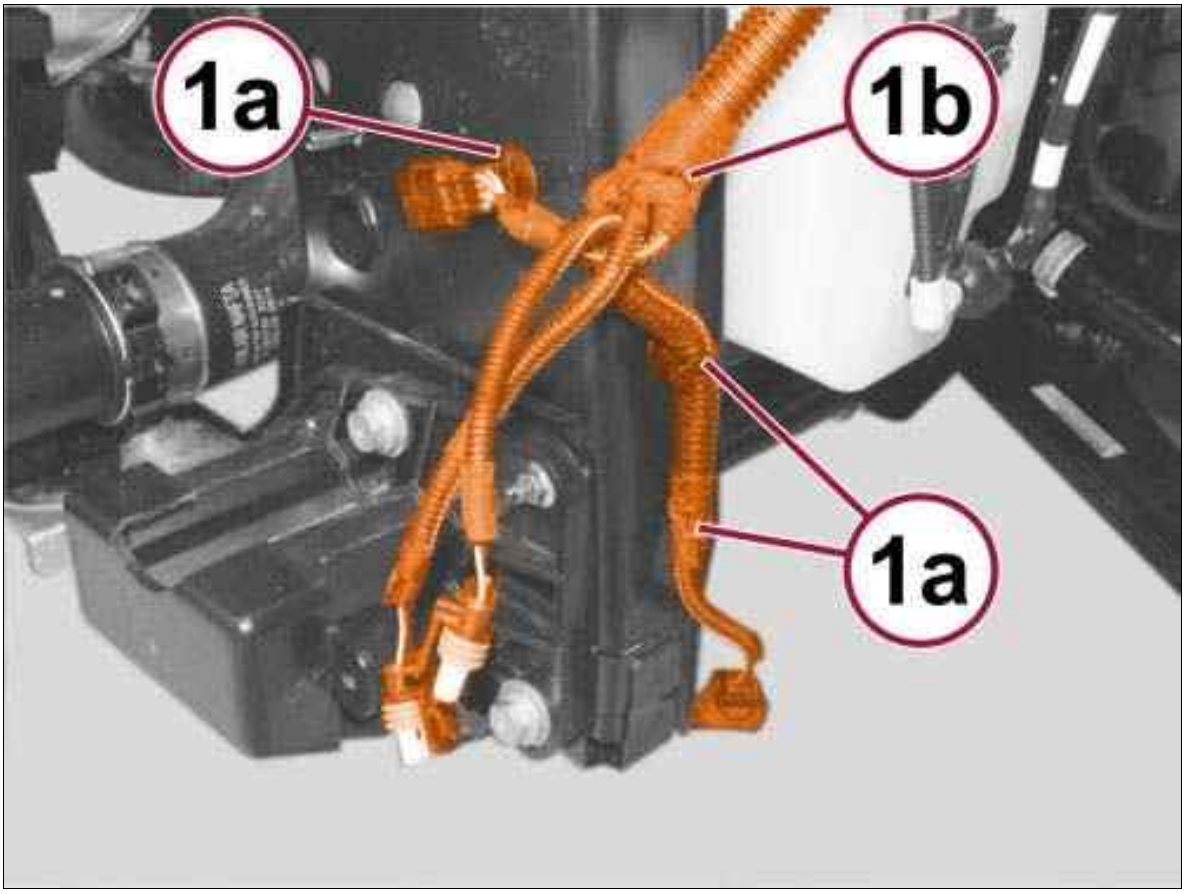
Fig 9: Wiring & Connectors



Courtesy of CHRYSLER GROUP, LLC

17. Disconnect the electrical connections (1a) and (1b).
18. Release the spring retainer and position aside the wiring (2).

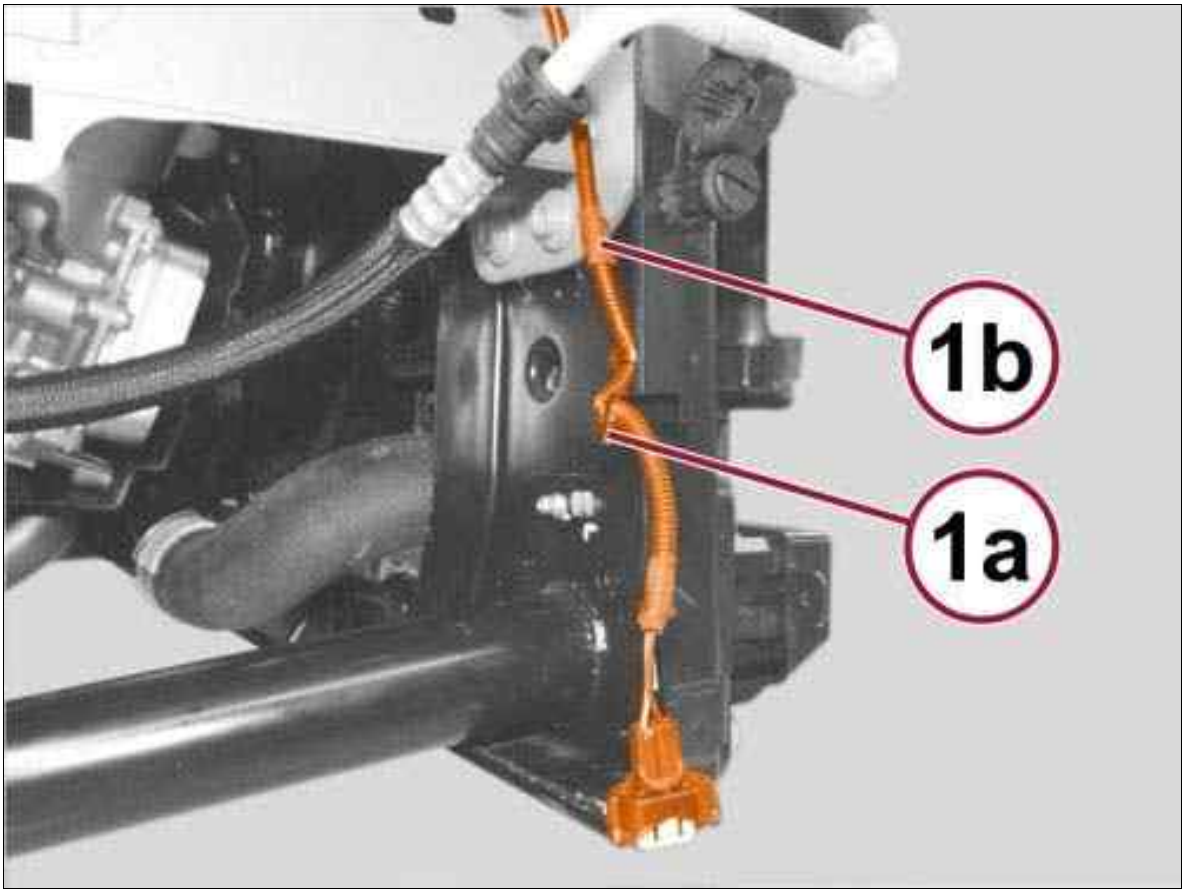
Fig 10: Left Side Wiring & Retaining Clips



Courtesy of CHRYSLER GROUP, LLC

19. Release the retaining clips (1a) and position aside the wiring (1b) on the left side.

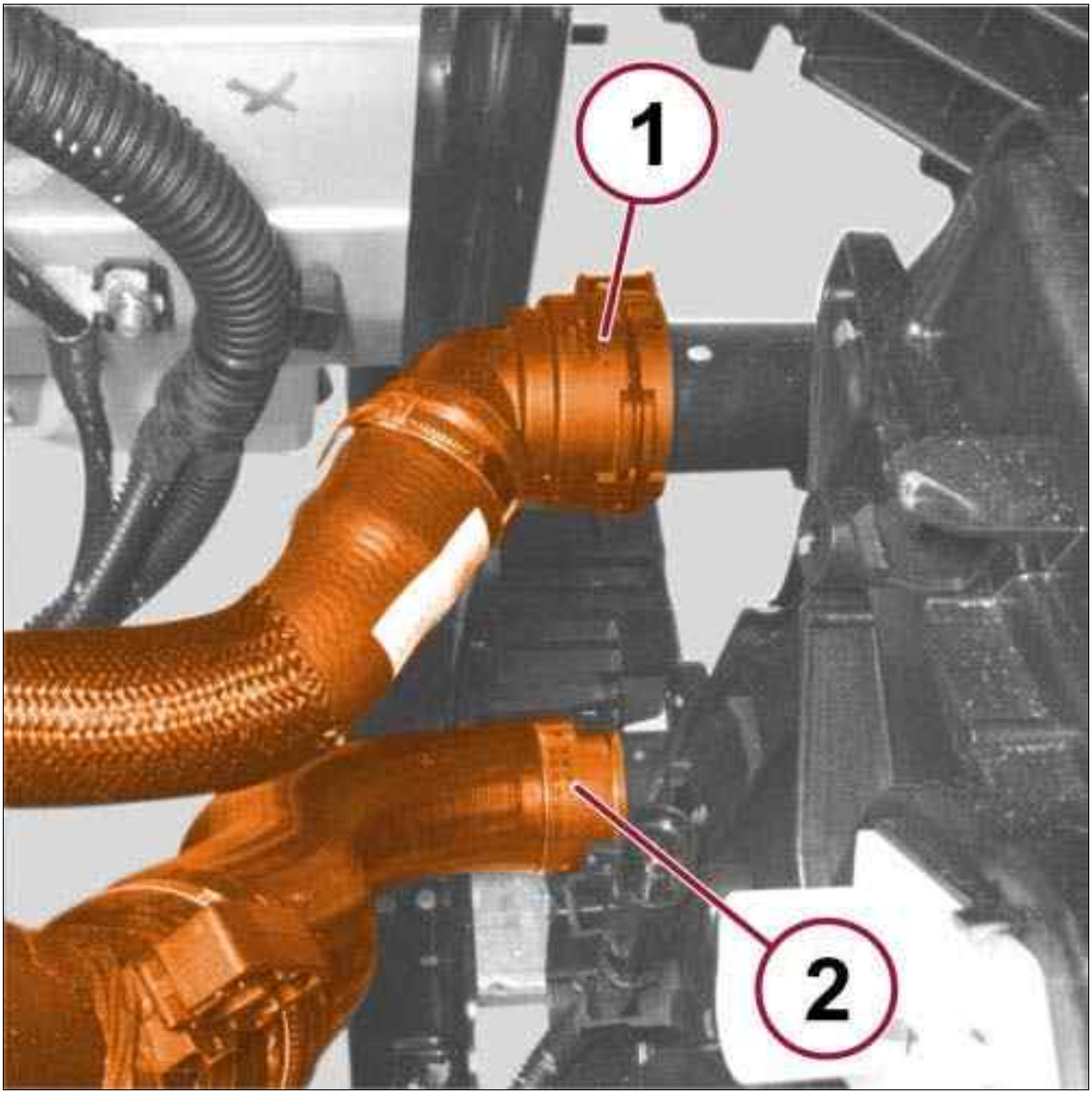
Fig 11: Right Side Wiring & Retaining Clips



Courtesy of CHRYSLER GROUP, LLC

20. Release the retaining clip (1a) and position aside the wiring (1b) on the right side.

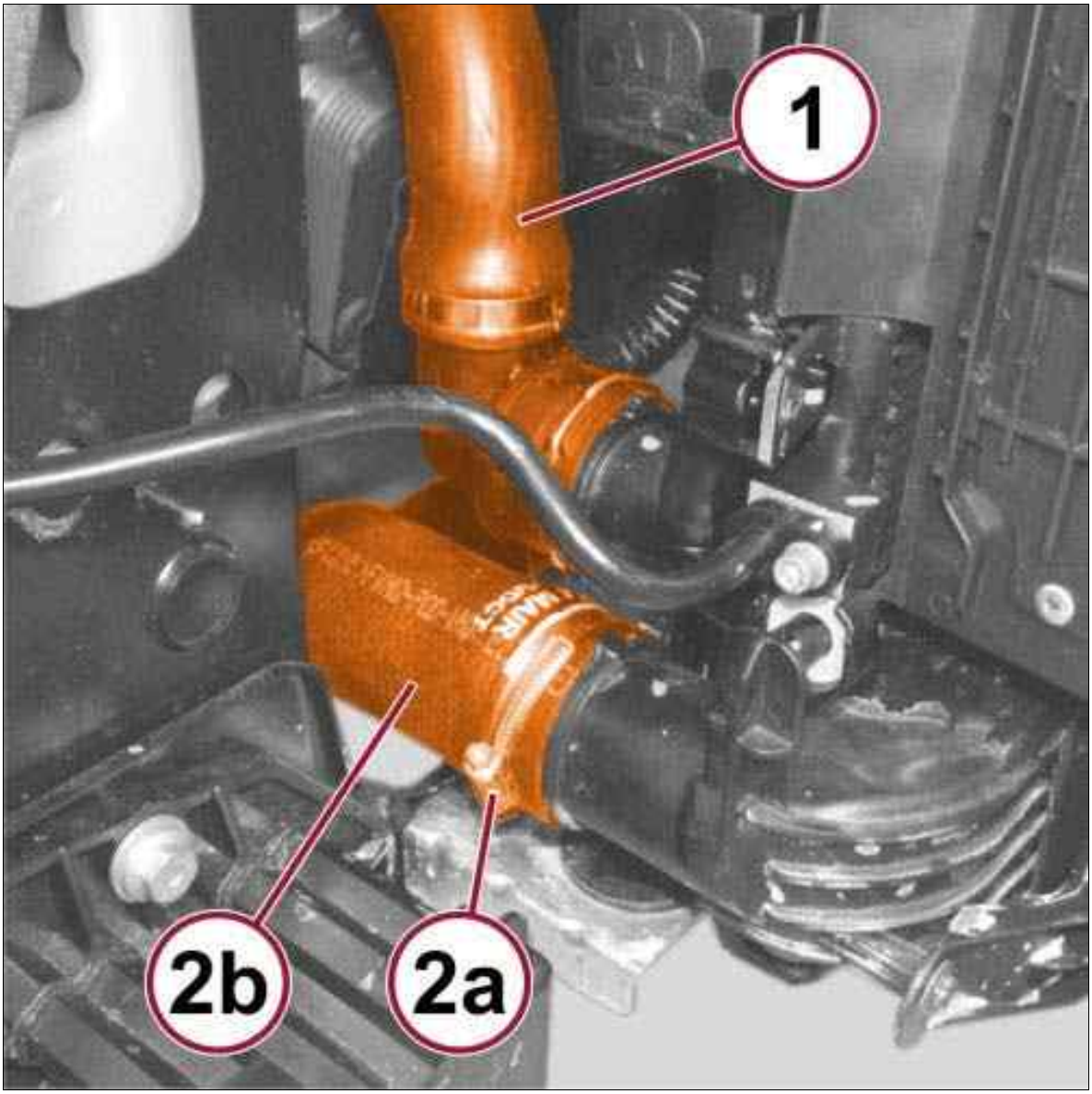
Fig 12: Coolant Inlet Pipe And Intercooler Outlet Pipe Couplings



Courtesy of CHRYSLER GROUP, LLC

21. Disconnect the quick coupling (1) of the coolant inlet pipe.
22. Disconnect the quick coupling (2) of the intercooler outlet pipe.

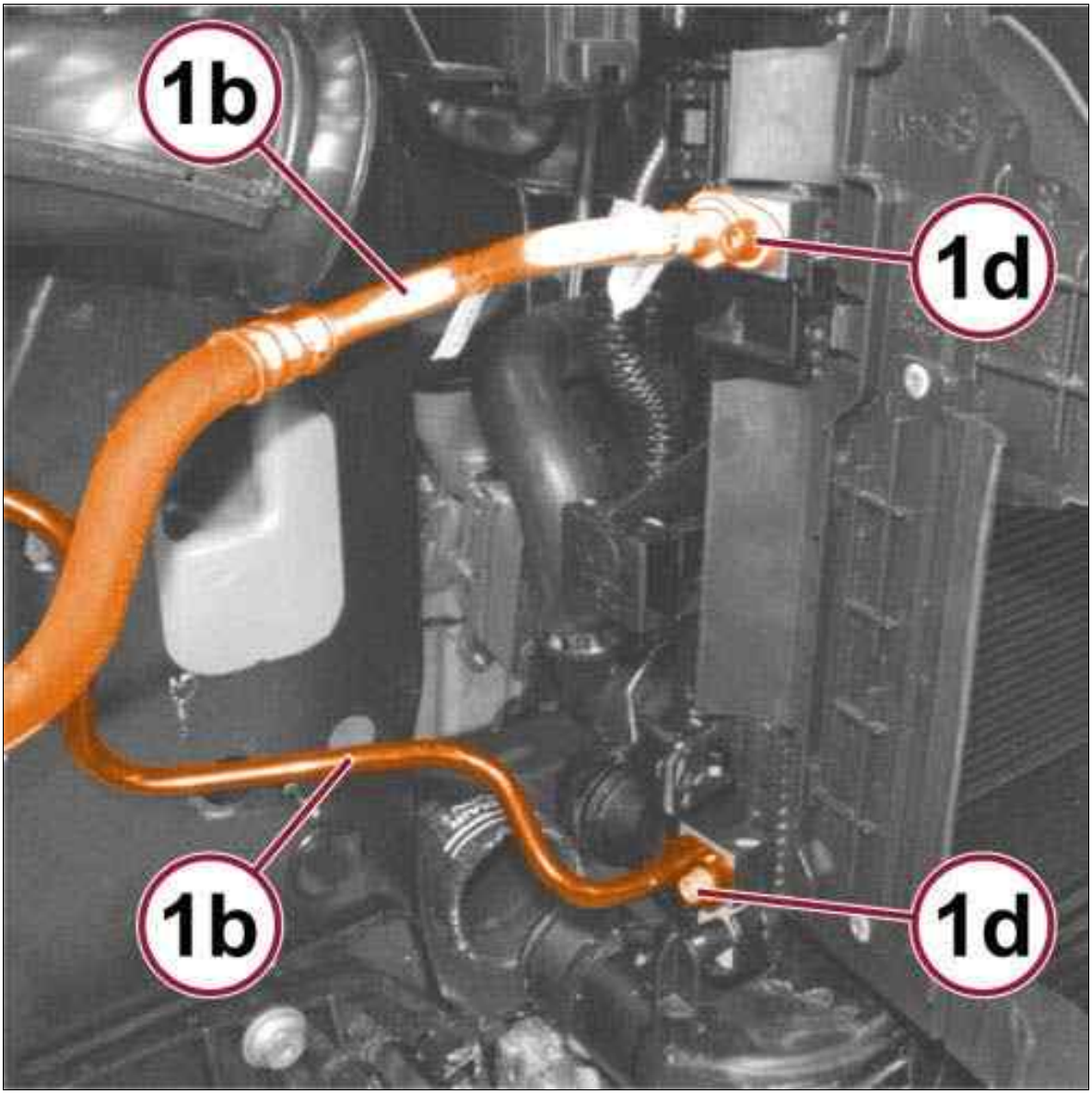
Fig 13: Coolant Outlet Pipe, Intercooler Inlet Hose & Clamp



Courtesy of CHRYSLER GROUP, LLC

23. Disconnect the quick coupling of the coolant outlet pipe (1).
24. Remove the clamp (2a) and disconnect the intercooler inlet hose (2b).

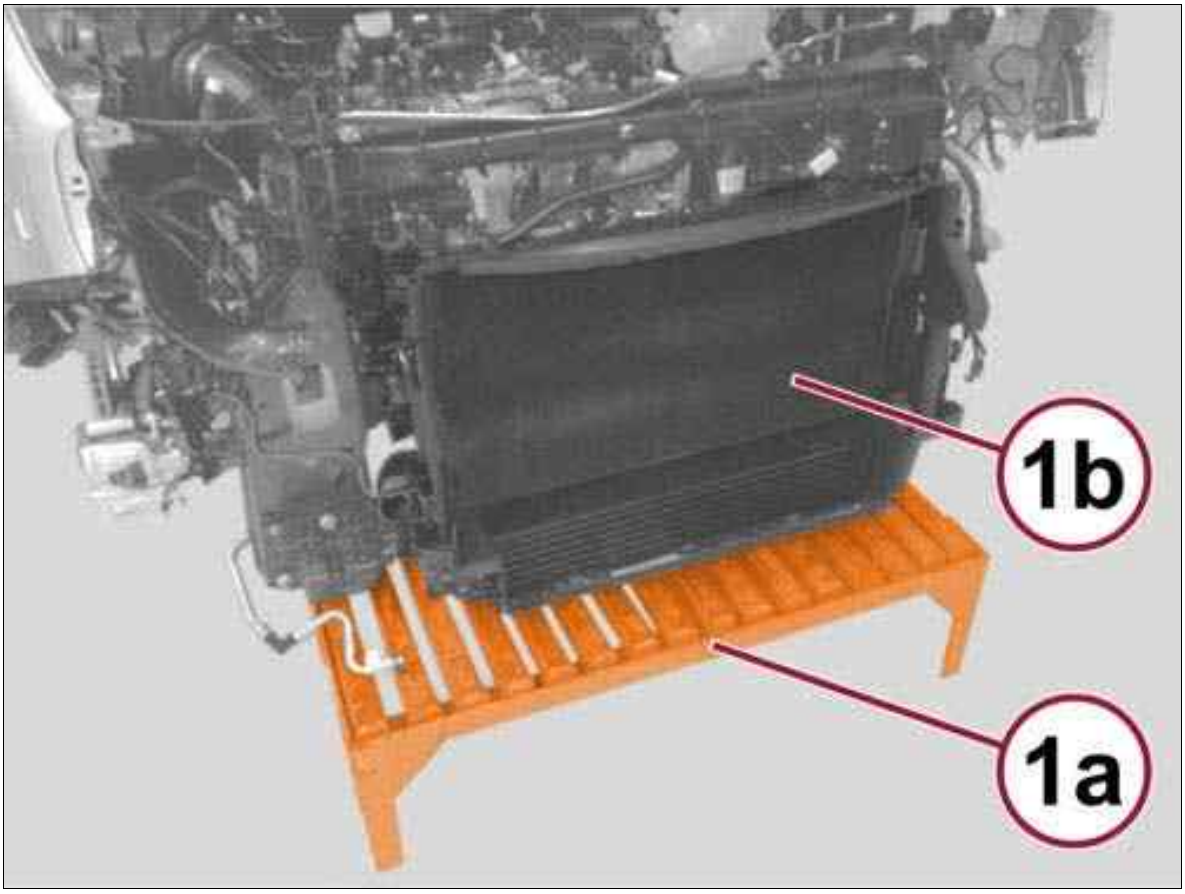
Fig 14: A/C Pipes & Bolts



Courtesy of CHRYSLER GROUP, LLC

25. Remove the screws (1d) and disconnect the pipes (1b) of the air conditioning.

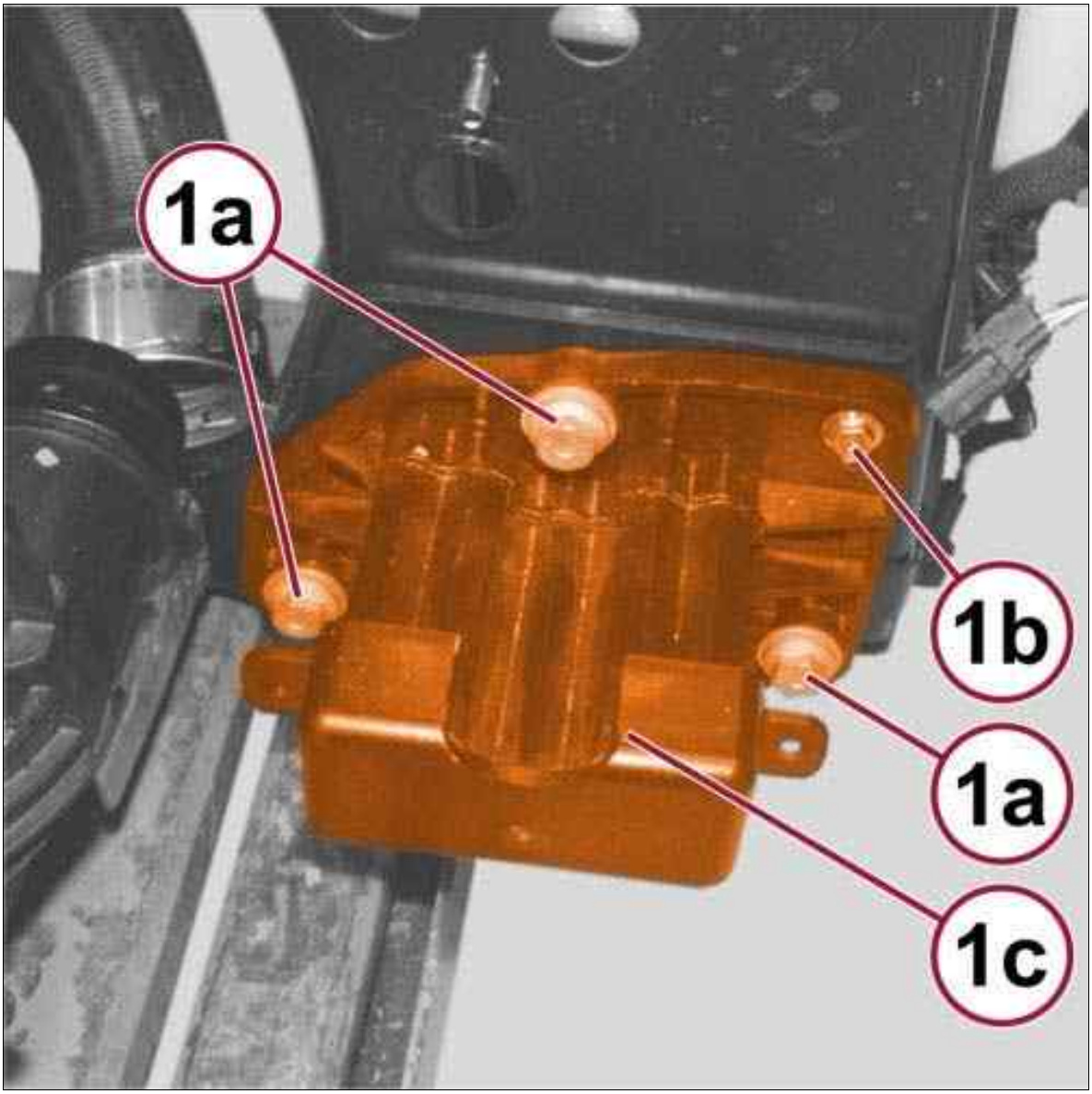
Fig 15: Supporting Device Under Crossmember



Courtesy of CHRYSLER GROUP, LLC

26. Place a suitable supporting device (1a) under the crossmember (1b).
27. Lower the vehicle so that the crossmember is resting on the lifting device.

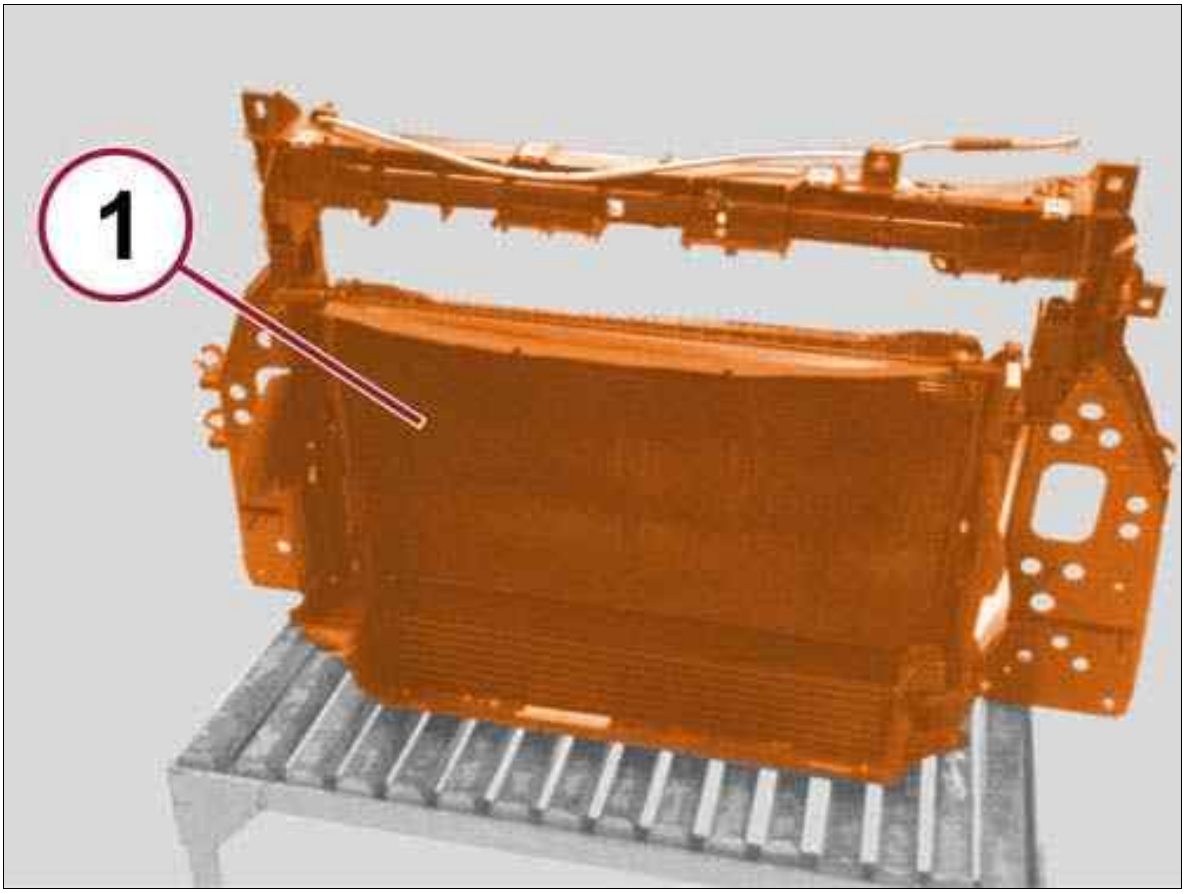
Fig 16: Shock Absorbers, Screws & Nuts



Courtesy of CHRYSLER GROUP, LLC

28. Working on both sides, remove the screws (1a) and nuts (1b) securing and removing shock absorbers (1c).

Fig 17: Headlamp Supporting Crossmember

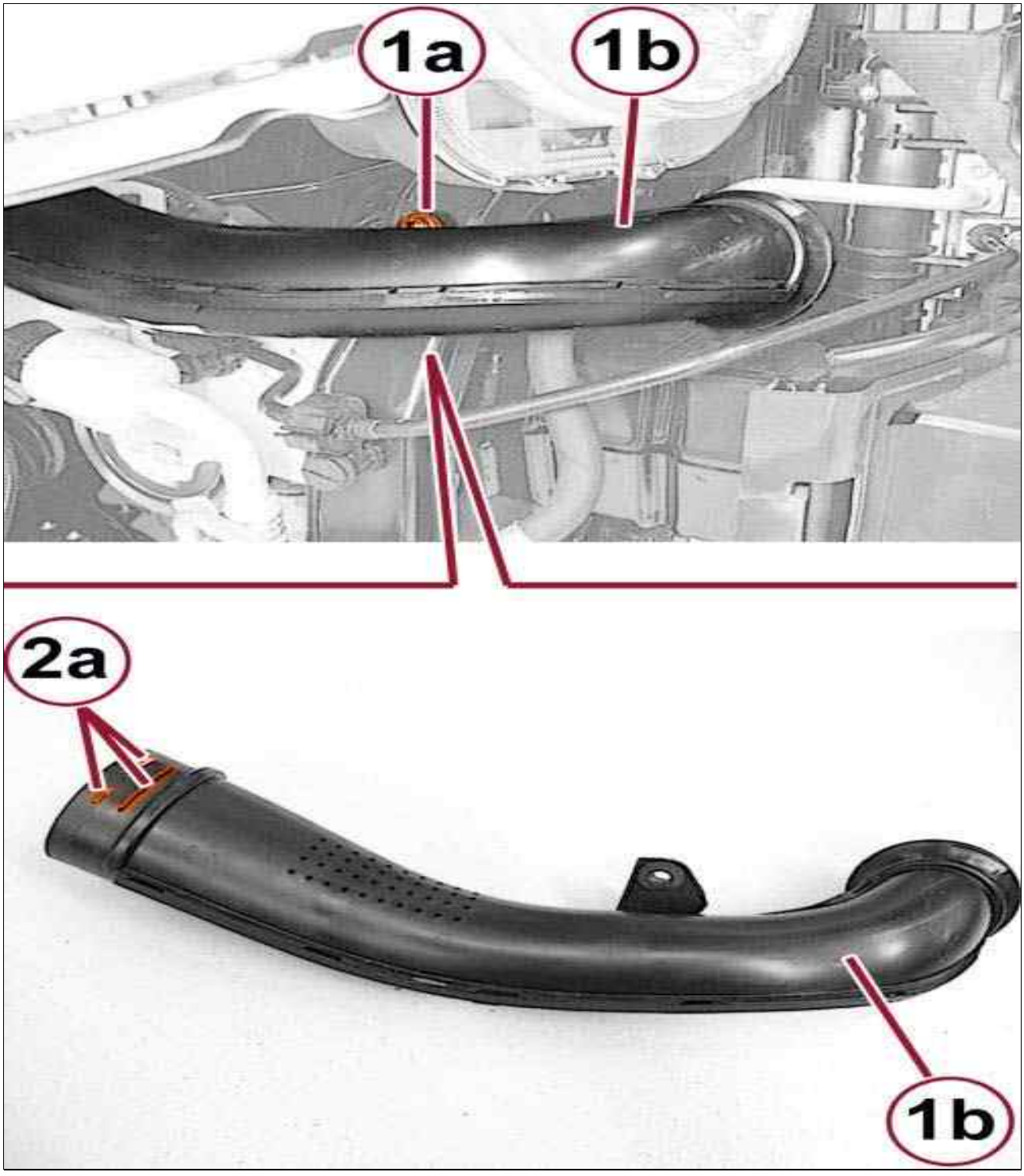


Courtesy of CHRYSLER GROUP, LLC

29. Remove the headlamp supporting crossmember (1).
30. Disassemble the crossmember as necessary. Refer to CROSSMEMBER, HEADLAMP MOUNTING, DISASSEMBLY AND ASSEMBLY .

EXTERIOR > CROSSMEMBER, HEADLAMP MOUNTING > REMOVAL AND INSTALLATION > REMOVAL > 2.0L TURBO DIESEL

Fig 1: Cool Air Inlet, Retainers & Nut



Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable.
2. Raise and support the vehicle. Refer to HOISTING, STANDARD PROCEDURE .
3. Remove the belly pan. Refer to BELLY PAN, REMOVAL AND INSTALLATION .
4. Drain the engine coolant. Refer to STANDARD PROCEDURE .

5. Recover the refrigerant from the refrigerant system. Refer to PLUMBING, STANDARD PROCEDURE .

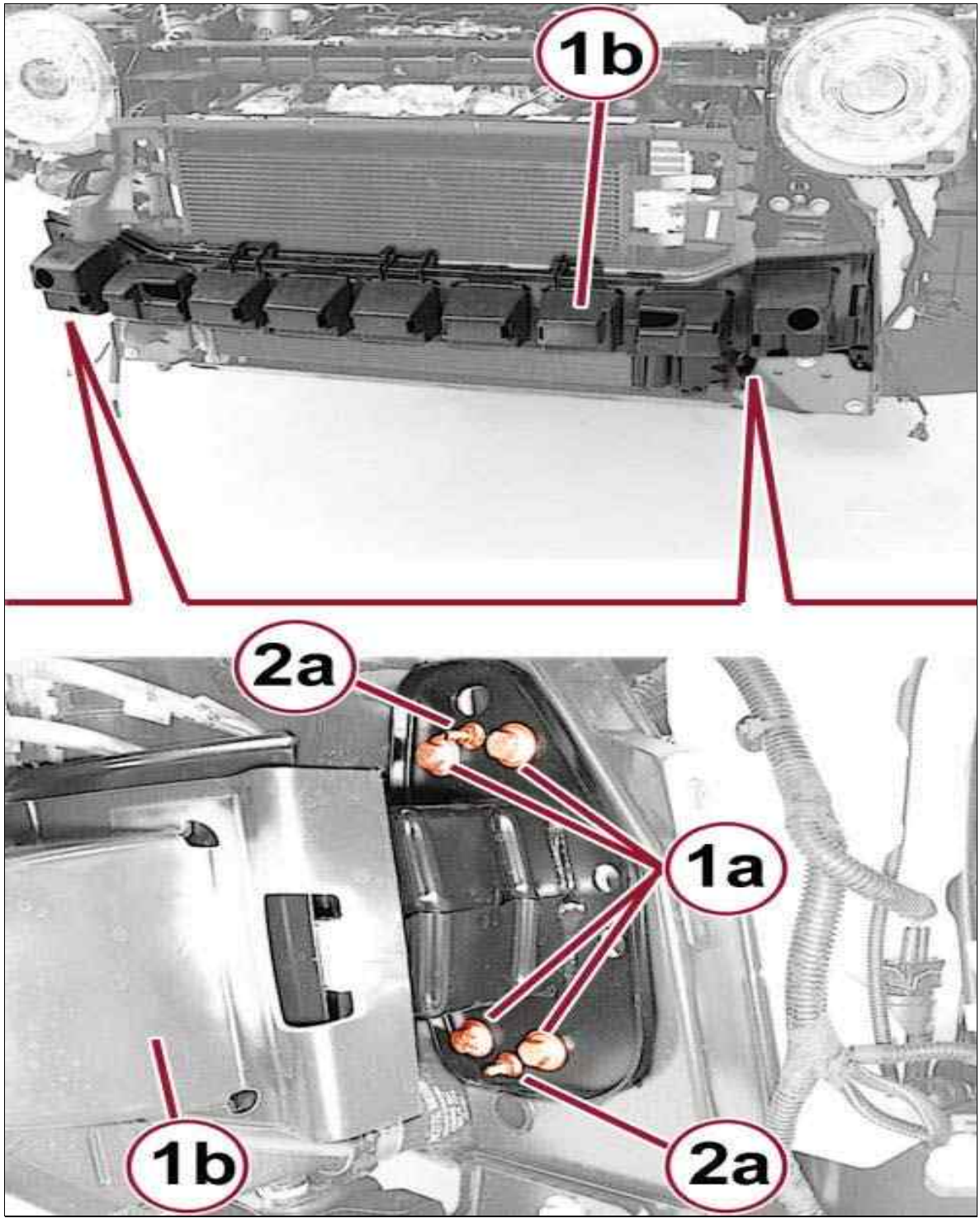
6. Remove the front fascia. Refer to FASCIA, FRONT, REMOVAL AND INSTALLATION .

7. Remove the headlight assemblies. Refer to UNIT, FRONT LAMP, REMOVAL AND INSTALLATION .

8. Working on the right side of the crossmember, remove the nut (1a) of the cool air inlet (1b).

9. Remove the cool air inlet (1b) releasing the retainers (2a) from the air filter housing.

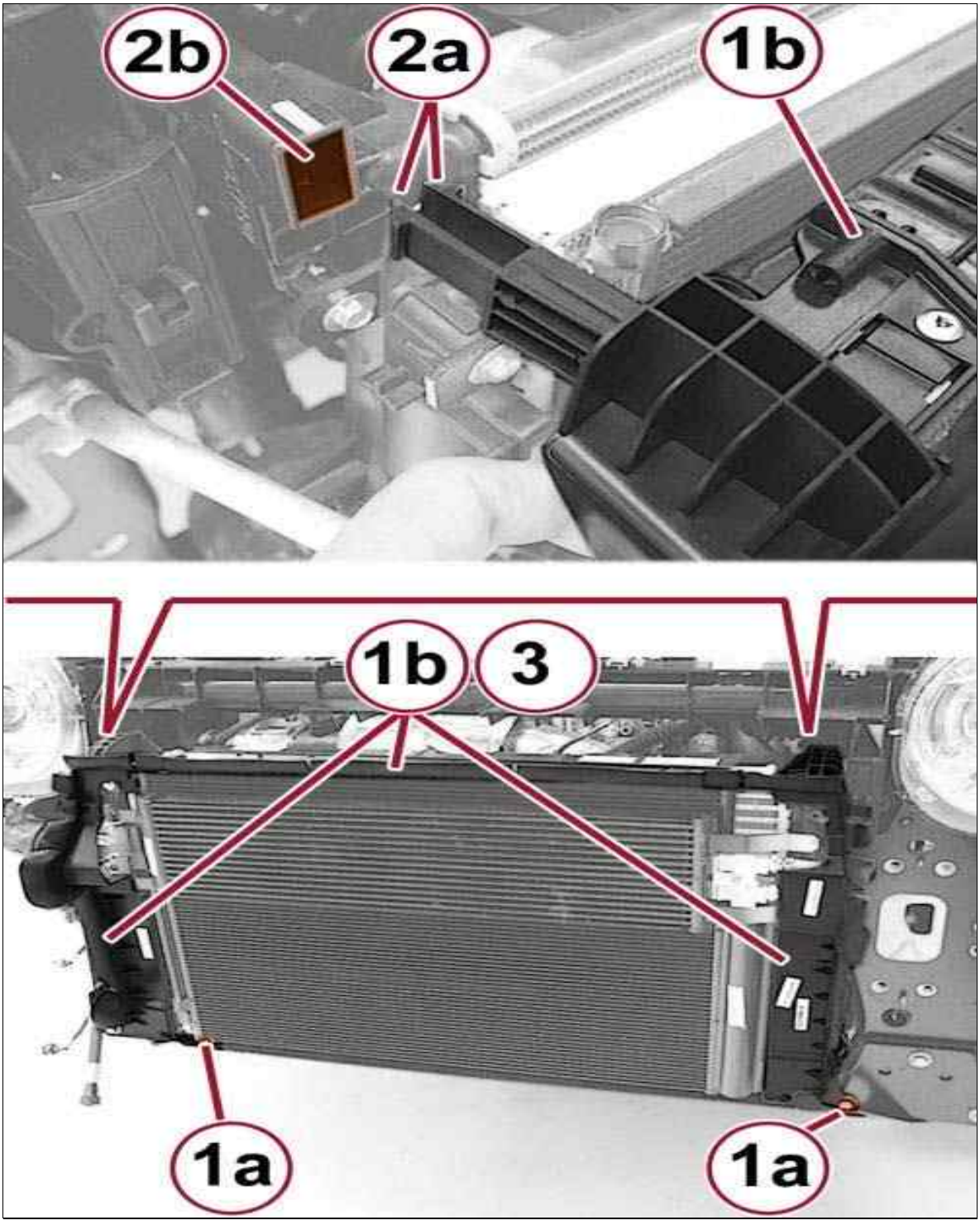
Fig 2: Energy Absorber, Nuts & Bolts



Courtesy of CHRYSLER GROUP, LLC

10. Remove the screws (1a) securing the energy absorber (1b).
11. Remove the three nuts (2a) and remove the energy absorber (1b).

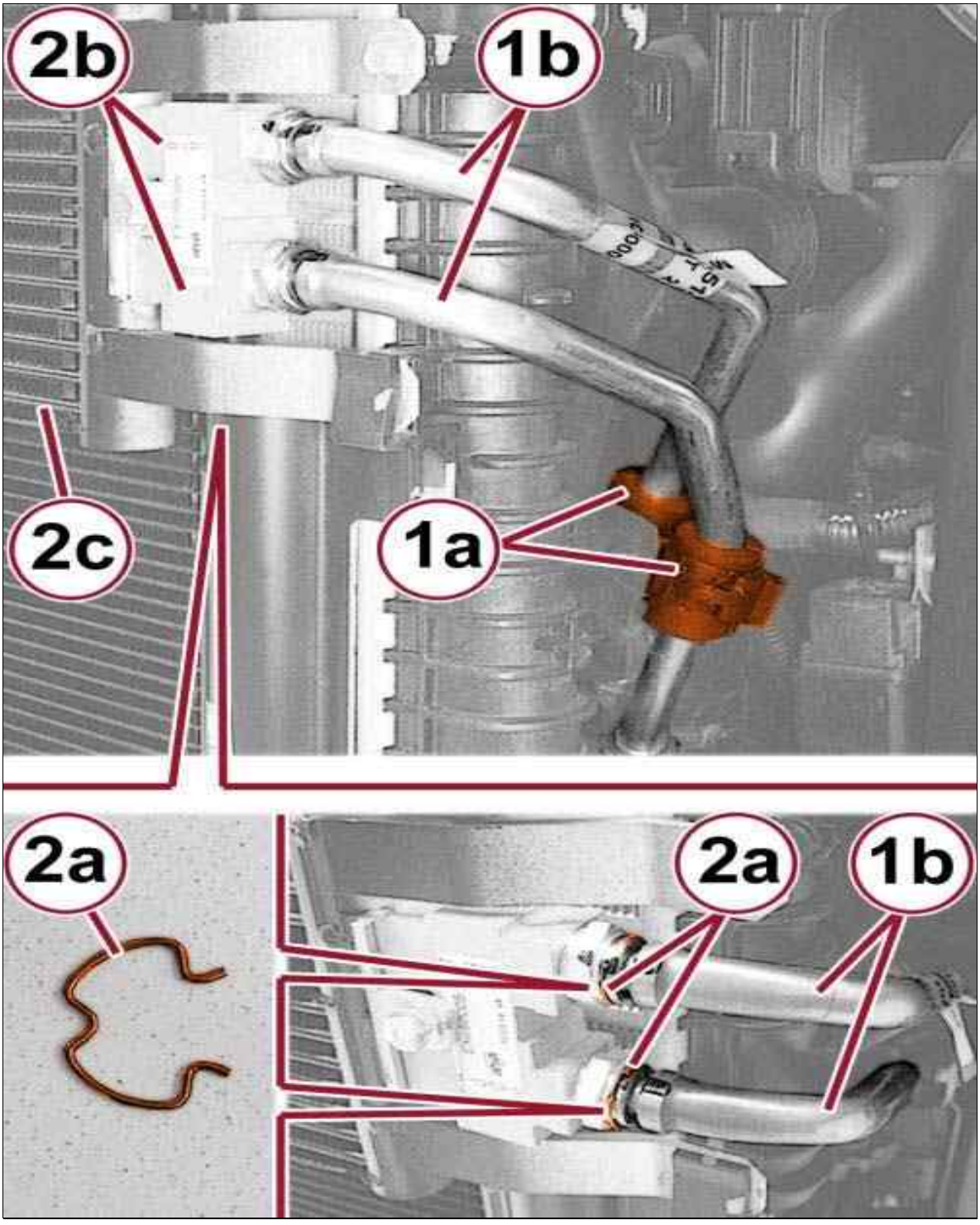
Fig 3: Air Duct, Seats, Retainers & Screws



Courtesy of CHRYSLER GROUP, LLC

12. Remove the screws (1a) of the lower air duct (1b).
13. Release the retainers (2a) of air duct (1b), from the seats (2b) of the crossmember.
14. Retrieve the air duct (1b).

Fig 4: Automatic Transmission Oil Cooler Lines, Clamps & Clips



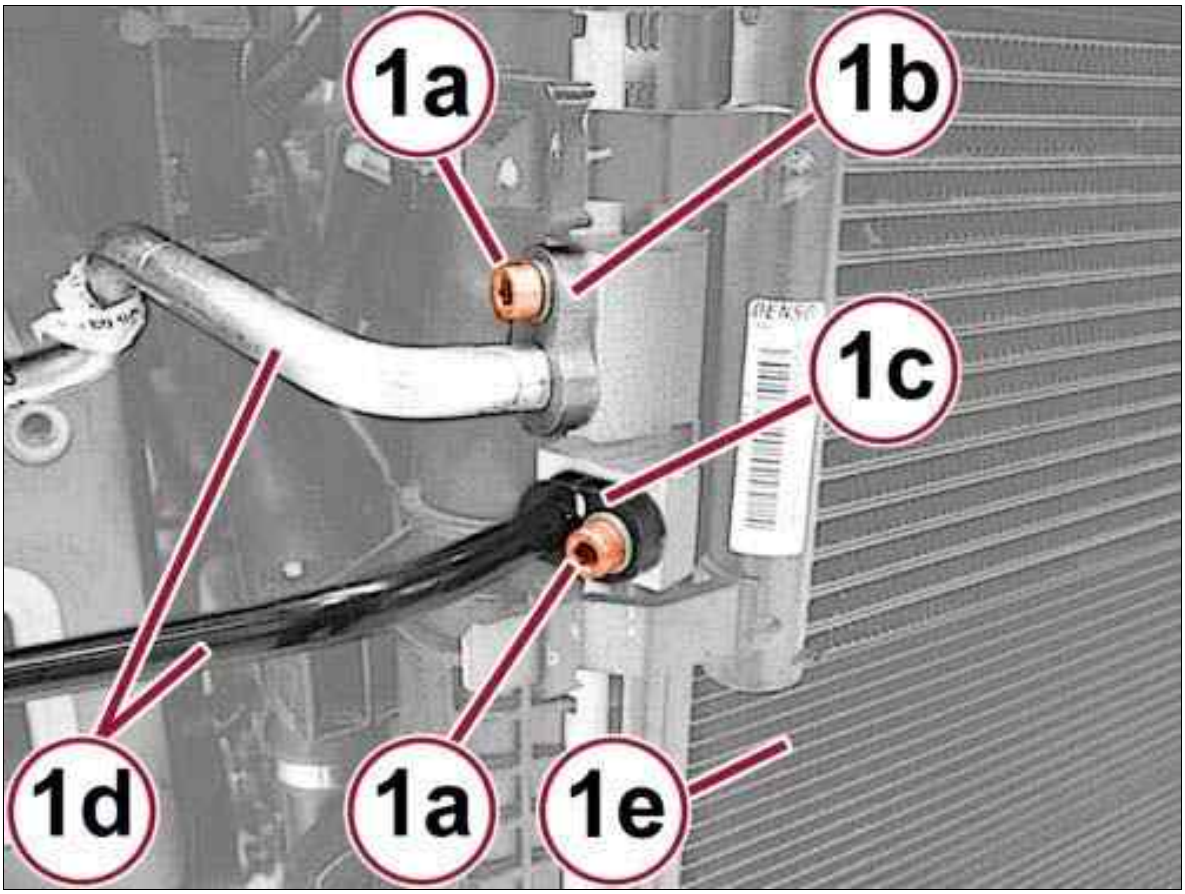
Courtesy of CHRYSLER GROUP, LLC

15. Open the retaining clamps (1a) and free up the automatic transmission oil cooler lines (1b).
16. Carefully release the retaining clips (2a) and disconnect the lines (1b) from the fittings (2b) of the automatic transmission oil cooler (2c).

> *NOTE:*

Using suitable tools, plug the fittings disconnected to prevent the system contamination.

Fig 5: A/C Lines, Fittings & Screws



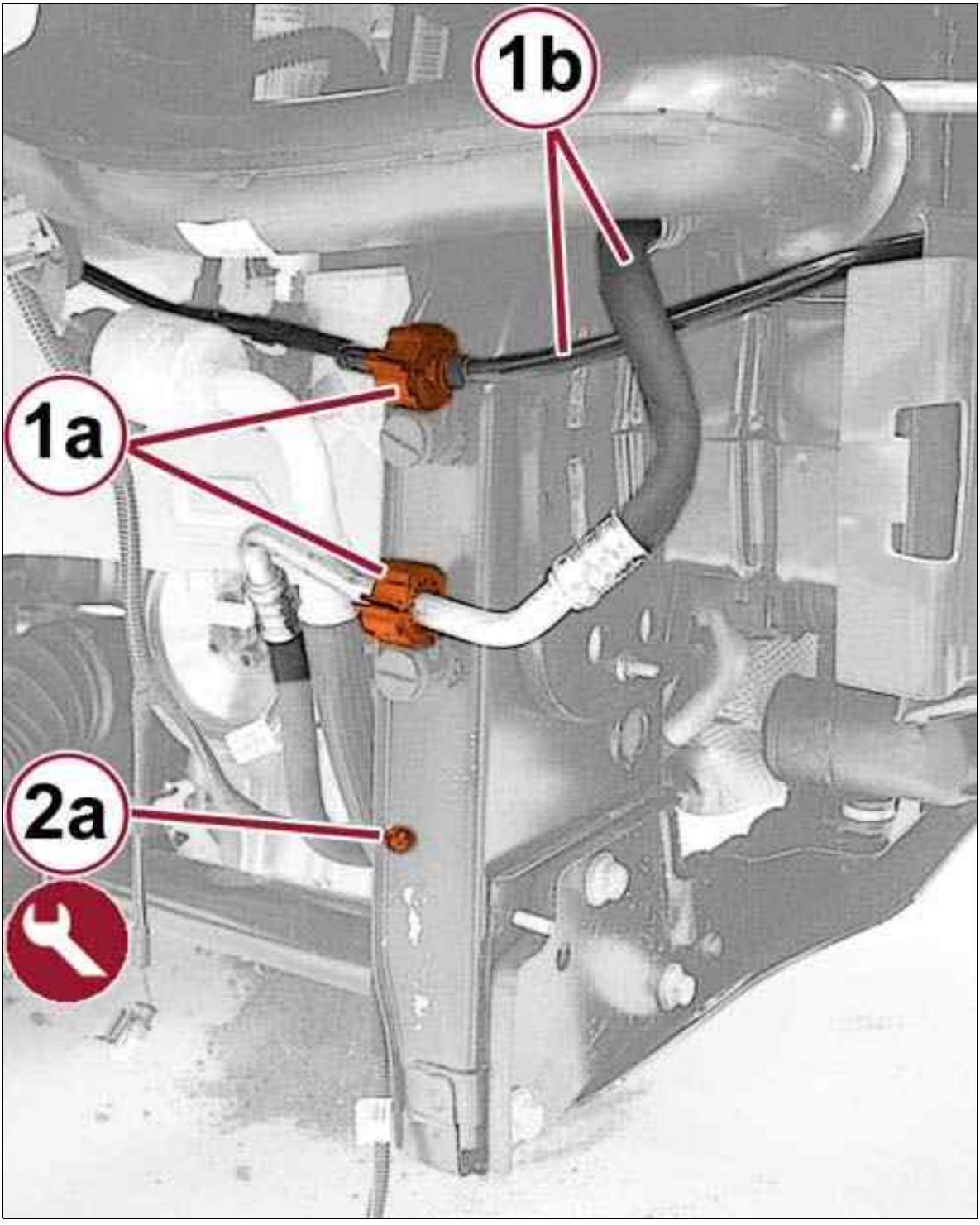
Courtesy of CHRYSLER GROUP, LLC

17. Remove the screws (1a) and disconnect the A/C condenser fittings (1b) and (1c) of the lines (1d) (first).

NOTE:

Using suitable tools, plug the fittings disconnected to prevent the system contamination.

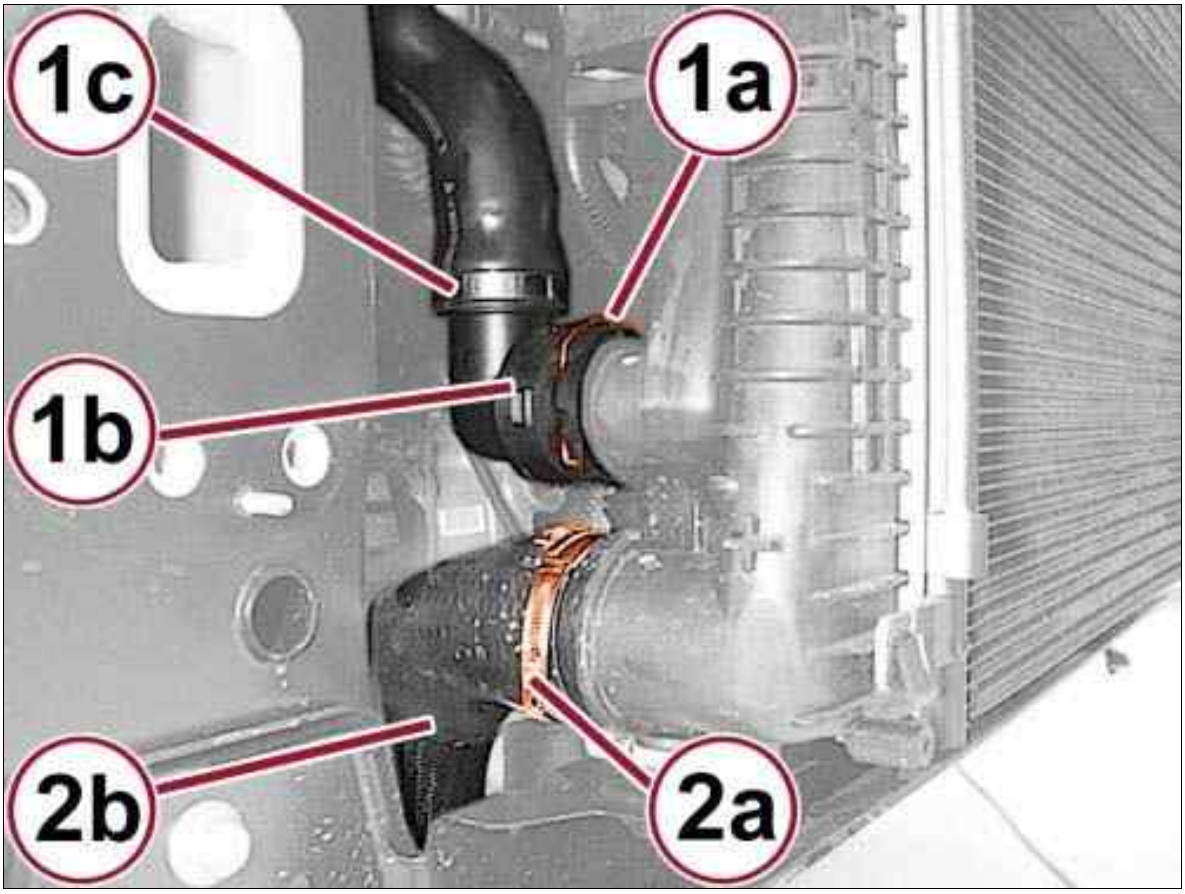
Fig 6: A/C Lines, Bracket & Clamps



Courtesy of CHRYSLER GROUP, LLC

18. Working on the right side of the crossmember, open the clamps (1a) and free up the A/C lines (1b).
19. Release the crossmember electrical wiring bracket (2a) with special tool #1823015000.

Fig 7: Engine Coolant Pipe, Intercooler Radiator Inlet Pipe, Coupling, Retainer & Clamp

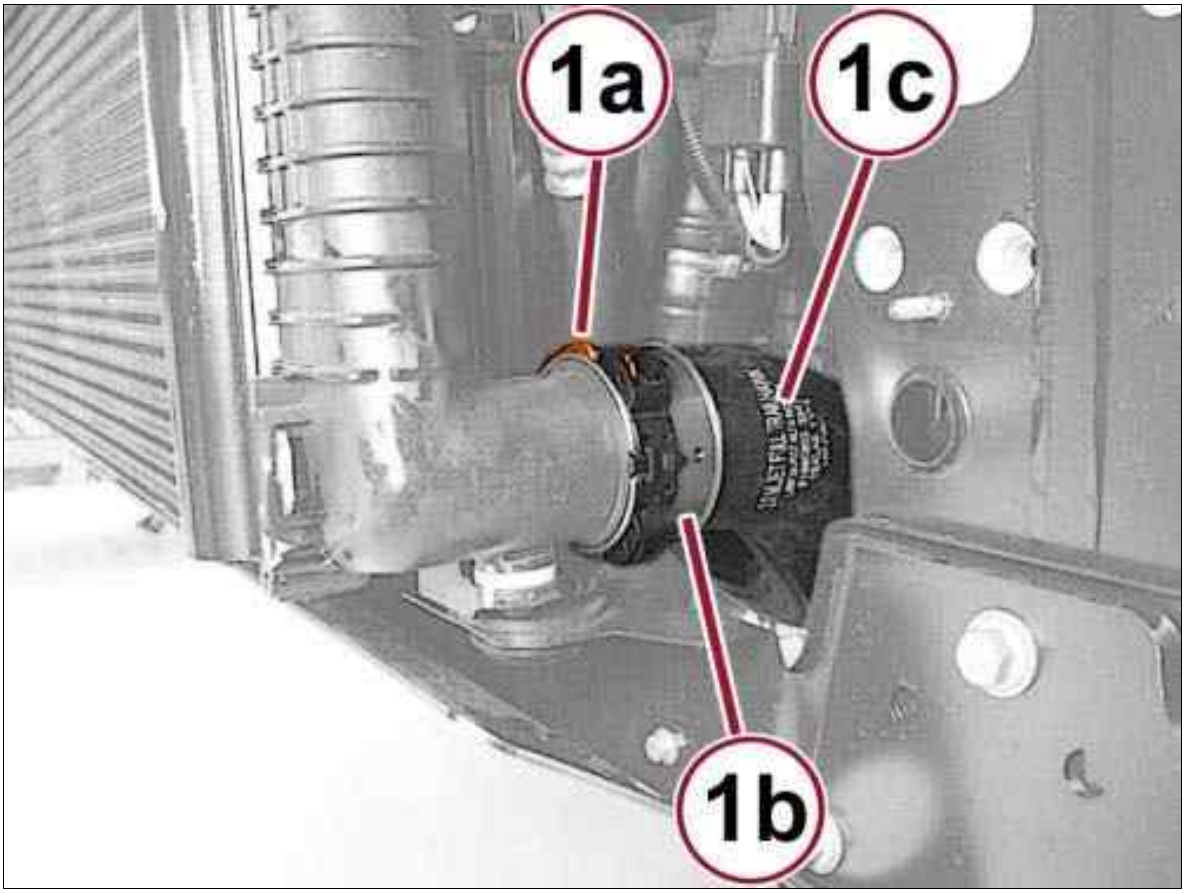


Courtesy of CHRYSLER GROUP, LLC

20. Working on the lower right side of the radiators, release the spring retainer (1a) and disconnect the quick coupling (1b) of the engine coolant pipe (1c) from the radiator output.

21. Open the clamp (2a) and disconnect the intercooler radiator inlet pipe (2b).

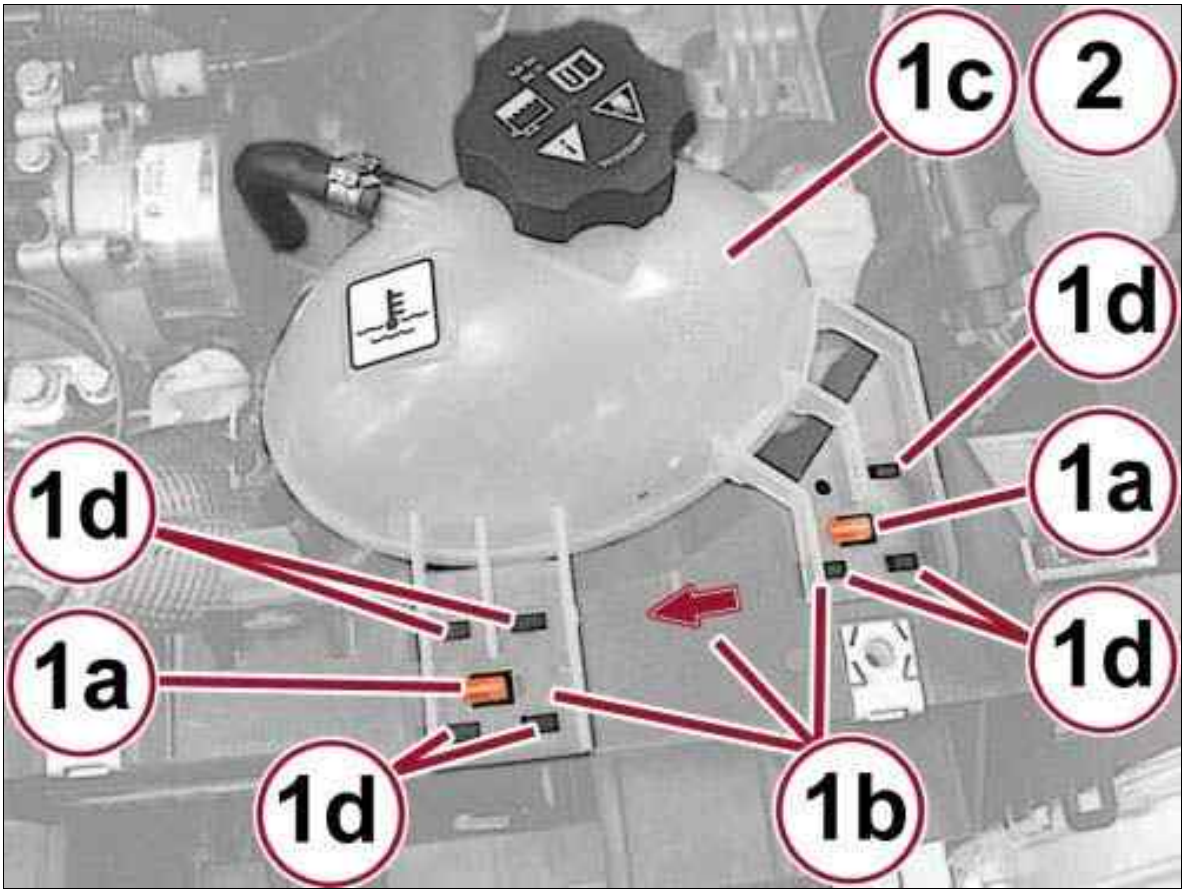
Fig 8: Intercooler Radiator Pipe, Coupling & Retainer



Courtesy of CHRYSLER GROUP, LLC

22. Working on the lower left side of the radiators, release the spring retainer (1a) and disconnect the quick coupling (1b) of the intercooler radiator pipe (1c).

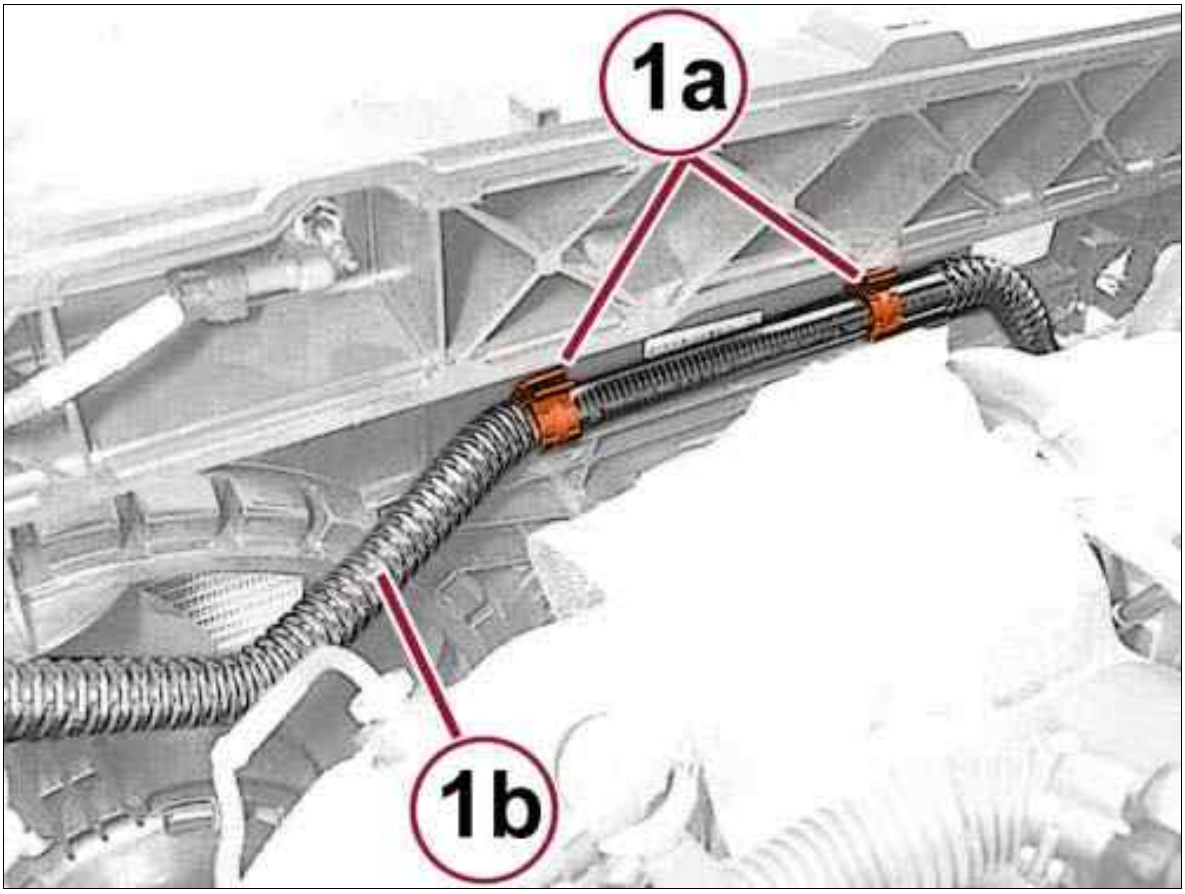
Fig 9: Engine Coolant Bottle & Retainer



Courtesy of CHRYSLER GROUP, LLC

23. Lift and disengage the retainers (1a) and slide the engine coolant bottle (1c) in the direction of the arrow (1b) by releasing the retainers (1d).
24. Position aside the reservoir (1c) after having released the lower restraint.

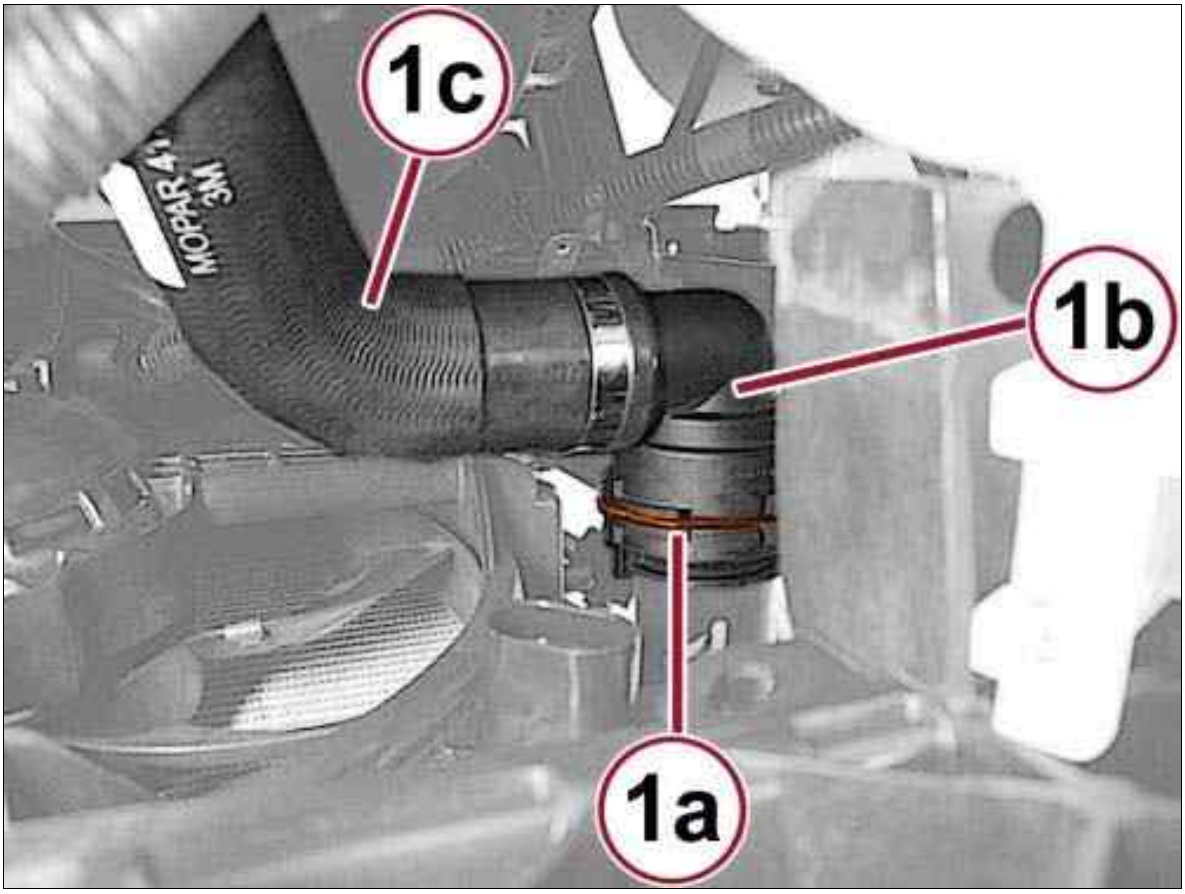
Fig 10: Coolant Line & Clamps



Courtesy of CHRYSLER GROUP, LLC

25. Release the engine coolant line (1b) from the clamps (1a).

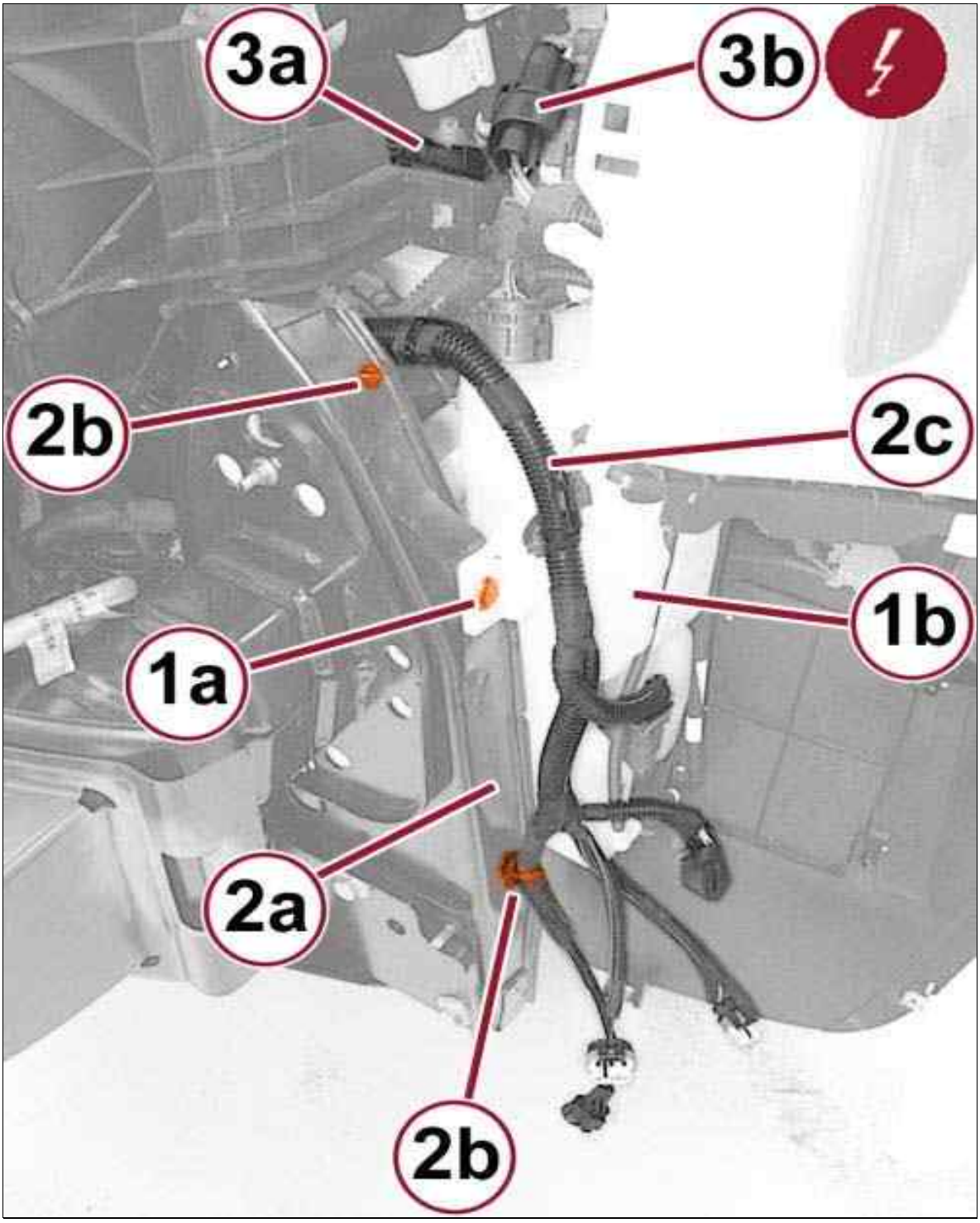
Fig 11: Engine Coolant Inlet Pipe, Coupling & Retainer



Courtesy of CHRYSLER GROUP, LLC

26. Working on the upper left side of the radiators, release the spring retainer (1a) and disconnect the quick coupling (1b) of the engine coolant inlet pipe (1c) of the radiator.

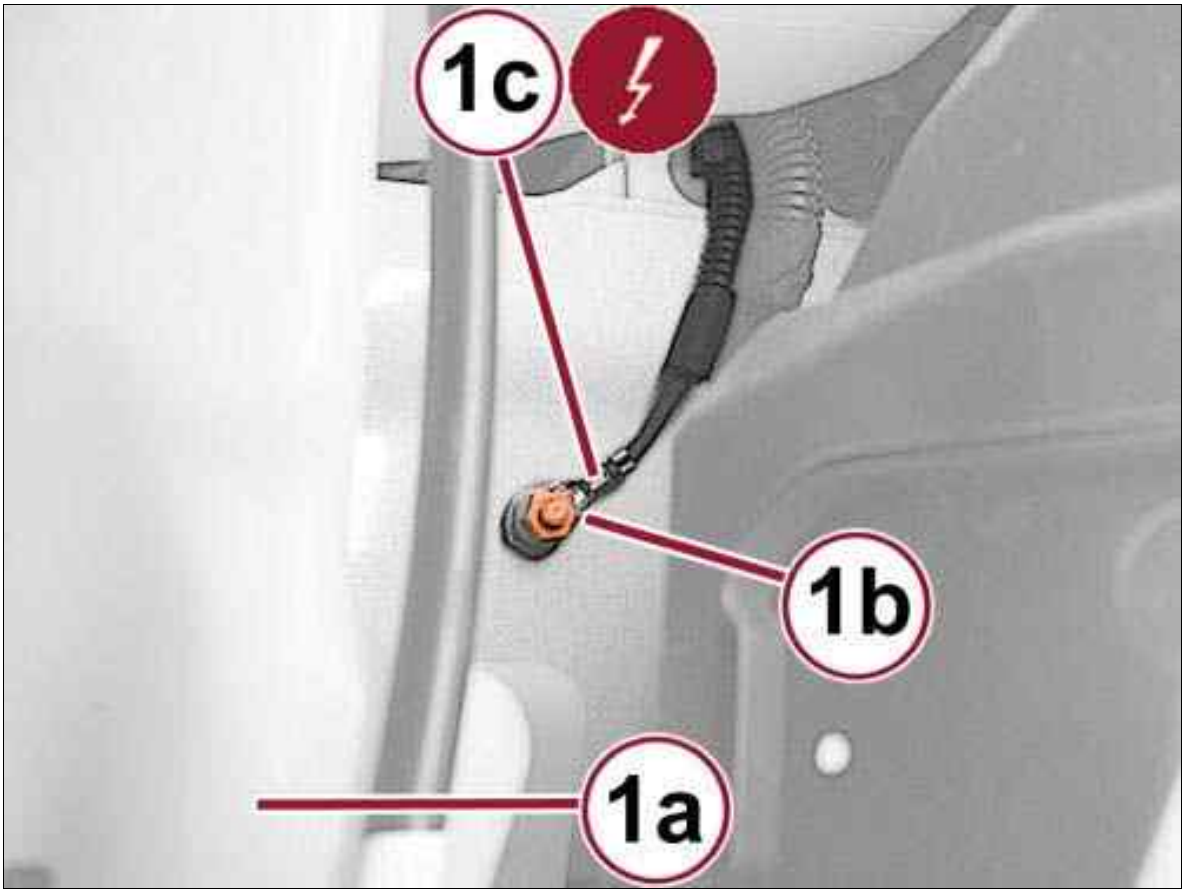
Fig 12: Washer Fluid Reservoir, Crossmember, Rivet, Retainers, Wiring & Connectors



Courtesy of CHRYSLER GROUP, LLC

27. Remove the rivet (1a) securing the front of the washer fluid reservoir (1b).
28. Release the electrical wiring (2c) retainers (2b) of the crossmember (2a).
29. Disconnect the electrical connections (3a, 3b).

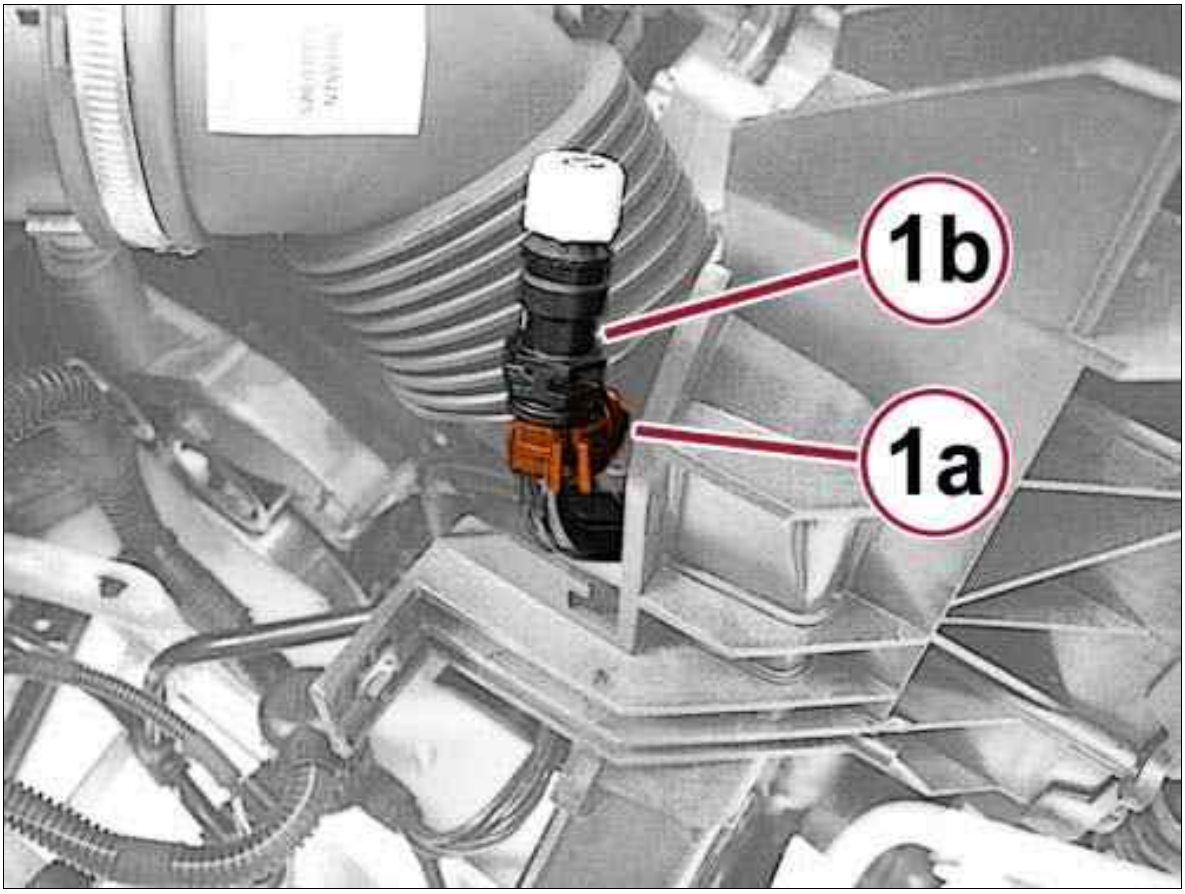
Fig 13: Windshield Wiper Fluid Reservoir, Ground Terminal & Nut



Courtesy of CHRYSLER GROUP, LLC

30. Working behind the windshield wiper fluid reservoir (1a), remove the nut (1b) and disconnect the ground terminal (1c).

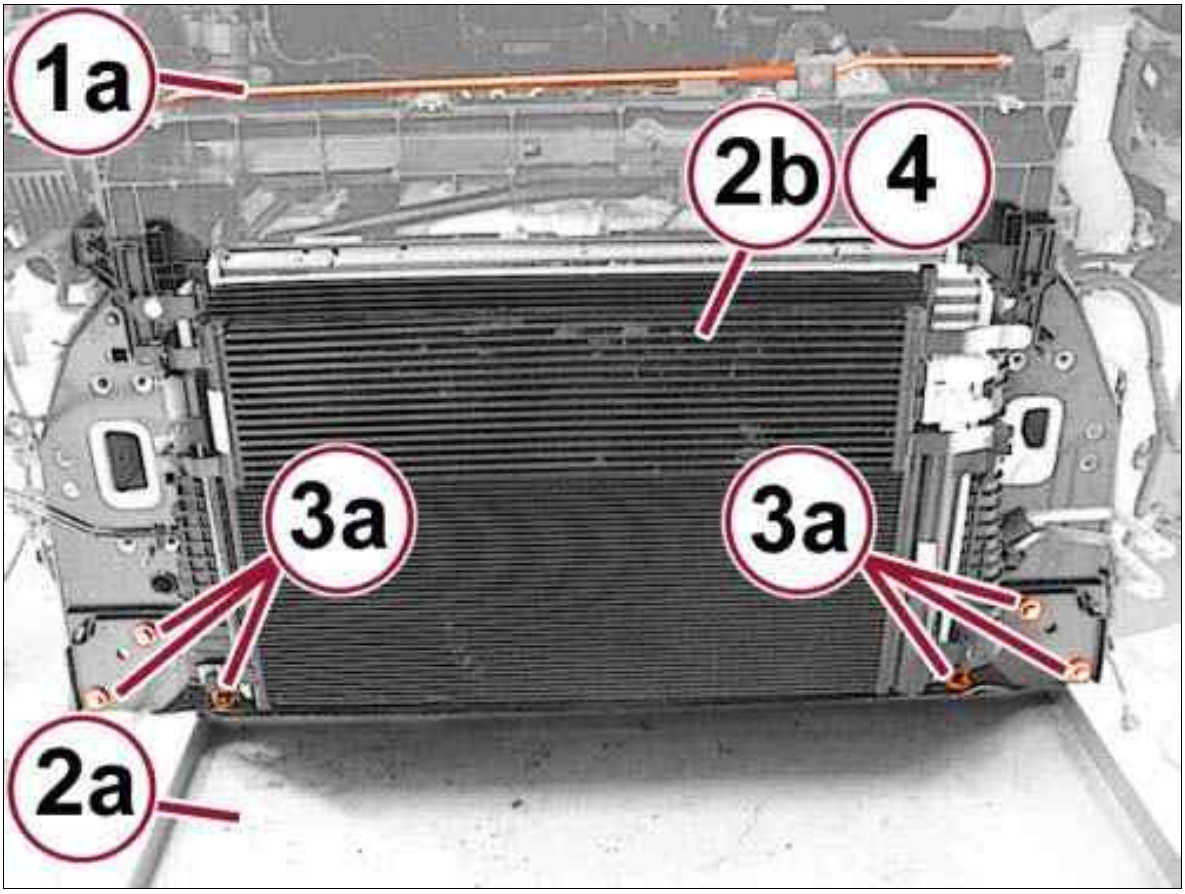
Fig 14: A/C Line & Clip



Courtesy of CHRYSLER GROUP, LLC

31. Working behind the right front headlamp compartment, open the retaining clip (1a) and release the A/C line (1b).

Fig 15: Crossmember, Support Rod & Screws

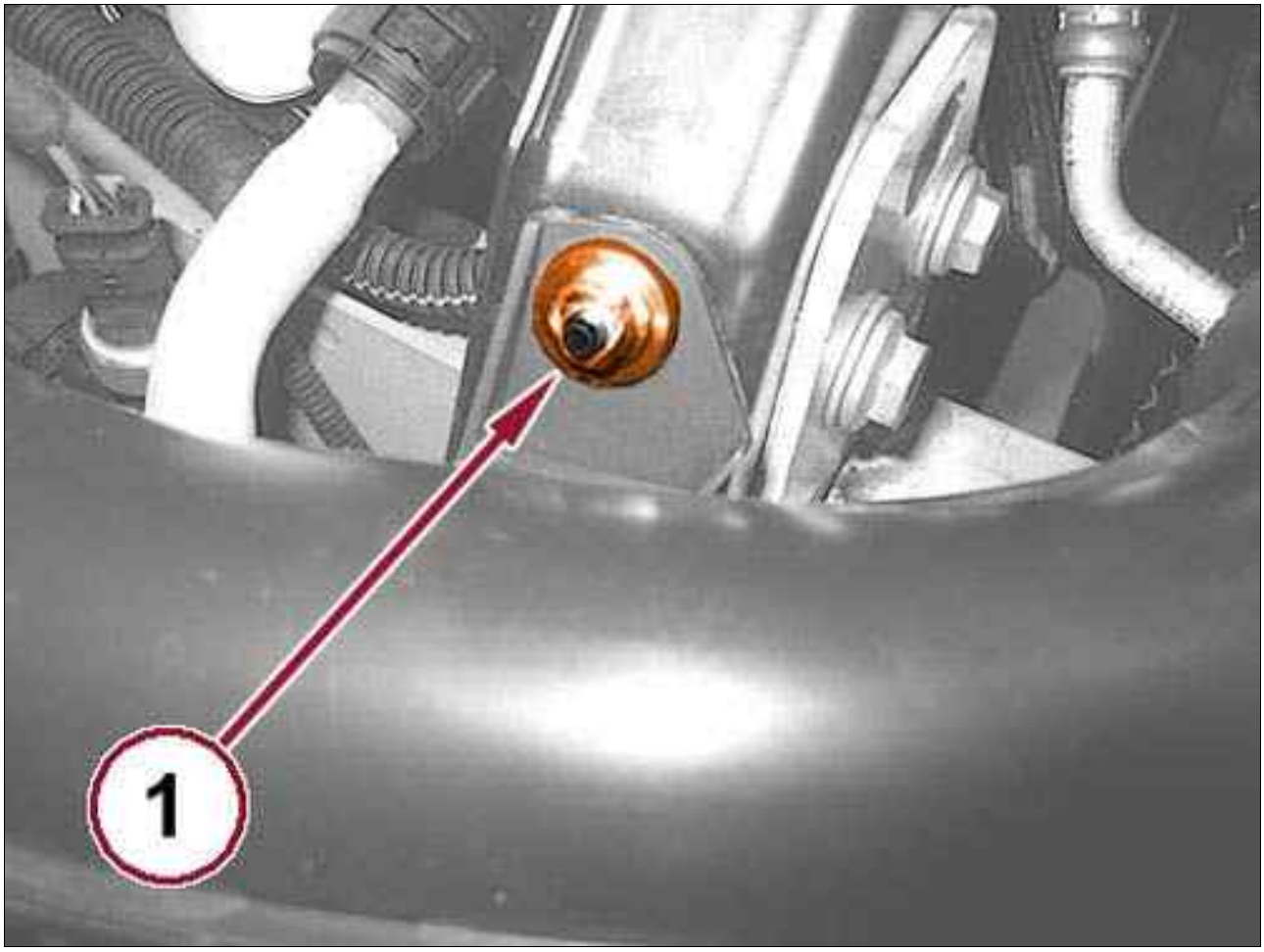


Courtesy of CHRYSLER GROUP, LLC

32. Release the hood support rod (1a) and support the hood with a suitable device or lower it so that it rests on the body without engaging the latch. Insert spacers to prevent latch engagement.
33. Place a suitable supporting device (2a) under the crossmember (2b).
34. Remove the screws (3a) securing the crossmember (2b) to the car and remove the crossmember.
35. Disassemble the crossmember as necessary. Refer to CROSSMEMBER, HEADLAMP MOUNTING, DISASSEMBLY AND ASSEMBLY .

EXTERIOR > CROSSMEMBER, HEADLAMP MOUNTING > REMOVAL AND INSTALLATION > REMOVAL > 2.4L MULTIAIR2

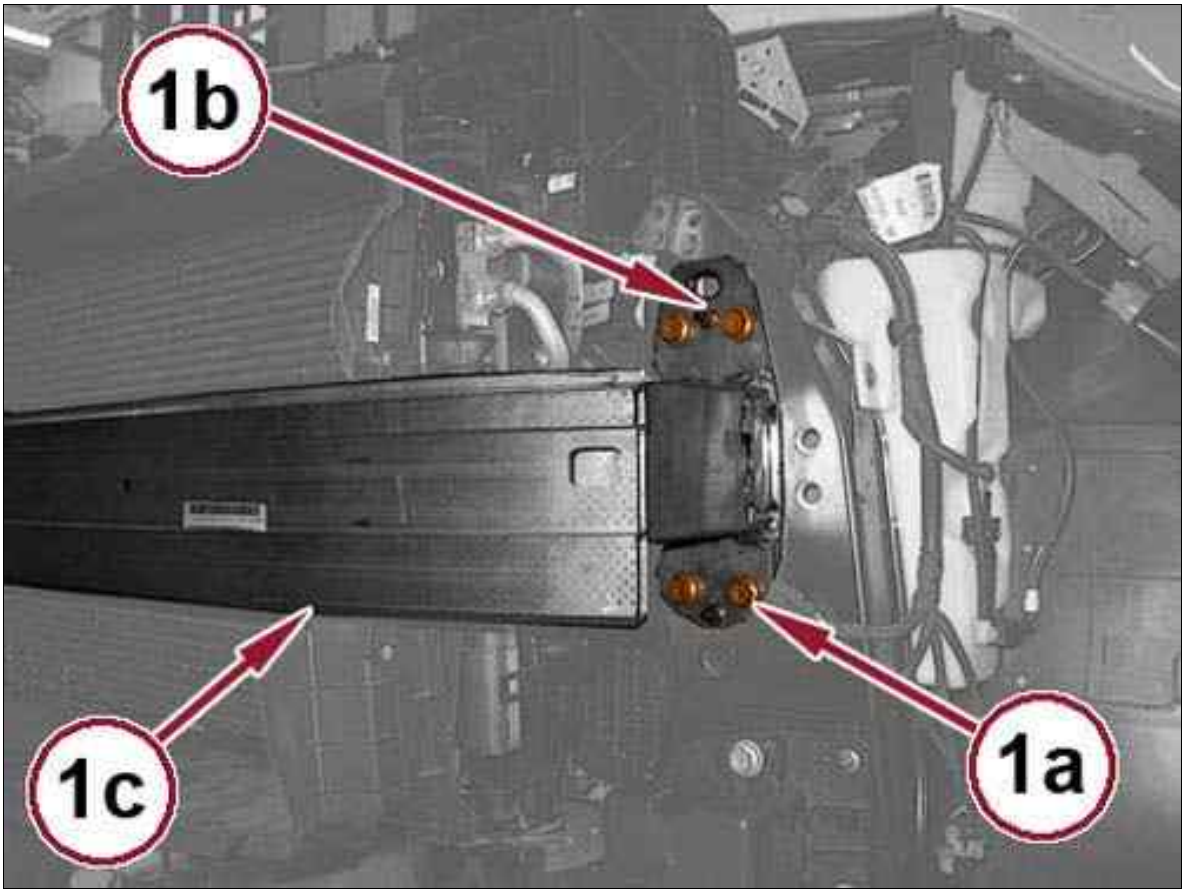
Fig 1: Cold Air Tube Mounting Nut



Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable.
2. Raise and support the vehicle. Refer to HOISTING, STANDARD PROCEDURE .
3. Remove the belly pan. Refer to BELLY PAN, REMOVAL AND INSTALLATION .
4. Remove the engine cover. Refer to COVER, ENGINE, REMOVAL AND INSTALLATION .
5. Drain the engine coolant. Refer to STANDARD PROCEDURE .
6. Recover the refrigerant from the refrigerant system. Refer to PLUMBING, STANDARD PROCEDURE .
7. Remove the front fascia. Refer to FASCIA, FRONT, REMOVAL AND INSTALLATION .
8. Remove the headlight assemblies. Refer to UNIT, FRONT LAMP, REMOVAL AND INSTALLATION .
9. Support the hood with a suitable supporting device.
10. Remove the cold air tube mounting nut.

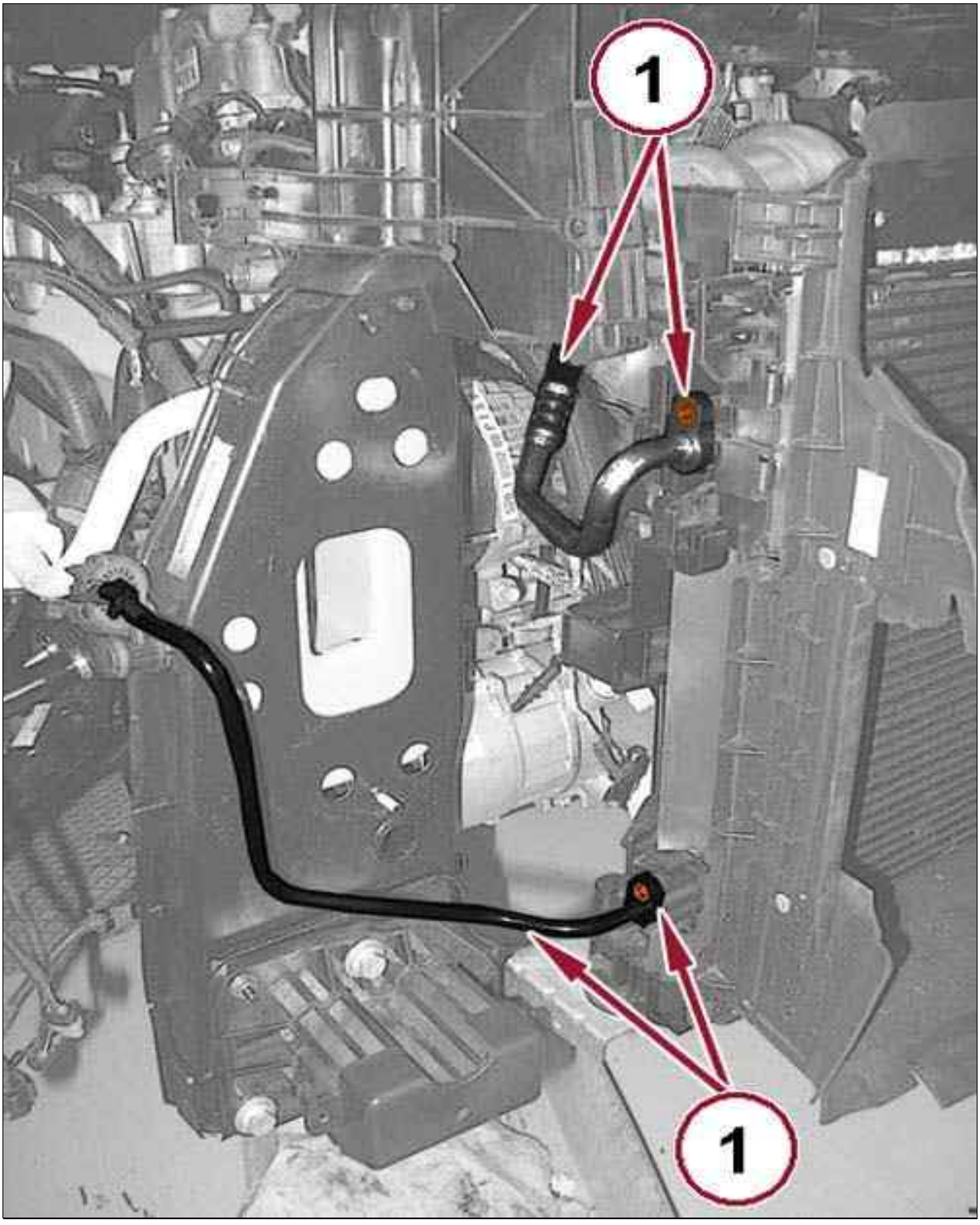
Fig 2: Front Bumper, Nuts & Bolts



Courtesy of CHRYSLER GROUP, LLC

11. Remove the screws (1a), nuts (1b) and remove the front bumper (1c).

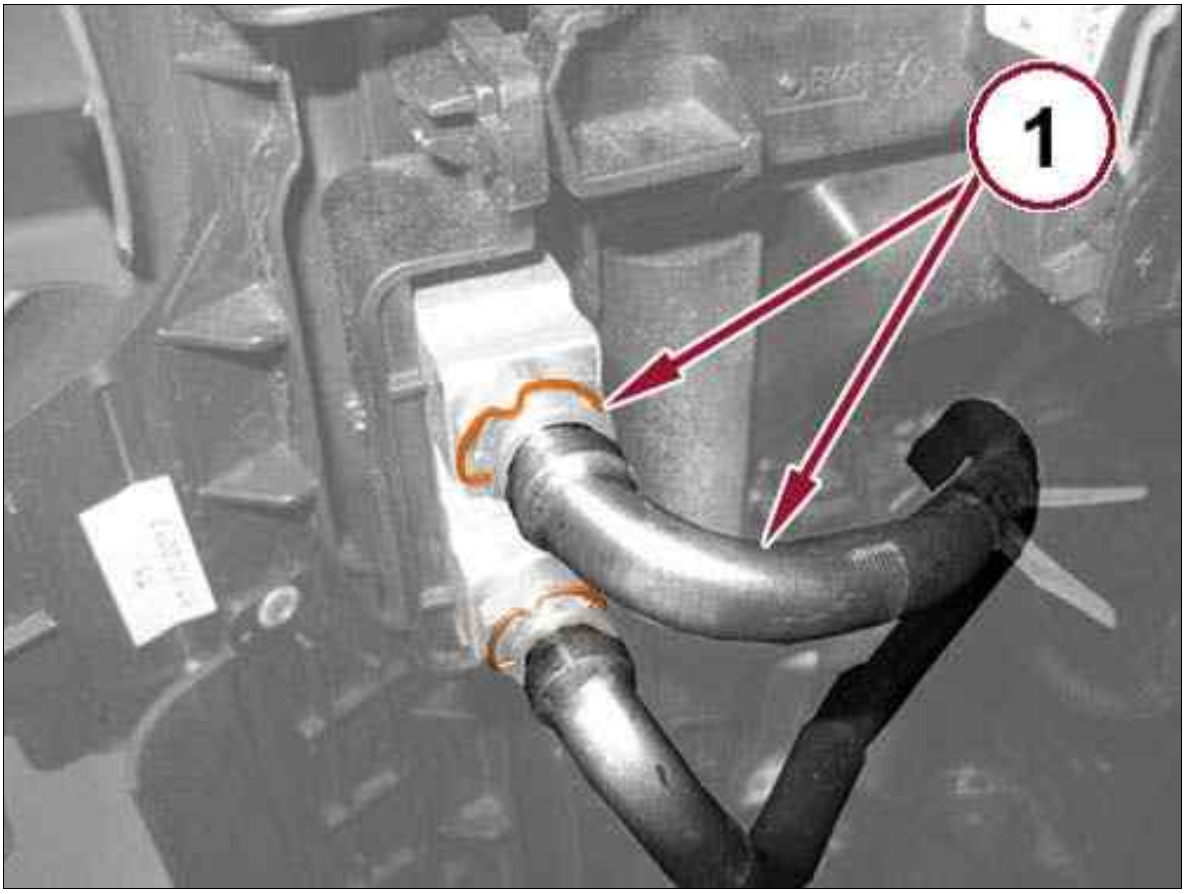
Fig 3: A/C Lines



Courtesy of CHRYSLER GROUP, LLC

12. Remove the screws and disconnect the supply and return lines (1) from the A/C condenser.

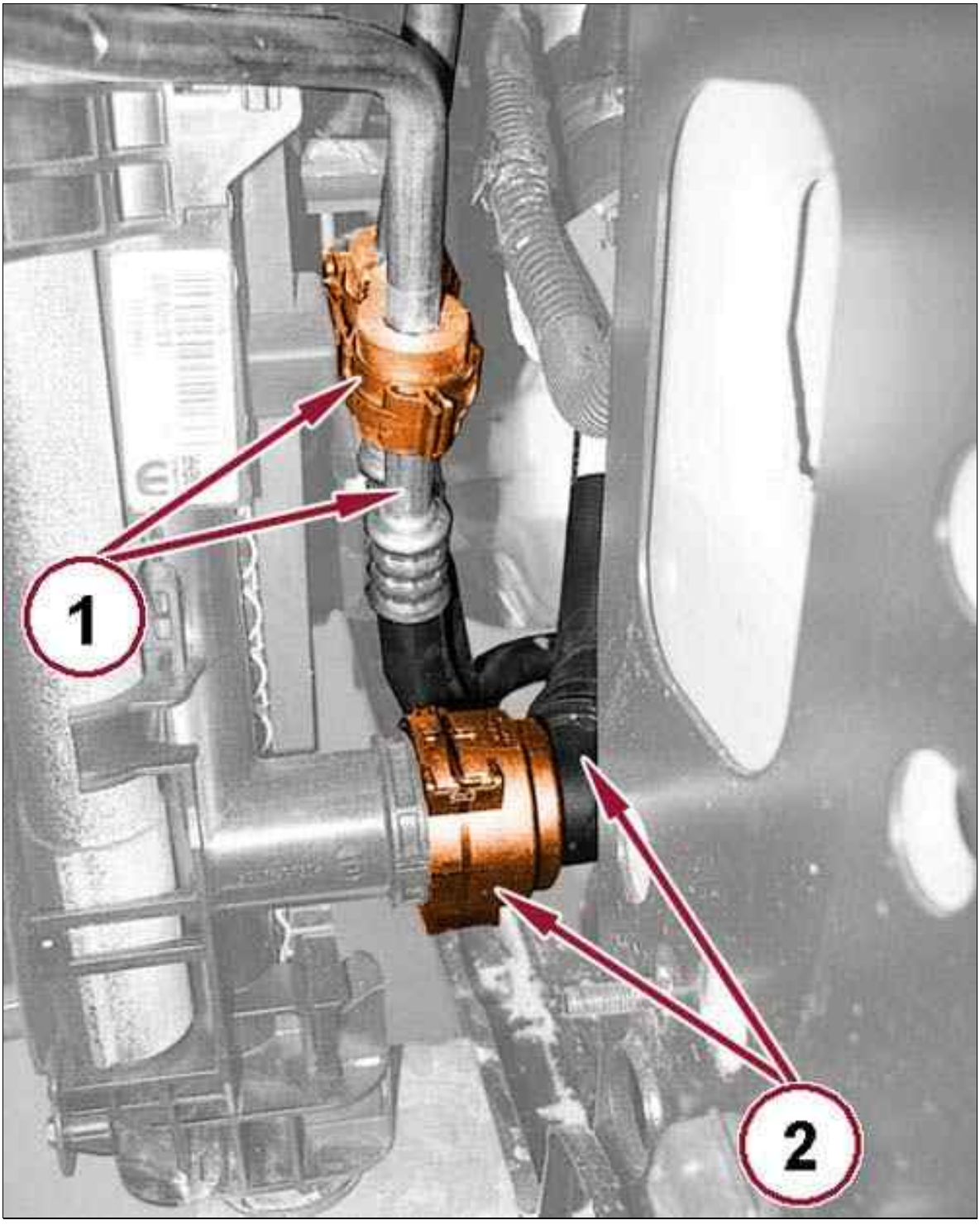
Fig 4: Transmission Line Clips



Courtesy of CHRYSLER GROUP, LLC

13. With suitable tool to release the clips (1) and disconnect the discharge and return to automatic transmission oil cooler.

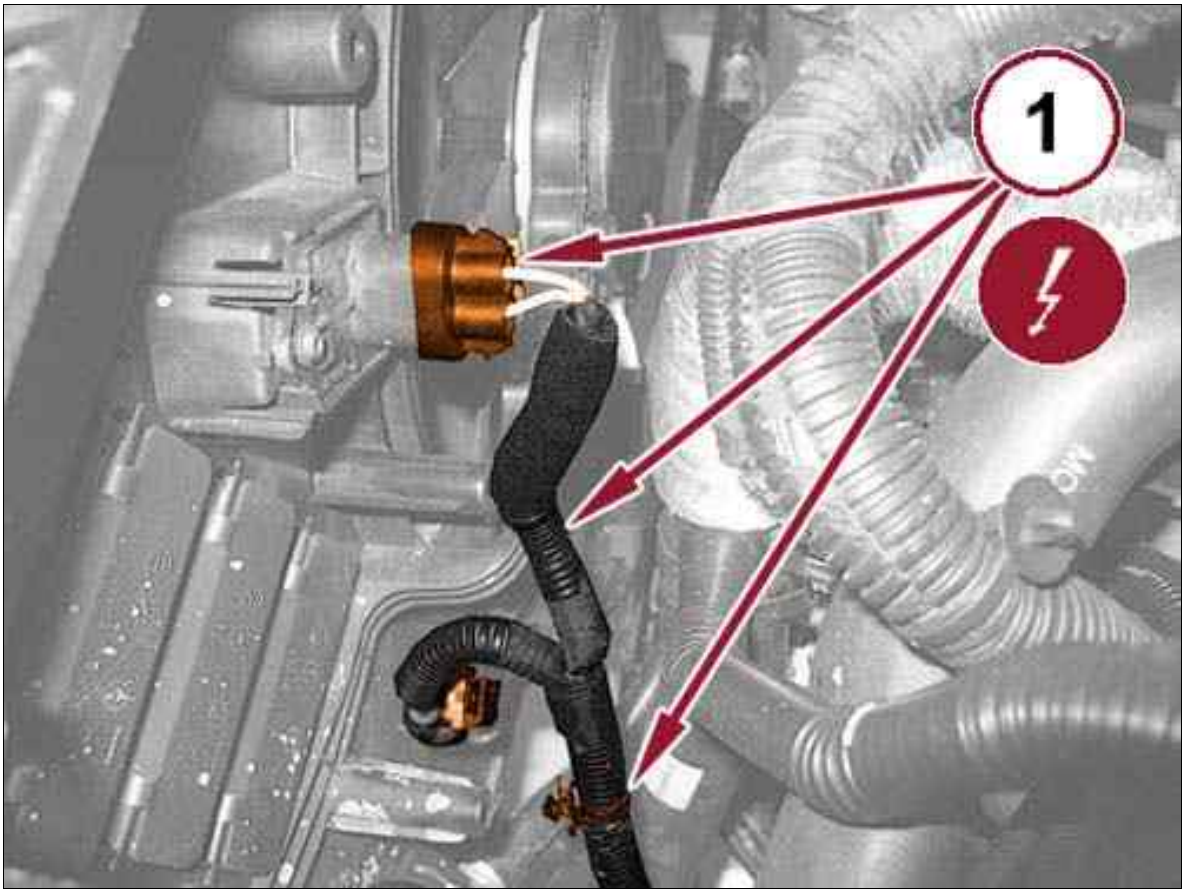
Fig 5: Quick Coupling Sleeve & Clip



Courtesy of CHRYSLER GROUP, LLC

14. Open the clip (1) and release the discharge and return to automatic transmission oil cooler.
15. Disconnect the quick coupling sleeve (2) radiator water outlet.

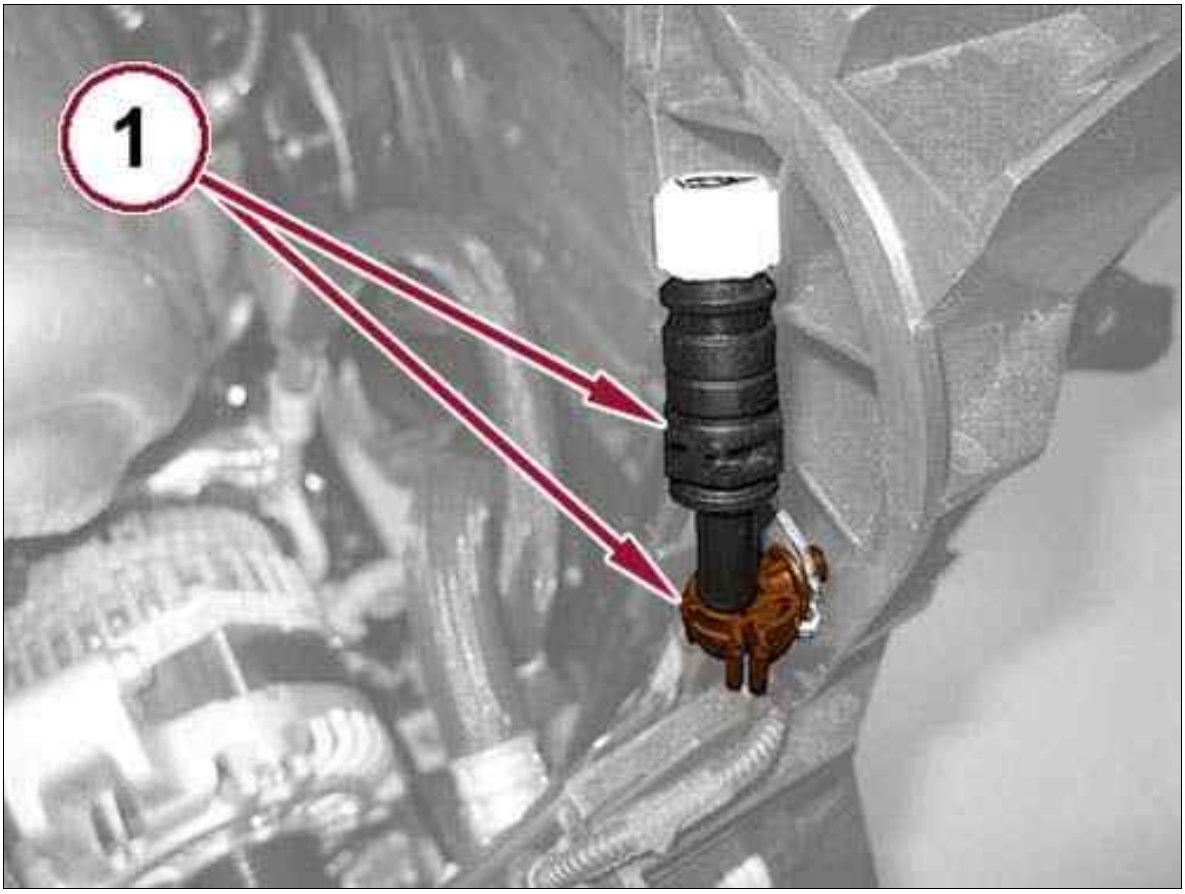
Fig 6: Fan Wiring & Connector



Courtesy of CHRYSLER GROUP, LLC

16. Detach the wiring (1) from the retaining clips and disconnect the electrical connections of the resistor and electric fan.

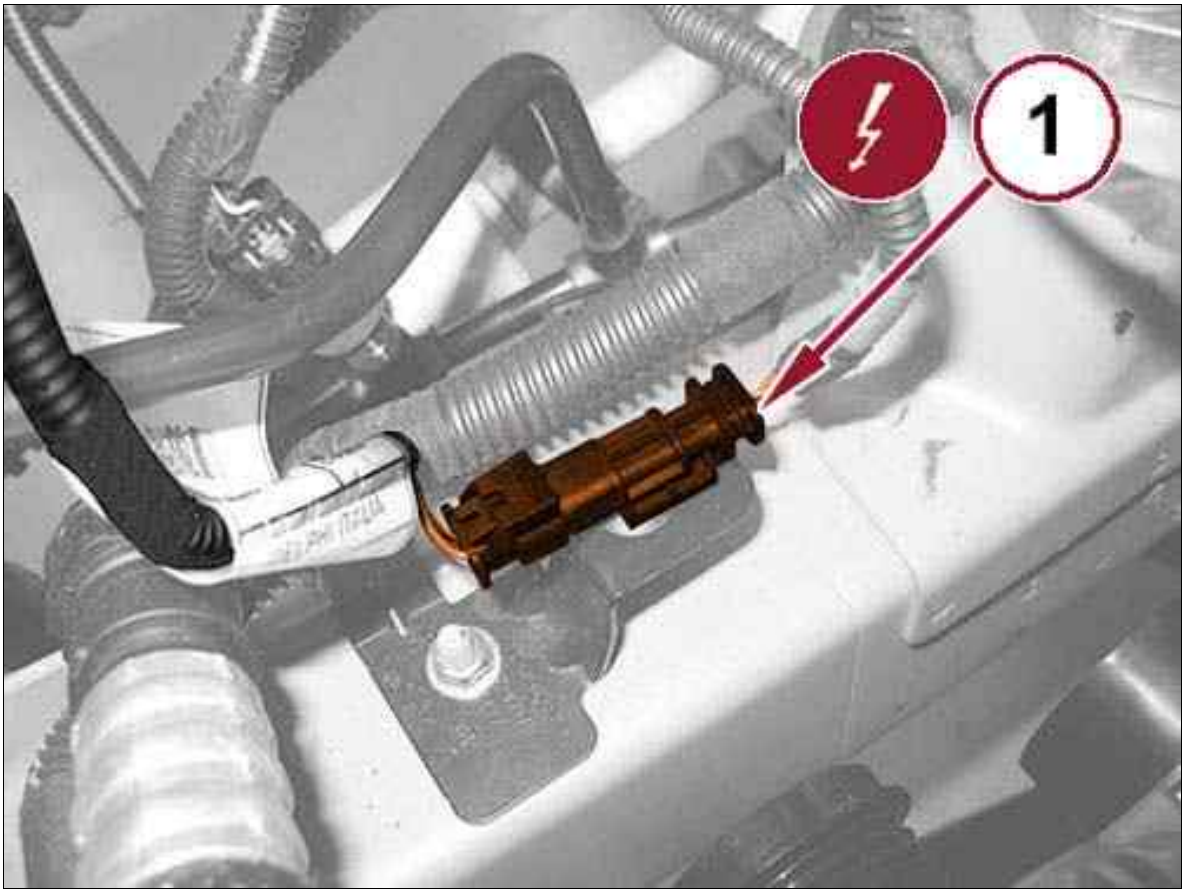
Fig 7: Pipe & Clip



Courtesy of CHRYSLER GROUP, LLC

17. Open the clip and disengage the pipe discharge / charge coolant conditioner plant.

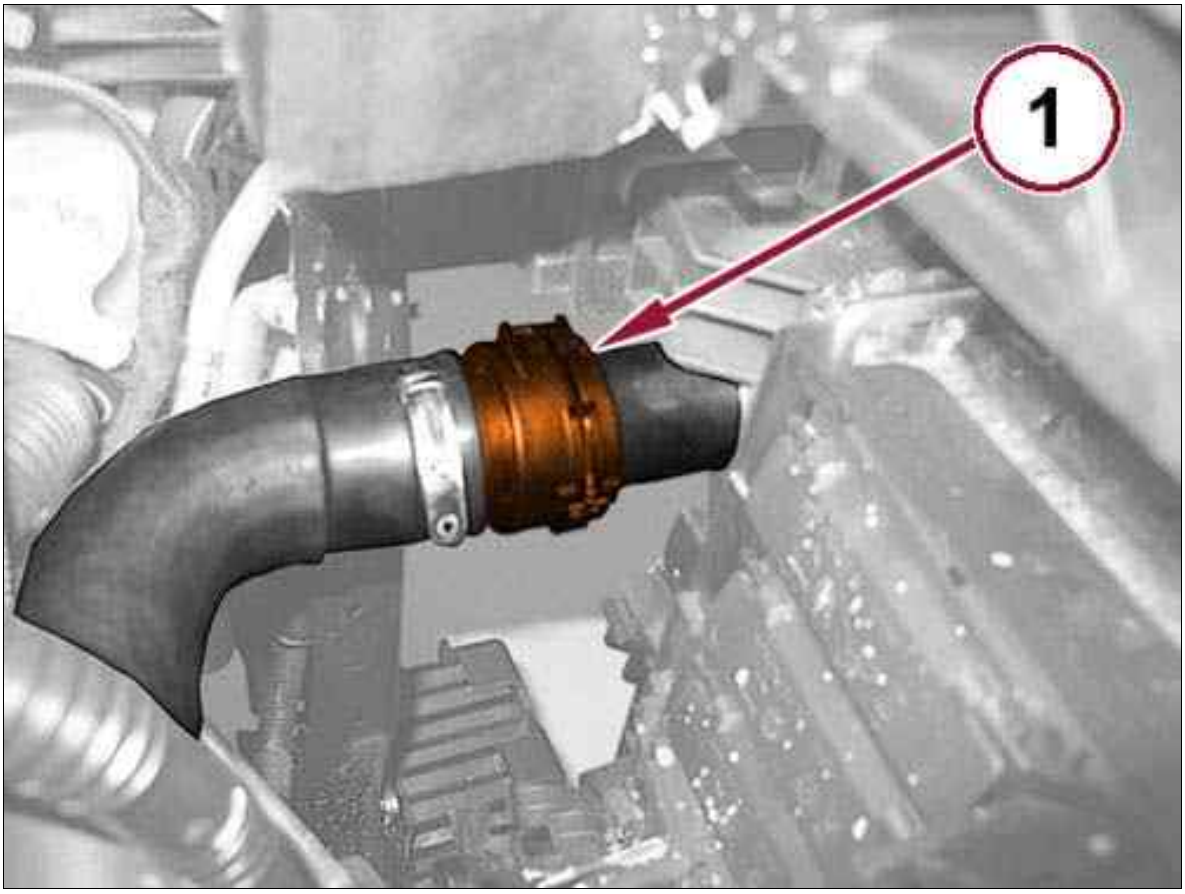
Fig 8: Front Air-Bag Sensor Connector



Courtesy of CHRYSLER GROUP, LLC

18. Disconnect the electrical connection (1) of the front airbag sensor, right side.

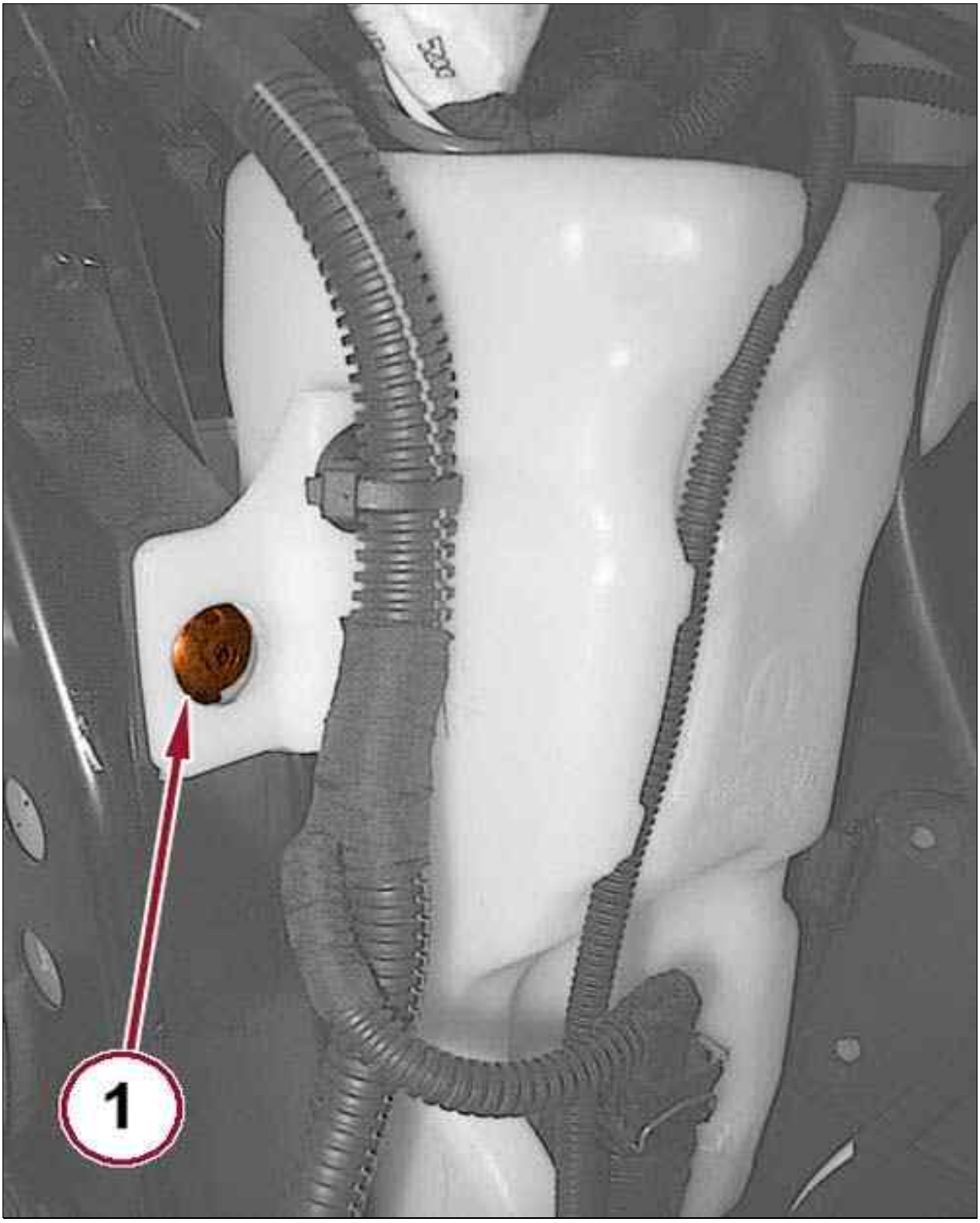
Fig 9: Radiator Water Supply Quick Coupling Sleeve



Courtesy of CHRYSLER GROUP, LLC

19. Disconnect the radiator water supply quick coupling sleeve (1).

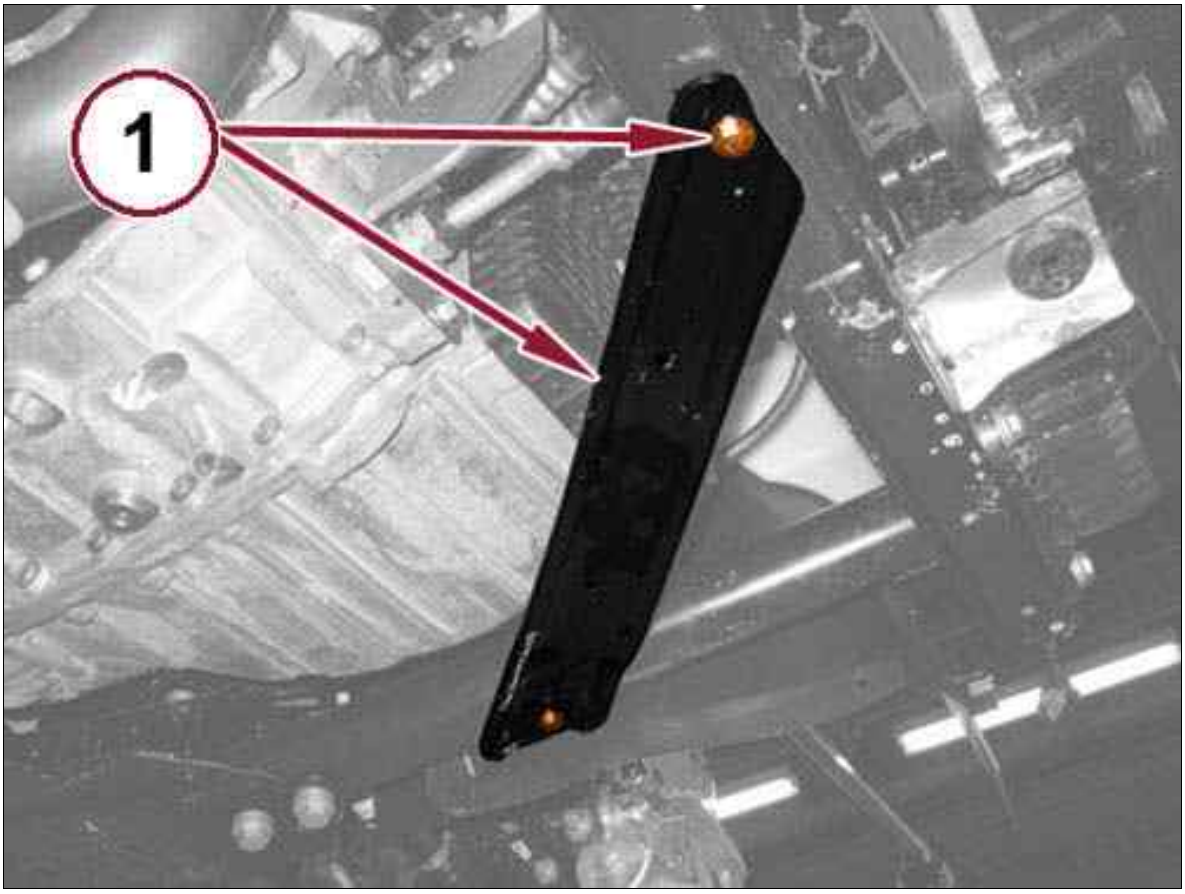
Fig 10: Washer Bottle Retaining Rivet



Courtesy of CHRYSLER GROUP, LLC

20. Remove the washer bottle retaining rivet (1).

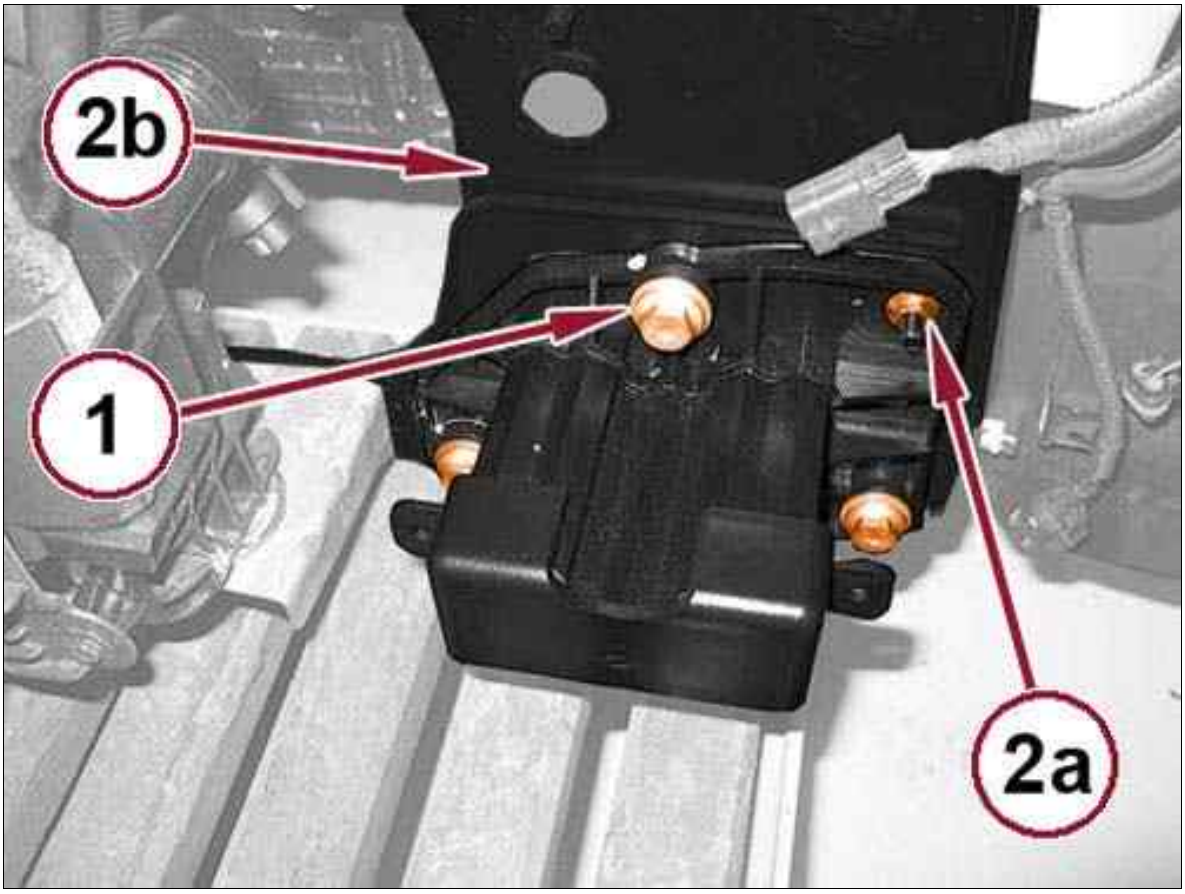
Fig 11: Crossmember Bracket & Bolt



Courtesy of CHRYSLER GROUP, LLC

21. Disengage the crossmember wiring retaining clips.
22. Remove the screws and remove the crossmember bracket (1) from the left and right side.
23. Place a suitable supporting device under the crossmember.
24. Lower the vehicle so that the crossmember is resting on the lifting device.

Fig 12: Energy Absorber, Nuts & Bolts



Courtesy of CHRYSLER GROUP, LLC

25. Remove the screws (1) attaching the crossmember to the left and right side.
26. Remove the nuts (2a) and remove energy absorbers left and right side (2b).
27. Remove the crossmember after having disengaged from the provisional attachment to the engine.
28. Disassemble the crossmember as necessary. Refer to CROSSMEMBER, HEADLAMP MOUNTING, DISASSEMBLY AND ASSEMBLY .

EXTERIOR > CROSSMEMBER, HEADLAMP MOUNTING > REMOVAL AND INSTALLATION > INSTALLATION > 1.4L TURBO MULTIAIR, 1.6L TURBO DIESEL

1. Check the crossmember for damage and repair as necessary.
2. If necessary, reassemble the crossmember. Refer to CROSSMEMBER, HEADLAMP MOUNTING, DISASSEMBLY AND ASSEMBLY .
3. Install the headlamp supporting crossmember.
4. Working on both sides, install the shock absorbers and tighten the screws and nuts to the proper specification. Refer to SPECIFICATIONS .

5. Remove the supporting device from under the crossmember.
6. Connect the A/C lines and tighten the screws.

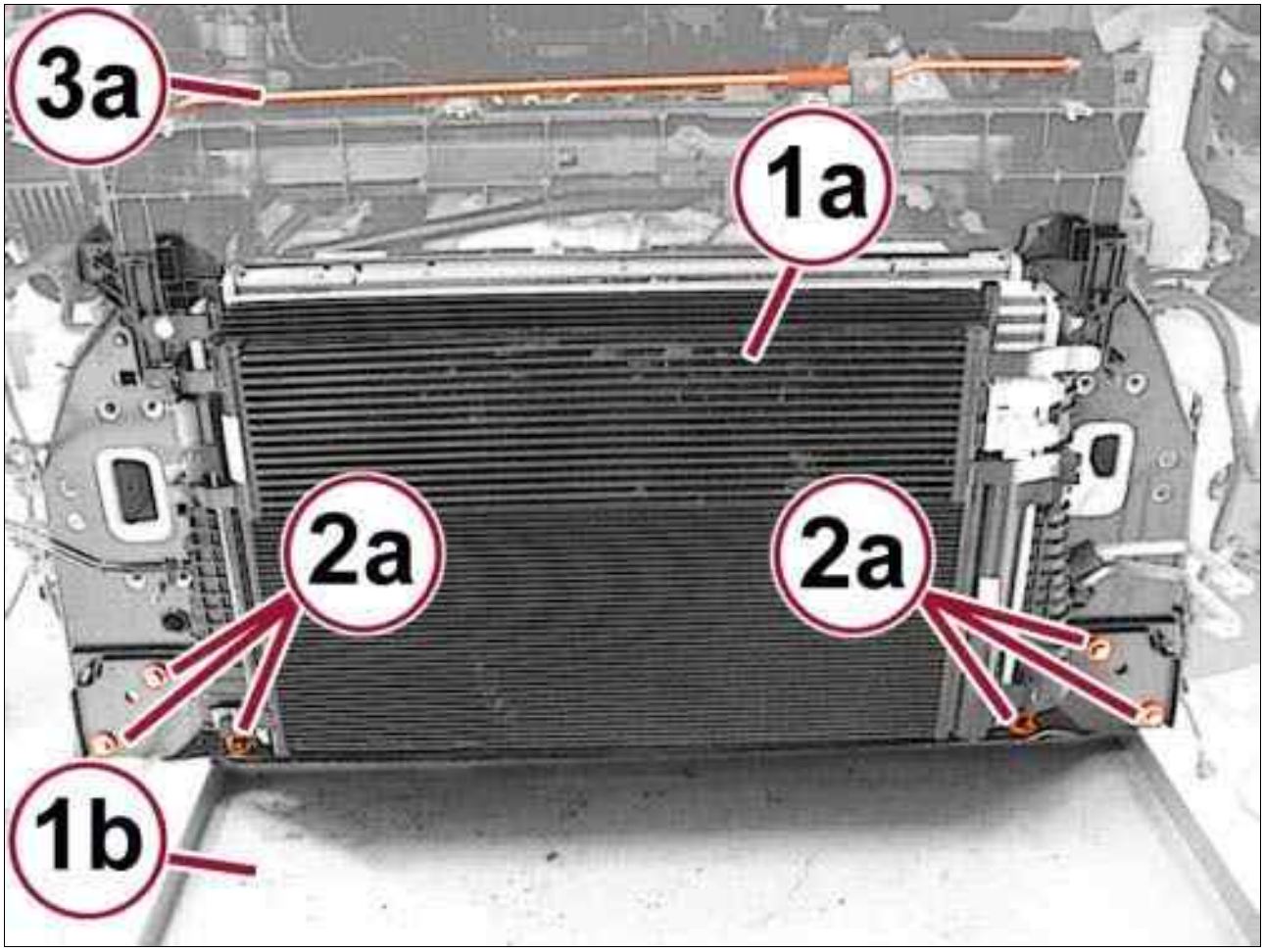
> *NOTE:*
>
> *Always replace the o-rings and lubricate them with coolant prior to assembly.*

7. Connect the intercooler inlet pipe and secure it with a new clamp.
8. Connect the radiator outlet pipe quick coupling.
9. Connect the intercooler quick coupling of the outlet pipe.
10. Connect the radiator inlet pipe quick coupling.
11. Position the wiring on the right side and secure the spring retainer.
12. Position the wiring on the left side and secure the retaining clips.
13. Position the wiring of the cooling electric motor and secure the spring retainer.
14. Connect the electrical connections for the electrical motor and resistance adjustment.
15. Connect the electrical connections of the front air bag sensors.
16. Position the A/C refill valve back into place and secure the retaining clip fully.
17. Install the washer fluid retaining rivet.
18. Secure the coolant pipes from the tank to the engine retaining clips.
19. Position the coolant recovery bottle in place and seat the lower pin fully.
20. Put in place the brackets from third load in front-end and tighten the screws to the specified torque
21. Install the lower crossmember brackets and install the screws.
22. Tighten the bracket screws to the proper specification. Refer to SPECIFICATIONS .
23. Install the bumper and install the screws.
24. Tighten the bumper screws to the proper specification. Refer to SPECIFICATIONS .
25. Secure the A/C lines to the retaining clips and seat fully.
26. Install the cold air intake nut.
27. Install the headlight assemblies. Refer to UNIT, FRONT LAMP, REMOVAL AND INSTALLATION .
28. Install the front fascia. Refer to FASCIA, FRONT, REMOVAL AND INSTALLATION .
29. Connect the negative battery cable.

30. Fill the engine coolant. Refer to STANDARD PROCEDURE .
31. Recharge the refrigerant system. Refer to PLUMBING, STANDARD PROCEDURE .
32. Install the engine cover. For 1.6/2.0L, refer to COVER, ENGINE, REMOVAL AND INSTALLATION . For 1.4L, refer to COVER, ENGINE, REMOVAL AND INSTALLATION .

EXTERIOR > CROSSMEMBER, HEADLAMP MOUNTING > REMOVAL AND INSTALLATION > INSTALLATION > 2.0L TURBO DIESEL

Fig 1: Crossmember, Support Rod & Fasteners

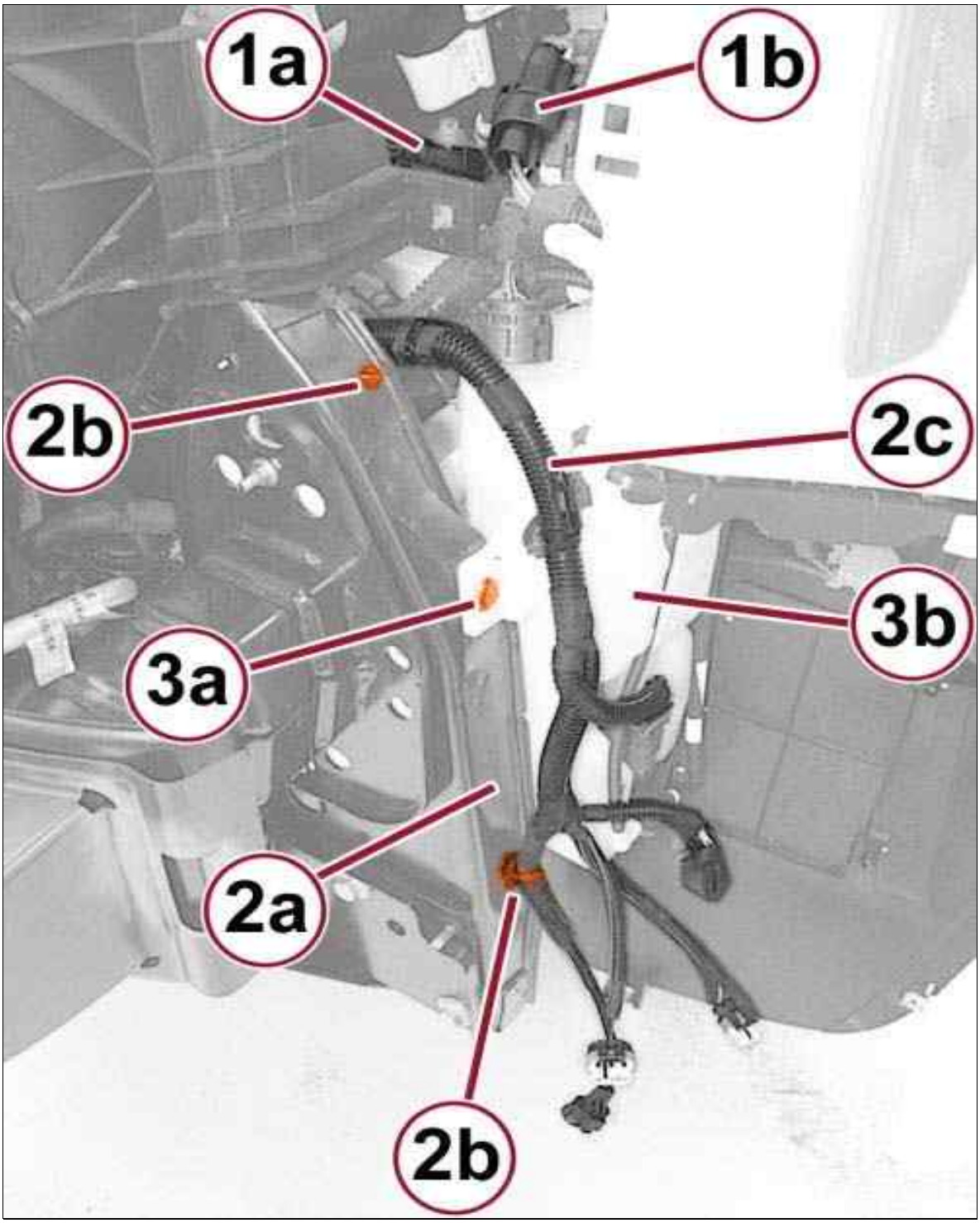


Courtesy of CHRYSLER GROUP, LLC

1. Check the crossmember for damage and repair as necessary.
2. If necessary, reassemble the crossmember. Refer to CROSSMEMBER, HEADLAMP MOUNTING, DISASSEMBLY AND ASSEMBLY .
3. Place a suitable supporting device under the crossmember.
4. Install the headlamp supporting crossmember.
5. Install the crossmember (1a) with the aid of the platform (1b) and by a second operator.

6. Tighten the screws (2a) securing the crossmember (1a) of the car, without tightening; their final tighten will be carried out in the following steps for the bumper installation.
7. Lift the engine hood and support with the hood support rod (3a).

Fig 2: Washer Fluid Reservoir, Crossmember, Rivet, Retainers, Wiring & Connectors

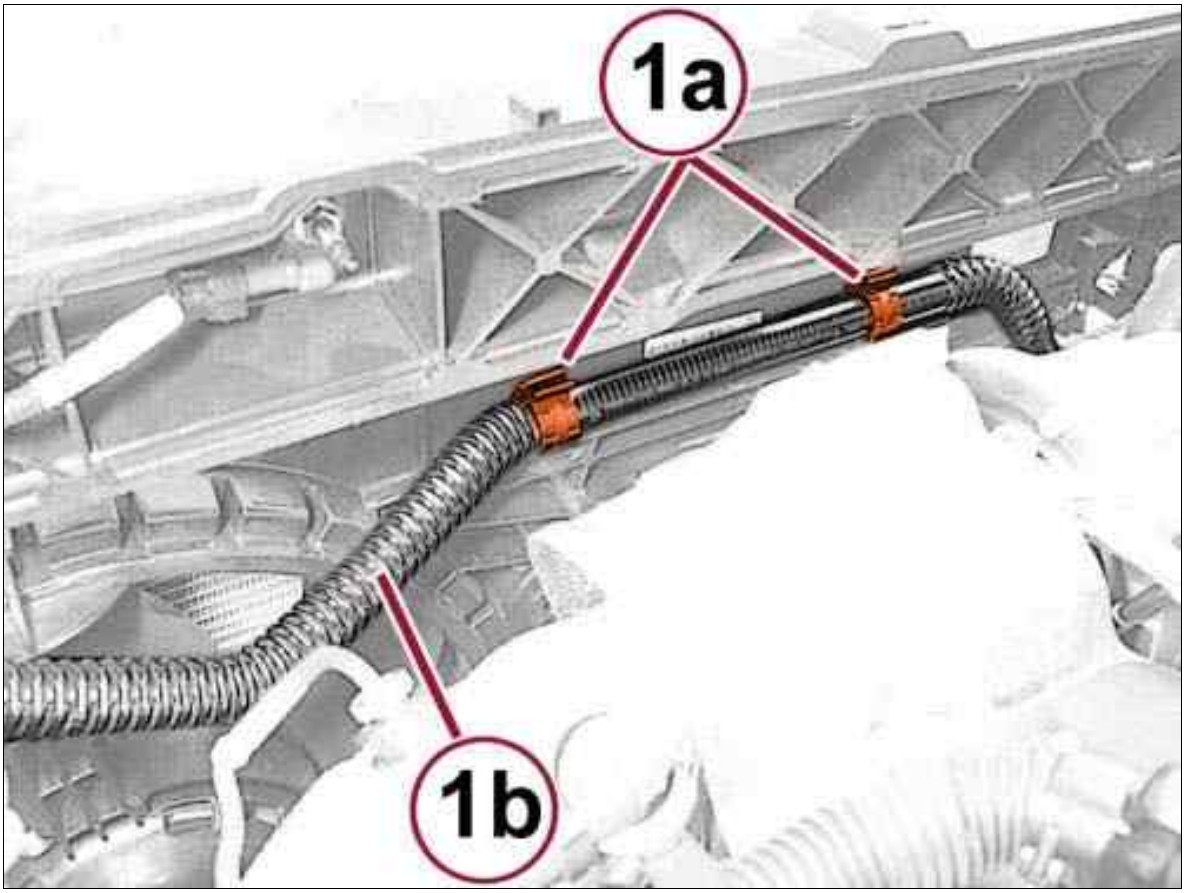


Courtesy of CHRYSLER GROUP, LLC

8. Working behind the right front headlamp compartment, install the A/C line and secure with the retaining clip.

9. Working behind the windshield wiper fluid reservoir, disconnect the cable end of the mass of the electric wiring, then tighten the nut.
10. Connect the electrical connections (1a, 1b).
11. Secure the retainers (2b) of the electrical wiring (2c) to the crossmember (2a).
12. Install the rivet (3a) securing the front of the washer fluid reservoir (3b).

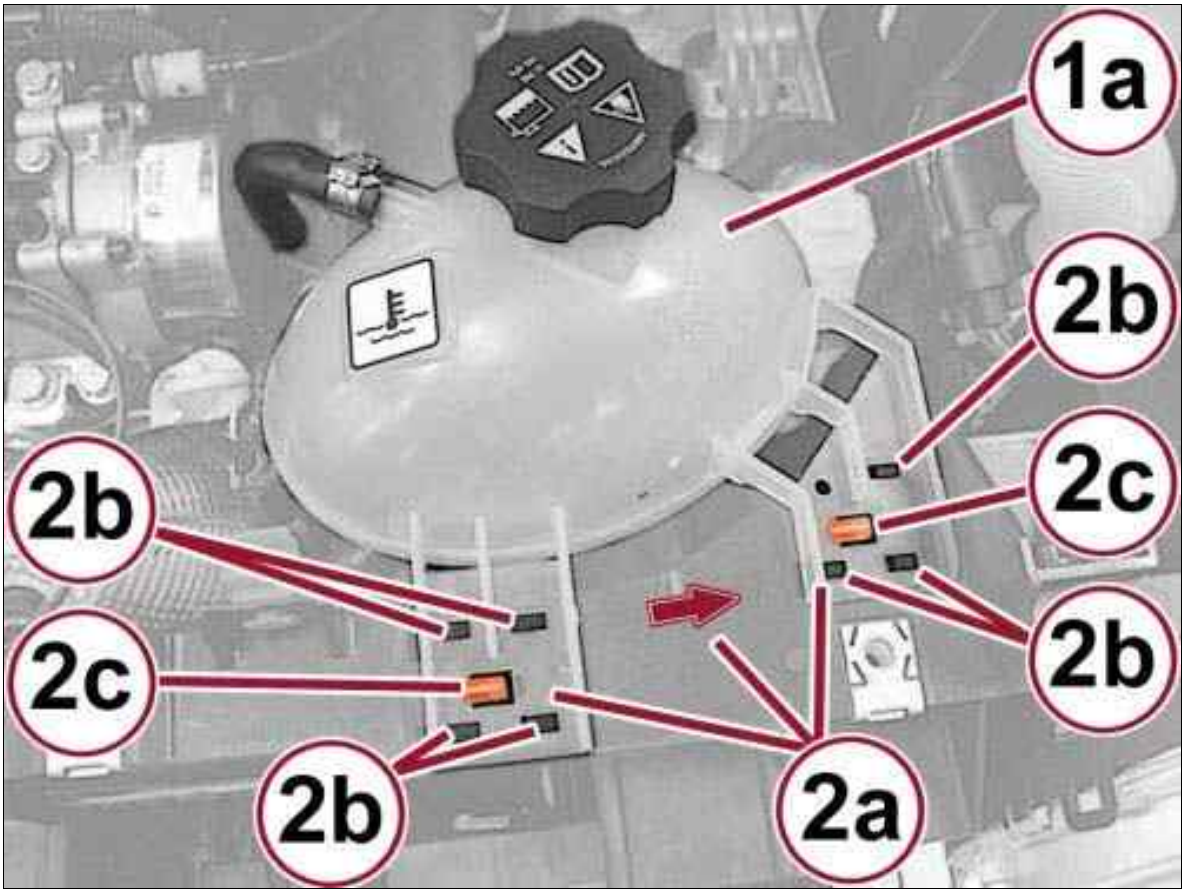
Fig 3: Coolant Tubing & Clamps



Courtesy of CHRYSLER GROUP, LLC

13. Working on the upper left side of the radiator, connect the radiator inlet pipe quick coupling then engage the retaining clip.
14. Secure engine coolant tubing (1b) to the clamps (1a).

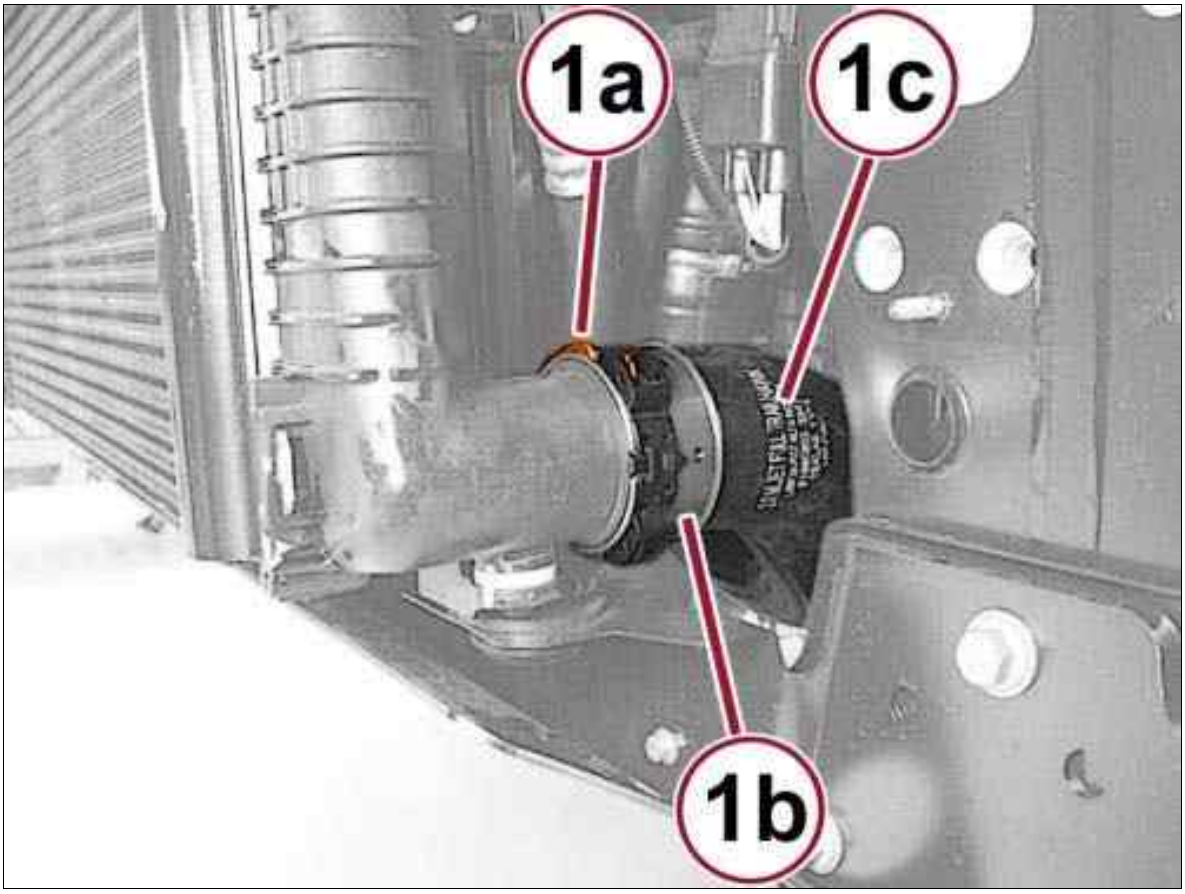
Fig 4: Coolant Reservoir & Retainers



Courtesy of CHRYSLER GROUP, LLC

15. Place the engine coolant reservoir (1a) onto the lower retainer.
16. Slide in the direction of the arrow brackets (2a) of the reservoir (1a), by engaging the retainers (2b), then engage the retainers (2c).

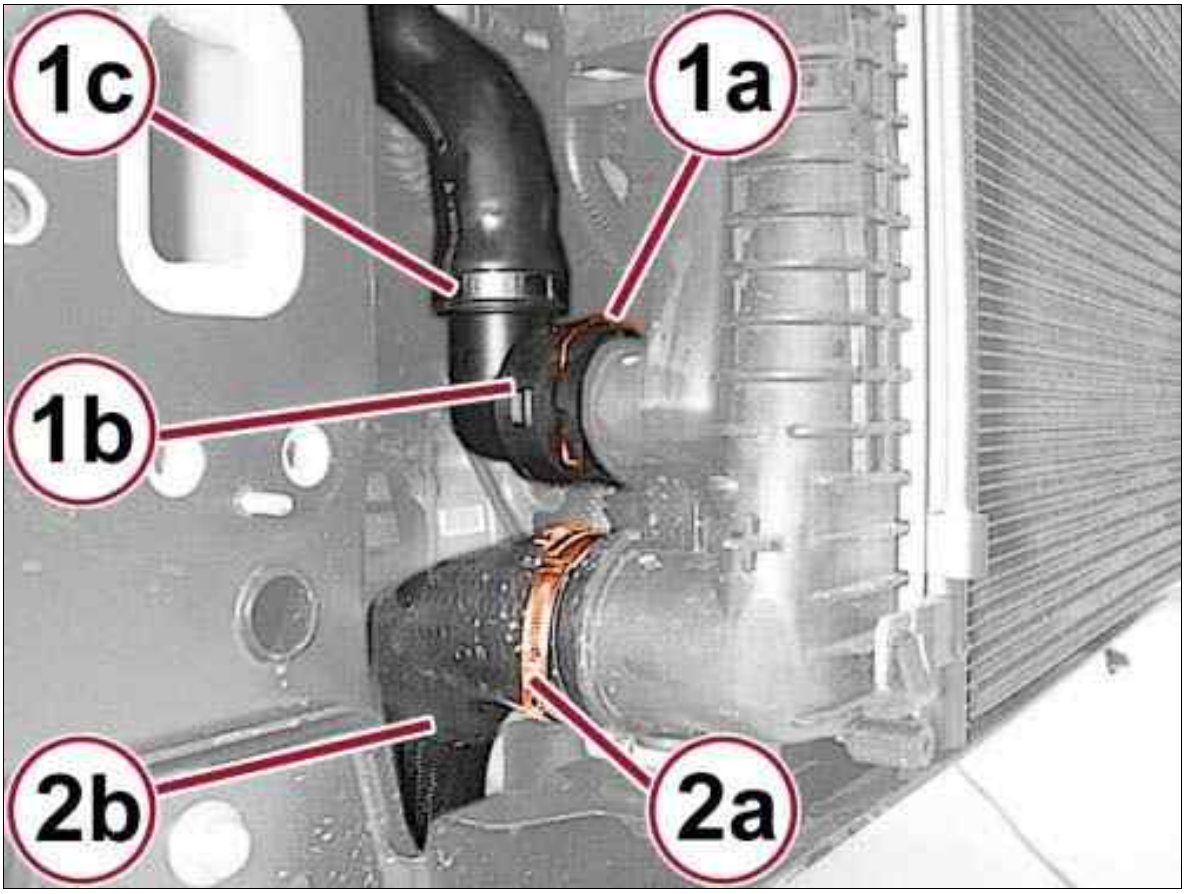
Fig 5: Intercooler Pipe, Quick Coupling & Clip



Courtesy of CHRYSLER GROUP, LLC

17. Working on the lower left side of the radiator, connect the quick coupling (1b) of the intercooler pipe (1c), then securing the retaining clip (1a).

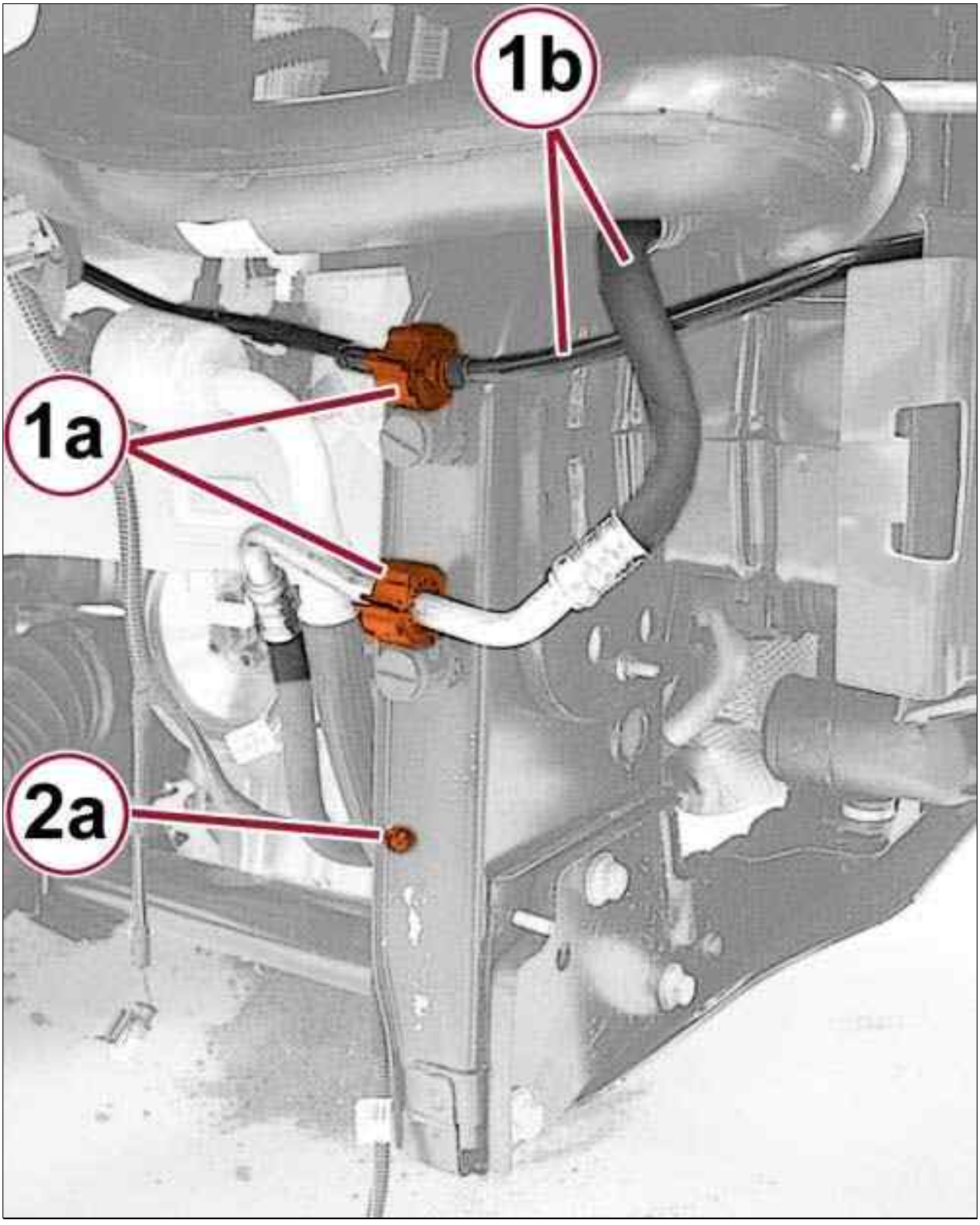
Fig 6: Engine Coolant Pipe, Intercooler Radiator Inlet Pipe, Coupling, Retainer & Clamp



Courtesy of CHRYSLER GROUP, LLC

18. Working on the lower right side of the radiator, connect the quick coupling (1b) of the engine coolant pipe (1c) then secure the retaining clip (1a).
19. Connect the intercooler radiator inlet pipe (2b) secure the clamp (2a).

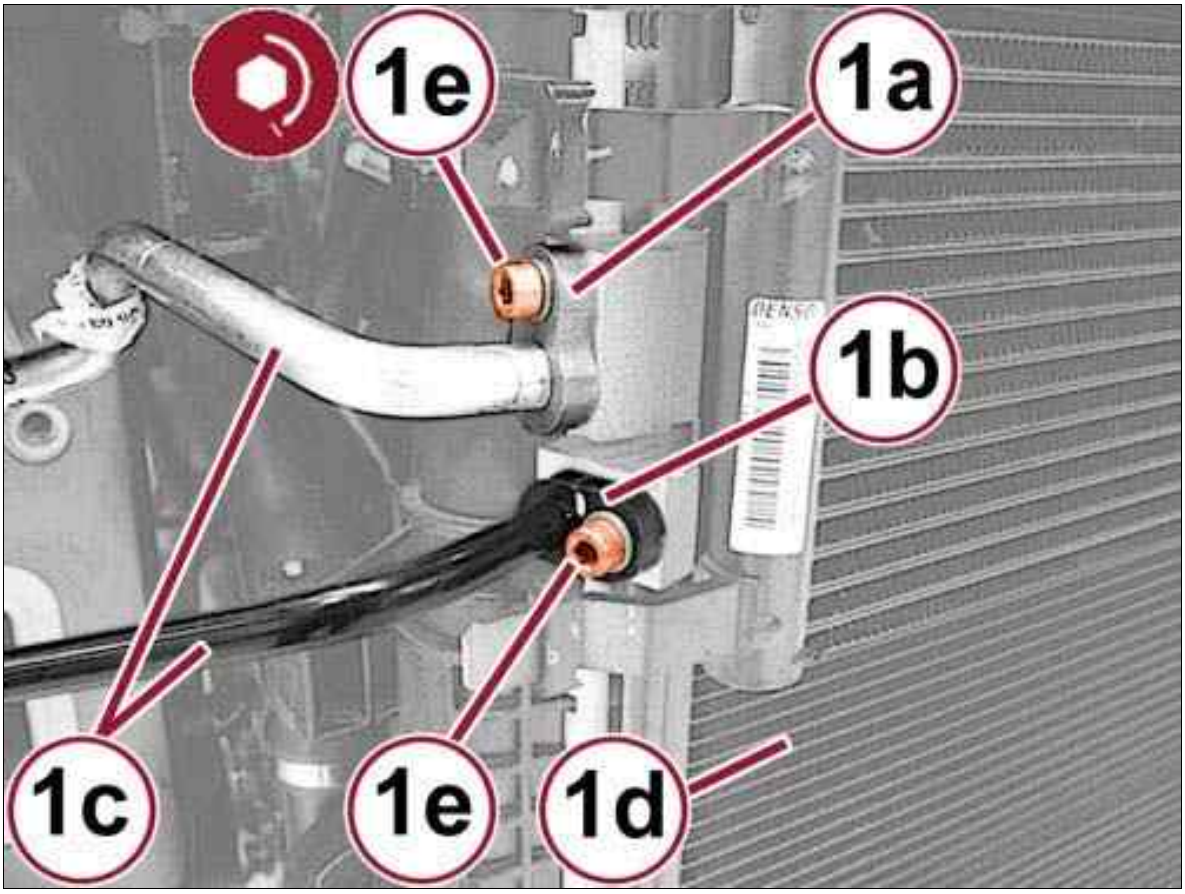
Fig 7: A/C Lines & Clamps



Courtesy of CHRYSLER GROUP, LLC

20. Working on the right side of the front-end, secure the clamps (1a) to the A/C lines (1b).
21. Secure the electrical wiring bracket (2a).

Fig 8: A/C Lines, Fittings & Screws

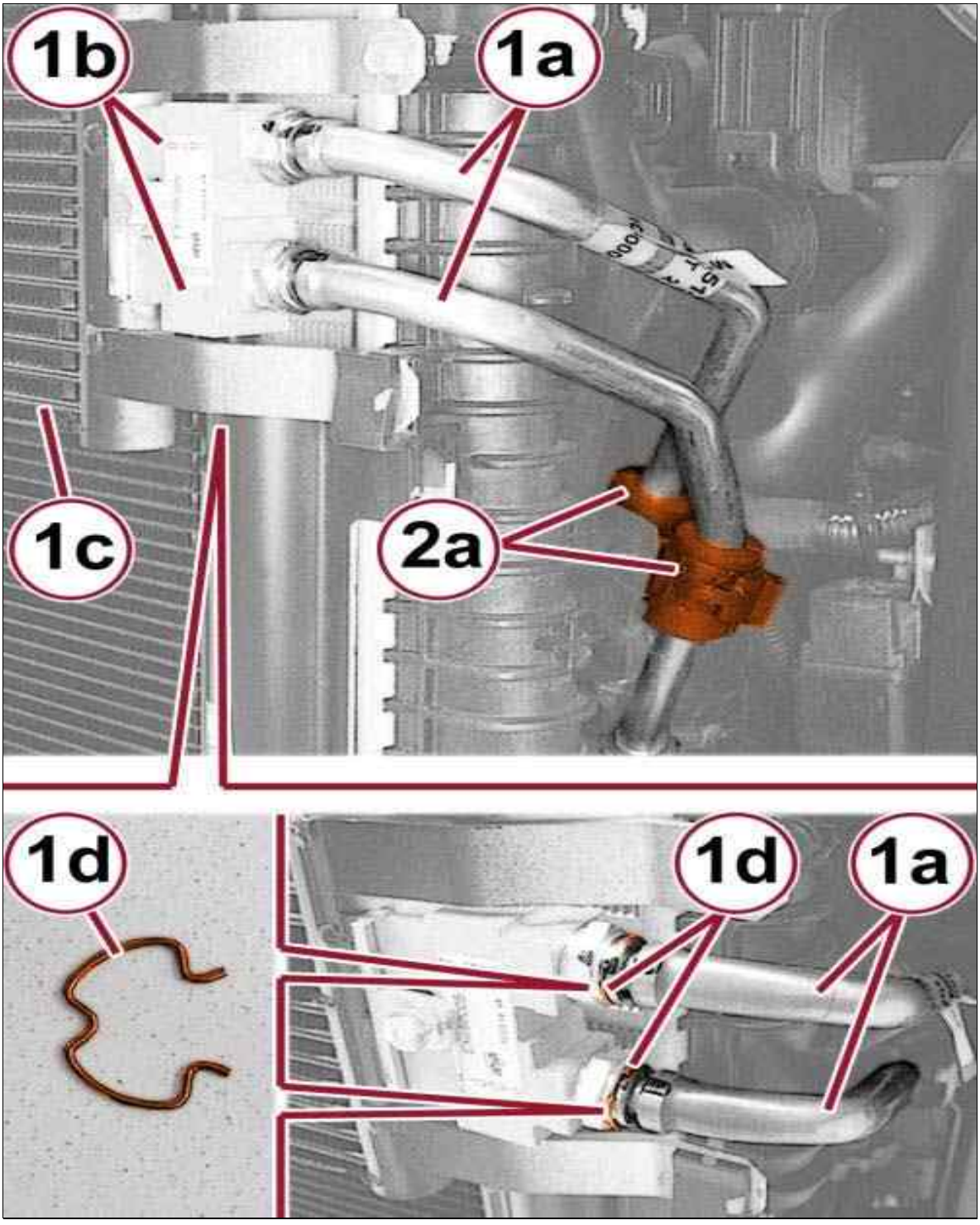


Courtesy of CHRYSLER GROUP, LLC

> *NOTE:*
>
> *Replace the ring O-ring seals. Use only rings seal washer with part HNBR elastomeric material resistant to refrigerant R1234yf. The use of rings seal washer with other elastomeric material is liable to have serious losses of refrigerant from the air conditioner.*

22. Connect the fittings (1a) and (1b) of the condenser lines (1c). Then tighten the screws (first) and tighten them to the to the proper specification. Refer to SPECIFICATIONS .

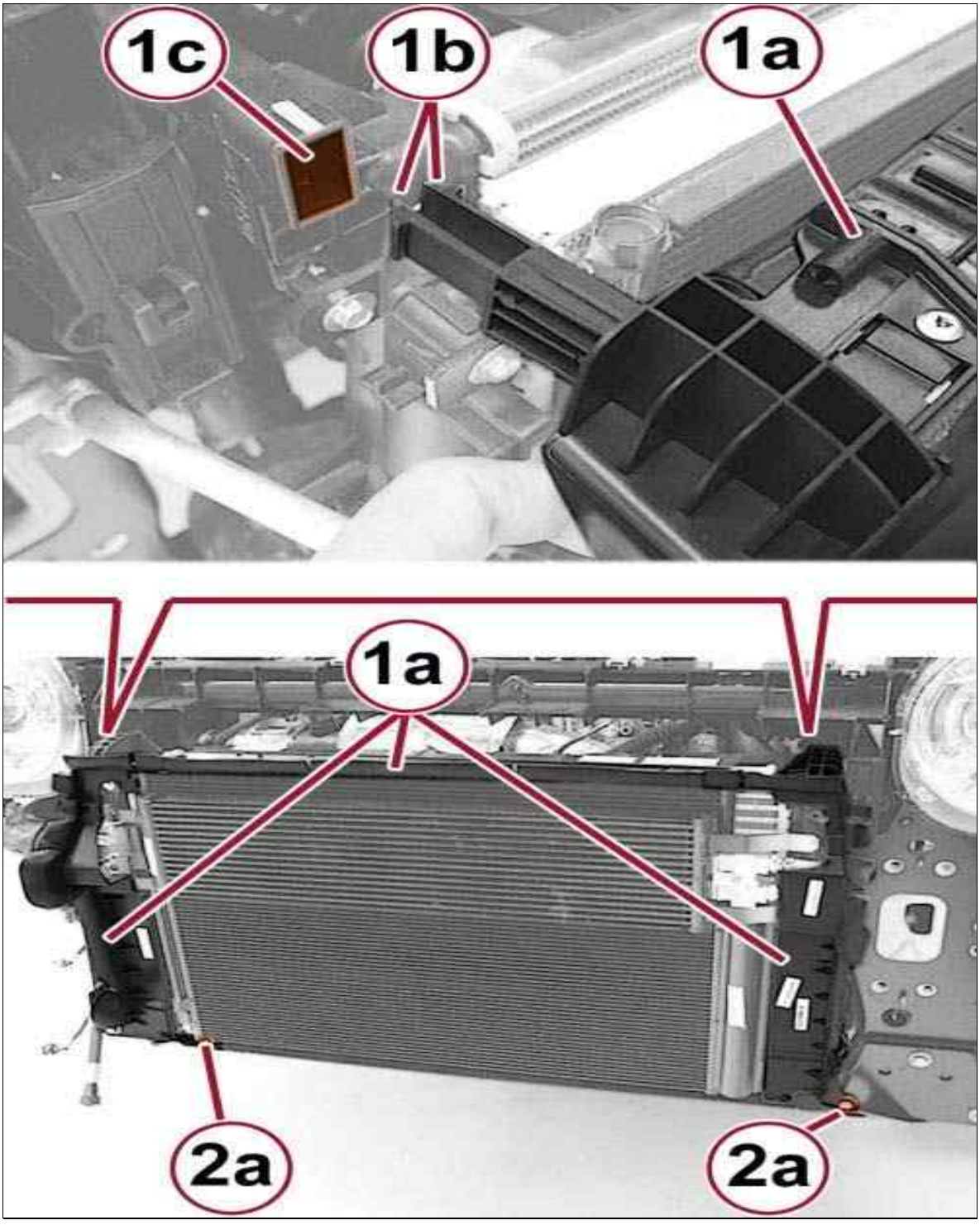
Fig 9: Automatic Transmission Oil Cooler Lines, Clamps & Clips



Courtesy of CHRYSLER GROUP, LLC

23. Connect the automatic transmission oil lines (1a) to fittings (1b) of the radiator (1c) then engage the retaining clips (1d).
24. Close the retainer clips (2a) on the automatic transmission oil lines (1a).

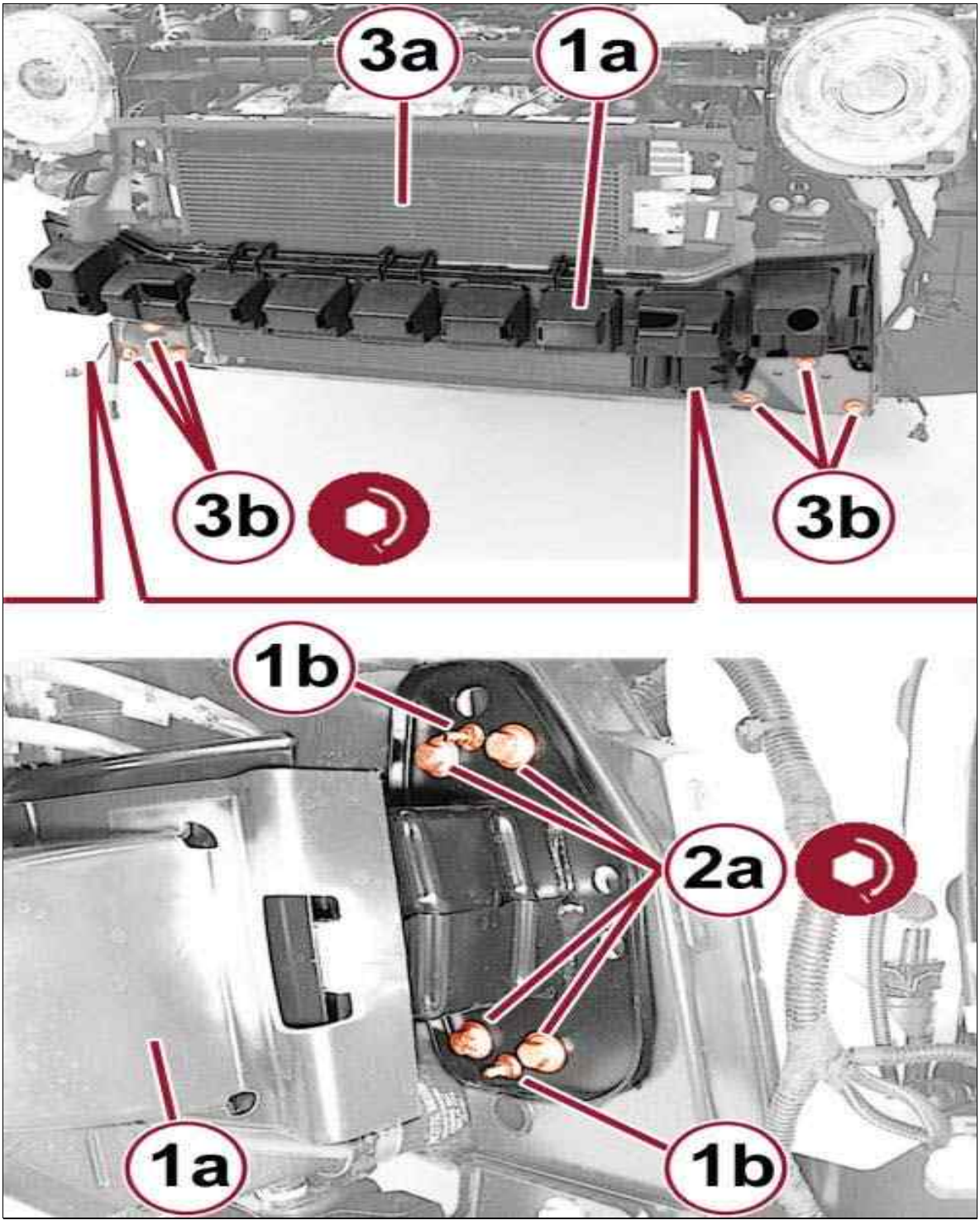
Fig 10: Air Duct, Seats, Retainers & Screws



Courtesy of CHRYSLER GROUP, LLC

25. Place the air cooler (1a) and secure the retainers (1b) in the seats (1c).
26. Tighten the screws (2a) of the lower air duct (1a).

Fig 11: Energy Absorber, Nuts & Bolts



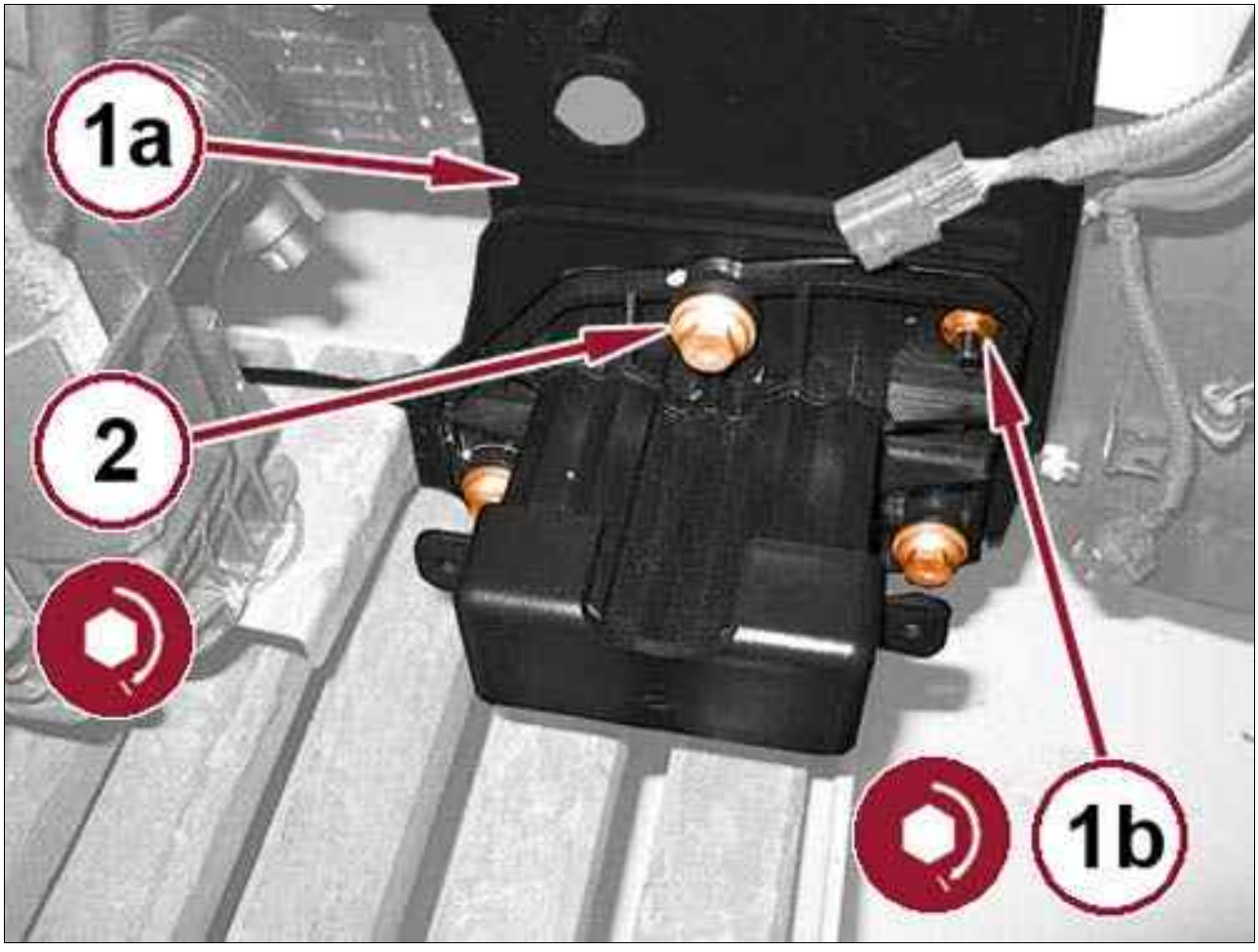
Courtesy of CHRYSLER GROUP, LLC

27. Place the bumper (1a) and tighten the three nuts (1b).
28. Install the screws (2a) securing the bumper (1a), without tightening.
29. Check the correct position of the crossmember (3a), then tighten the screws (2a) and screws (3b) to the proper specification. Refer to SPECIFICATIONS .
30. Install the cool air inlet to the air filter box, then tighten the nut.

31. Install the headlight assemblies. Refer to UNIT, FRONT LAMP, REMOVAL AND INSTALLATION .
32. Install the front fascia. Refer to FASCIA, FRONT, REMOVAL AND INSTALLATION .
33. Connect the negative battery cable.
34. Fill the engine coolant. Refer to STANDARD PROCEDURE .
35. Recharge the refrigerant system. Refer to PLUMBING, STANDARD PROCEDURE .
36. Check the oil level of the automatic transmission.

EXTERIOR > CROSSMEMBER, HEADLAMP MOUNTING > REMOVAL AND INSTALLATION > INSTALLATION > 2.4L MULTIAIR2

Fig 1: Energy Absorbers, Nuts & Bolts

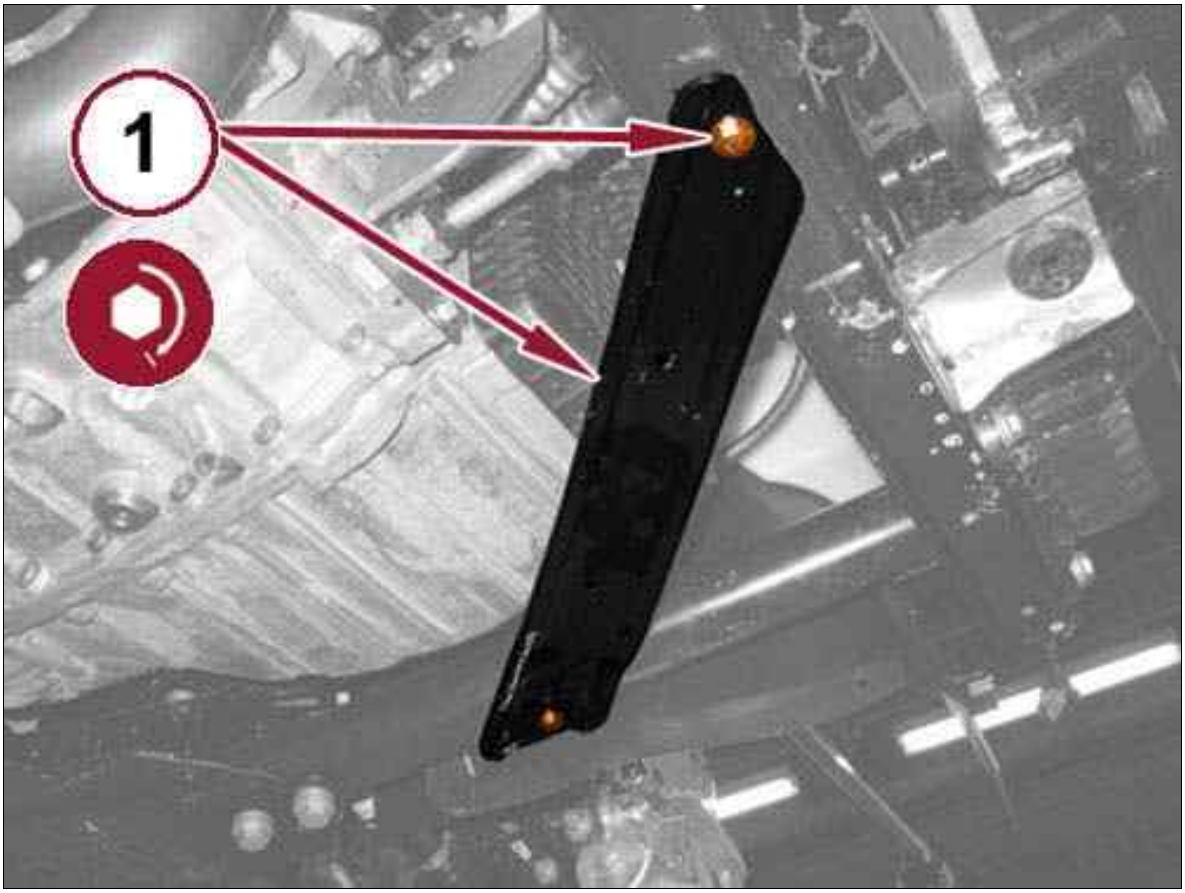


Courtesy of CHRYSLER GROUP, LLC

1. Check the crossmember for damage and repair as necessary.
2. If necessary, reassemble the crossmember. Refer to CROSSMEMBER, HEADLAMP MOUNTING, DISASSEMBLY AND ASSEMBLY .

3. Place a suitable supporting device under the crossmember.
4. Install the headlamp supporting crossmember.
5. Position the energy absorbers into place, the left and right (1a) and tighten the nuts (1b) to the proper specification. Refer to SPECIFICATIONS .
6. Tighten the screws (2) attaching the crossmember to the left and right side.

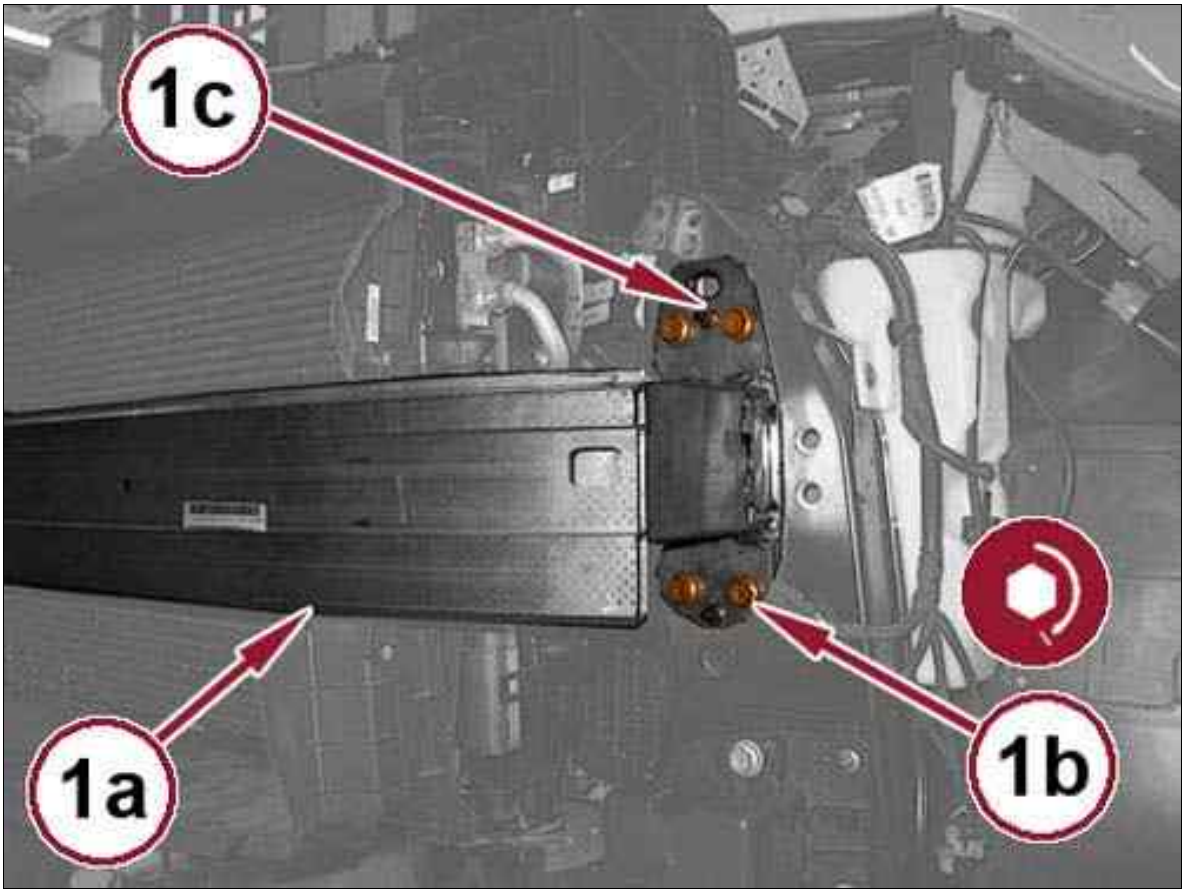
Fig 2: Support Bracket & Bolt



Courtesy of CHRYSLER GROUP, LLC

7. Put into place the support brackets (1) and tighten the screws to the proper specification. Refer to SPECIFICATIONS .

Fig 3: Bumper, Nuts & Bolts



Courtesy of CHRYSLER GROUP, LLC

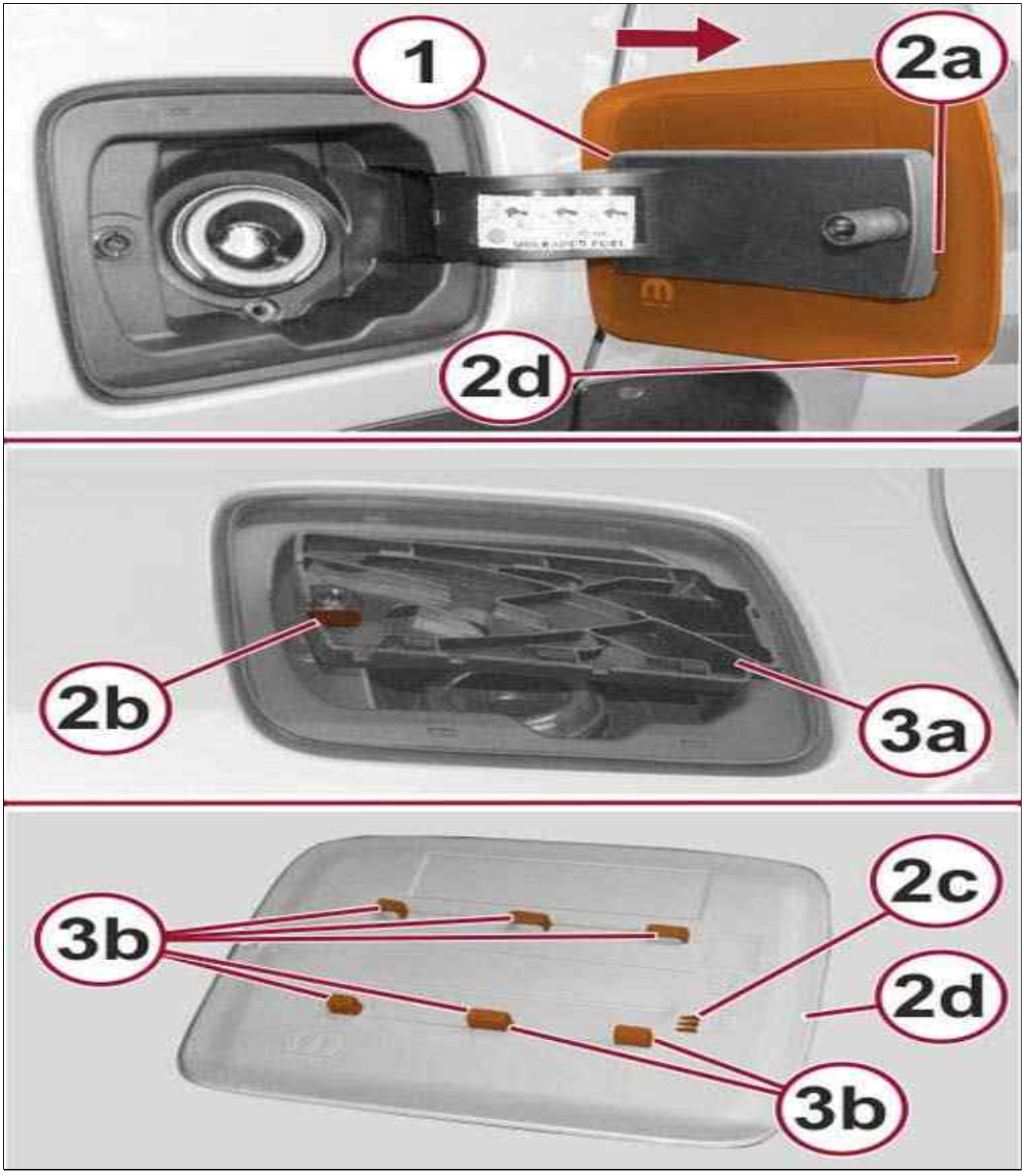
8. Secure the wiring retaining clips to the crossmember.
9. Install the rivet attaching the washer fluid reservoir.
10. Connect the water supply quick coupling sleeve to the radiator.
11. Connect the front airbag sensors electrical connections of the left and right side.
12. Secure the coolant conditioner discharge / charge pipe in the spring retainer.
13. Connect the electrical connections of the resistor and the electric fan and engage the wiring in the retaining clips.
14. Connect the water outlet quick coupling sleeve from the radiator.
15. Connect the discharge and return to automatic transmission oil cooler and engage the retaining clips
16. Connect the supply and return lines from the air conditioner condenser and tighten the screws.
17. Put into place the bumper (1a) and tighten the screws (1b) to the proper specification, then tighten the nuts (1c). Refer to SPECIFICATIONS .
18. Tighten the cold air mounting nut socket to the crossmember.
19. Install the headlight assemblies. Refer to UNIT, FRONT LAMP, REMOVAL AND INSTALLATION

.

20. Install the front fascia. Refer to FASCIA, FRONT, REMOVAL AND INSTALLATION .
21. Connect the negative battery cable.
22. Fill the engine coolant. Refer to STANDARD PROCEDURE .
23. Recharge the refrigerant system. Refer to PLUMBING, STANDARD PROCEDURE .
24. Install the engine cover. Refer to COVER, ENGINE, REMOVAL AND INSTALLATION .
25. Install the belly pan. Refer to BELLY PAN, REMOVAL AND INSTALLATION .

EXTERIOR > DOOR, FUEL FILL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Fuel Filler Door, Guides, Tab & Support



Courtesy of CHRYSLER GROUP, LLC

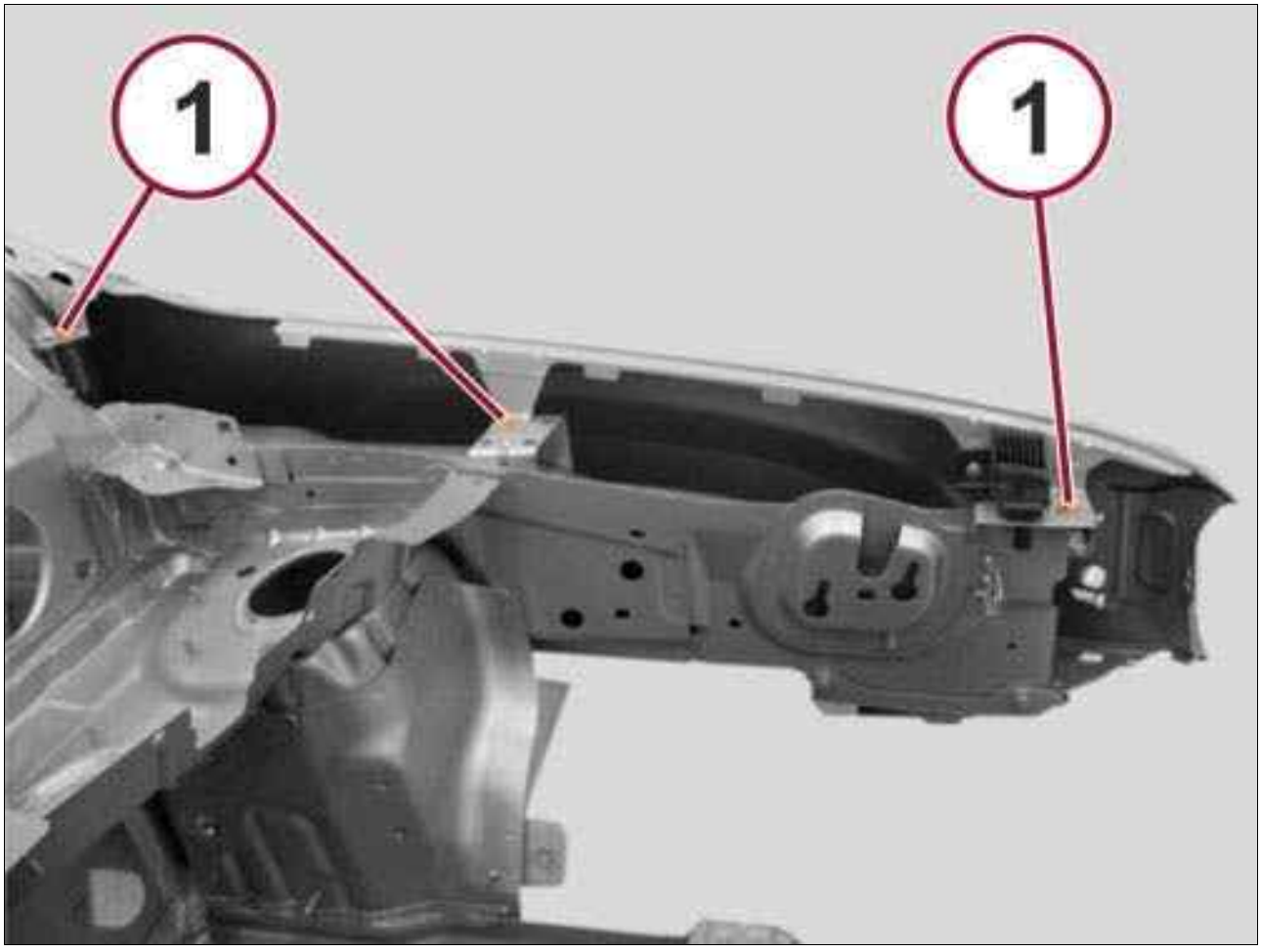
1. Open the fuel filler door (1).
2. Insert a screwdriver into the slot (2a) and press the inner end of the tab (2b) disengaging it from holder (2c) of the door (2d).
3. Then remove the door (2d) from the support (3a) by pulling in the direction of the arrow, disengaging the guides (3b).

EXTERIOR > DOOR, FUEL FILL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

1. Check that the door is not damaged.
2. Position the door onto the guides.
3. Slide the door onto the guides and seat the retainers fully.
4. Close the door.

EXTERIOR > FENDER, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Front Fender Upper Bolts

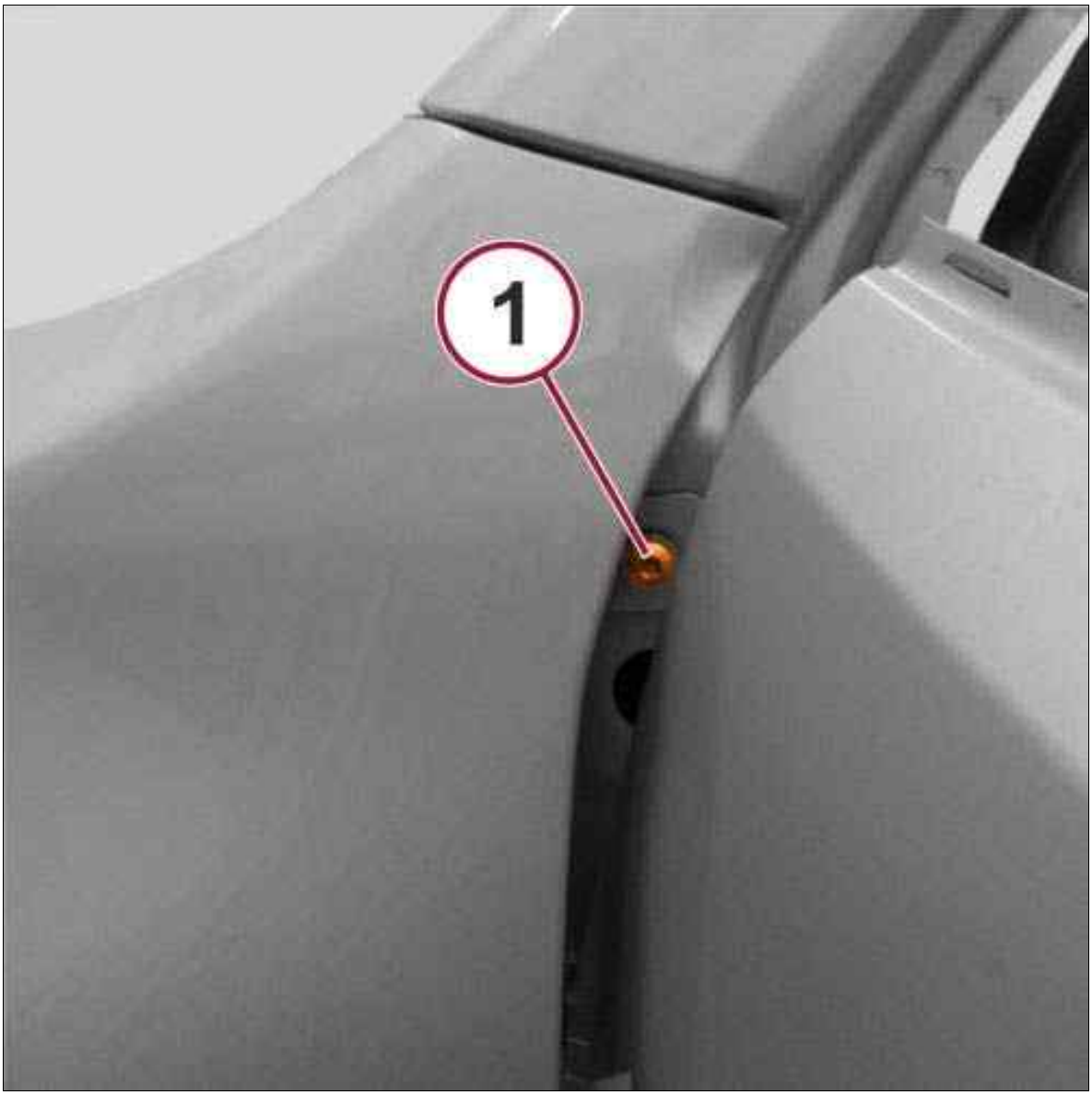


Courtesy of CHRYSLER GROUP, LLC

1. Be certain that the components connected are not distorted by checking the body alignment measurements with suitable equipment (reference rigs, templates or gauges).
2. Straighten the body as necessary.

3. Apply adhesive tape to the surrounding body panels to protect against damage.
4. Remove the three upper bolts (1) securing the fender.

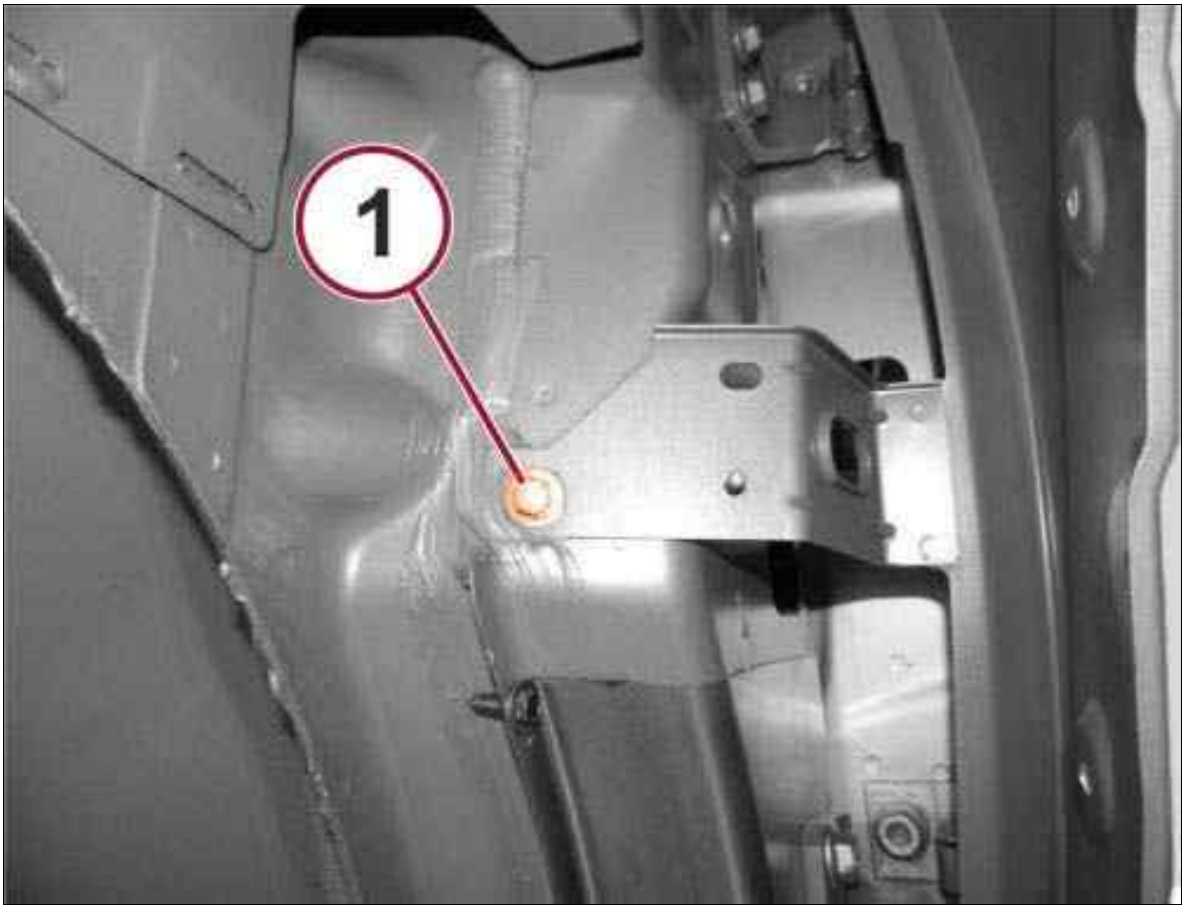
Fig 2: Door Opening Bolt



Courtesy of CHRYSLER GROUP, LLC

5. Open the front side door.
6. Remove the bolt (1) from the door opening.

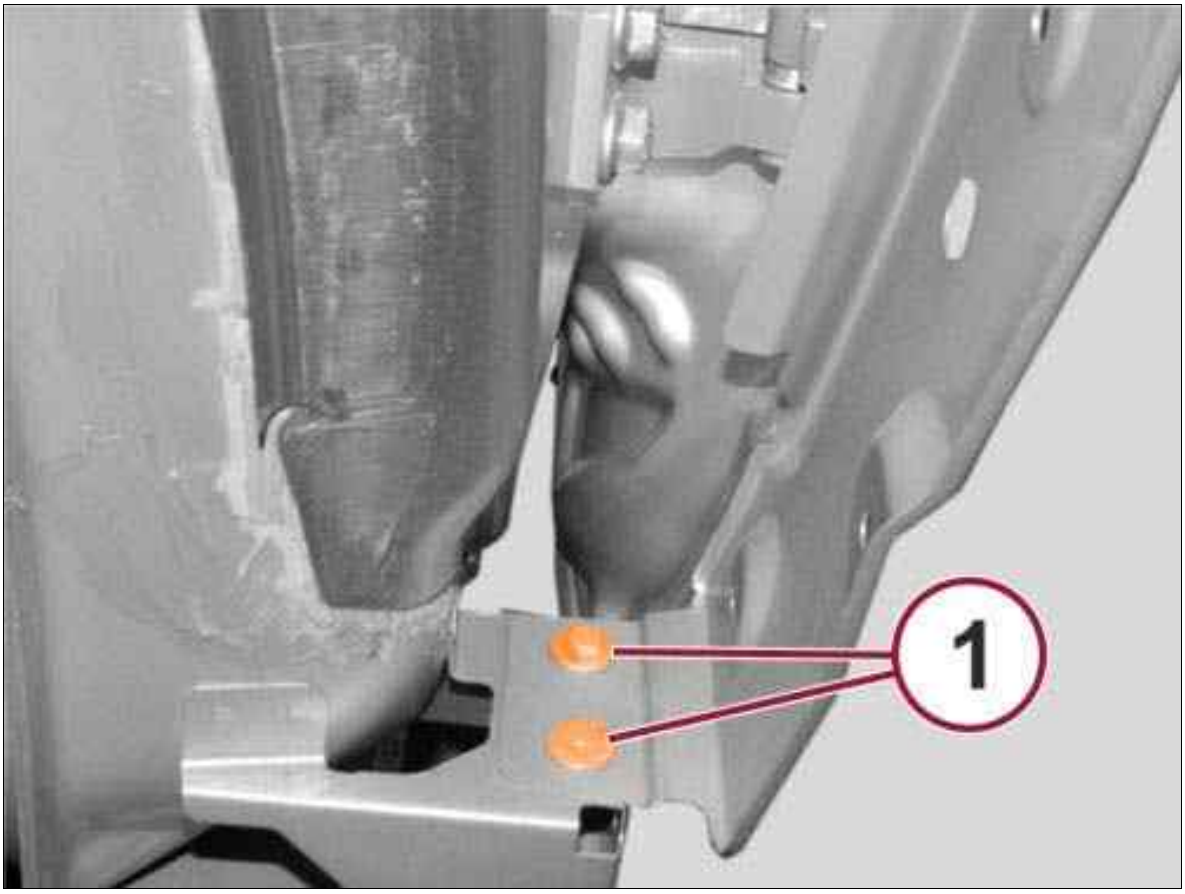
Fig 3: Wheel Housing Bolt



Courtesy of CHRYSLER GROUP, LLC

7. With the use of a rotating brush, remove the sealant protection.
8. Remove the bolt (1) from the wheel housing.

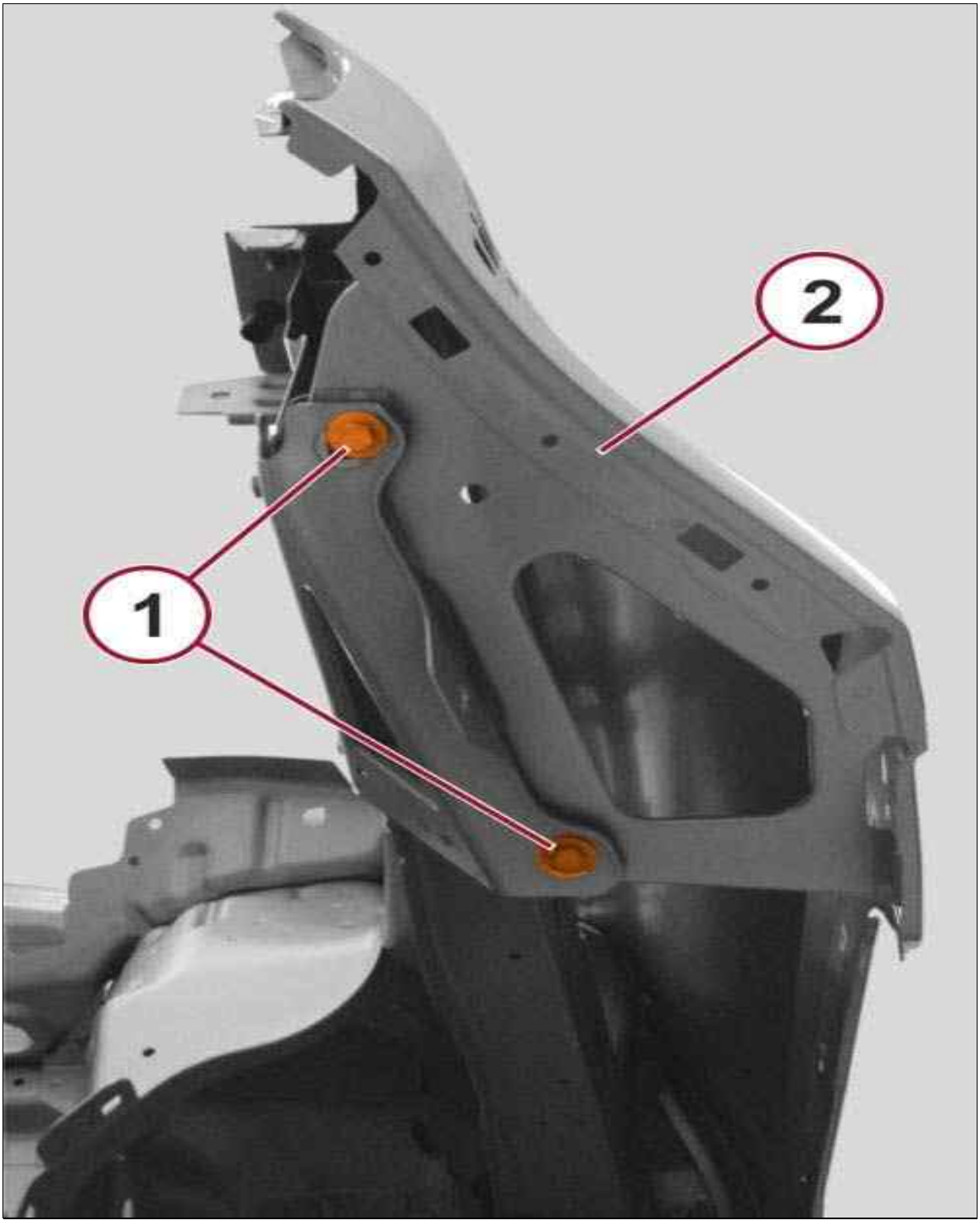
Fig 4: Lower Fender Bolts



Courtesy of CHRYSLER GROUP, LLC

9. Remove the two bolts (1) from the lower fender.

Fig 5: Fender & Support Bracket Lower Bolts



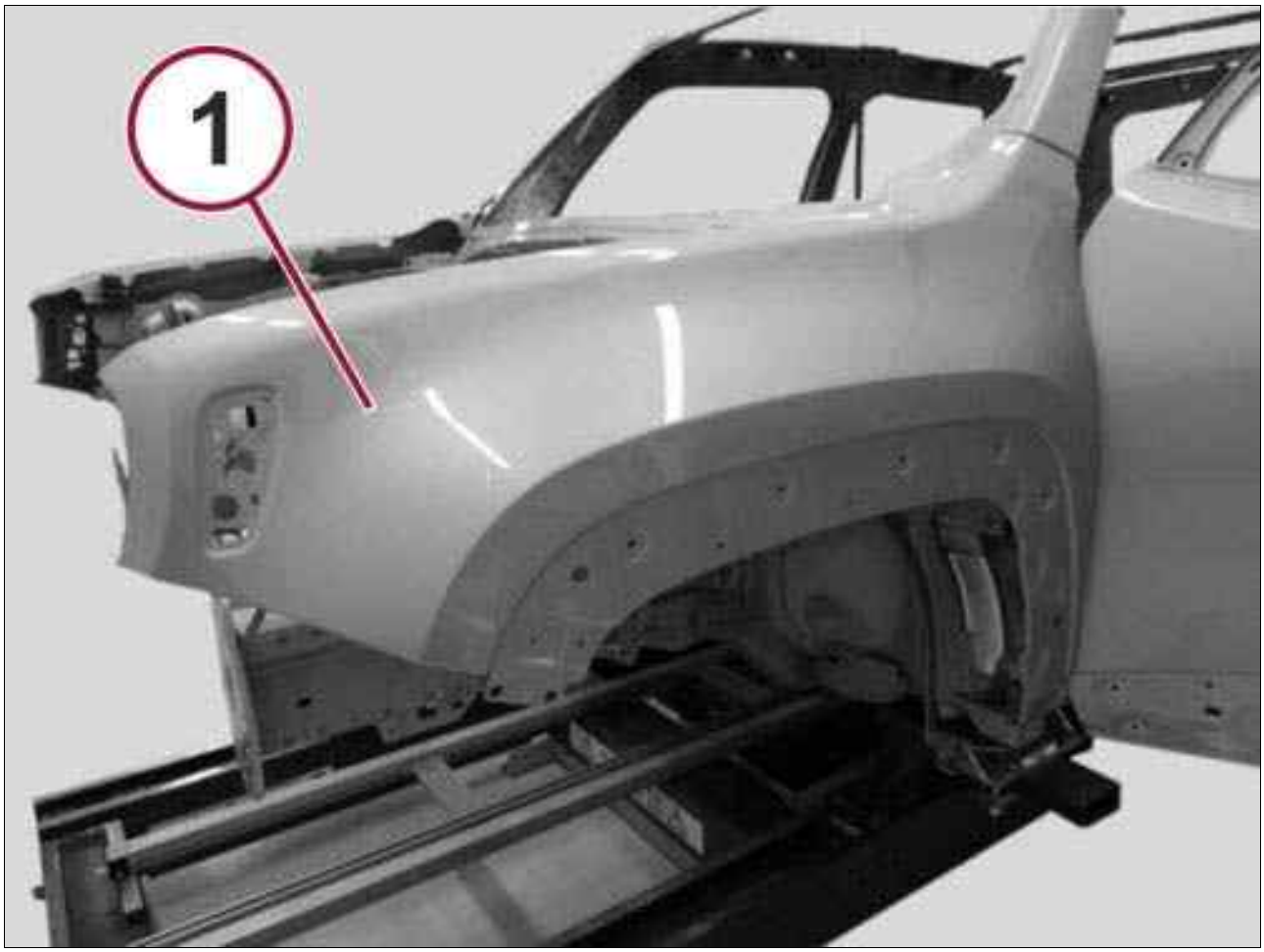
Courtesy of CHRYSLER GROUP, LLC

10. Remove the two lower bolts (1) securing the fender (2) to the support bracket.
11. Remove the fender from the vehicle.

EXTERIOR > FENDER, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND

INSTALLATION > INSTALLATION

Fig 1: Front Fender

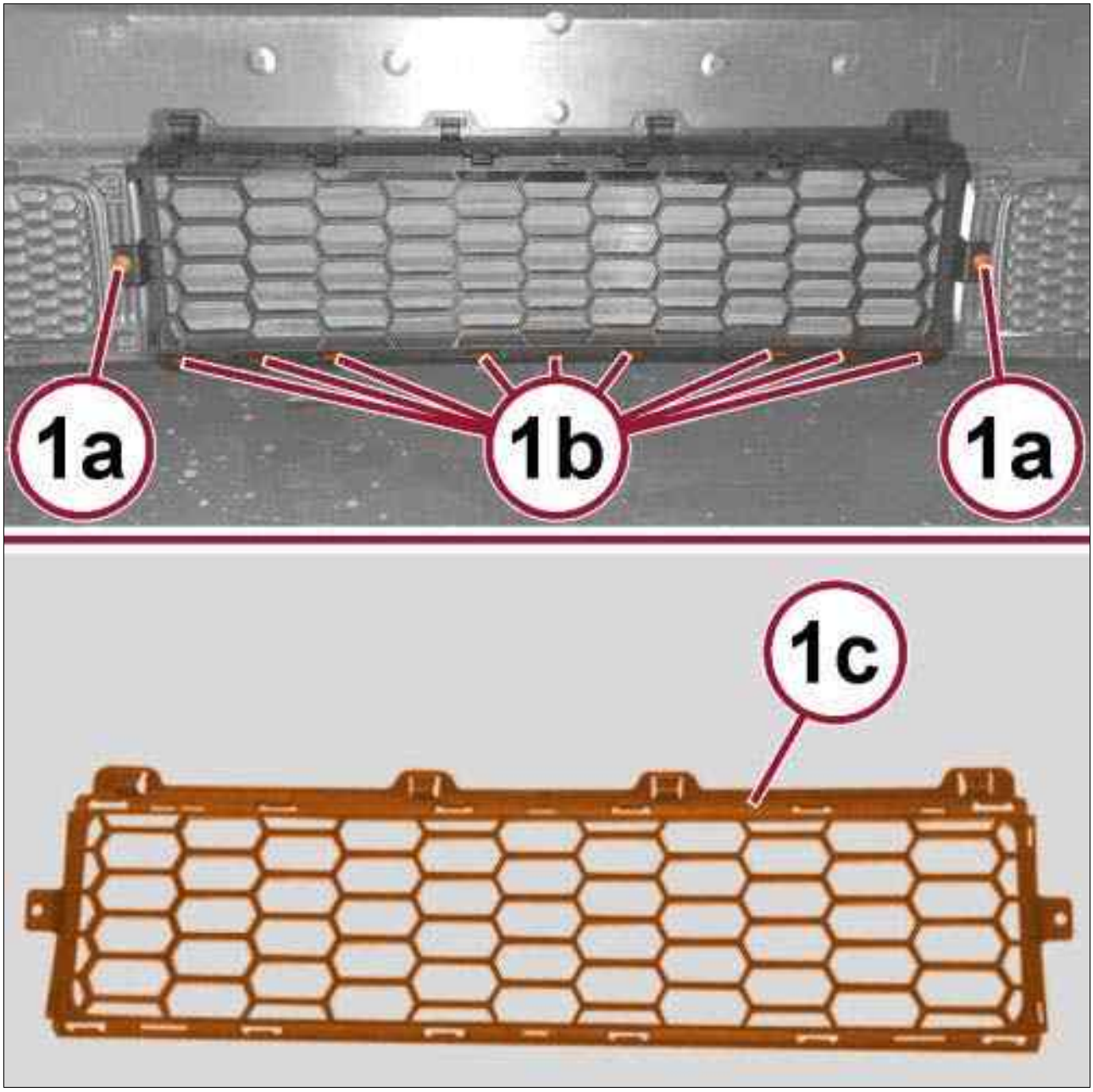


Courtesy of CHRYSLER GROUP, LLC

1. Inspect the fender to be certain there is no damage.
2. Remove any sealant from the body and fender.
3. Restore any sealant from the body and fender.
4. Position the fender on the vehicle and loosely install the bolts.
5. Check the alignment of the fender to the door and the hood.
6. Tighten the fender bolts securely.

EXTERIOR > GRILLE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Grille, Retainers & Screws



Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable.
2. Remove the front fascia. Refer to FASCIA, FRONT, REMOVAL AND INSTALLATION .
3. Remove the screws (1a), release the retainers (1b) and remove the grille (1c).

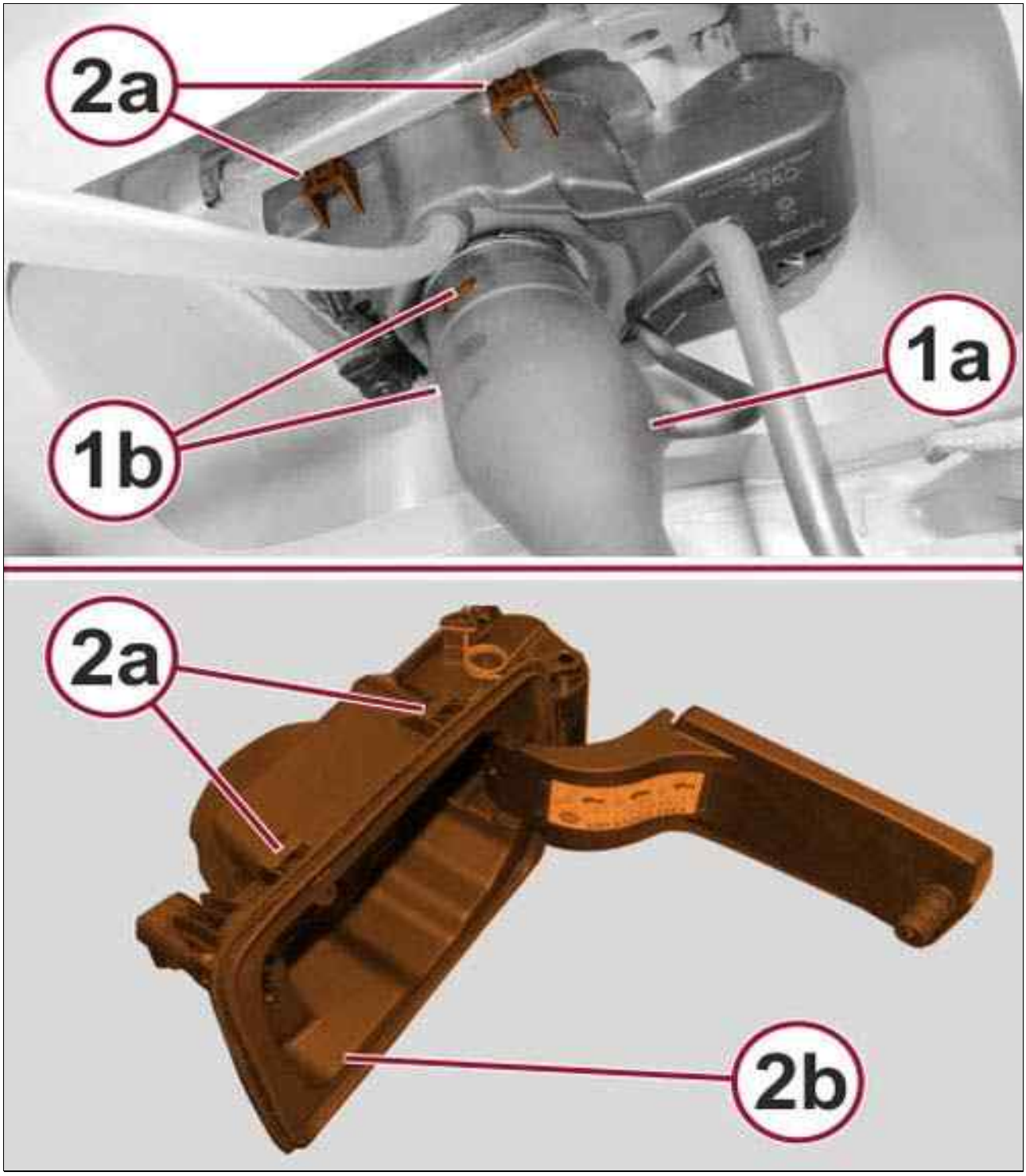
EXTERIOR > GRILLE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

1. Make sure the grille is not damaged.

2. Position the grille back into place and seat the retainers fully.
3. Install the screws.
4. Install the front fascia. Refer to FASCIA, FRONT, REMOVAL AND INSTALLATION .
5. Connect the negative battery cable.

EXTERIOR > HOUSING, FUEL FILL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Fuel Filler Housing, Tube & Retainers



Courtesy of CHRYSLER GROUP, LLC

1. Raise and support the vehicle. Refer to HOISTING, STANDARD PROCEDURE .
2. Remove the rear wheelhouse splash shield. Refer to SHIELD, SPLASH, REAR WHEELHOUSE, REMOVAL AND INSTALLATION .
3. Remove the fuel filler door. Refer to DOOR, FUEL FILL, REMOVAL AND INSTALLATION .
4. Working from the inside of the wheel arch release the fuel filler tube (1a) by releasing the

retainers (1b).

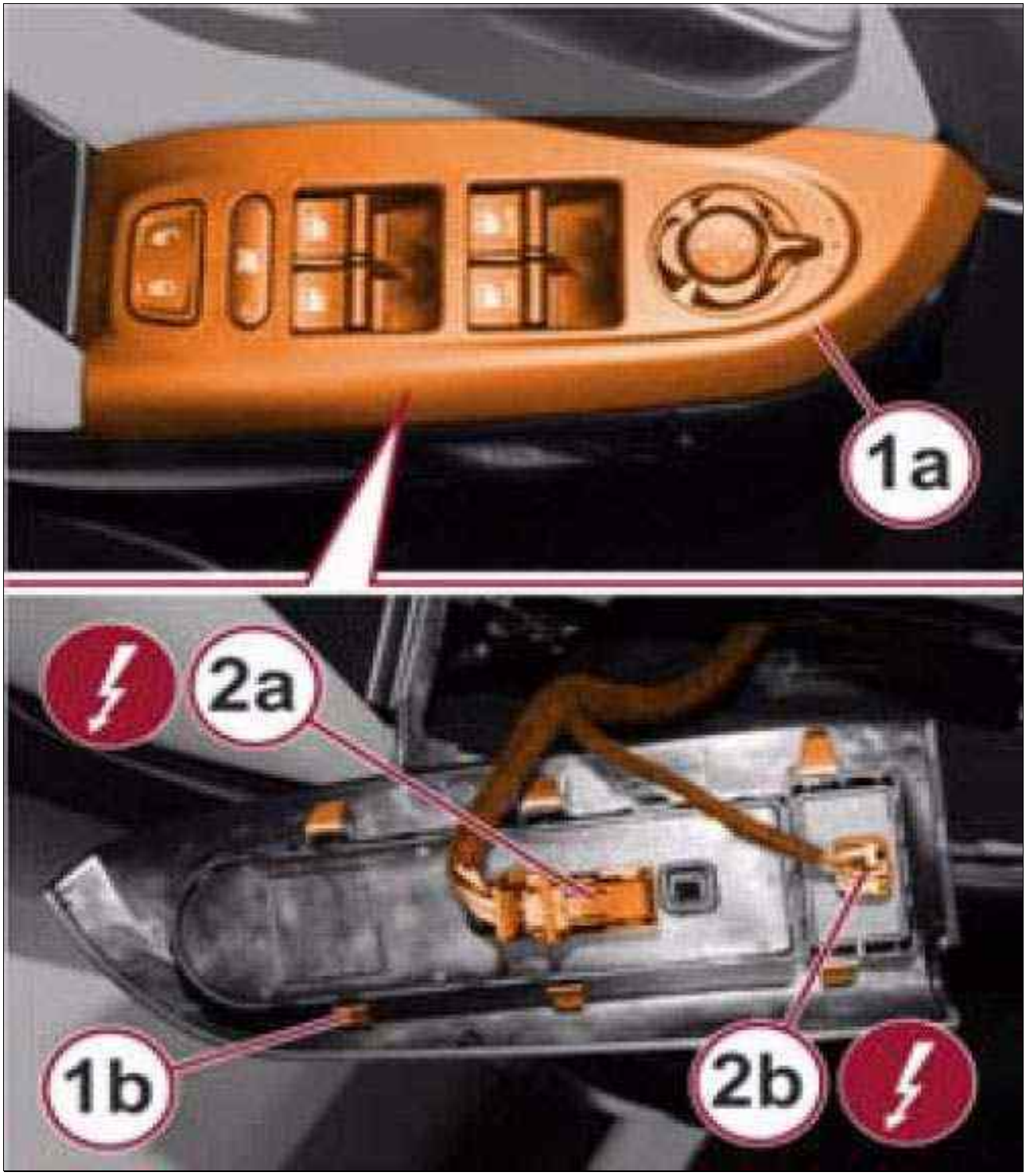
5. Release the retainers (2a) and then remove the fuel filler housing (2b) complete with drainage tube.

EXTERIOR > HOUSING, FUEL FILL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

1. Fit the housing on the fuel filler tube engaging the retaining clips.
2. Position the housing into the sheet metal and seat the retainers fully.
3. Tighten the fuel filler tube screw.
4. Install the fuel filler door. Refer to DOOR, FUEL FILL, REMOVAL AND INSTALLATION .
5. Install the rear wheelhouse splash shield. Refer to SHIELD, SPLASH, REAR WHEELHOUSE, REMOVAL AND INSTALLATION .

EXTERIOR > MIRROR, OUTSIDE REARVIEW > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

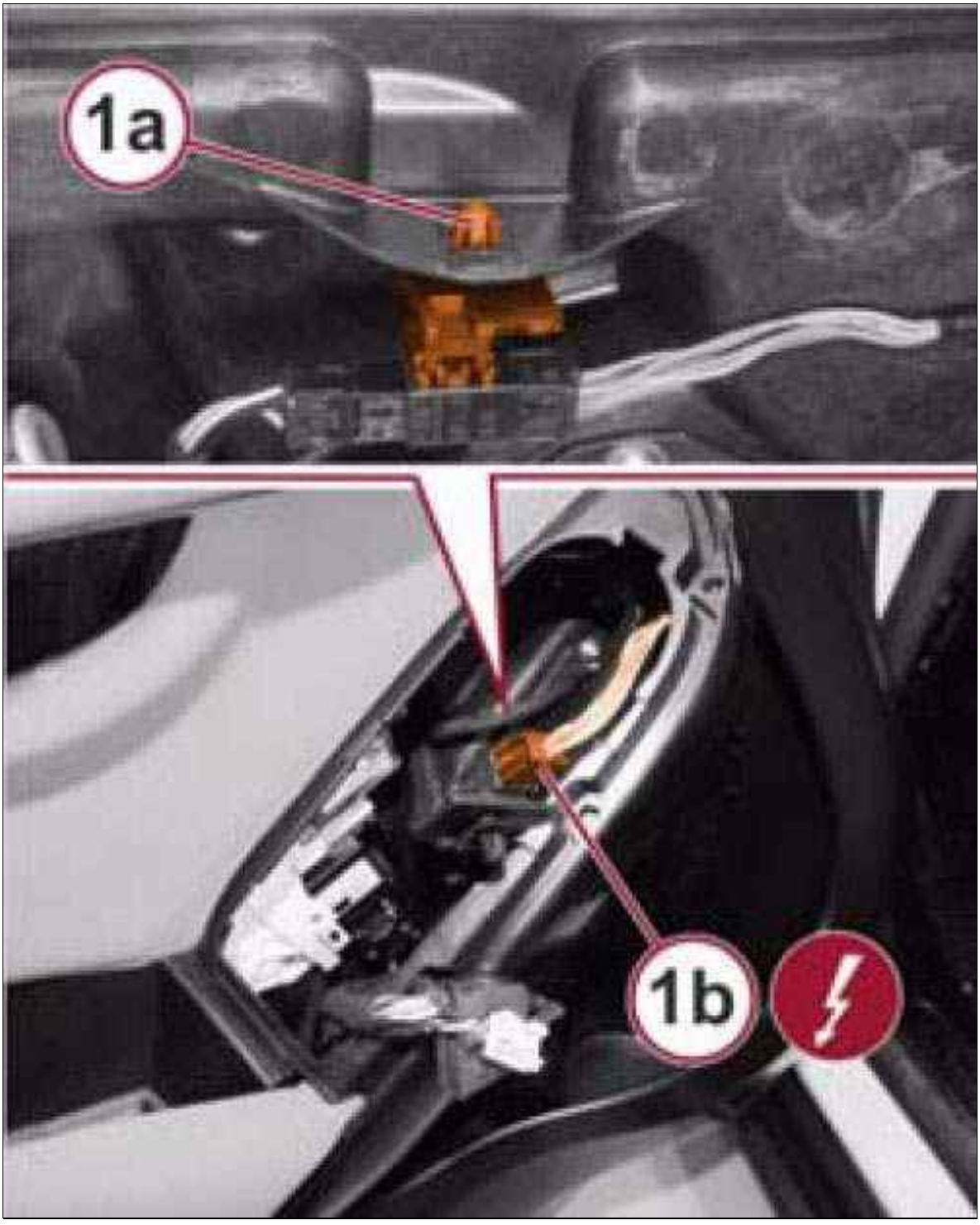
Fig 1: Switch Unit, Clips & Connectors



Courtesy of CHRYSLER GROUP, LLC

1. disconnect battery
2. Use the suitable tool to pry up the switch unit (1a) from its housing, releasing the retaining clips (1b).
3. Disconnect the electrical connections (2a, 2b).
4. Remove the switch unit.

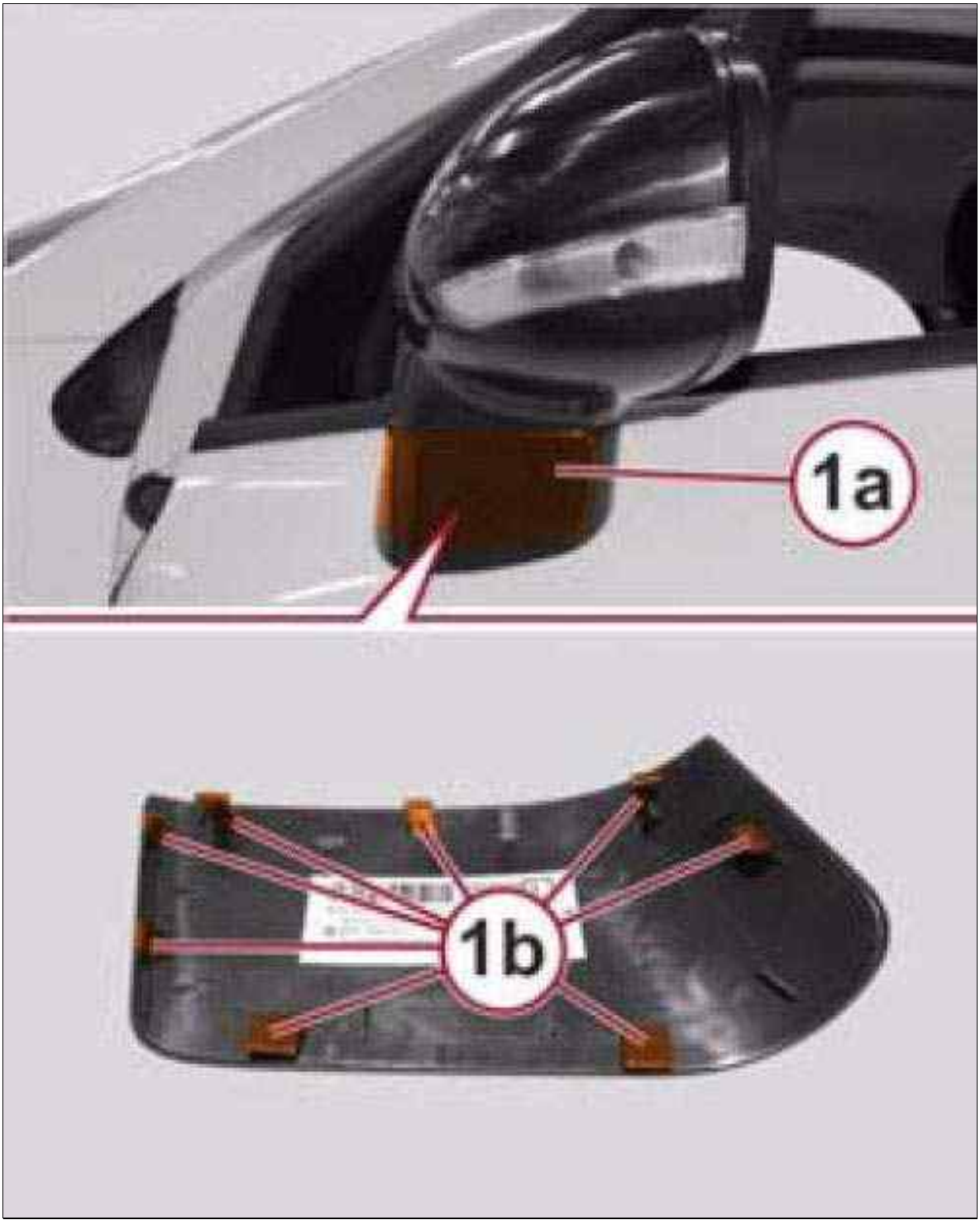
Fig 2: Wiring Retainer & Connector



Courtesy of CHRYSLER GROUP, LLC

5. Working from inside the switch unit compartment, release the wiring retainer (1a) and disconnect the electrical connection of the door window (1b).

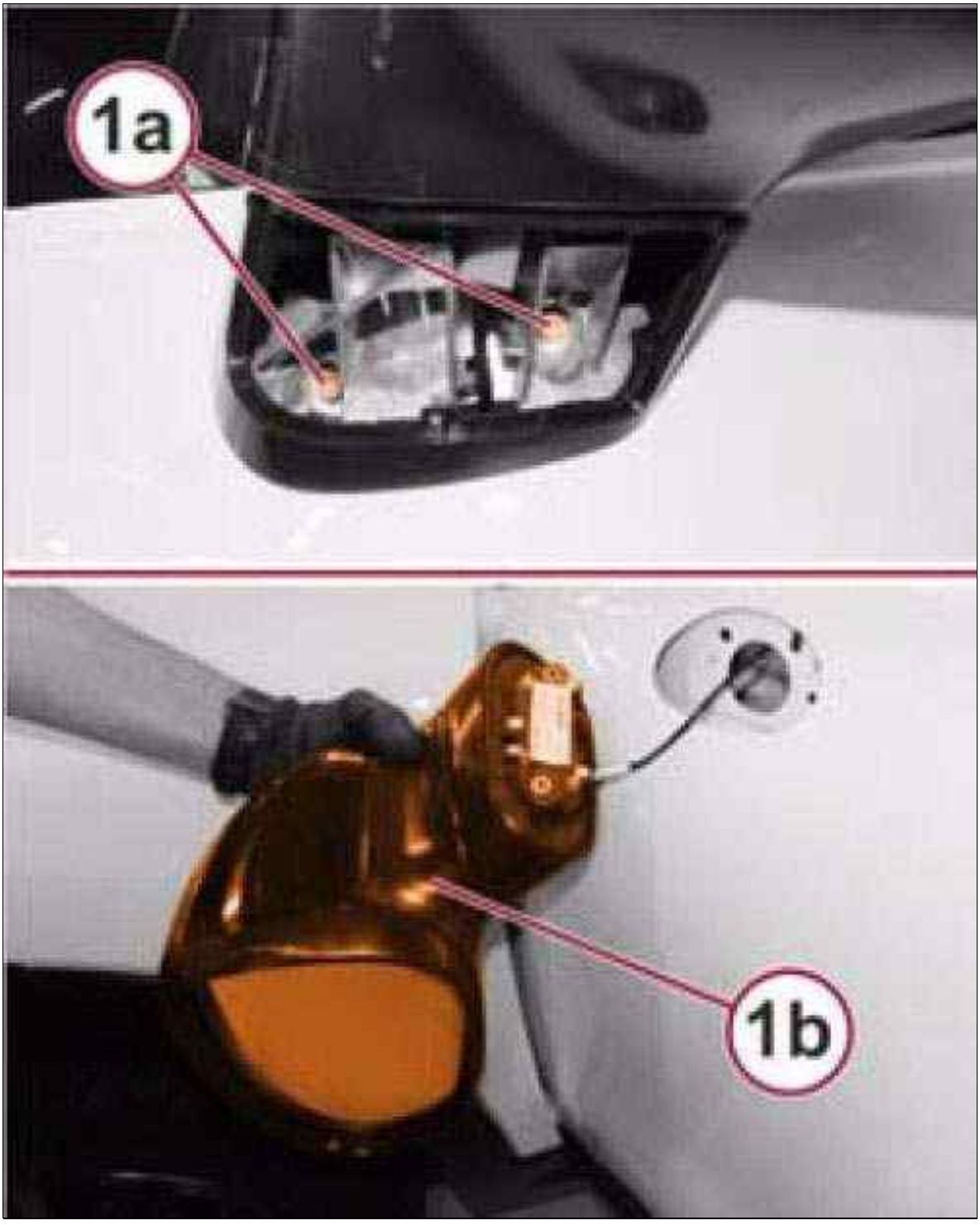
Fig 3: Door Mirror & Retainers



Courtesy of CHRYSLER GROUP, LLC

6. Use a suitable tool #1878077000 to pry up the molding of the base securing the door mirror (1a), releasing the retainers (1b).

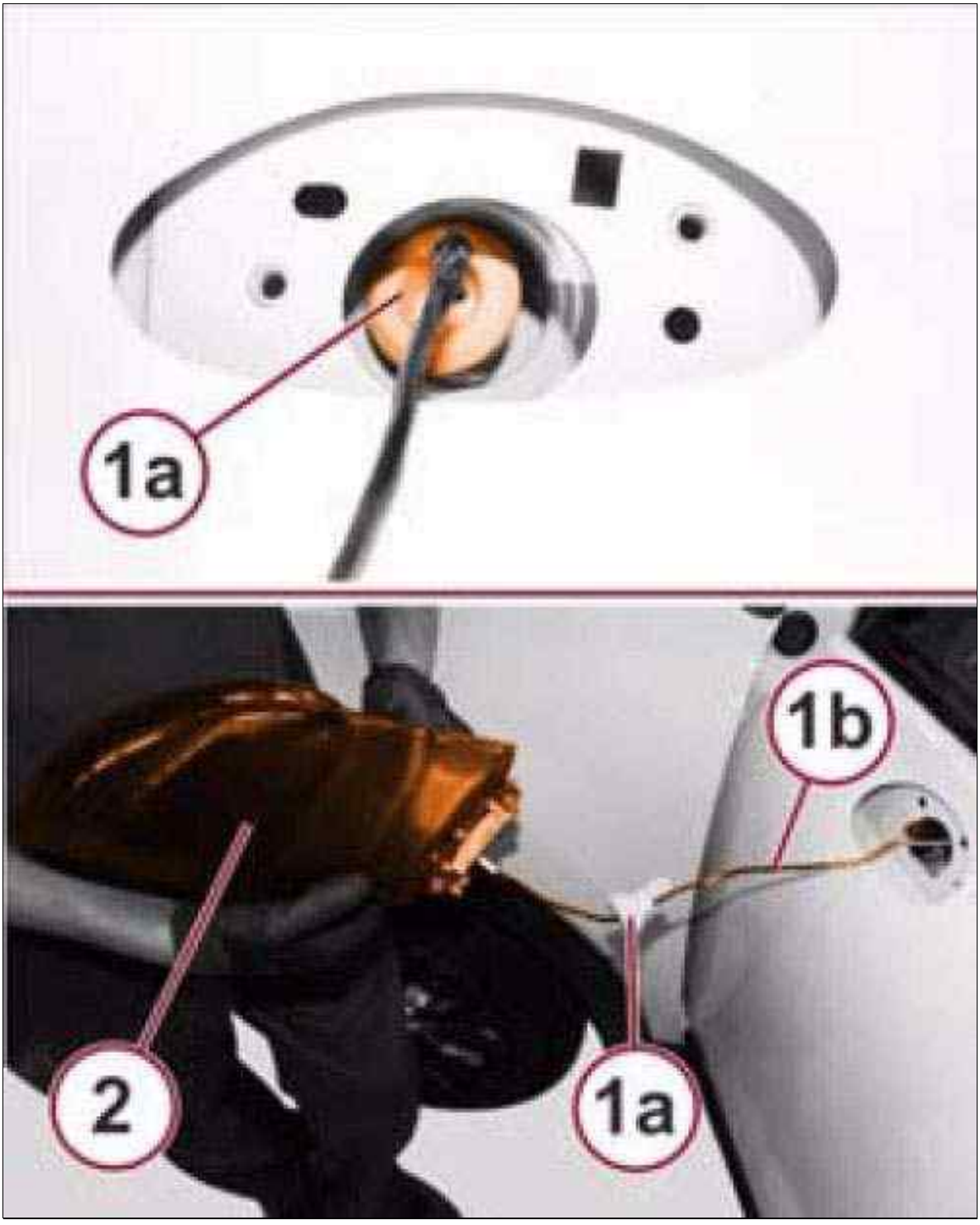
Fig 4: Door Mirror & Screws



Courtesy of CHRYSLER GROUP, LLC

7. Undo the screws (1a) and move the door mirror (1b) aside.

Fig 5: Door Mirror, Wiring & Bulkhead



Courtesy of CHRYSLER GROUP, LLC

8. Pry up the bulkhead (1a) and extract the wiring section (1b).
9. Release the sensor from the wiring and keep the door mirror.

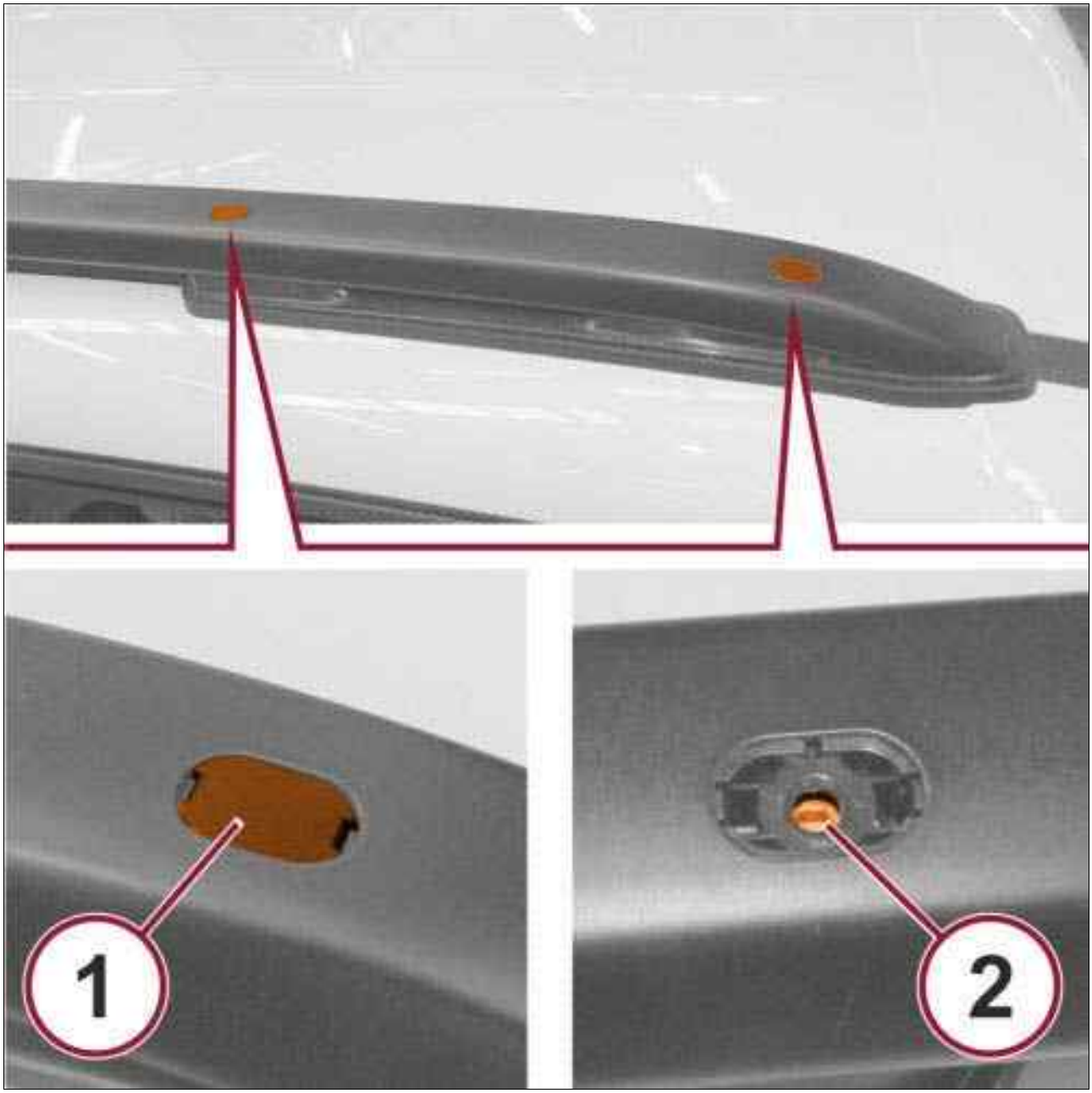
EXTERIOR > MIRROR, OUTSIDE REARVIEW > REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION > INSTALLATION

1. Check that the rear view mirror is not damaged.
2. If removed position the rearview mirror cover back and seat the tabs on the retainers fully.
3. Fit the bulkhead.
4. Fit the wiring with the sensor.
5. Place the door mirror in its housing.
6. Tighten the screws securing the door mirror.
7. Connect the electrical connection.
8. Working from inside the switch unit compartment, secure the wiring retainer.
9. Connect the switch unit electrical connections.
10. Place the switch unit in position and attach the retainers.
11. Connect the negative battery terminal.

EXTERIOR > RACK, LUGGAGE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

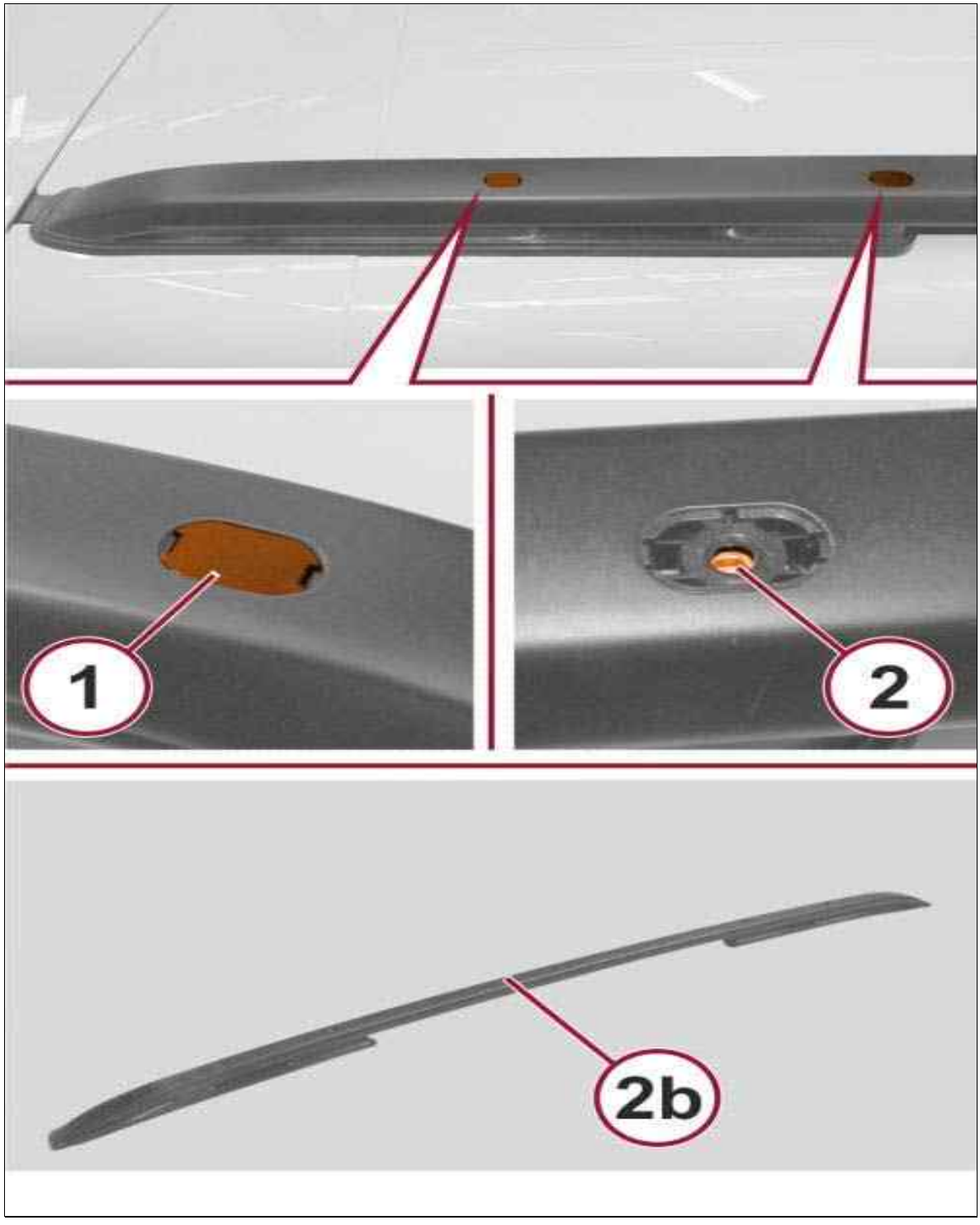
Fig 1: Caps & Screws



Courtesy of CHRYSLER GROUP, LLC

1. Remove the caps (1).
2. Remove the screws (2).

Fig 2: Rack Rail, Caps & Screws



Courtesy of CHRYSLER GROUP, LLC

3. Remove the caps (1).
4. Remove the screws (2) and remove the rack rail (2b).

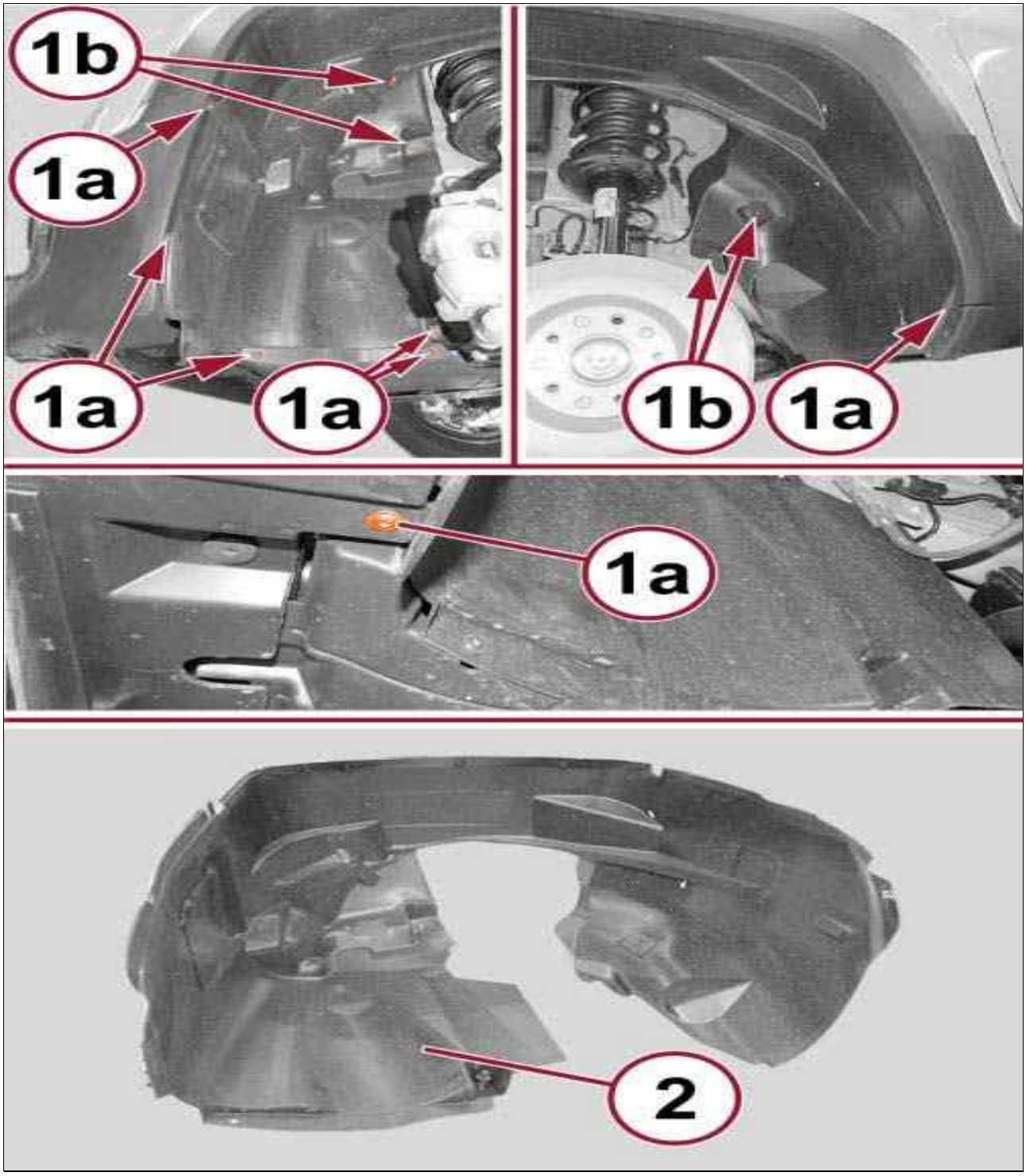
EXTERIOR > RACK, LUGGAGE > REMOVAL AND INSTALLATION > REMOVAL AND

INSTALLATION > INSTALLATION

1. Check that the roof rack rails are not damaged, replace the parts as necessary.
2. Install the roof rack rail.
3. Apply suitable thread locker to the screws and install the screws.
4. Install the screw caps.

EXTERIOR > SHIELD, SPLASH, FRONT WHEELHOUSE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Front Wheelhouse Splash Shield & Fasteners



Courtesy of CHRYSLER GROUP, LLC

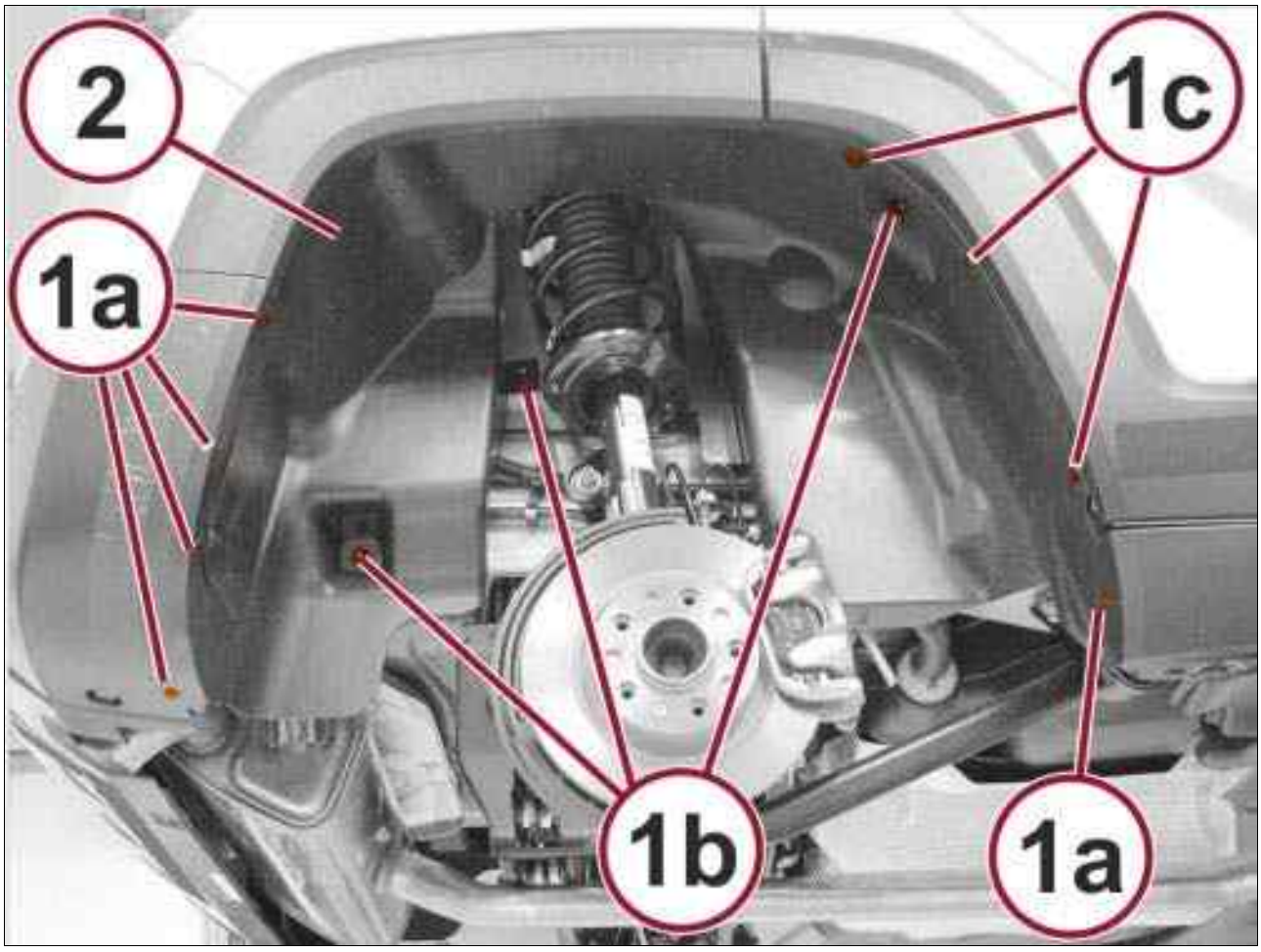
1. Raise and support the vehicle. Refer to HOISTING, STANDARD PROCEDURE .
2. Remove the front wheel. Refer to REMOVAL AND INSTALLATION .
3. Undo the screws (1a) and nuts (1b).
4. Use the special tool #1878077000 to pry up the button (2a) and remove the additional wheel liner (2b) prying it up from its housing.

EXTERIOR > SHIELD, SPLASH, FRONT WHEELHOUSE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

1. Position the splash shield back onto the vehicle and install the screws and nuts.

EXTERIOR > SHIELD, SPLASH, REAR WHEELHOUSE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Rear Wheelhouse Splash Shield & Fasteners



Courtesy of CHRYSLER GROUP, LLC

1. Raise and support the vehicle. Refer to HOISTING, STANDARD PROCEDURE .
2. Remove the wheel. Refer to REMOVAL AND INSTALLATION .
3. Remove the screws (1a) and nuts (1b).
4. Using trim stick (special tool #C-4755, Trim Stick) or equivalent, remove the push pin fasteners (1c).
5. Remove the shield (2).

EXTERIOR > SHIELD, SPLASH, REAR WHEELHOUSE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

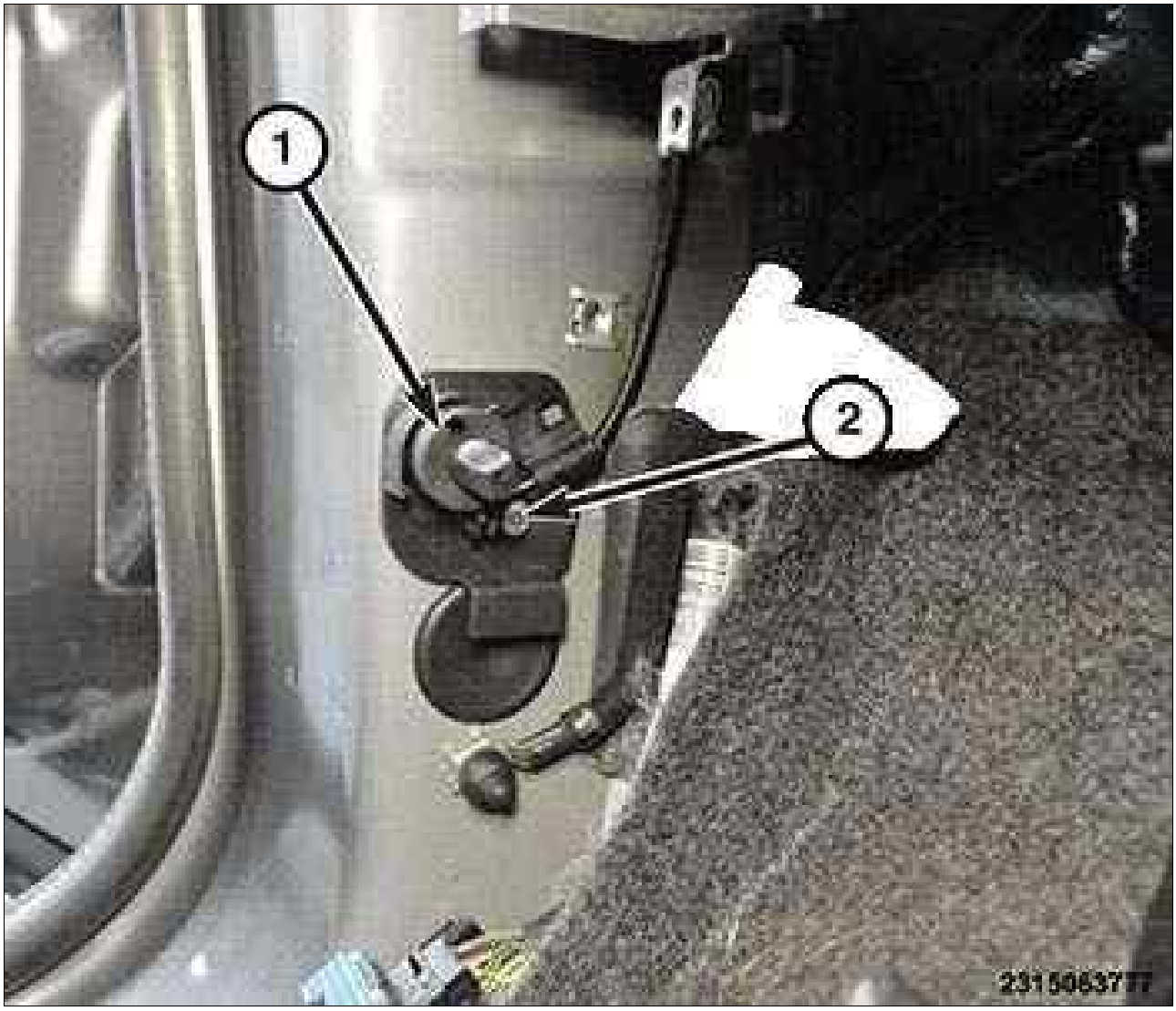
1. Install the splash shield and install the push pin fasteners.
2. Install the screws and nuts.
3. Install the wheel. Refer to REMOVAL AND INSTALLATION .

HOOD > CABLE, HOOD RELEASE > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

NOTE:

Take note of the cable routing for correct installation.

Fig 1: Hood Latch Release Assembly & Screw



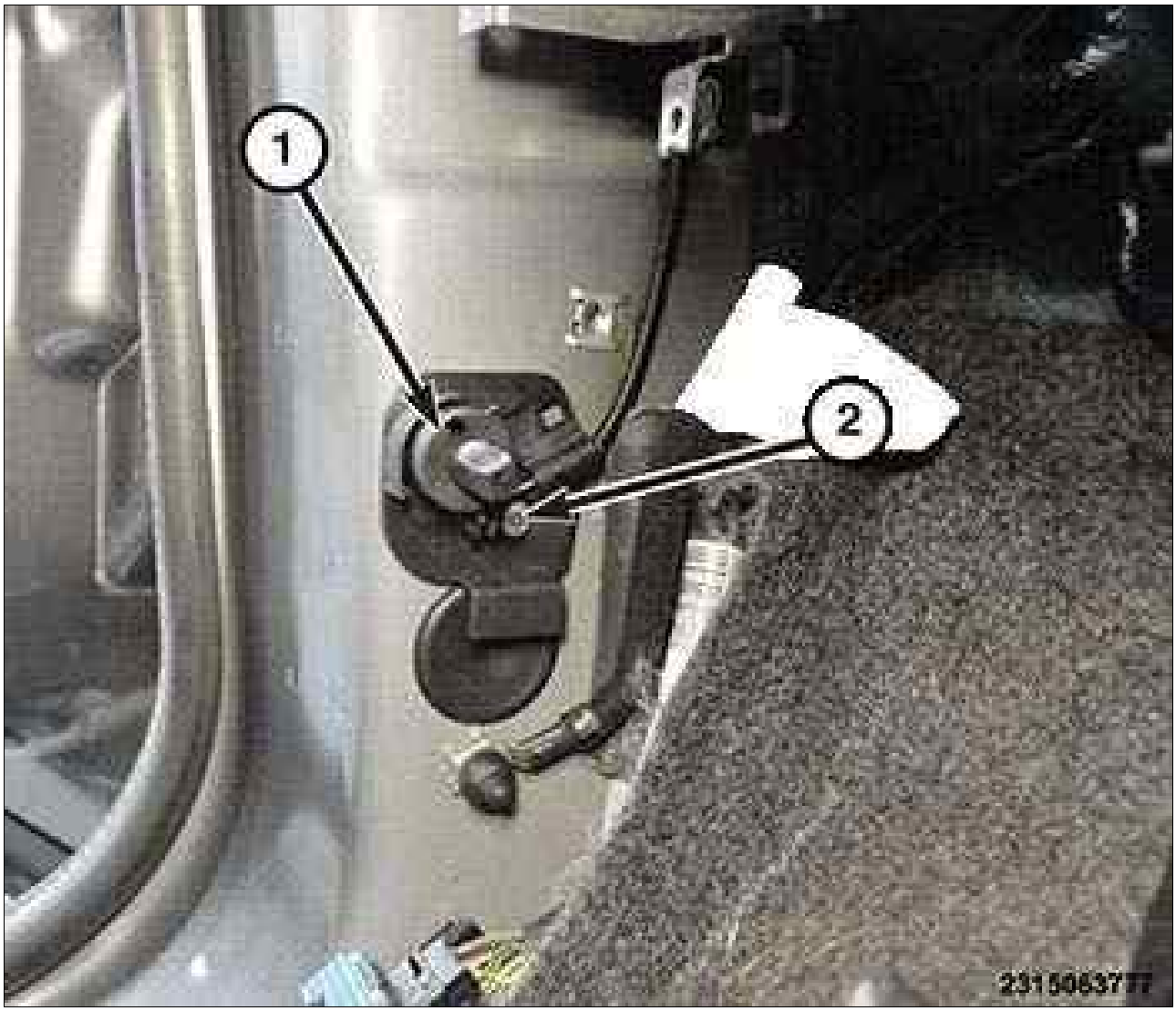
Courtesy of CHRYSLER GROUP, LLC

1. Remove the hood latch release cable from the hood latch.
2. Loosen the cowl top panel as needed to unclip the hood latch release cable. Refer to COVER, COWL PANEL, REMOVAL AND INSTALLATION .
3. Unclip the hood latch release cable from the body.
4. Remove the driver side cowl trim panel. Refer to PANEL, COWL TRIM, REMOVAL AND INSTALLATION .
5. Remove the screw (2).
6. Remove the hood latch release cable grommet from the dash panel and remove the hood latch release assembly (1).

HOOD > CABLE, HOOD RELEASE > REMOVAL AND INSTALLATION > REMOVAL AND

INSTALLATION > INSTALLATION

Fig 1: Hood Latch Release Assembly & Screw

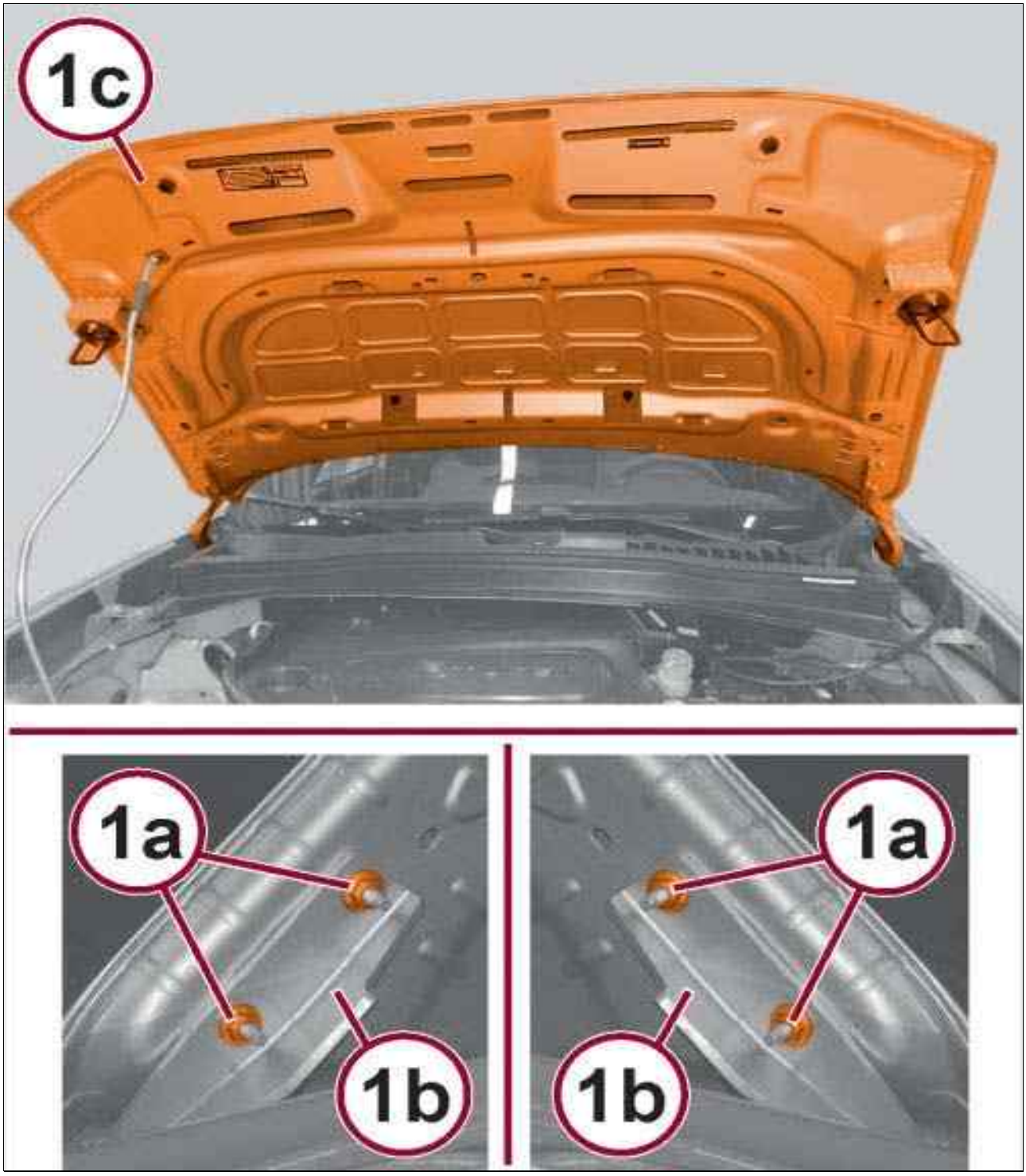


Courtesy of CHRYSLER GROUP, LLC

1. Install the hood latch release cable through the hole in the dash panel and seat the hood latch release cable grommet.
2. Position the hood latch release assembly (1) and install the screw (2). Tighten the screw securely.
3. Install the driver side cowl trim panel. Refer to PANEL, COWL TRIM, REMOVAL AND INSTALLATION .
4. Route the hood latch release cable and clip into place.
5. Install the cowl top panel. Refer to COVER, COWL PANEL, REMOVAL AND INSTALLATION .
6. Install the cable end into the hood latch.

HOOD > HINGE, HOOD > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Hood, Hinge & Nuts



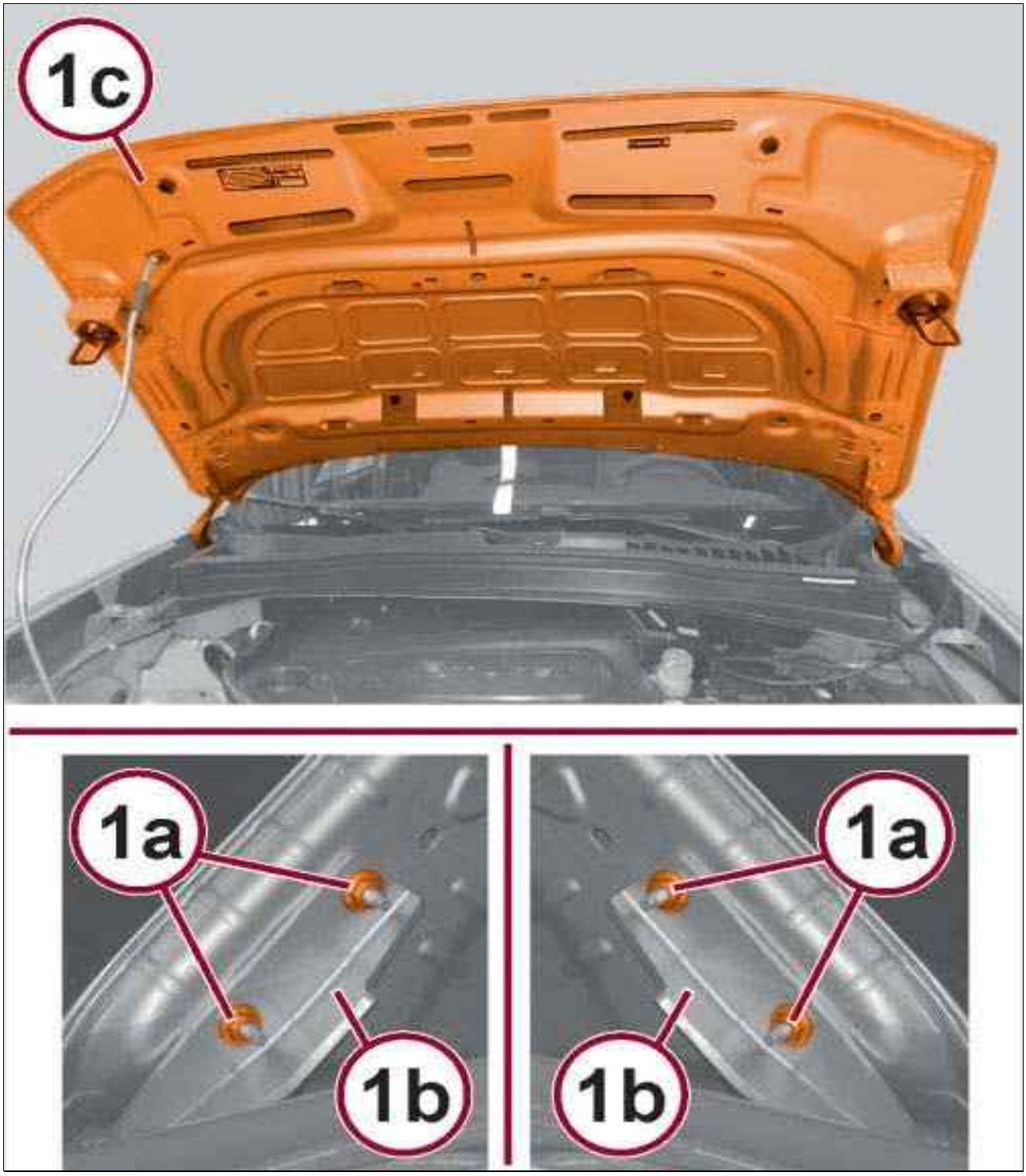
Courtesy of CHRYSLER GROUP, LLC

1. Open and support the hood (1c) with a suitable prop or block.
2. Remove the cowl top panel. Refer to COVER, COWL PANEL, REMOVAL AND INSTALLATION .

3. Using a grease pencil or equivalent, mark the position of the hood hinge (1b) to aid in installation.
4. With the help of an assistant holding the hood, remove the hinge nuts (1a) from the hood.
5. Remove the nuts from the body and remove the hood hinge.

HOOD > HINGE, HOOD > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Hood, Hinge & Nuts



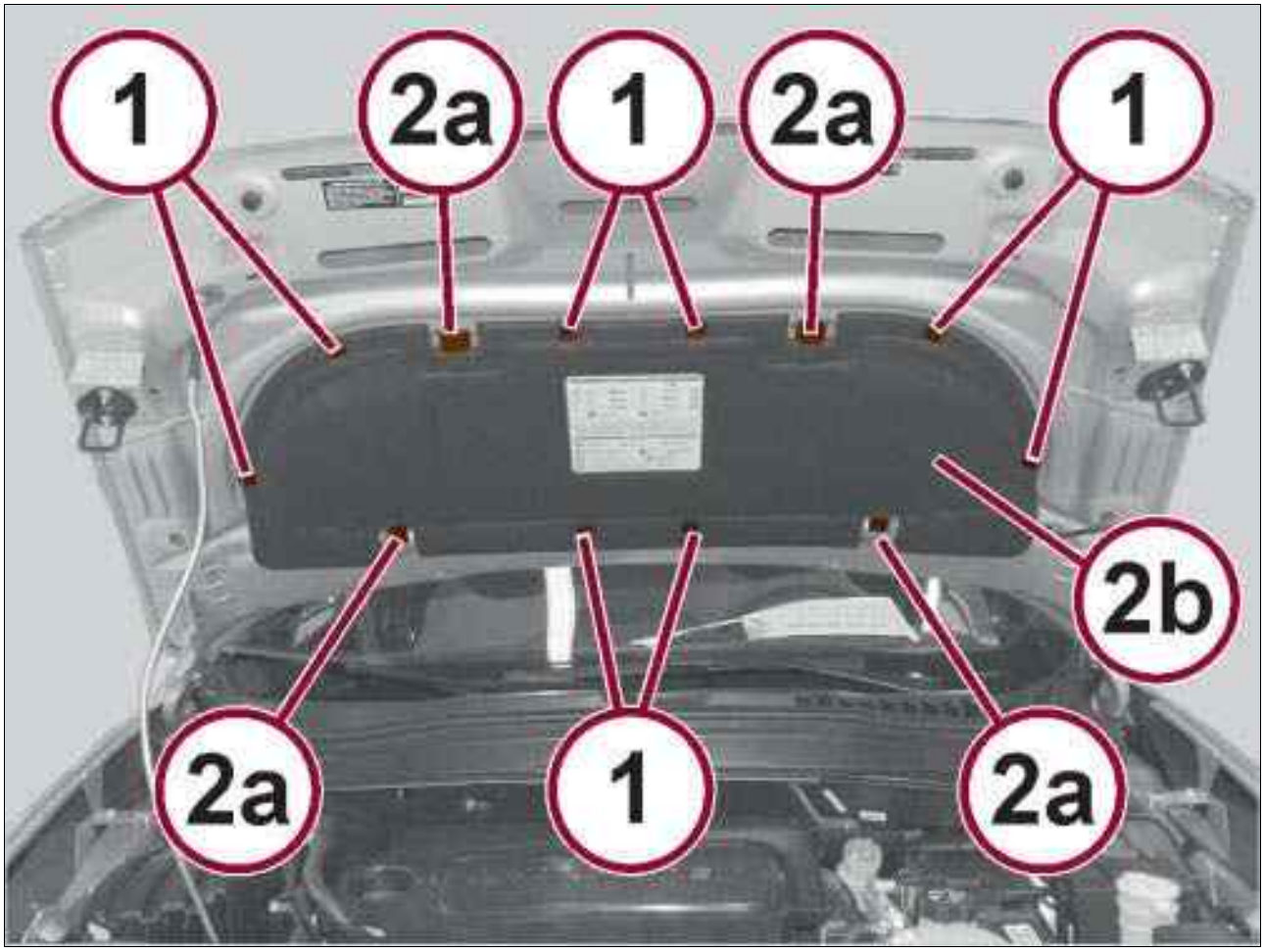
Courtesy of CHRYSLER GROUP, LLC

1. With the help of an assistant, position the hood hinge (1b) onto the body and loosely install the nuts.
2. Align the hood hinge with the reference mark made previously and tighten the hood hinge to body nuts to the proper specification. Refer to SPECIFICATIONS .
3. Position the hood to the hood hinge and loosely install the nuts (1a).

4. Align the hood hinge with the reference mark made previously and tighten the hood hinge to hood nuts to the proper specification. Refer to SPECIFICATIONS .
5. Verify proper hood latch operation and fit of hood. Adjust if necessary.

HOOD > HOOD > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

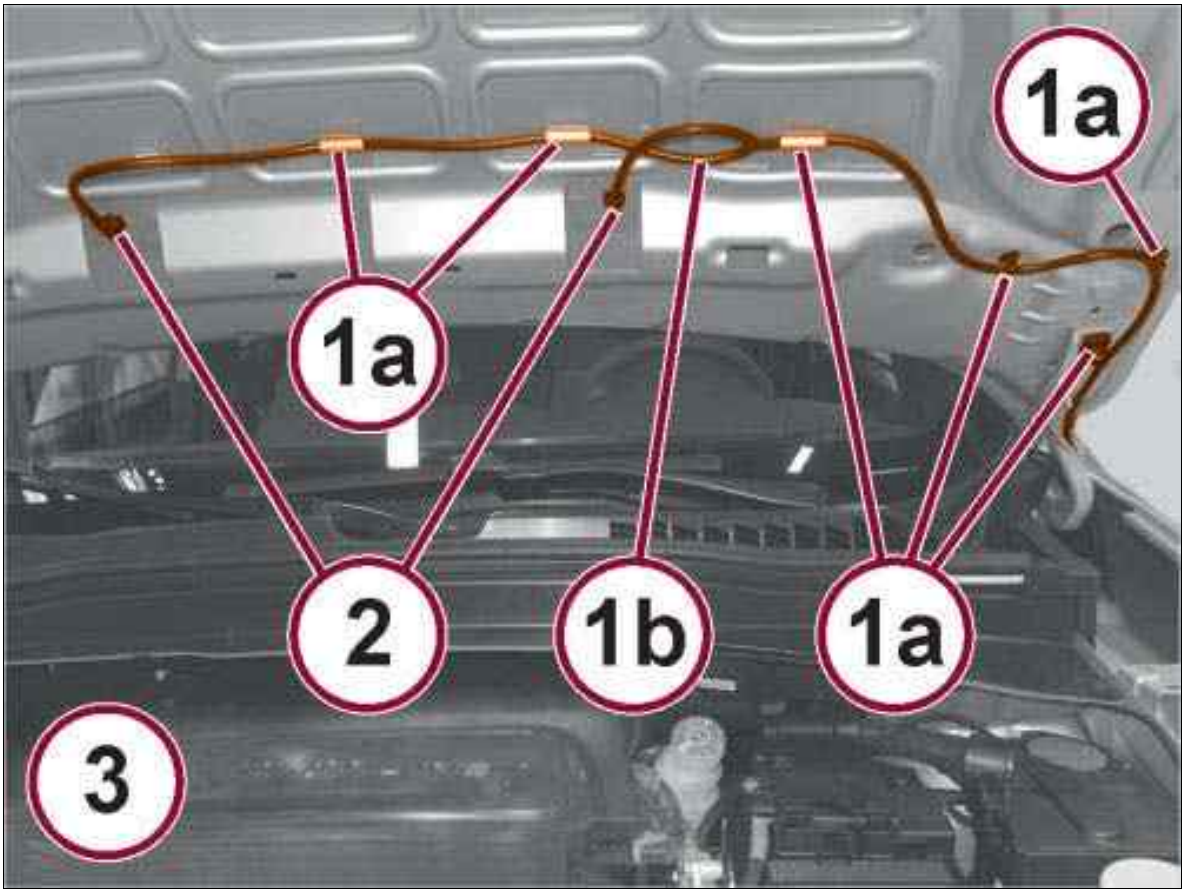
Fig 1: Silencer, Tabs & Push Fasteners



Courtesy of CHRYSLER GROUP, LLC

1. Open the hood and remove the push fasteners (1).
2. Release the tabs (2a) and remove the silencer (2b).

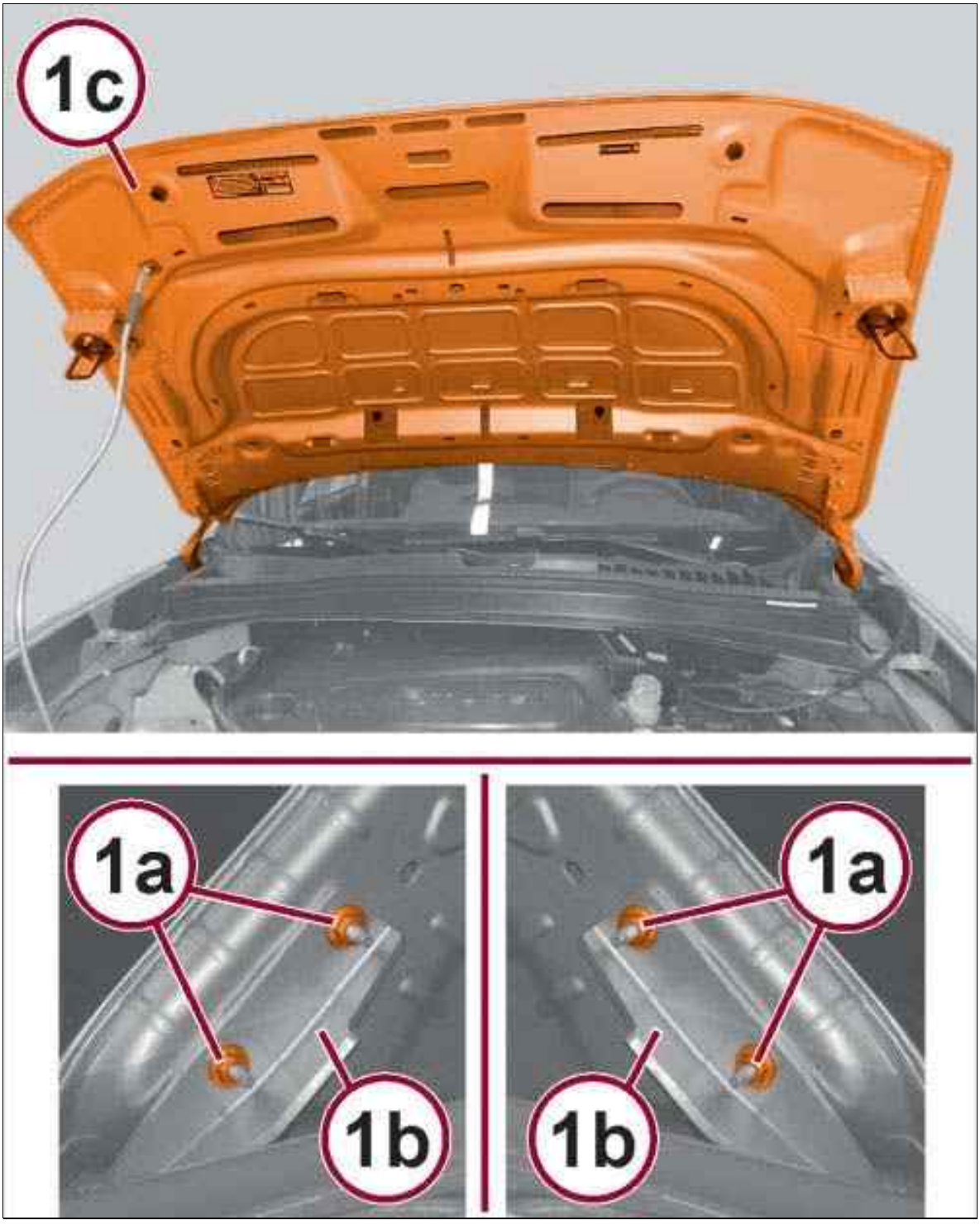
Fig 2: Windshield Washer Hose & Connectors



Courtesy of CHRYSLER GROUP, LLC

3. Disconnect the windshield washer hose from the connectors (2).
4. Unclip the windshield washer hose (1a) from the hood and position aside.

Fig 3: Hood, Hinge & Nuts



Courtesy of CHRYSLER GROUP, LLC

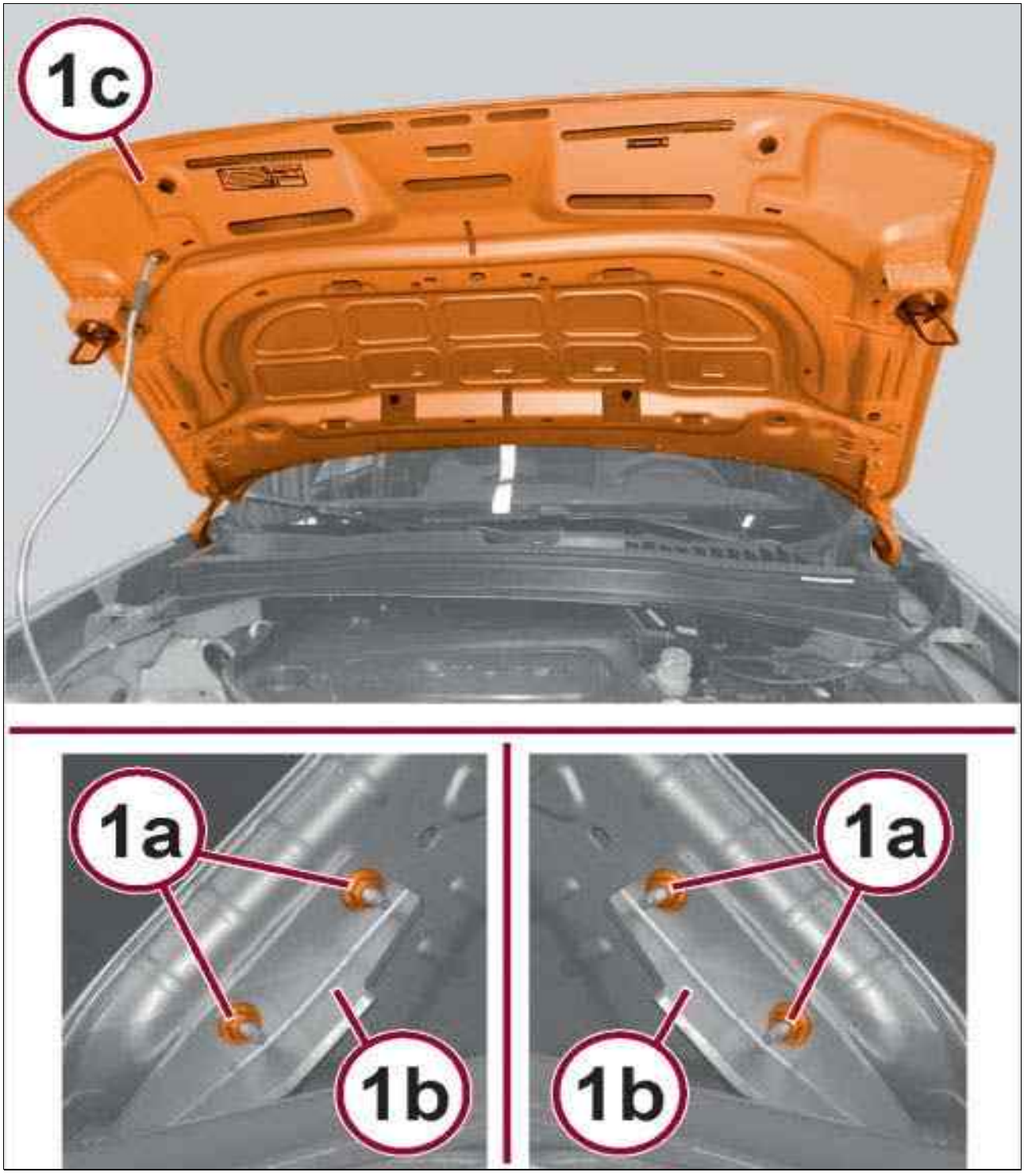
5. Using a grease pencil or equivalent, mark the position of the hood hinge (1b) to aid in installation.
6. With the help of an assistant holding the hood (1c), remove the hinge nuts (1a) from the hood and remove the hood.

HOOD > HOOD > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

NOTE:

The Vehicle Emission Control Information (VECI) label(s) must be in place for the life of the vehicle. When replacing the component to which the VECI label is adhered, a new VECI label must also be adhered to the new component.

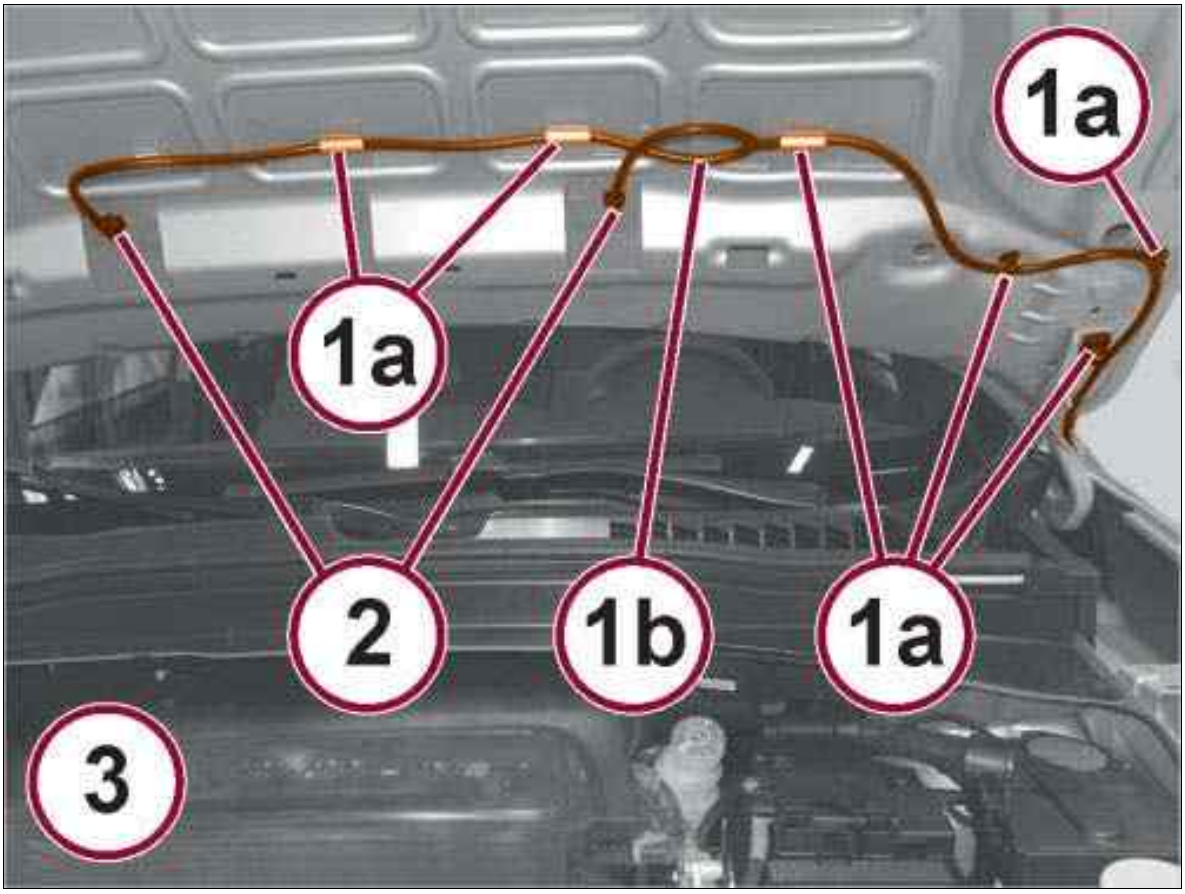
Fig 1: Hood, Hinge & Nuts



Courtesy of CHRYSLER GROUP, LLC

1. With assistance from a helper, position the hood (1c) onto the hood hinges (1b) and loosely install the nuts (1a).
2. Align the hood with the reference mark made previously and tighten the hood hinge to hood nuts to the proper specification. Refer to SPECIFICATIONS .

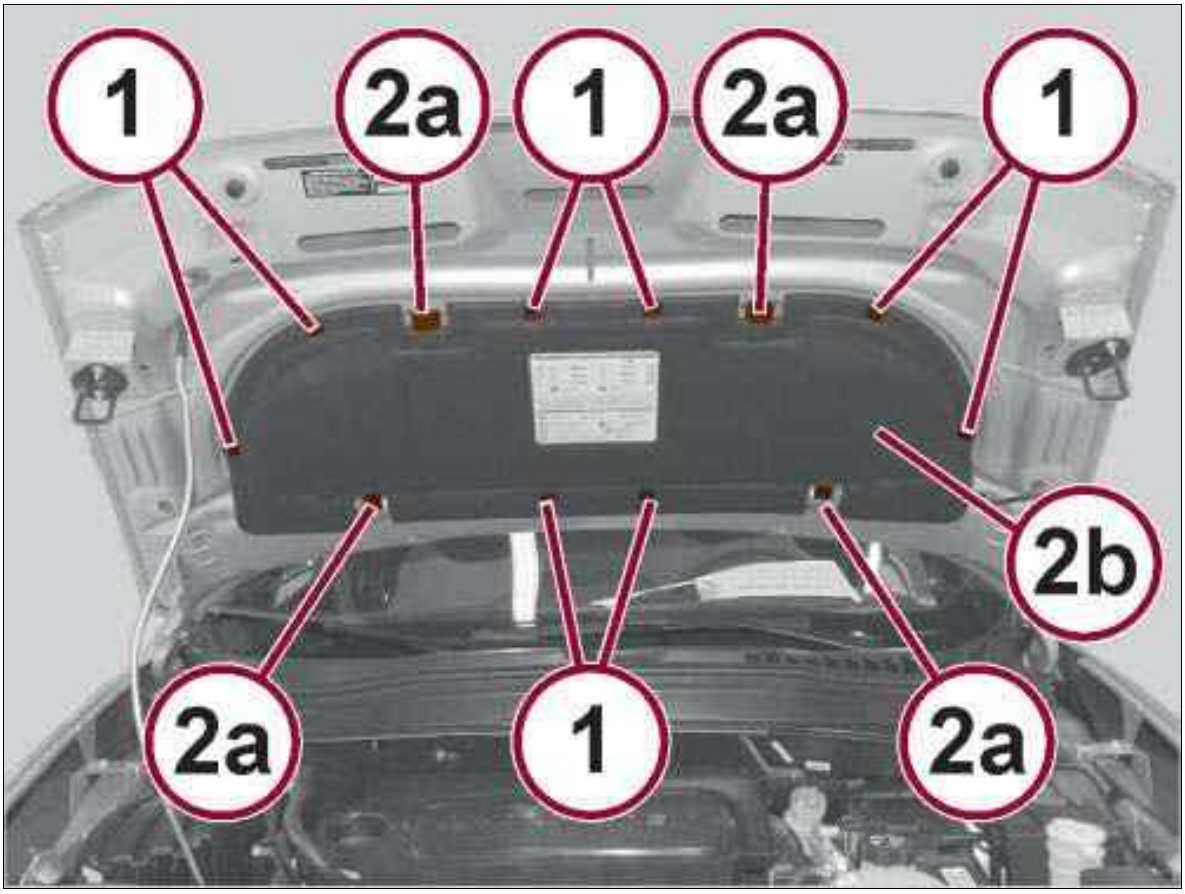
Fig 2: Windshield Washer Hose & Connectors



Courtesy of CHRYSLER GROUP, LLC

3. Route and clip the windshield washer hose (1a) to the hood.
4. Connect the windshield washer hose to the connectors (2).
5. Verify proper hood latch operation and fit of hood. Adjust if necessary.

Fig 3: Silencer, Tabs & Push Fasteners



Courtesy of CHRYSLER GROUP, LLC

6. Position the silencer (2b) and then install the push fasteners (1).

HOOD > LATCH, HOOD > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

1. Using a grease pencil or equivalent, mark the position of the hood latch to aid in installation.
2. Remove the fasteners from the hood latch.
3. Turn the hood latch over and remove the hood latch release cable from the hood latch.

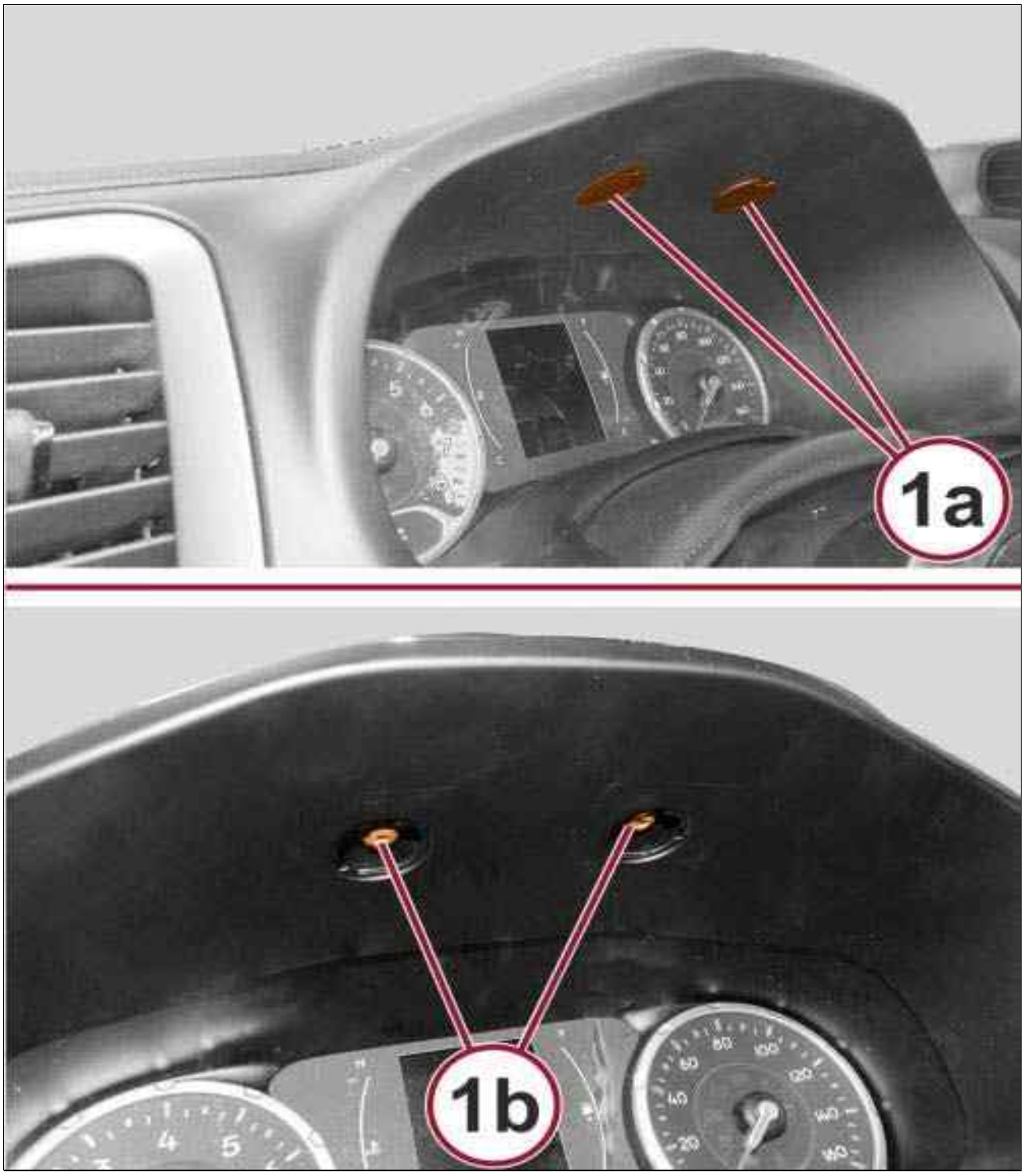
HOOD > LATCH, HOOD > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

1. Install the hood latch release cable into the hood latch.
2. Position the hood latch and loosely install the bolts.
3. Align the hood latch with the reference mark made previously and tighten the hood latch bolts to the proper specification. Refer to SPECIFICATIONS .

4. Verify proper hood latch operation and fit of hood. Adjust if necessary.

INSTRUMENT PANEL > BEZEL, INSTRUMENT CLUSTER > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Instrument Cluster Bezel Covers & Screws



Courtesy of CHRYSLER GROUP, LLC

1. Lower the steering column to the lowest position and telescope the steering wheel full rearward.
2. Remove the screw covers (1a) and the screws (1b).

   Fig 2: Instrument Cluster Bezel

Courtesy of CHRYSLER GROUP, LLC

3. Using a trim stick or equivalent, release the instrument cluster bezel (1a) and remove.

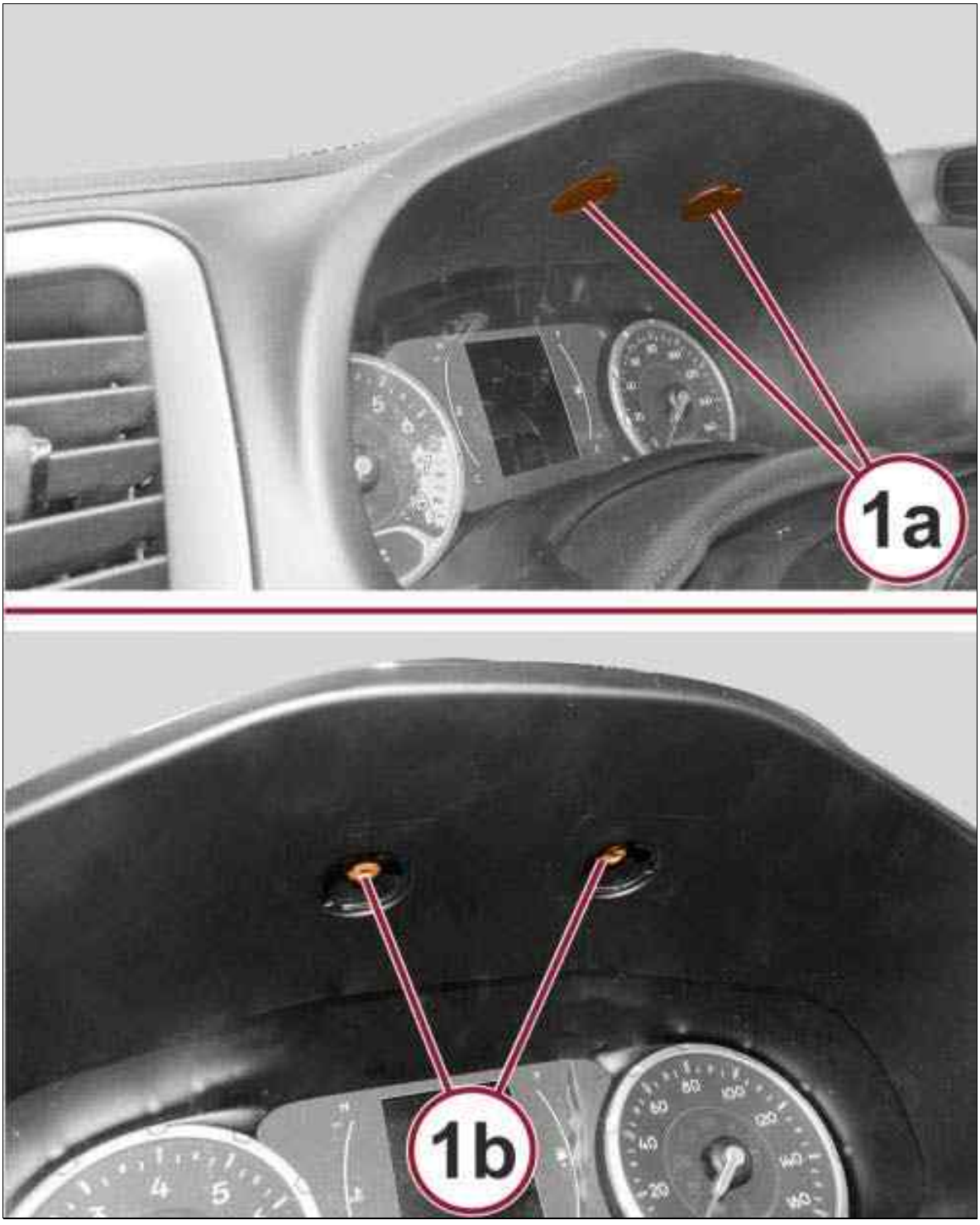
INSTRUMENT PANEL > BEZEL, INSTRUMENT CLUSTER > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Instrument Cluster Bezel

Courtesy of CHRYSLER GROUP, LLC

1. Position the instrument cluster bezel (1a) and hand tap to engage the retaining tabs (1b).

Fig 2: Instrument Cluster Bezel Covers & Screws

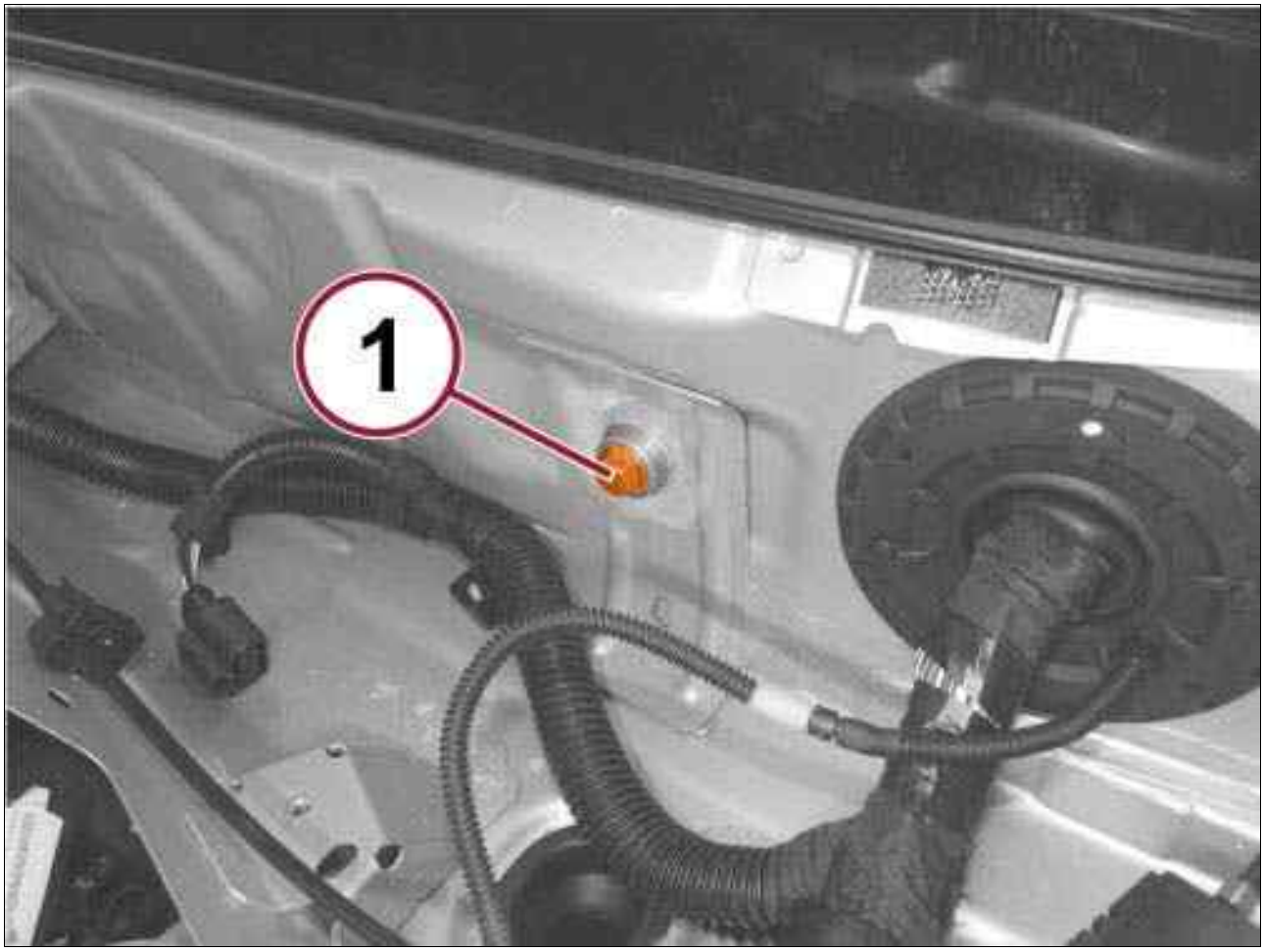


Courtesy of CHRYSLER GROUP, LLC

2. Install the screws (1b) and tighten securely. Install the screw covers (1a).

INSTRUMENT PANEL > CARRIER, INSTRUMENT PANEL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

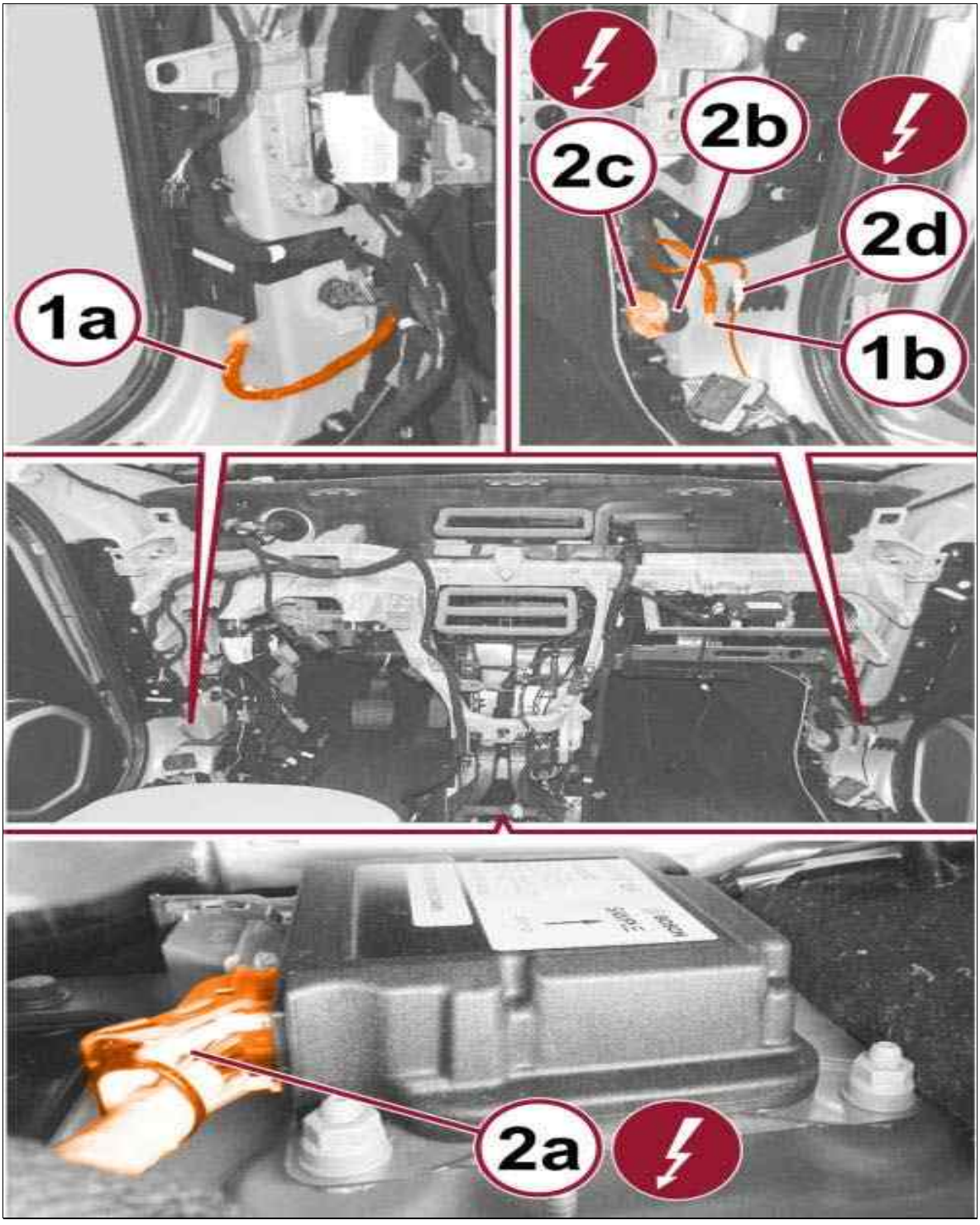
Fig 1: Bolt In Engine Compartment



Courtesy of CHRYSLER GROUP, LLC

1. Remove the front doors. Refer to DOOR, REMOVAL AND INSTALLATION .
2. Remove the instrument panel cover. Refer to COVER, INSTRUMENT PANEL, REMOVAL AND INSTALLATION .
3. Remove the cowl side trim panels. Refer to PANEL, COWL TRIM, REMOVAL AND INSTALLATION .
4. In the engine compartment, remove the bolt (1).

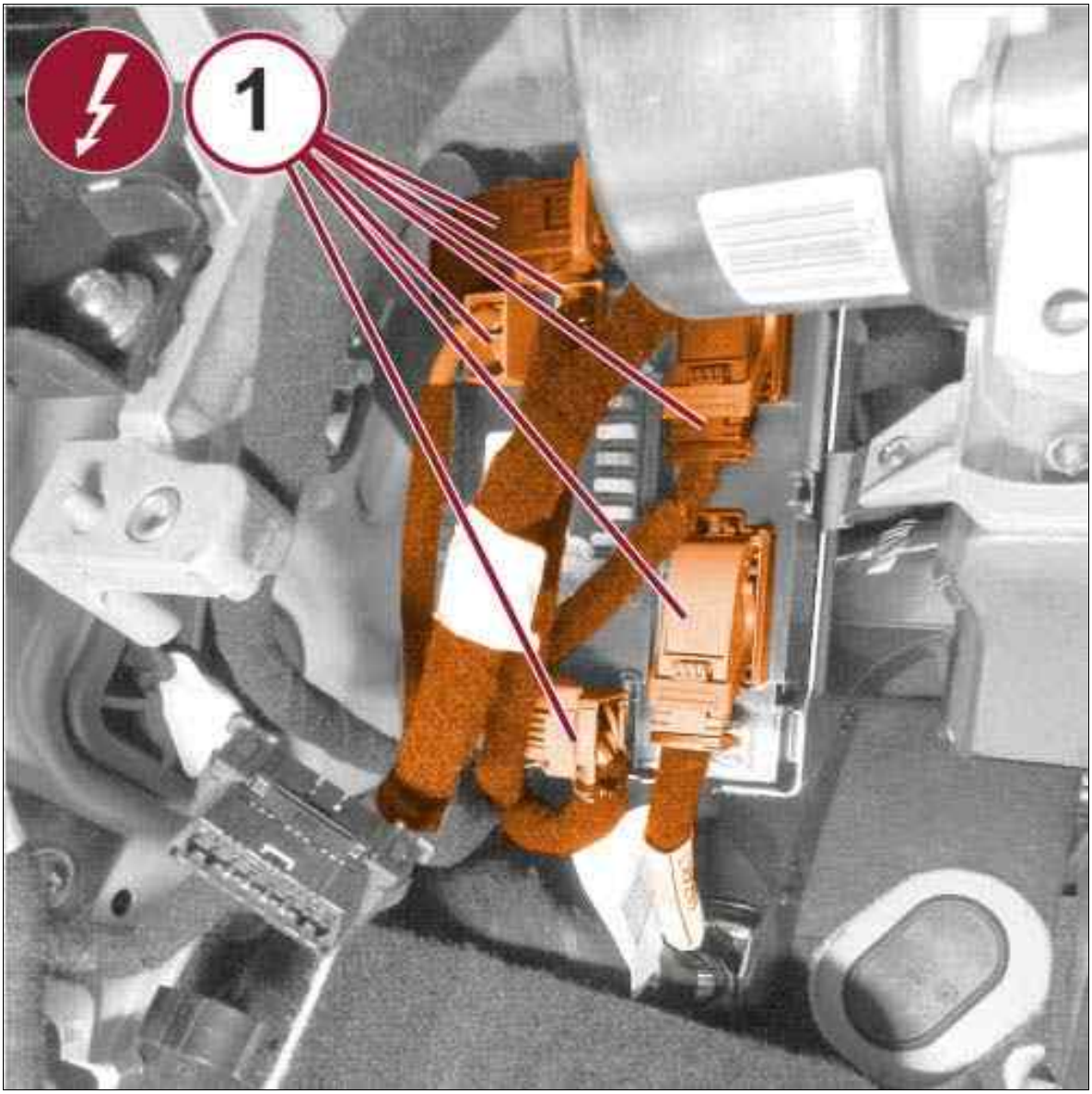
Fig 2: Ground Straps & Connectors



Courtesy of CHRYSLER GROUP, LLC

5. On the left side of vehicle, remove the nut and the ground strap (1a).
6. On the right side of vehicle, remove the nut and the ground strap (1b).
7. Disconnect the wire harness connectors (2c and 2d).
8. Disconnect the wire harness connector (2a) from the airbag control module.

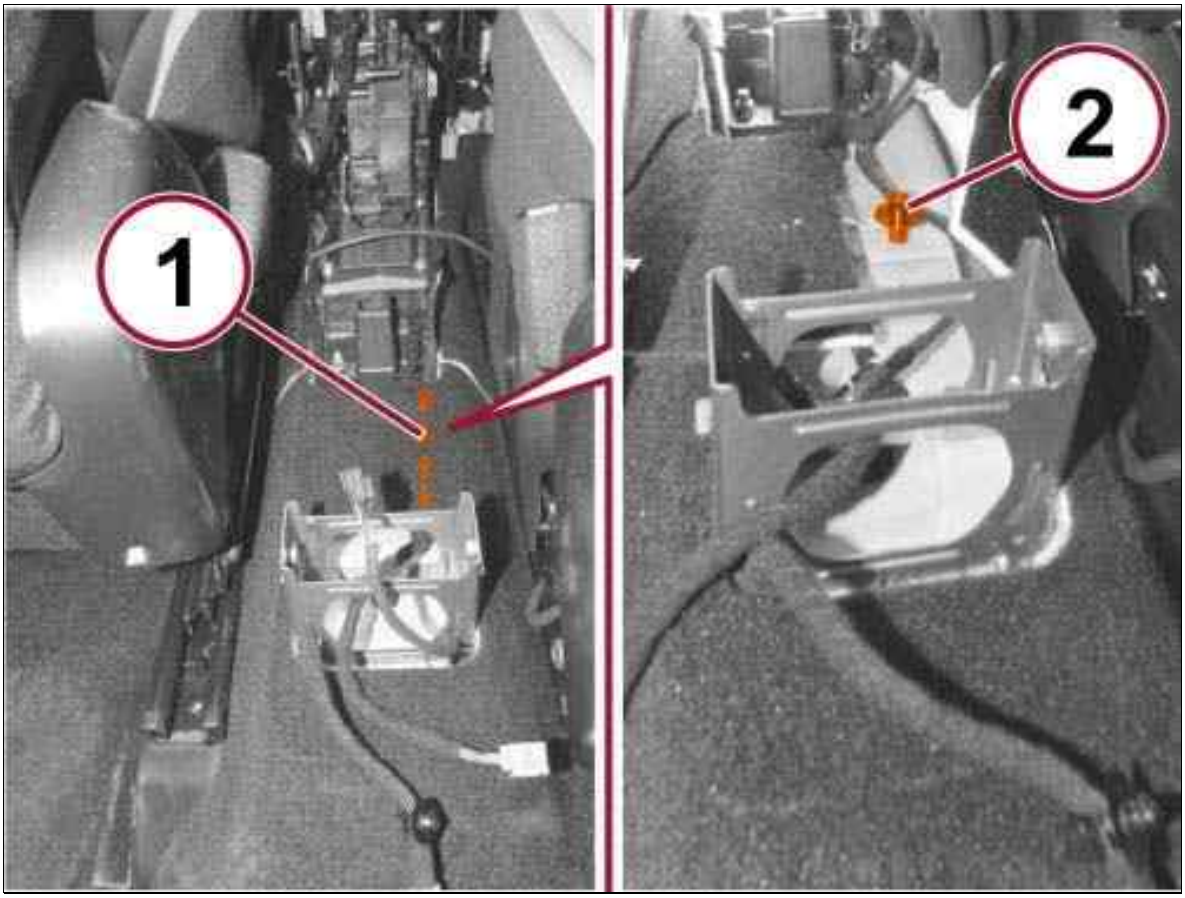
Fig 3: BCM Wire Harness Connectors



Courtesy of CHRYSLER GROUP, LLC

9. Disconnect the wire harness connectors (1) from the BCM.

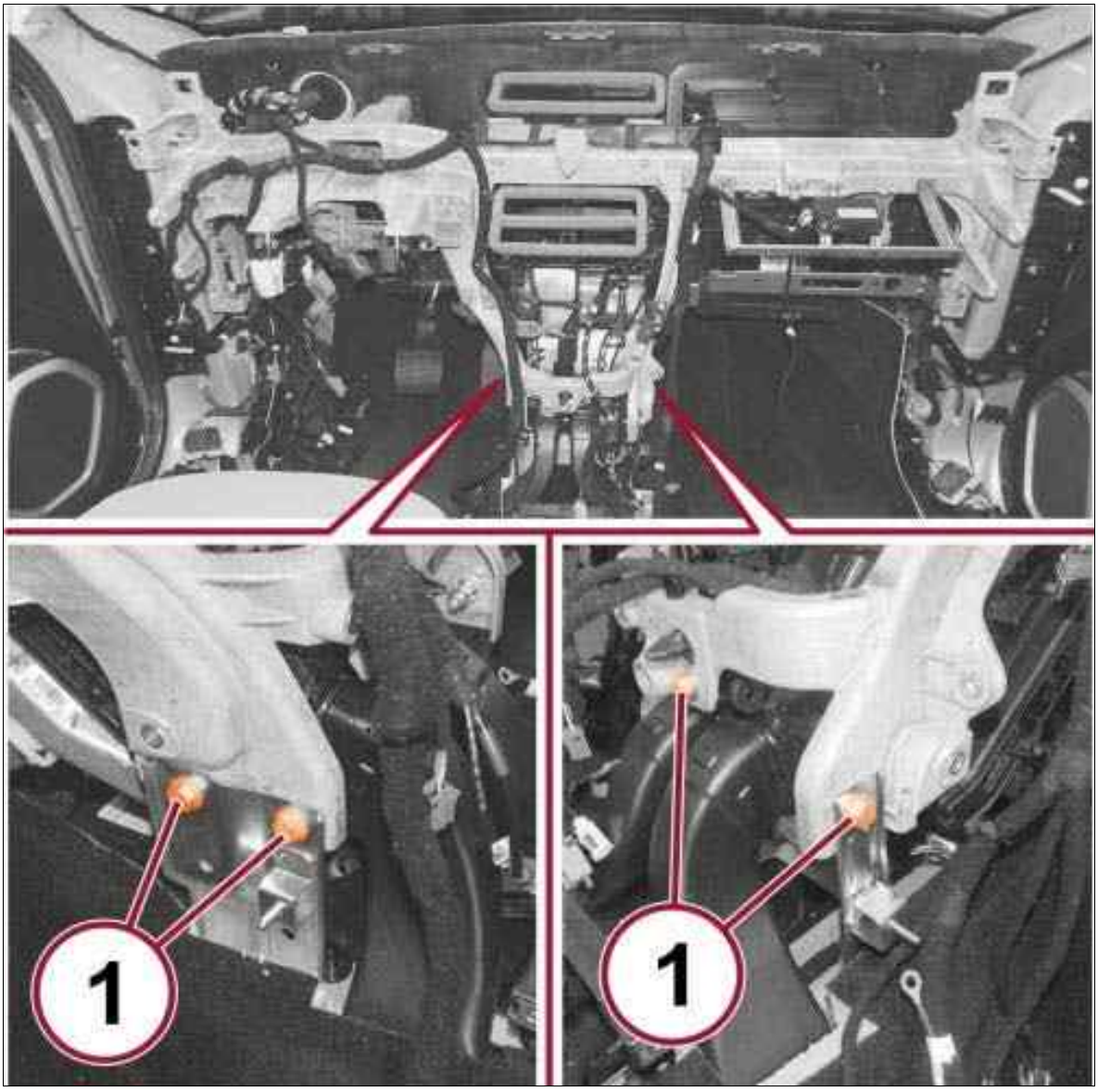
Fig 4: Area To Cut Carpet & Wire Harness



Courtesy of CHRYSLER GROUP, LLC

10. Cut the carpet along the line (1).
11. Unclip the wire harness (2) from the body.

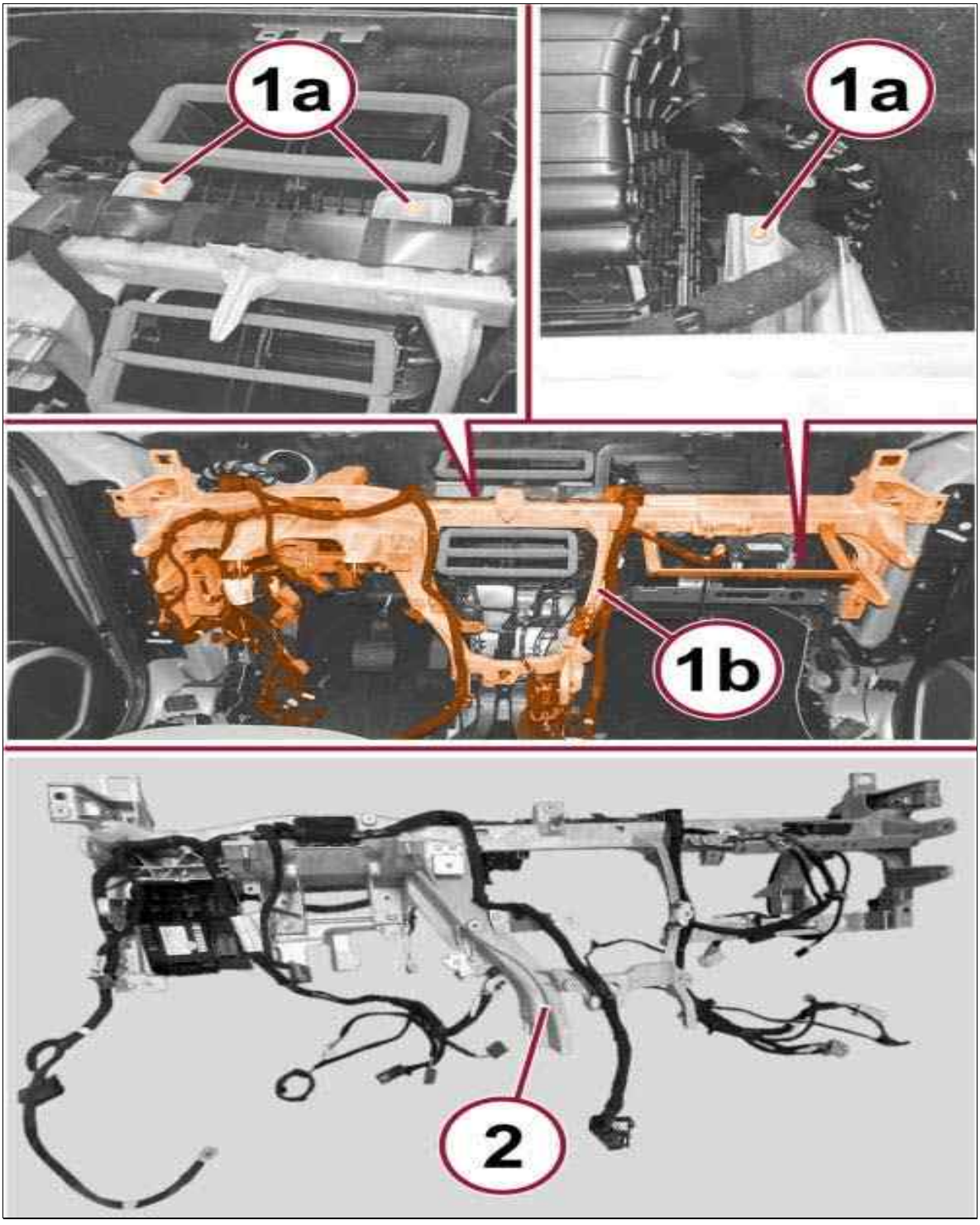
Fig 5: Instrument Panel Brackets Bolts



Courtesy of CHRYSLER GROUP, LLC

12. Remove the bolts (1) from the instrument panel brackets.

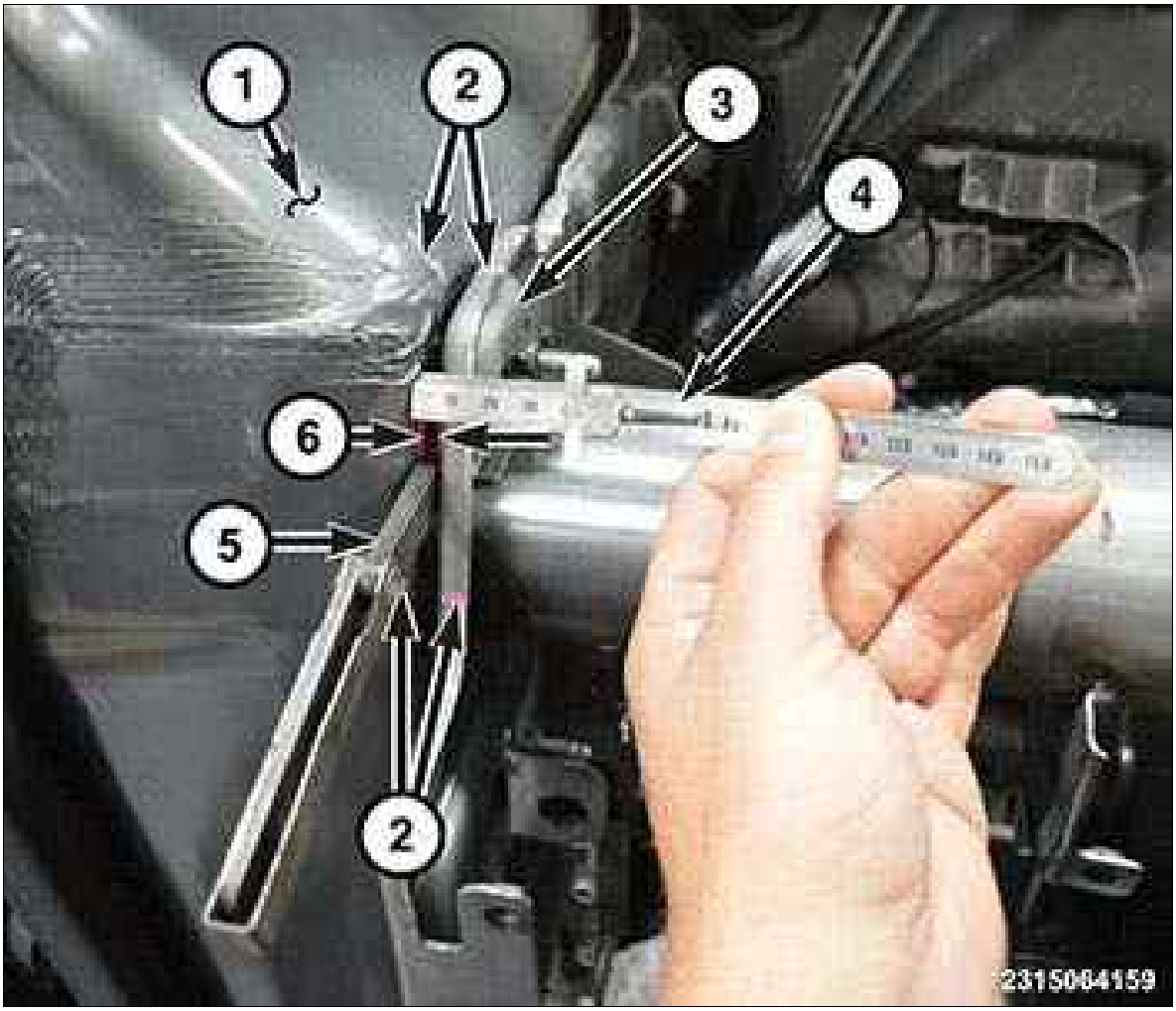
Fig 6: Instrument Panel Carrier & Bolts



Courtesy of CHRYSLER GROUP, LLC

13. Remove the bolts (1a) that secure the HVAC housing to the instrument panel carrier (1b).

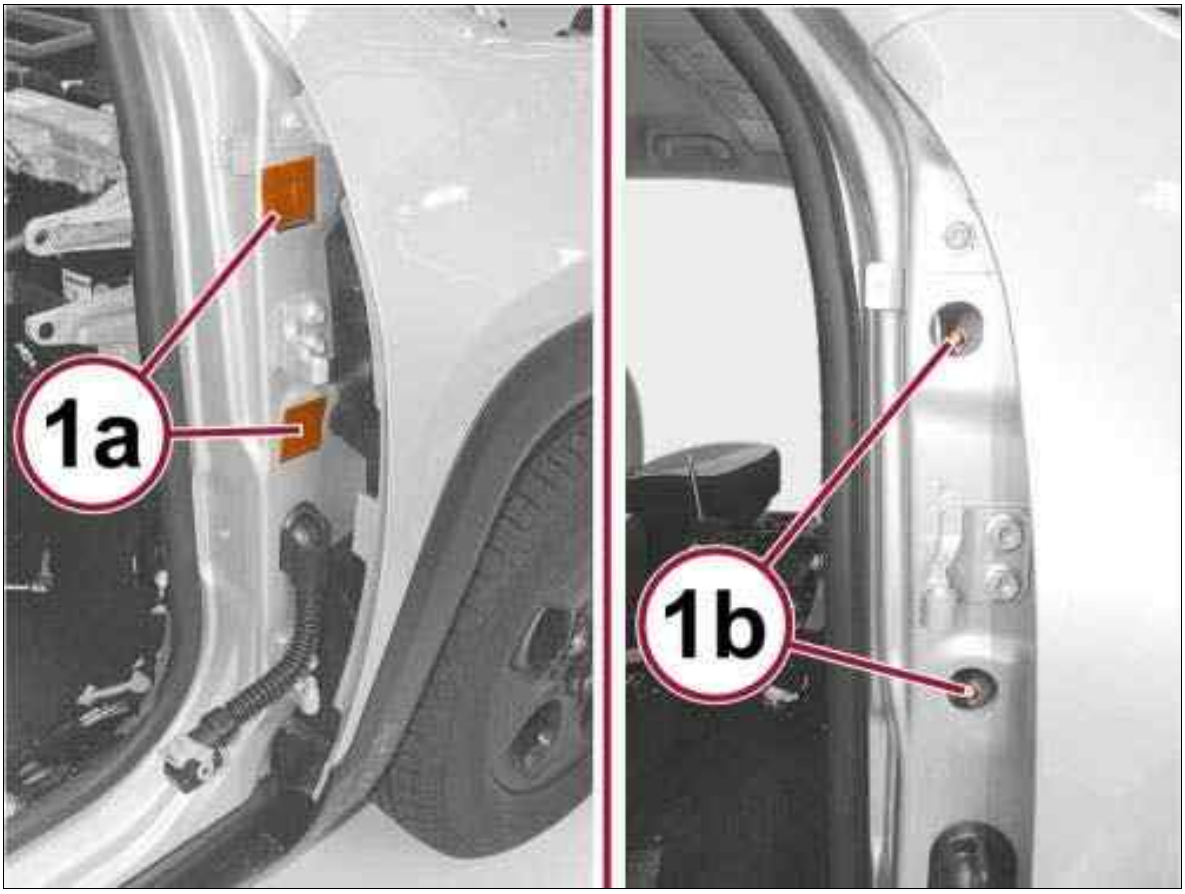
Fig 7: Positioning Instrument Panel Carrier To Body



Courtesy of CHRYSLER GROUP, LLC

14. Using a paint marker, mark (2) the position of the sides of the instrument panel carrier (3) to the body (1) to aid during installation.
15. Using a pocket ruler (4) or feeler gauge (5), measure and record the distance (6) from the instrument panel carrier to the body (1) on both sides of the vehicle, to aid during installation.

Fig 8: Bolts & Covers



Courtesy of CHRYSLER GROUP, LLC

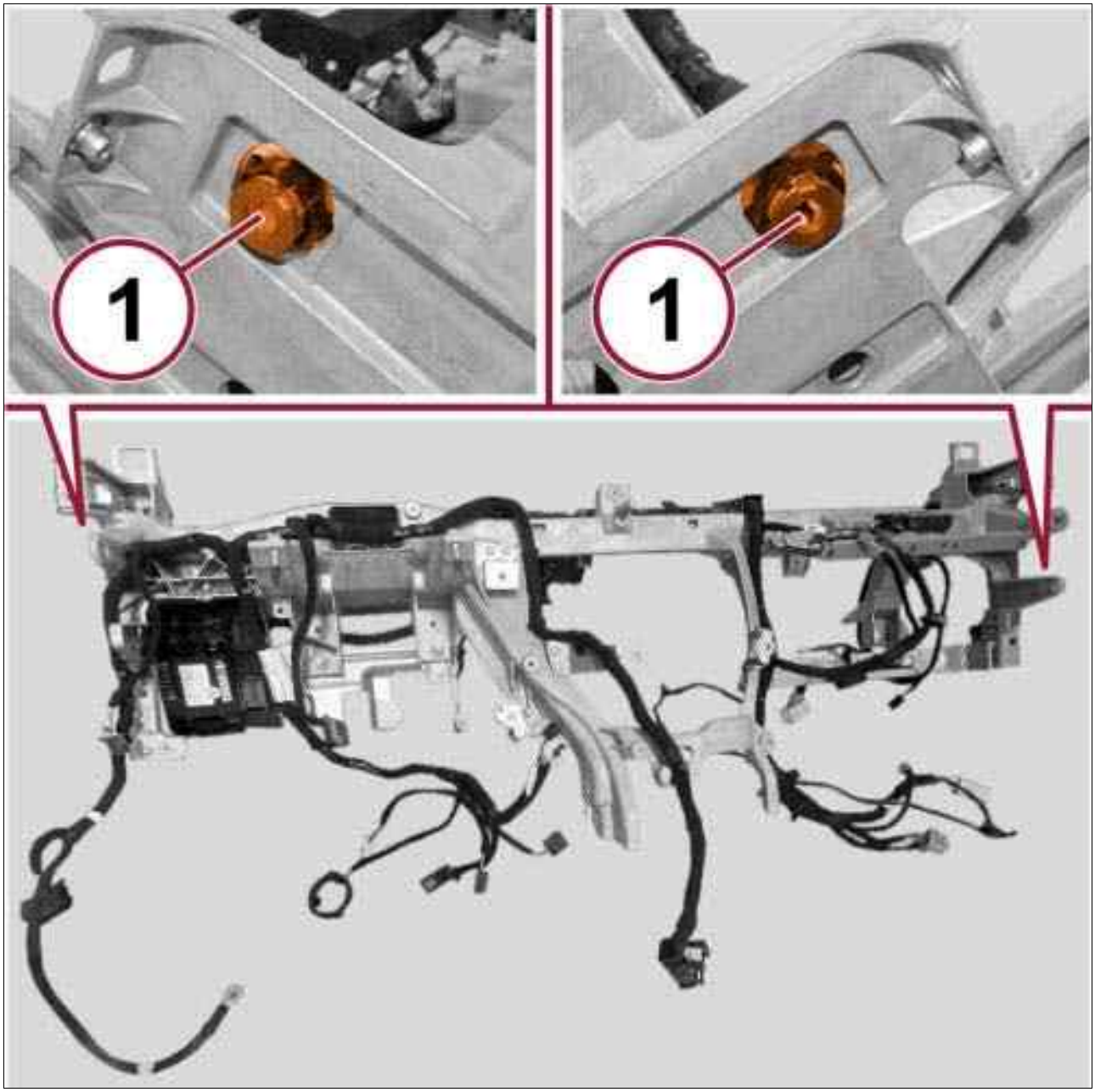
16. Remove the bolt hole covers (1a) on both side of the vehicle.
17. With the help of an assistant, one person on each side of the vehicle, loosen the bolts (1b) from both ends of the instrument panel carrier.
18. Carefully roll the instrument panel carrier slightly rearward to make sure there is nothing attached, then remove.

INSTRUMENT PANEL > CARRIER, INSTRUMENT PANEL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

NOTE:

Installation of the instrument panel carrier will require three people. One on each end and one in the middle.

Fig 1: Centering Bushings



Courtesy of CHRYSLER GROUP, LLC

1. Verify that the four centering bushings (1) are fully screwed in and rotate freely.

> *NOTE:*
>
> *The resetting of the centering bushings allows the instrument panel carrier to be installed properly using the measurements taken during removal.*

> *NOTE:*

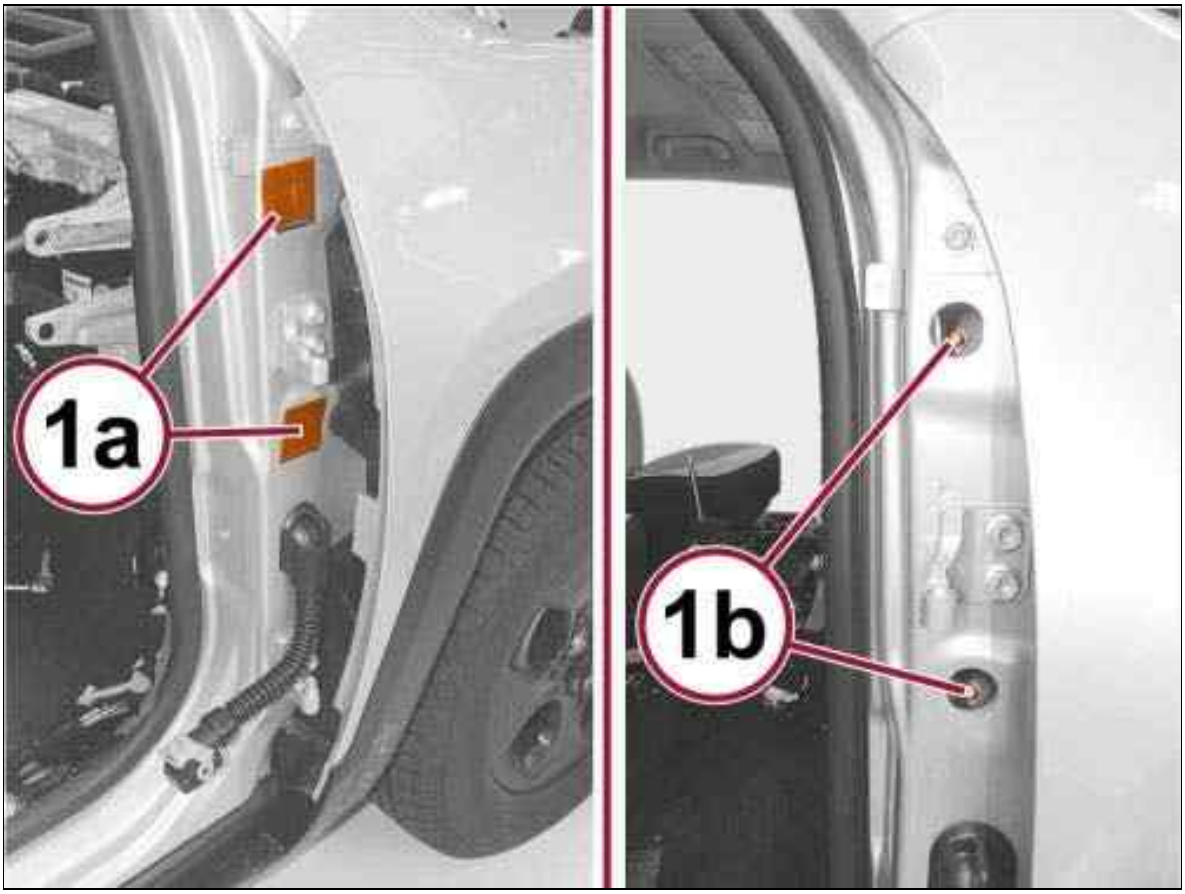
Inspect the centering bushings and replace if necessary.

2. Position the instrument panel carrier into the vehicle.

NOTE:

Make sure that all wiring harnesses are routed properly and are not pinched when installing the instrument panel carrier.

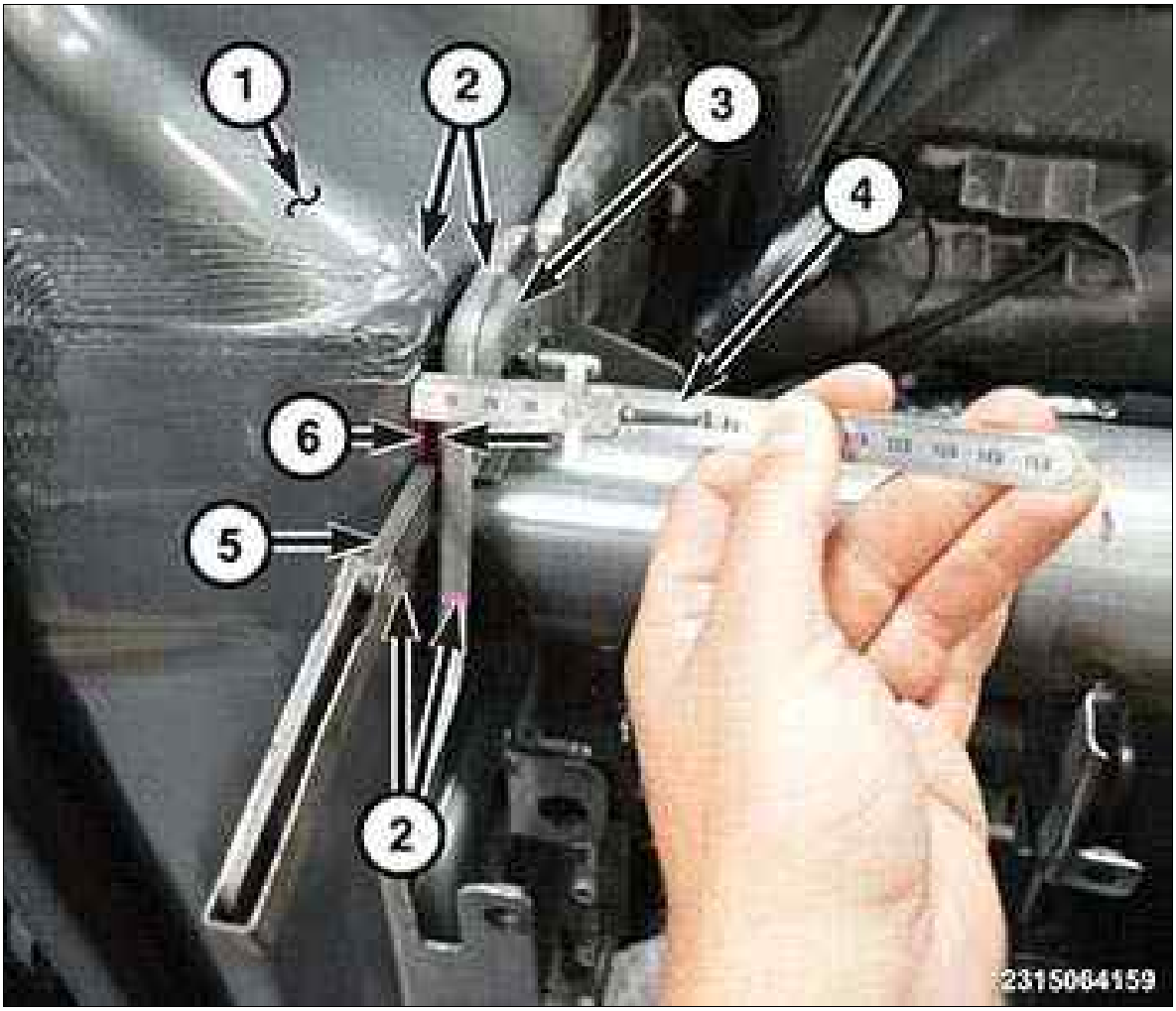
Fig 2: Bolts & Covers



Courtesy of CHRYSLER GROUP, LLC

3. Start the bolts (1b) on both sides of the vehicle. Do not tighten the bolt until the instrument panel carrier is positioned properly.

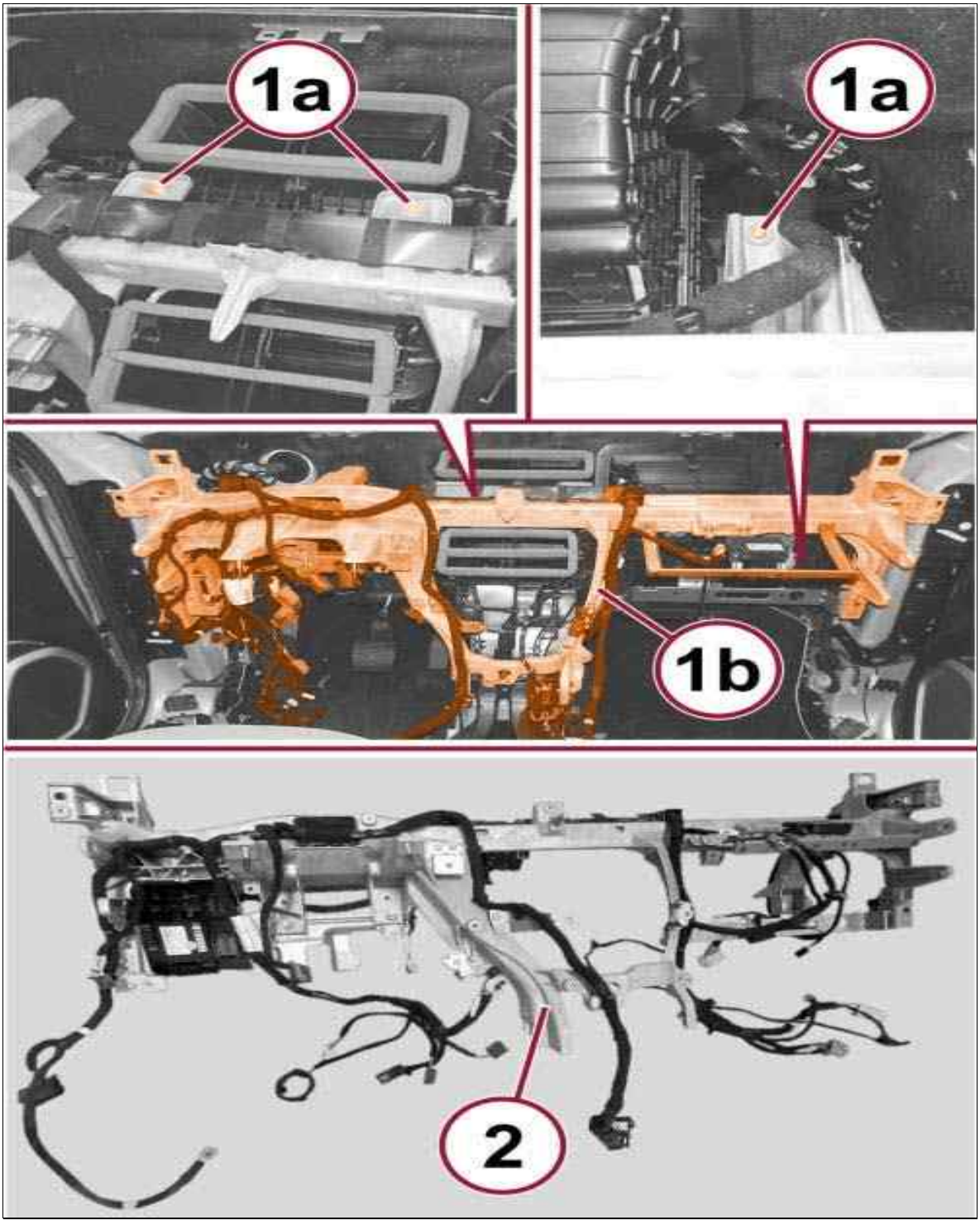
Fig 3: Positioning Instrument Panel Carrier To Body



Courtesy of CHRYSLER GROUP, LLC

4. Using a pocket ruler (4) or feeler gauge (5), position the instrument panel carrier (3) to the body (1) as noted during removal.
5. Align the marks (2) made during removal.
6. Tighten the carrier bolts gradually. This will allow the centering bushings to recover the clearances between the instrument panel carrier and the body correctly.
7. Once all four bolts are secured, tighten the instrument panel carrier bolts to the proper specification. Refer to SPECIFICATIONS .

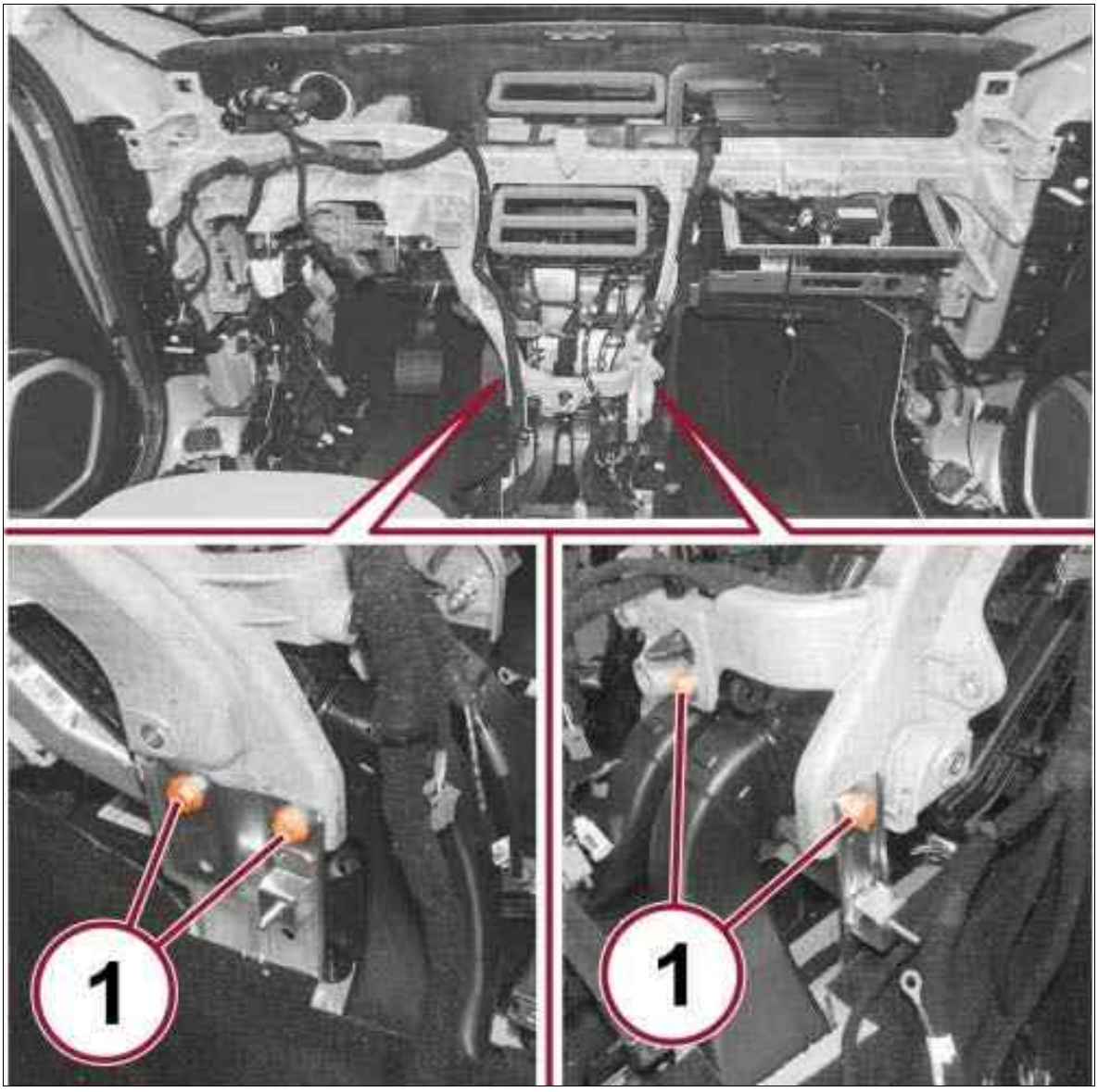
Fig 4: Instrument Panel Carrier & Bolts



Courtesy of CHRYSLER GROUP, LLC

8. Install the bolts (1a) that secure the instrument panel carrier (1b) to the HVAC housing and tighten securely.

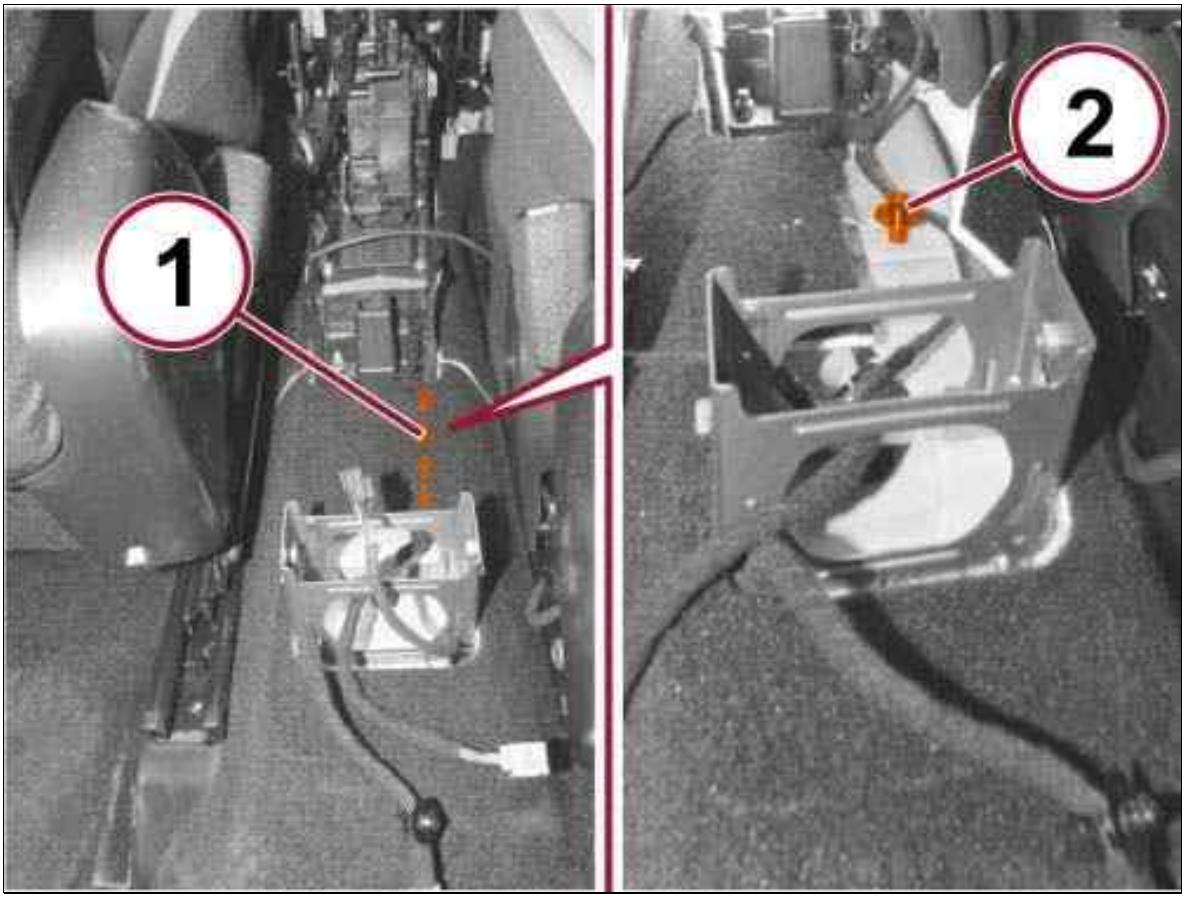
Fig 5: Instrument Panel Brackets Bolts



Courtesy of CHRYSLER GROUP, LLC

9. Install the bolts (1) at the center of the instrument panel and tighten securely.

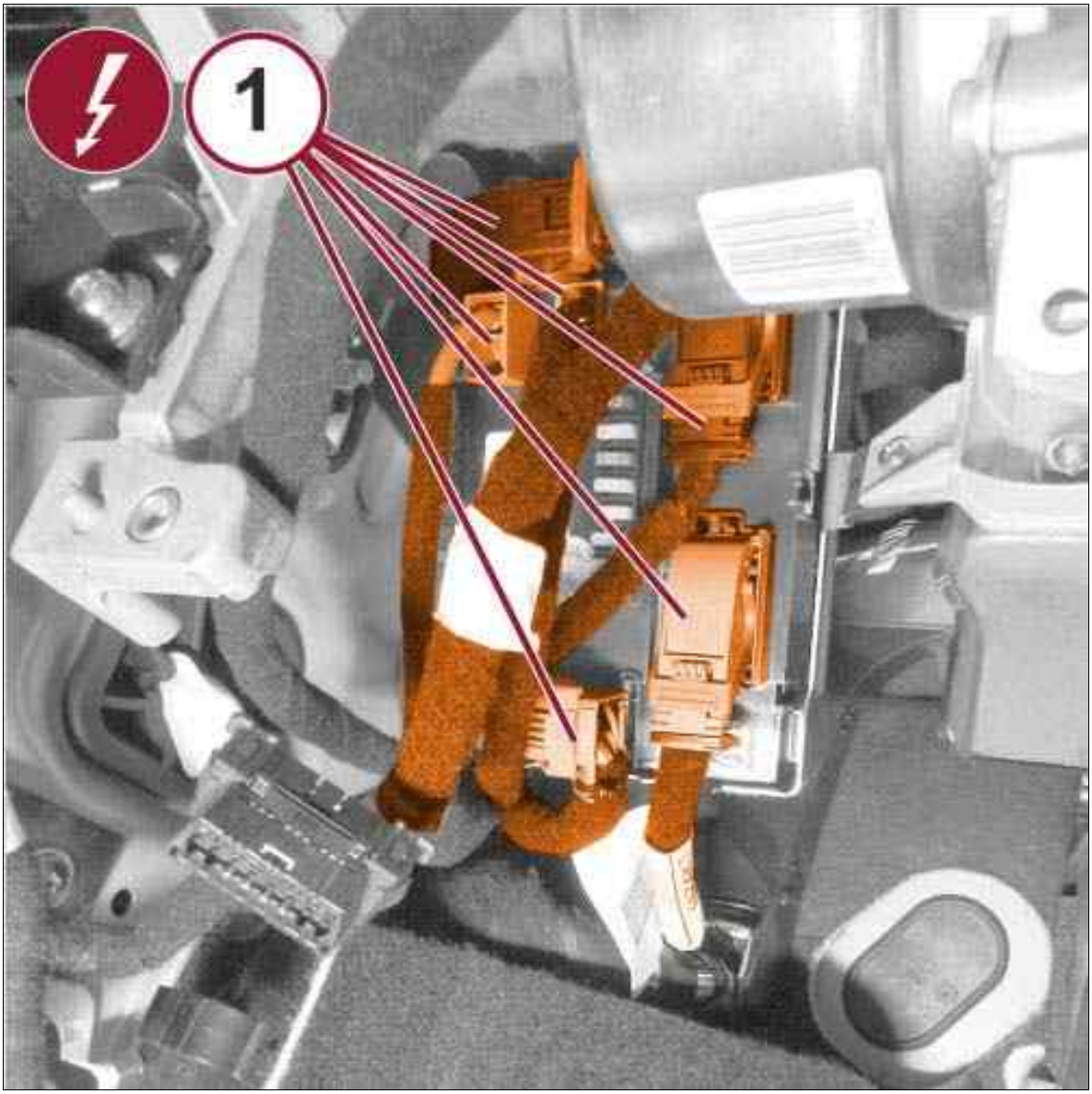
Fig 6: Area To Cut Carpet & Wire Harness



Courtesy of CHRYSLER GROUP, LLC

10. Route and clip the wire harness (2) to the body.

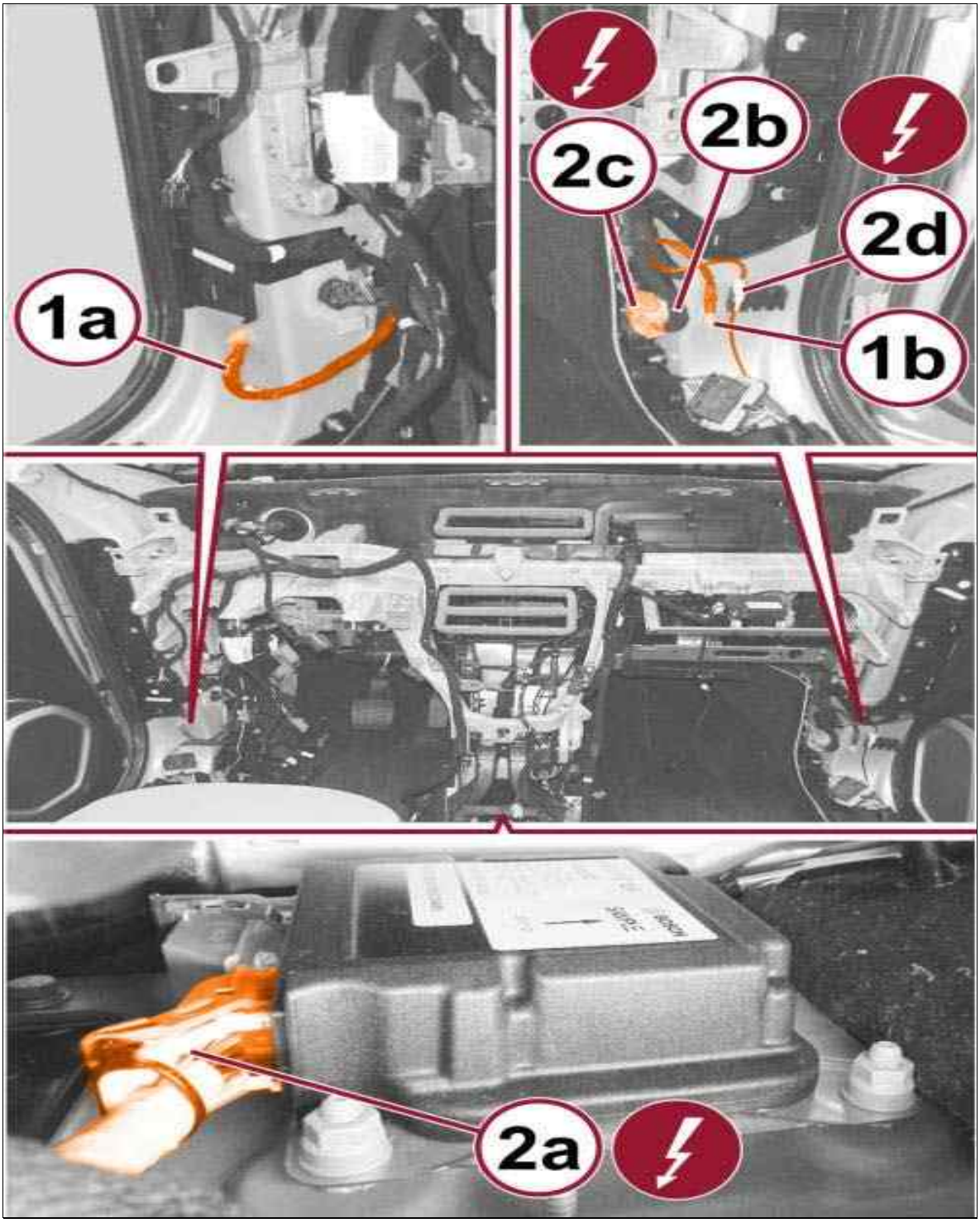
Fig 7: BCM Wire Harness Connectors



Courtesy of CHRYSLER GROUP, LLC

11. Connect the wire harness connectors (1) to the Body Control Module.

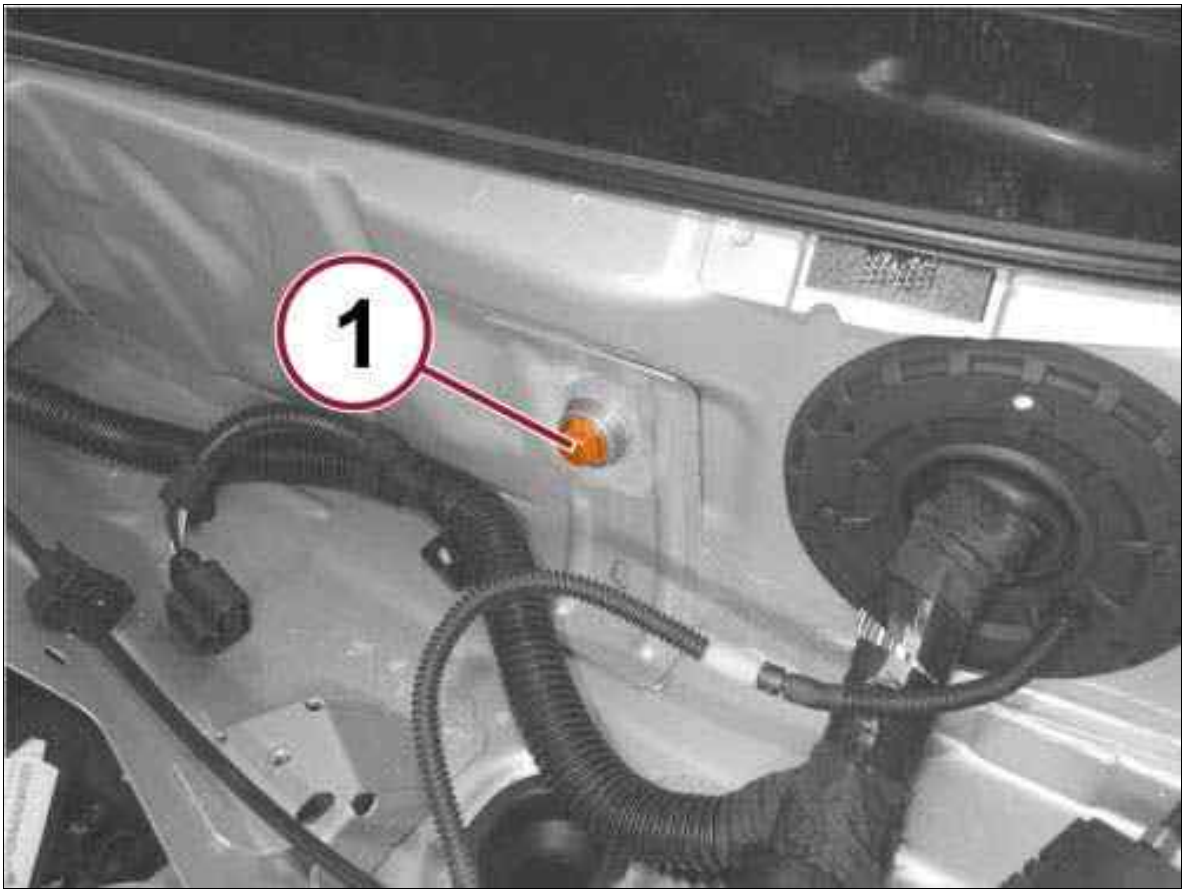
Fig 8: Ground Straps & Connectors



Courtesy of CHRYSLER GROUP, LLC

12. Connect the wiring harness connector (2a) to the airbag control module.
13. On the right side of vehicle, install the ground strap (1b) and nut. Tighten securely.
14. Connect the wire harness connectors (2c and 2d).
15. On the left side of vehicle, install the ground strap (1a) and nut. Tighten securely.

Fig 9: Bolt In Engine Compartment



Courtesy of CHRYSLER GROUP, LLC

16. In the engine compartment, install the bolt (1) and tighten securely.
17. Install the cowl side trim panels. Refer to PANEL, COWL TRIM, REMOVAL AND INSTALLATION .
18. Install the instrument panel cover. Refer to COVER, INSTRUMENT PANEL, REMOVAL AND INSTALLATION .
19. Install the front doors. Refer to DOOR, REMOVAL AND INSTALLATION .

INSTRUMENT PANEL > COVER, INSTRUMENT PANEL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

WARNING:

To avoid serious or fatal injury on vehicles equipped with airbags, disable the Supplemental Restraint System (SRS) before attempting any steering wheel, steering column, airbag, Occupant Classification System (OCS), seat belt tensioner, impact sensor or instrument panel component diagnosis or service. Refer to WARNING . Disconnect and isolate the battery negative (ground) cable, then wait two minutes for the system capacitor to discharge before performing further diagnosis or service. This is the only sure way to disable the SRS.

Failure to follow these instructions may result in accidental airbag deployment.

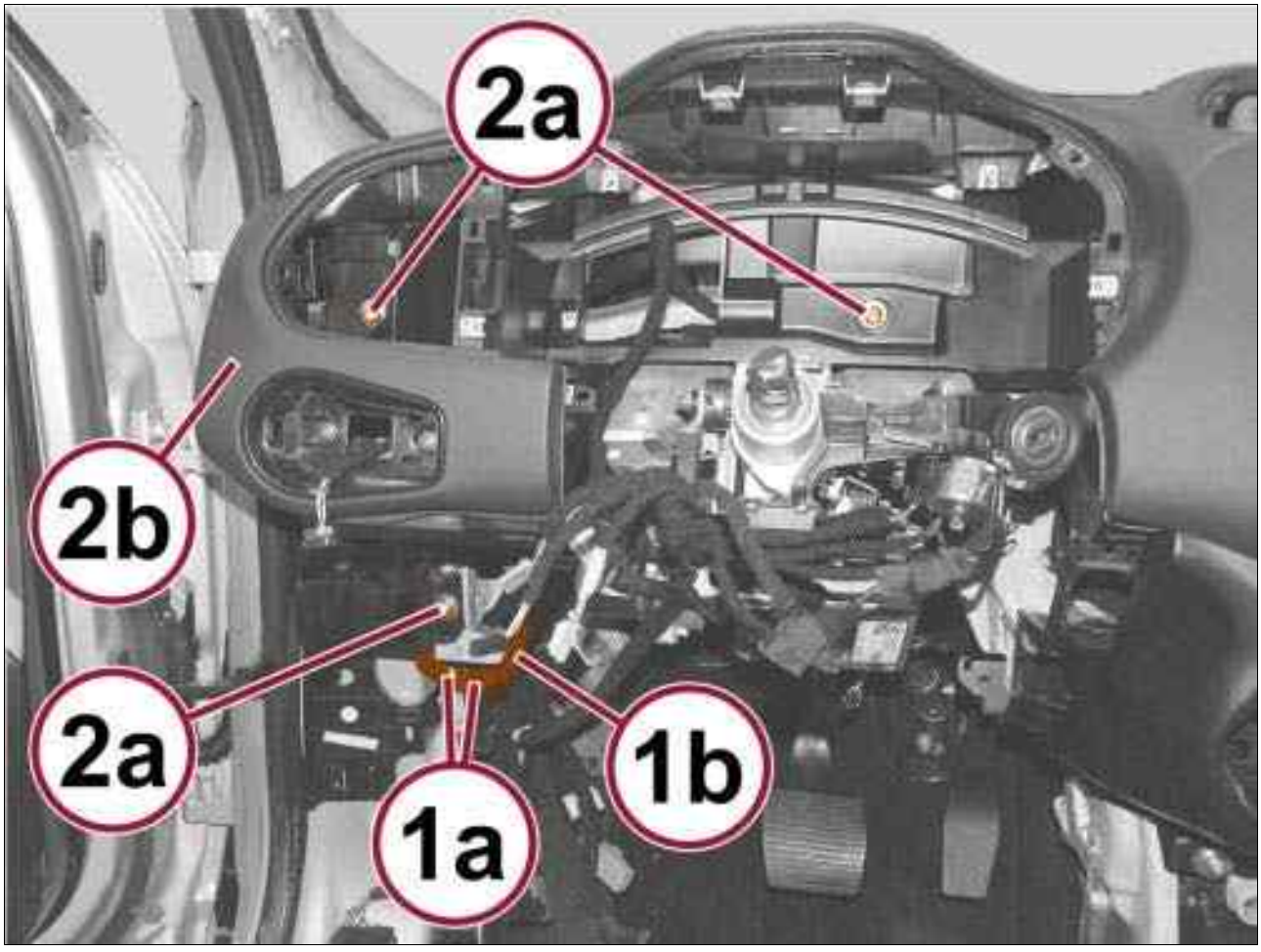
WARNING:

To avoid serious or fatal injury when removing a deployed airbag, rubber gloves, eye protection, and a long-sleeved shirt should be worn. There may be deposits on the airbag unit and other interior surfaces. In large doses, these deposits may cause irritation to the skin and eyes.

WARNING:

To avoid serious or fatal injury, use extreme care to prevent any foreign material from entering the passenger airbag, or becoming entrapped between the passenger airbag cushion and the instrument panel top pad. Failure to observe this warning could result in occupant injuries upon airbag deployment.

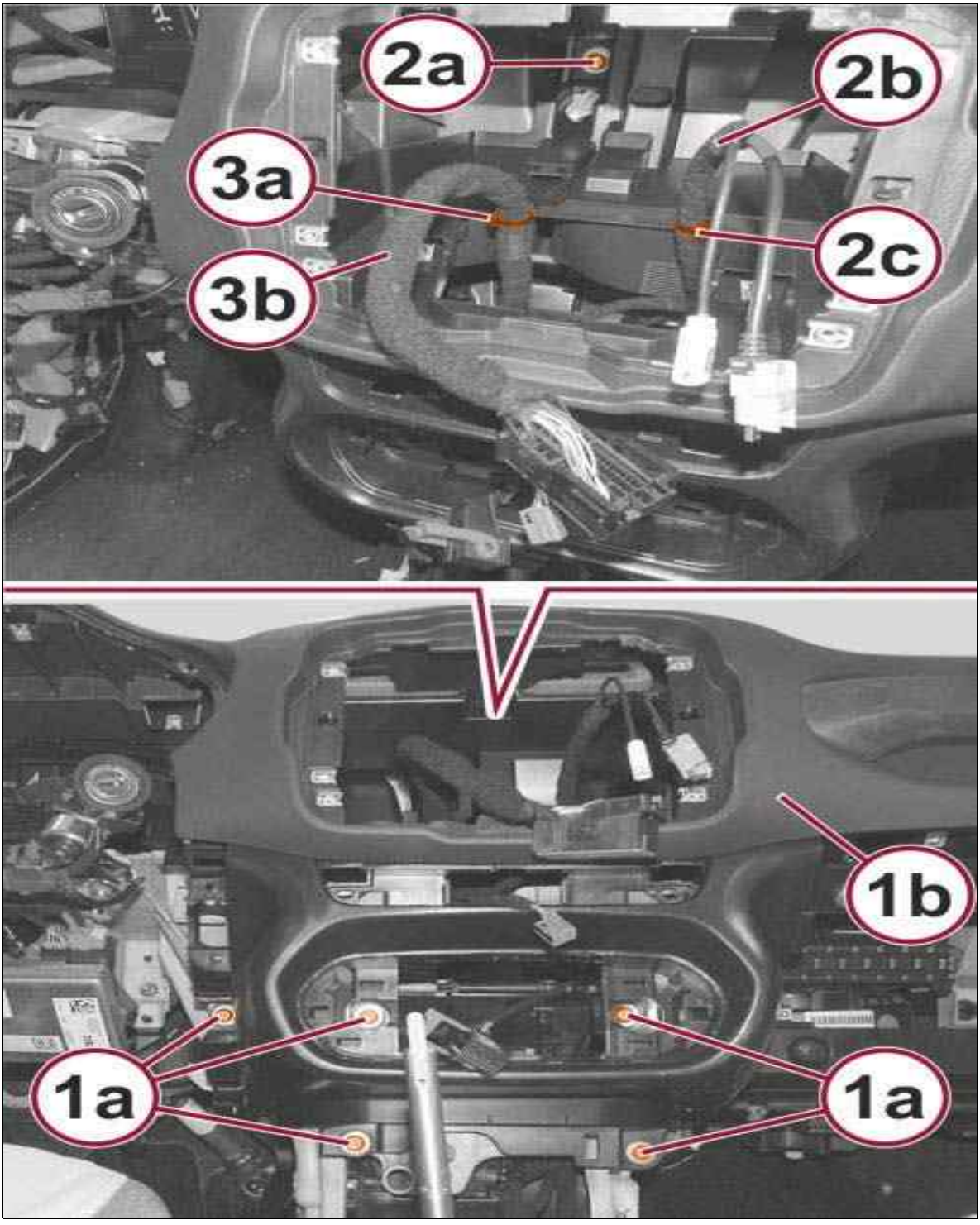
Fig 1: Wire Harness & Screws



Courtesy of CHRYSLER GROUP, LLC

1. Remove the instrument cluster. Refer to REMOVAL AND INSTALLATION .
2. Remove the clockspring. Refer to CLOCKSPRING, REMOVAL AND INSTALLATION .
3. Remove the floor console. Refer to CONSOLE, FLOOR, REMOVAL AND INSTALLATION .
4. Remove the switch pod. Refer to POD, SWITCH, REMOVAL AND INSTALLATION .
5. Remove the radio. Refer to RADIO, REMOVAL AND INSTALLATION .
6. Remove the A/C and Heater controls. Refer to CONTROL, A/C AND HEATER, REMOVAL AND INSTALLATION .
7. Remove the center air outlet and right side air outlet. Refer to OUTLET, AIR, REMOVAL AND INSTALLATION .
8. Remove the screws (2a) and unclip the wire harness (1a and 1b).

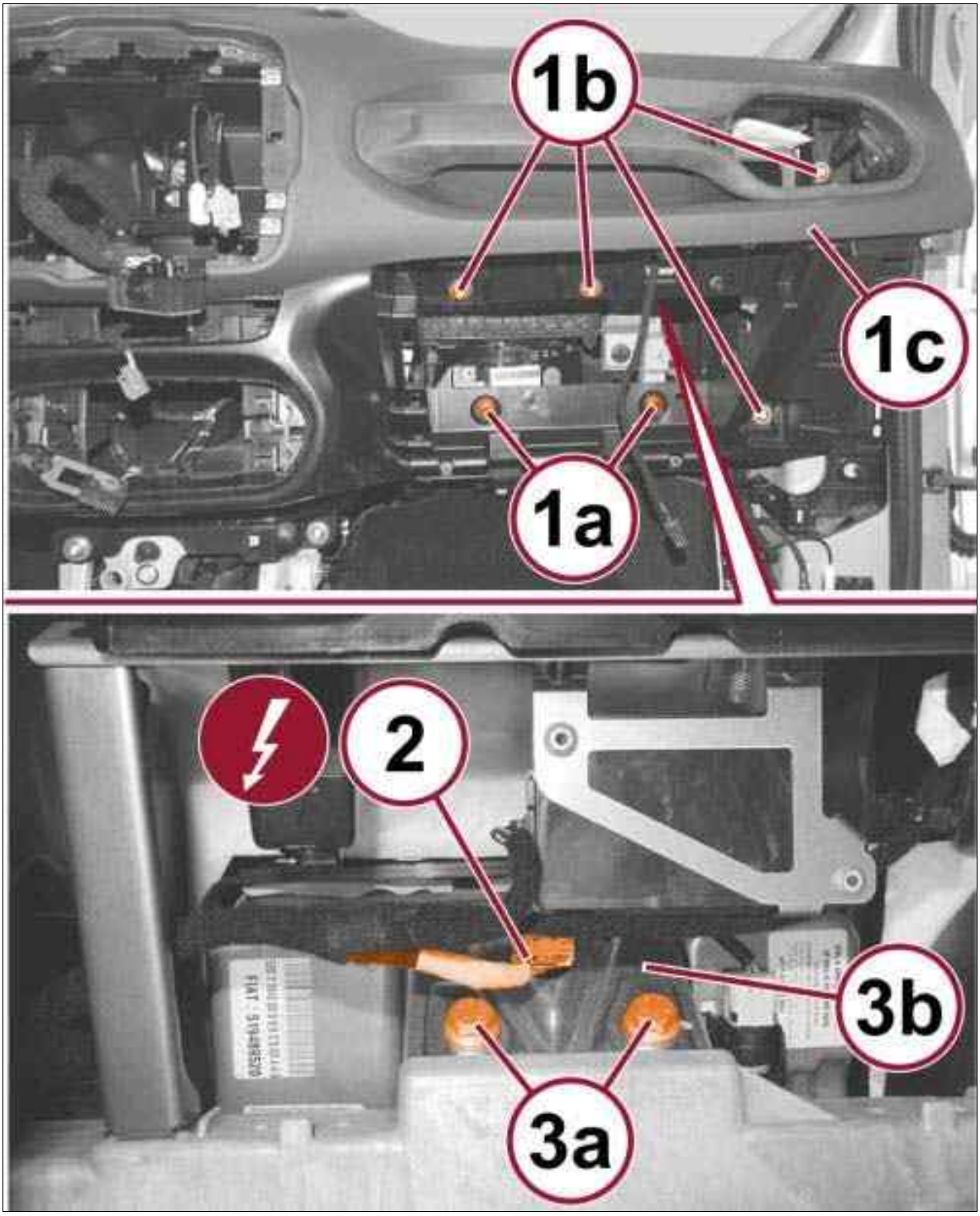
Fig 2: Wire Harness Clips & Screws



Courtesy of CHRYSLER GROUP, LLC

9. Remove the screws (1a and 2a).
10. Unclip the wire harness (2c and 3a).

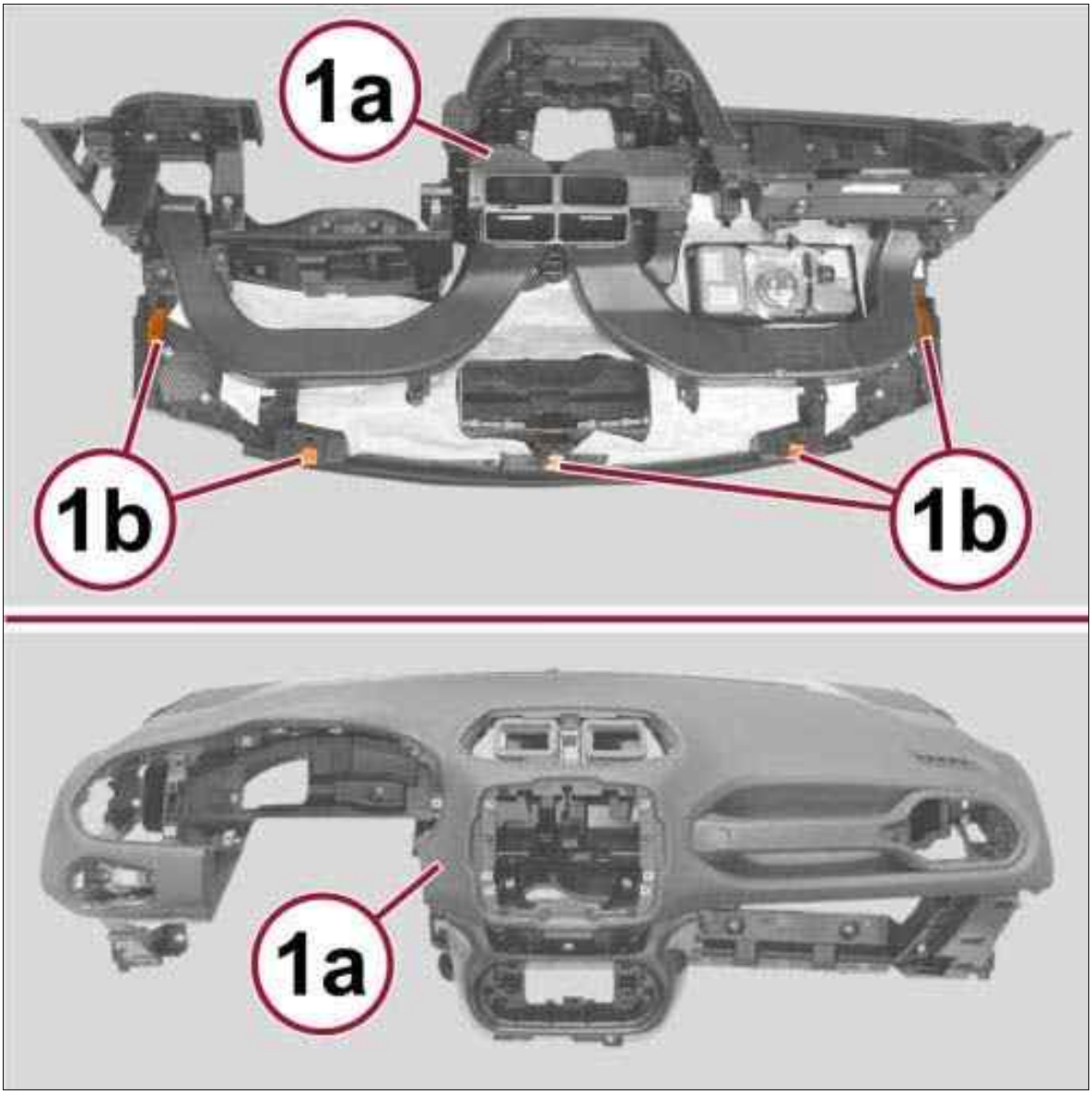
Fig 3: Passenger Airbag Bolts, Connector & Screws



Courtesy of CHRYSLER GROUP, LLC

11. Remove the screws (1a and 1b).
12. Remove the two passenger airbag bolts (3a).
13. Disconnect the passenger airbag wire harness connector (2).

Fig 4: Instrument Panel Cover & Clips



Courtesy of CHRYSLER GROUP, LLC

14. Release the retaining clips (1b) and carefully remove the instrument panel cover (1a) from the instrument panel carrier.

INSTRUMENT PANEL > COVER, INSTRUMENT PANEL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

WARNING:

To avoid serious or fatal injury on vehicles equipped with airbags, disable the Supplemental Restraint System (SRS) before attempting any steering wheel, steering column, airbag, Occupant Classification System (OCS), seat belt tensioner, impact sensor or instrument panel component diagnosis or service. Refer to WARNING . Disconnect and isolate the

battery negative (ground) cable, then wait two minutes for the system capacitor to discharge before performing further diagnosis or service. This is the only sure way to disable the SRS. Failure to follow these instructions may result in accidental airbag deployment.

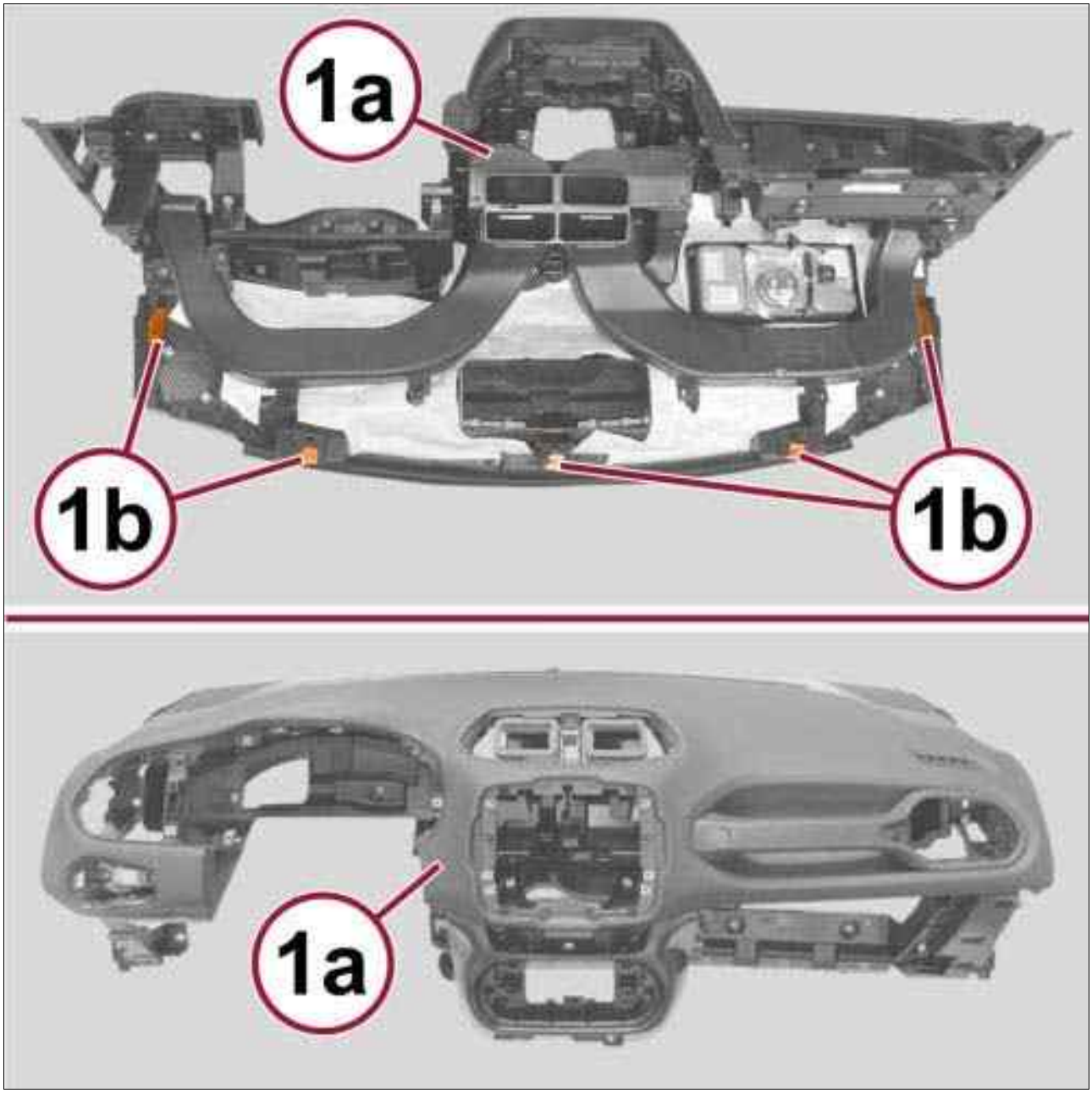
WARNING:

To avoid serious or fatal injury when removing a deployed airbag, rubber gloves, eye protection, and a long-sleeved shirt should be worn. There may be deposits on the airbag unit and other interior surfaces. In large doses, these deposits may cause irritation to the skin and eyes.

WARNING:

To avoid serious or fatal injury, use extreme care to prevent any foreign material from entering the passenger airbag, or becoming entrapped between the passenger airbag cushion and the instrument panel top pad. Failure to observe this warning could result in occupant injuries upon airbag deployment.

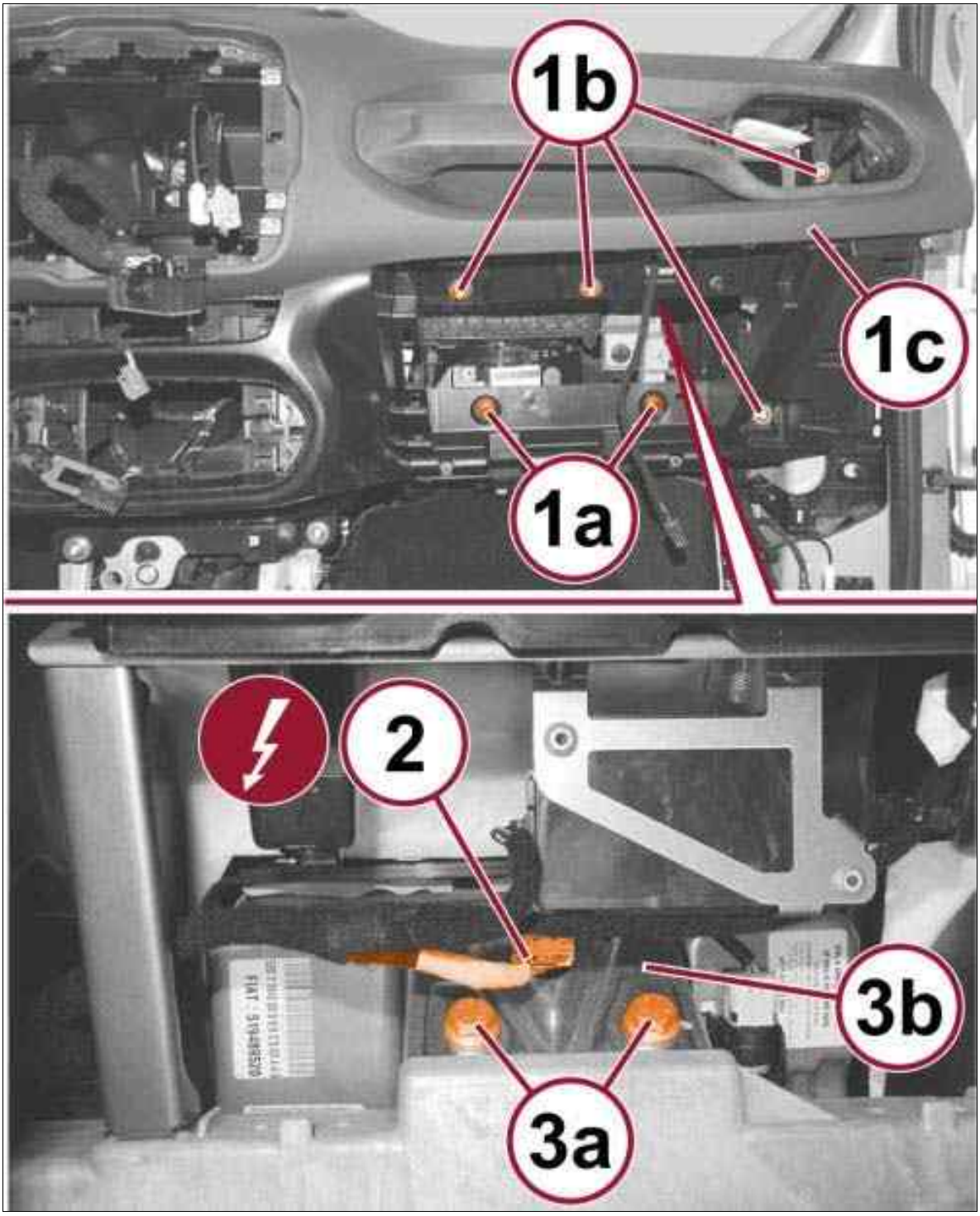
Fig 1: Instrument Panel Cover & Clips



Courtesy of CHRYSLER GROUP, LLC

1. Carefully position the instrument panel cover (1a) onto the instrument panel carrier and engage the retaining clips (1b).
2. Route the wire harness for the Radio, A/C controls, switch pod and instrument cluster through the instrument panel cover.

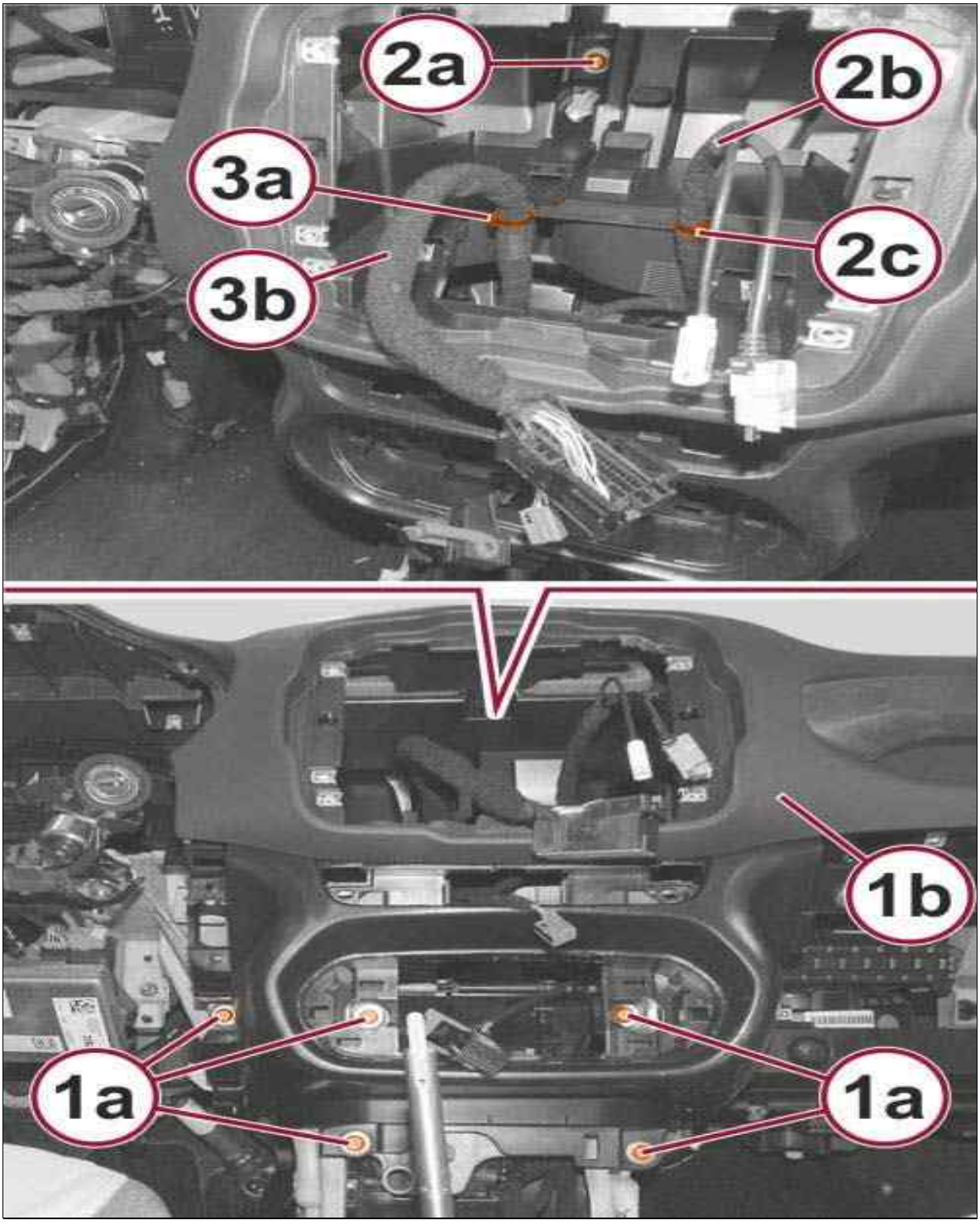
Fig 2: Passenger Airbag Bolts, Connector & Screws



Courtesy of CHRYSLER GROUP, LLC

3. Install the screws (1a and 1b) and tighten securely.
4. Install the two passenger airbag bolts (3a) and tighten to the proper specification. Refer to SPECIFICATIONS .
5. Connect the passenger airbag wire harness connectors (2).

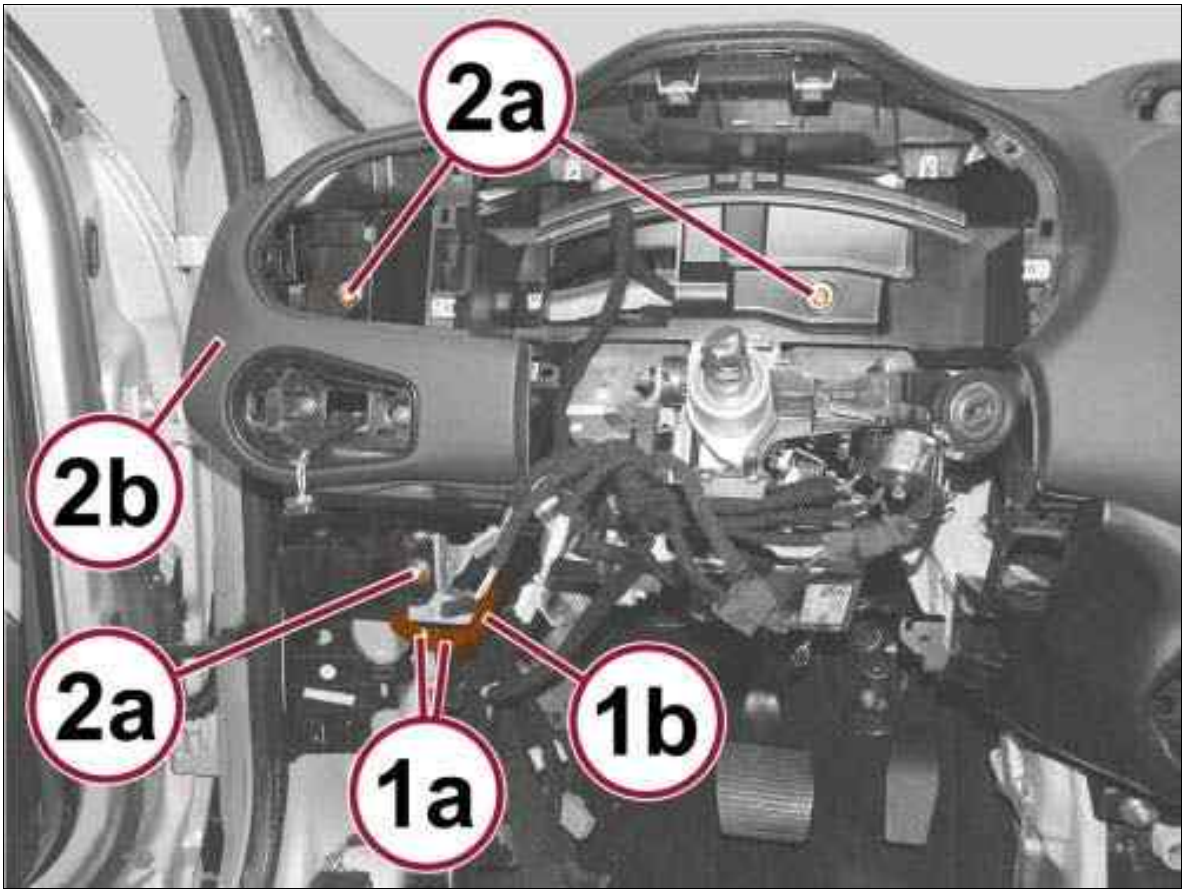
Fig 3: Wire Harness Clips & Screws



Courtesy of CHRYSLER GROUP, LLC

6. Install the screws (1a and 2a) and tighten securely.
7. Clip the wire harness (2c and 3a) to the instrument panel cover.

Fig 4: Wire Harness & Screws

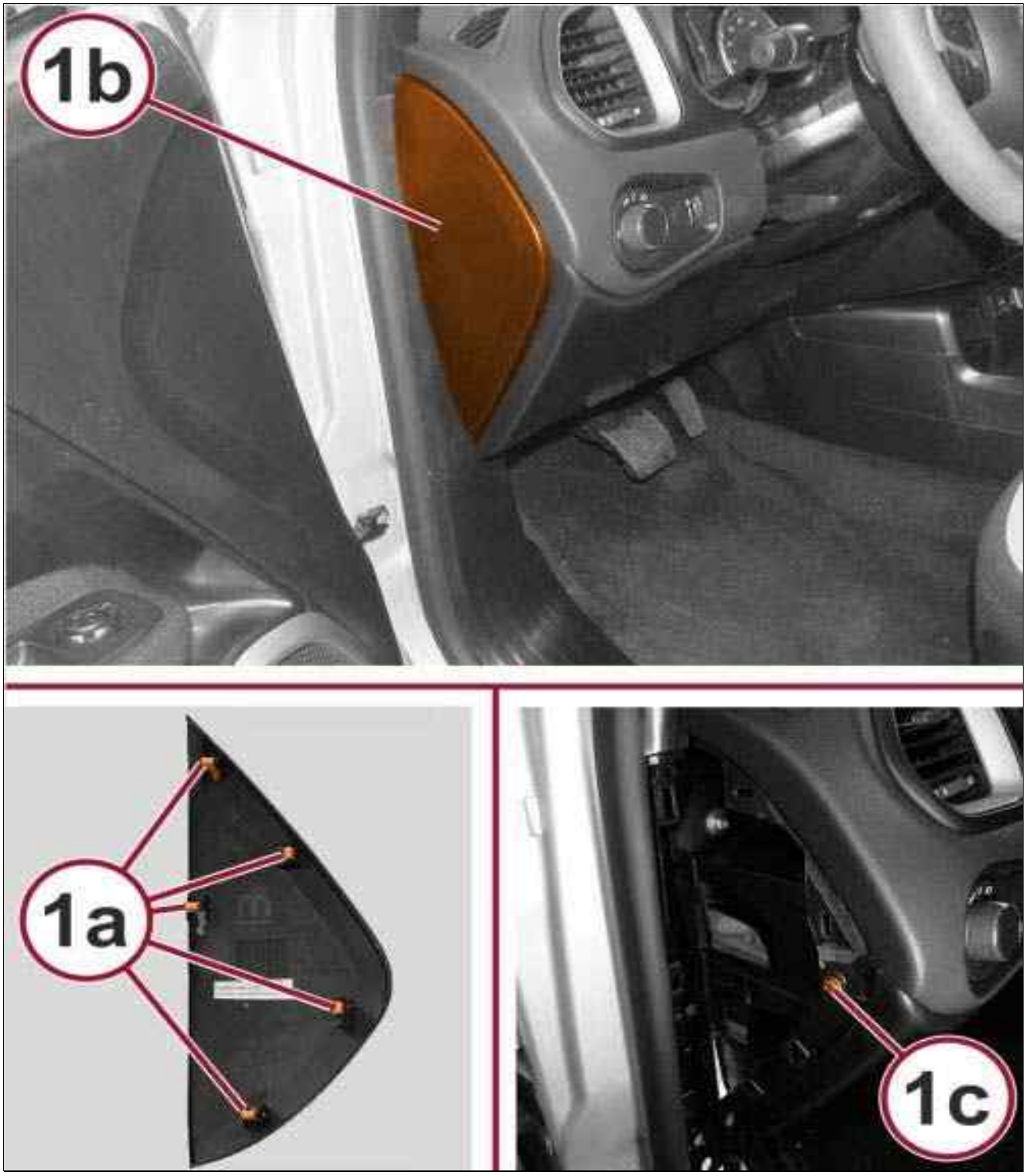


Courtesy of CHRYSLER GROUP, LLC

8. Install the screws (2a) and tighten securely.
9. Clip the wire harness (1a and 1b) to the instrument panel cover.
10. Install the center air outlet and right side air outlet. Refer to OUTLET, AIR, REMOVAL AND INSTALLATION .
11. Install the A/C and Heater controls. Refer to CONTROL, A/C AND HEATER, REMOVAL AND INSTALLATION .
12. Install the radio. Refer to RADIO, REMOVAL AND INSTALLATION .
13. Install the switch pod. Refer to POD, SWITCH, REMOVAL AND INSTALLATION .
14. Install the floor console. Refer to CONSOLE, FLOOR, REMOVAL AND INSTALLATION .
15. Install the clockspring. Refer to CLOCKSPRING, REMOVAL AND INSTALLATION .
16. Install the instrument cluster. Refer to REMOVAL AND INSTALLATION .
17. Do not reconnect the negative cable to the battery at this time. The Supplemental Restraint System (SRS) Verification Test procedure should be performed following service of any SRS component. Refer to SUPPLEMENTAL RESTRAINT SYSTEM VERIFICATION TEST .

INSTRUMENT PANEL > COVER, STEERING COLUMN OPENING > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

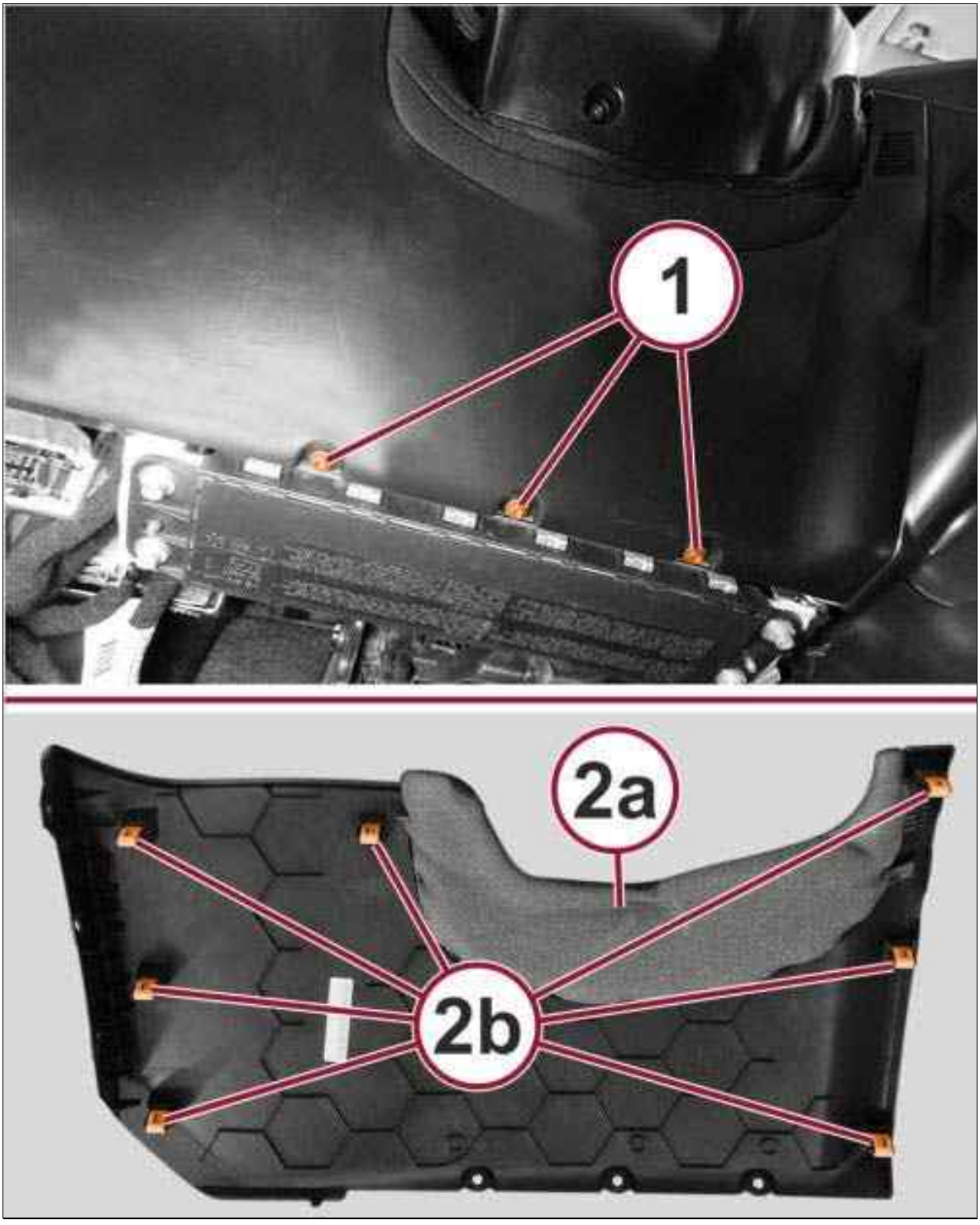
Fig 1: Instrument Panel Side Cover, Clips & Screw



Courtesy of CHRYSLER GROUP, LLC

1. Using a trim stick or equivalent, remove the instrument panel side cover (1b).
2. Remove the screw (1c).

Fig 2: Steering Column Opening Cover, Clips & Screws



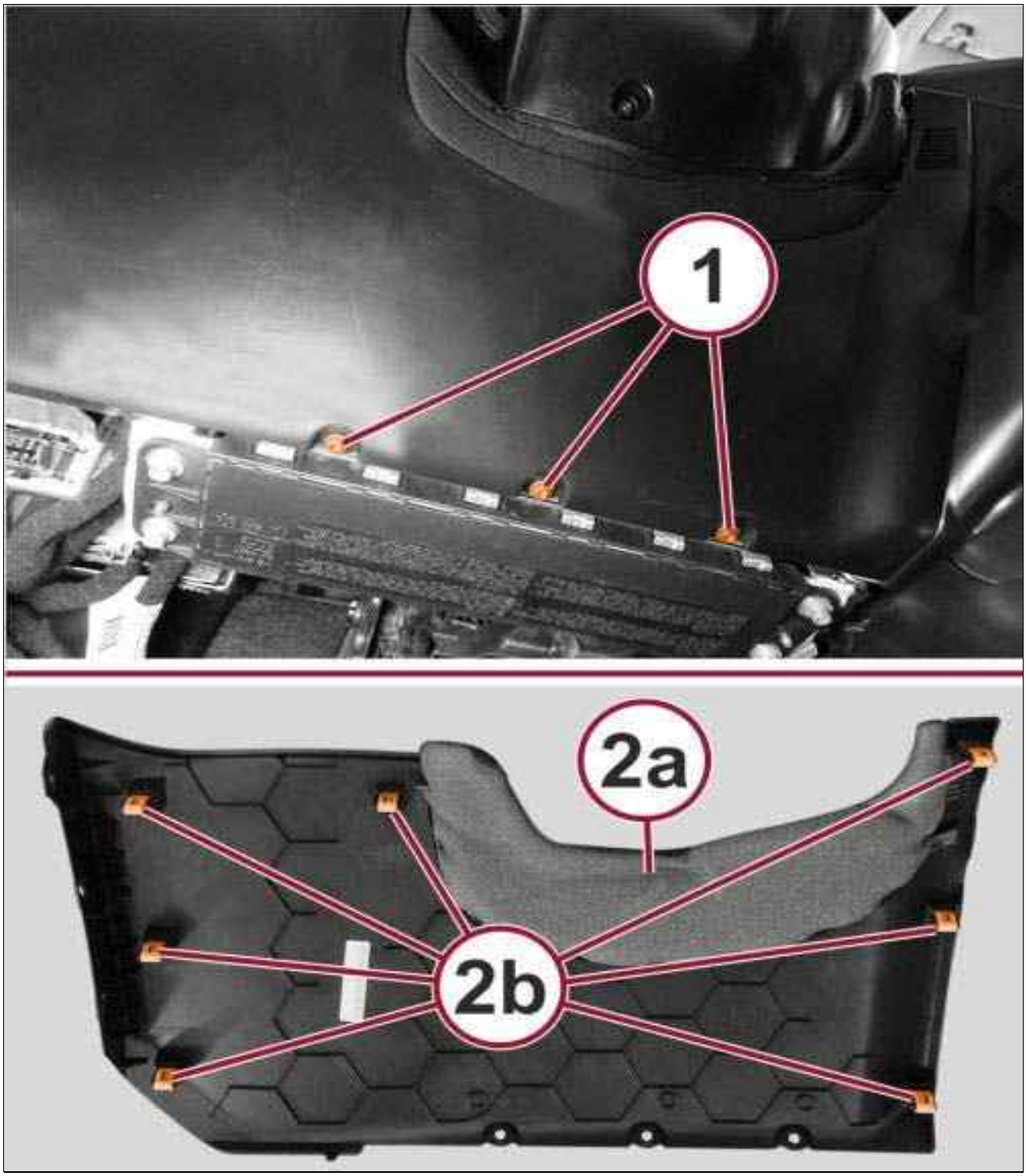
Courtesy of CHRYSLER GROUP, LLC

3. Remove the screw (1).
4. Using a trim stick or equivalent, remove the steering column opening cover (2a).

INSTRUMENT PANEL > COVER, STEERING COLUMN OPENING > REMOVAL AND

INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

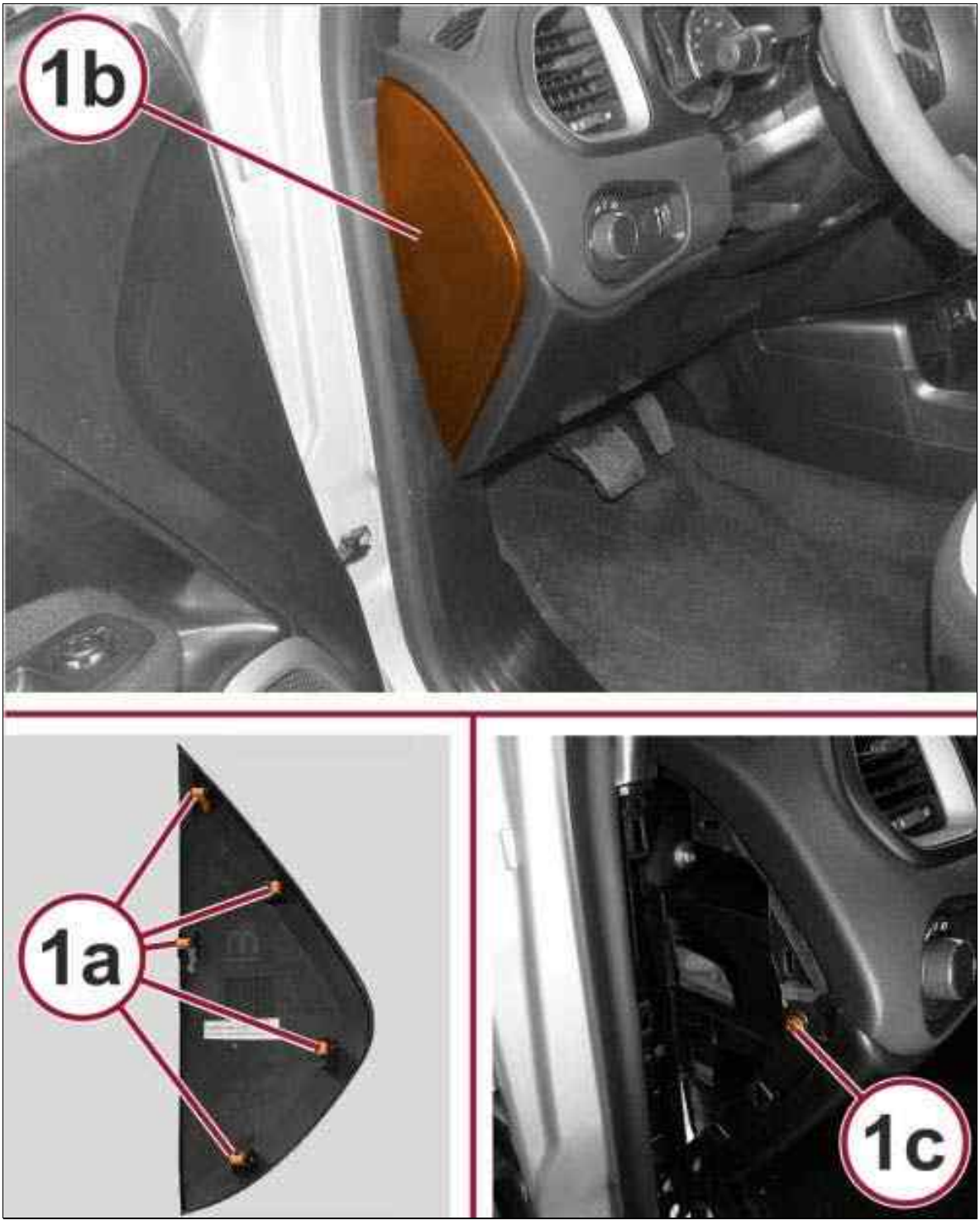
Fig 1: Steering Column Opening Cover, Clips & Screws



Courtesy of CHRYSLER GROUP, LLC

1. Install the steering column opening cover (2a) onto the instrument panel and hand tap to engage the retaining clips (2b).
2. Install the screws (1) and tighten securely.

Fig 2: Instrument Panel Side Cover, Clips & Screw



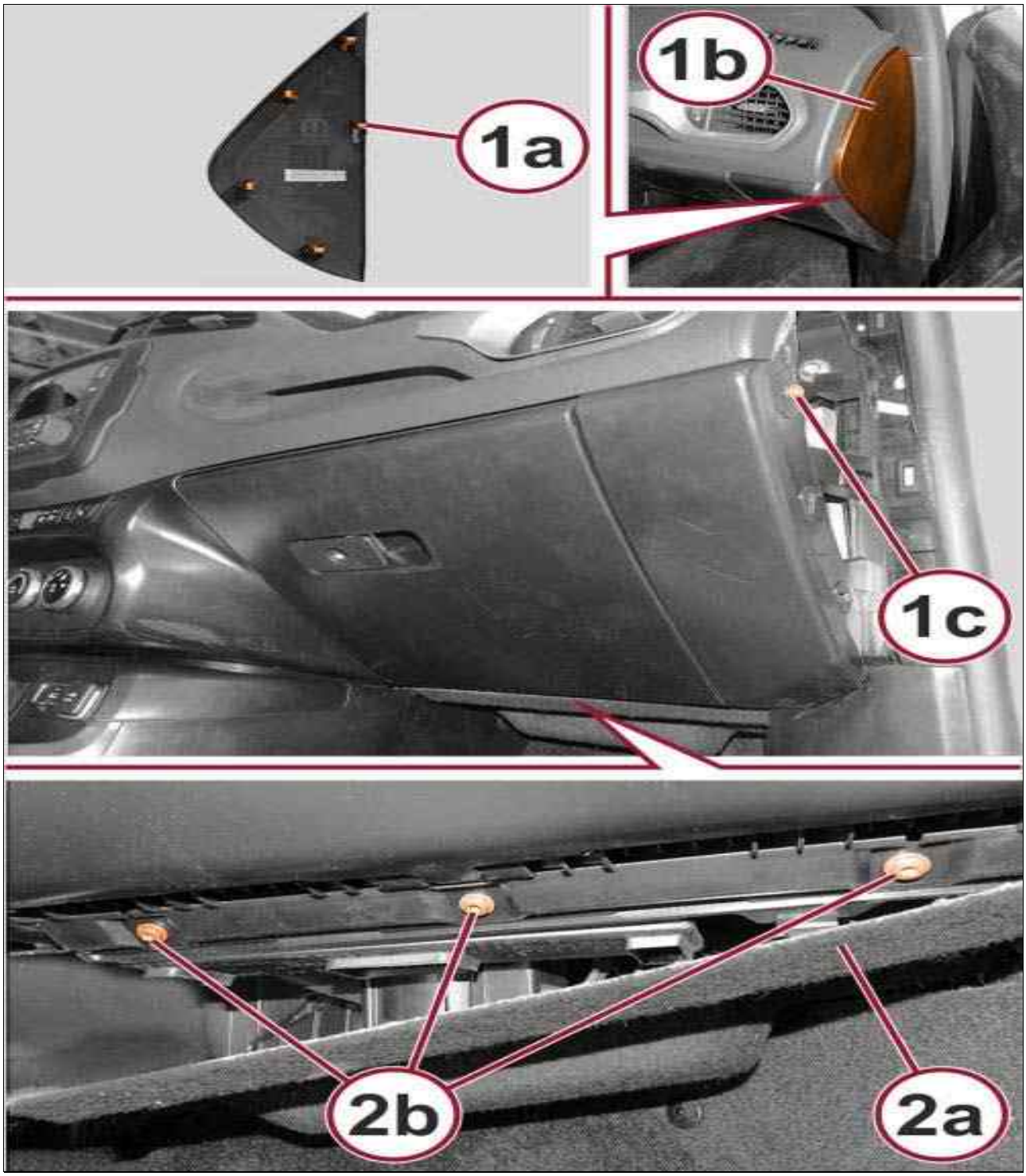
Courtesy of CHRYSLER GROUP, LLC

3. Install the screws (1c) and tighten securely.
4. Position the instrument panel side cover (1b) and hand tap to engage the retaining clips (1a).

INSTRUMENT PANEL > GLOVE BOX, INSTRUMENT PANEL > REMOVAL AND

INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

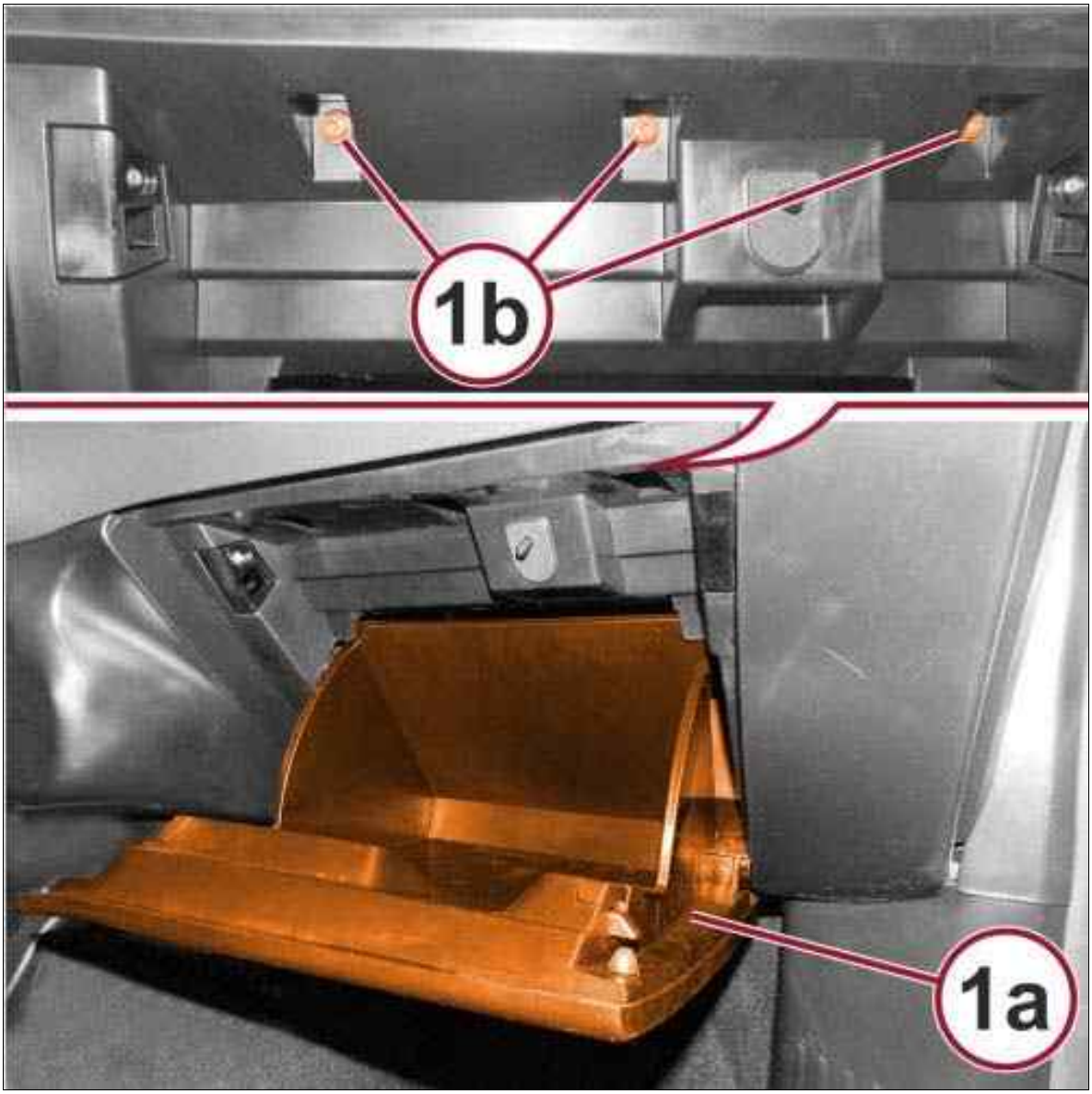
Fig 1: Instrument Panel Side Cover, Silencer Panel & Screws



Courtesy of CHRYSLER GROUP, LLC

1. Using a trim stick or equivalent, remove the instrument panel side cover (1b).
2. Remove the screw (1c).
3. Lower the silencer panel (2a) and remove the screws (2b) at the bottom of the glove box.

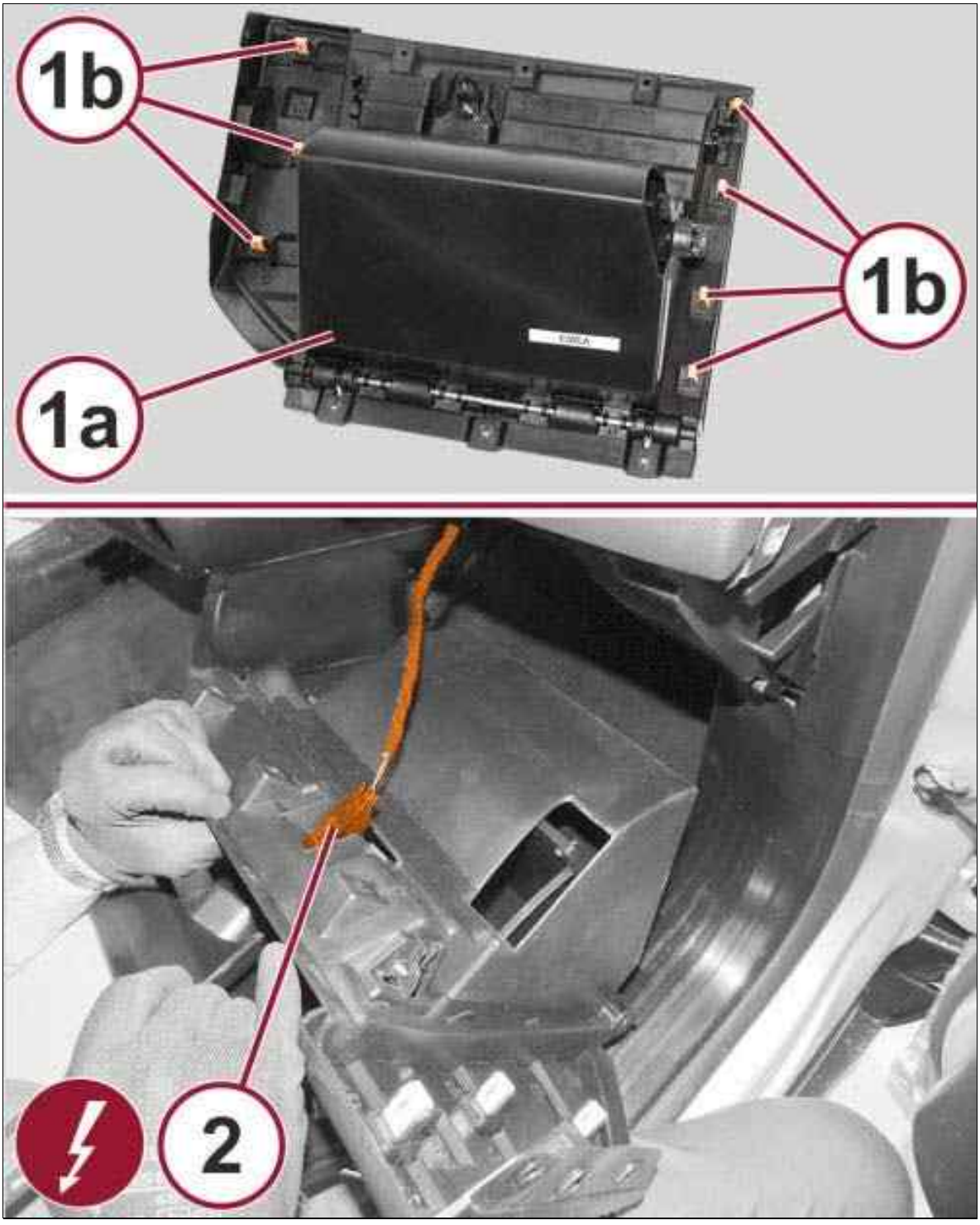
Fig 2: Glove Box Door & Screws



Courtesy of CHRYSLER GROUP, LLC

4. Open the glove box door (1a) and remove the screws (1b).

Fig 3: Glove Box Assembly, Clips & Connector

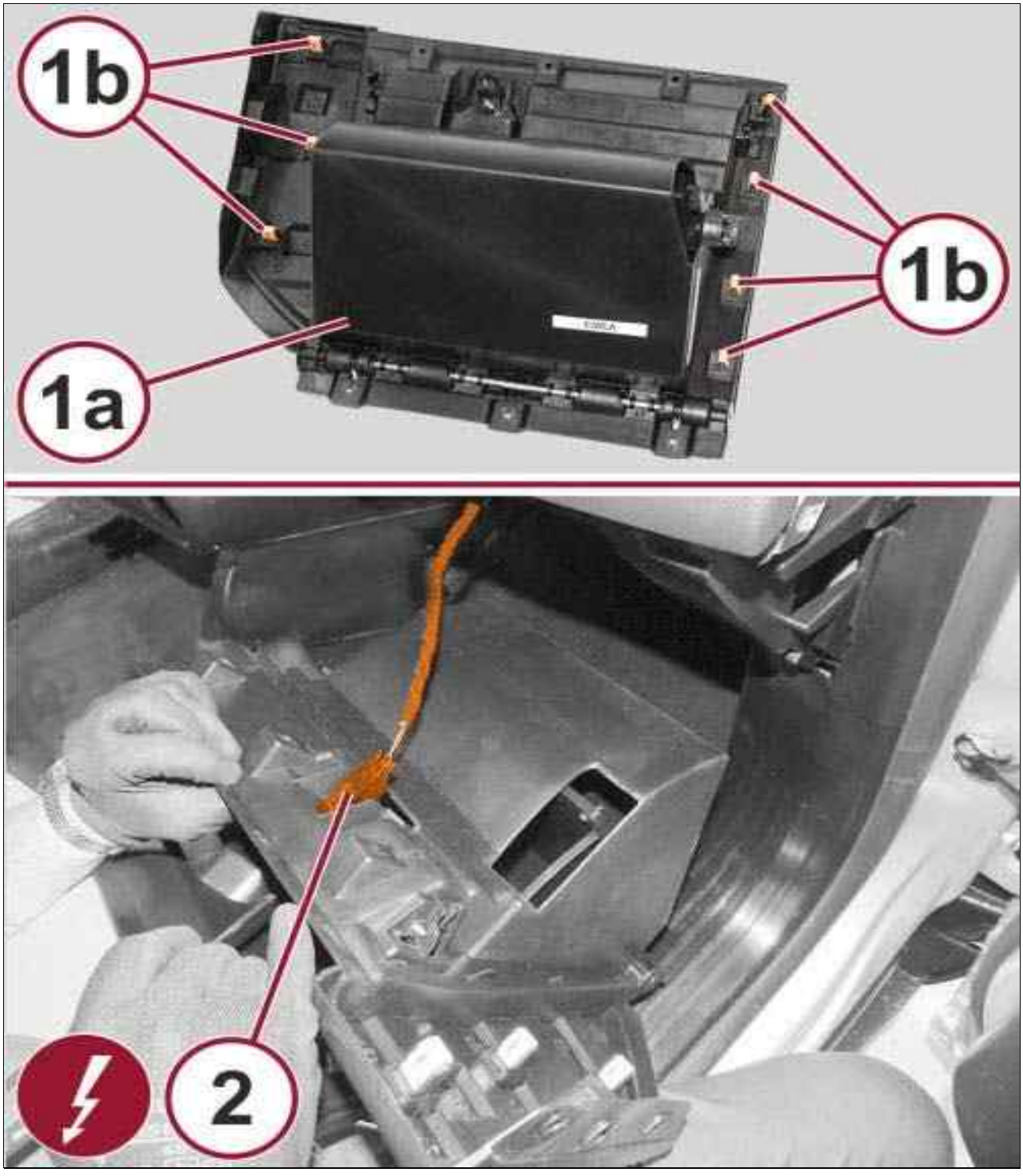


Courtesy of CHRYSLER GROUP, LLC

5. Using a trim stick or equivalent, remove the glove box assembly (1a) and disconnect the wire harness connector (2).

INSTRUMENT PANEL > GLOVE BOX, INSTRUMENT PANEL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

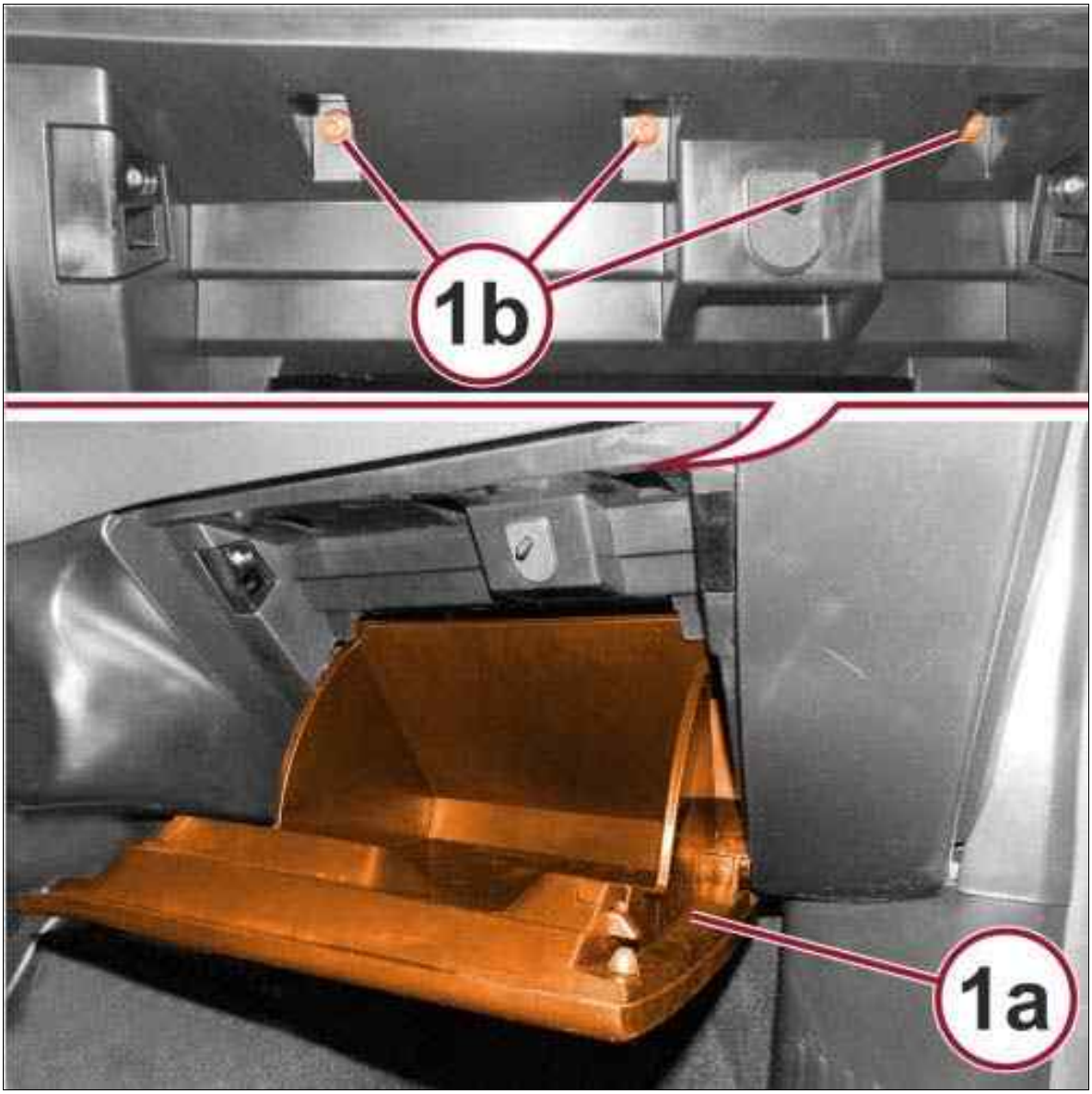
Fig 1: Glove Box Assembly, Clips & Connector



Courtesy of CHRYSLER GROUP, LLC

1. Position the glove box assembly (1a) near the instrument panel and connect the wire harness connector (2).
2. Position the glove box assembly into the instrument panel and hand tap to engage the retaining clips (1b).

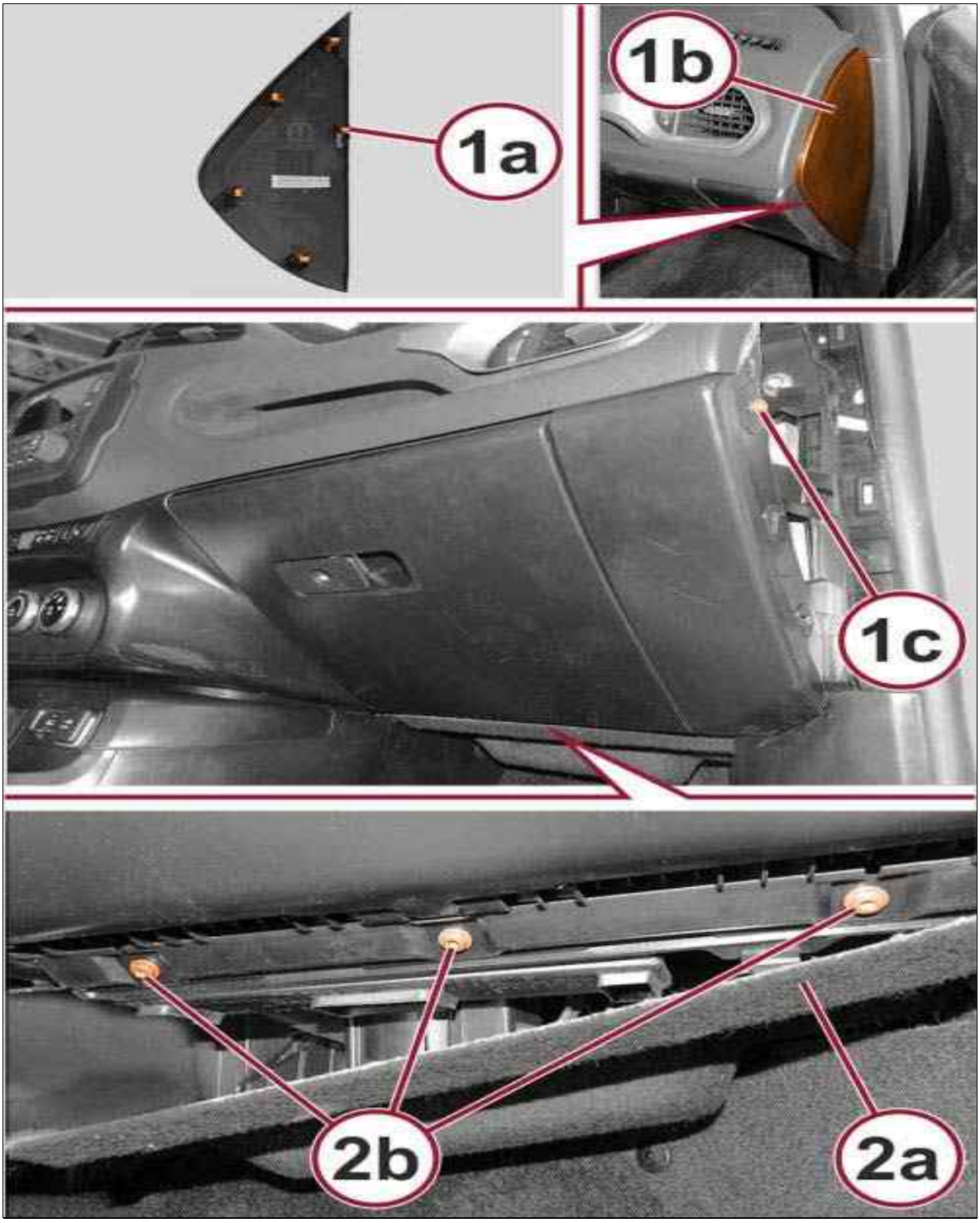
Fig 2: Glove Box Door & Screws



Courtesy of CHRYSLER GROUP, LLC

3. Open the glove box door (1a) and install the screws (1b). Tighten the screws securely.

Fig 3: Instrument Panel Side Cover, Silencer Panel & Screws

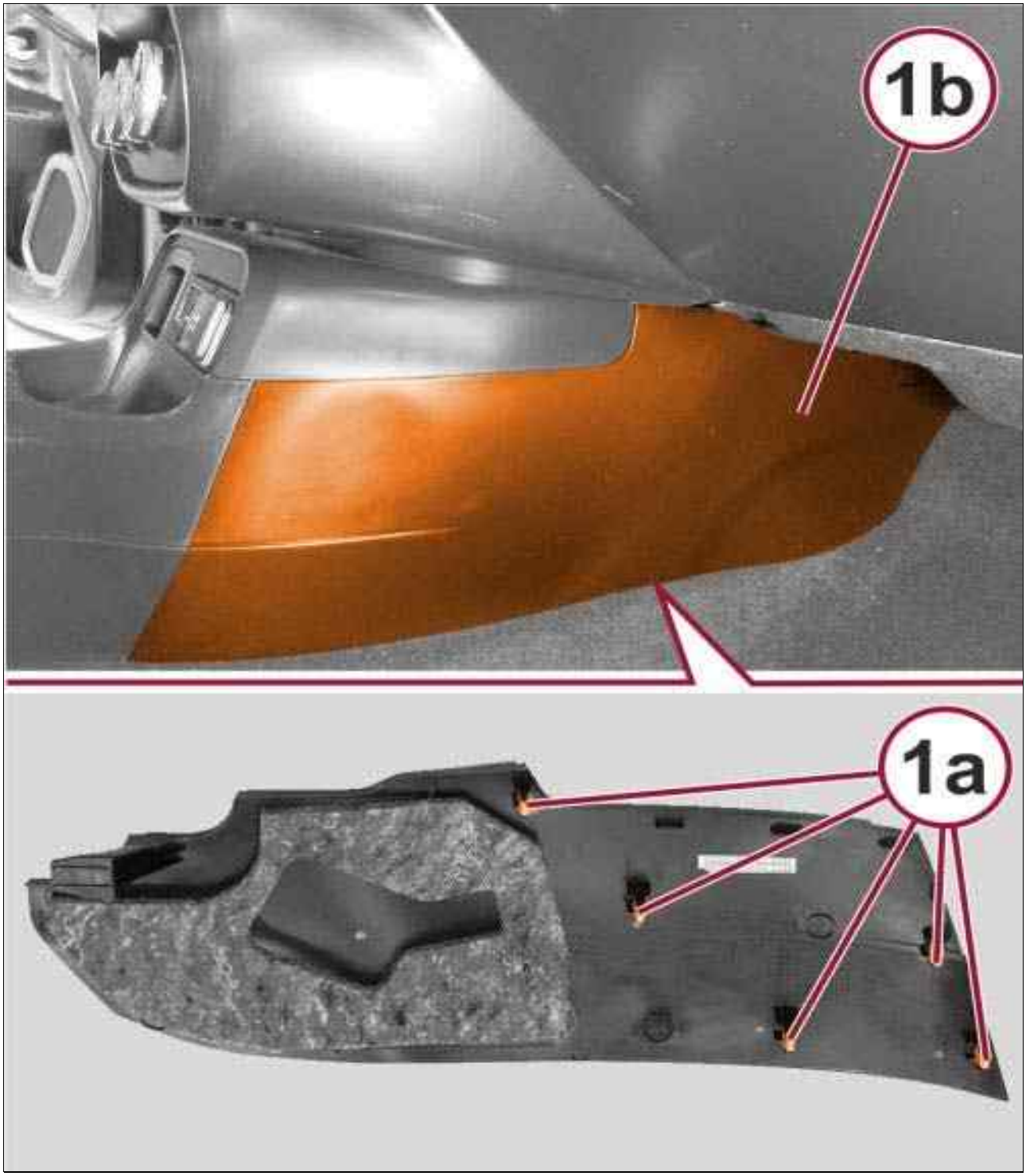


Courtesy of CHRYSLER GROUP, LLC

4. Install the screws (2b) and tighten securely.
5. Secure the silencer panel (2a) into place.
6. Install the screw (1c) and tighten securely.
7. Position the instrument panel side cover (1b) and hand tap to engage.

INTERIOR > CONSOLE, FLOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Floor Console Side Panel



Courtesy of CHRYSLER GROUP, LLC

1. Remove the front floor console side panels (1b).

Fig 2: Clips, Boot & Retainers

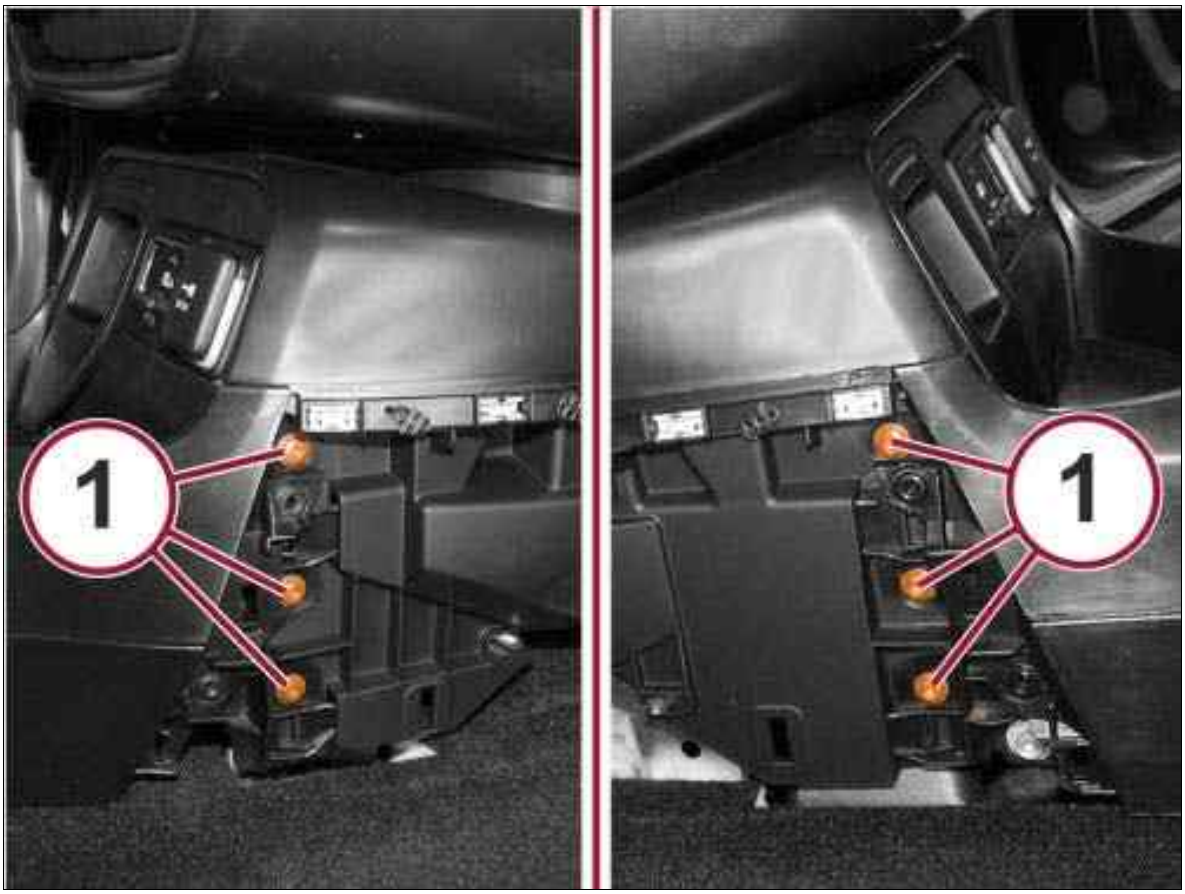
Courtesy of CHRYSLER GROUP, LLC

2. Using a trim stick or equivalent, lift the shifter bezel (1b).
3. Disconnect the wire harness connector from the shifter bezel.
4. Release the clips (2a and 2b) and release the shifter boot (2c) from the shifter bezel.

NOTE:

It is not necessary to remove the shifter boot or shifter handle from vehicle.

Fig 3: Floor Console Screws



Courtesy of CHRYSLER GROUP, LLC

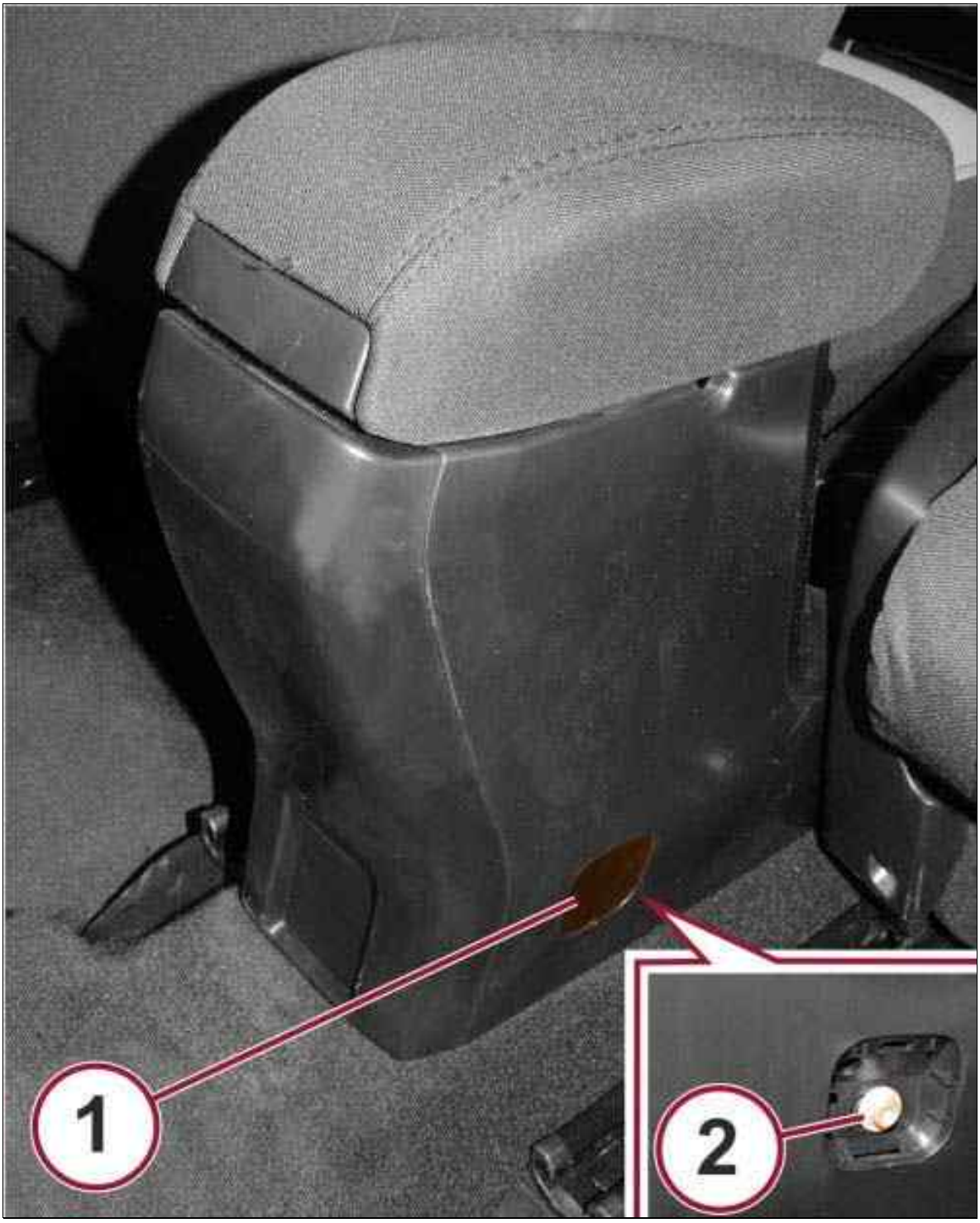
5. Remove the screws (1) on each side at the front of the floor console.

Fig 4: Cup Holder Liner & Screw

Courtesy of CHRYSLER GROUP, LLC

6. Remove the cup holder liner (1a) and remove the screw (1b).

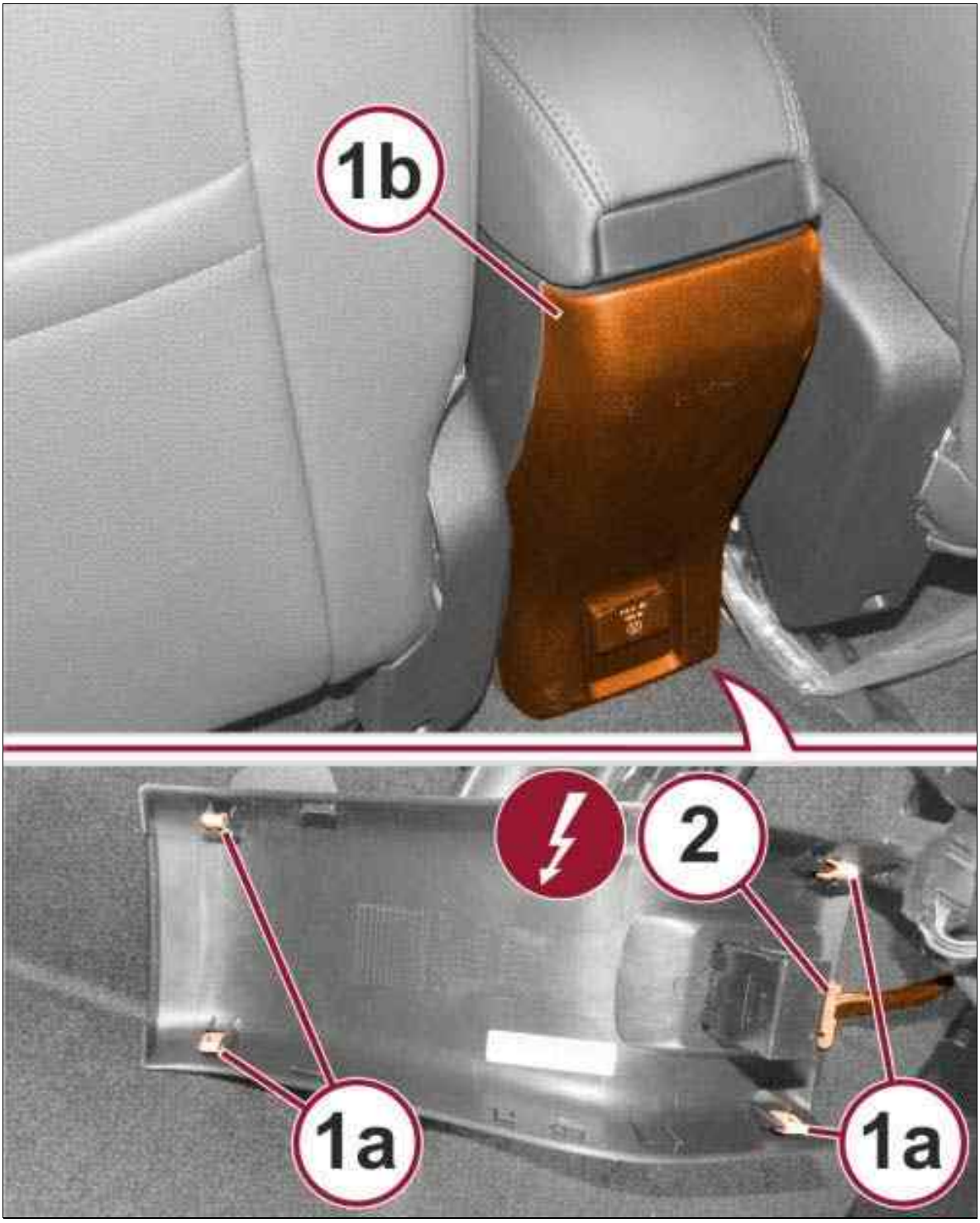
Fig 5: Cover & Bolt



Courtesy of CHRYSLER GROUP, LLC

7. Move the front seats to the full forward position.
8. Remove the screw covers (1) and the bolts (2) on both side of the rear floor console.

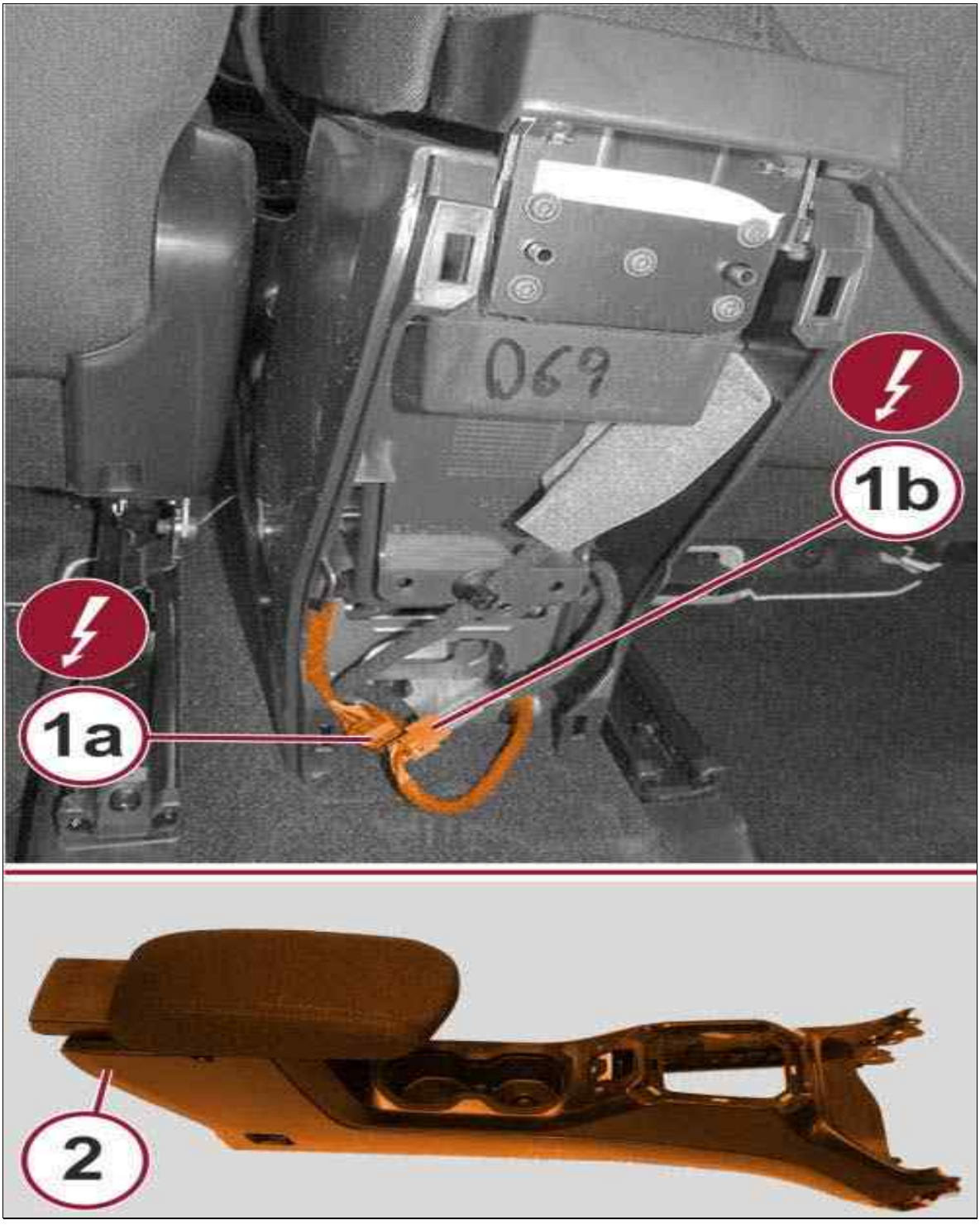
Fig 6: Floor Console Rear Cover, Retainers & Connector



Courtesy of CHRYSLER GROUP, LLC

9. Using a trim stick or equivalent, remove the rear floor console cover (1b) and disconnect the wire harness connector (2).

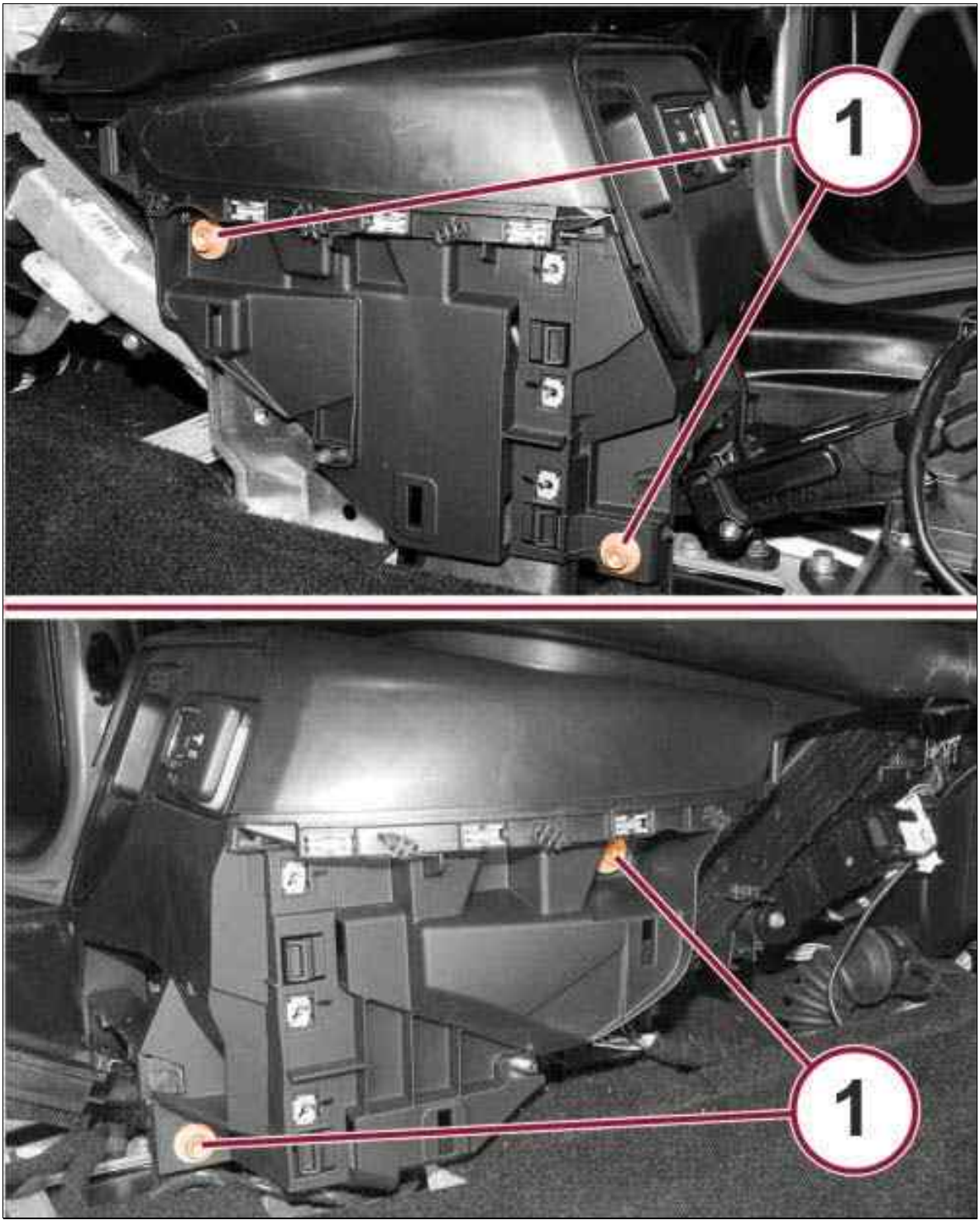
Fig 7: Rear Floor Console & Connectors



Courtesy of CHRYSLER GROUP, LLC

10. Disconnect the wire harness connectors (1a and 1b).
11. Pull the rear floor console slightly rearward and remove.

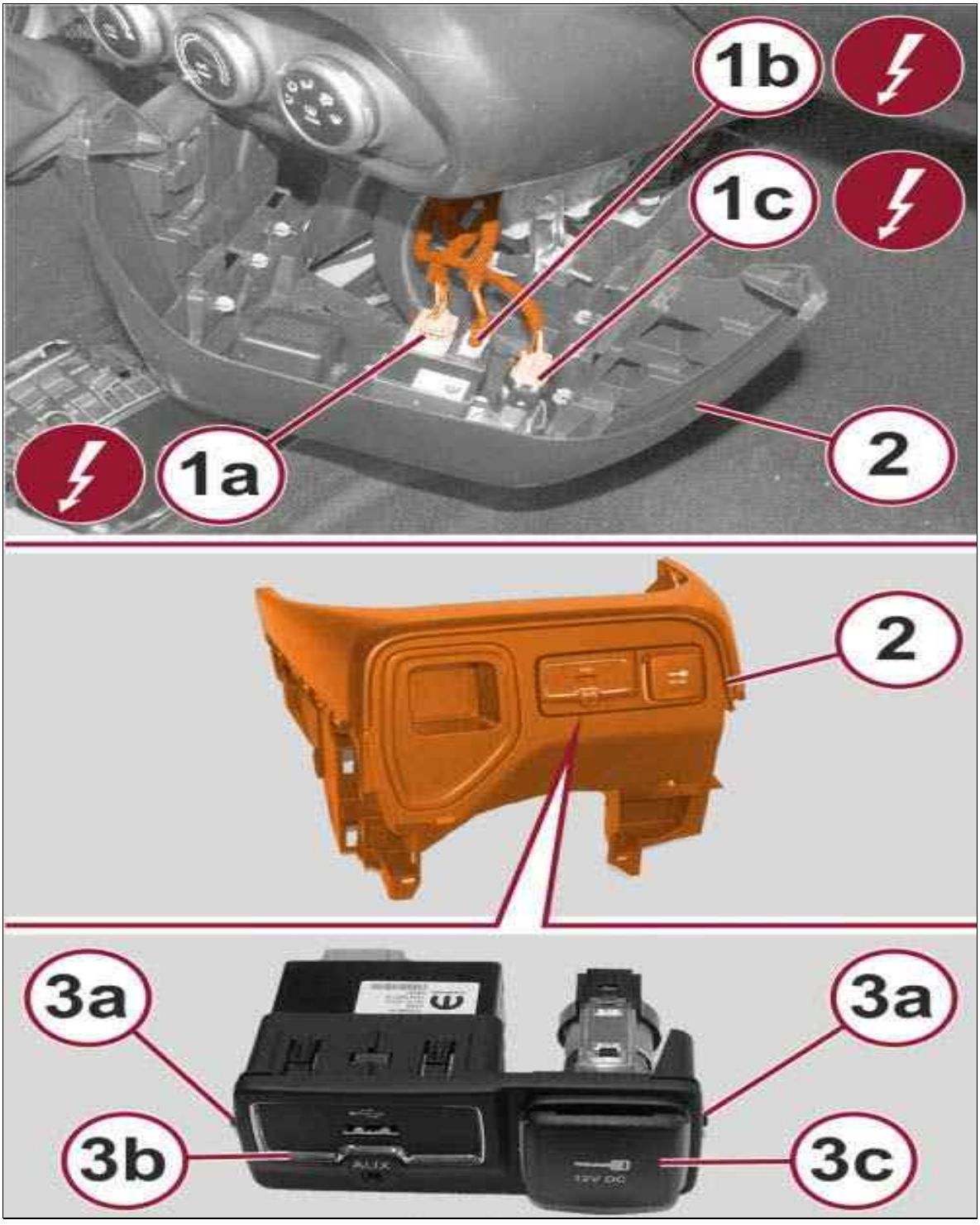
Fig 8: Front Floor Console Bolts



Courtesy of CHRYSLER GROUP, LLC

12. Remove the bolts (1) on both sides of the front floor console.

Fig 9: Front Floor Console & Connectors

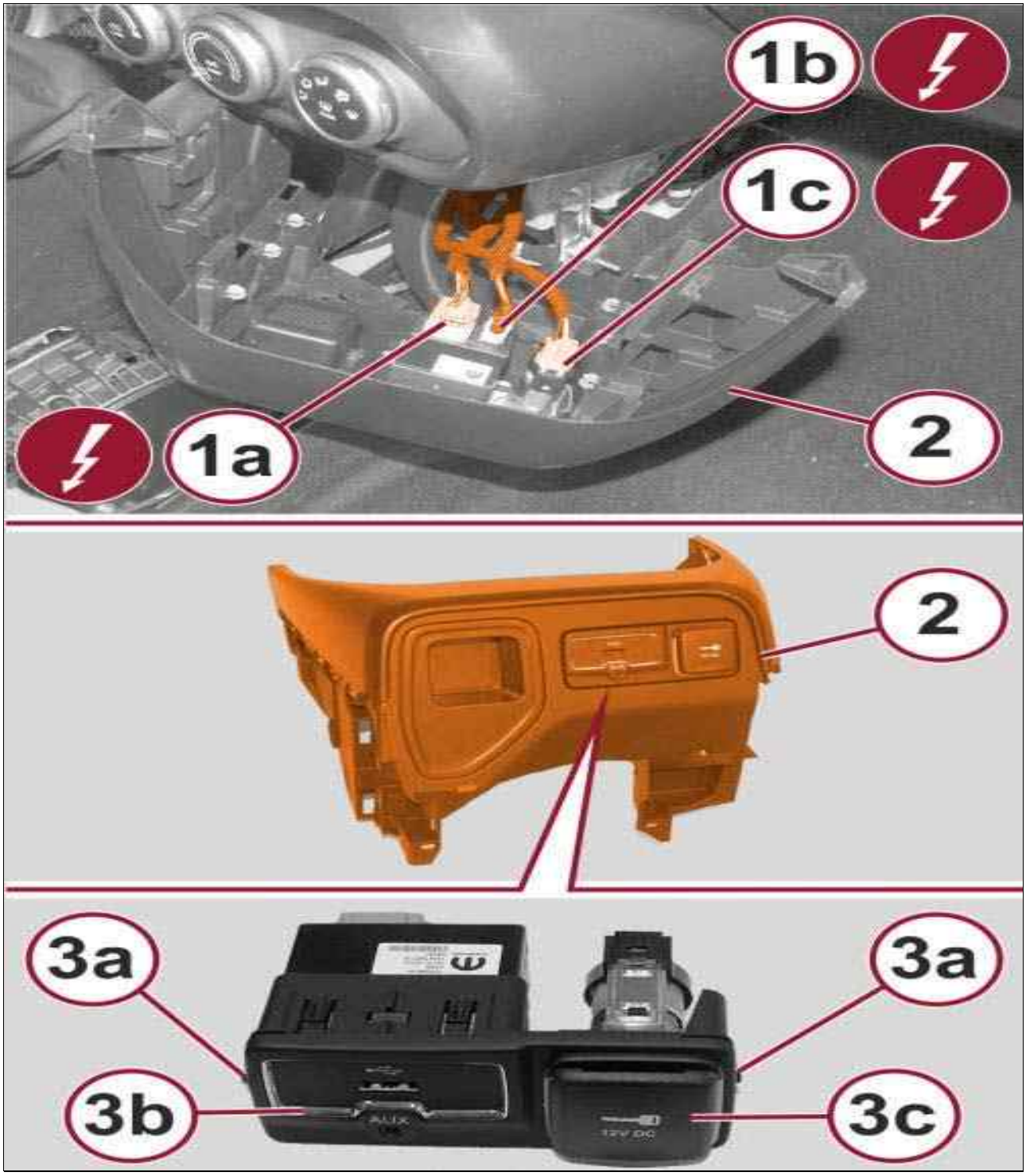


Courtesy of CHRYSLER GROUP, LLC

13. Pull the front floor console (2) slightly rearward and disconnect the wire harness connectors (1a, 1b, 1c).
14. Remove the front floor console.

INTERIOR > CONSOLE, FLOOR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

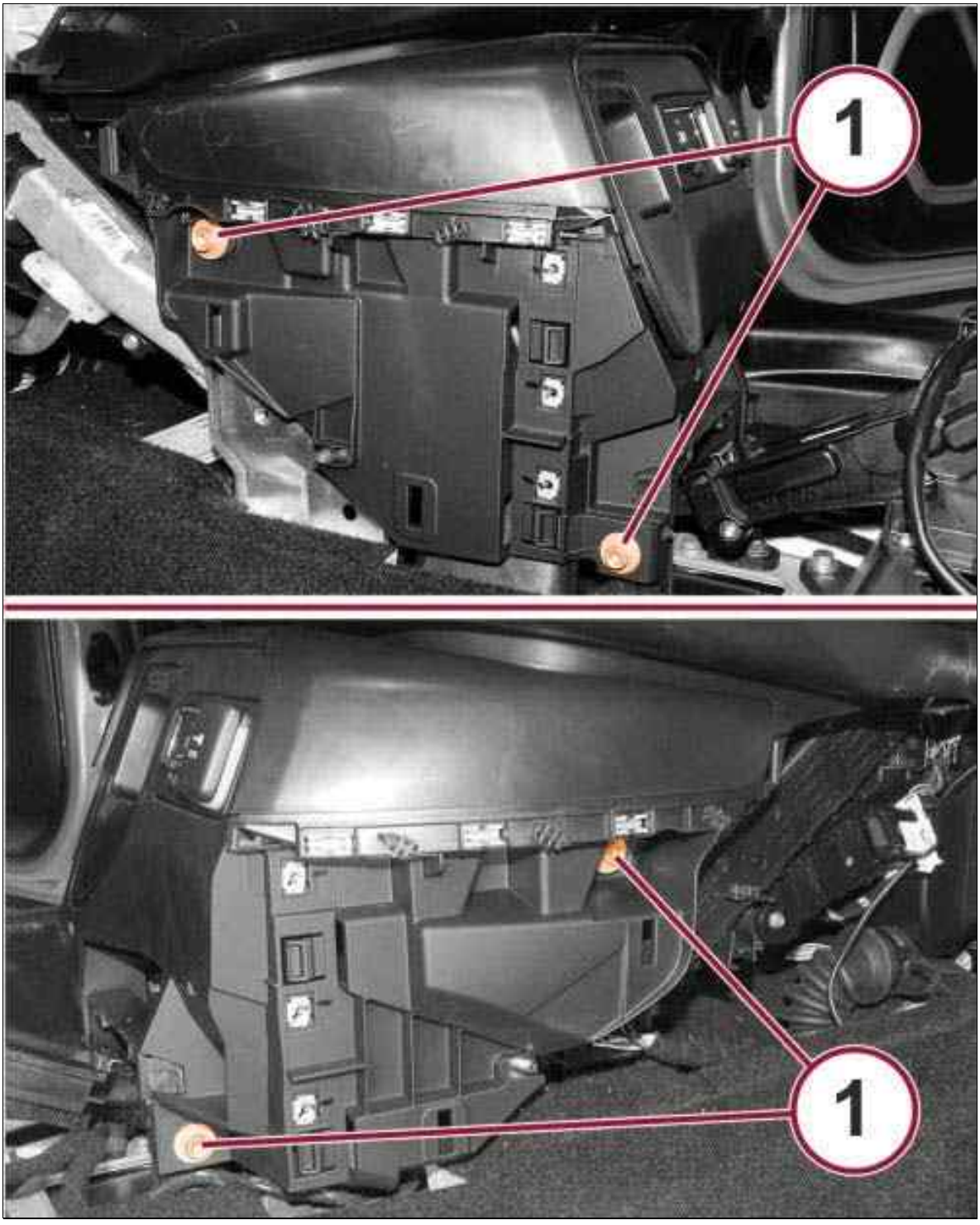
Fig 1: Front Floor Console & Connectors



Courtesy of CHRYSLER GROUP, LLC

1. Position the front floor console (2) and connect the wire harness connectors.

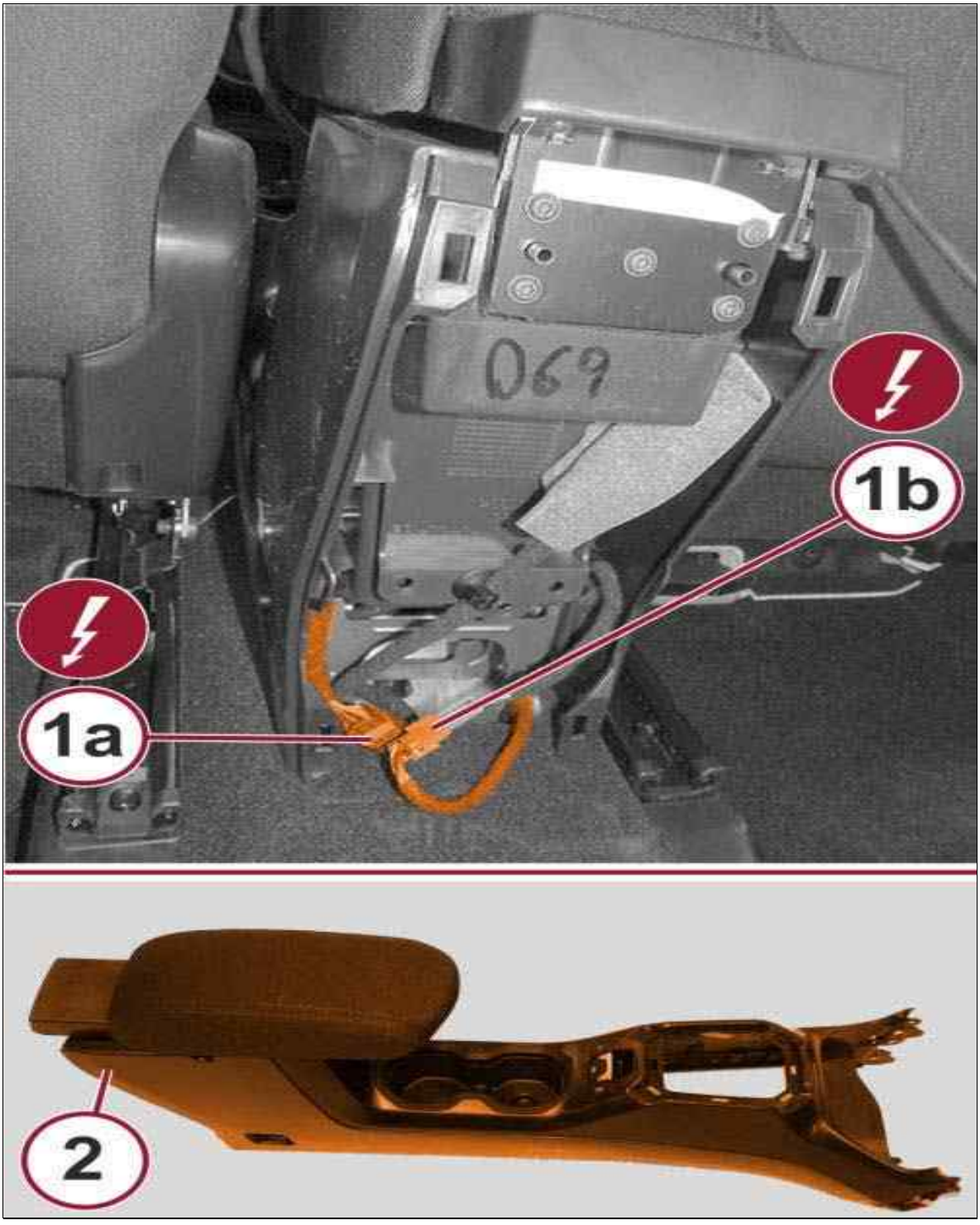
Fig 2: Front Floor Console Bolts



Courtesy of CHRYSLER GROUP, LLC

2. Install the bolts (1) and tighten securely.

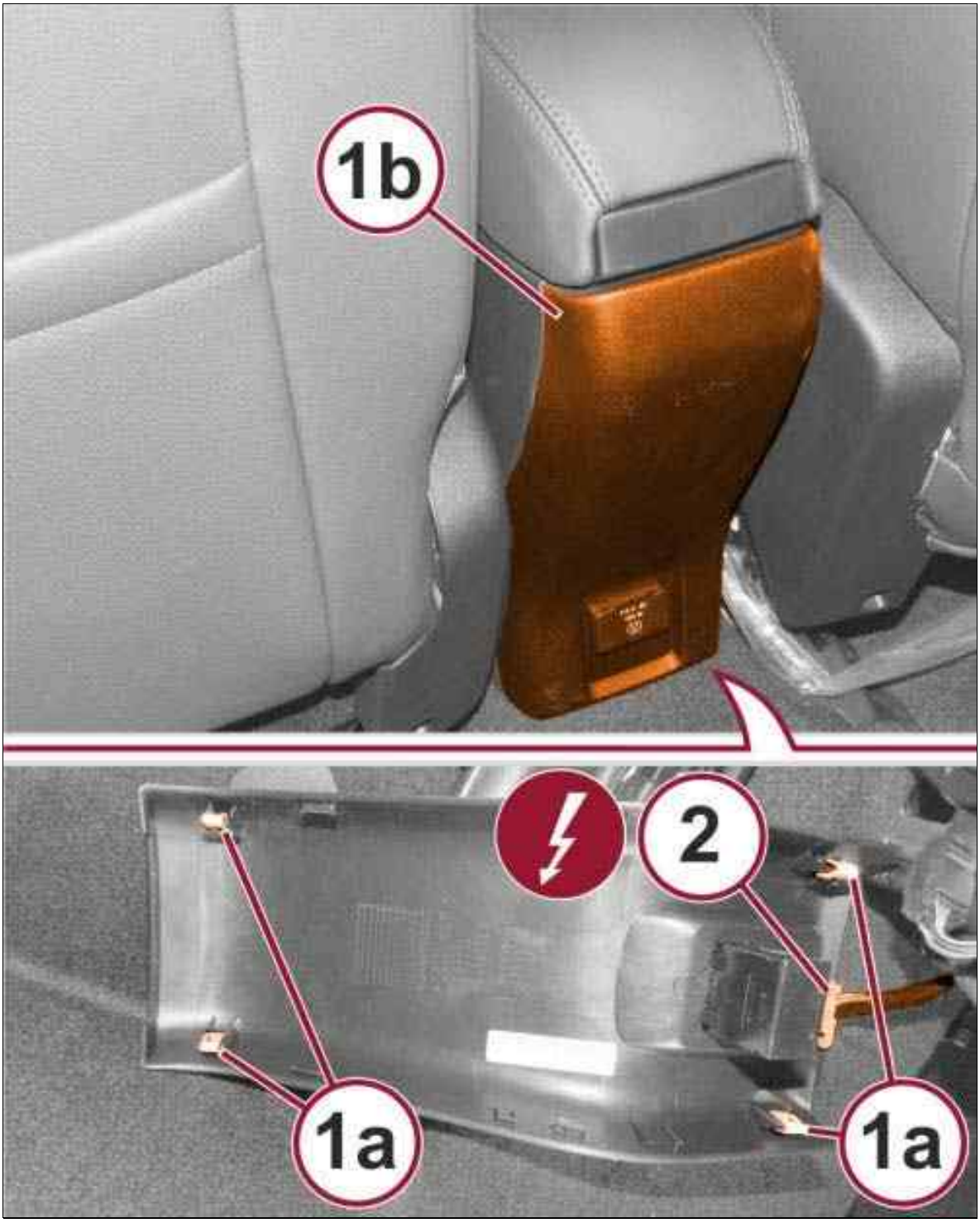
Fig 3: Rear Floor Console & Connectors



Courtesy of CHRYSLER GROUP, LLC

3. Position the rear floor console (2) into the vehicle and connect the wire harness connectors (1a and 1b).

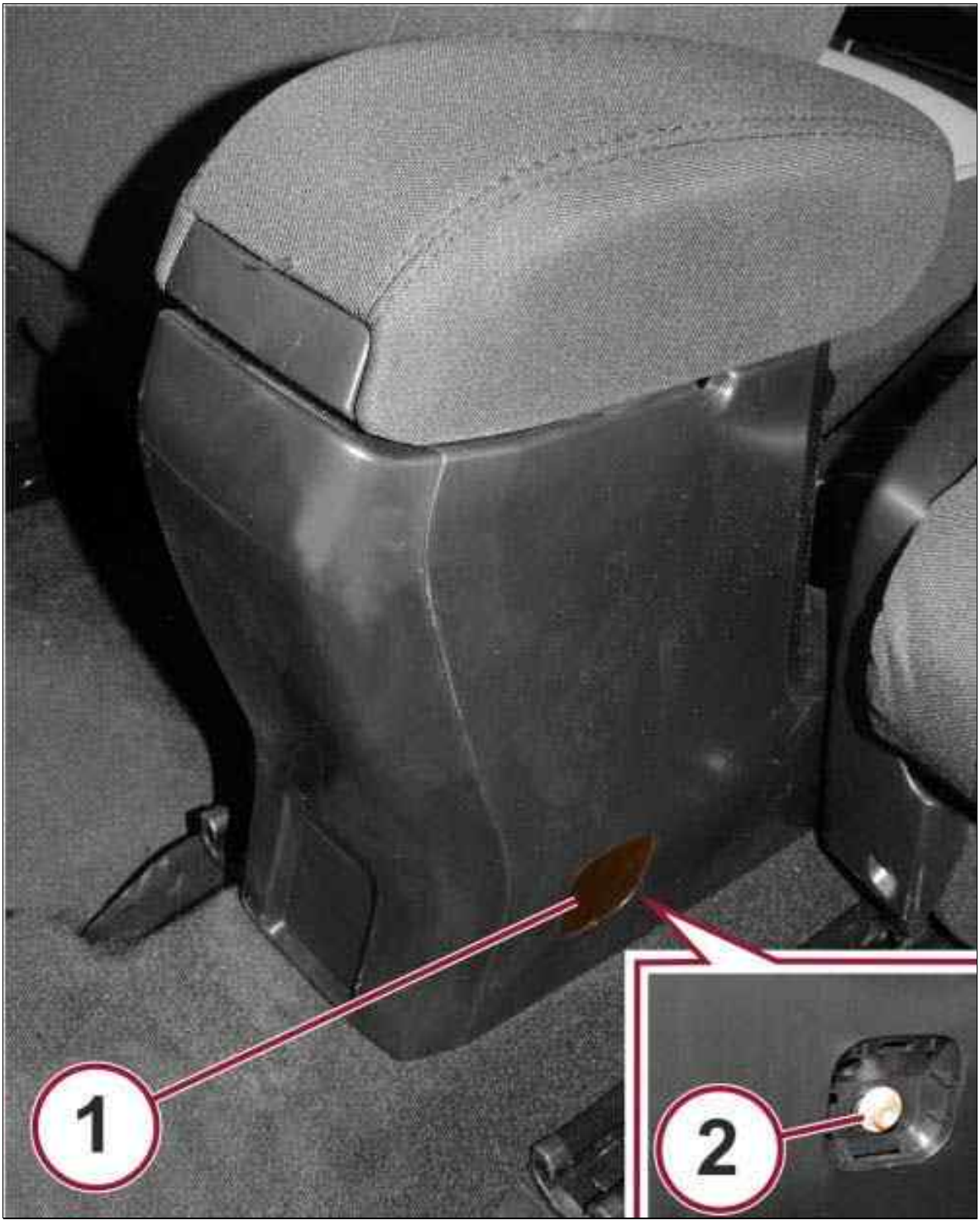
Fig 4: Floor Console Rear Cover, Retainers & Connector



Courtesy of CHRYSLER GROUP, LLC

4. Connect the wire harness connector (2) and install the rear floor console cover (1b).

Fig 5: Cover & Bolt



Courtesy of CHRYSLER GROUP, LLC

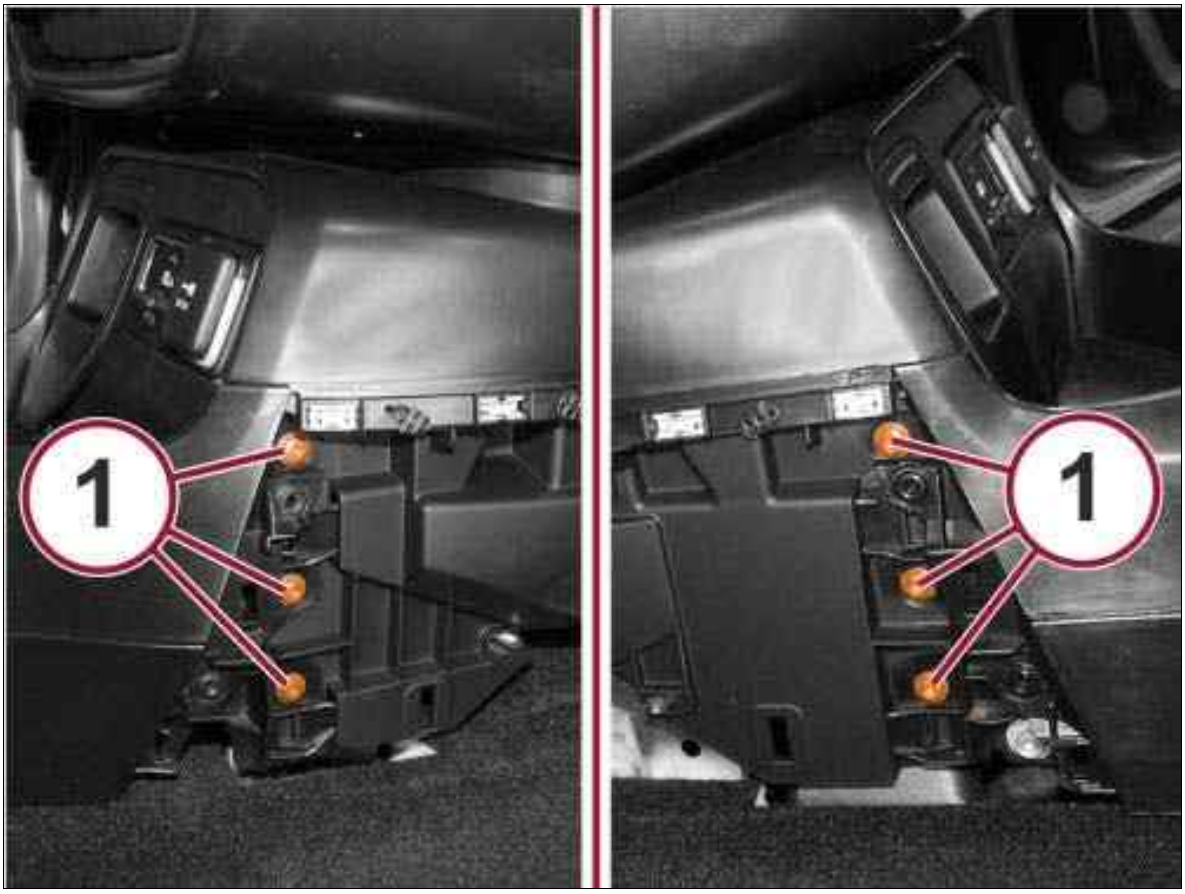
5. Install the screws (2) and tighten securely. Install the screw covers (1).

Fig 6: Cup Holder Liner & Screw

Courtesy of CHRYSLER GROUP, LLC

6. Install the screw (1b) and tighten securely. Install the cup holder liner (1a).

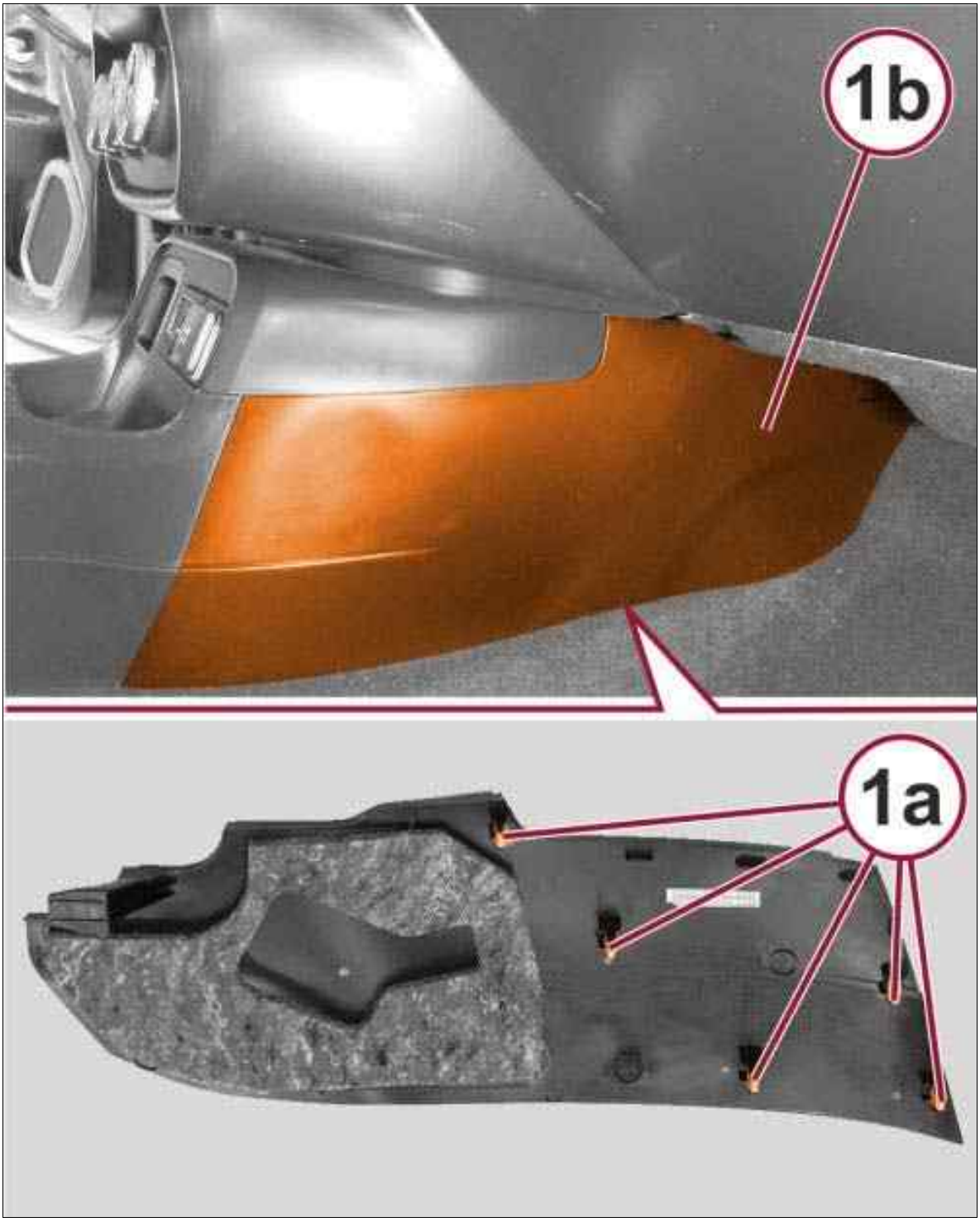
Fig 7: Floor Console Screws



Courtesy of CHRYSLER GROUP, LLC

7. Install the screws (1) on each side at the front of the floor console and tighten securely.

Fig 8: Floor Console Side Panel



Courtesy of CHRYSLER GROUP, LLC

8. Position the front floor console side panels (1b) and hand tap into place.

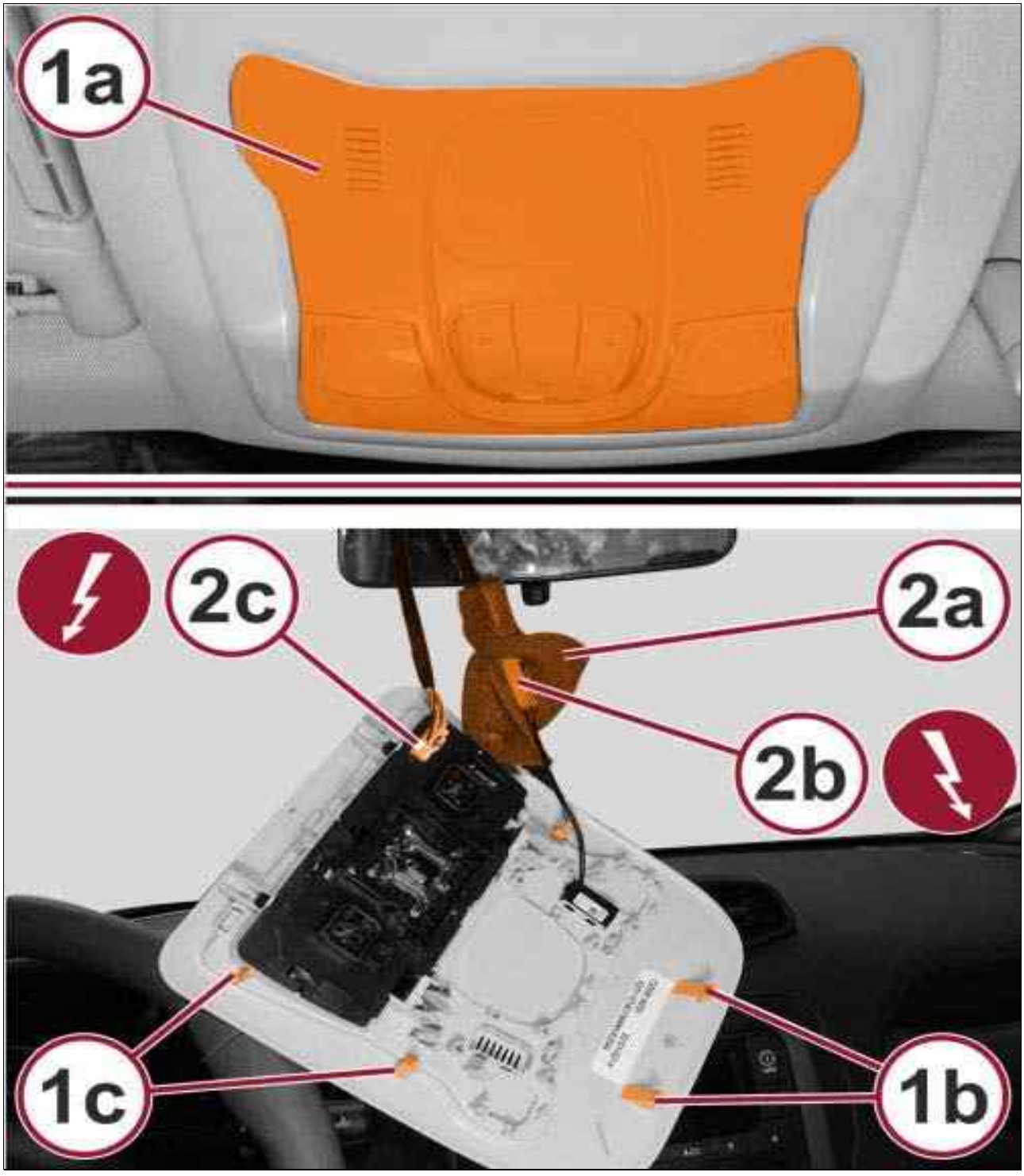
Fig 9: Clips, Boot & Retainers

Courtesy of CHRYSLER GROUP, LLC

9. Align the clips (2a and 2b) to the shifter bezel and snap into place.
10. Connect the wire harness connector to the shifter bezel.
11. Position the shifter bezel (1b) onto the floor console and hand tap into place.

INTERIOR > CONSOLE, OVERHEAD, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Overhead Console, Handsfree Microphone, Protective Wrap & Retainers



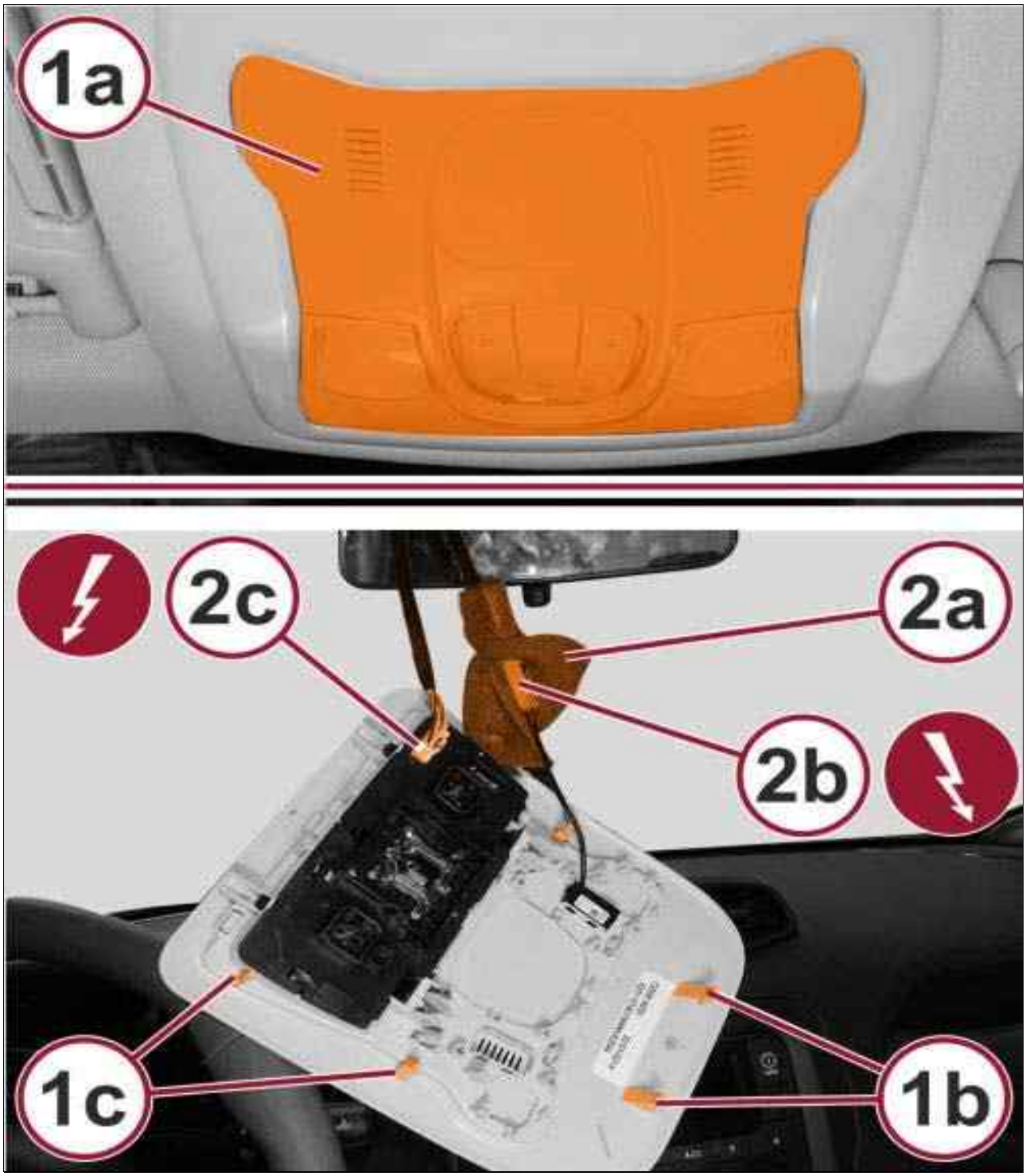
Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable.
2. Using a trim stick or equivalent, release the retaining clips (1b) and lower the overhead console (1a).

3. Disconnect the wire harness connectors (2b and 2c) and remove.

INTERIOR > CONSOLE, OVERHEAD, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Overhead Console, Handsfree Microphone, Protective Wrap & Retainers



Courtesy of CHRYSLER GROUP, LLC

1. Connect the wire harness connectors (2b and 2c).
2. Align the retaining clips (1b and 1c) and push firmly and evenly on the sides of the overhead console (1a) to engage the retaining clips.
3. Connect the negative battery cable.

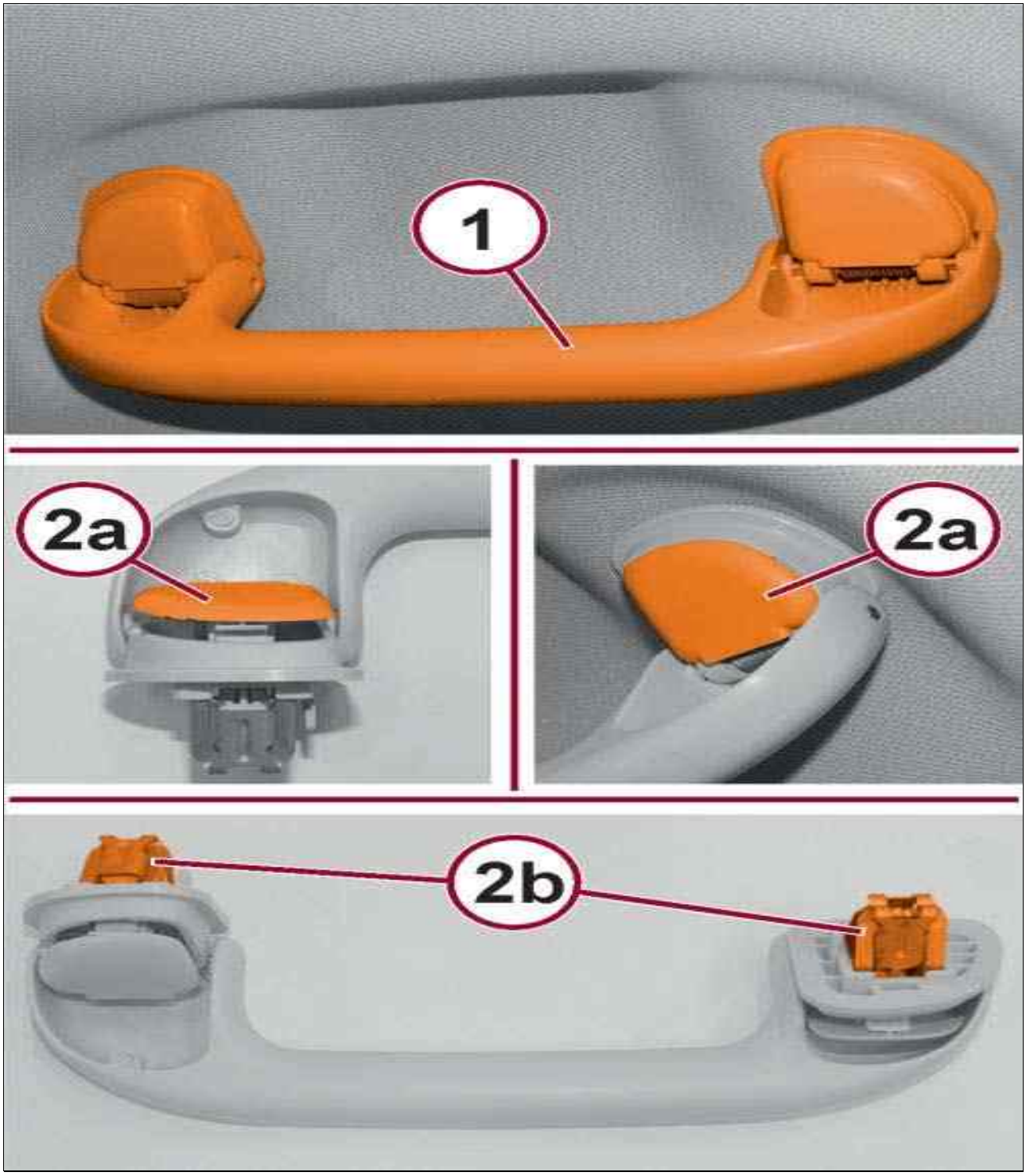
INTERIOR > HEADLINER > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

NOTE:

In the event the headliner is damaged or creased during removal, it will need to be replaced with a new headliner.

Use clean gloves or make sure your hands are clean before removing the headliner.

Fig 1: Grab Handles & Screw Covers



Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable.
2. Remove the A-pillar trim panels. Refer to PANEL, A-PILLAR TRIM, REMOVAL AND INSTALLATION .
3. Remove the overhead console. Refer to CONSOLE, OVERHEAD, FRONT, REMOVAL AND INSTALLATION .

4. Open the screw covers (2a). Remove the screws and the grab handles.

Fig 2: Visor, Support, Screws & Covers

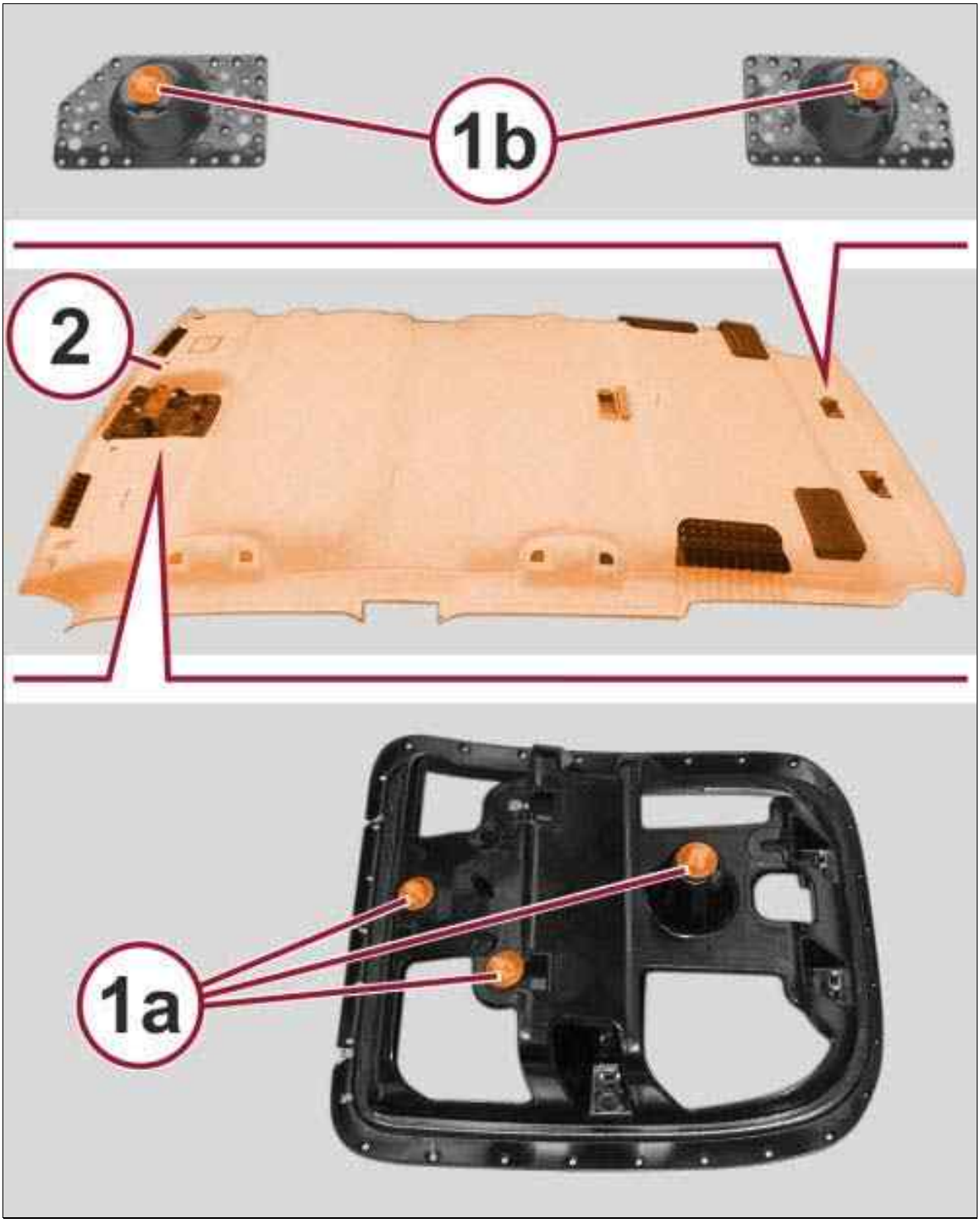
Courtesy of CHRYSLER GROUP, LLC

5. Using a small flat bladed tool, open the screw cover (2) and remove the screw (3). Remove both visors (1a).

6. Using a small flat bladed tool, open the screw cover (1b) and remove the screw (4a). Remove both visor supports (4b).

7. Remove the rearview mirror. Refer to MIRROR, REARVIEW, REMOVAL AND INSTALLATION .
8. Remove the upper B-pillar trim panels. Refer to PANEL, B-PILLAR TRIM, UPPER, REMOVAL AND INSTALLATION .
9. Remove the upper quarter trim panels. Refer to PANEL, QUARTER TRIM, REMOVAL AND INSTALLATION .
10. Loosen the weatherstrip at the top of the door openings.

Fig 3: Headliner & Push Fasteners



Courtesy of CHRYSLER GROUP, LLC

11. Release the push fasteners (1a) at the front of the headliner.
12. Release the push fasteners (1b) at the rear of the headliner and remove the headliner through the liftgate opening.

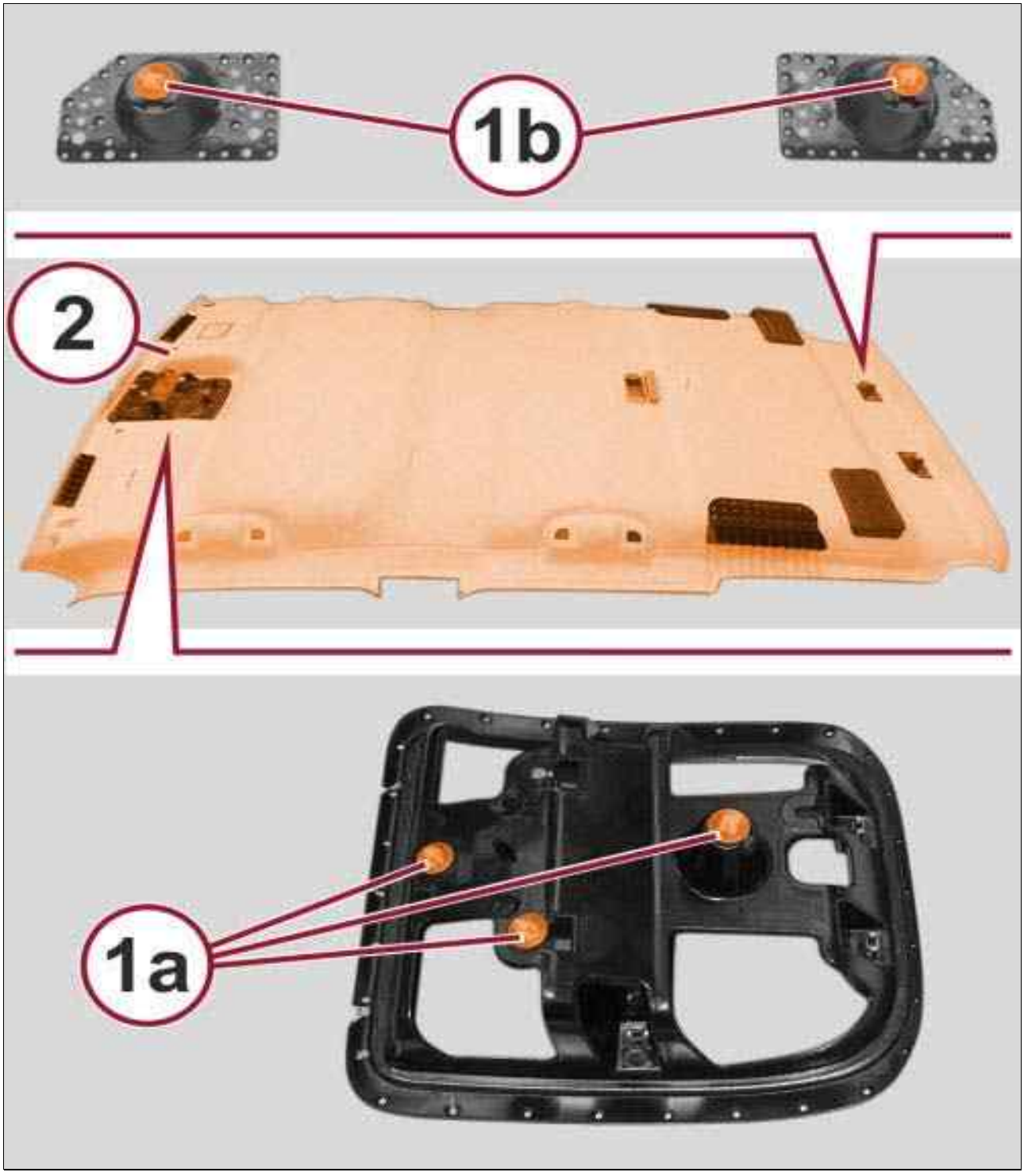
INTERIOR > HEADLINER > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

NOTE:

In the event the headliner is damaged or creased during installation, it will need to be replaced with a new headliner.

Use clean gloves or make sure your hands are clean before removing the headliner.

Fig 1: Headliner & Push Fasteners



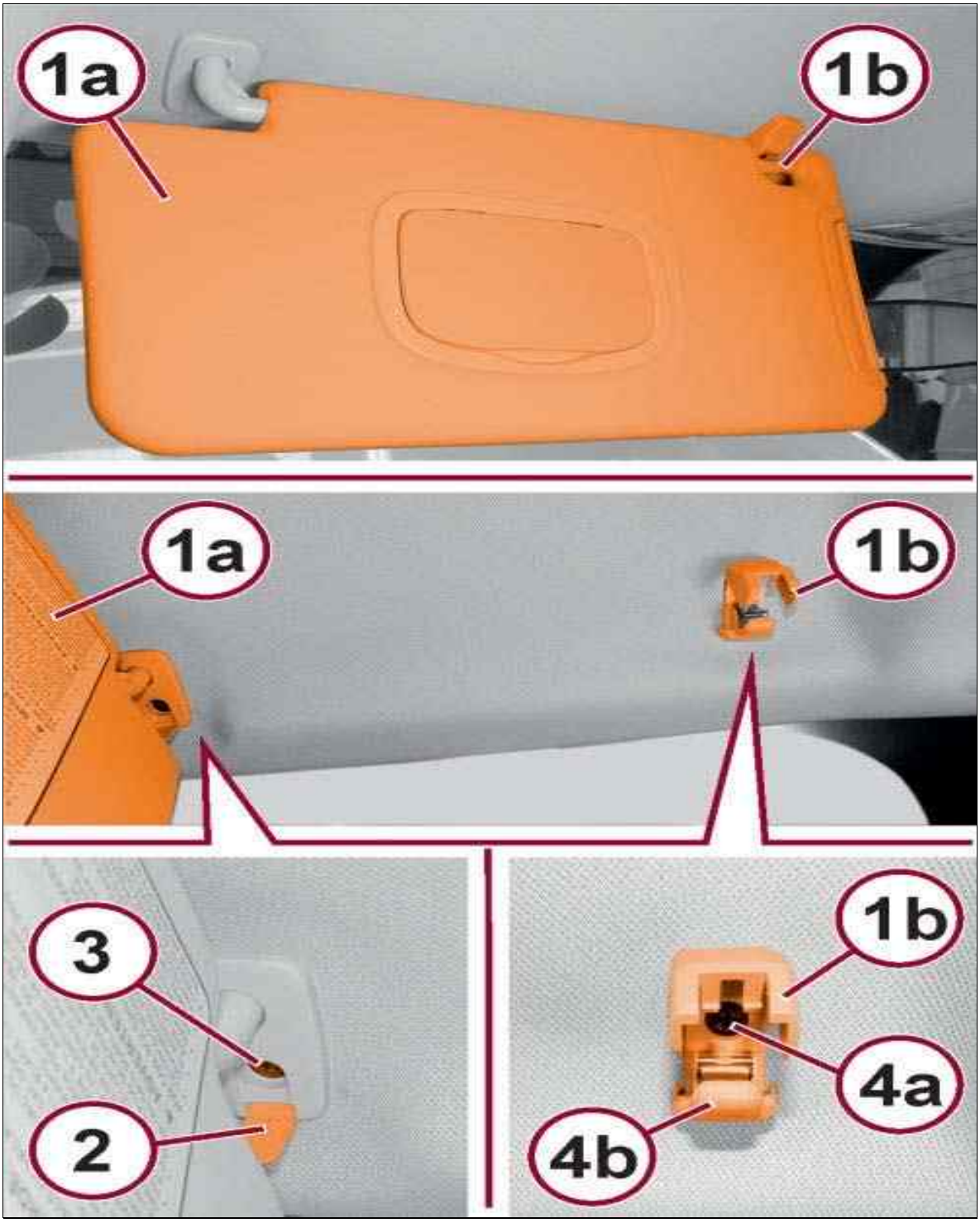
Courtesy of CHRYSLER GROUP, LLC

1. Position the headliner into the vehicle and engage the push fasteners (1a and 1b).
2. Install the A-pillar trim panels. Refer to PANEL, A-PILLAR TRIM, REMOVAL AND INSTALLATION .
3. Install the rearview mirror. Refer to MIRROR, REARVIEW, REMOVAL AND INSTALLATION .
4. Install the upper B-pillar trim panels. Refer to PANEL, B-PILLAR TRIM, UPPER, REMOVAL

AND INSTALLATION .

5. Install the upper quarter trim panels. Refer to PANEL, QUARTER TRIM, REMOVAL AND INSTALLATION .
6. Install the overhead console. Refer to CONSOLE, OVERHEAD, FRONT, REMOVAL AND INSTALLATION .

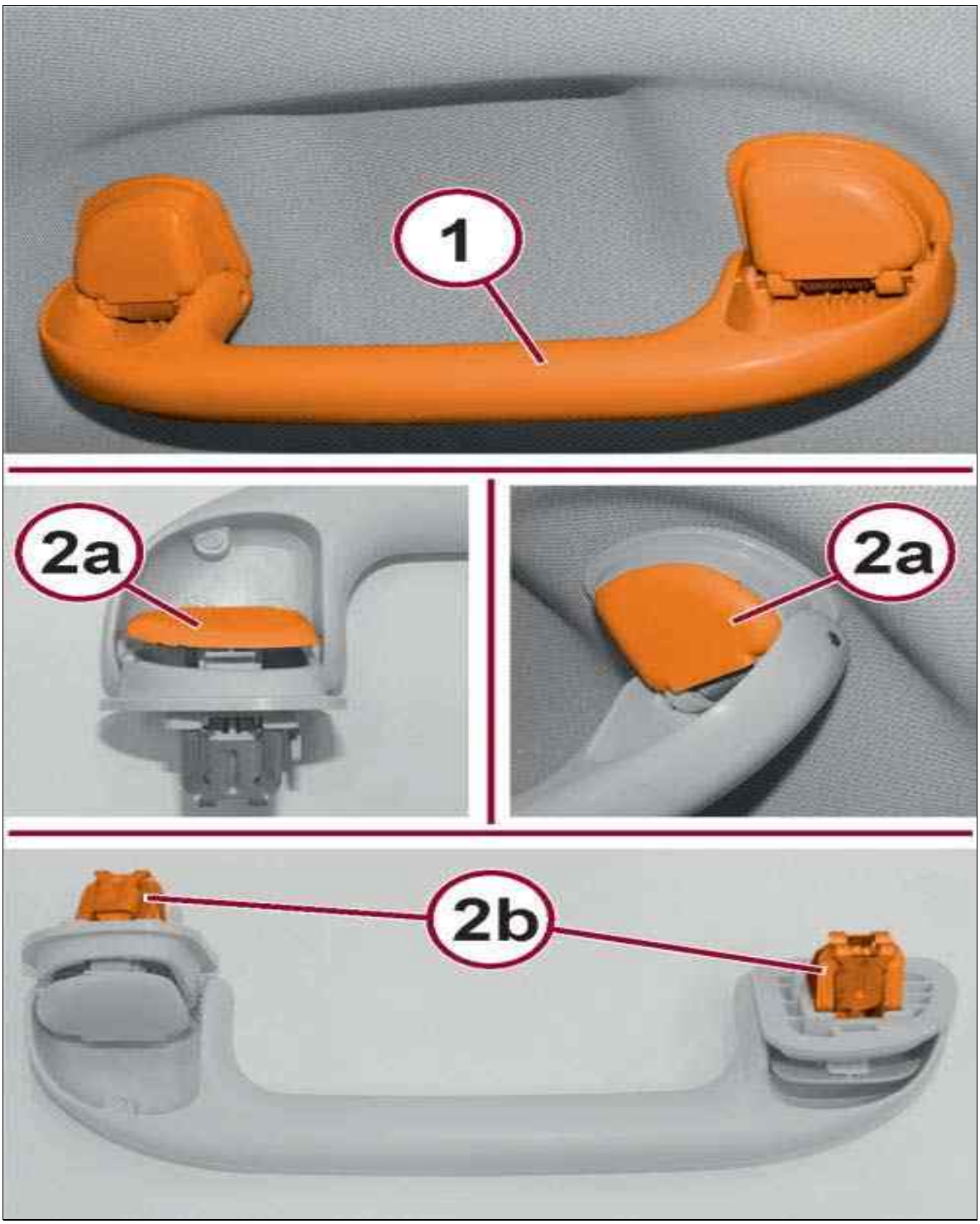
Fig 2: Visor, Support, Screws & Covers



Courtesy of CHRYSLER GROUP, LLC

7. Install the visor supports (4b) and tighten the screws securely.
8. Install the visors (1a) and tighten the screws securely.
9. Install the weatherstrip at the top of the door openings.

Fig 3: Grab Handles & Screw Covers



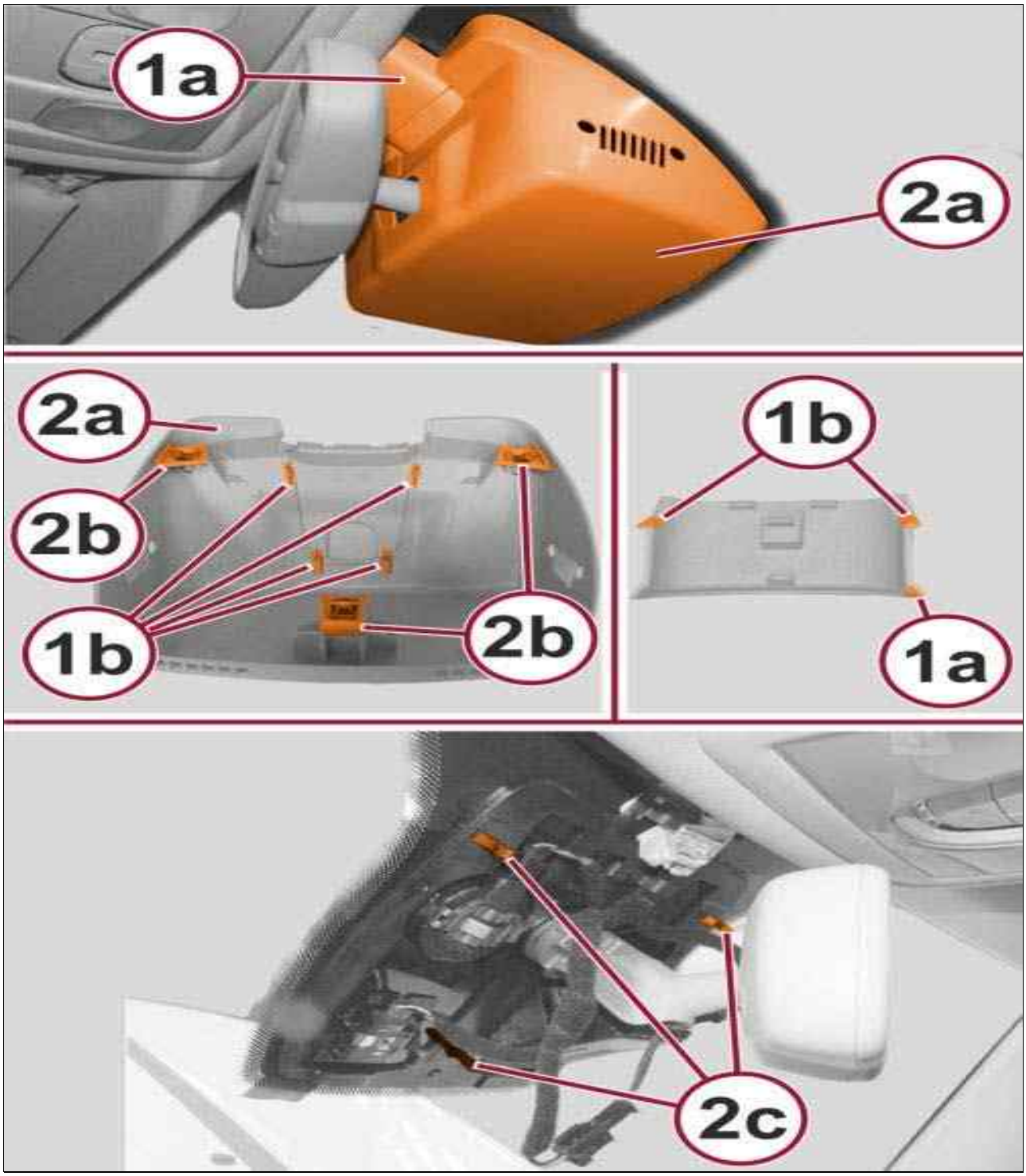
Courtesy of CHRYSLER GROUP, LLC

10. Position the grab handles (1) and install the screws. Tighten the screws securely then install the screw covers (2a).

11. Connect the negative battery cable.

INTERIOR > MIRROR, REARVIEW > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

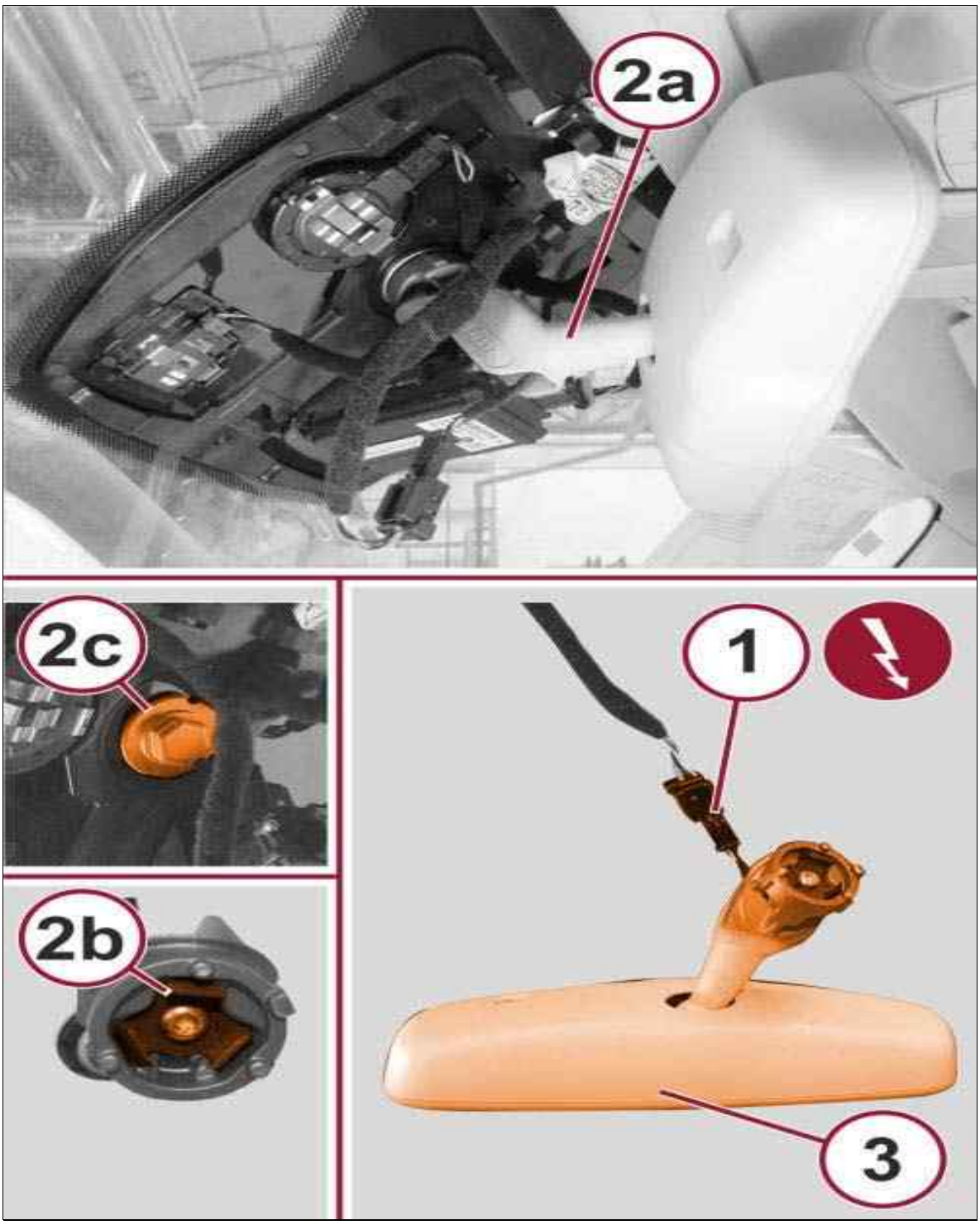
Fig 1: Mirror Trim, Tabs & Clips



Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable.
2. Using a small flat bladed tool, release the clips on each side of the upper mirror trim (1a) and remove.
3. Using a trim stick or equivalent, release the clips (2b) and remove the lower mirror trim (2a).

Fig 2: Mirror, Base, Button & Connector



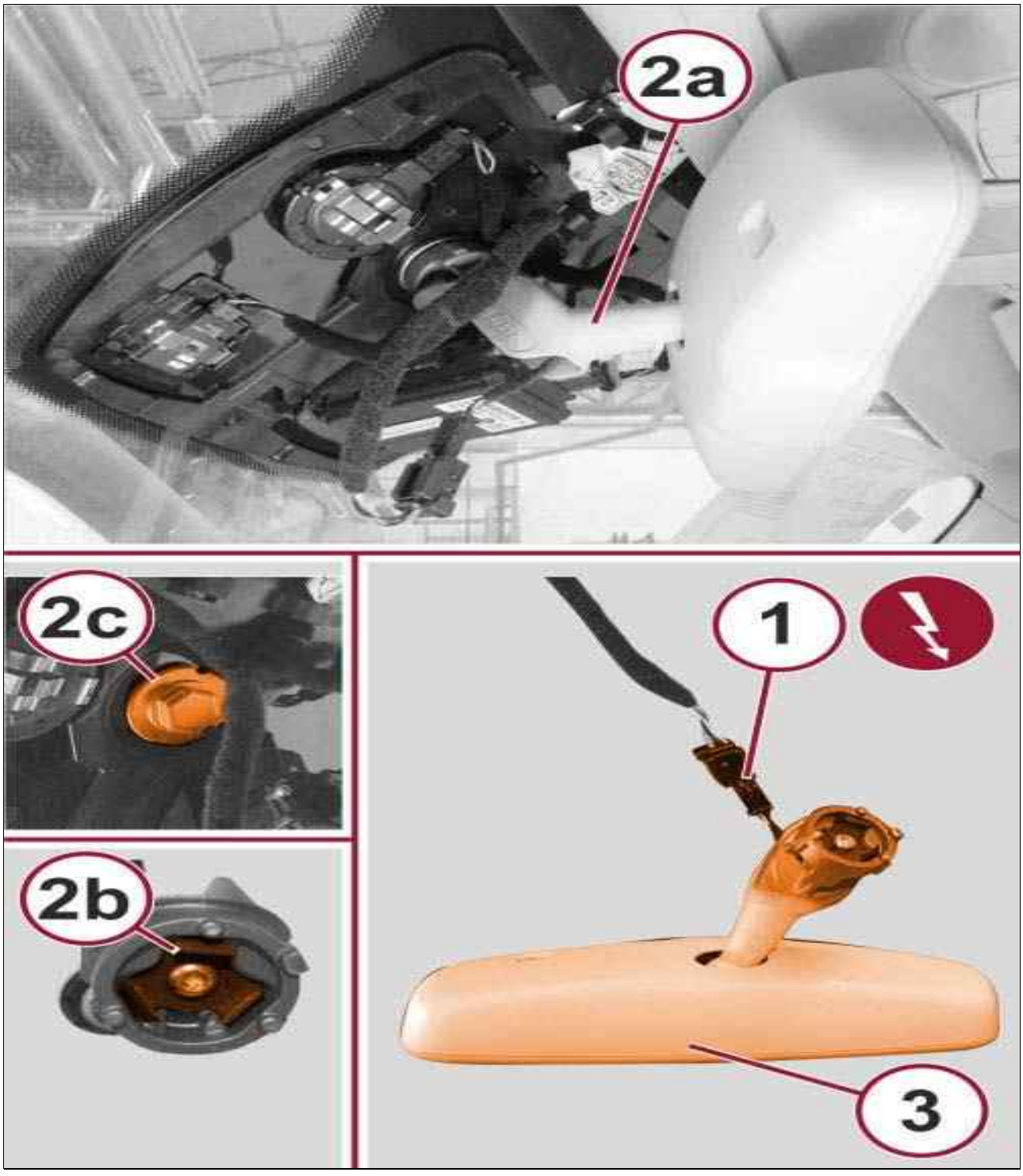
Courtesy of CHRYSLER GROUP, LLC

4. Disconnect the wire harness connector (1) from the rear view mirror.

5. Grasp the rear view mirror by the base (2a) and rotate it clockwise approximately 90 degrees and remove.

INTERIOR > MIRROR, REARVIEW > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Mirror, Base, Button & Connector



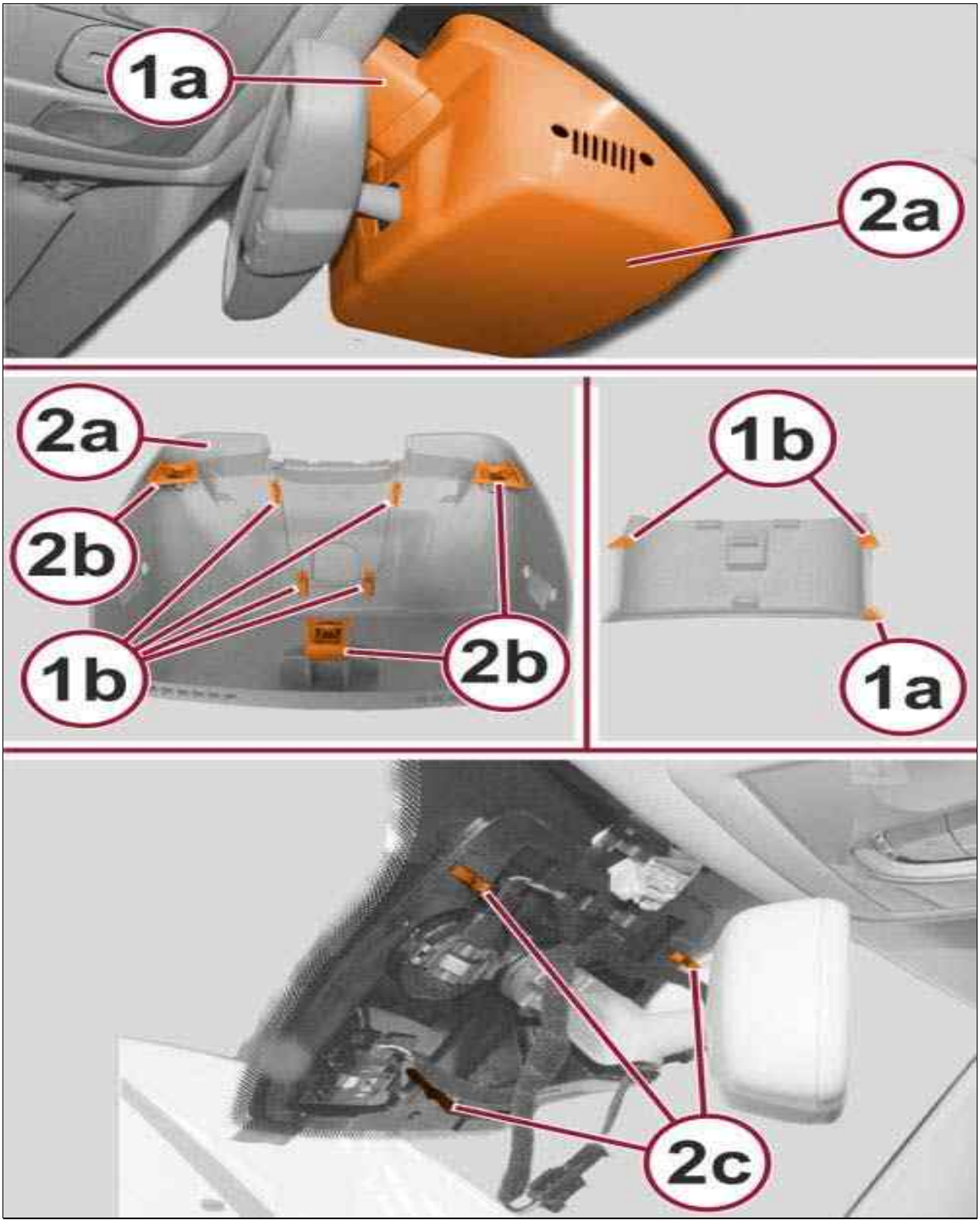
Courtesy of CHRYSLER GROUP, LLC

1. Place the rear view mirror (2a) onto the mirror button (2c).
2. Grasp the mirror by the base and rotate it approximately 90 degrees counter-clockwise until the mirror locks into place.

> *NOTE:*
>
> *The mirror must be fully seated onto the button before rotating.*

3. Connect the wire harness connector (1).

Fig 2: Mirror Trim, Tabs & Clips



Courtesy of CHRYSLER GROUP, LLC

4. Install the lower mirror trim (2a) from the bottom. Make sure the tabs (2b) engage fully.
5. Insert the bottom of the upper mirror trim (1a) and engage the tabs (1b).

INTERIOR > PANEL, A-PILLAR TRIM > REMOVAL AND INSTALLATION > REMOVAL

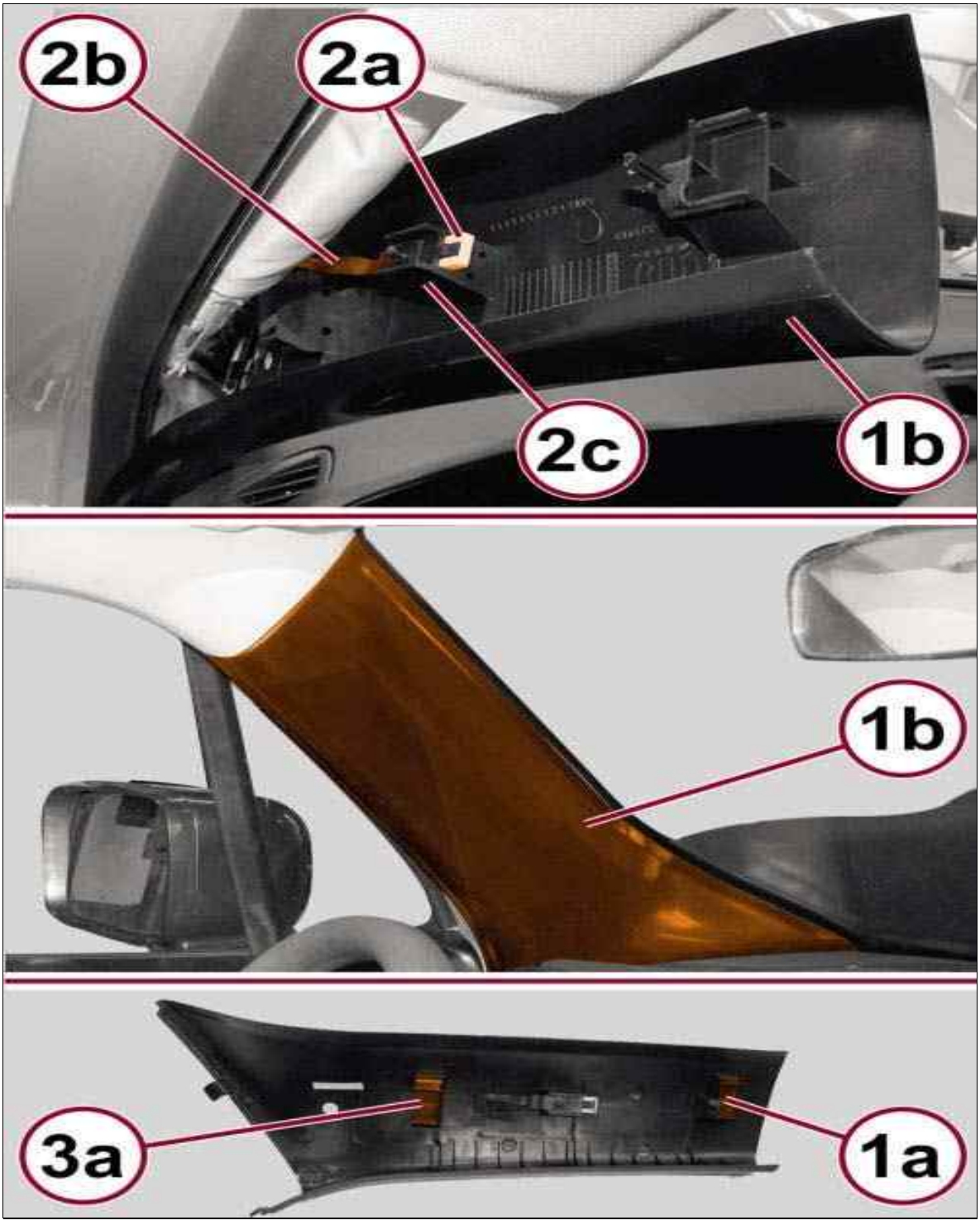
AND INSTALLATION > REMOVAL

Fig 1: Instrument Panel Side Cover & Cowl Side Upper Cover

Courtesy of CHRYSLER GROUP, LLC

1. Using a trim stick or equivalent, remove the instrument panel side cover (1a).
2. Loosen the door opening weatherstrip from the body.
3. Using a trim stick or equivalent, remove the cowl side upper cover (1b).

Fig 2: A-Pillar Trim Panel, Tether & Lock



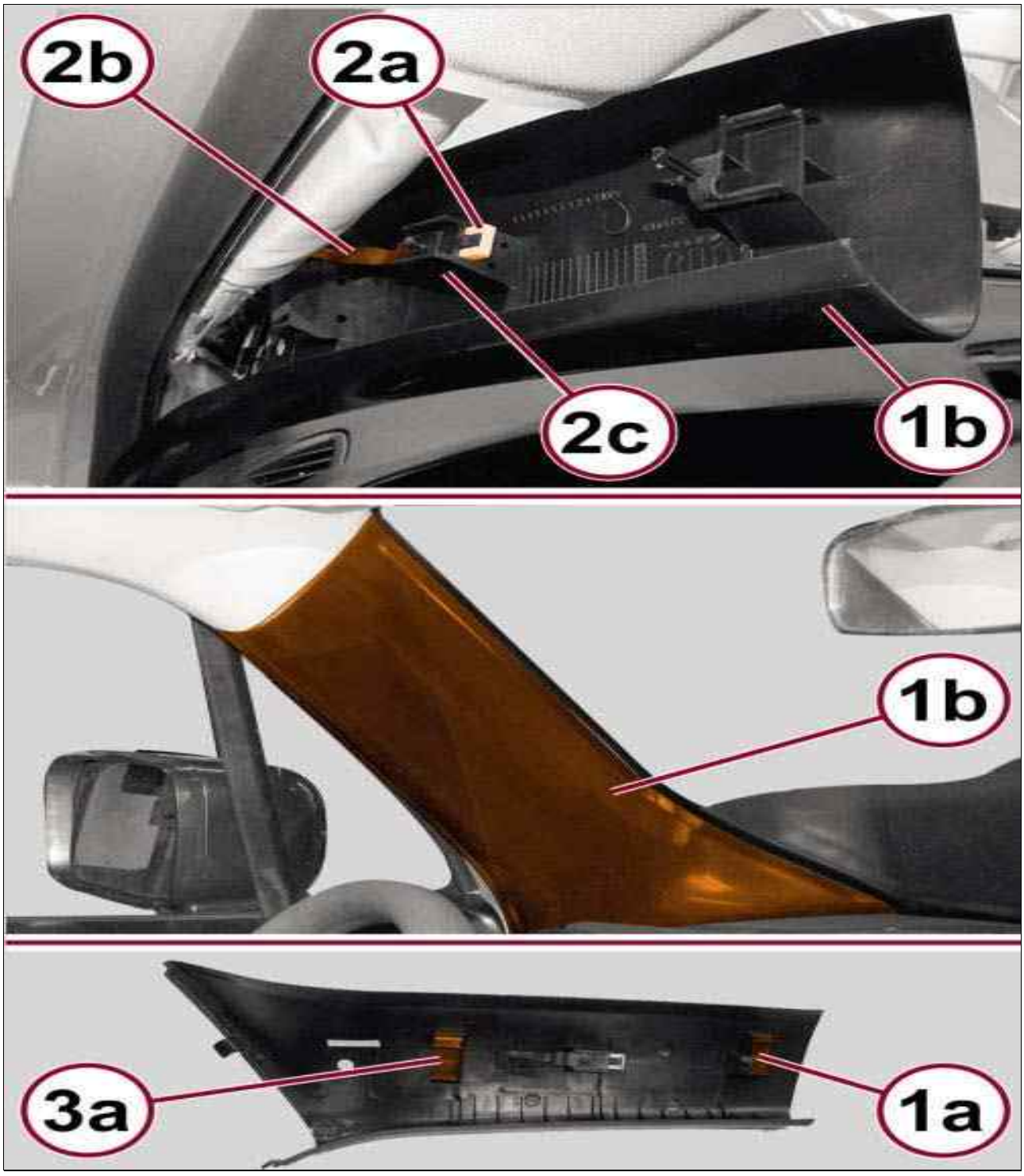
Courtesy of CHRYSLER GROUP, LLC

4. By hand, pull inward at the top of the A-pillar trim panel (1b) and release it from the body.
5. Using a flat bladed tool, remove the tether lock (2a).
6. Using a flat bladed tool, press the tab to disengage the tether (2b) and slide it out of A-pillar trim panel.
7. Rotate the top of the A-pillar towards the center of the vehicle, then lift upward to remove it

from the instrument panel.

INTERIOR > PANEL, A-PILLAR TRIM > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: A-Pillar Trim Panel, Tether & Lock



Courtesy of CHRYSLER GROUP, LLC

1. Position the bottom of the A-pillar trim panel (1b) into the top of the instrument panel.
2. Insert the tether (2b) into the A-pillar trim panel. Make sure the tab is fully engaged, and the tether is secured properly.
3. Install the tether lock (2a).
4. Align the retaining clips and hand tap to engage.

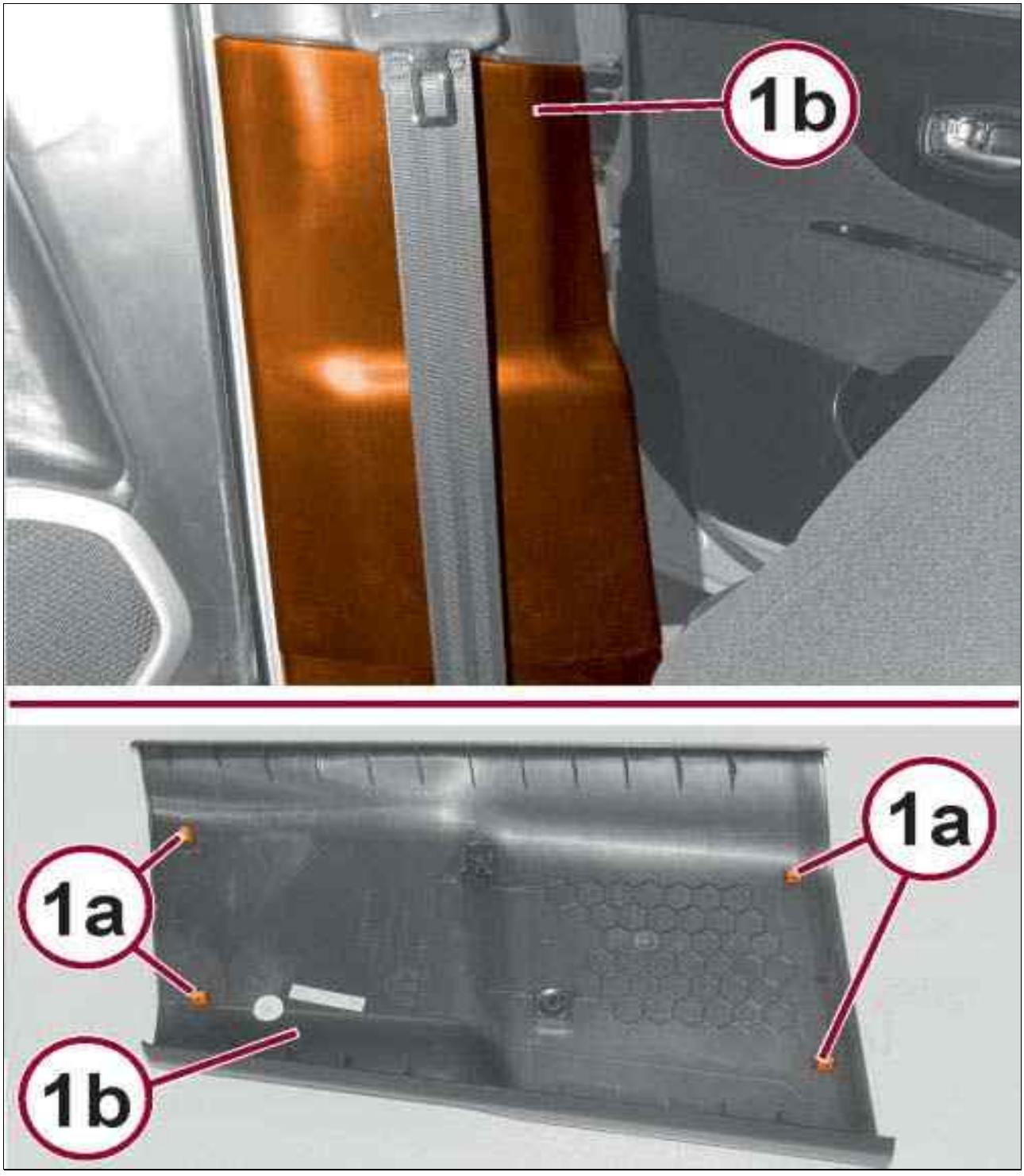
Fig 2: Instrument Panel Side Cover & Cowl Side Upper Cover

Courtesy of CHRYSLER GROUP, LLC

5. Install the cowl side upper cover (1b).
6. Install the weatherstrip seal to the body.
7. Install the instrument panel side cover (1a).

INTERIOR > PANEL, B-PILLAR TRIM, LOWER > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

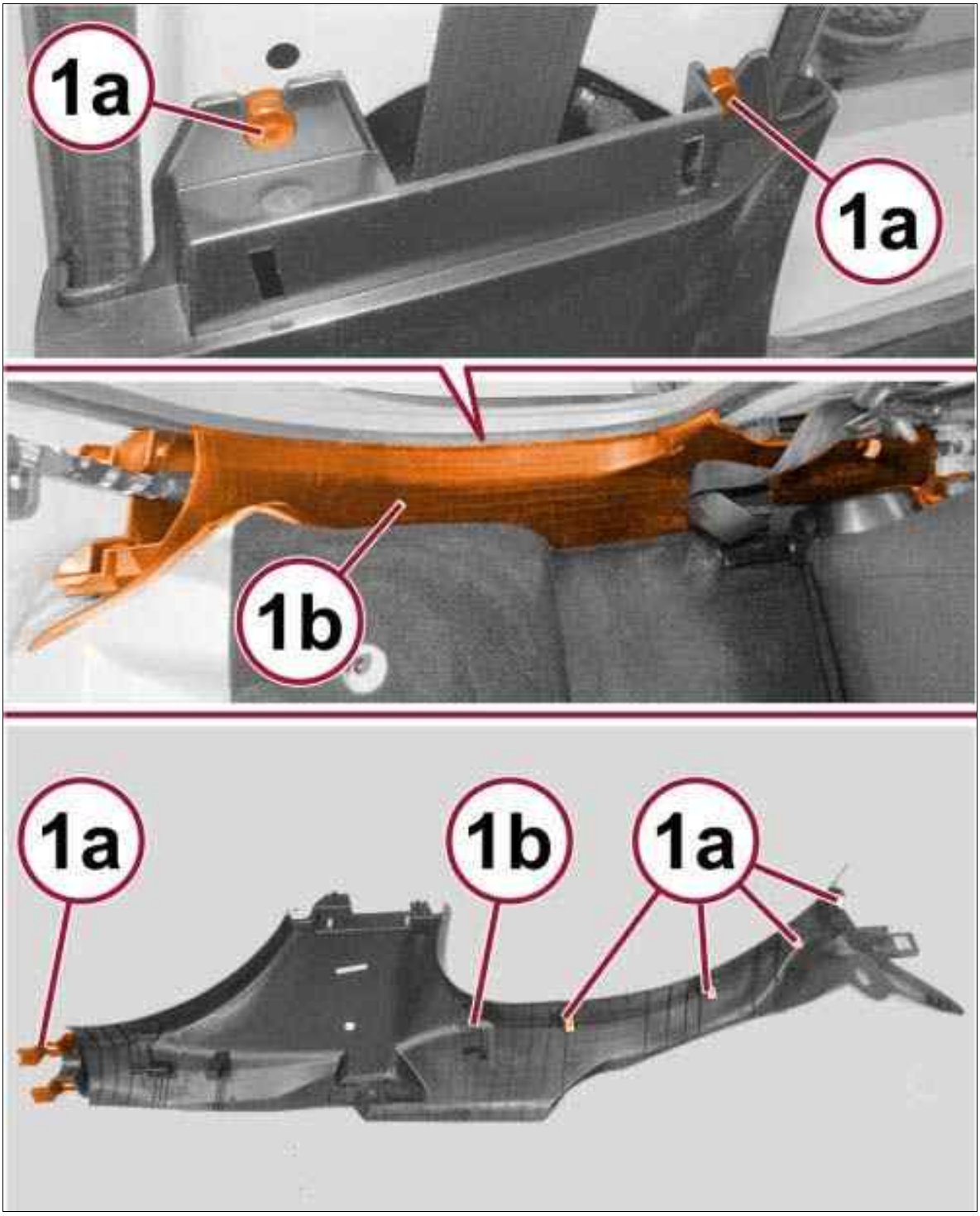
Fig 1: Center B-Pillar Trim Panel & Clips



Courtesy of CHRYSLER GROUP, LLC

1. Remove the cowl side trim panel. Refer to PANEL, COWL TRIM, REMOVAL AND INSTALLATION .
2. Remove the rear seat cushion. Refer to SEAT CUSHION, REMOVAL AND INSTALLATION .
3. Using a trim tool or equivalent, remove the center B-pillar trim panel (1b).

Fig 2: Lower B-Pillar Trim Panel & Push Fasteners

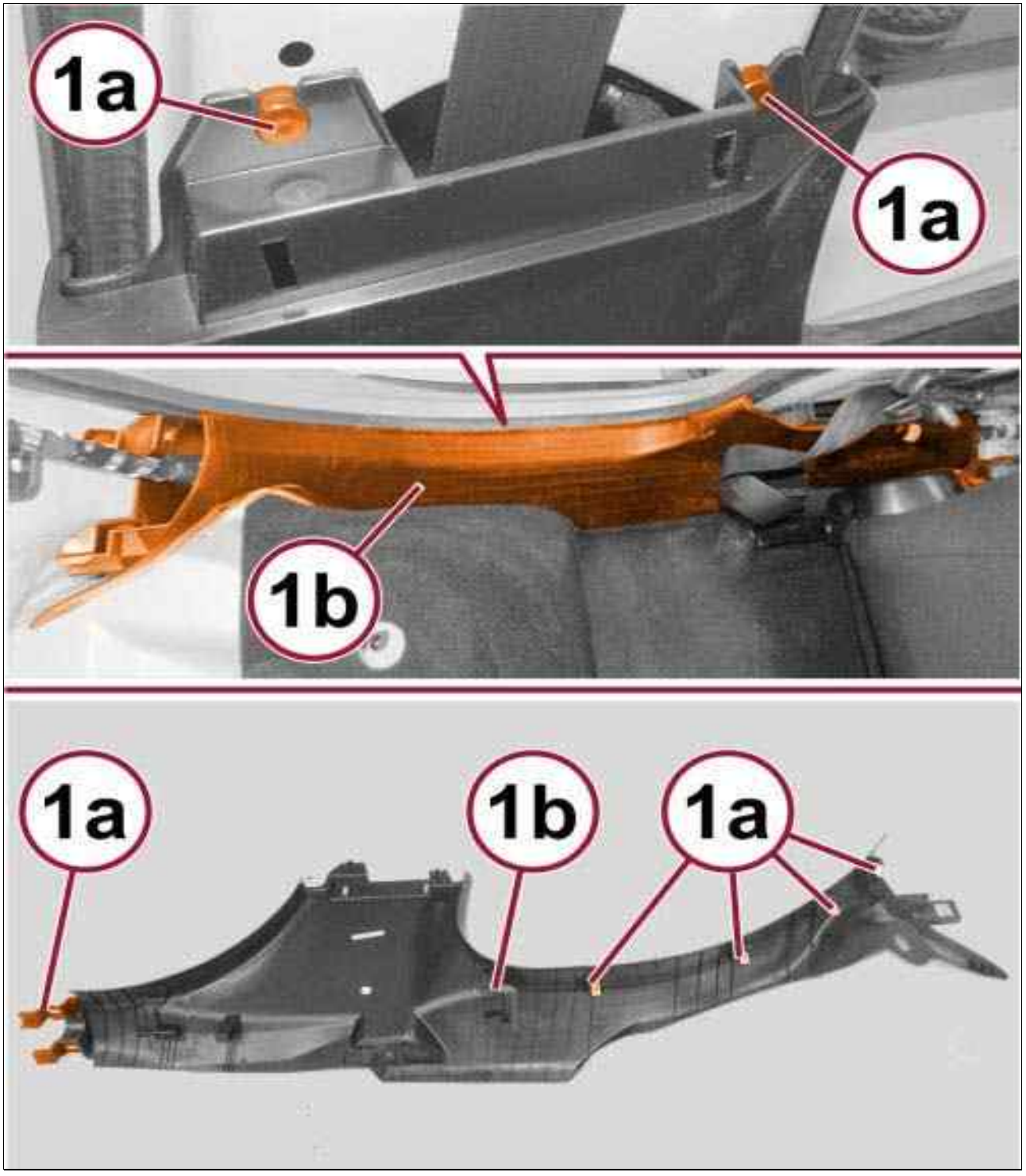


Courtesy of CHRYSLER GROUP, LLC

4. Using a trim tool or equivalent, remove the push fasteners (1a) and the lower B-pillar trim panel (1b).

INTERIOR > PANEL, B-PILLAR TRIM, LOWER > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

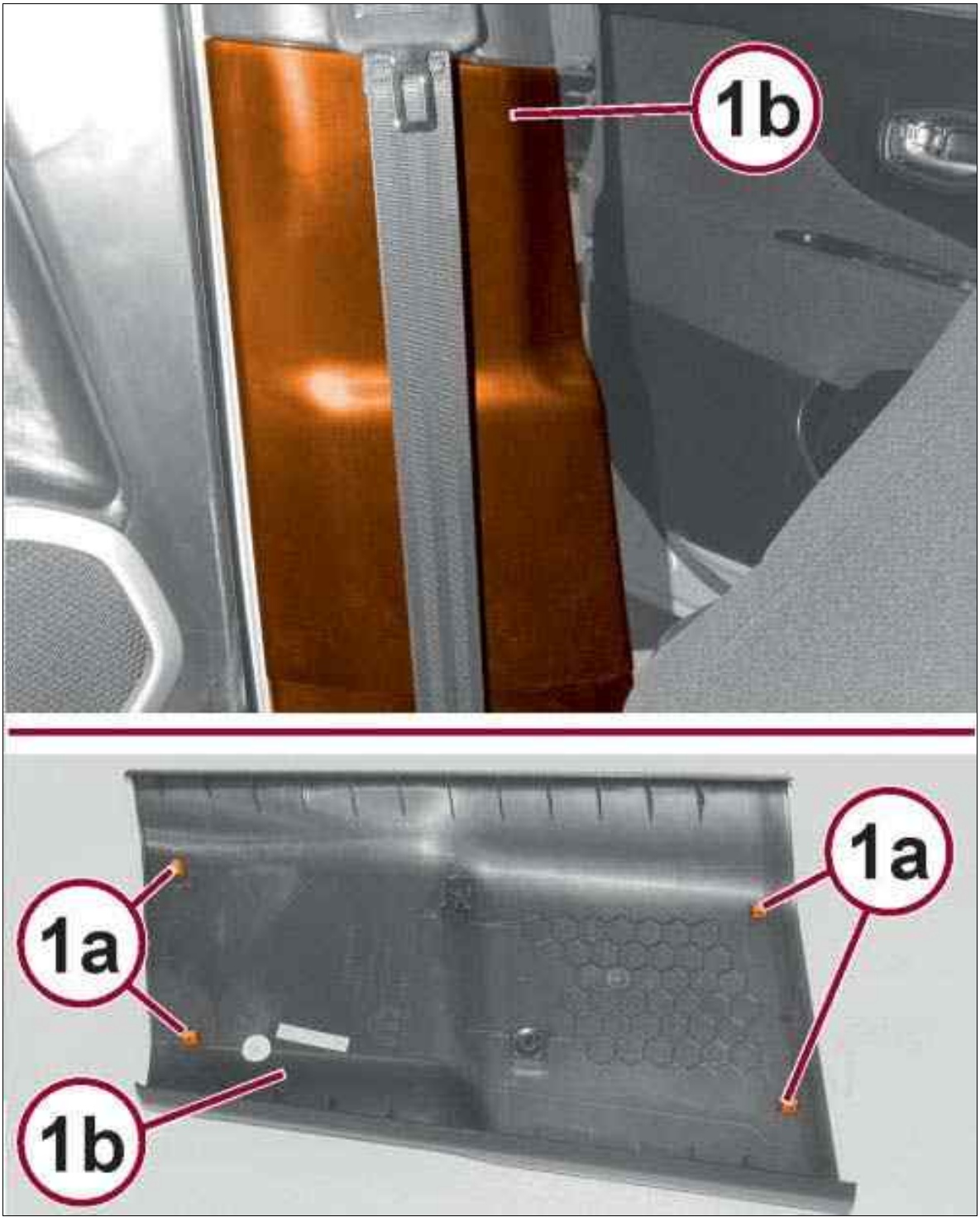
Fig 1: Lower B-Pillar Trim Panel & Push Fasteners



Courtesy of CHRYSLER GROUP, LLC

1. Position the lower B-pillar trim panel (1b) and hand tap into place.

Fig 2: Center B-Pillar Trim Panel & Clips

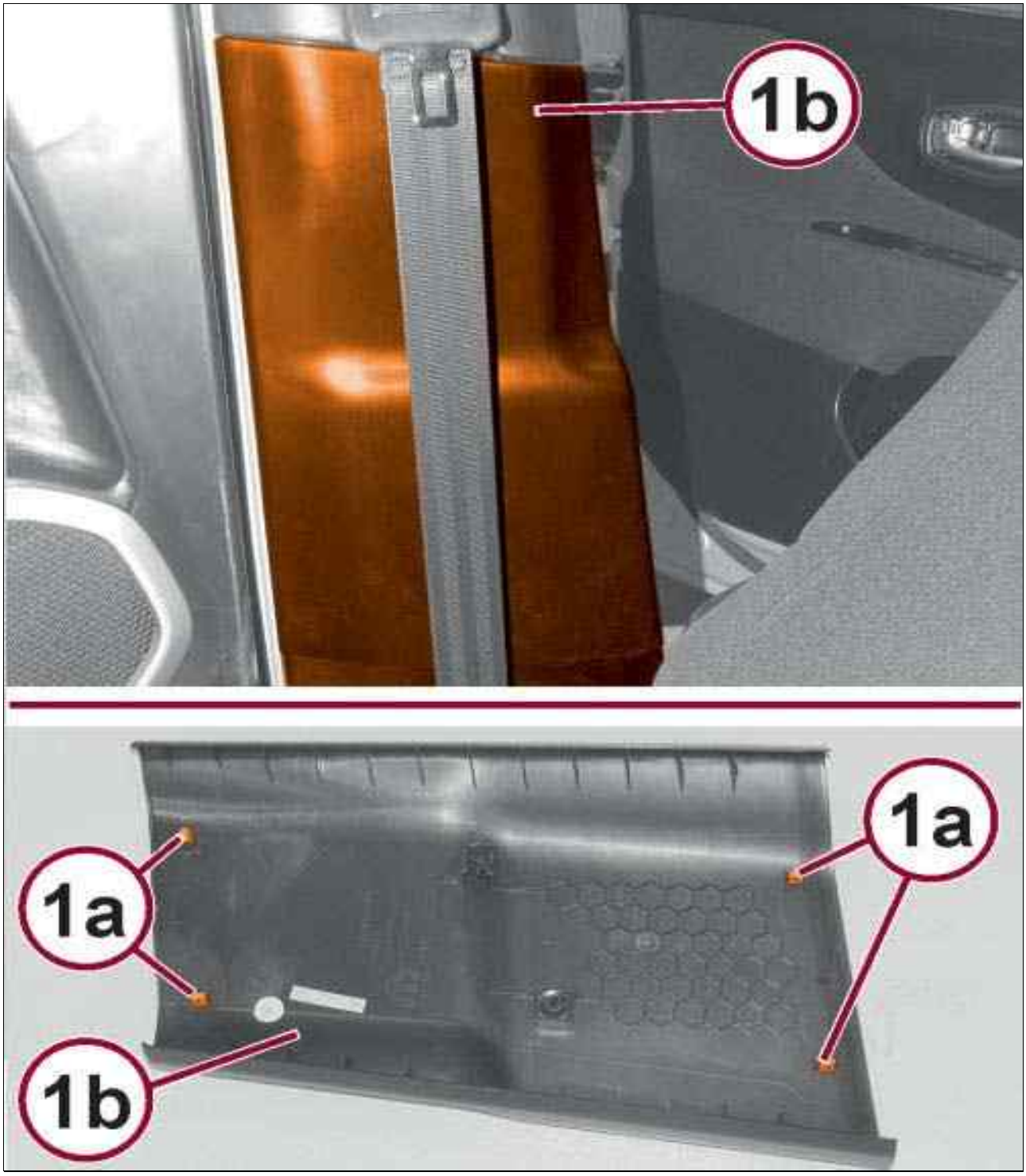


Courtesy of CHRYSLER GROUP, LLC

2. Position the lower B-pillar trim panel (1b) and hand tap into place.
3. Install the cowl side trim panel. Refer to PANEL, COWL TRIM, REMOVAL AND INSTALLATION .
4. Install the rear seat cushion. Refer to SEAT CUSHION, REMOVAL AND INSTALLATION .

INTERIOR > PANEL, B-PILLAR TRIM, UPPER > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

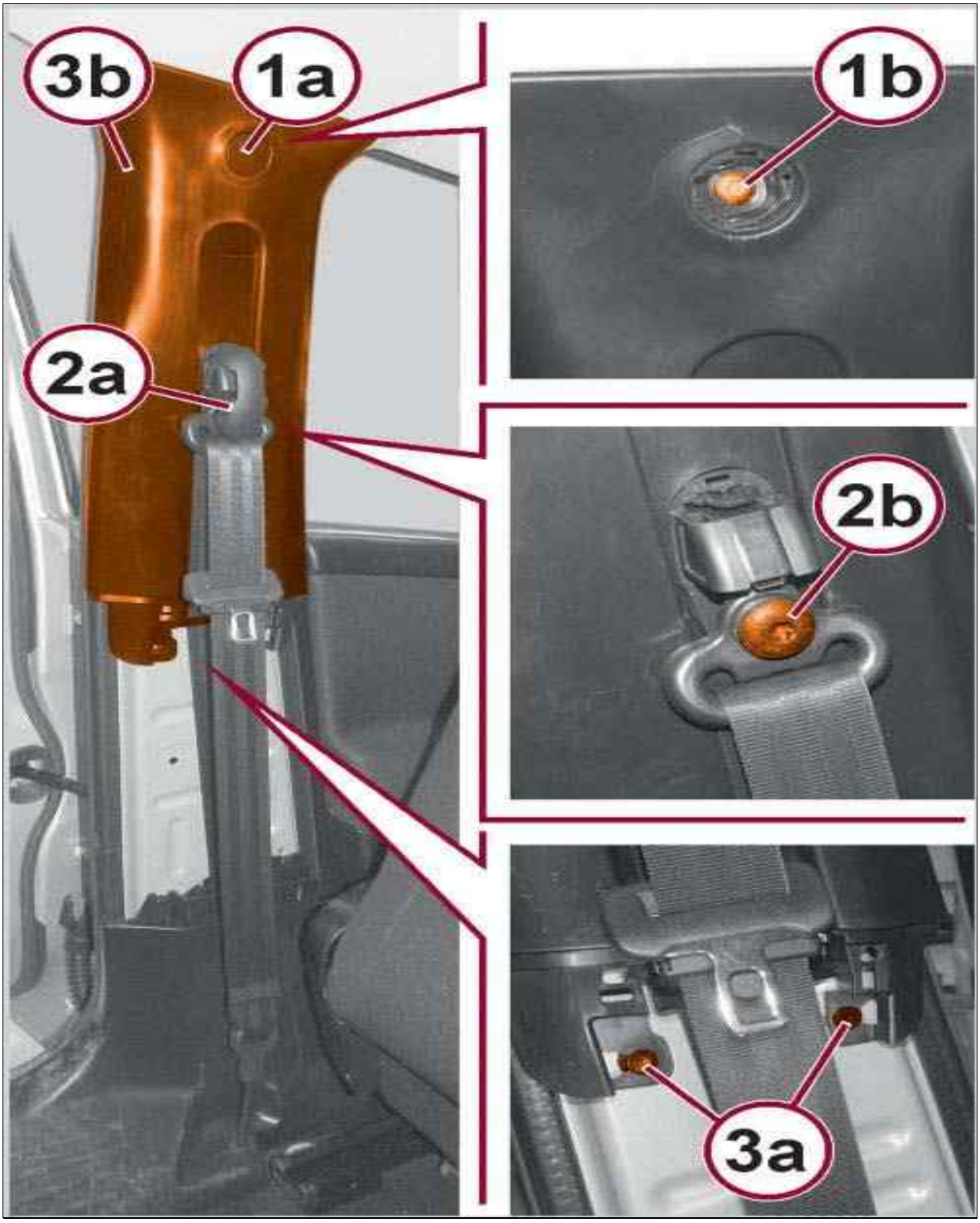
Fig 1: Center B-Pillar Trim Panel & Clips



Courtesy of CHRYSLER GROUP, LLC

1. Using a trim tool or equivalent, remove the center B-pillar trim panel (1b).

Fig 2: Upper B-Pillar Trim Panel, Upper Seat Belt Turning Loop, Cover & Screws



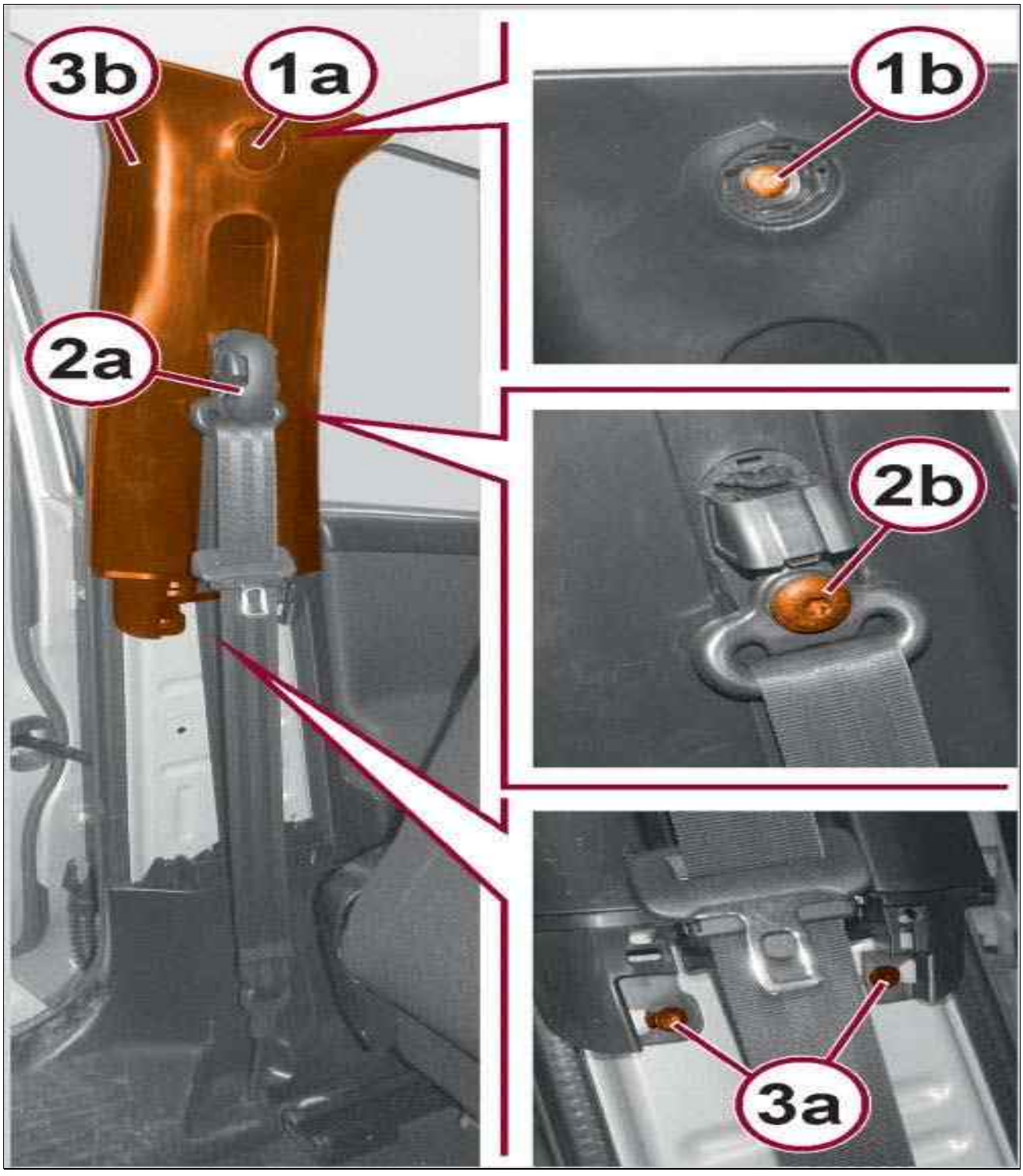
Courtesy of CHRYSLER GROUP, LLC

2. Remove the screw cover (1a) and the screw (1b).
3. Remove the screws (3a).
4. Move the seat belt height adjuster to the lowest position.
5. Remove the front seat upper seat belt turning loop (2b). Refer to RETRACTOR, SEAT BELT, REMOVAL AND INSTALLATION .

6. Starting at the bottom of the B-pillar trim panel, pull by hand to release the retaining clips and remove.

INTERIOR > PANEL, B-PILLAR TRIM, UPPER > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

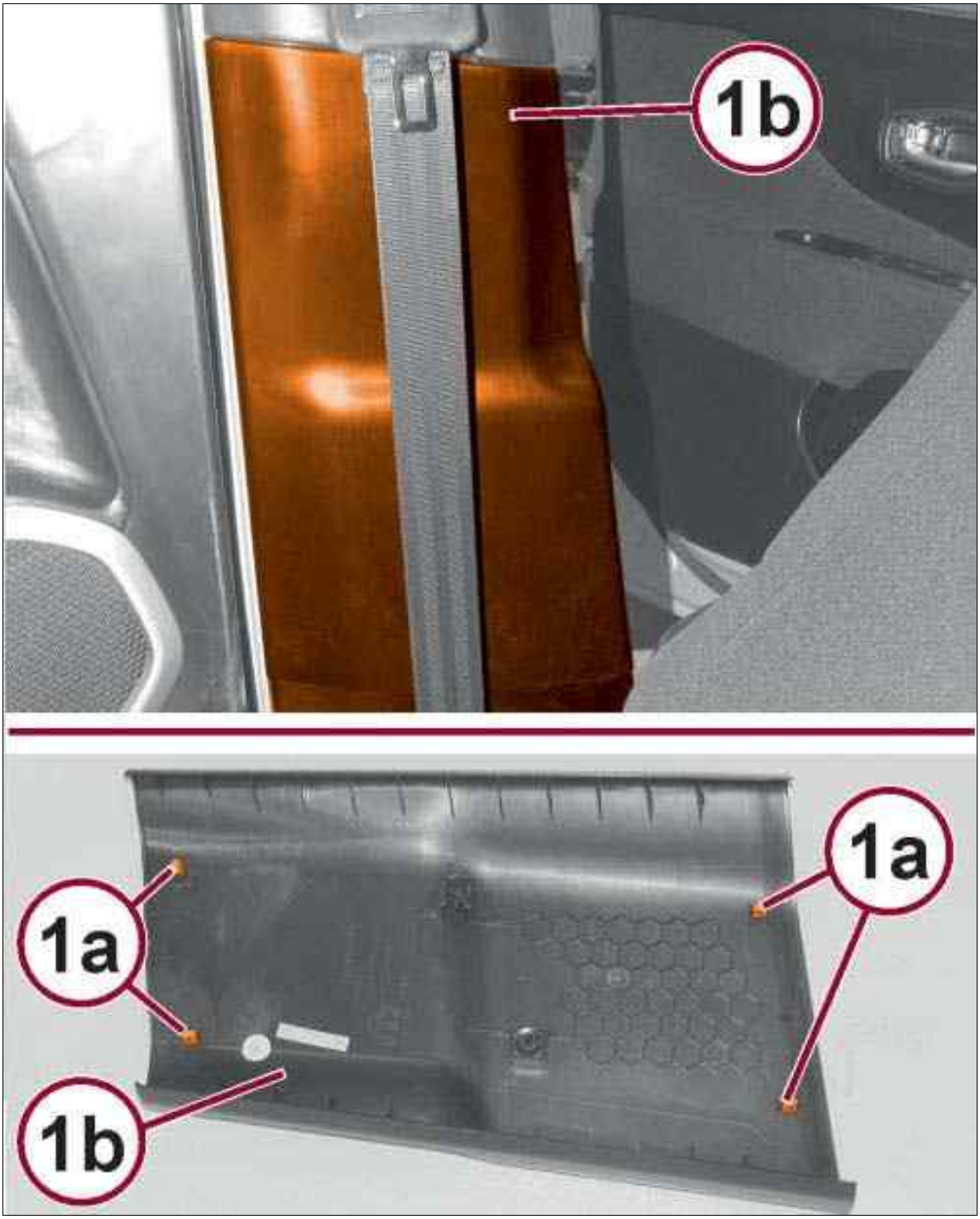
Fig 1: Upper B-Pillar Trim Panel, Upper Seat Belt Turning Loop, Cover & Screws



Courtesy of CHRYSLER GROUP, LLC

1. Align the seat belt height adjuster and position the upper B-pillar trim panel (3b) onto the body. Hand tap to engage the retaining clips.
2. Install the screw (1b) and screw cover (1a). Tighten the screw securely.
3. Install the screws (3a) and tighten securely.
4. Install the front seat upper seat belt turning loop (2b). Refer to RETRACTOR, SEAT BELT, REMOVAL AND INSTALLATION .

Fig 2: Center B-Pillar Trim Panel & Clips



Courtesy of CHRYSLER GROUP, LLC

5. Position the center B-pillar trim panel (1b) onto the body. Hand tap to engage the retaining clips (1a).

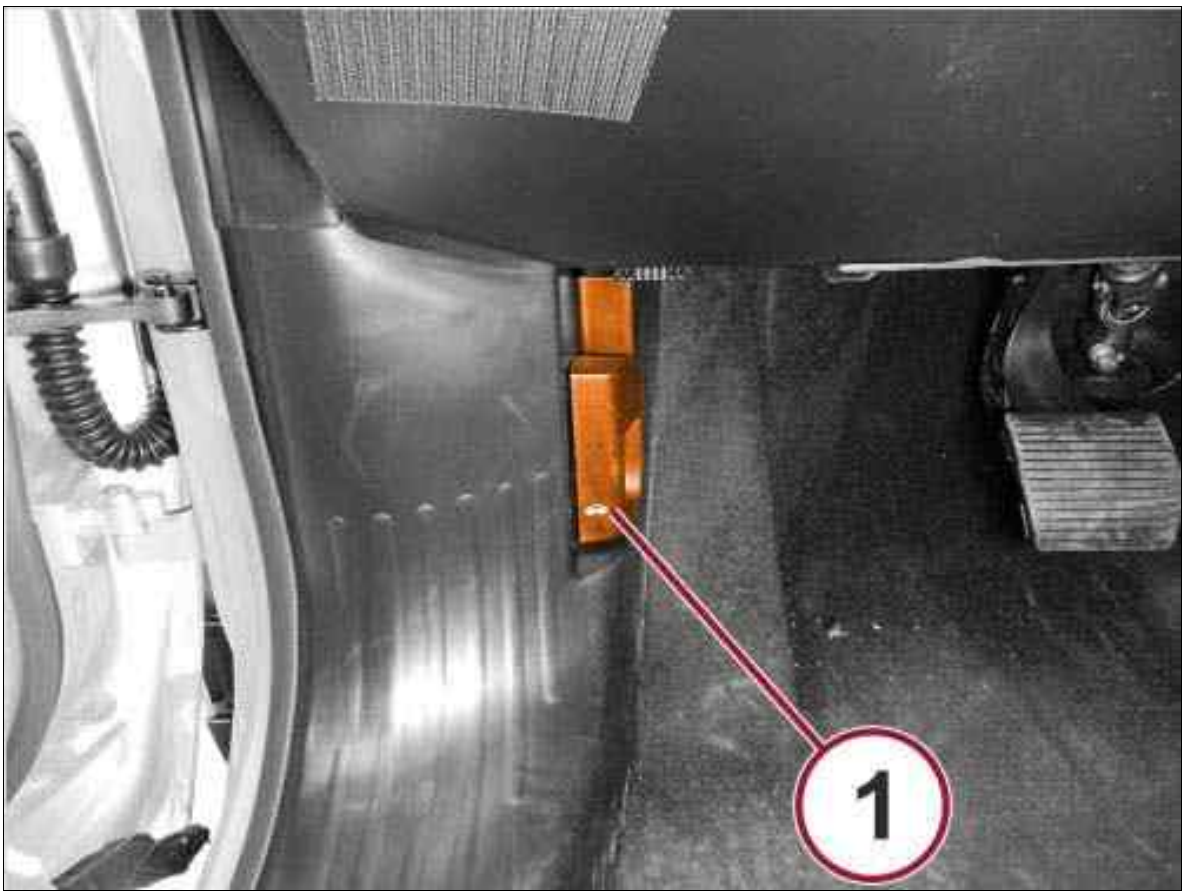
INTERIOR > PANEL, COWL TRIM > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Instrument Panel Side Cover & Cowl Side Upper Cover

Courtesy of CHRYSLER GROUP, LLC

1. Using a trim stick or equivalent, remove the instrument panel side cover (1a).
2. Loosen the door opening weatherstrip from the body.
3. Using a trim stick or equivalent, remove the cowl side upper cover (1b).

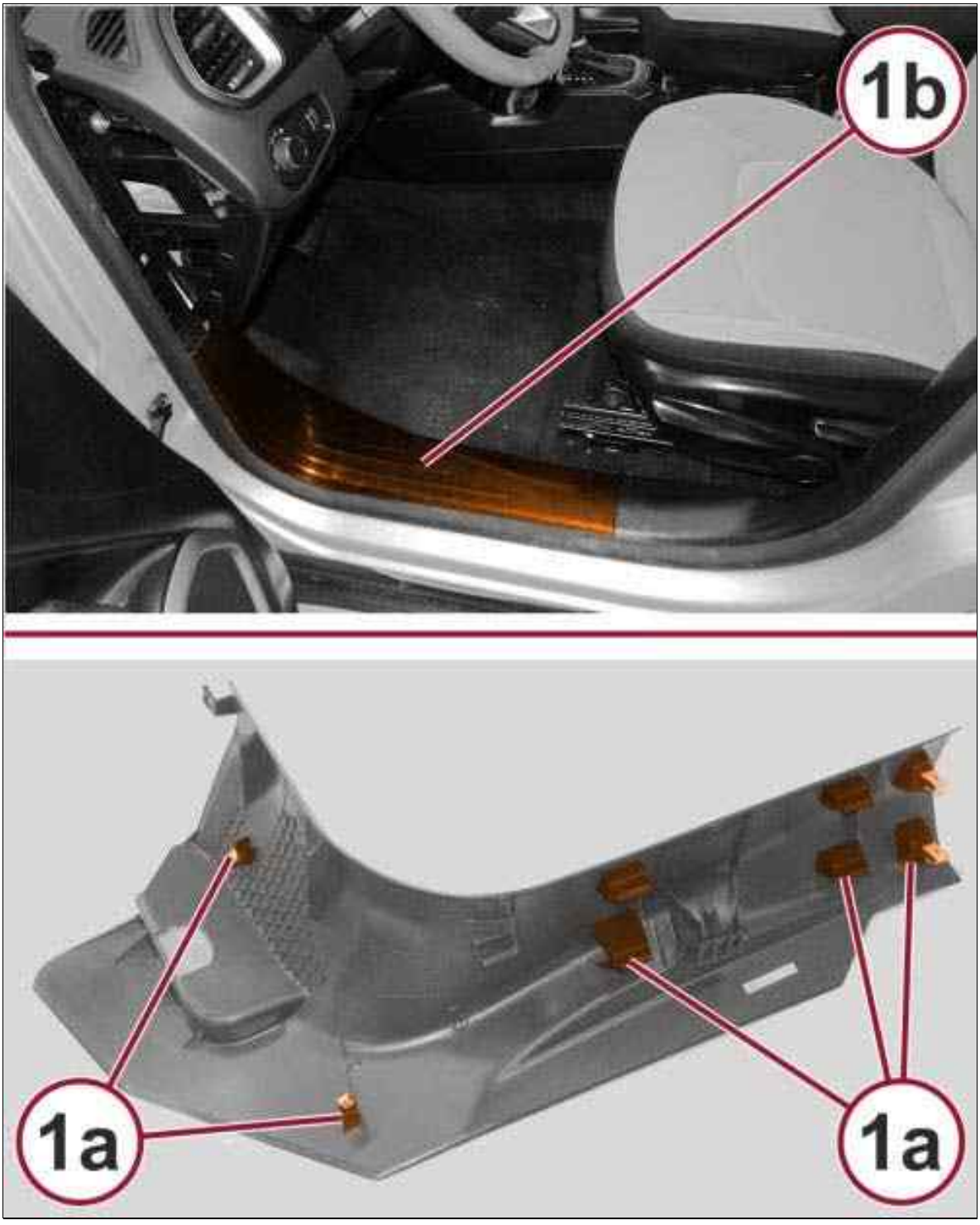
Fig 2: Hood Release Handle



Courtesy of CHRYSLER GROUP, LLC

4. Using a trim stick or equivalent, remove the hood release handle (1).

Fig 3: Cowl Side Trim & Clips

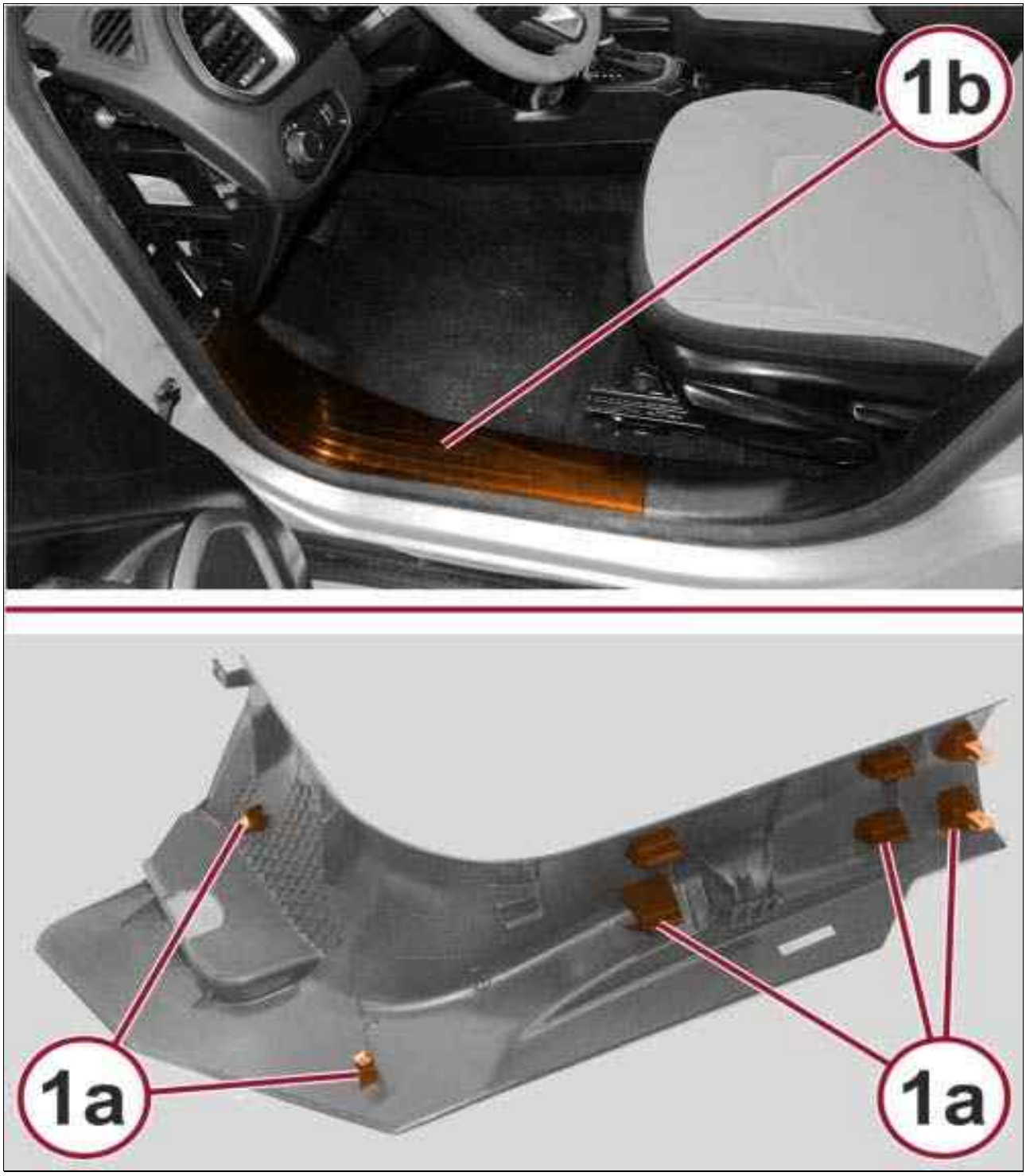


Courtesy of CHRYSLER GROUP, LLC

5. Lift the cowl side trim (1b) at the rear, then pull rearward and remove.

INTERIOR > PANEL, COWL TRIM > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

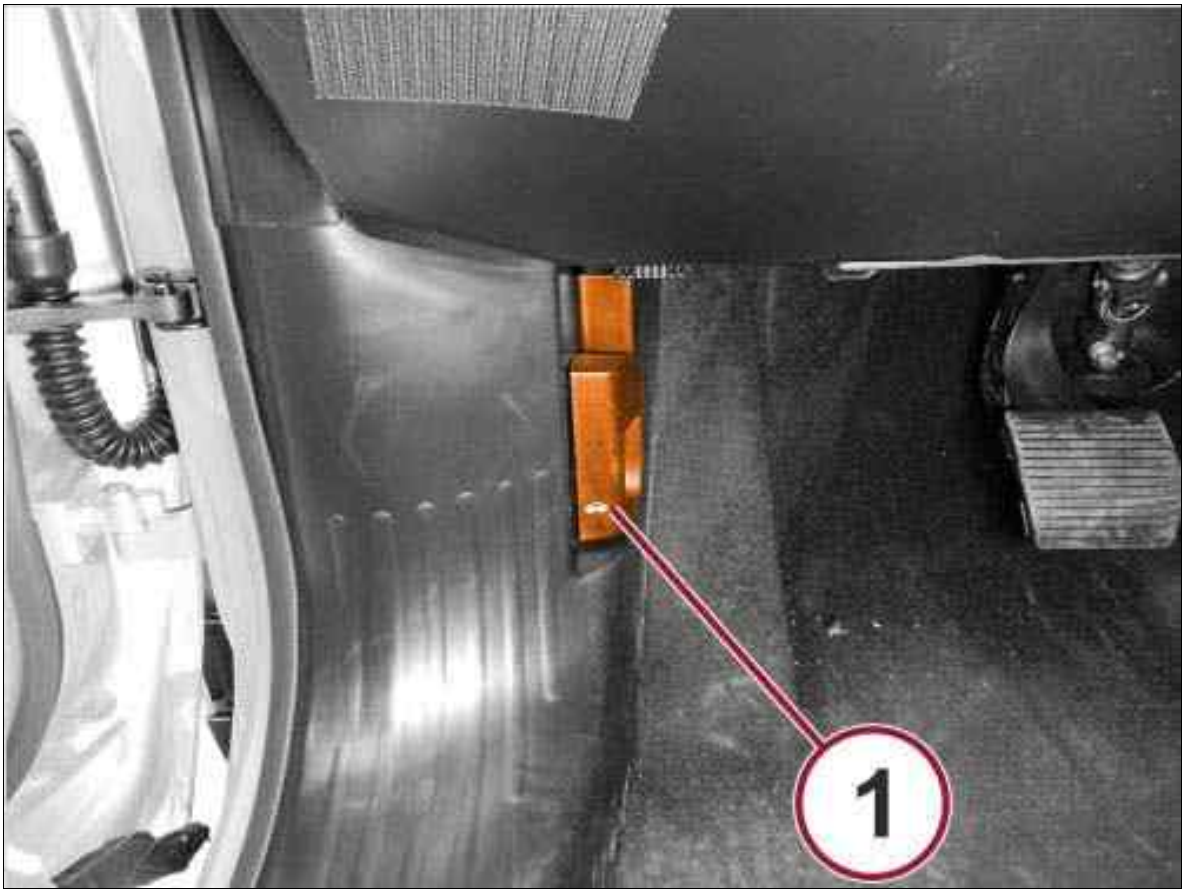
Fig 1: Cowl Side Trim & Clips



Courtesy of CHRYSLER GROUP, LLC

1. Install the cowl side trim (1a) at the front, then hand tap the rear to install the retaining clips.

Fig 2: Hood Release Handle



Courtesy of CHRYSLER GROUP, LLC

2. Install the hood release handle (1).

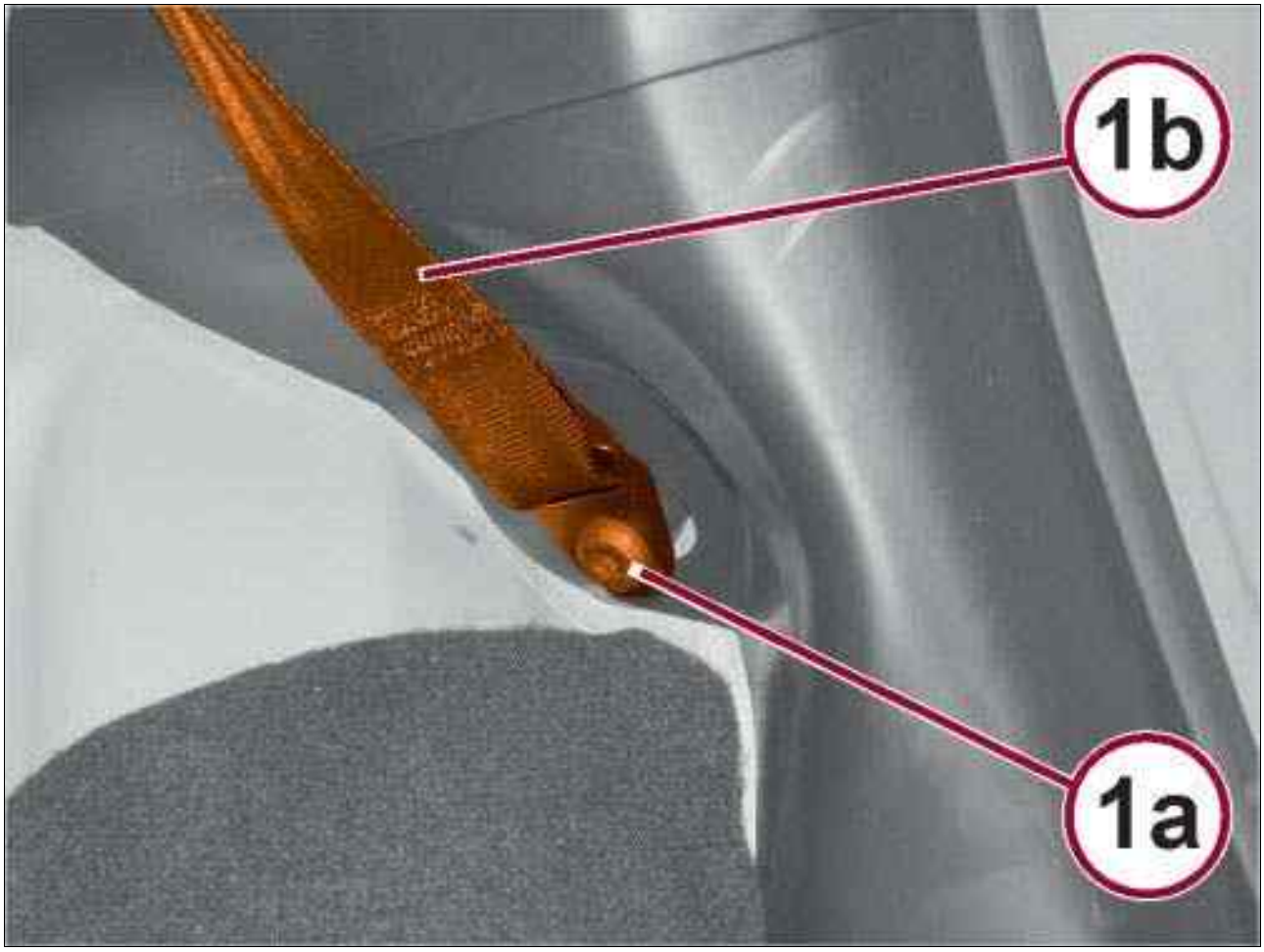
Fig 3: Instrument Panel Side Cover & Cowl Side Upper Cover

Courtesy of CHRYSLER GROUP, LLC

3. Install the cowl side upper cover (1b).
4. Install the weatherstrip seal to the body.
5. Install the instrument panel side cover (1a).

INTERIOR > PANEL, QUARTER TRIM > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

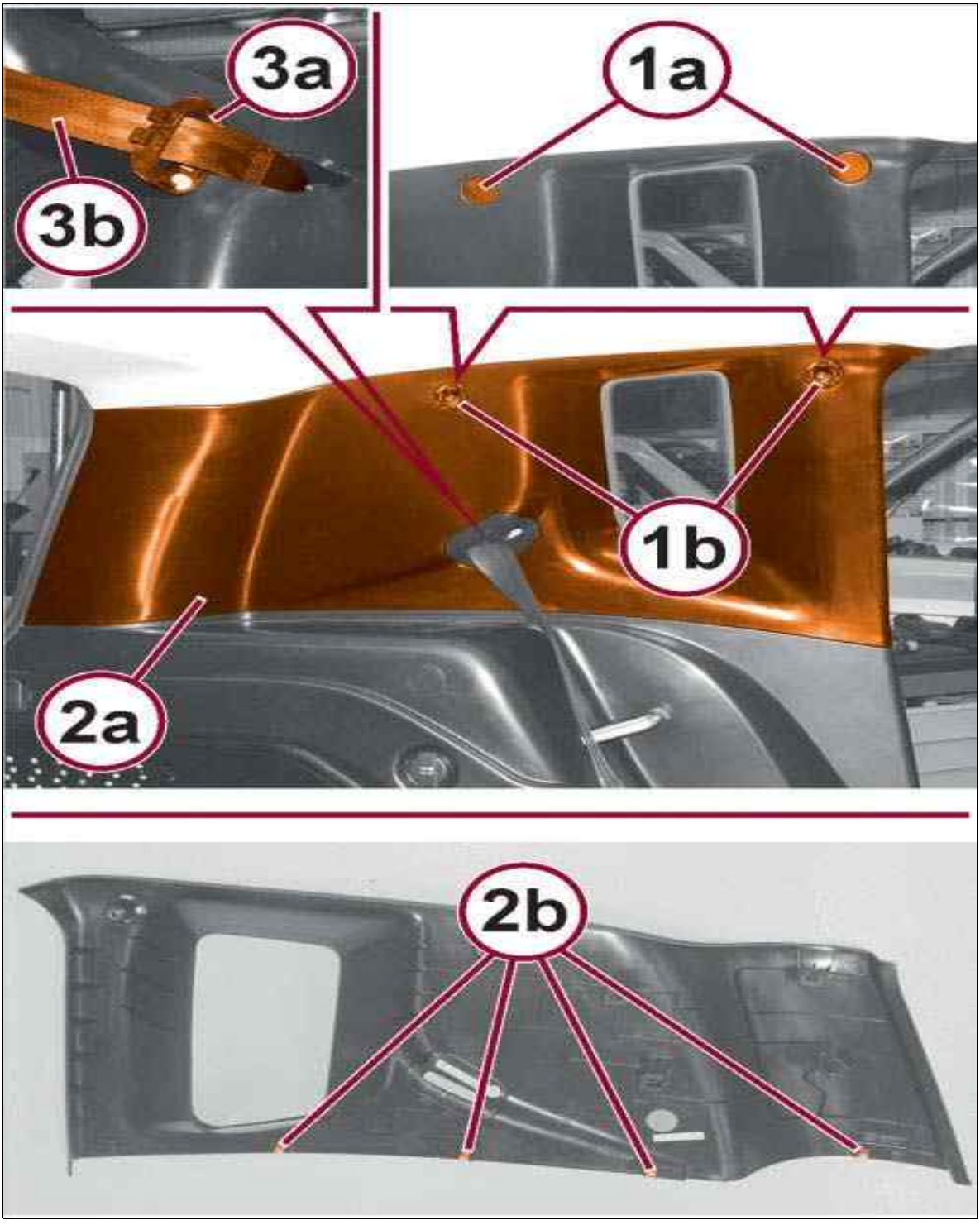
Fig 1: Seat Belt & Lower Anchor Bolt



Courtesy of CHRYSLER GROUP, LLC

1. Remove the seat belt lower anchor bolt (1a).

Fig 2: Upper Quarter Trim Panel, Seat Belt Bezel, Retainers, Screws & Covers

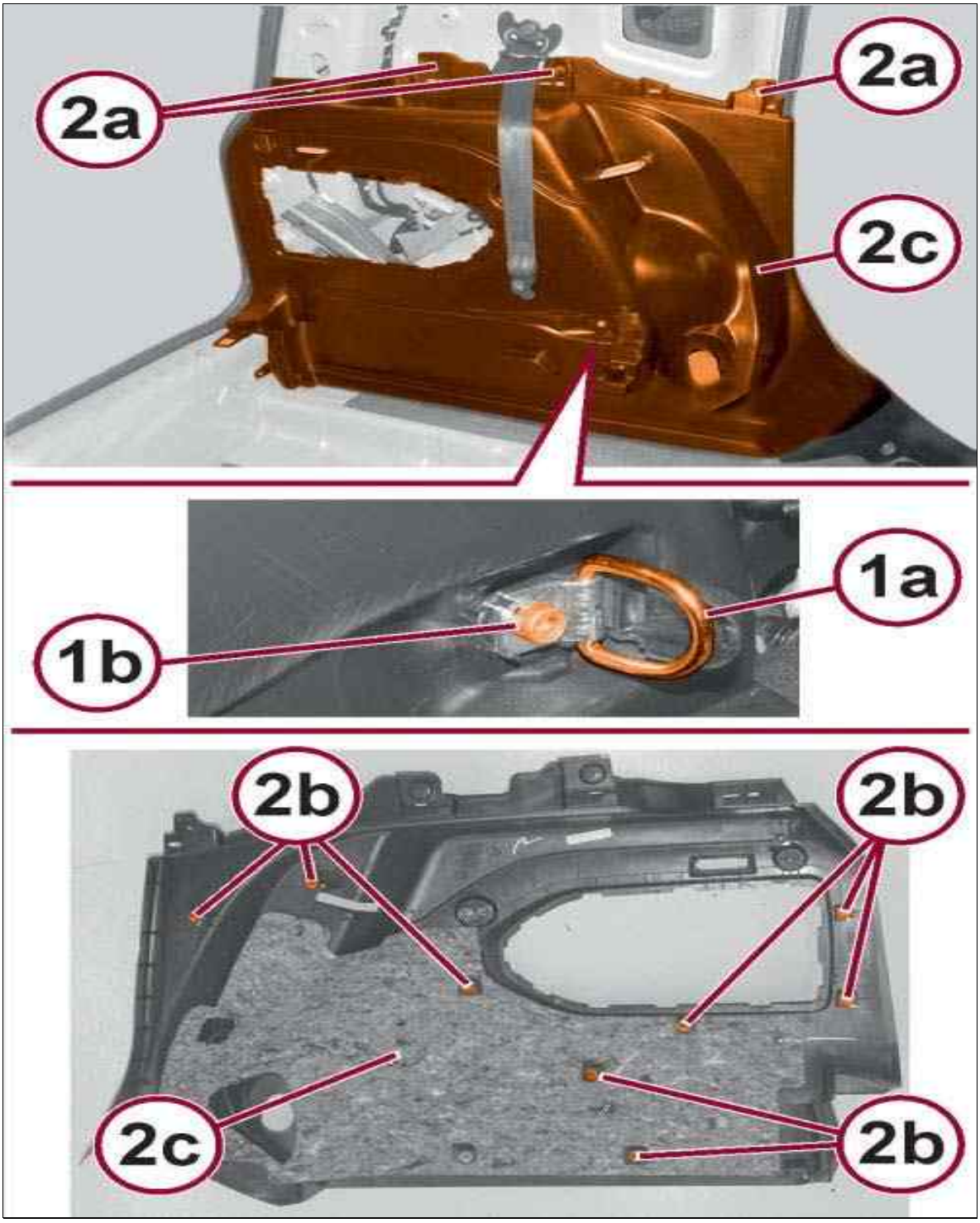


Courtesy of CHRYSLER GROUP, LLC

2. Remove the screw covers (1a) then remove the screws (1b).
3. Using a trim stick or equivalent, remove the seat belt bezel (3a).
4. Loosen the liftgate weatherstrip.
5. Using a trim stick or equivalent, release the retainers (2b) and remove the upper quarter trim panel (2a).

6. If removing the upper quarter trim panel completely, first remove the seat belt lower anchor bolt.
7. Remove the rear seat cushion. Refer to SEAT CUSHION, REMOVAL AND INSTALLATION .
8. Remove the liftgate sill plate. Refer to PLATE, SCUFF, LIFTGATE SILL, REMOVAL AND INSTALLATION .

Fig 3: Lower Quarter Trim Panel, Cargo Hook, Screw, Bolt & Clips

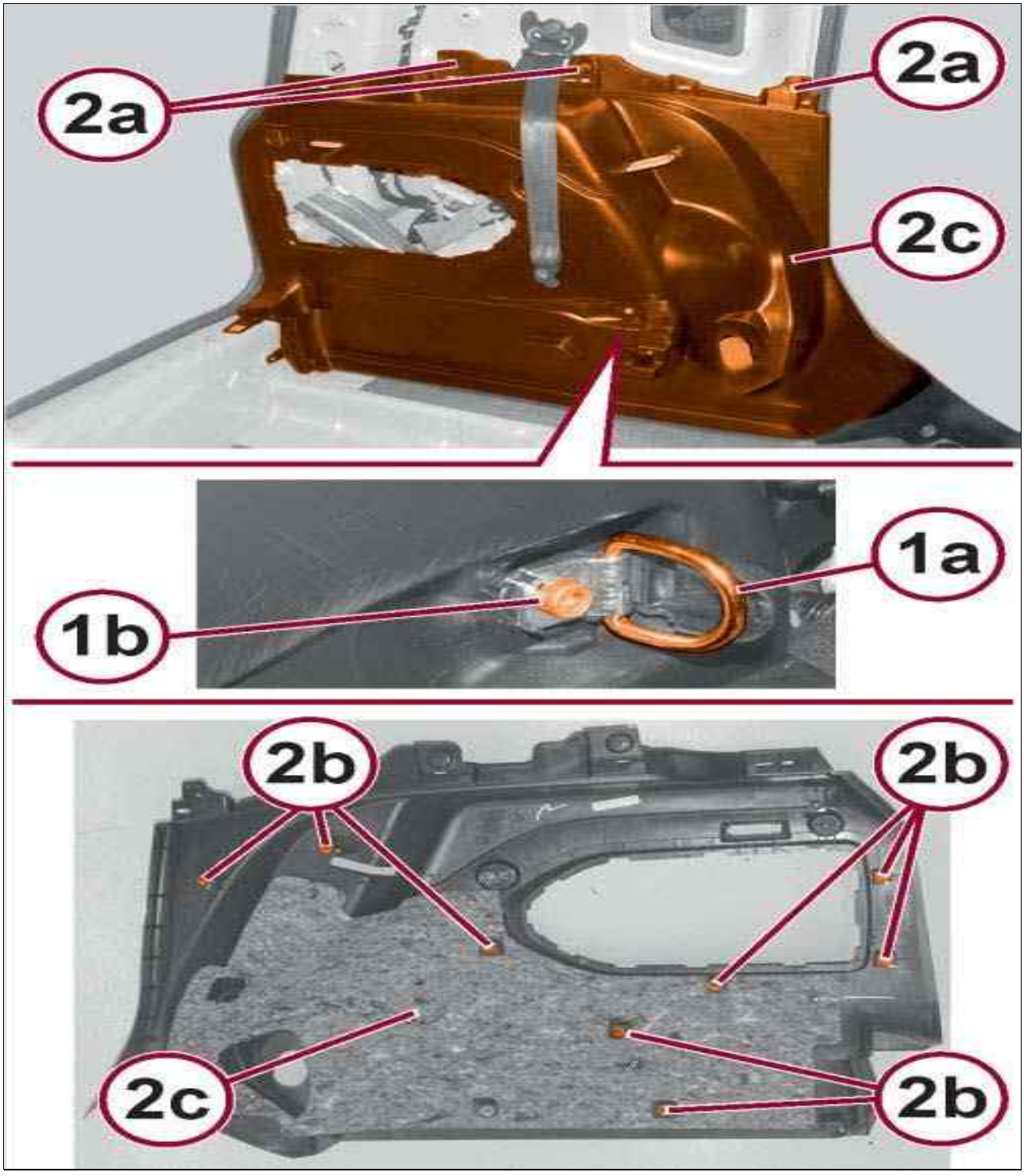


Courtesy of CHRYSLER GROUP, LLC

9. Remove the screw (2a) securing the lower quarter trim panel (2c).
10. Remove the bolt (1b) and the cargo hook (1a).
11. Loosen the liftgate weatherstrip
12. Using a trim stick or equivalent, release the retaining clips (2b) and loosen the lower quarter trim panel.
13. Disconnect the wire harness connectors and remove the lower quarter trim panel.

INTERIOR > PANEL, QUARTER TRIM > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

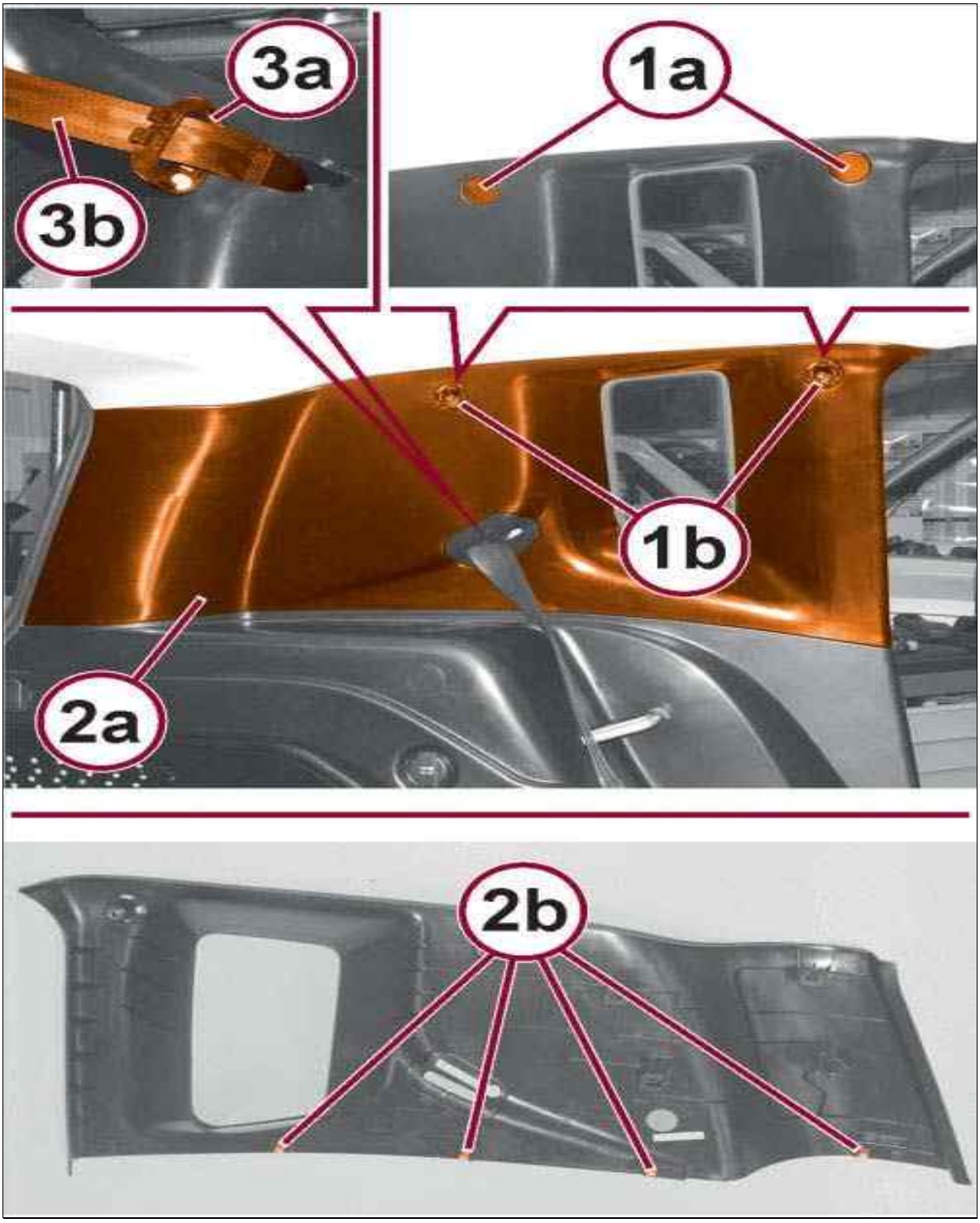
Fig 1: Lower Quarter Trim Panel, Cargo Hook, Screw, Bolt & Clips



Courtesy of CHRYSLER GROUP, LLC

1. Position the lower quarter trim panel (2c) in the vehicle and connect the wire harness connectors.
2. Hand tap the lower quarter trim panel to engage the retaining clips (2b).
3. Install the cargo hook (1a) and tighten the bolt (1b) securely.
4. Install the screws (2a) and tighten securely.

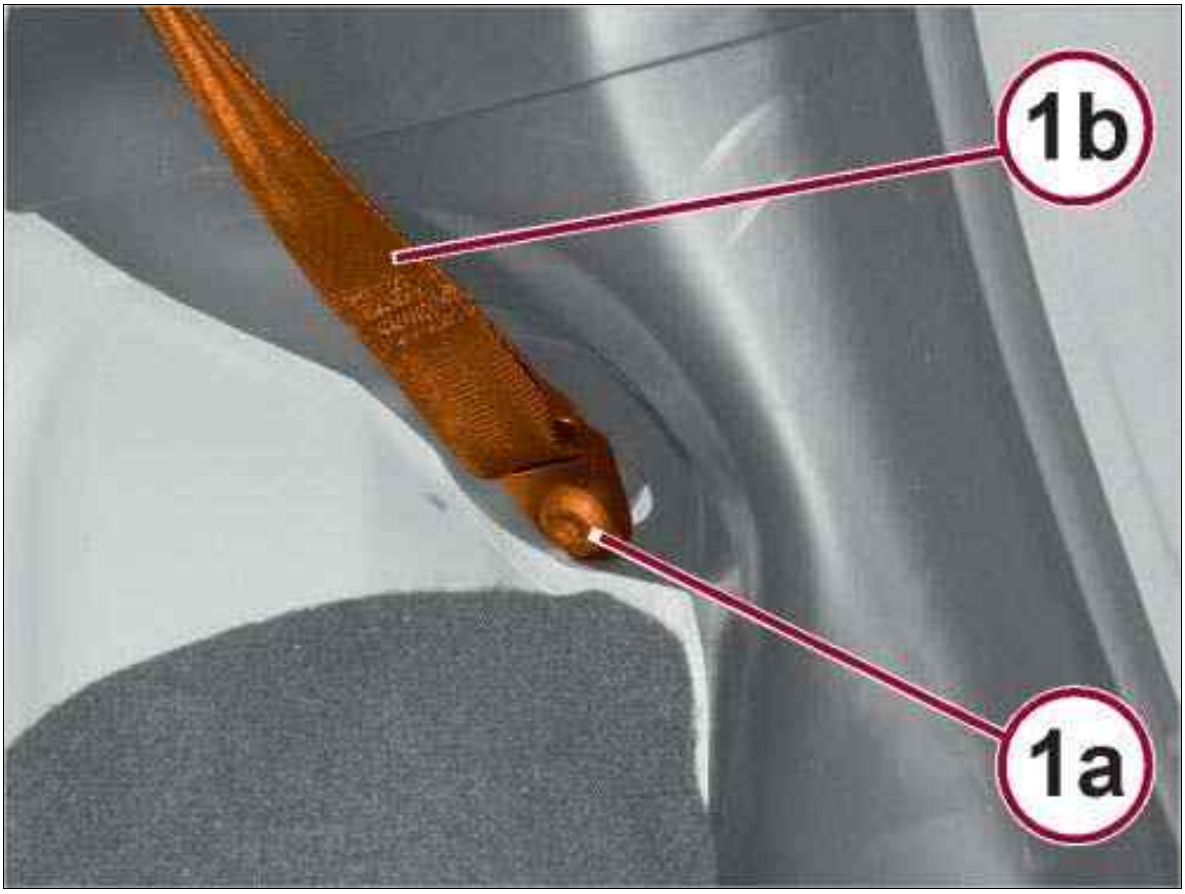
Fig 2: Upper Quarter Trim Panel, Seat Belt Bezel, Retainers, Screws & Covers



Courtesy of CHRYSLER GROUP, LLC

5. Route the seat belt (3b) through the upper quarter trim panel.
6. Position the upper quarter trim panel (2a) and hand tap to engage the retaining clips (2b).
7. Install the screws (1b) and tighten securely. Install the screw covers (1a).

Fig 3: Seat Belt & Lower Anchor Bolt

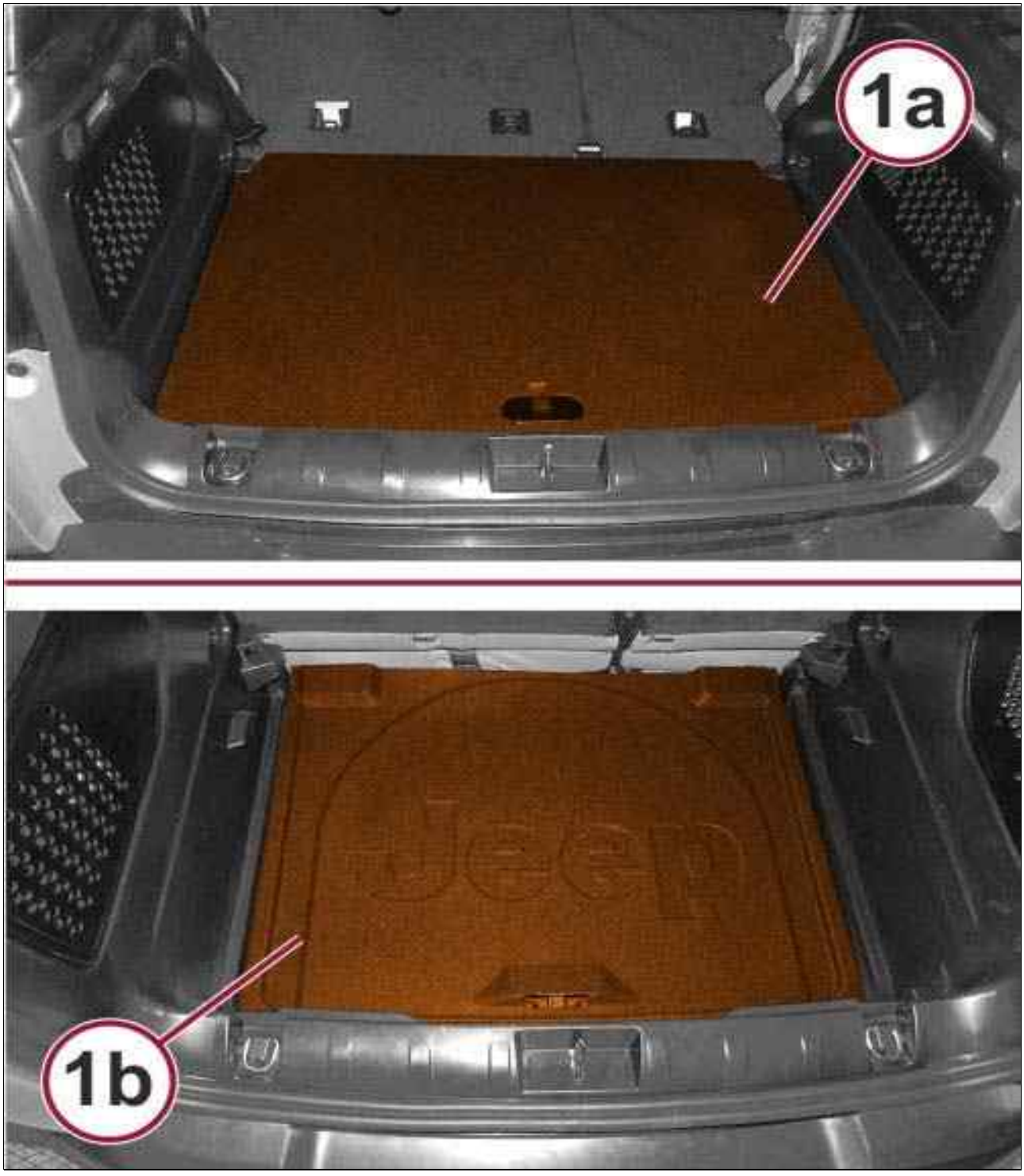


Courtesy of CHRYSLER GROUP, LLC

8. Install the seat belt lower anchor bolt (1a). Refer to RETRACTOR, SEAT BELT, REMOVAL AND INSTALLATION .
9. Install the liftgate sill plate. Refer to PLATE, SCUFF, LIFTGATE SILL, REMOVAL AND INSTALLATION .
10. Install the liftgate weatherstrip.
11. Install the rear seat cushion. Refer to SEAT CUSHION, REMOVAL AND INSTALLATION .

INTERIOR > PLATE, SCUFF, LIFTGATE SILL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

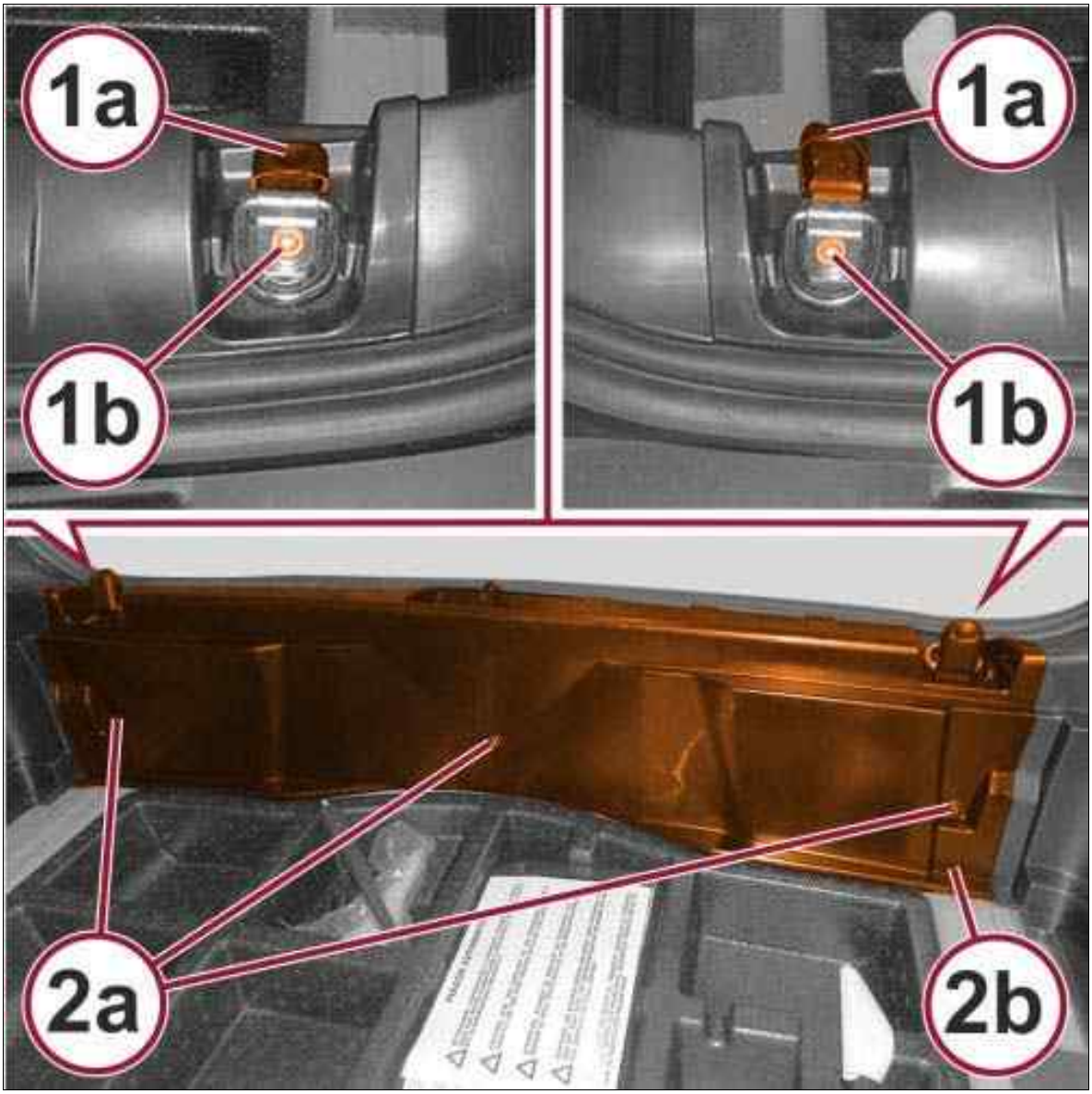
Fig 1: Rear Cargo Covers



Courtesy of CHRYSLER GROUP, LLC

1. Remove the rear cargo covers (1a and 1b).

Fig 2: Liftgate Sill Plate, Screws & Covers

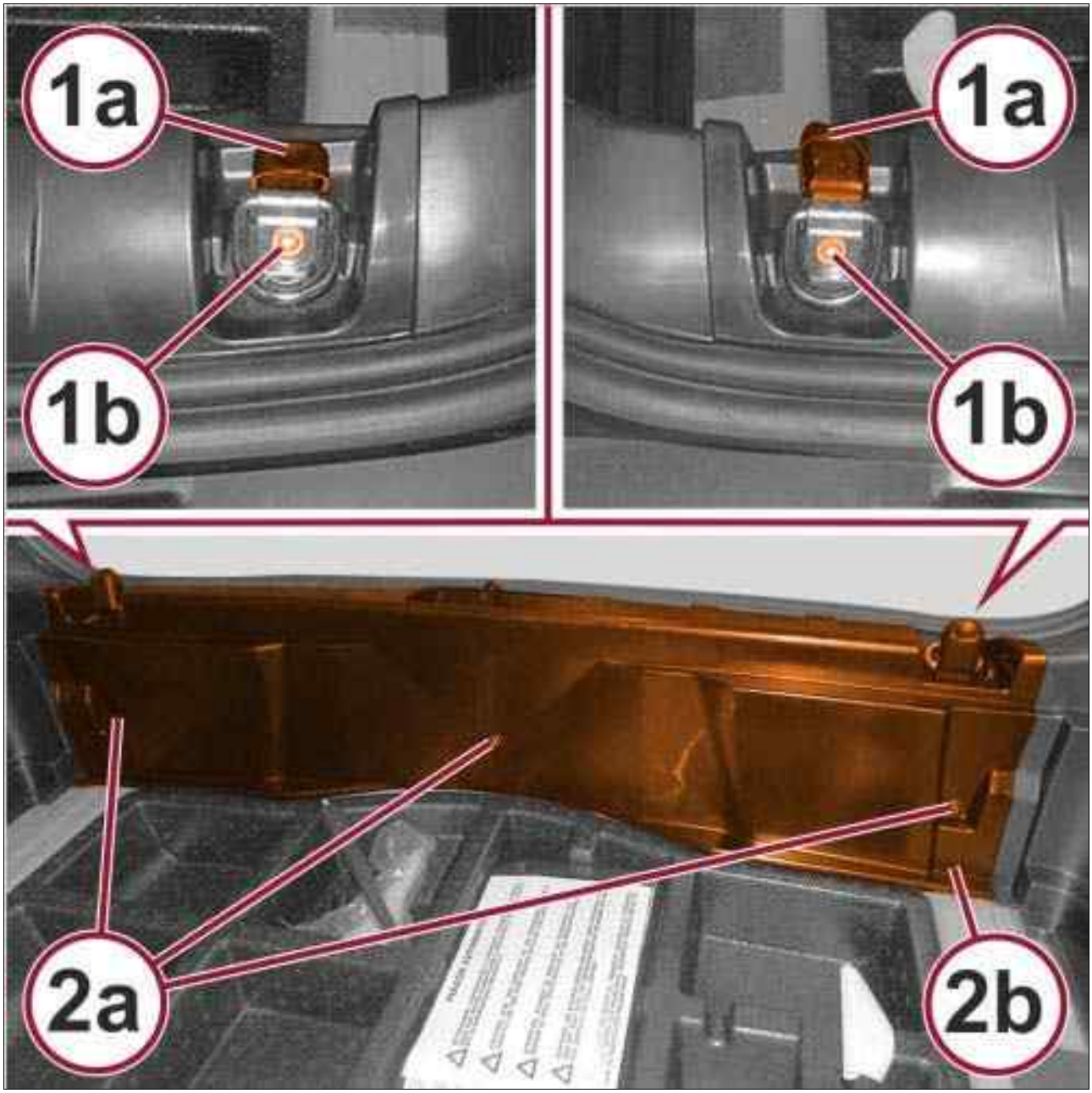


Courtesy of CHRYSLER GROUP, LLC

2. Remove the weatherstrip along the top of the liftgate sill plate.
3. Open the screw covers (1a) and remove the screws (1b).
4. Remove the screws (2a) and lift the liftgate sill plate (2b) and remove.

INTERIOR > PLATE, SCUFF, LIFTGATE SILL > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

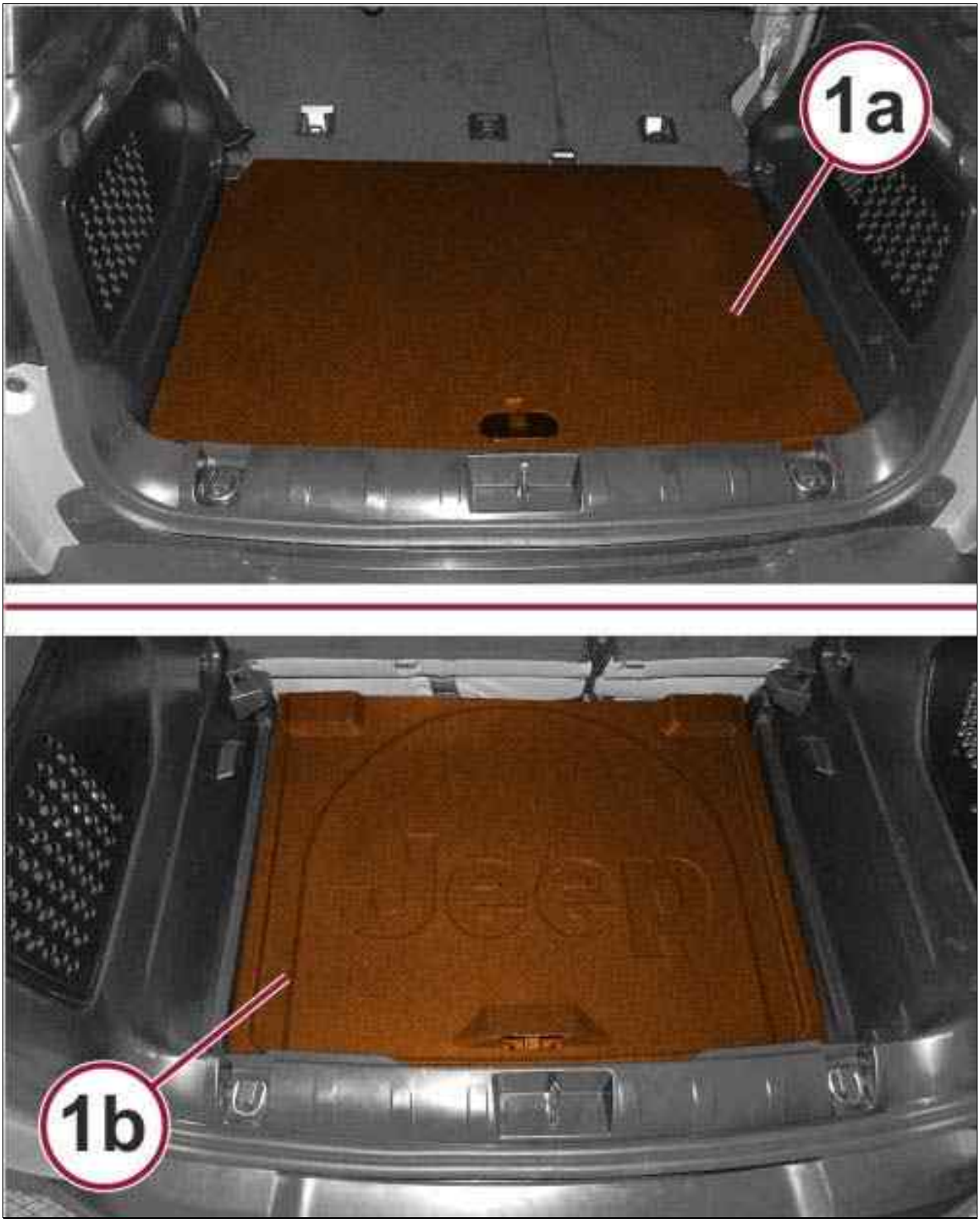
Fig 1: Liftgate Sill Plate, Screws & Covers



Courtesy of CHRYSLER GROUP, LLC

1. Position the liftgate sill plate (2b) and install the screws (2a). Tighten the screws securely.
2. Install the screws (1b) and tighten securely. Close the bolt covers (1a).
3. Install the weatherstrip along the top of the liftgate sill plate.

Fig 2: Rear Cargo Covers



Courtesy of CHRYSLER GROUP, LLC

4. Install the rear cargo covers (1a and 1b).

PAINT > SPECIFICATIONS > SPECIFICATIONS

Because of late model changes to the available paint colors for each vehicle the current color codes can

be found on the Vehicle Certification Label. Refer to DESCRIPTION .

EXTERIOR COLORS

EXTERIOR COLOR	PAINT CODE
Black Clear Coat	DX8
Solar/Detonator Yellow Clear Coat	EYB (VR 178)
Sierra /Cosmos Blue	JB4 (VR 364/B)
Mojave Sand/Mocha Latte	KTA (VR 231/B)
Anvil Clear Coat	LDS (VR385/A)
Commando Clear Coat	LGH (VR 145/B)
Dune Clear Coat	LTT
Omaha/Spritz Orange	NKP (VR 562/A)
Colorado/Passion Red	NRX (VR 176)
Glacier/Silver Grey Metallic	NSN (VR 348)
Alpine White	PWV (VR 296)
Carbon Black Metallic	NXB (VR876/B)

INTERIOR COLORS

INTERIOR COLOR	Order Code	COLOR CODE
Bark Brown / Ski Grey	TS	GT5 / PS4
Black / Sandstorm	XU	LXH / LTU
Black	X9	LXH

SEATS, FIRST ROW > WARNING > WARNING

WARNING:

- *During and following any seat belt or child restraint anchor service, carefully inspect all seat belts, buckles, mounting hardware, retractors, tether straps, and anchors for proper installation, operation, or damage. Replace any belt that is cut, frayed, or torn. Straighten any belt that is twisted. Tighten any loose fasteners. Replace any belt that has a damaged or inoperative buckle or retractor. Replace any belt that has a bent or damaged latch plate or anchor plate. Replace any child restraint anchor or the unit to which the anchor is integral that has been bent or damaged. Never attempt to repair a seat belt or child restraint component. Always replace damaged or faulty seat belt and child restraint components with the correct, new and unused replacement parts listed in the FCA US LLC Mopar® parts catalog. Failure to follow these instructions may result*

in personal injury or death.

- *On vehicles equipped with airbags, disable the supplemental restraint system before attempting any steering wheel, steering column, airbag, occupant classification system, seat belt tensioner, impact sensor, or instrument panel component diagnosis or service. Refer to WARNING . Disconnect and isolate the battery negative (ground) cable, then wait two minutes for the system capacitor to discharge before performing further diagnosis or service. This is the only sure way to disable the supplemental restraint system. Failure to take the proper precautions could result in accidental airbag deployment. Failure to follow these instructions may result in personal injury or death.*
- *On vehicles equipped with airbags, before performing any welding operations disconnect and isolate the battery negative (ground) cable and disconnect all wire harness connectors from the Occupant Restraint Controller (ORC). Failure to take the proper precautions could result in accidental airbag deployment and other possible damage to the supplemental restraint system circuits and components. Failure to follow these instructions may result in personal injury or death.*
- *Replace all restraint system components only with parts specified in the FCA US LLC Mopar® parts catalog. Substitute parts may appear interchangeable, but internal differences may result in inferior occupant protection. Failure to follow these instructions may result in personal injury or death.*
- *The fasteners, screws, and bolts originally used for the restraint system components must never be replaced with any substitutes. These fasteners have special coatings and are specifically designed for the restraint system. Any time a new fastener is needed, replace it with the correct fasteners provided in the service package or specified in the FCA US LLC Mopar® parts catalog. Failure to follow these instructions may result in personal injury or death.*
- *On vehicles equipped with the Occupant Classification System (OCS), do not hang any after market devices from the front passengers seat back. Do not install a front drivers seat back cover with map pocket onto the passenger seat. Failure to follow these instructions may result in personal injury or death.*
- *The Seat Weight Sensor is a sensitive, calibrated unit and must be handled carefully. Do not drop or handle roughly. If dropped or damaged, replace with another sensor. Failure to follow these instructions may result in personal injury or death.*
- *The front passenger seat must be handled carefully as well. When removing the seat, be careful when setting on floor not to drop. If dropped, the sensor may be inoperative. Failure to follow these instructions may result in personal injury or death.*
- *When the seat is on the floor, no one should sit in the front passenger seat. This uneven force may damage the sensing ability of the seat weight sensors. If sat on and damaged, the sensor may be inoperative. Failure to follow these instructions may result in personal injury or death.*

SEATS, FIRST ROW > COVER, SEAT BACK, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

WARNING:

Disable the airbag system before attempting any front seat diagnosis or service. Disconnect and isolate the negative battery (ground) cable and wait two minutes for the airbag system capacitor to discharge before performing further diagnosis or service. This is the only sure way to disable the airbag system. Failure to follow these instructions may result in accidental airbag deployment and possible serious or fatal injury. Refer to WARNING .

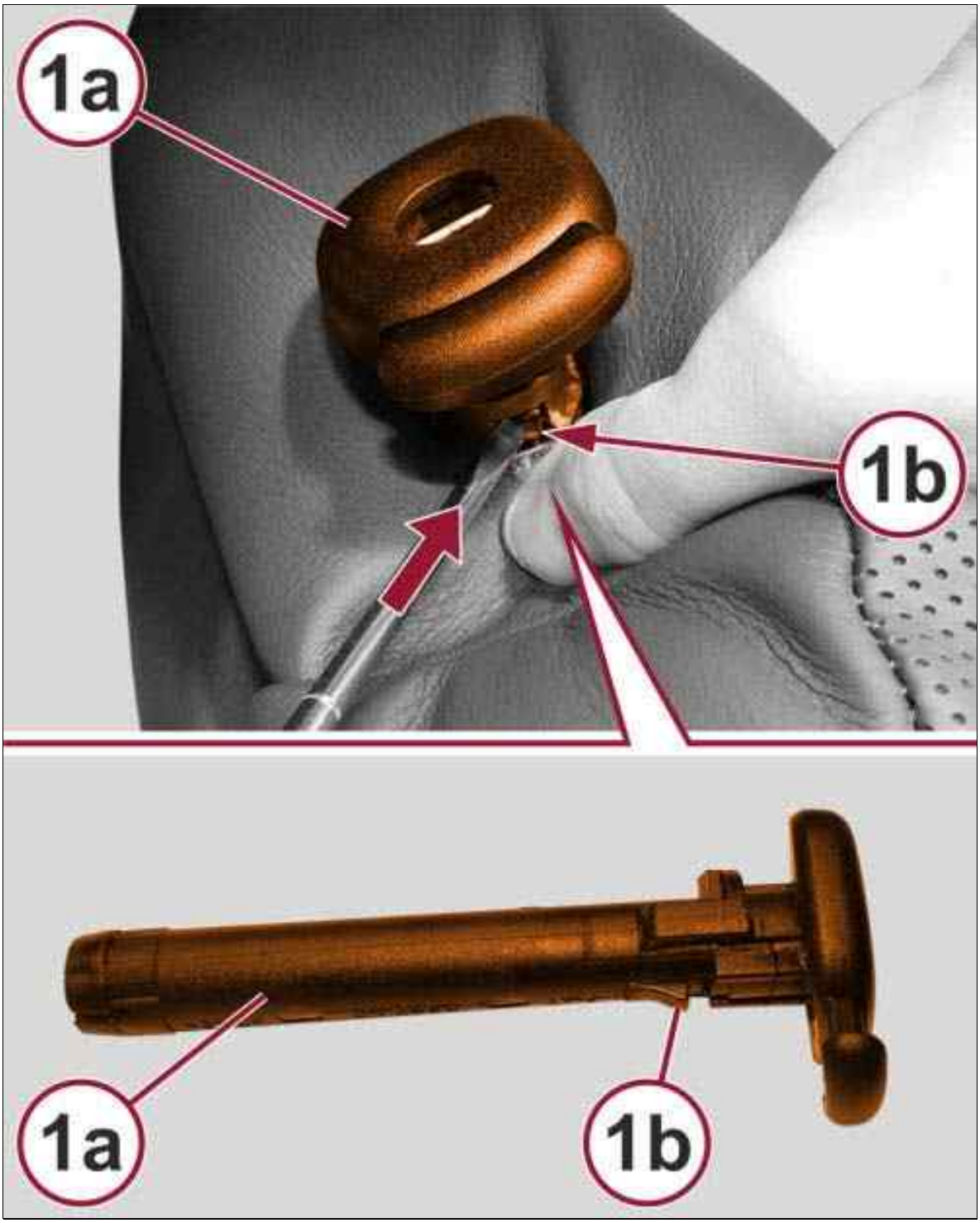
Fig 1: Headrest & Releases

Courtesy of CHRYSLER GROUP, LLC

1. Before proceeding with the following repair procedure, review all warnings and cautions. Refer to SEATS, FIRST ROW, WARNING .

2. Remove the front seat back. Refer to SEAT BACK, FRONT, REMOVAL AND INSTALLATION .
3. Push the release (2a and 2b) and remove the headrest (1).

Fig 2: Headrest Sleeve & Tab



Courtesy of CHRYSLER GROUP, LLC

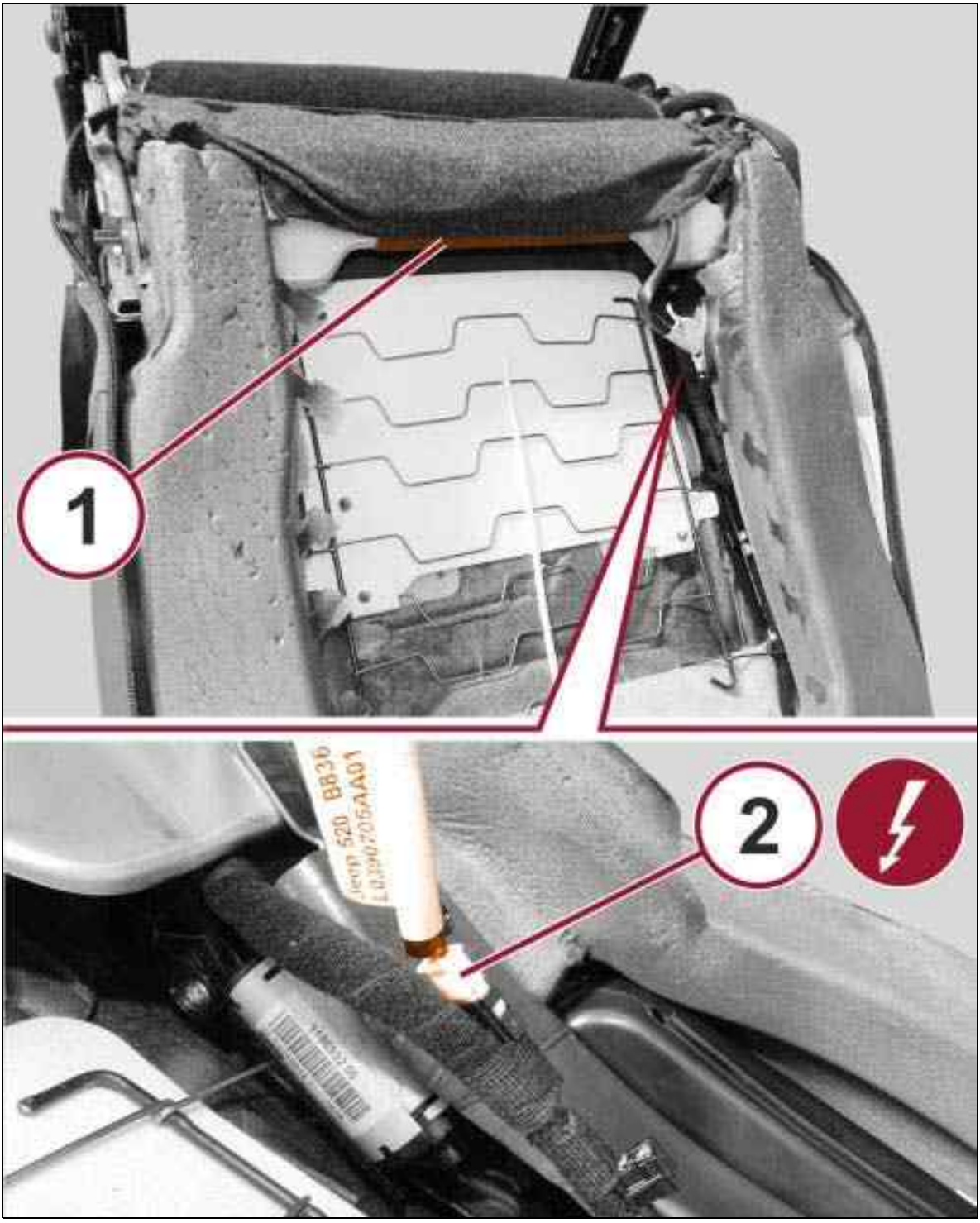
4. Using a small flat bladed tool, push the tab (1b) of the headrest sleeve (1a) and pull out to remove.

Fig 3: Seat Back Zippers

Courtesy of CHRYSLER GROUP, LLC

5. Unzip the seat back zippers (1a and 1b).

Fig 4: J-Clip Retainer & Connector



Courtesy of CHRYSLER GROUP, LLC

6. Release the J-clip retainer (1) at the bottom of the seat.
7. Disconnect the harness connector (2).

Fig 5: Seat Back Cover

Courtesy of CHRYSLER GROUP, LLC

8. Remove the seat air bag from the seat back. Refer to AIR BAG, SEAT, REMOVAL AND INSTALLATION .
9. Remove the seat back foam and seat back cover (1) as an assembly, from the seat back frame.
10. Pull the seat back cover away from the foam and remove the hog rings.

SEATS, FIRST ROW > COVER, SEAT BACK, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

WARNING:

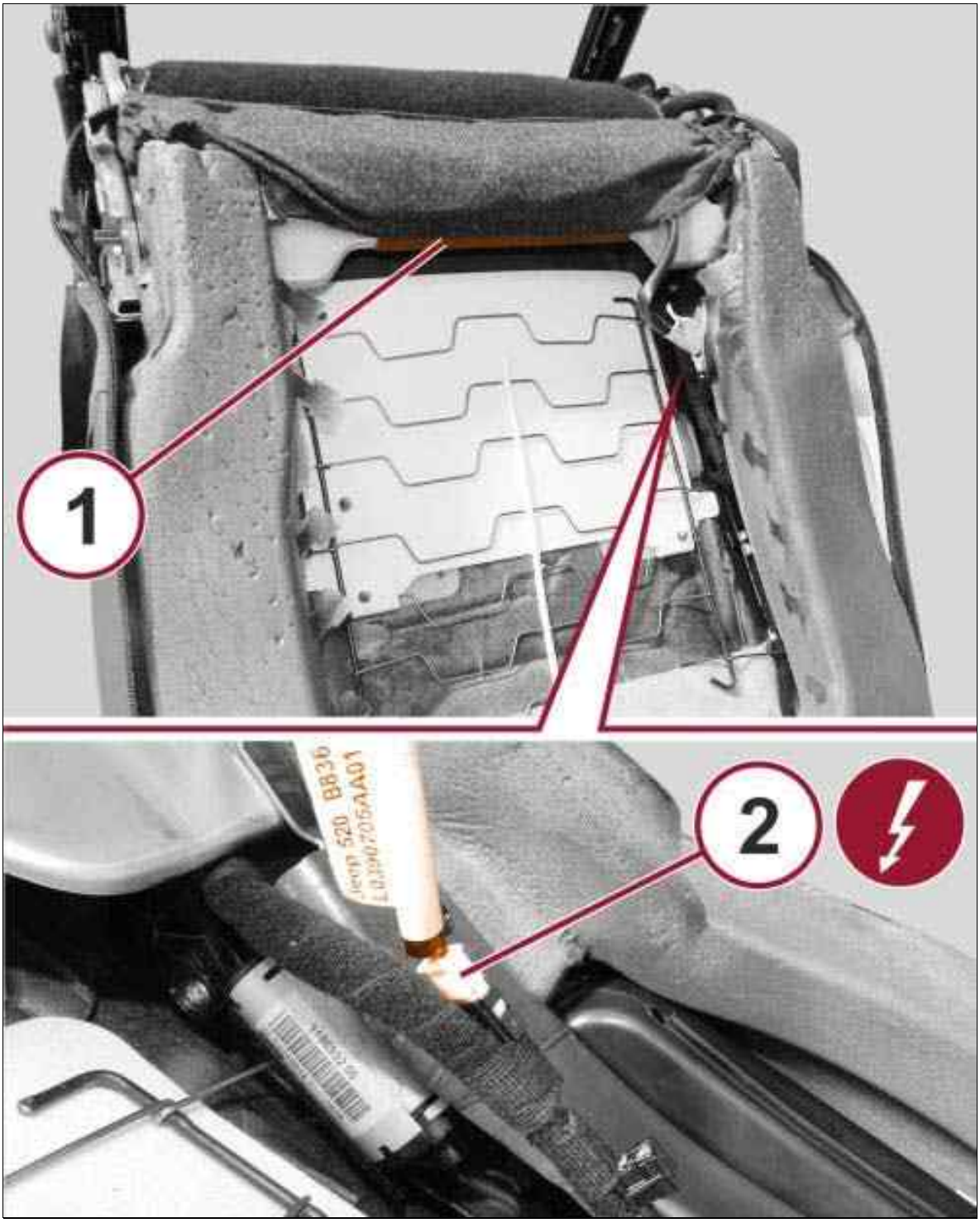
Disable the airbag system before attempting any front seat diagnosis or service. Disconnect and isolate the negative battery (ground) cable and wait two minutes for the airbag system capacitor to discharge before performing further diagnosis or service. This is the only sure way to disable the airbag system. Failure to follow these instructions may result in accidental airbag deployment and possible serious or fatal injury. Refer to WARNING .

Fig 1: Seat Back Cover

Courtesy of CHRYSLER GROUP, LLC

1. Before proceeding with the following repair procedure, review all warnings and cautions. Refer to SEATS, FIRST ROW, WARNING .
2. Position the seat back cover (1) onto the seat back foam and install new hog rings.
3. Position the seat back foam assembly onto the seat back frame.
4. Install the seat air bag into the seat back. Refer to AIR BAG, SEAT, REMOVAL AND INSTALLATION .

Fig 2: J-Clip Retainer & Connector



Courtesy of CHRYSLER GROUP, LLC

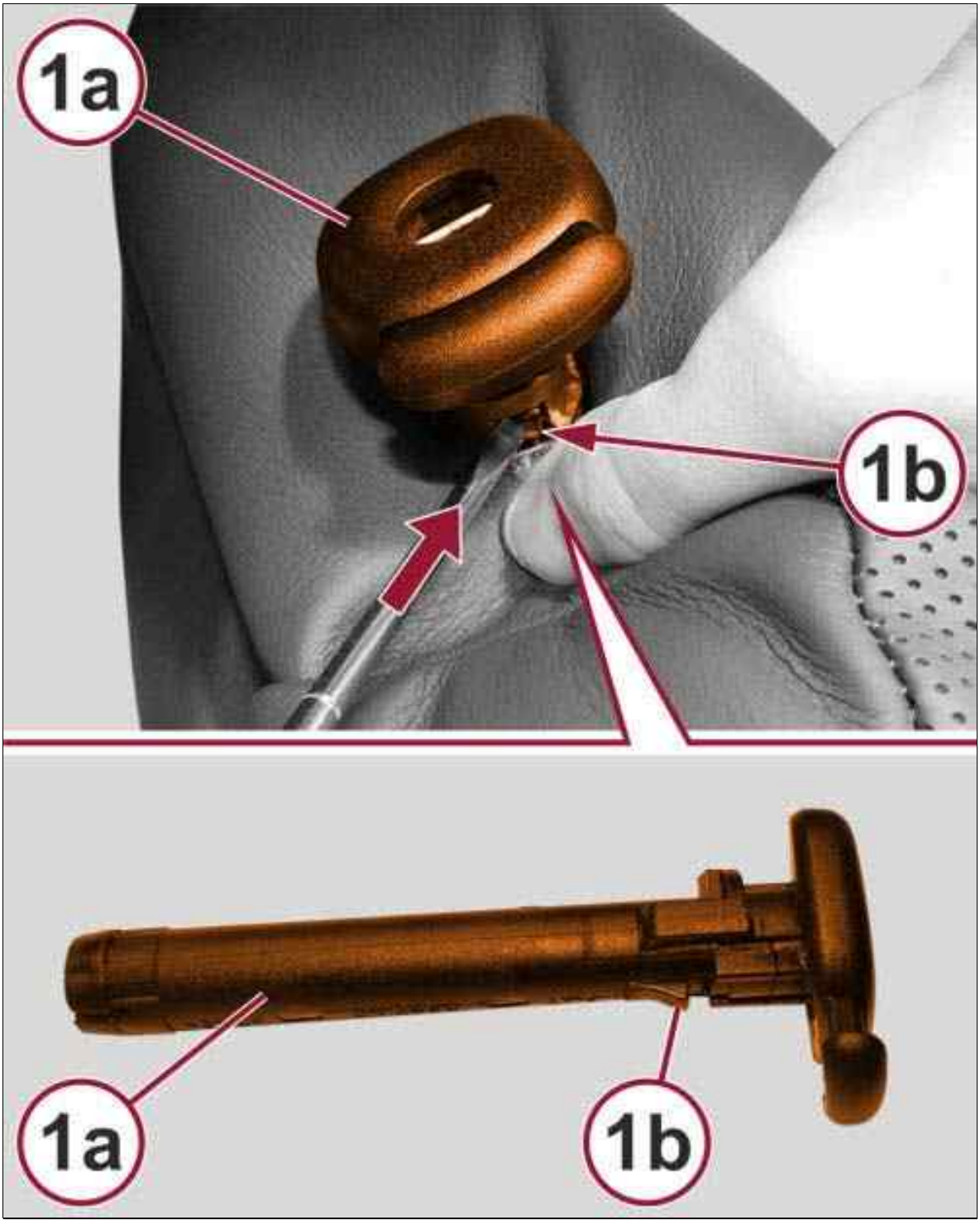
5. Pull the seat back cover tight and fasten the J-clip retainers (1).
6. Connect the harness connector (2).

Fig 3: Seat Back Zippers

Courtesy of CHRYSLER GROUP, LLC

7. Close the seat back zippers (1a and 1b).

Fig 4: Headrest Sleeve & Tab



Courtesy of CHRYSLER GROUP, LLC

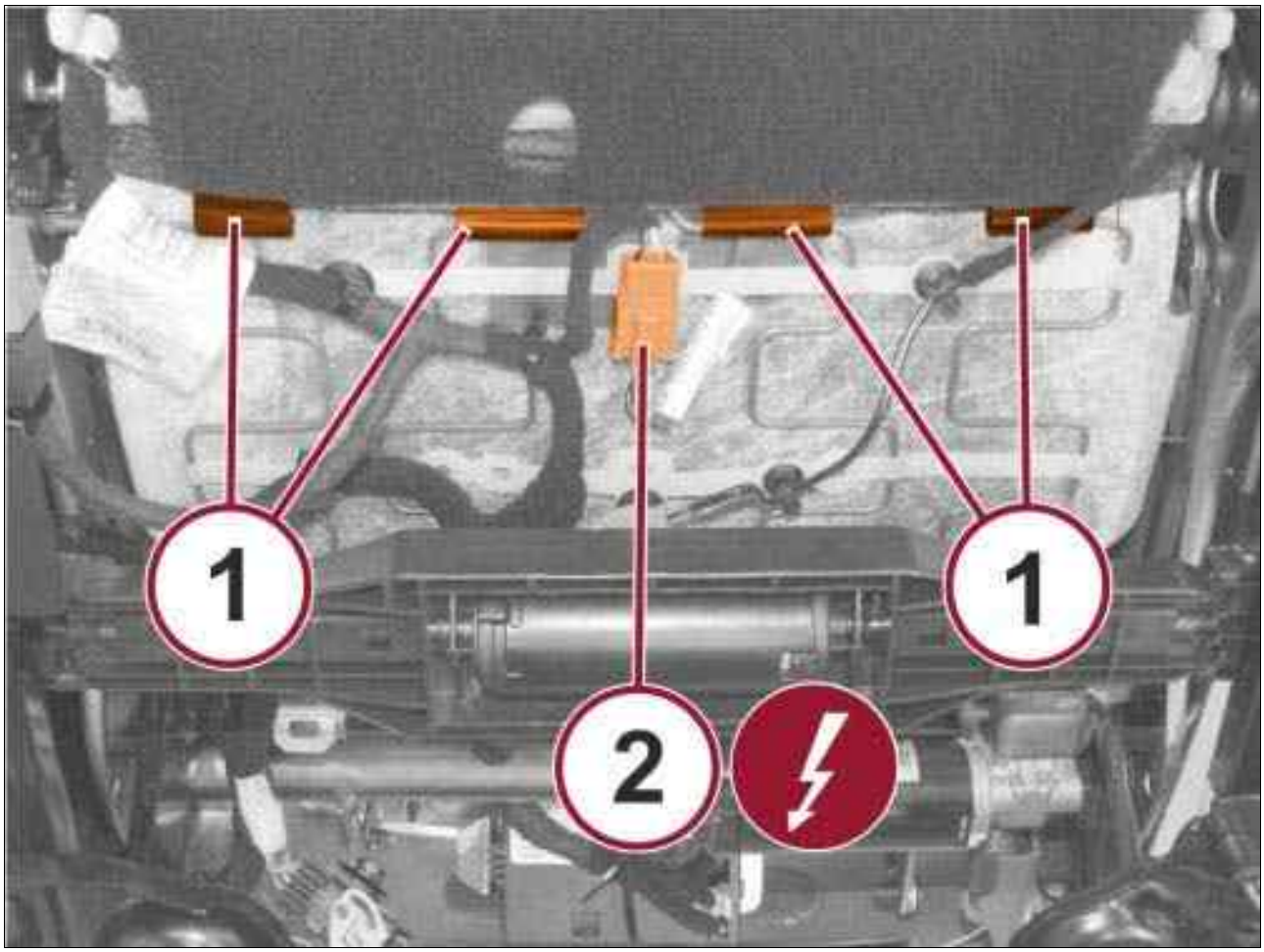
8. Install the headrest sleeves (1a) and hand tap to engage the tab (1b).
9. Install the headrest.
10. Install the front seat back. Refer to SEAT BACK, FRONT, REMOVAL AND INSTALLATION .

SEATS, FIRST ROW > COVER, SEAT CUSHION, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

WARNING:

Disable the airbag system before attempting any front seat diagnosis or service. Disconnect and isolate the negative battery (ground) cable and wait two minutes for the airbag system capacitor to discharge before performing further diagnosis or service. This is the only sure way to disable the airbag system. Failure to follow these instructions may result in accidental airbag deployment and possible serious or fatal injury. Refer to WARNING .

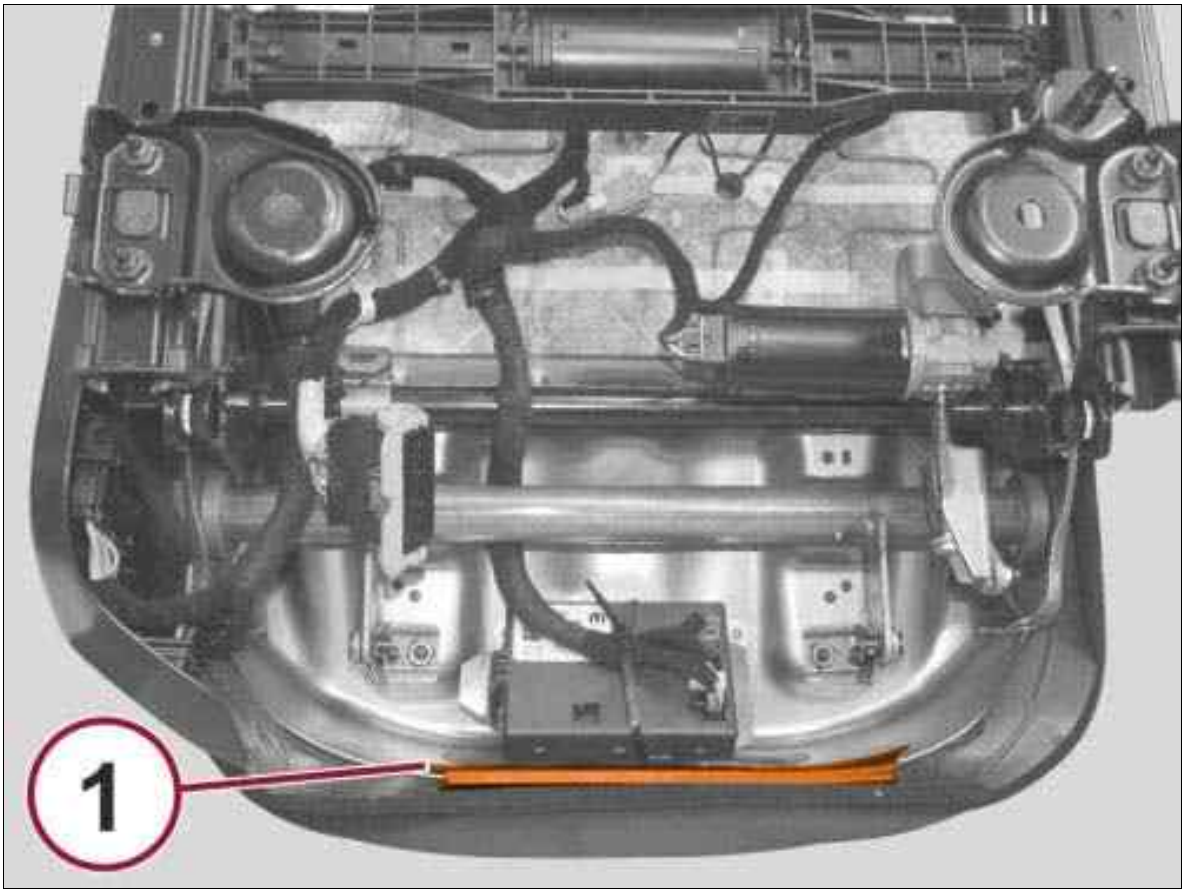
Fig 1: J-Hooks & Connector



Courtesy of CHRYSLER GROUP, LLC

1. Before proceeding with the following repair procedure, review all warnings and cautions. Refer to SEATS, FIRST ROW, WARNING .
2. Remove the front seat back. Refer to SEAT BACK, FRONT, REMOVAL AND INSTALLATION .
3. Release the J-hooks (1) from the rear of the cushion.
4. Disconnect the wire harness connector (2).

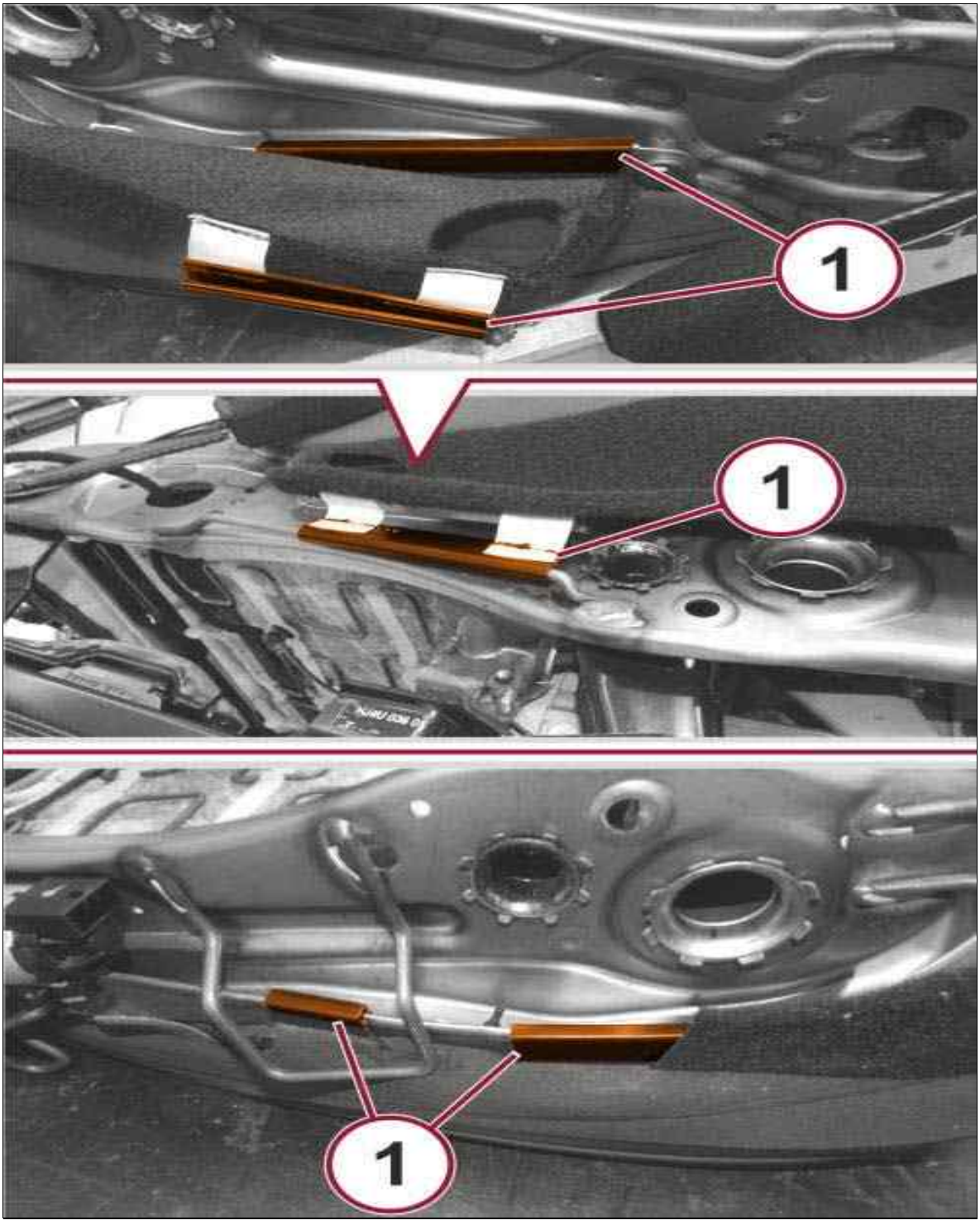
Fig 2: J-Hook



Courtesy of CHRYSLER GROUP, LLC

5. Release the J-hook (1) from the front of the cushion.

Fig 3: J-Hooks



Courtesy of CHRYSLER GROUP, LLC

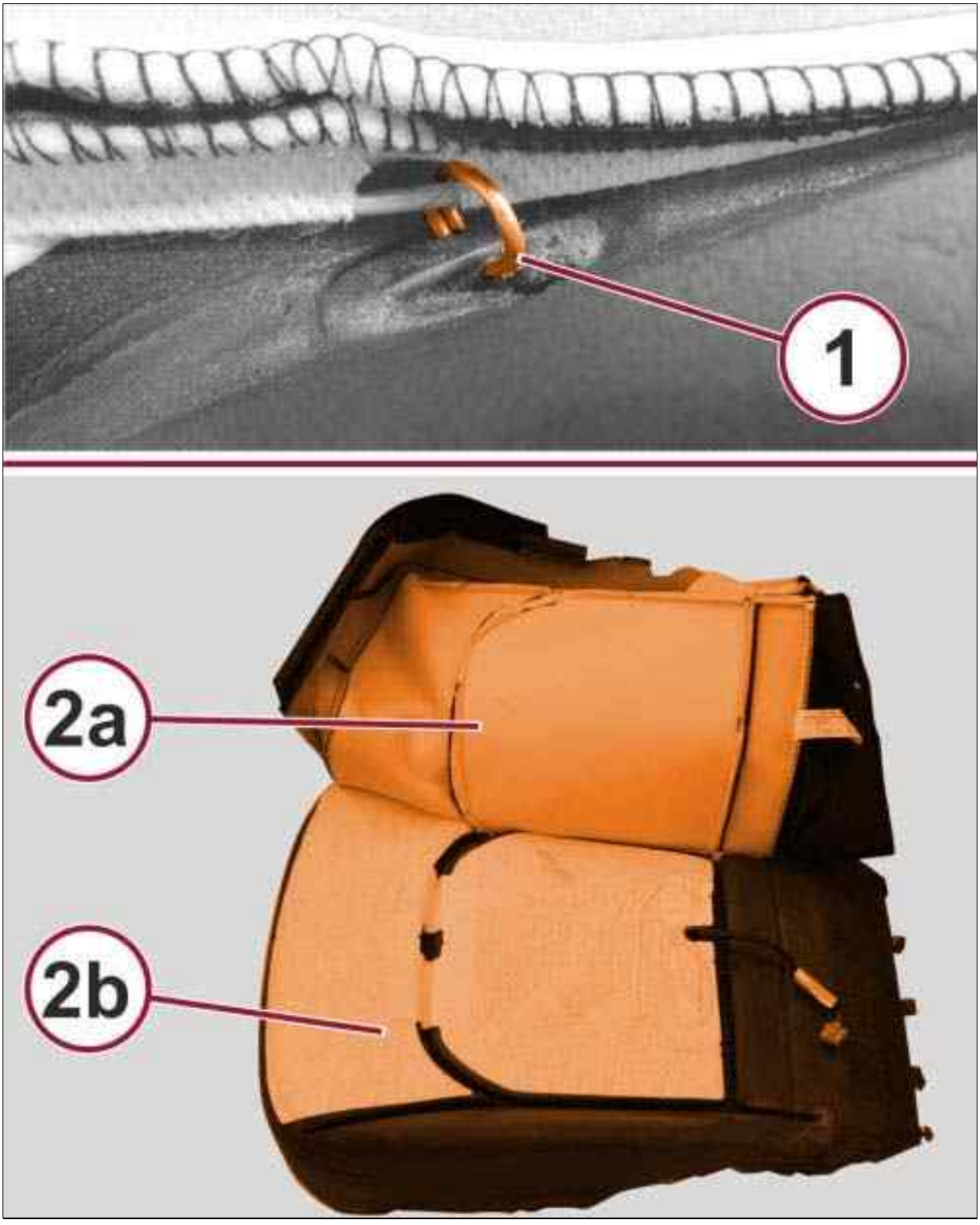
6. Release the J-hooks (1) from the sides of the cushion.

Fig 4: Seat Cover

Courtesy of CHRYSLER GROUP, LLC

7. Loosen the seat cover (1) from the foam.

Fig 5: Seat Cover, Foam & Hog Ring



Courtesy of CHRYSLER GROUP, LLC

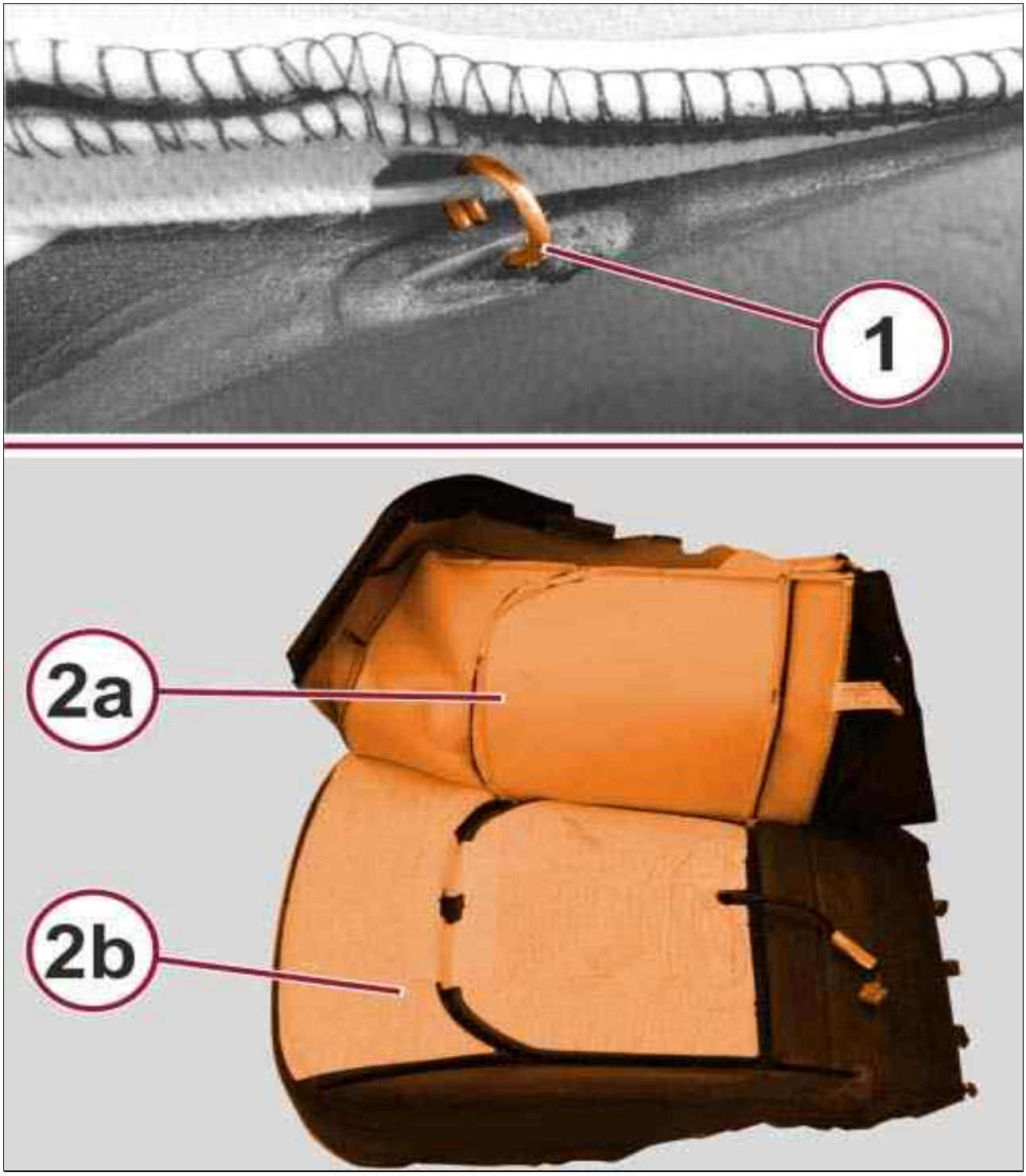
8. Pull the seat cover (2a) away from the foam and remove the hog rings (1).

SEATS, FIRST ROW > COVER, SEAT CUSHION, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

WARNING:

Disable the airbag system before attempting any front seat diagnosis or service. Disconnect and isolate the negative battery (ground) cable and wait two minutes for the airbag system capacitor to discharge before performing further diagnosis or service. This is the only sure way to disable the airbag system. Failure to follow these instructions may result in accidental airbag deployment and possible serious or fatal injury. Refer to WARNING .

Fig 1: Seat Cover, Foam & Hog Ring



Courtesy of CHRYSLER GROUP, LLC

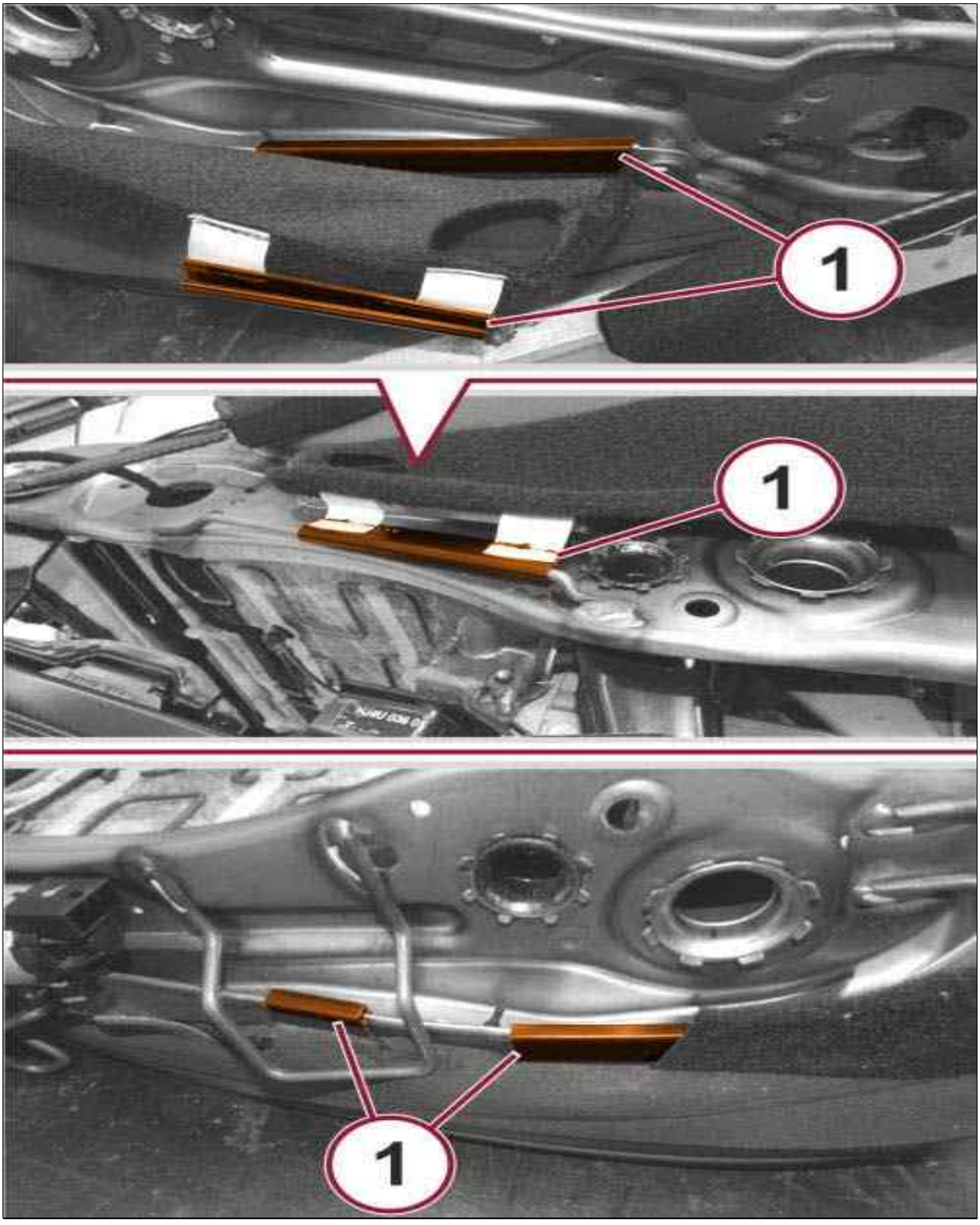
1. Position the seat cover (2a) onto the foam (2b) and install new hog rings (1).

Fig 2: Seat Cover

Courtesy of CHRYSLER GROUP, LLC

2. Pull the seat cover (1) tight over the foam.

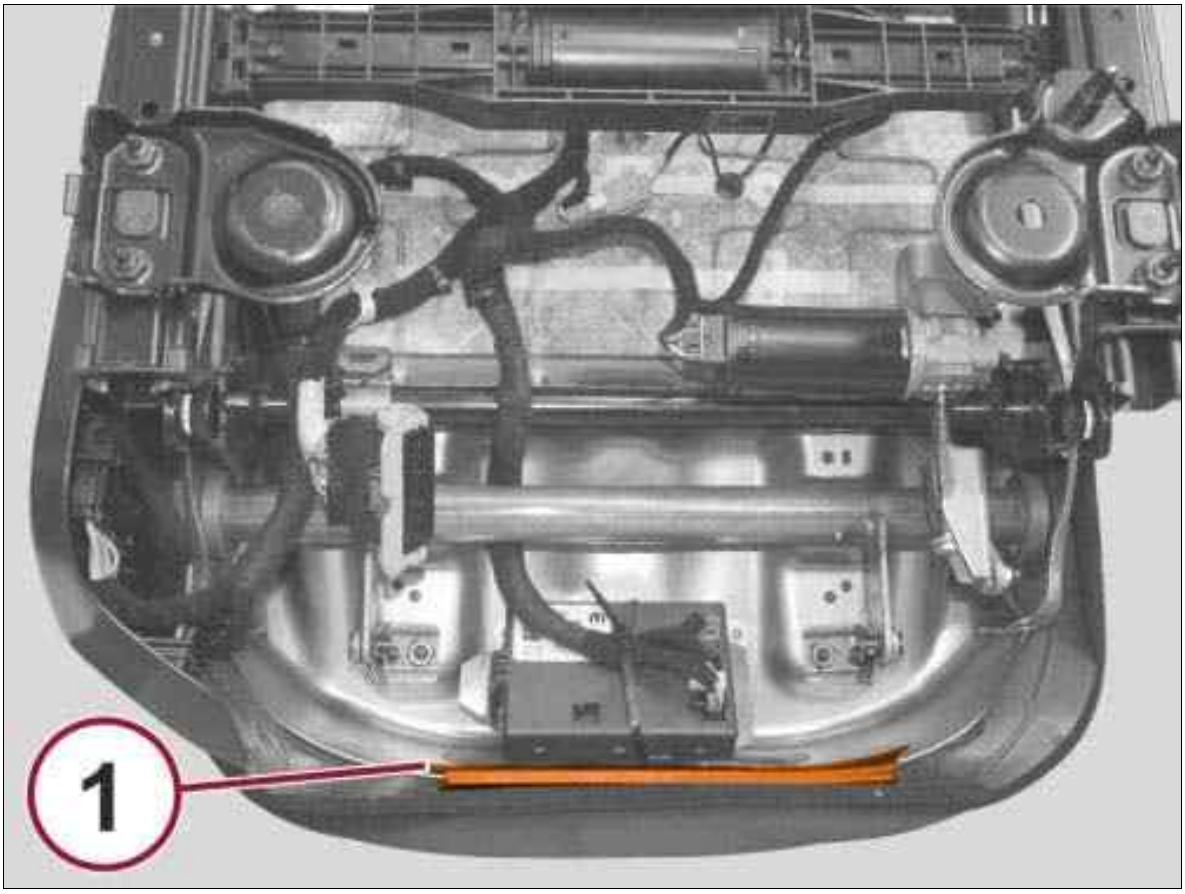
Fig 3: J-Hooks



Courtesy of CHRYSLER GROUP, LLC

3. Route the wire harness, if equipped
4. Attach the J-hooks (1) to the sides of the cushion.

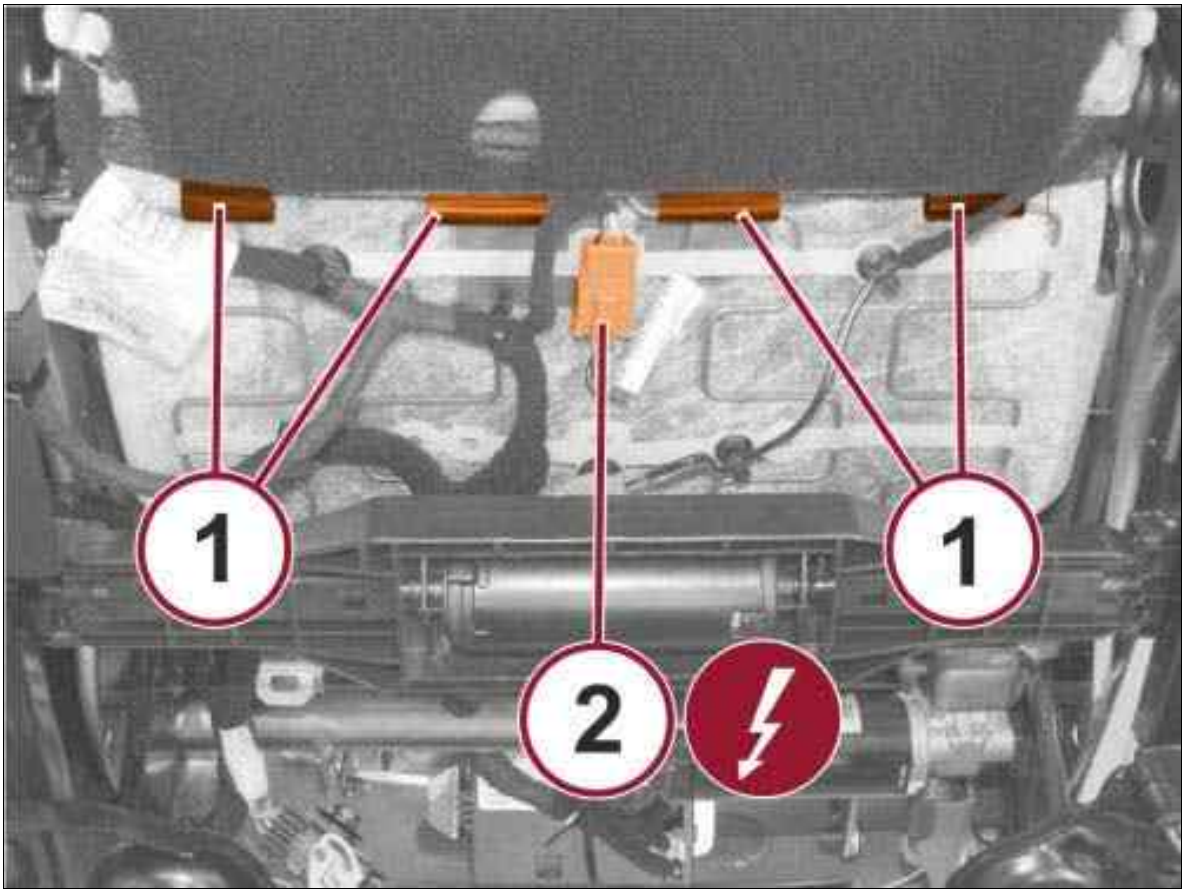
Fig 4: J-Hook



Courtesy of CHRYSLER GROUP, LLC

5. Attach the J-hook (1) to the front of the cushion.

Fig 5: J-Hooks & Connector

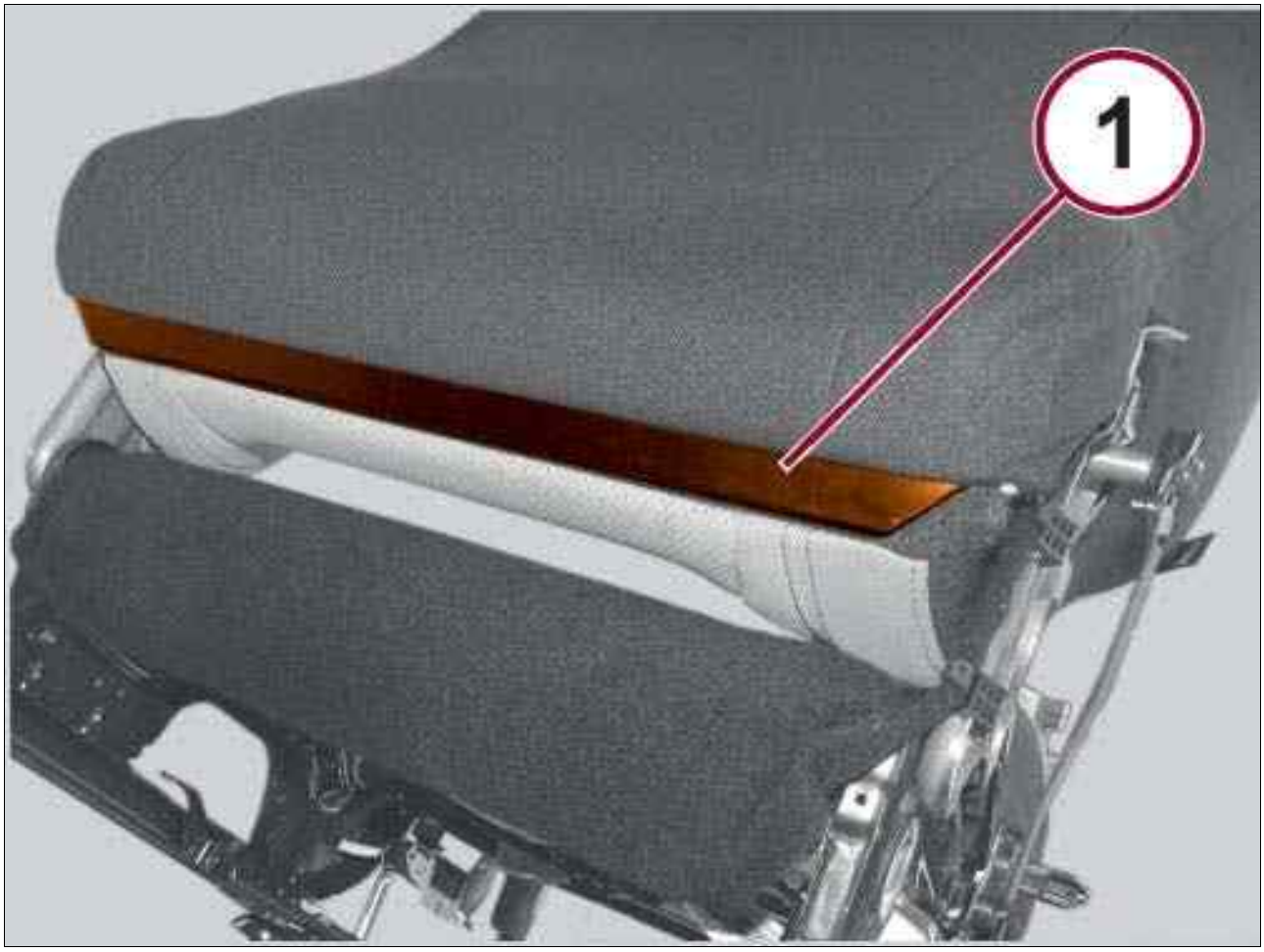


Courtesy of CHRYSLER GROUP, LLC

6. Attach the J-hooks (1) to the rear of the cushion.
7. Connect the wire harness connector (2).
8. Install the front seat back. Refer to SEAT BACK, FRONT, REMOVAL AND INSTALLATION .

SEATS, FIRST ROW > SEAT BACK, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

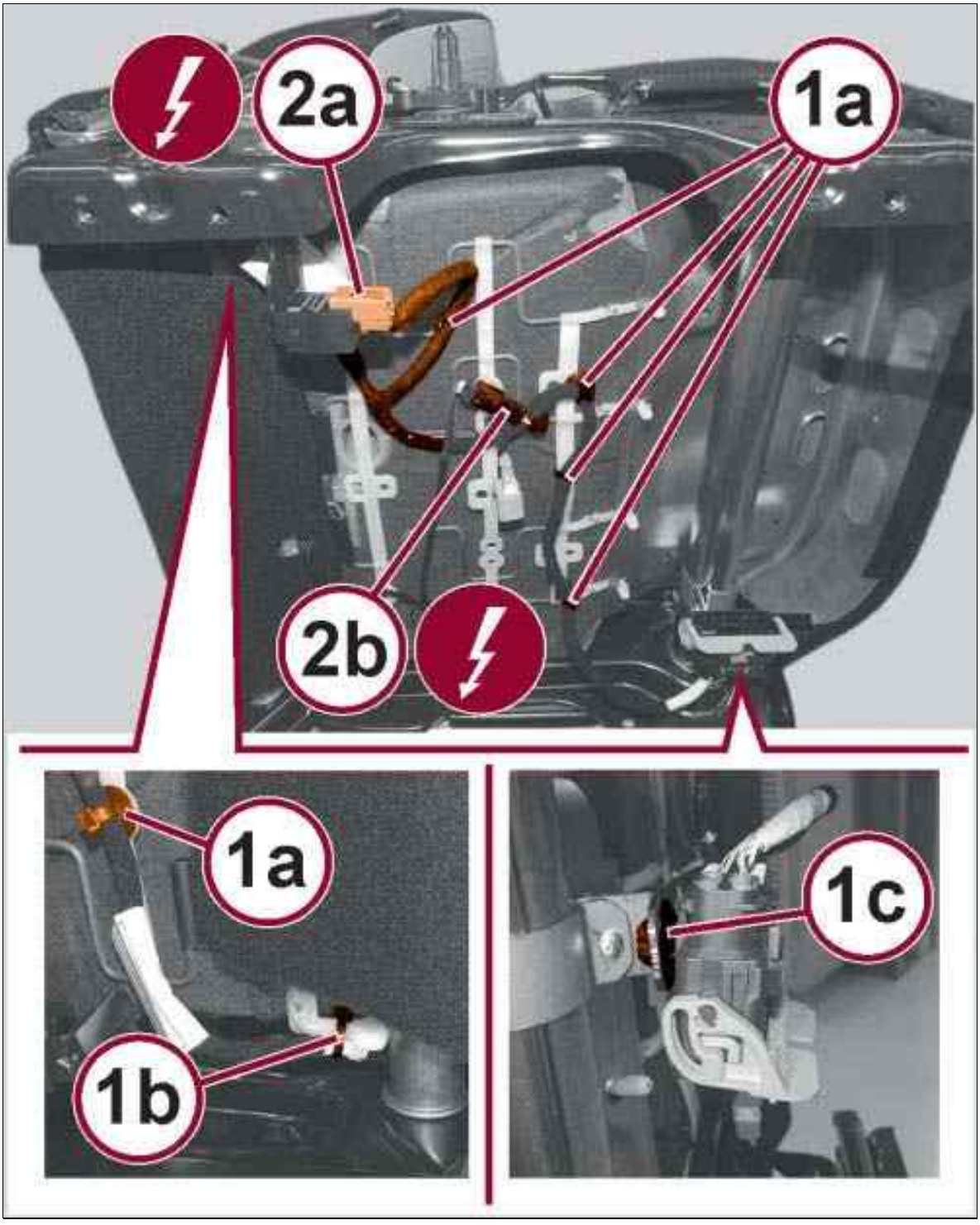
Fig 1: Bottom J-Clip



Courtesy of CHRYSLER GROUP, LLC

1. Before proceeding with the following repair procedure, review all warnings and cautions. Refer to SEATS, FIRST ROW, WARNING .
2. Remove the side shields. Refer to SIDE SHIELDS, SEAT CUSHION, FRONT, REMOVAL AND INSTALLATION .
3. Open the J-clip (1) at the bottom on the seat back.

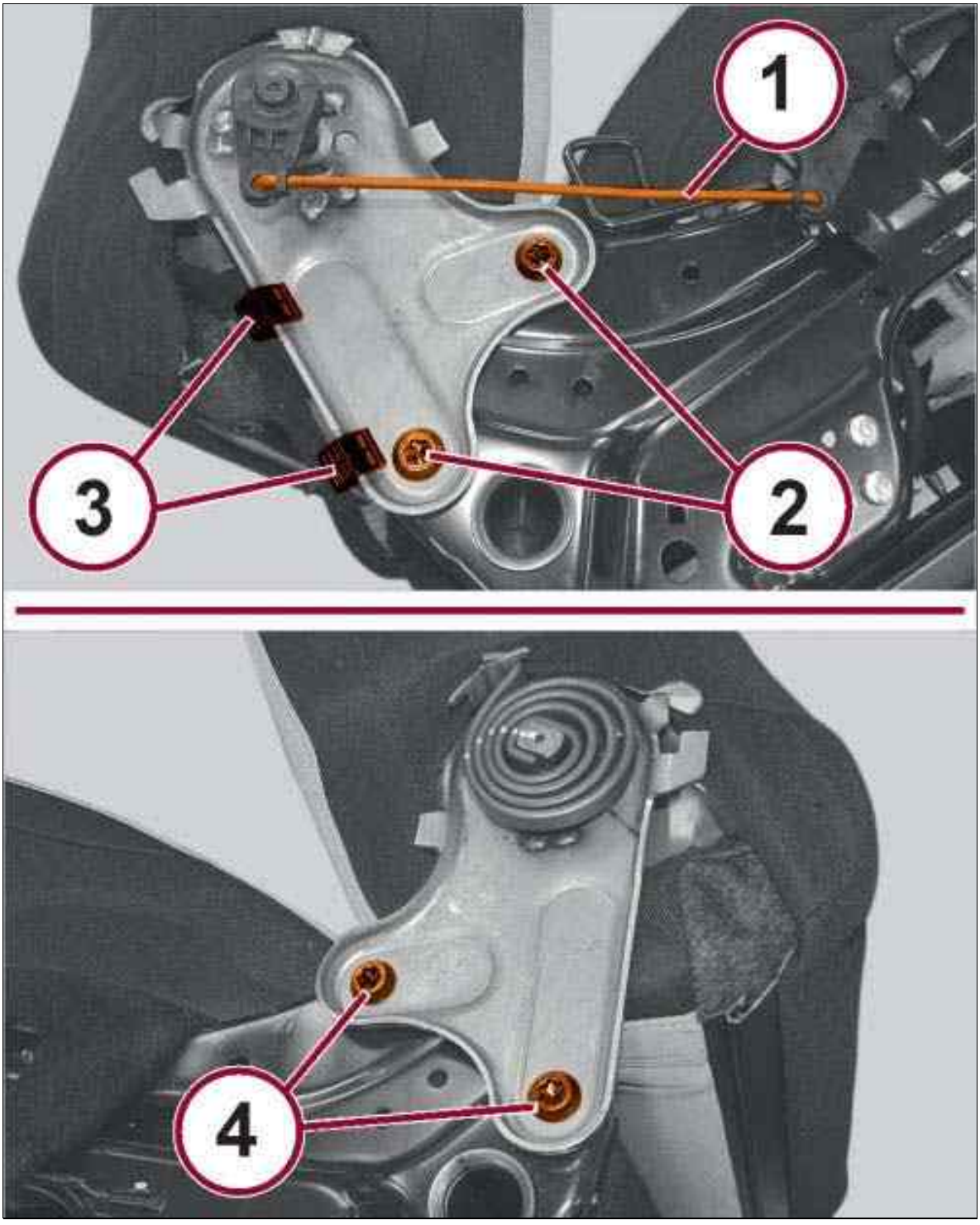
Fig 2: Wire Harness & Connectors



Courtesy of CHRYSLER GROUP, LLC

4. Disconnect the wire harness connectors (2a and 2b).
5. Unclip the harness (1a, 1b and 1c) from the seat frame.

Fig 3: Recliner Rod, Harness & Bolts

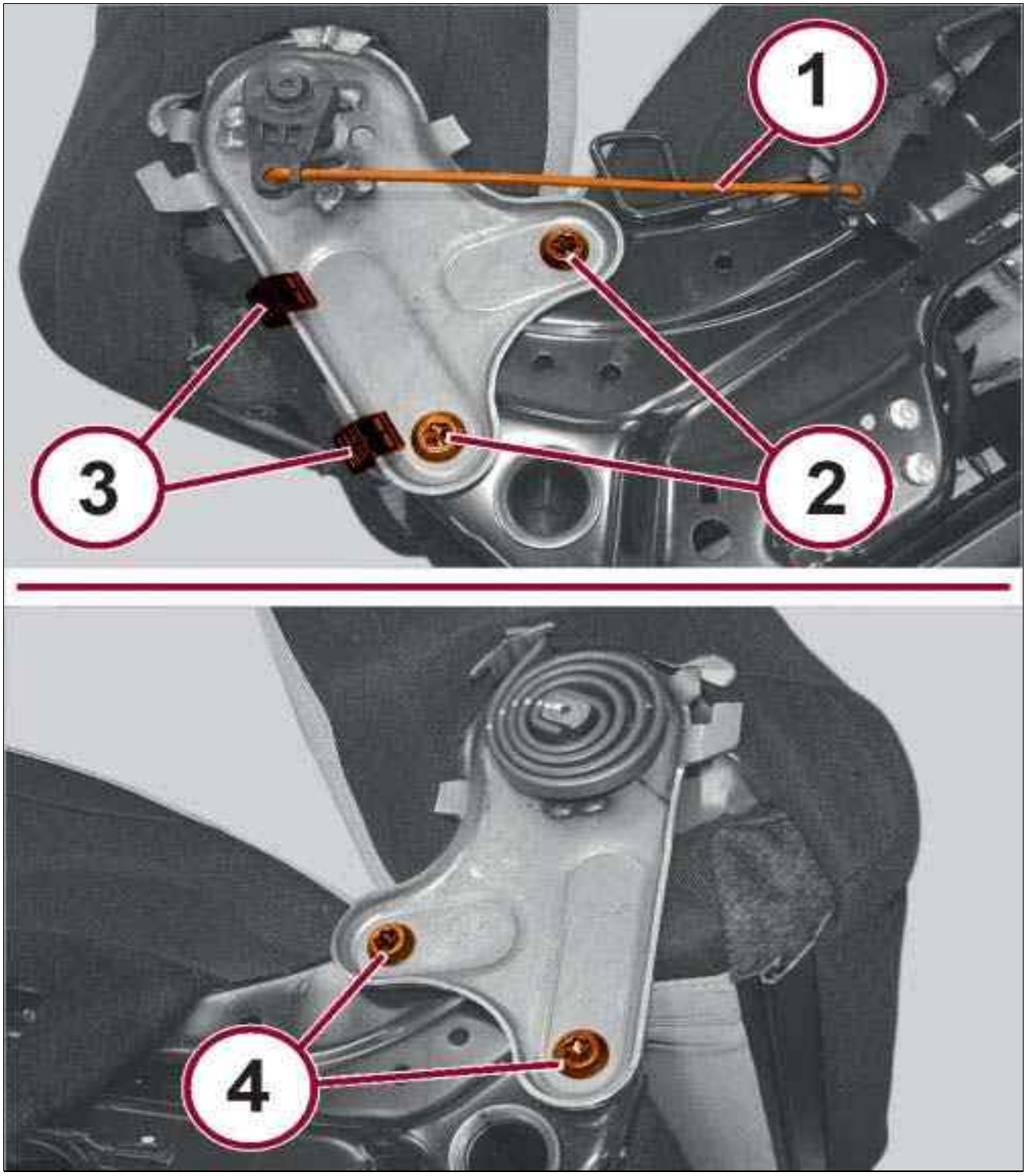


Courtesy of CHRYSLER GROUP, LLC

6. Remove the recliner rod (1).
7. Unclip the wire harness (3).
8. Remove the two bolts (4) on each side of the seat back and remove.

SEATS, FIRST ROW > SEAT BACK, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Recliner Rod, Harness & Bolts

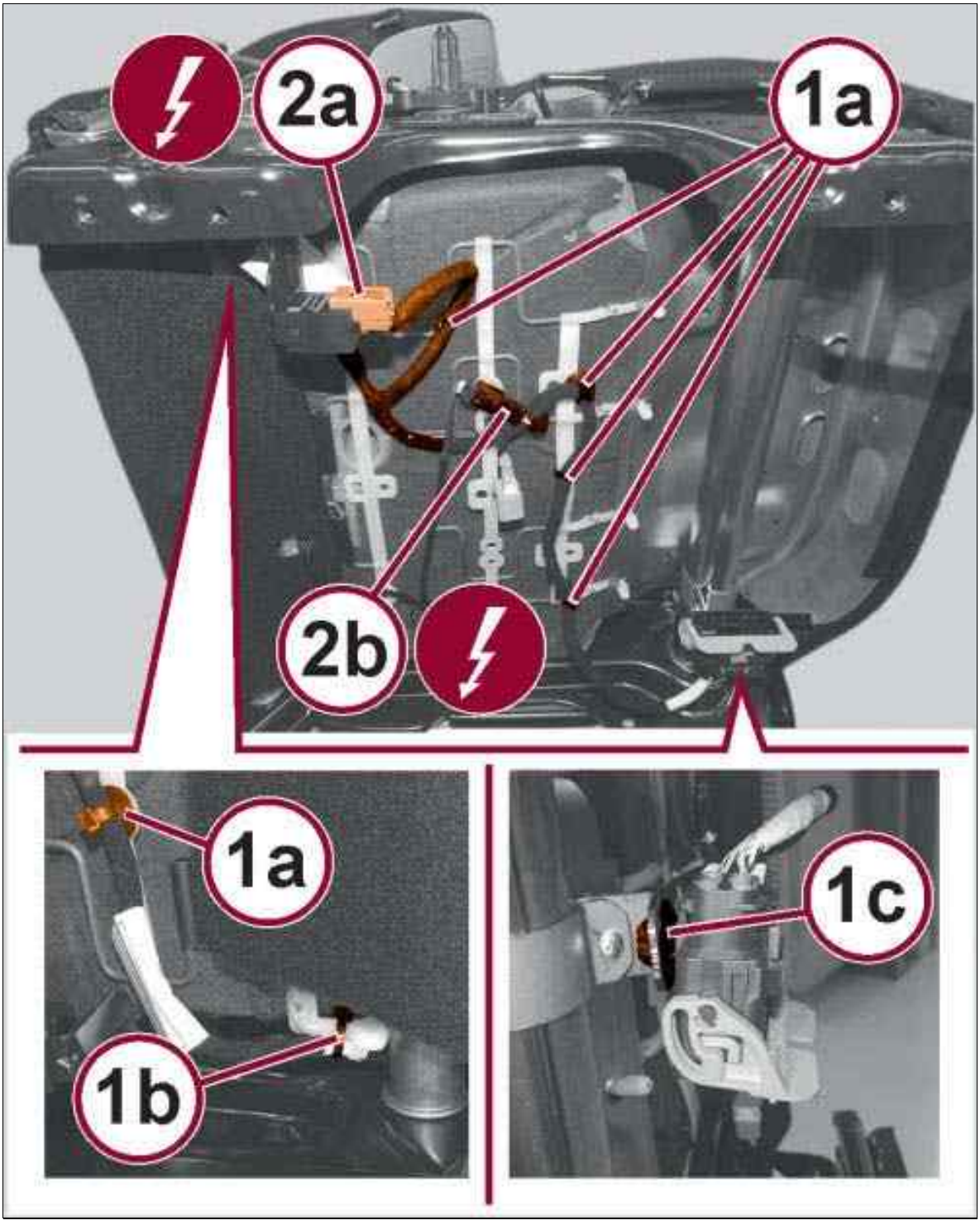


Courtesy of CHRYSLER GROUP, LLC

1. Before proceeding with the following repair procedure, review all warnings and cautions. Refer to SEATS, FIRST ROW, WARNING .
2. Install the seat back onto the adjuster and install the bolts (4). Tighten the front seat back bolts

to the proper specification. Refer to SPECIFICATIONS .

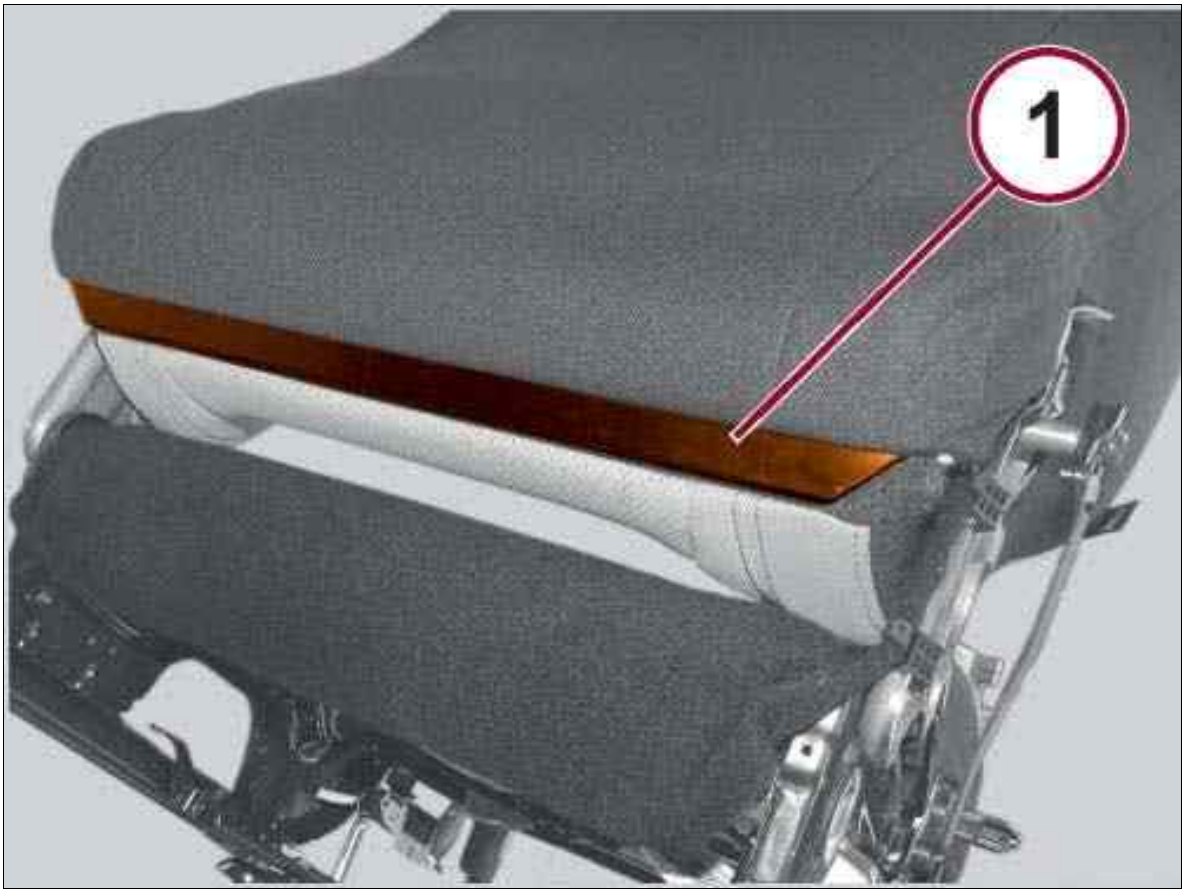
Fig 2: Wire Harness & Connectors



Courtesy of CHRYSLER GROUP, LLC

3. From under the seat, route the seat back wiring harness (1a, 1b and 1c) and connect the wire harness connectors (2a and 2b).

Fig 3: Bottom J-Clip



Courtesy of CHRYSLER GROUP, LLC

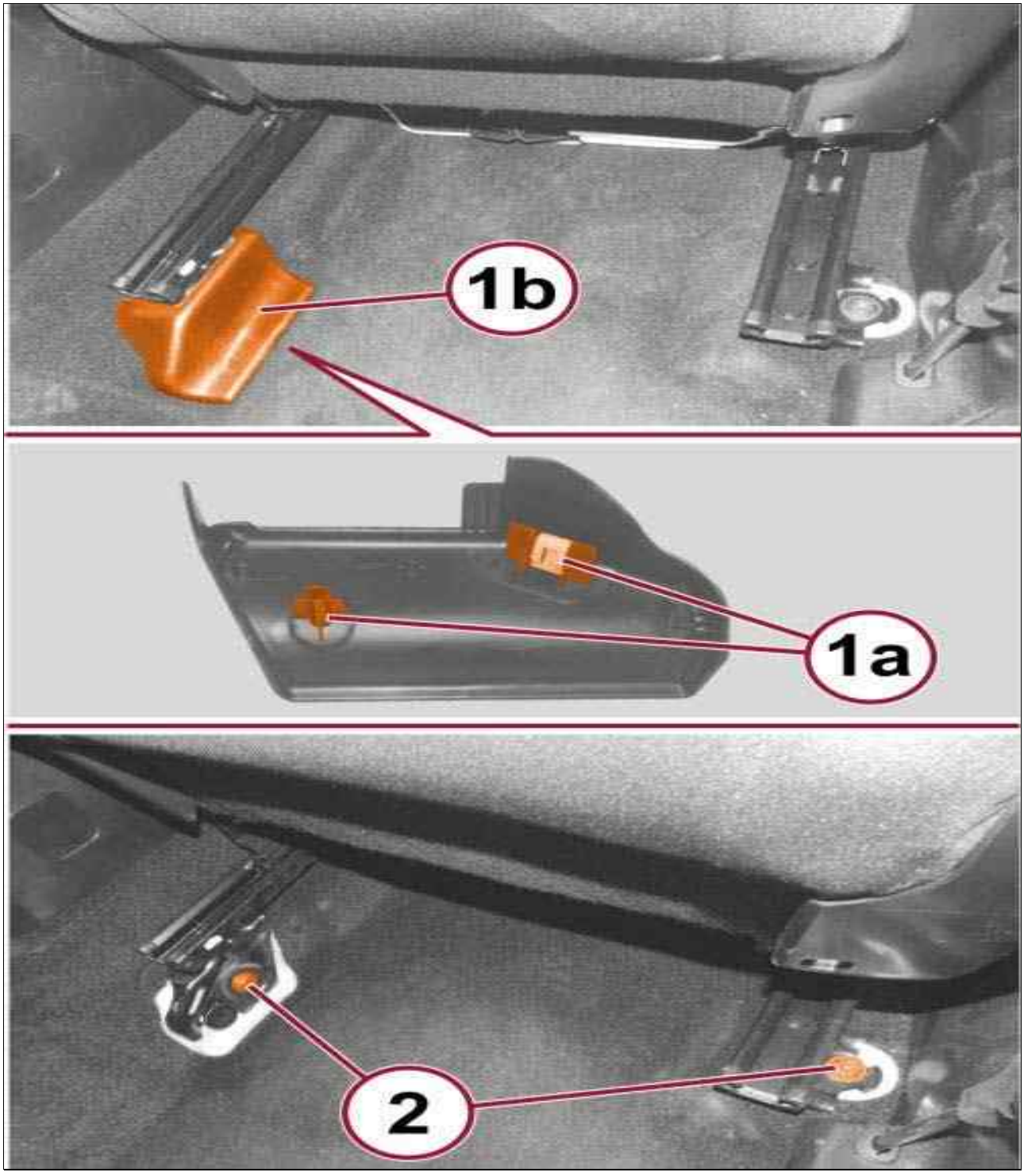
4. Close the J-clip (1) at the bottom on the seat back.
5. Install the side shields. Refer to SIDE SHIELDS, SEAT CUSHION, FRONT, REMOVAL AND INSTALLATION .

SEATS, FIRST ROW > SEAT, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

WARNING:

Disable the airbag system before attempting any component diagnosis or service of the front seats, when equipped with front seat air bags. Disconnect and isolate the negative battery (ground) cable, then wait two minutes for the airbag system capacitor to discharge before performing further diagnosis or service. This is the only sure way to disable the airbag system. Failure to take the proper precautions may result in accidental airbag deployment and possible serious or fatal injury. Refer to WARNING .

Fig 1: Rear Track Cover & Bolts

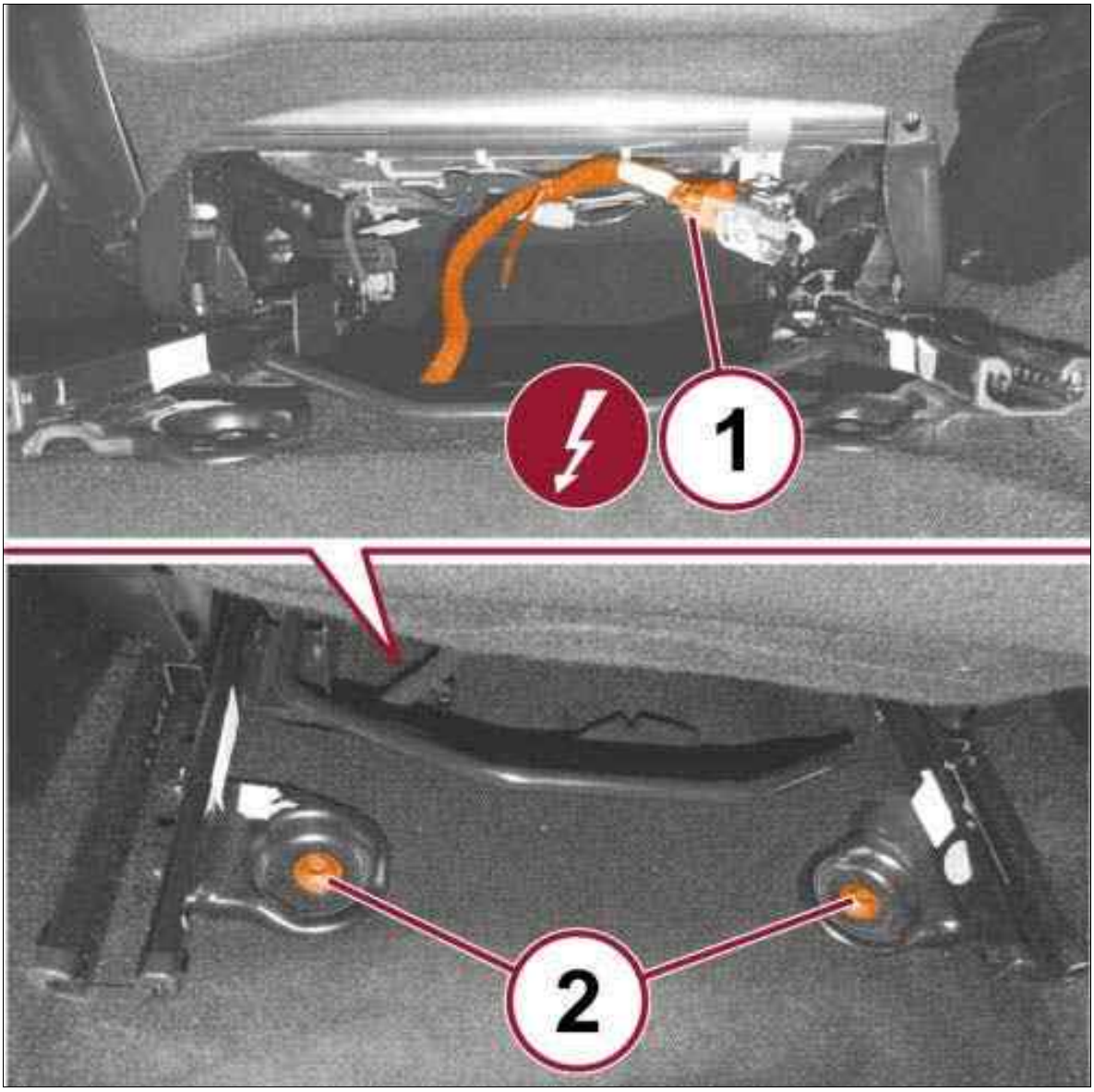


Courtesy of CHRYSLER GROUP, LLC

1. Before proceeding with the following repair procedure, review all warnings and cautions. Refer to SEATS, FIRST ROW, WARNING .
2. Disconnect and isolate the negative battery cable.
3. Move the front seat to the full forward position.
4. Using a trim stick, remove the rear track cover (1b).

5. Remove the two seat bolts (2).

Fig 2: Wire Harness Connector & Bolts



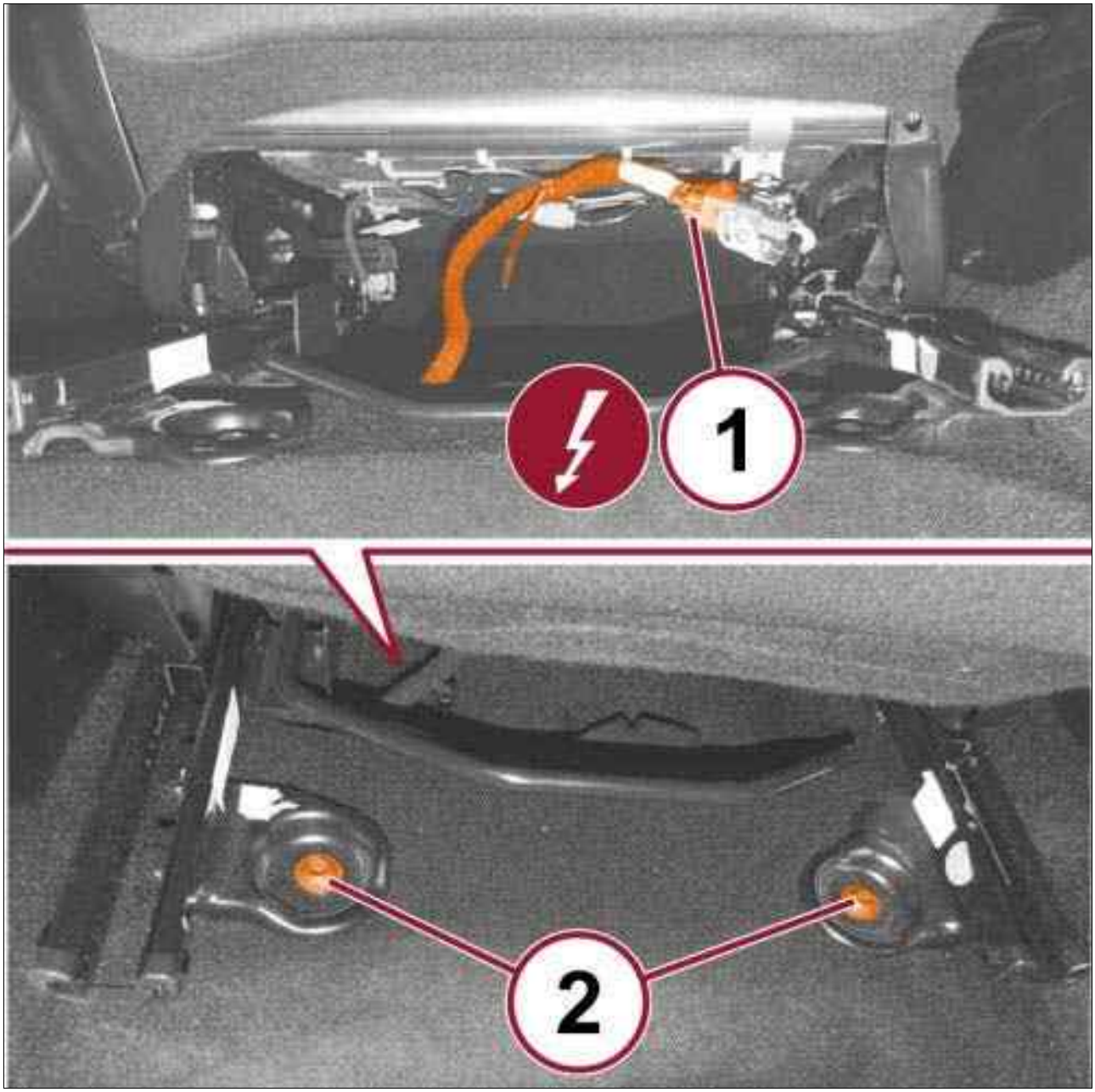
Courtesy of CHRYSLER GROUP, LLC

6. Move the front seat to the full rearward position.
7. Disconnect the wire harness connector (1).
8. Remove the two seat bolts (2).
9. Remove the front seat from the vehicle.

> ⚠ *CAUTION:*
>
> *Do not use the adjuster release bar as a handle when removing or installing the front seat.*

SEATS, FIRST ROW > SEAT, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Wire Harness Connector & Bolts



Courtesy of CHRYSLER GROUP, LLC

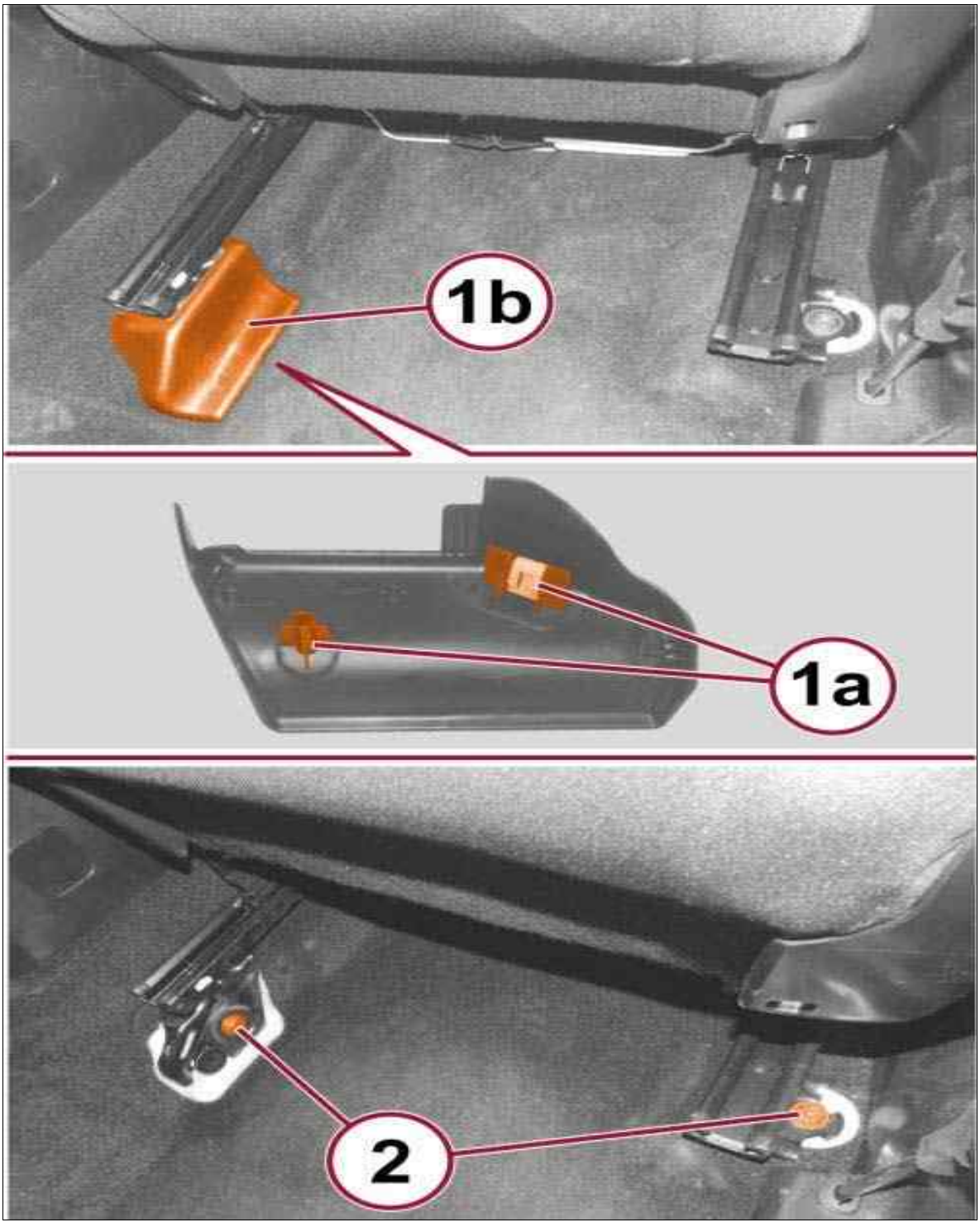
1. Before proceeding with the following repair procedure, review all warnings and cautions. Refer to SEATS, FIRST ROW, WARNING .
2. Position the front seat into the vehicle.

> ⚠ *CAUTION:*

Do not use the adjuster release bar as a handle when removing or installing the front seat.

3. Loosely install the front seat bolts (2) and connect the wire harness connectors (1).

Fig 2: Rear Track Cover & Bolts

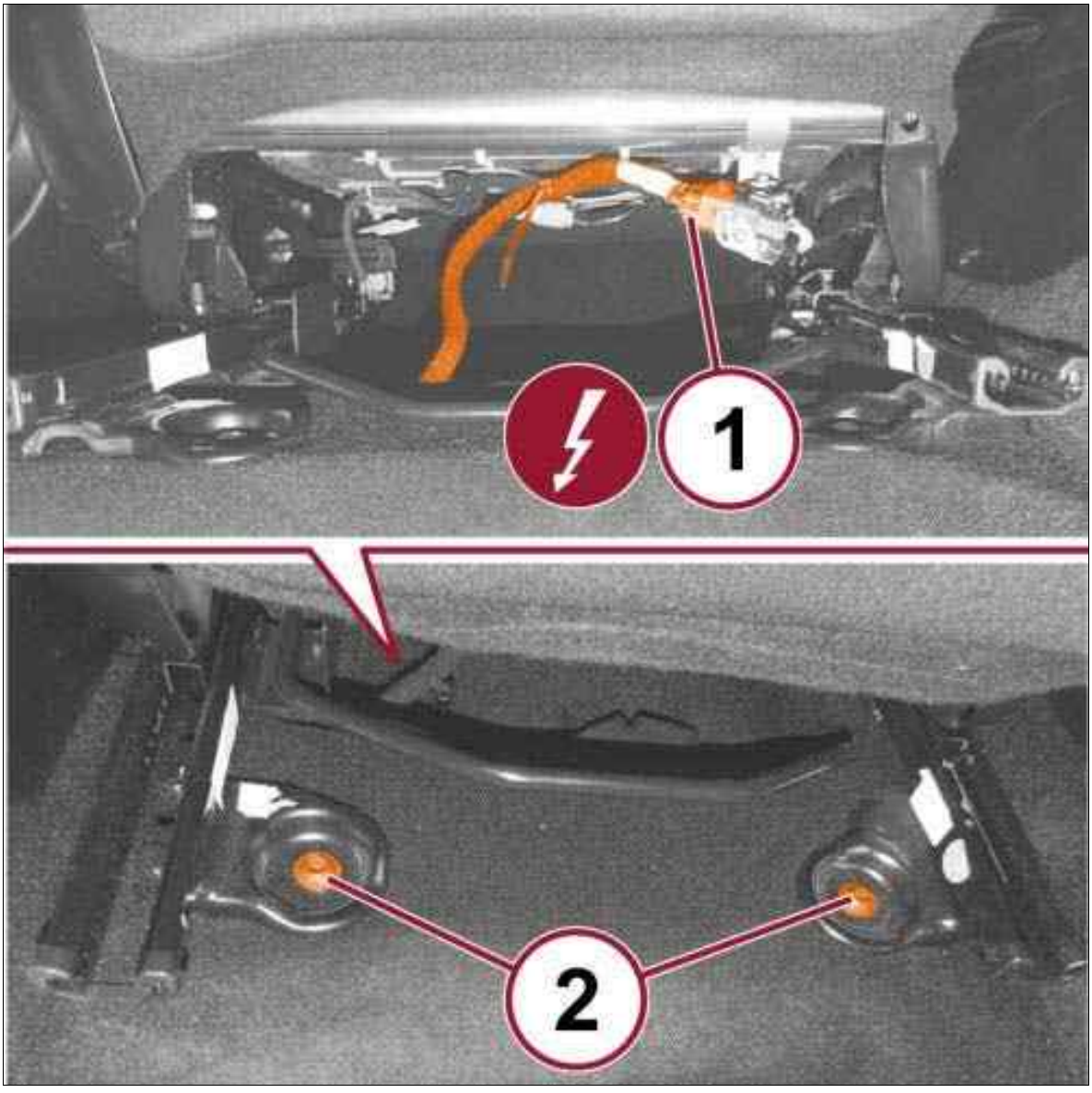


Courtesy of CHRYSLER GROUP, LLC

4. Move the front seat (1) to the full forward position.

5. Loosely install the rear seat bolts (2) and tighten to **OUTBOARD** bolt to the proper specification. Refer to SPECIFICATIONS .
6. Slide the seat rearward and forward to make sure the track is aligned properly, then tighten the **INBOARD** bolt to the proper specification. Refer to SPECIFICATIONS .
7. Install the rear seat track cover (1b).

Fig 3: Wire Harness Connector & Bolts



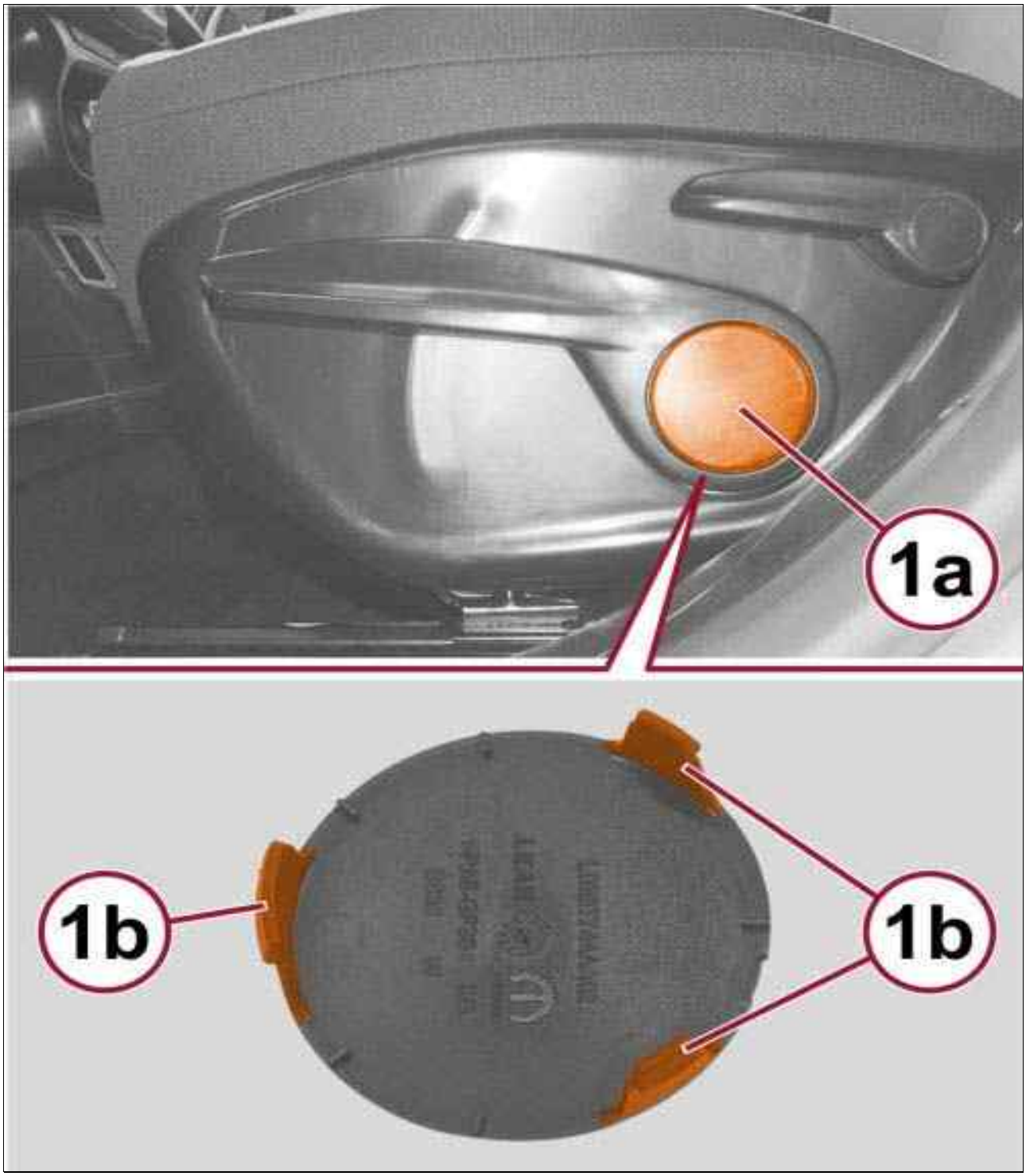
Courtesy of CHRYSLER GROUP, LLC

8. Slide the seat rearward and tighten the bolts (2) to the proper specification. Refer to SPECIFICATIONS .
9. Connect the negative battery cable.

SEATS, FIRST ROW > SIDE SHIELDS, SEAT CUSHION, FRONT > REMOVAL AND

INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

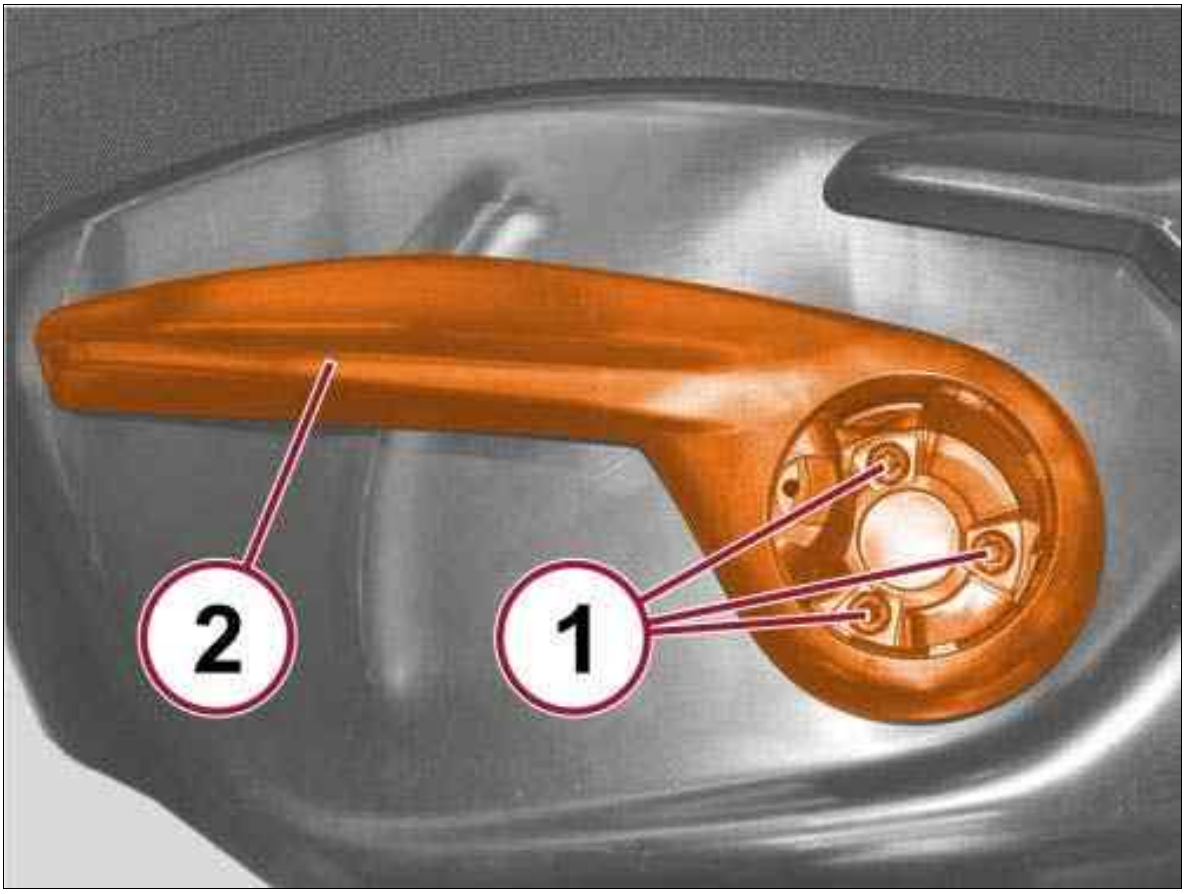
Fig 1: Cover & Tabs



Courtesy of CHRYSLER GROUP, LLC

1. Using a small flat bladed tool, remove the cover (1a) from the height adjusting handle.

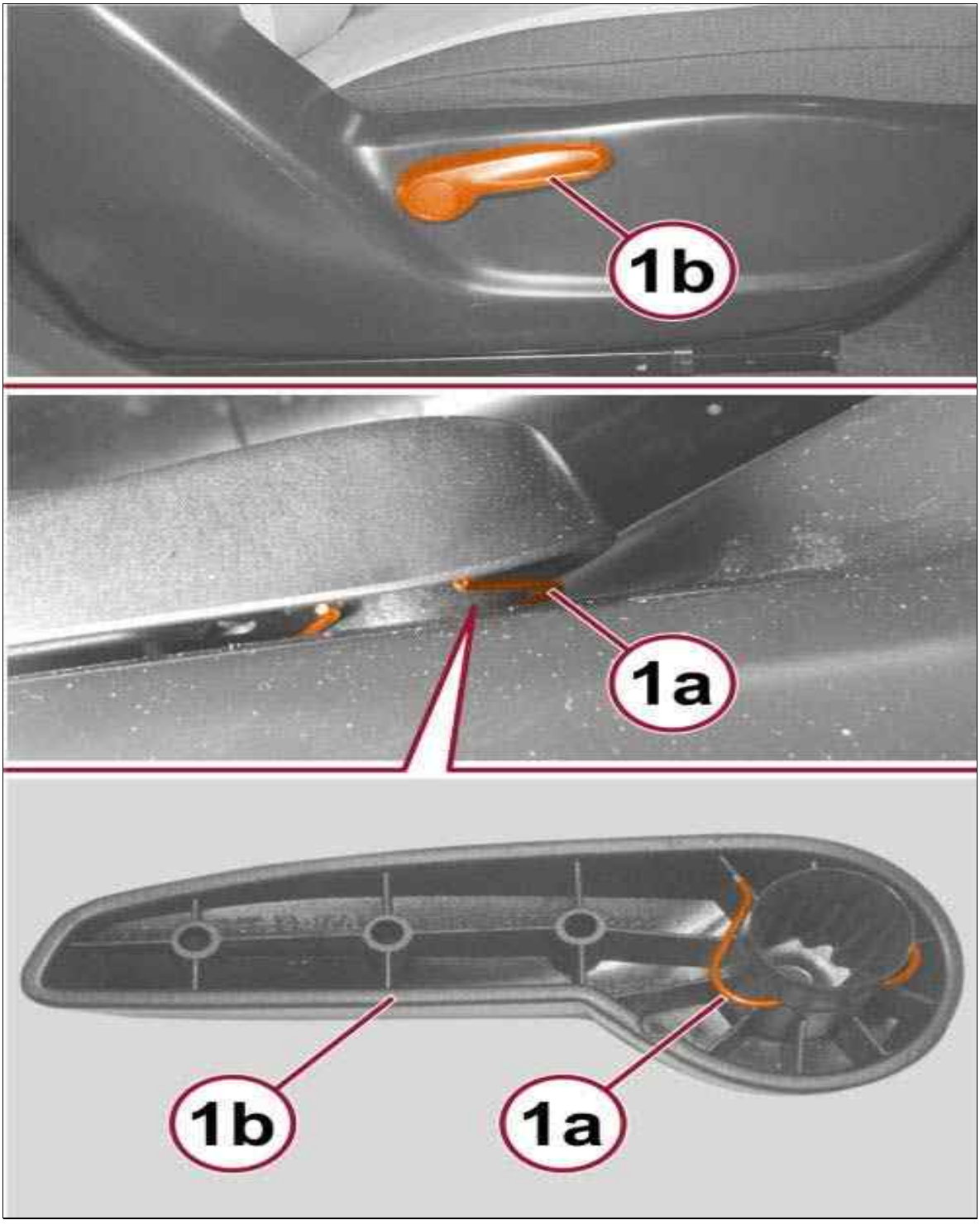
Fig 2: Height Adjusting Handle & Screws



Courtesy of CHRYSLER GROUP, LLC

2. Remove the screws (1) and the height adjusting handle (2).

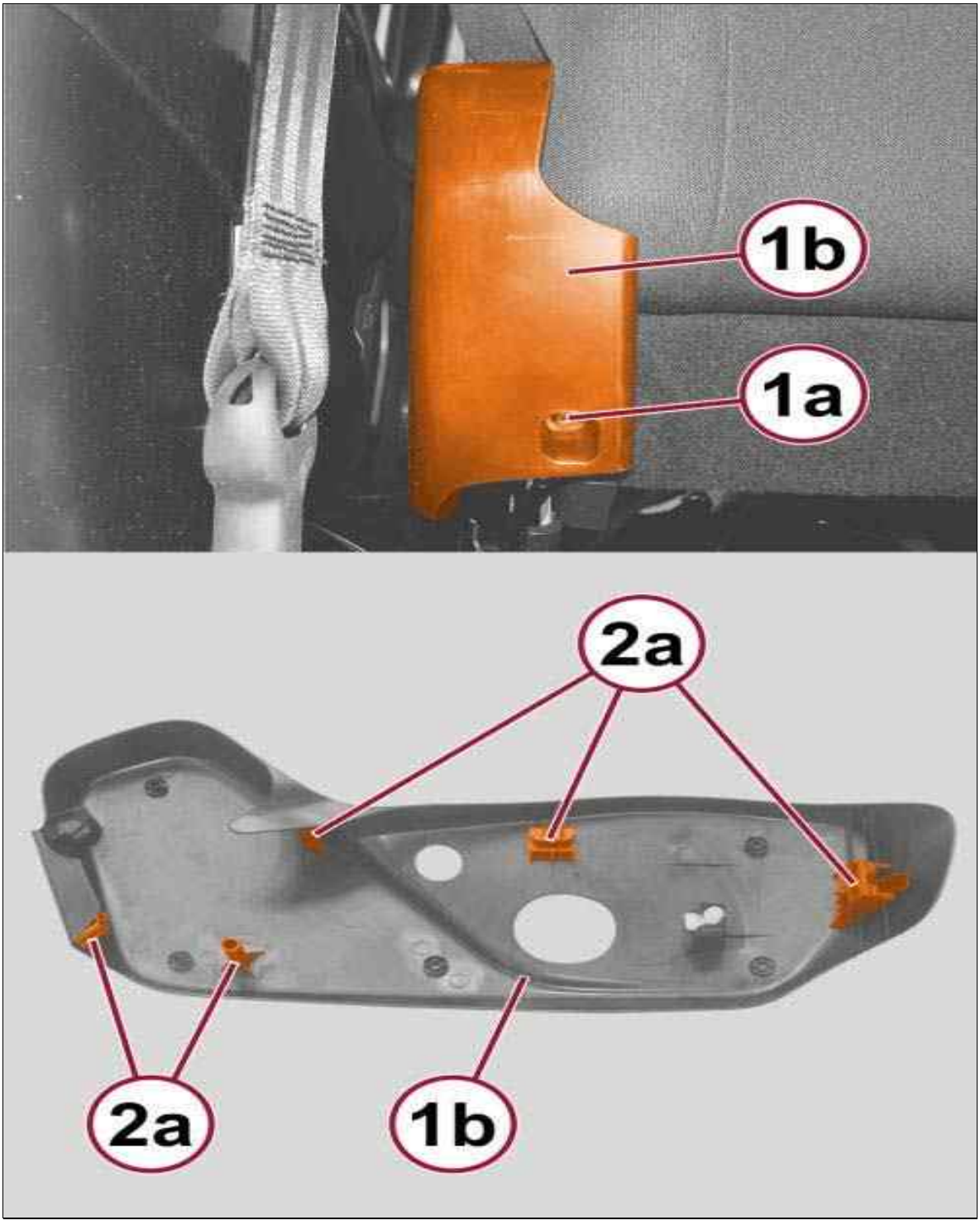
Fig 3: Recline Handle & Clip



Courtesy of CHRYSLER GROUP, LLC

3. Using a hook tool remove the clip (1a) and remove the recline handle (1b).

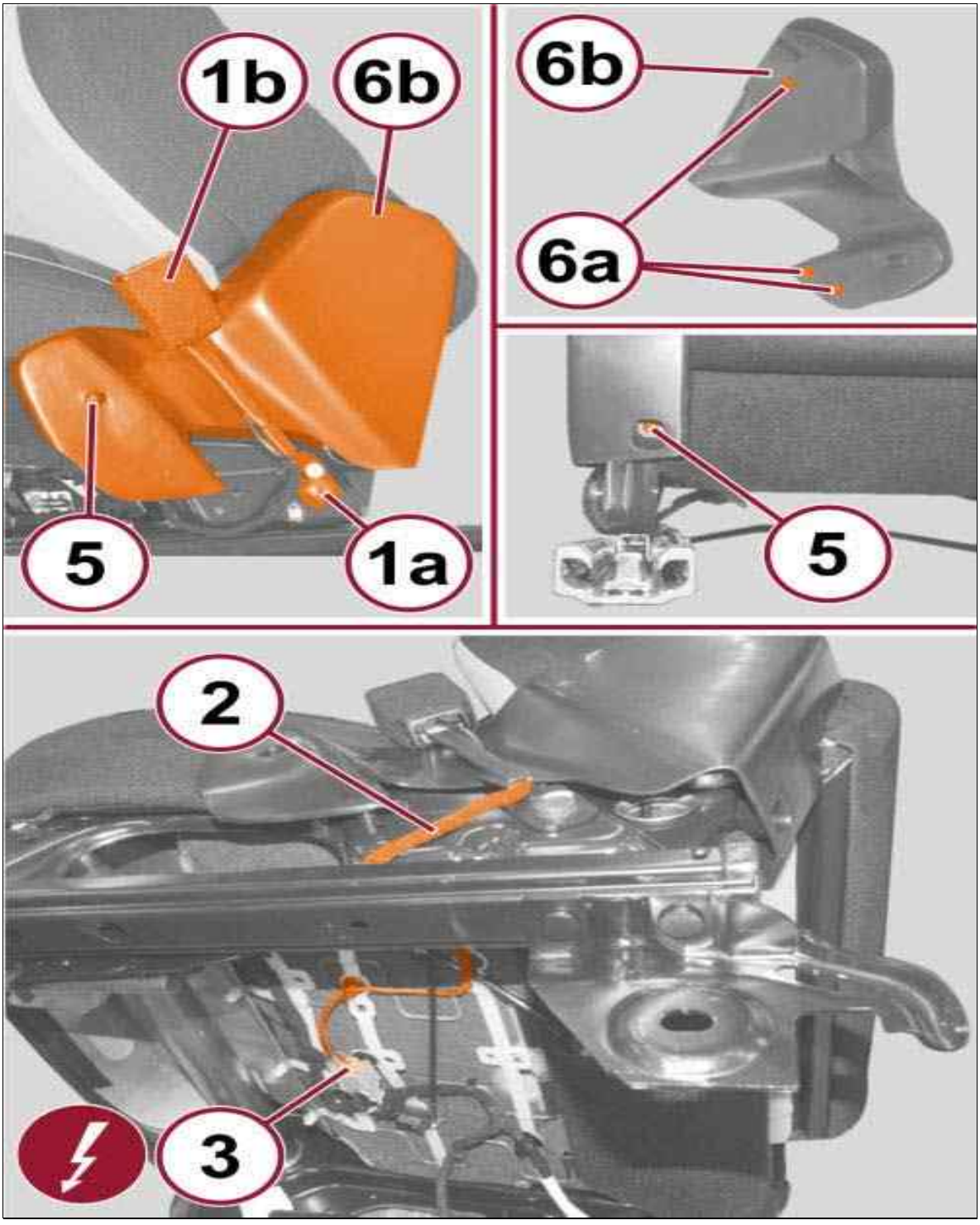
Fig 4: Side Shield, Retaining Tab & Screw



Courtesy of CHRYSLER GROUP, LLC

4. Remove the screw (1a) at the rear of the side shield (1b).
5. Using a trim stick or equivalent, release the retaining clips (2a) and the side shield (1b).

Fig 5: Side Shield, Seat Belt Buckle, Bolt, Screws & Clips

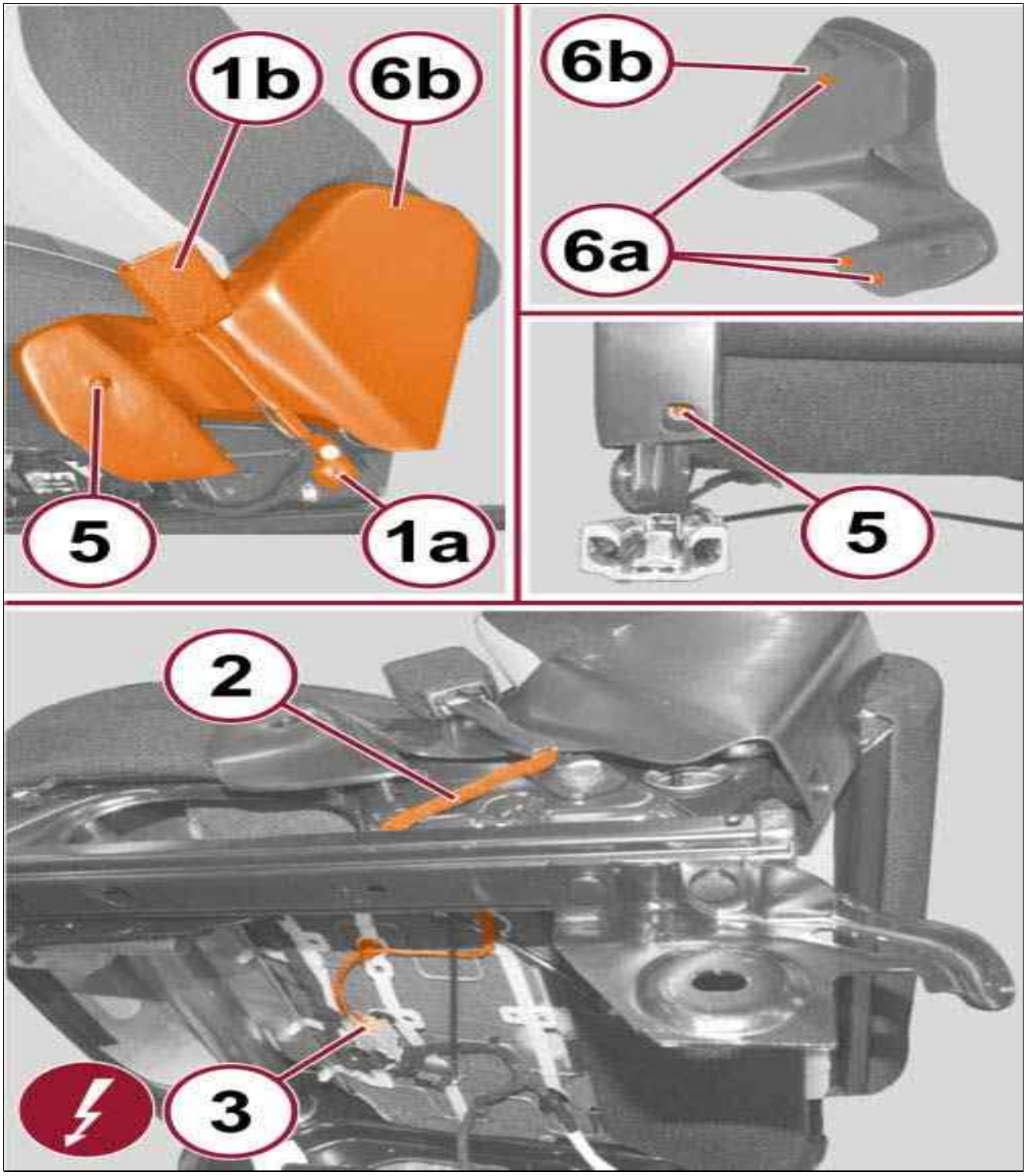


Courtesy of CHRYSLER GROUP, LLC

6. Remove the seat belt buckle bolt (1a) and the seat belt buckle (1b).
7. Remove the screws (5) from the side shield (6b).
8. Using a trim stick or equivalent, release the retaining clips (6a) and remove the side shield.

SEATS, FIRST ROW > SIDE SHIELDS, SEAT CUSHION, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Side Shield, Seat Belt Buckle, Bolt, Screws & Clips

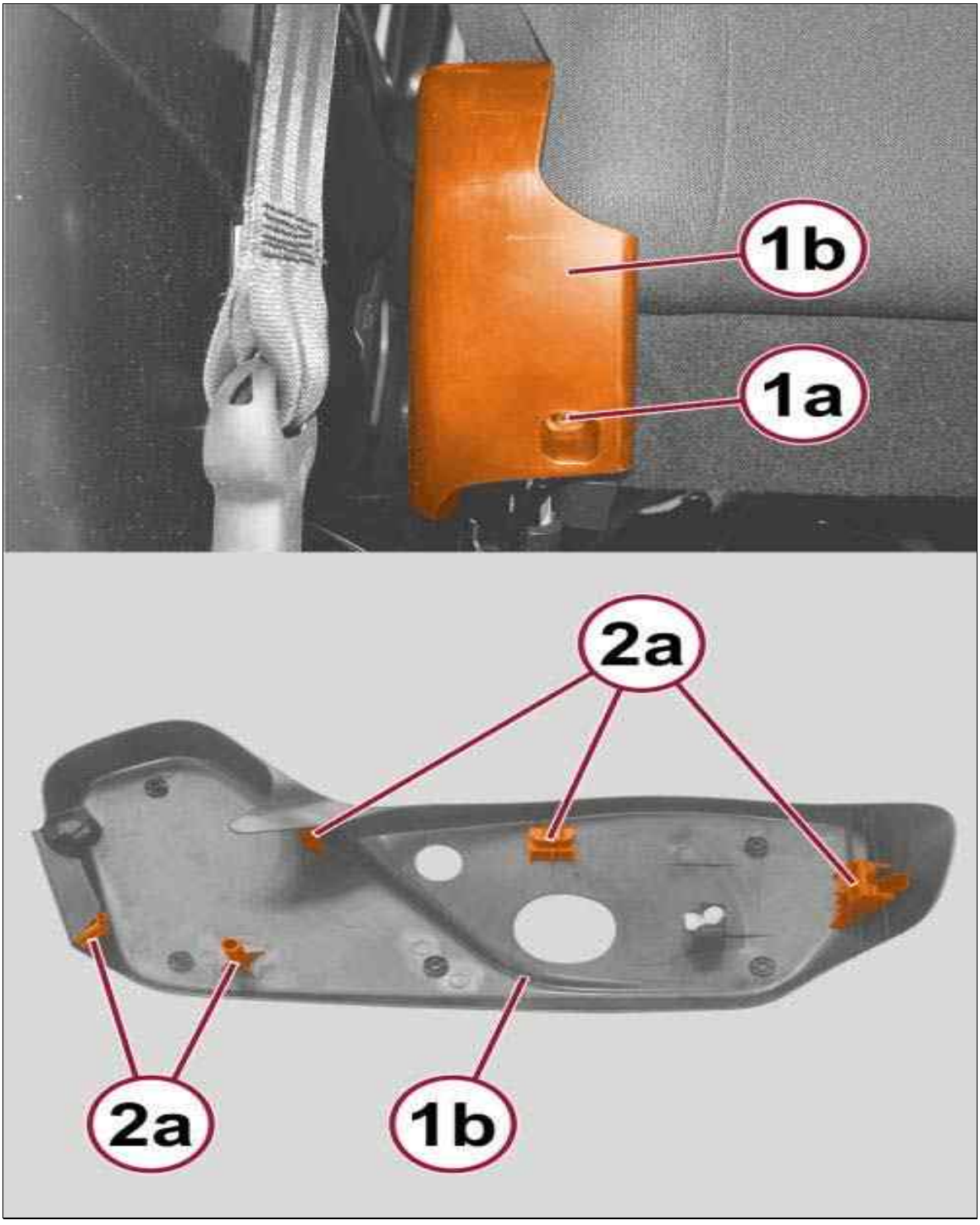


Courtesy of CHRYSLER GROUP, LLC

1. Position the side shield (6b) onto the seat frame and engage the retaining tab (6a).
2. Install the screws (5) and tighten securely.

3. Tighten the seat belt buckle bolt (1a) and tighten to the proper specification. Refer to SPECIFICATIONS .

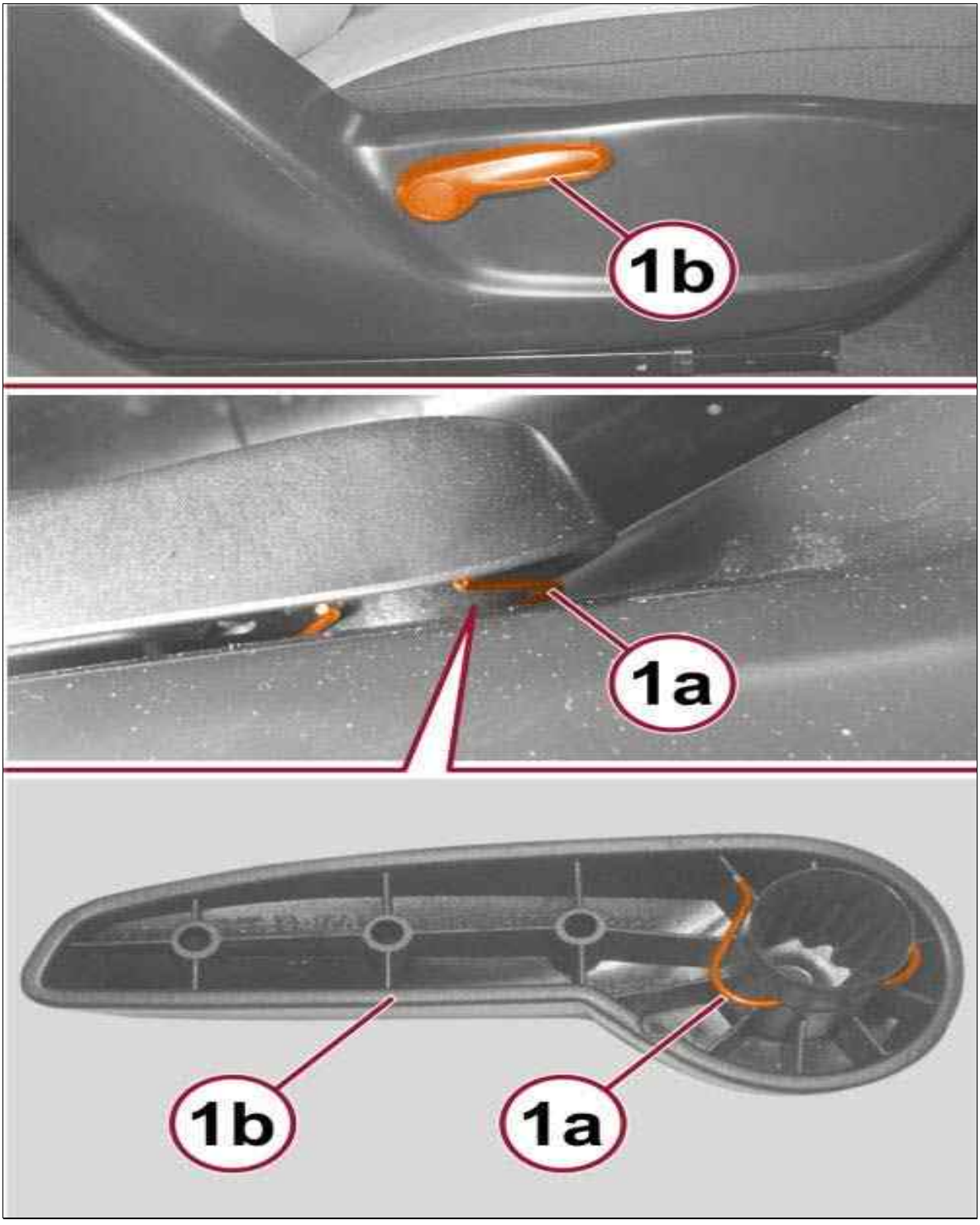
Fig 2: Side Shield, Retaining Tab & Screw



Courtesy of CHRYSLER GROUP, LLC

4. Position the side shield (1b) onto the seat frame and engage the retaining tab (2a).
5. Install the screw (1a) and tighten securely.

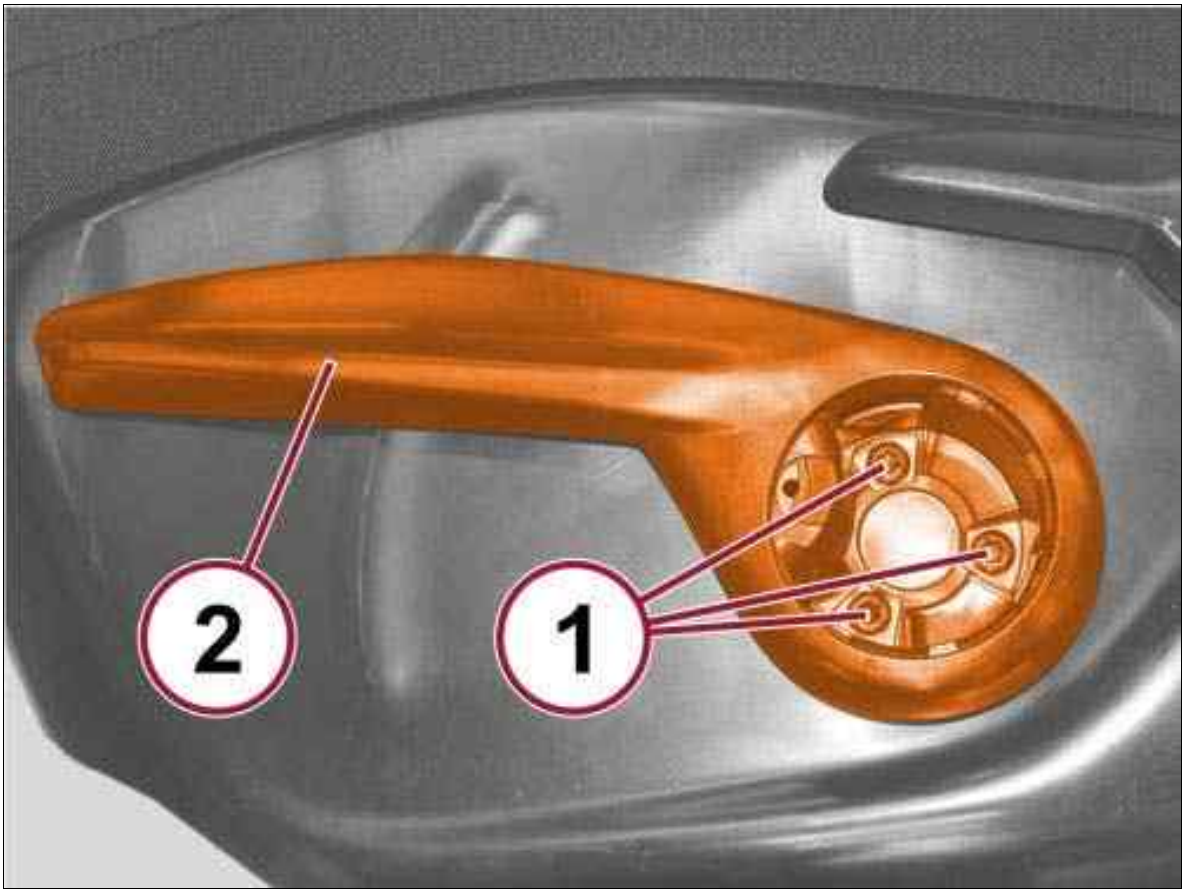
Fig 3: Recline Handle & Clip



Courtesy of CHRYSLER GROUP, LLC

6. Install the clip (1a) onto the recline handle (1b), then install onto the seat.

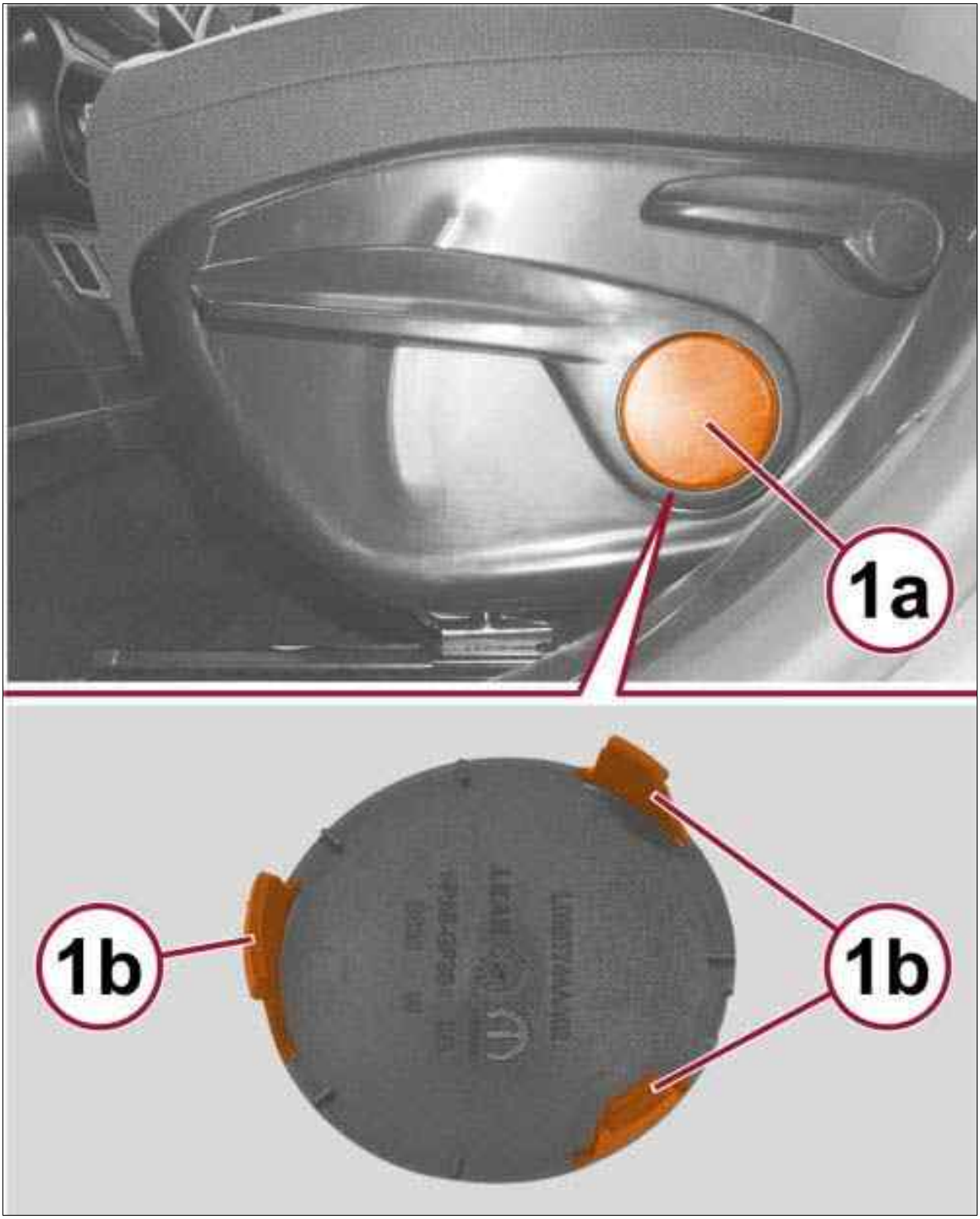
Fig 4: Height Adjusting Handle & Screws



Courtesy of CHRYSLER GROUP, LLC

7. Position the height adjusting handle (2) and install the screws (1). Tighten the screws securely.

Fig 5: Cover & Tabs

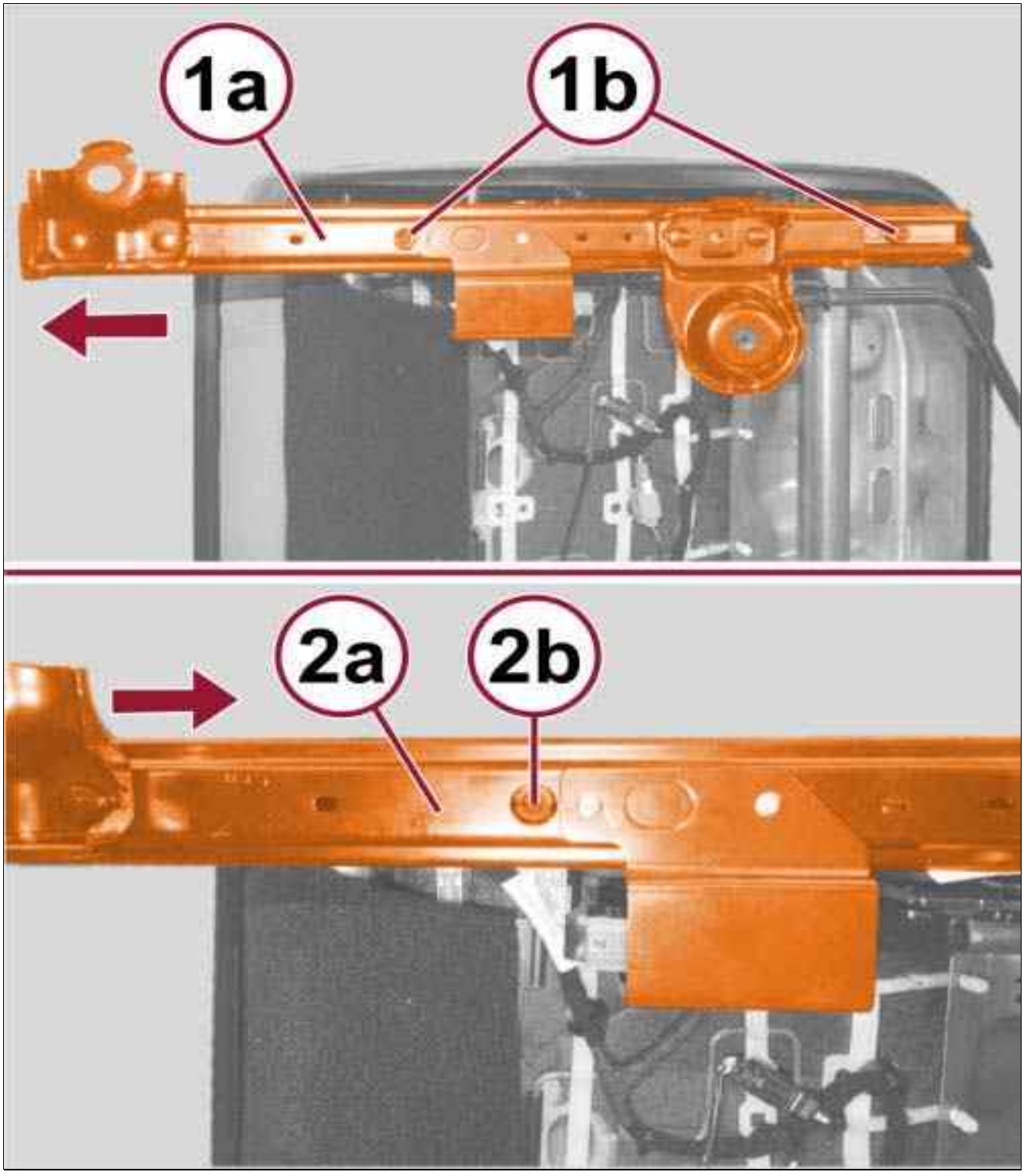


Courtesy of CHRYSLER GROUP, LLC

8. Install the cover (1a) and engage the tabs (1b).

SEATS, FIRST ROW > TRACK, MANUAL FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

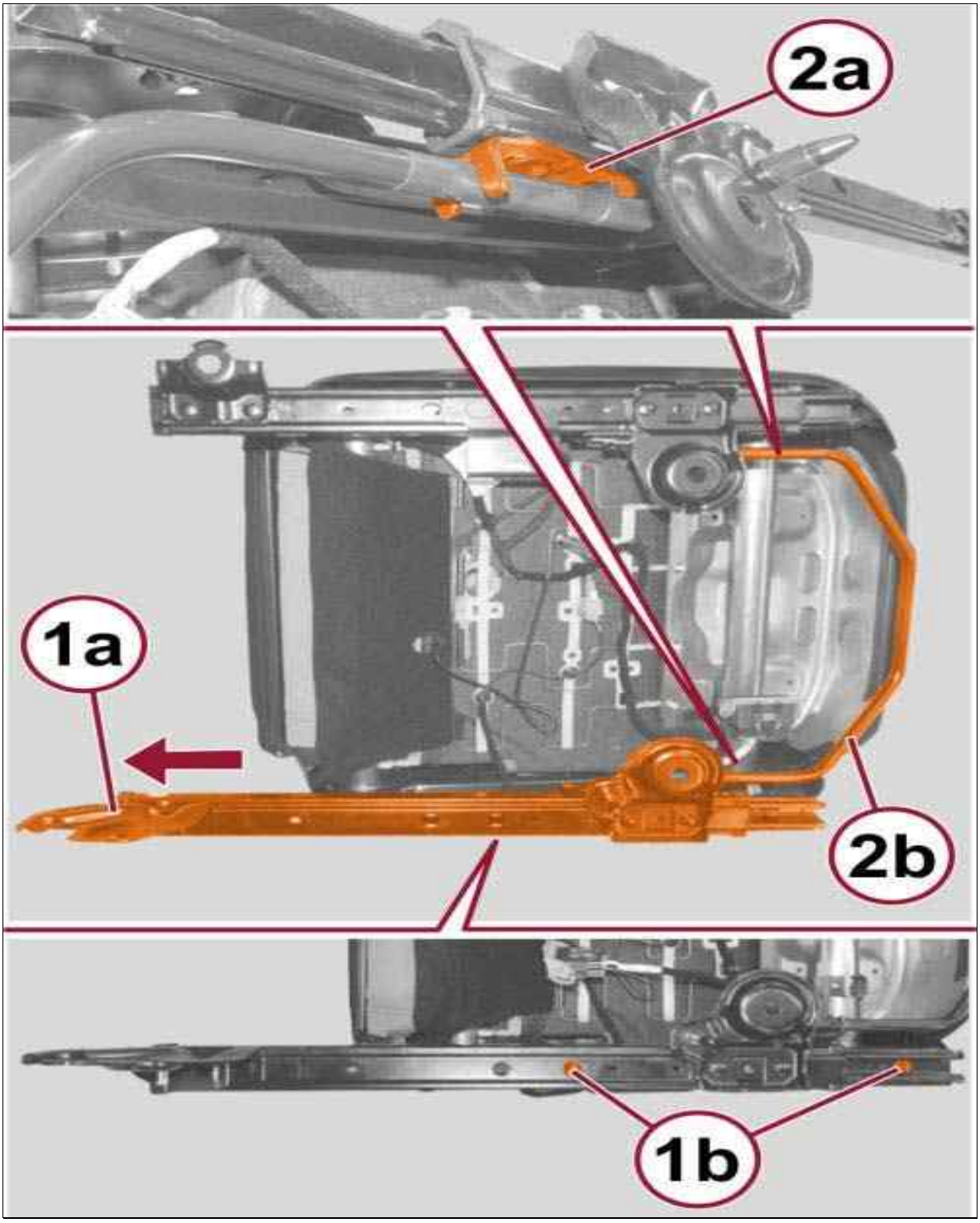
Fig 1: Seat Track & Bolts



Courtesy of CHRYSLER GROUP, LLC

1. Remove the seat from the vehicle. Refer to SEAT, FRONT, REMOVAL AND INSTALLATION .
2. Move the seat track (1a) rearward and remove the bolts (1b).
3. Move the seat track (2a) forward and remove the bolt (2b).

Fig 2: Seat Track, Handle & Bolts



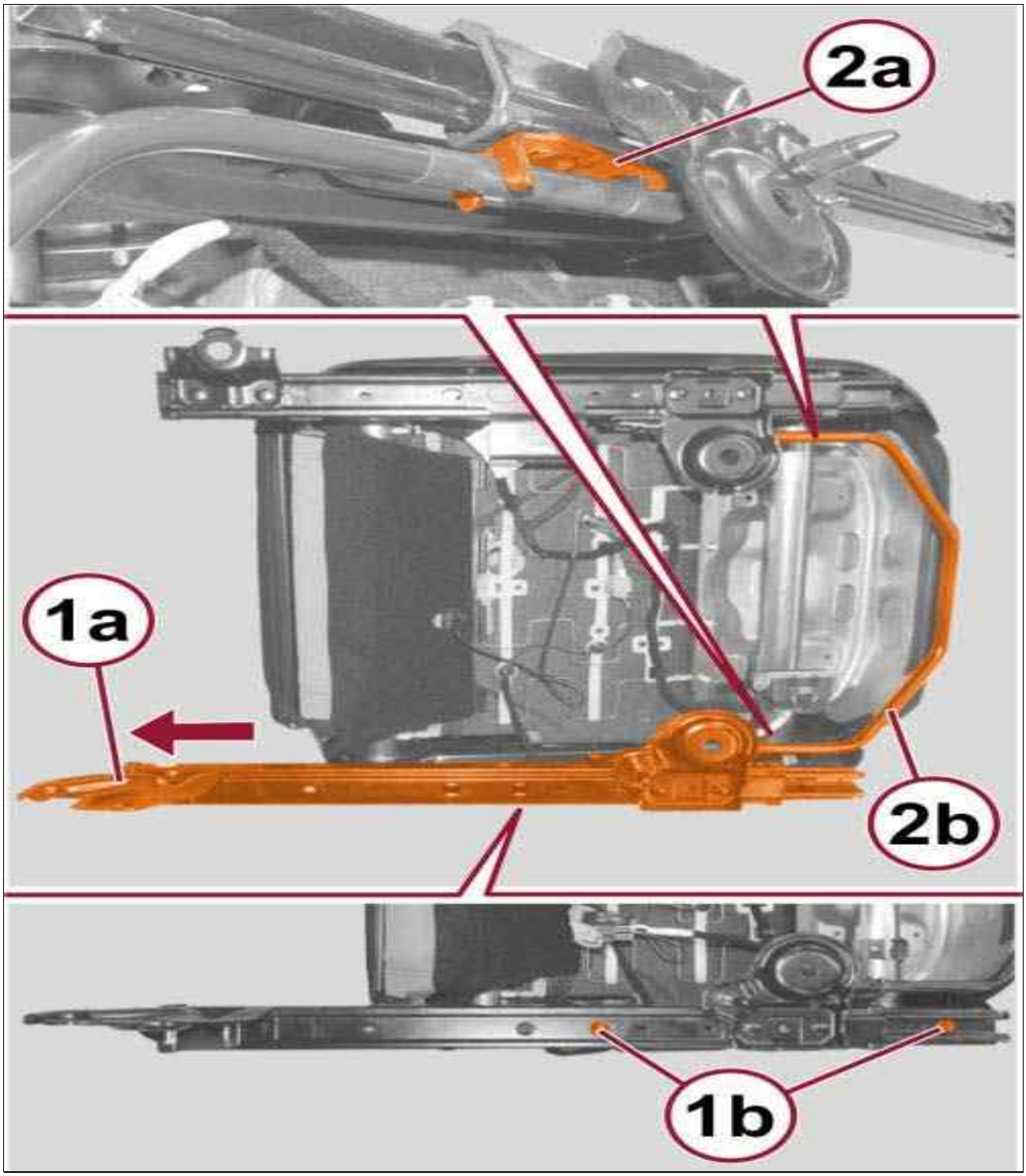
Courtesy of CHRYSLER GROUP, LLC

4. Move the seat track (1a) rearward and remove the bolts (1b).
5. Remove the seat adjust handle (2b) and seat track.

SEATS, FIRST ROW > TRACK, MANUAL FRONT > REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION > INSTALLATION

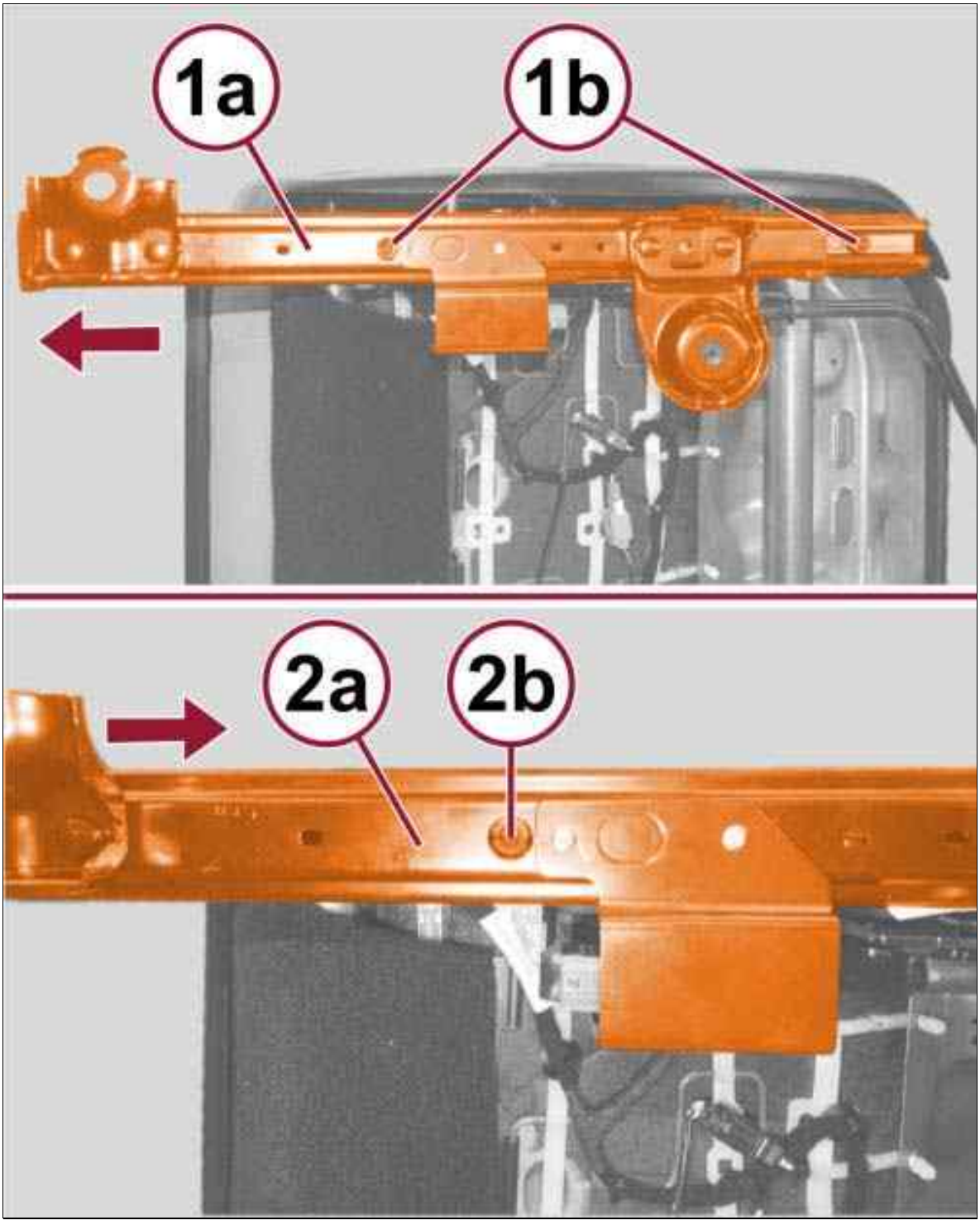
Fig 1: Seat Track, Handle & Bolts



Courtesy of CHRYSLER GROUP, LLC

1. Install the seat adjuster handle (2b) onto the seat track (1a).
2. Position the seat track and install the bolts (1b). Tighten the seat track bolts to the proper specification. Refer to SPECIFICATIONS .

Fig 2: Seat Track & Bolts

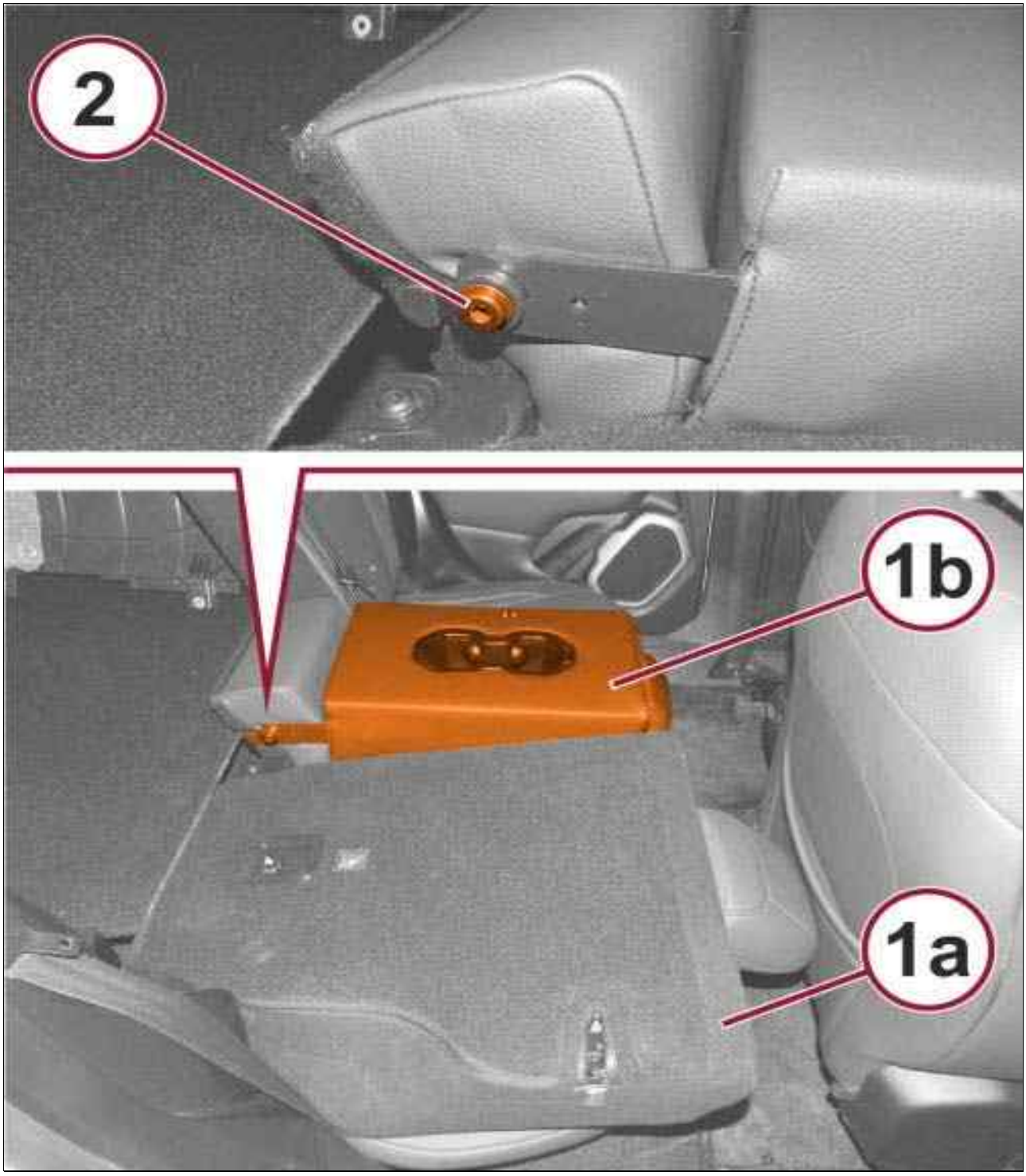


Courtesy of CHRYSLER GROUP, LLC

3. Move the seat track (1a) as necessary and install the bolts (1b and 2b).
4. Tighten the seat track bolts to the proper specification. Refer to SPECIFICATIONS .
5. Install the seat into the vehicle. Refer to SEAT, FRONT, REMOVAL AND INSTALLATION .

SEATS, REAR > ARMREST, SECOND ROW > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

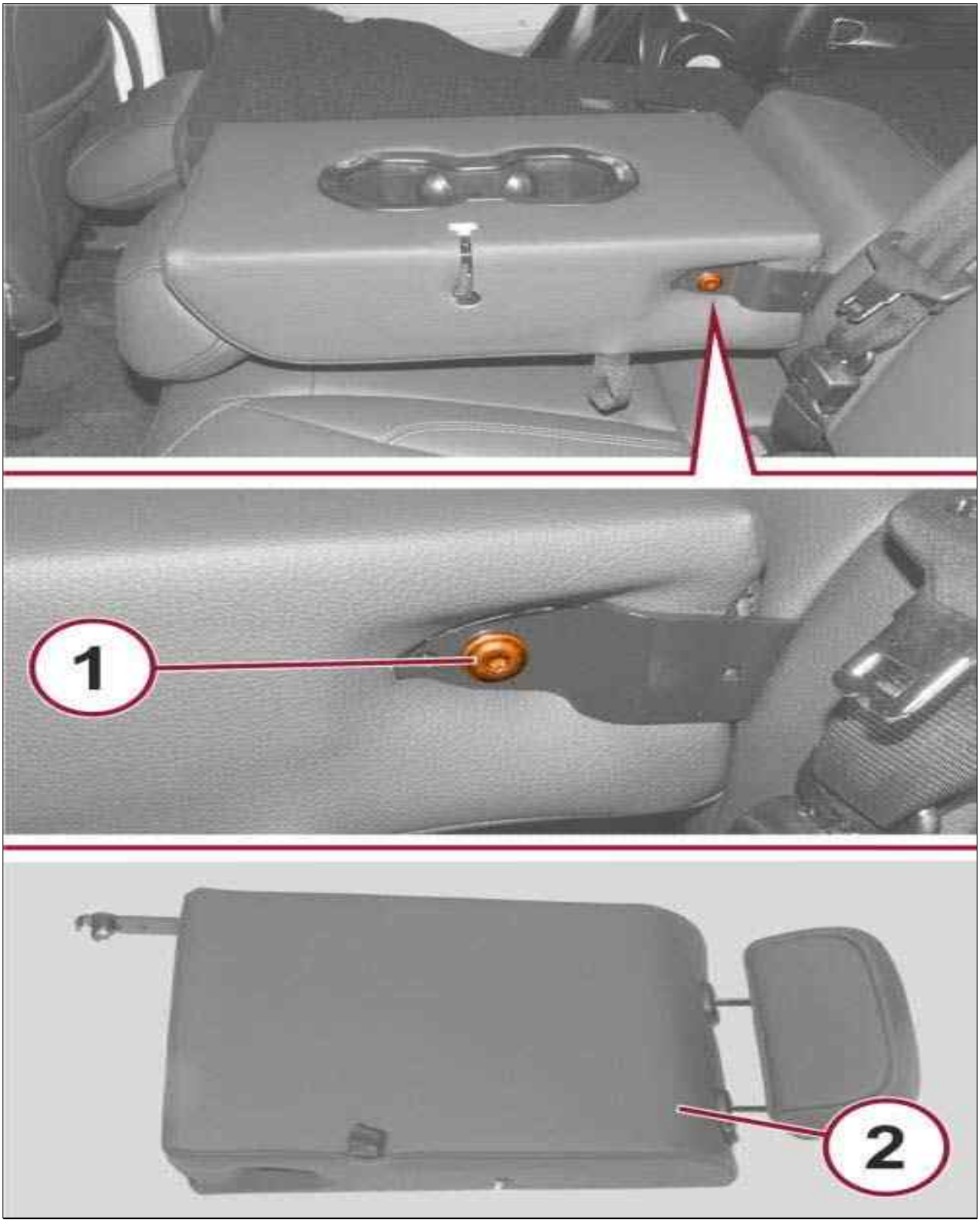
Fig 1: Right Side Rear Seat, Armrest & Bolt



Courtesy of CHRYSLER GROUP, LLC

1. fold the right side rear seat (1a) to the full forward position.
2. With the armrest (1b) in the folded down position, remove the bolt (2).

Fig 2: Armrest & Bolt

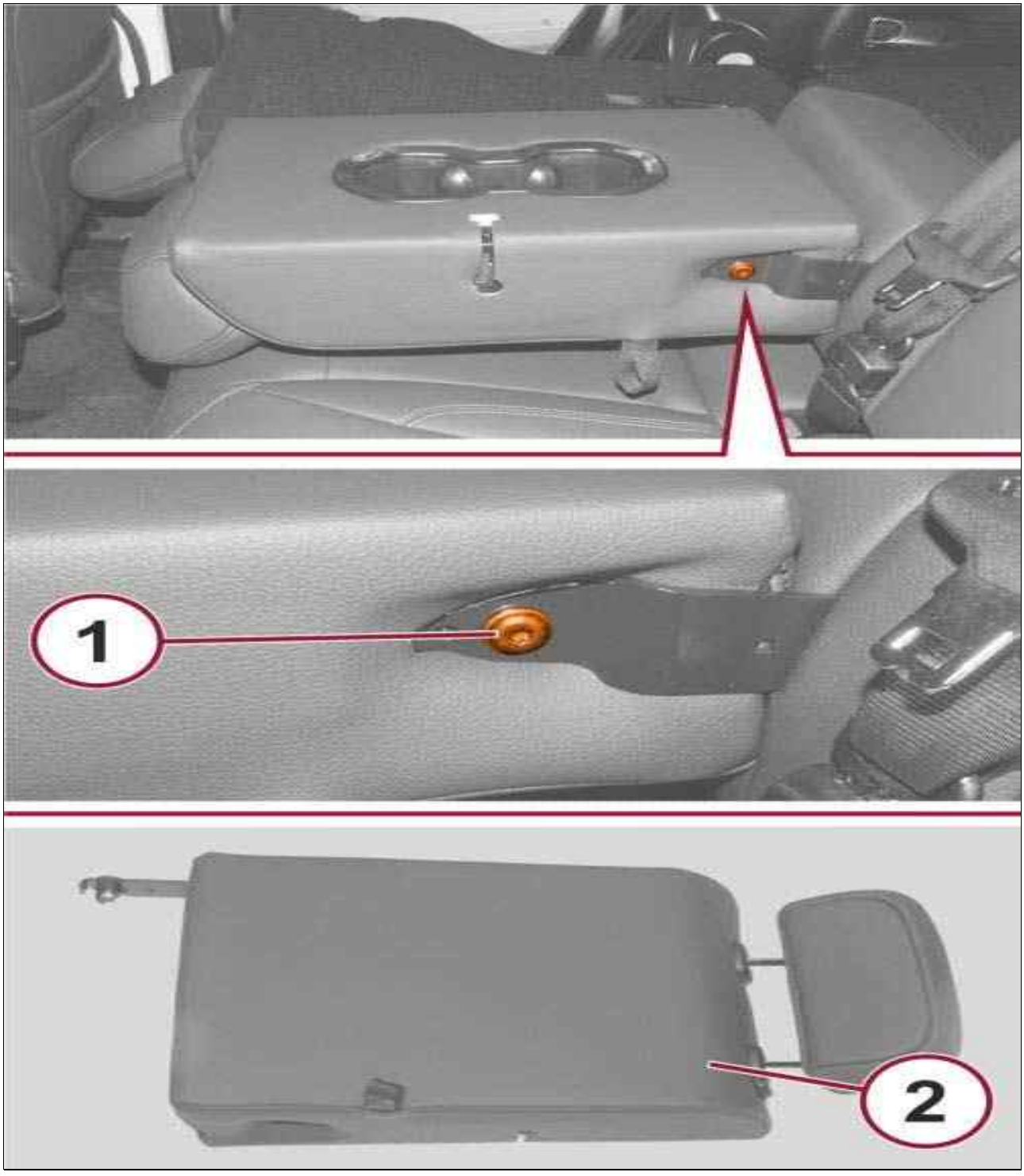


Courtesy of CHRYSLER GROUP, LLC

3. With the armrest in the folded down position, remove the bolt (1) and remove the armrest (2).

SEATS, REAR > ARMREST, SECOND ROW > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

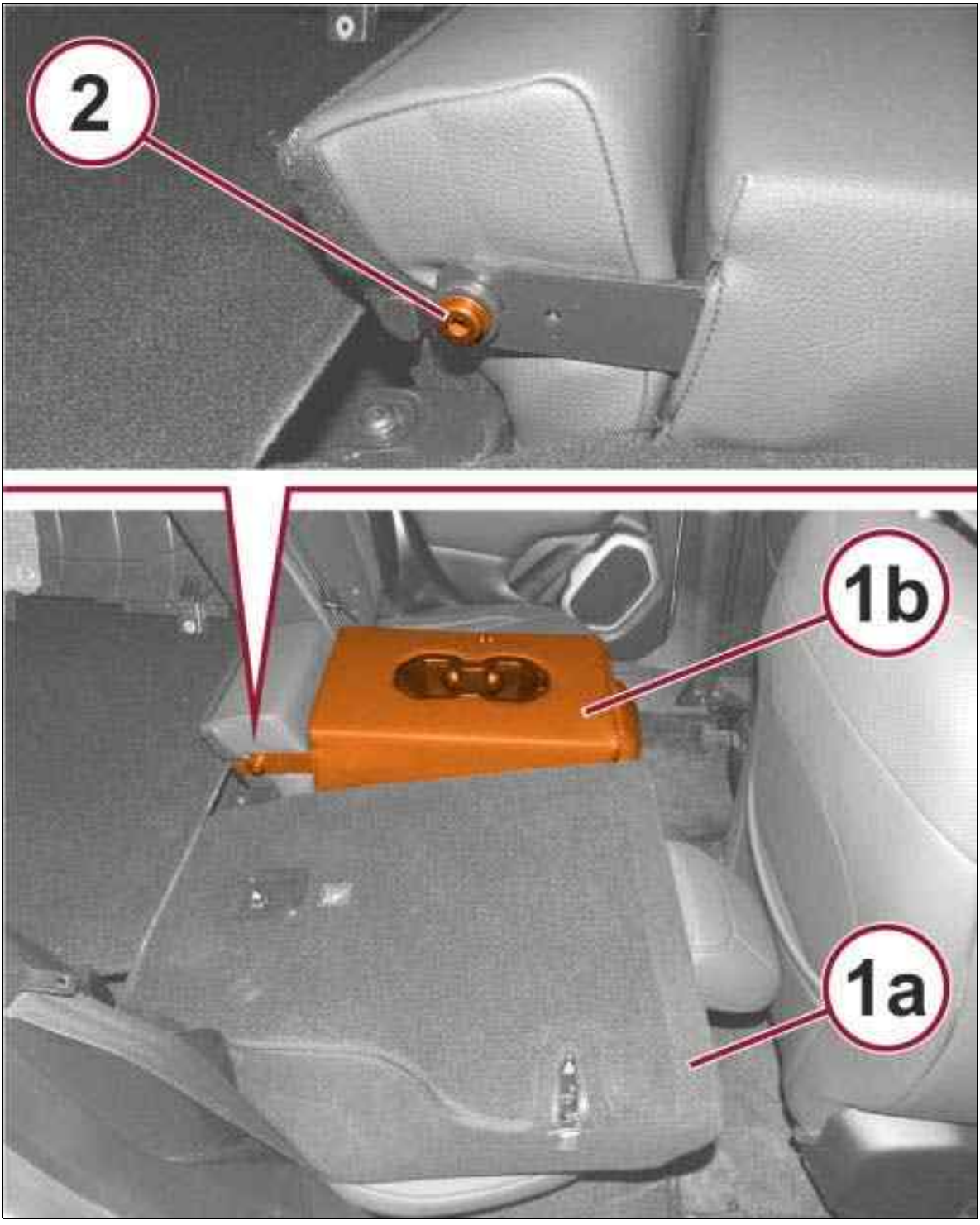
Fig 1: Armrest & Bolt



Courtesy of CHRYSLER GROUP, LLC

1. Position the armrest and install the bolt (1).

Fig 2: Right Side Rear Seat, Armrest & Bolt



Courtesy of CHRYSLER GROUP, LLC

2. Install the inboard bolt (2) and tighten the rear seat armrest bolts to the proper specification. Refer to SPECIFICATIONS .

SEATS, REAR > SEAT BACK, REAR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Seat Backs, Center Seat Belt & Release Handles

Courtesy of CHRYSLER GROUP, LLC

1. Release the center seat belt (1b) at the bottom.
2. Pull the release handles (2a) and fold both seat backs (2b and 2c) down.

Fig 2: Seat Back Pivot, Bracket, Bushing & Bolt

Courtesy of CHRYSLER GROUP, LLC

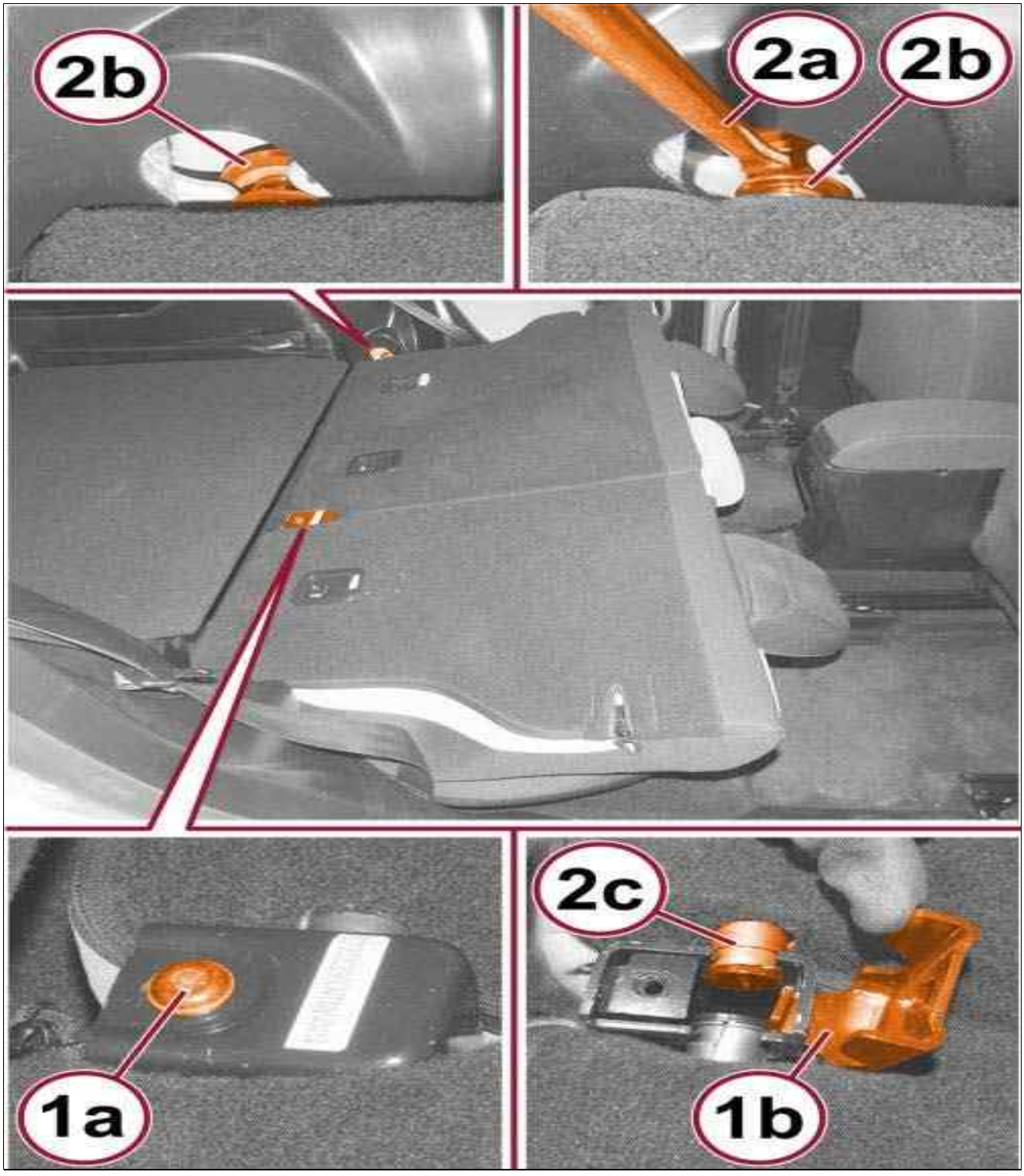
3. Remove the pivot bracket bolt (1a) and open the pivot bracket (1b).
4. Lift the seat back pivot (2c) out of the center pivot bracket.
5. Using a pry tool (2a), release the locking bushing (2b) and lift the seat back and remove.

SEATS, REAR > SEAT BACK, REAR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

NOTE:

The 60% split rear seat back must be installed before the 40% split rear seat back.

Fig 1: Seat Back Pivot, Bracket, Bushing & Bolt



Courtesy of CHRYSLER GROUP, LLC

1. Engage the locking bushing (2b) into the out pivot bracket.
2. Place the seat pivot (2c) into the pivot bracket.
3. Close the pivot bracket (1b) and install the pivot bracket bolt (1a).
4. Tighten the rear seat pivot bracket bolt to the proper specification. Refer to SPECIFICATIONS .

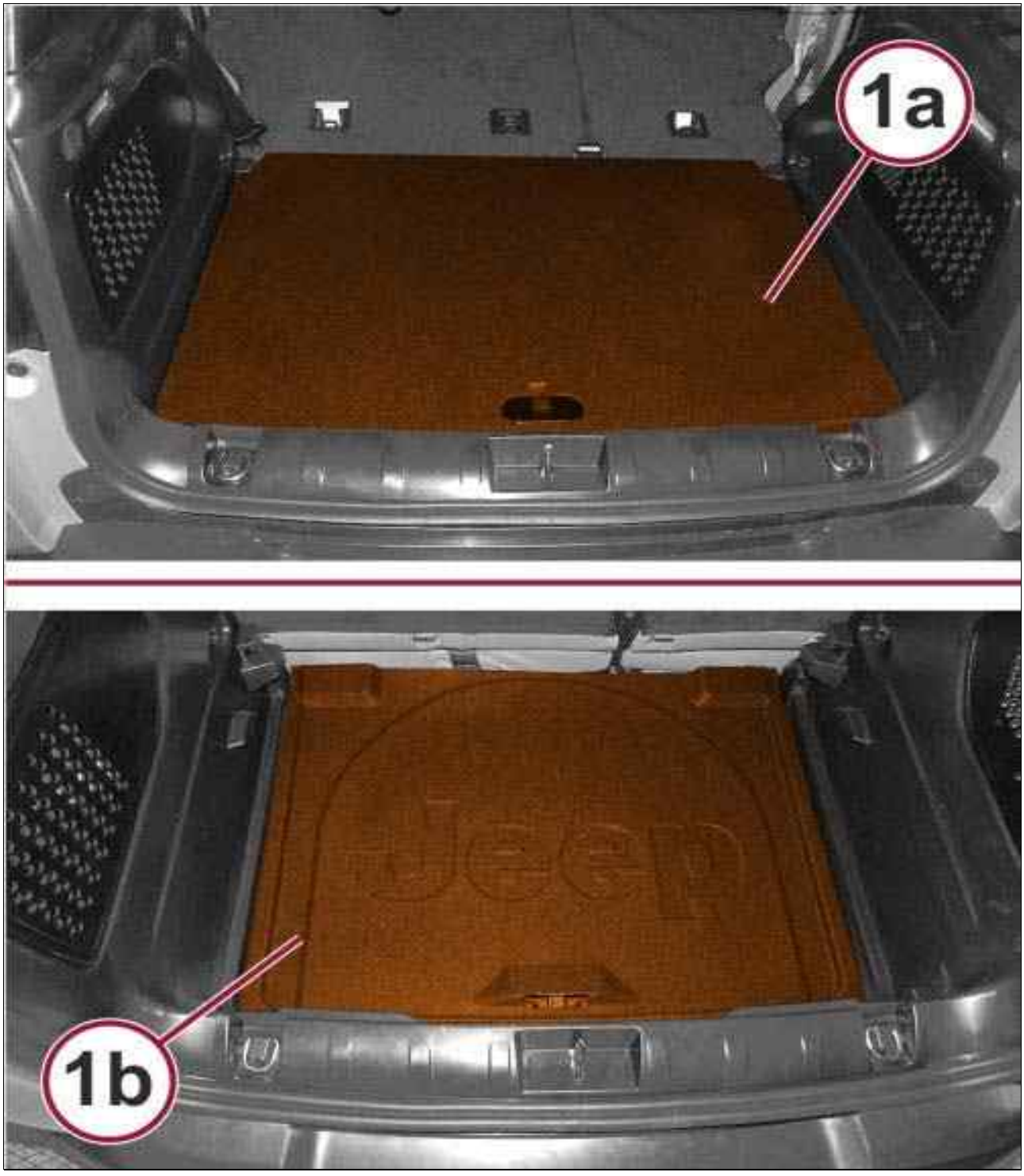
Fig 2: Seat Backs, Center Seat Belt & Release Handles

Courtesy of CHRYSLER GROUP, LLC

5. Raise the seat back and install the center seat belt (1b).

SEATS, REAR > SEAT CUSHION > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

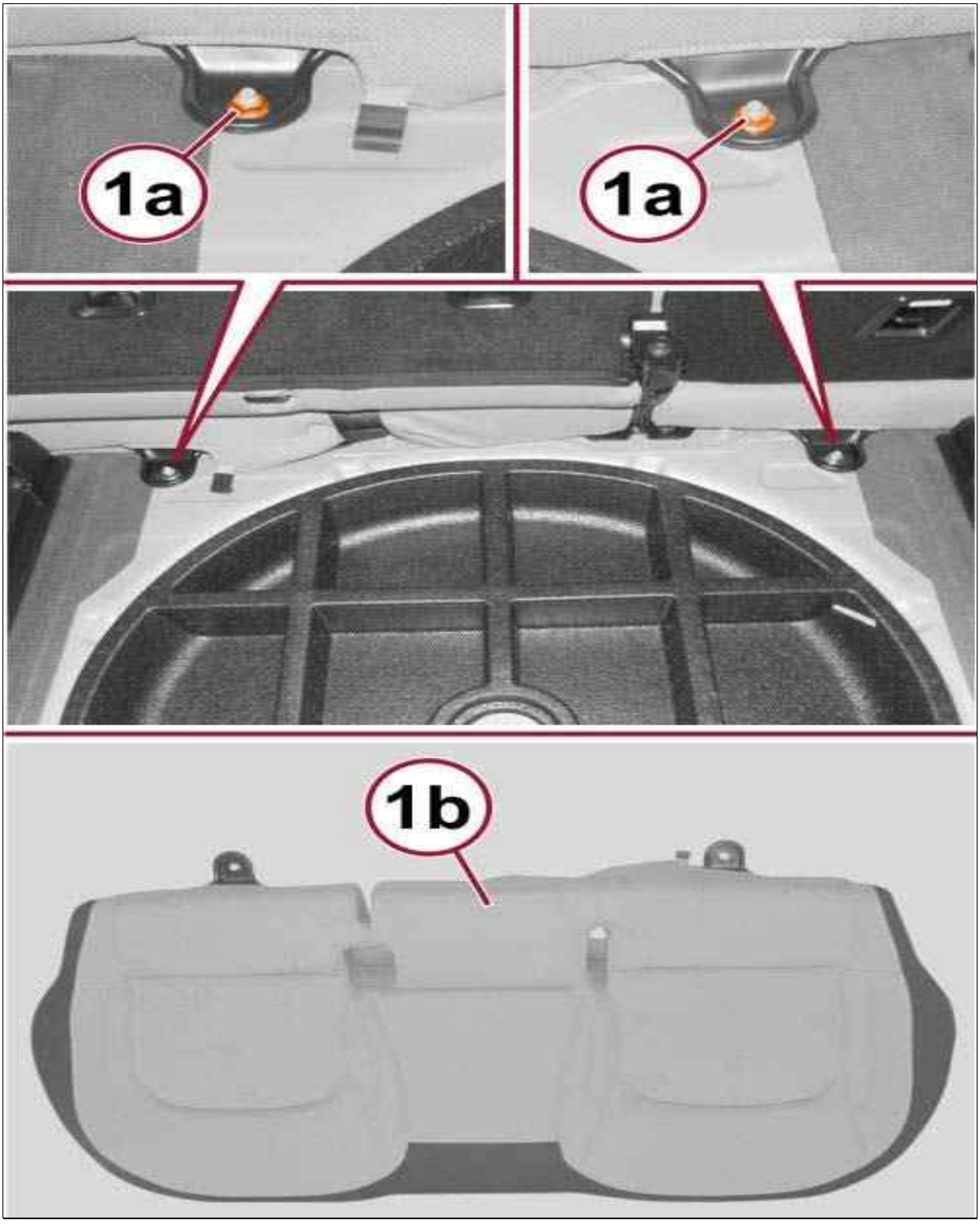
Fig 1: Cargo Cover & Support



Courtesy of CHRYSLER GROUP, LLC

1. Lift and remove the cargo cover (1a) and support (1b).

Fig 2: Seat Cushion & Nuts



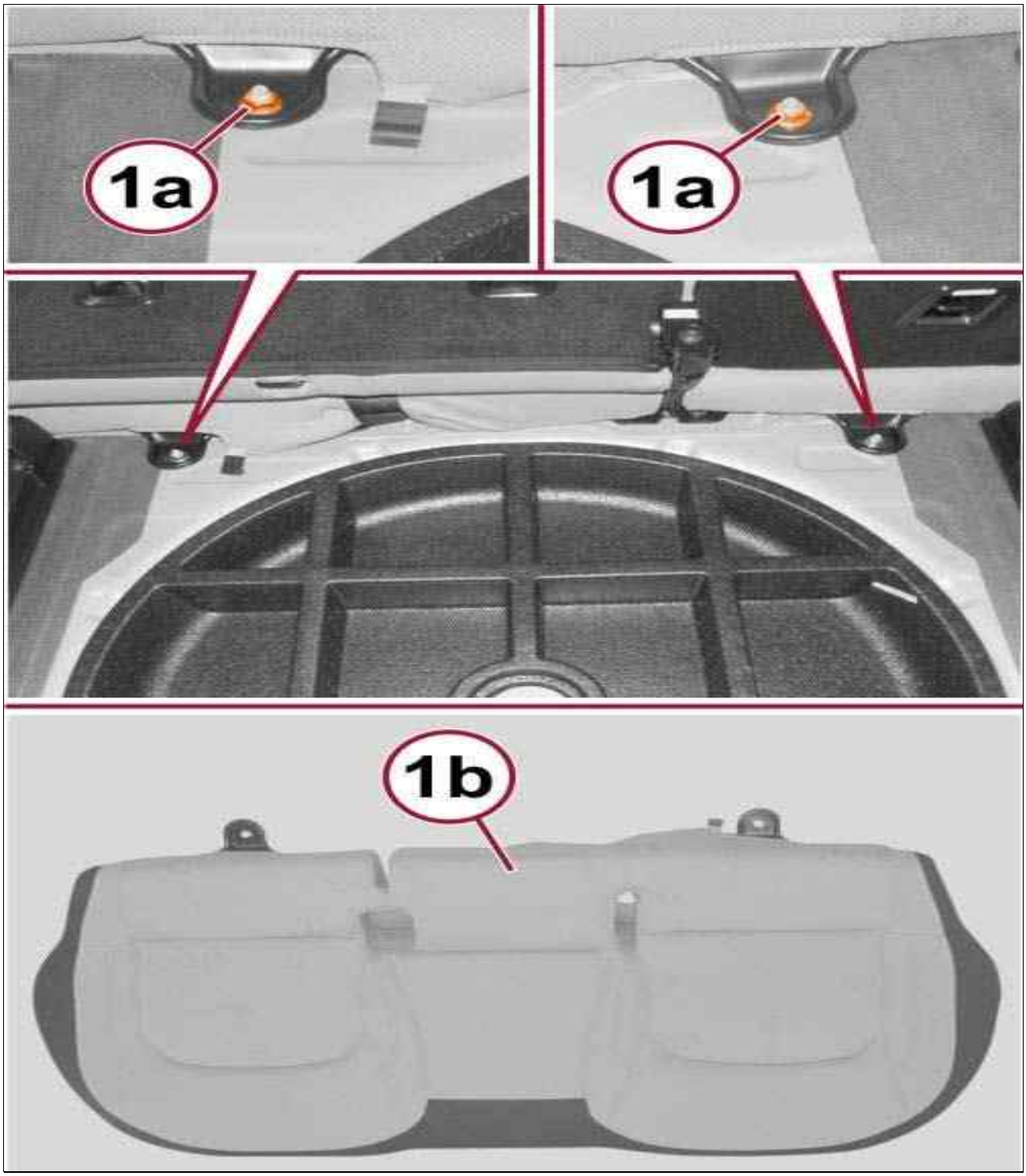
Courtesy of CHRYSLER GROUP, LLC

2. Fold the seat backs forward and remove the nuts (1a) at the rear of the seat.
3. Raise the seat backs and remove the seat cushion (1b).

SEATS, REAR > SEAT CUSHION > REMOVAL AND INSTALLATION > REMOVAL AND

INSTALLATION > INSTALLATION

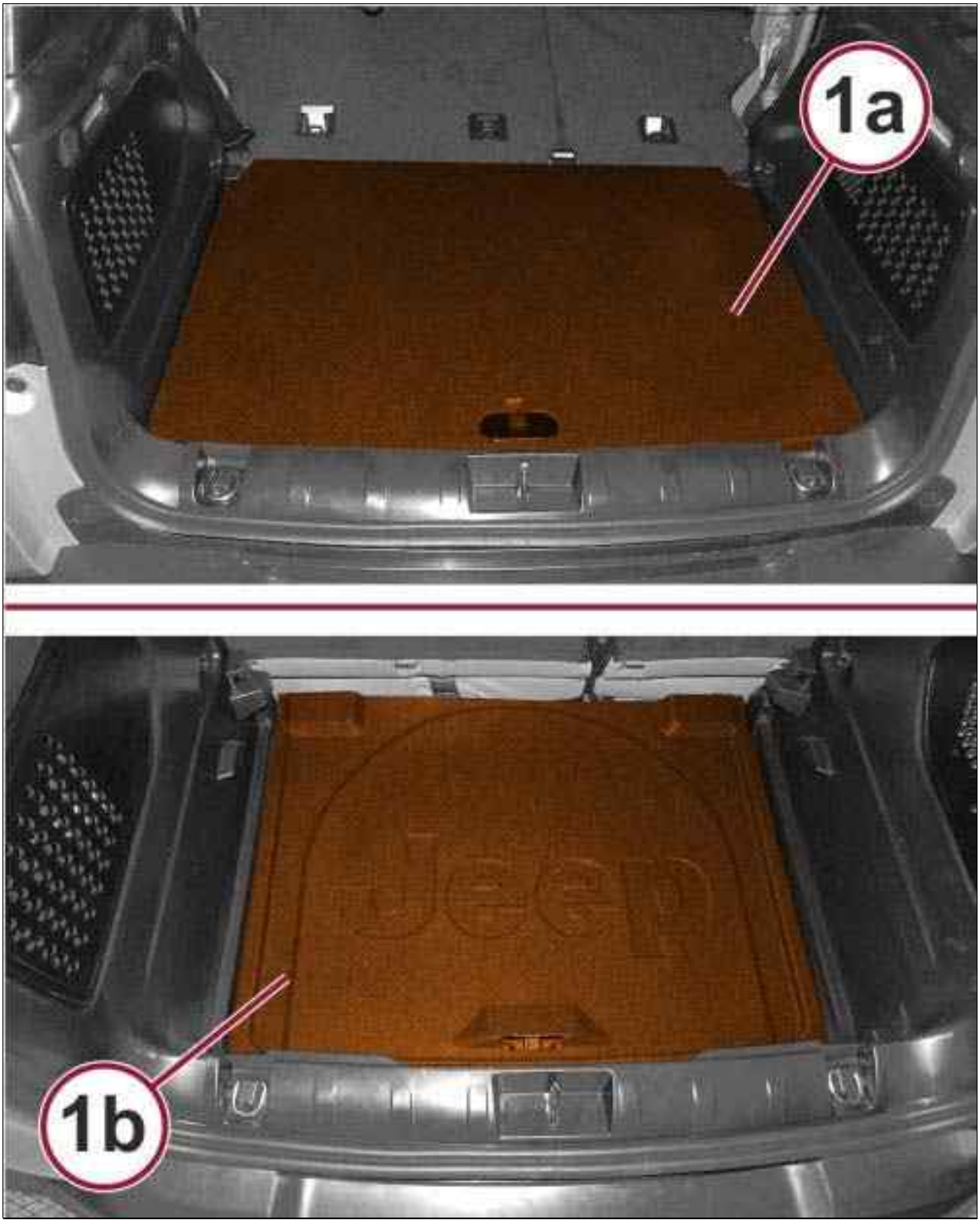
Fig 1: Seat Cushion & Nuts



Courtesy of CHRYSLER GROUP, LLC

1. Position the rear seat cushion (1b) and install the nuts (1a). Tighten the rear seat nuts to the proper specification. Refer to SPECIFICATIONS .

Fig 2: Cargo Cover & Support



Courtesy of CHRYSLER GROUP, LLC

2. Install support (1b) and the cargo cover (1a).

STATIONARY GLASS > WARNING > WARNING

WARNING:

Do not operate the vehicle within 24 hours of windshield installation. It takes at least 24 hours for urethane adhesive to cure. If it is not cured, the windshield may not perform properly in an accident.

- *Urethane adhesives are applied as a system. Use glass cleaner, glass prep solvent, glass primer, PVC (vinyl) primer and pinch weld (fence) primer provided by the adhesive manufacturer. If not, structural integrity could be compromised.*
- *FCA US LLC does not recommend glass adhesive by brand. Technicians should review product labels and technical data sheets, and use only adhesives that their manufactures warrant will restore a vehicle to the requirements of FMVSS 212. Technicians should also insure that primers and cleaners are compatible with the particular adhesive used.*
- *Be sure to refer to the urethane manufacturer's directions for curing time specifications, and do not use adhesive after its expiration date.*
- *Vapors that are emitted from the urethane adhesive or primer could cause personal injury. Use them in a well-ventilated area.*
- *Skin contact with urethane adhesive should be avoided. Personal injury may result.*
- *Always wear eye and hand protection when working with glass.*

CAUTION:

Protect all painted and trimmed surfaces from coming in contact with urethane or primers.

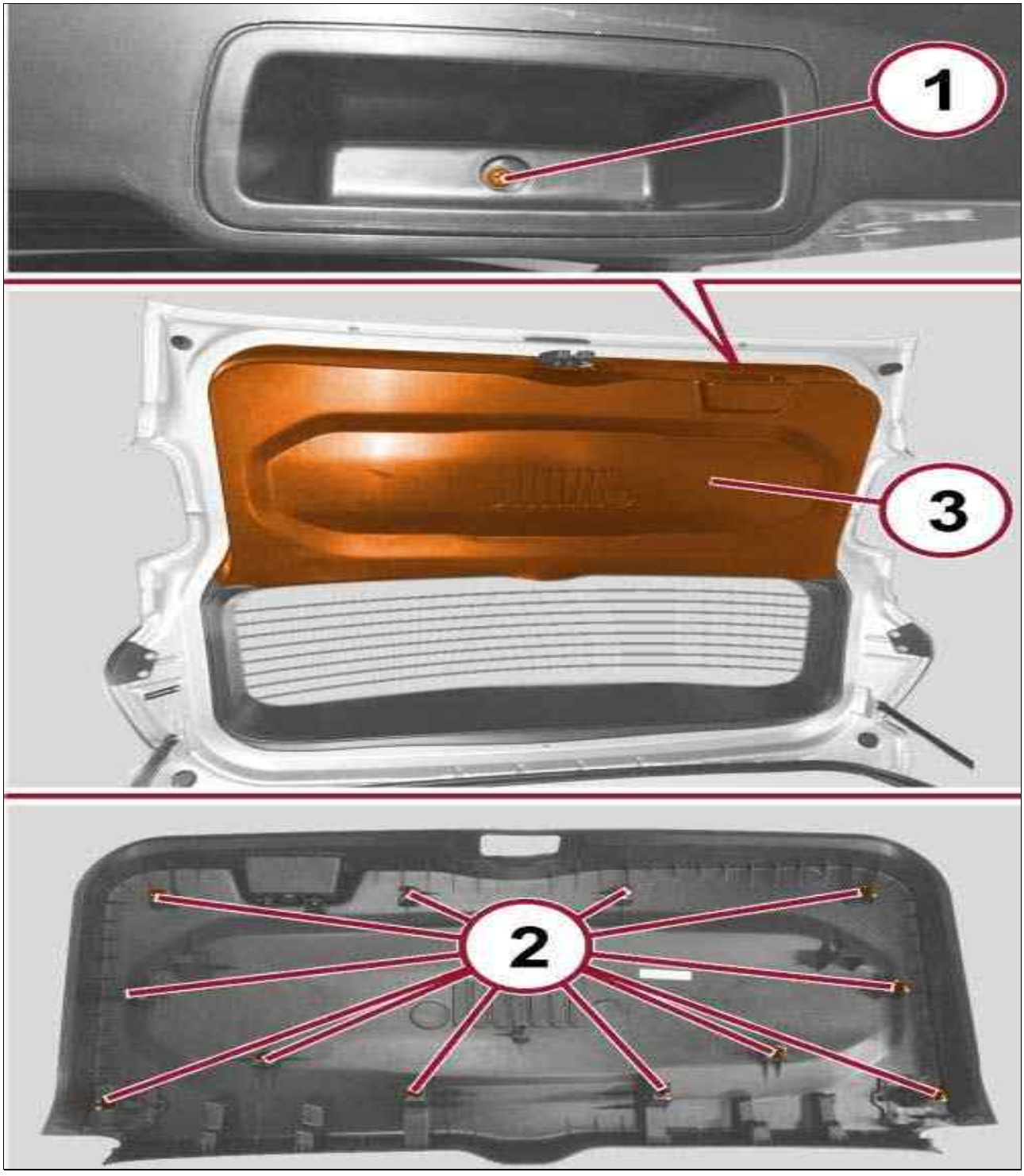
Be careful not to damage painted surfaces when removing moldings or cutting urethane around windshield.

STATIONARY GLASS > SPECIFICATIONS > BODYWORK GLASS AND WINDOWS

Component	Type	Name	Classification	Q.ty	Validity
Glass/Window compartment	Activator for PUR	-	-	-	-
Glass	Glass Sealant	N.71711976	-	-	-

STATIONARY GLASS > GLASS, LIFTGATE > REMOVAL AND INSTALLATION > REMOVAL

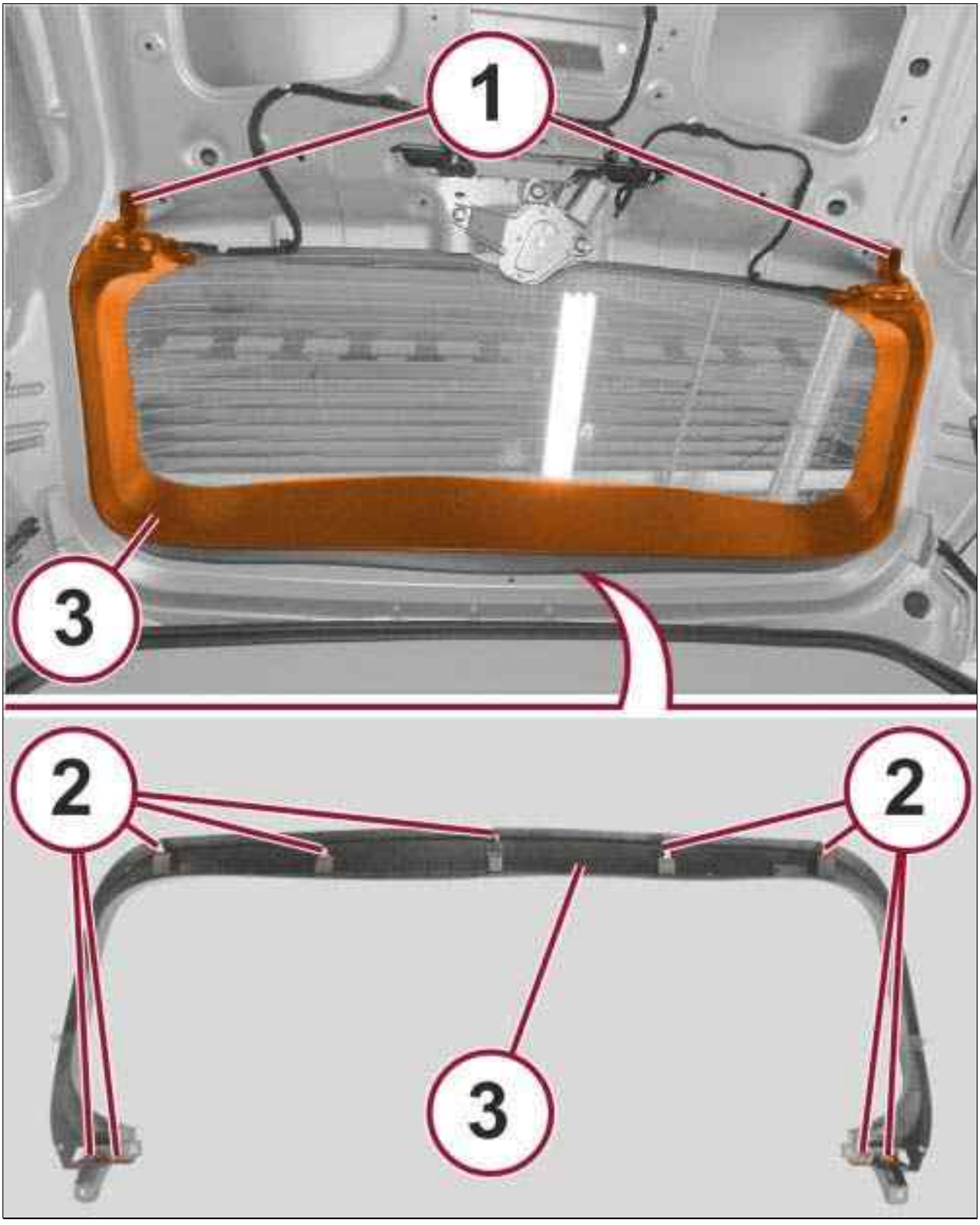
Fig 1: Lower Trim Panel, Push Pin Fasteners & Screw



Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable.
2. Remove the rear wiper arm. Refer to ARM, WIPER, REMOVAL AND INSTALLATION .
3. Remove the screw (1) from the pull cup.
4. Using trim stick (special tool #C-4755, Trim Stick) or equivalent, release the push pin fasteners (2) and remove the lower trim panel (3).

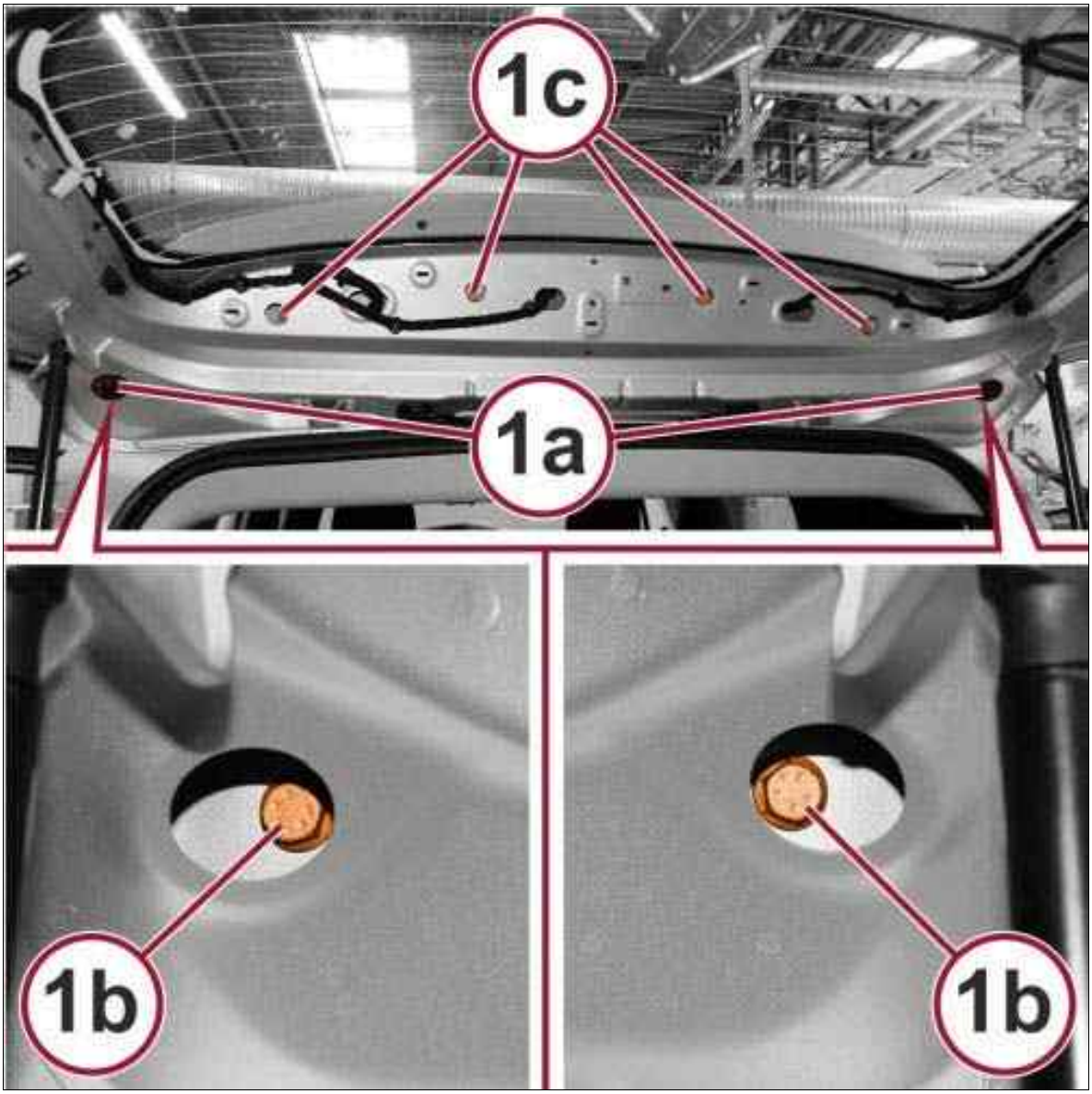
Fig 2: Upper Trim, Push Pin Fasteners & Screws



Courtesy of CHRYSLER GROUP, LLC

5. Remove the screws (1).
6. Using trim stick or equivalent, release the push pin fasteners (2) and remove the upper trim (3).

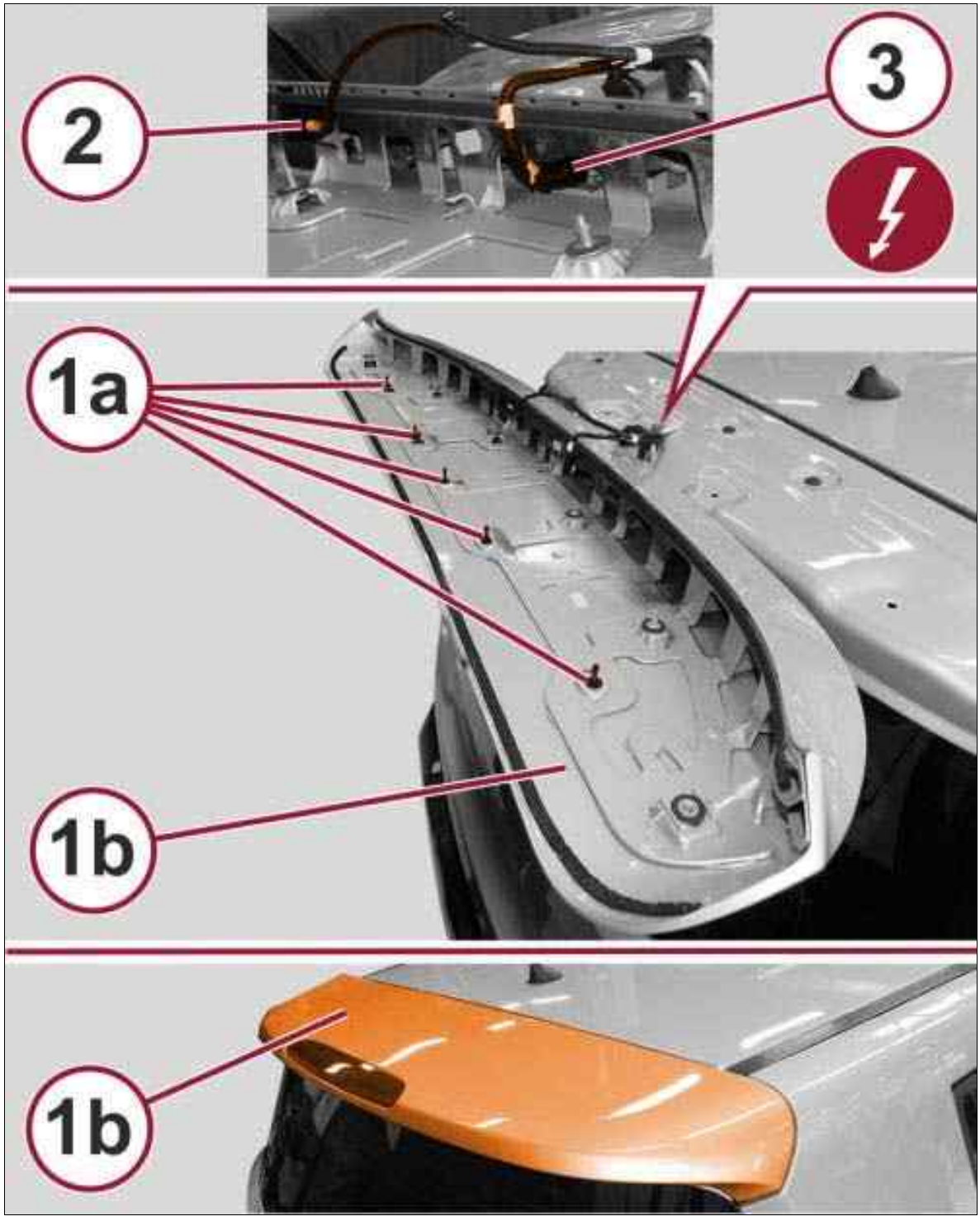
Fig 3: Caps, Bolts & Nuts



Courtesy of CHRYSLER GROUP, LLC

7. Pry off the caps (1a), remove the screws (1b) and nuts (1c).

Fig 4: Rear Spoiler, Push Pin Fasteners, Washer Hose & Connector



Courtesy of CHRYSLER GROUP, LLC

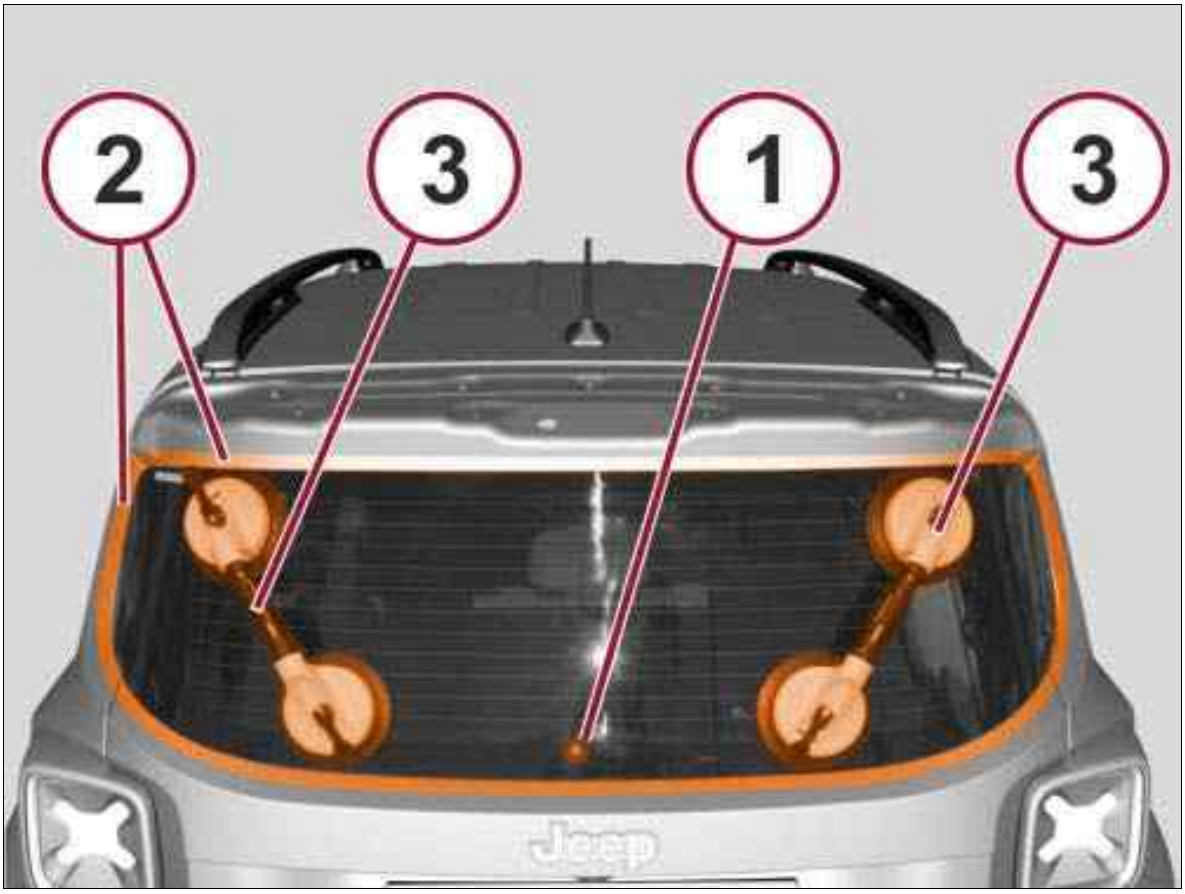
8. Using trim stick or equivalent, release the push pin fasteners (1a) and fold the spoiler down (1b).
9. Disconnect the rear washer hose (2).
10. Disconnect the electrical connector (3).
11. Remove the rear spoiler (1b).

Fig 5: Rear Window Defogger Electrical Connectors

Courtesy of CHRYSLER GROUP, LLC

12. Disconnect the rear window defogger electrical connectors (1) and position aside to avoid damage while cutting the urethane adhesive.

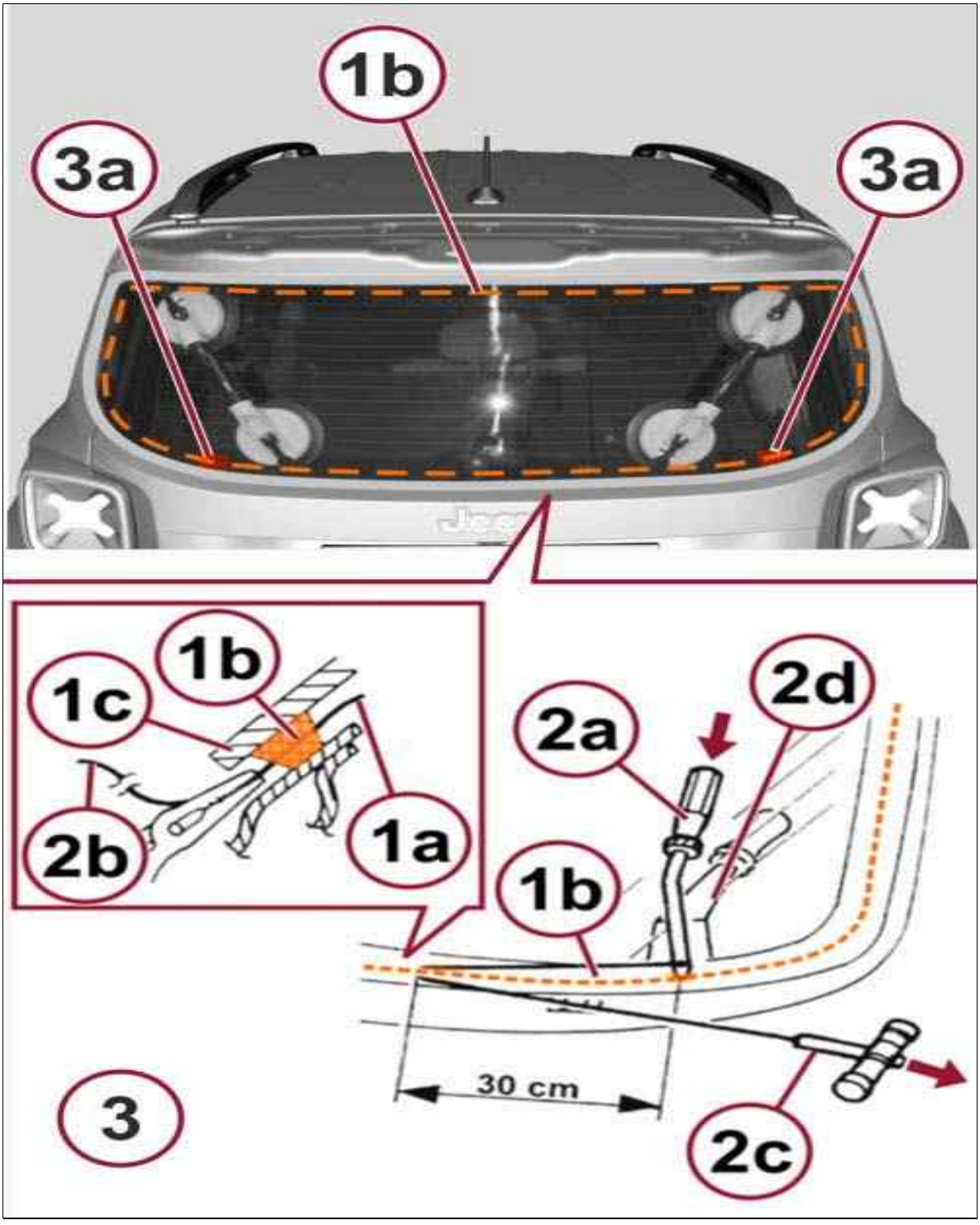
Fig 6: Suction Cups On Glass



Courtesy of CHRYSLER GROUP, LLC

13. Remove the wiper motor gasket (1).
14. Apply a double layer of adhesive tape to the body to prevent damage.
15. Apply suction cups (3) onto the glass to prevent accidental damage from falling while cutting the glass adhesive.

Fig 7: Removing Liftgate Glass



Courtesy of CHRYSLER GROUP, LLC

NOTE:

Protect interior car parts with suitable covers.

> *NOTE:*
>
> *The strip of rear window sealant can be cut using piano wire. To cut with a vibrating cutter, an adequate cutter usage capacity is required, as well as an appropriate choice of blades in accordance with the cutting areas and the obstructions present.*

> *NOTE:*
>
> *To make the cut by piano wire, proceed as follows.*

> *NOTE:*
>
> *The following procedure is done using standard equipment.*

16. Cut a length of piano wire of about 80 cm then, using pliers, introduce one end (1a) of the piano wire through the strip of sealant (1b) fixing the windscreen (1c).
17. Fasten one end (1a) of the wire to the special retaining tool (2a) located inside the vehicle. Fasten one end (2b) of the wire to the traction handle (2c) located outside the vehicle.
18. The operator inside the car must keep the end of tool (2a) on the sealant bead (1b) about 30 cm from the point where the wire passes through. The other operator, outside the car, has to pull the handle (2c), following the profile of the rear window and then cut the strip of sealant (1b). When necessary, position an adequately-sized spatula (2d) by the tool (2a), to protect the inner parts of the car. Repeat the operation in sections of about 30 cm until the bead of sealant (1b) is completely cut.

> *NOTE:*
>
> *During the cutting stage, bear in mind that the piano wire must also cut the two needle retainers (3a).*

19. After cutting the entire sealant strip, use suction pads, with the help of a second operator, to remove the rear window (1c) and rest it on a support stand.

STATIONARY GLASS > GLASS, LIFTGATE > REMOVAL AND INSTALLATION > GLASS REMOVAL TOOLS

Fig 1: Common Glass Tools Needed To Remove Stationary Glass

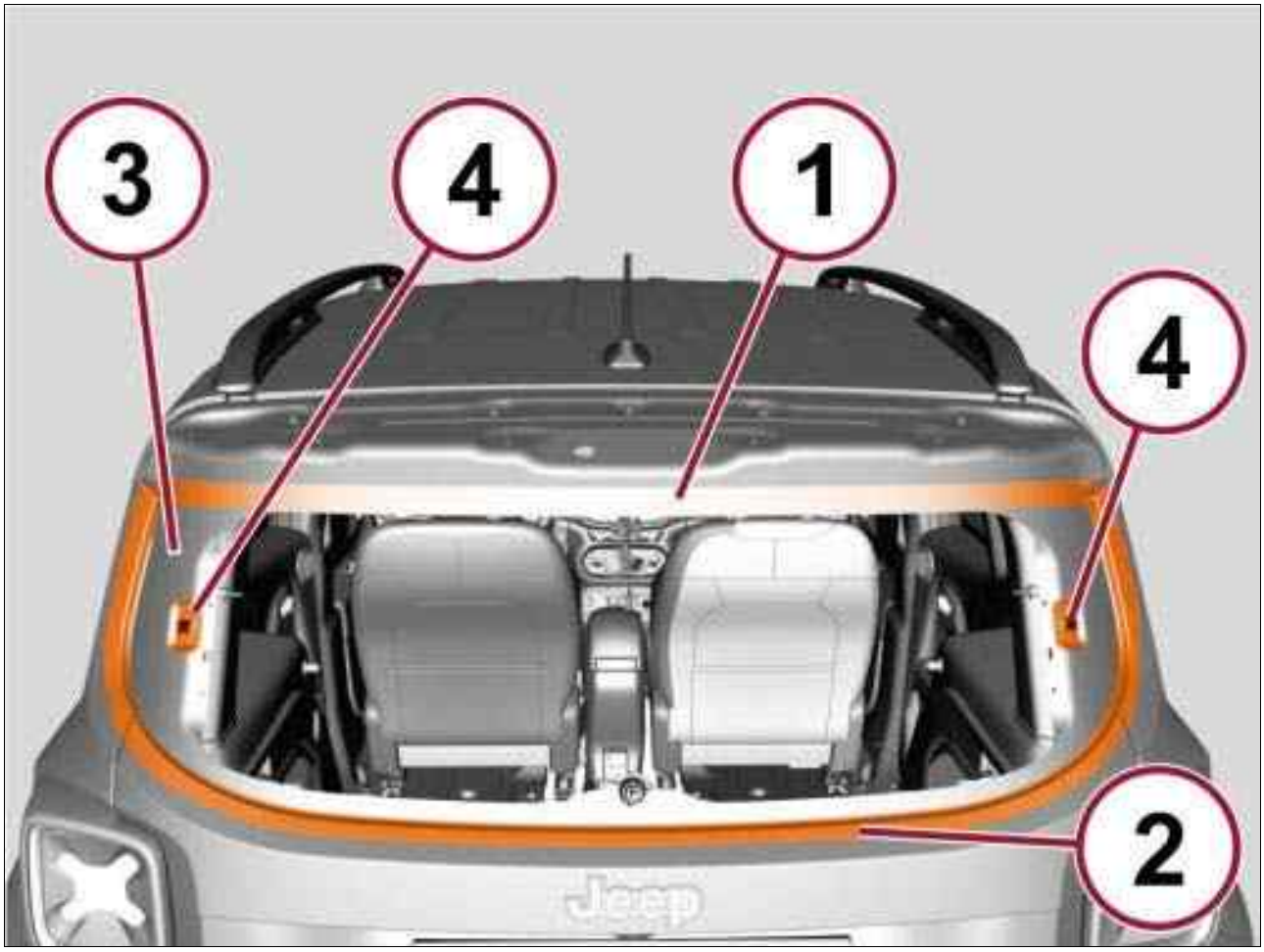
Courtesy of CHRYSLER GROUP, LLC

Common glass tools needed to remove Stationary Glass

- 1- Extractor® Express™ or equivalent, equipped with flat blade
- 2- Two handled wire type cut out tool
- 3- Cold knife equipped wit a 25 mm (1 in.) blade
- 4 - Cold knife equipped with an 38 mm (1.5 in.) blade
- 5 - Long knife

STATIONARY GLASS > GLASS, LIFTGATE > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Liftgate Fence Line, Support Pins & Adhesive Tape



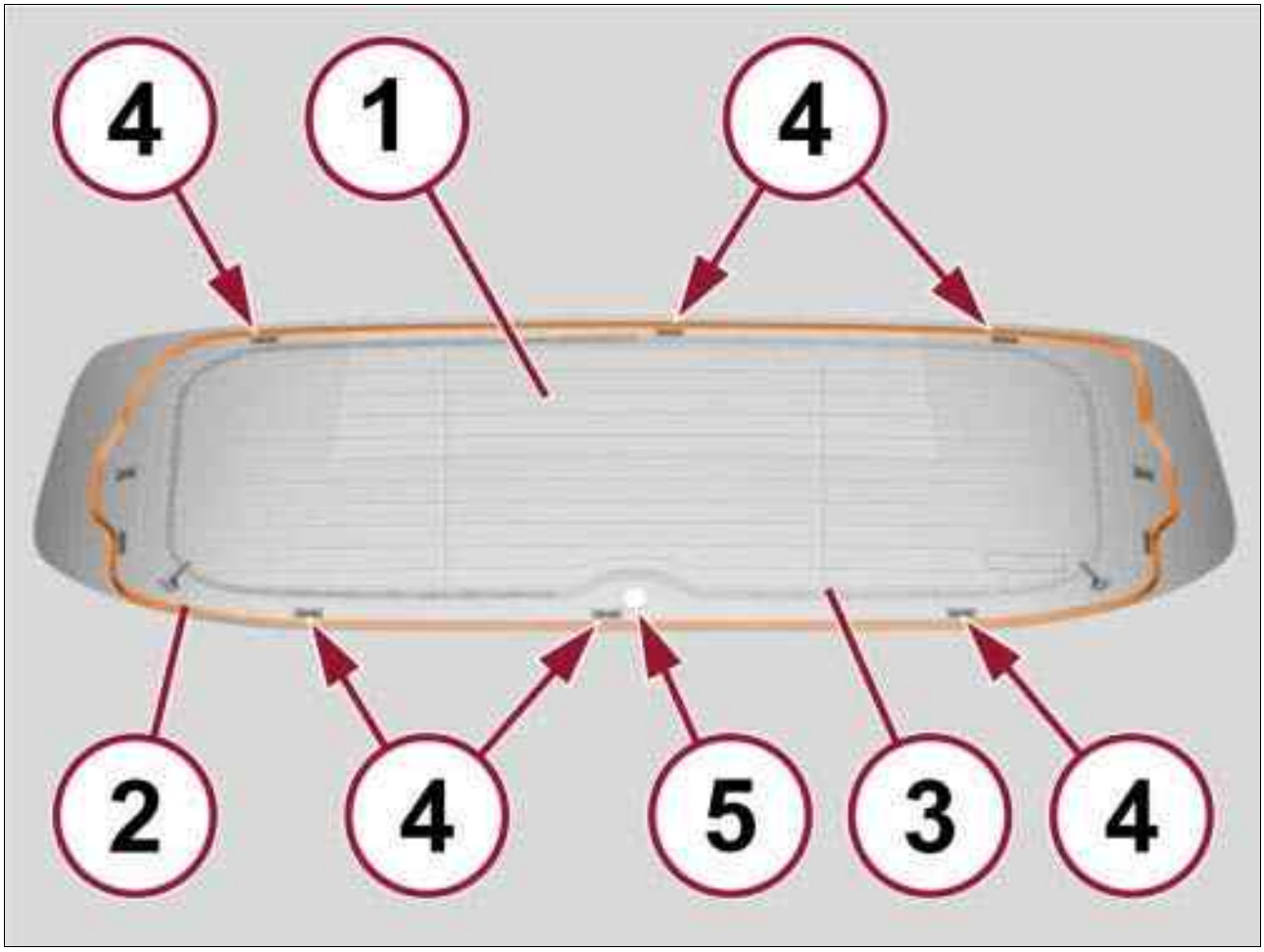
Courtesy of CHRYSLER GROUP, LLC

1. Using suitable equipment, cut and level the strip of adhesive in the rear window housing, leaving a thickness of between 0.25 and 1 mm, taking care not to scratch the paintwork. The thickness of the adhesive remaining in the housing will act as a support for the new bonding.
2. Remove the adhesive tape (2).
3. Thoroughly clean the liftgate fence line (3) and degrease fully using ammonia based glass cleaner.
4. Check the support pins (4) for damage and replace if necessary.

> *NOTE:*
>
> *When bonding more than 60 minutes after the bead of adhesive has been cut and levelled, the surface of the adhesive must be treated using glass prep adhesion promoter and it is necessary to wait for 15 minutes before installing the glass.*

STATIONARY GLASS > GLASS, LIFTGATE > REMOVAL AND INSTALLATION > INSTALLATION > PREPARATION OF THE REMOVED GLASS

Fig 1: Glass, Perimeter Area & Spacers



Courtesy of CHRYSLER GROUP, LLC

1. Repair any paint damage if necessary.

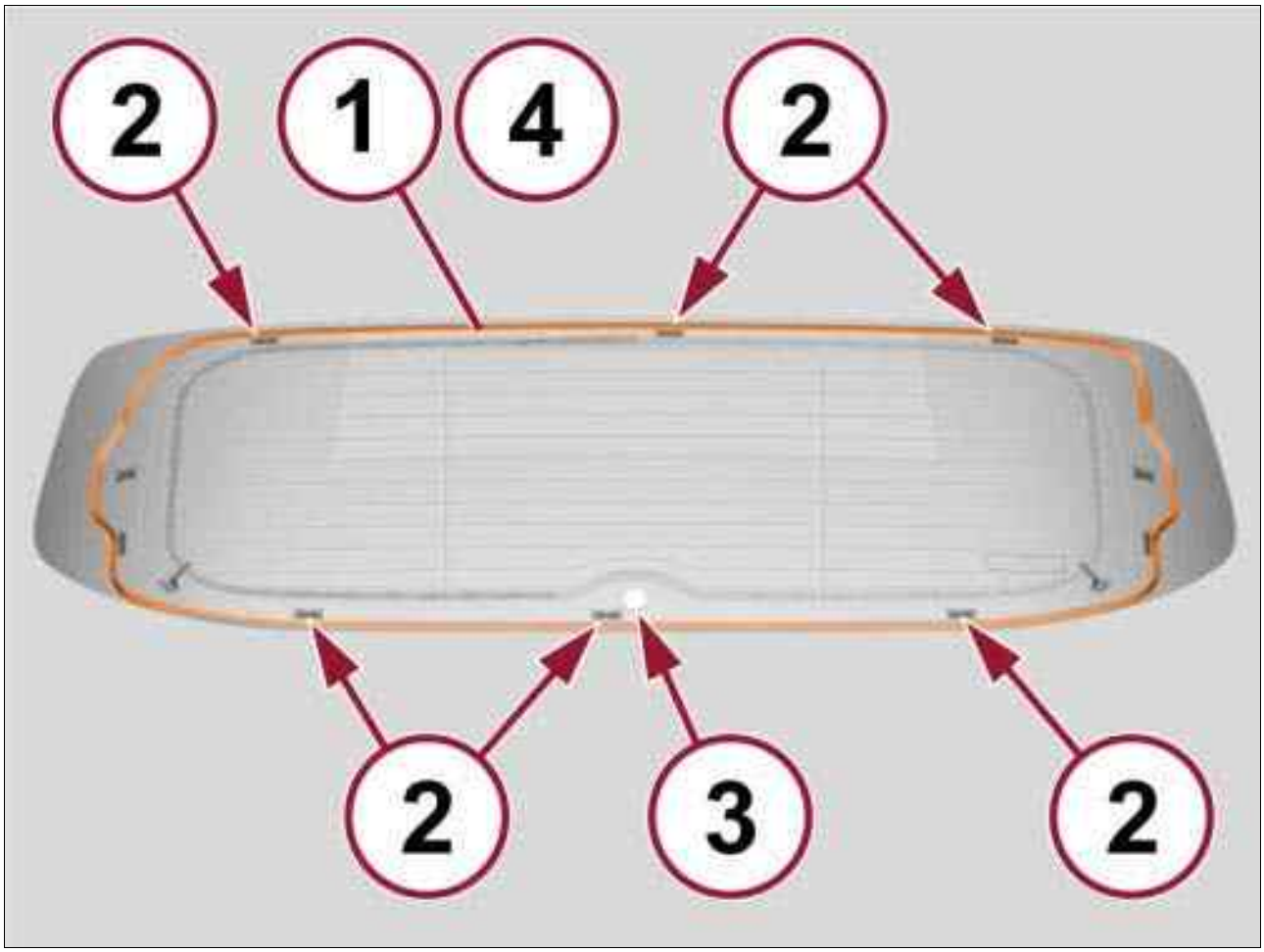
> *NOTE:*
>
> *The glass (1) that is removed can only be reused if it has not been damaged during the removal.*

2. With suitable tool to cut and smooth the bead of adhesive on the glass so as to leave a thickness between 0.25 and 1 mm to avoid scratching the paint. The thickness of adhesive remaining will be the support for the new bonding.
3. Clean the perimeter area (3) of the glass thoroughly and degrease fully ammonia based glass cleaner. Check that the glass is not damaged.
4. If not present, install new spacers (4).
5. Install the wiper motor gasket.

6. When bonding more than 60 minutes after the bead of adhesive has been cut and levelled, the surface of the adhesive must be treated using glass prep adhesion promoter and it is necessary to wait for 15 minutes before installing the glass.

STATIONARY GLASS > GLASS, LIFTGATE > REMOVAL AND INSTALLATION > INSTALLATION > NEW GLASS PREPARATION

Fig 1: Perimeter & Spacers



Courtesy of CHRYSLER GROUP, LLC

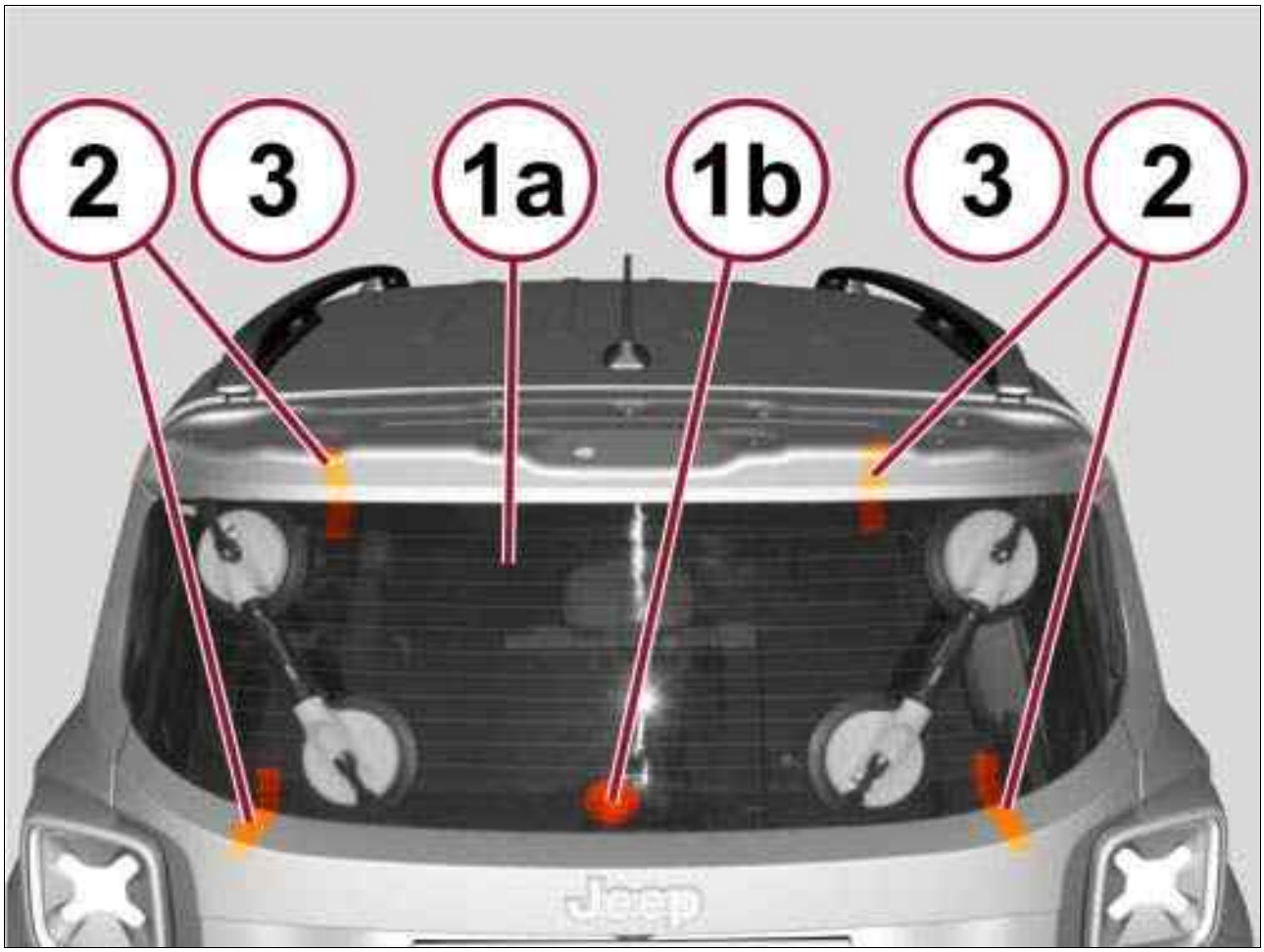
1. Degrease the perimeter (1) of the new glass to be bonded using an ammonia based glass cleaner.
2. Check the spacers (2) for damage and replace if necessary.
3. Install the wiper motor gasket.
4. Apply glass adhesion promoter (primer) to the entire perimeter (3) cleaned previously.

> *NOTE:*
>
> *Wait for about 15 minutes before continuing with the next operation to allow the*

adhesion promoter (primer) to evaporate completely

STATIONARY GLASS > GLASS, LIFTGATE > REMOVAL AND INSTALLATION > INSTALLATION > LIFTGATE GLASS INSTALLATION

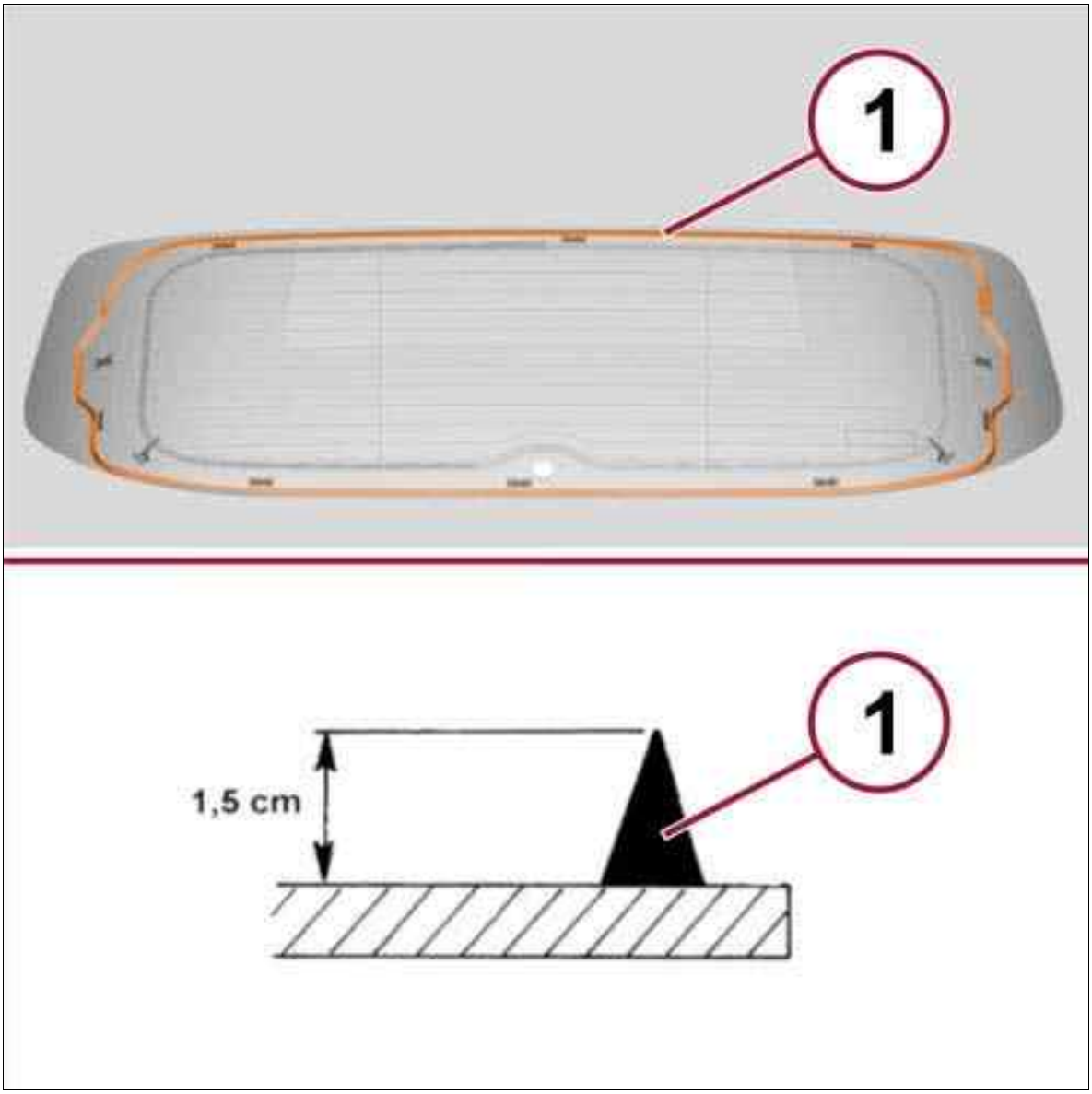
Fig 1: Glass & Masking Tape



Courtesy of CHRYSLER GROUP, LLC

1. Test fit the glass (1a) centering in the glass over the wiper motor shaft and then in the liftgate opening and mark the position using masking tape (2) as a reference.
2. Cut the strips of tape and remove the glass.

Fig 2: Bead Of Adhesive

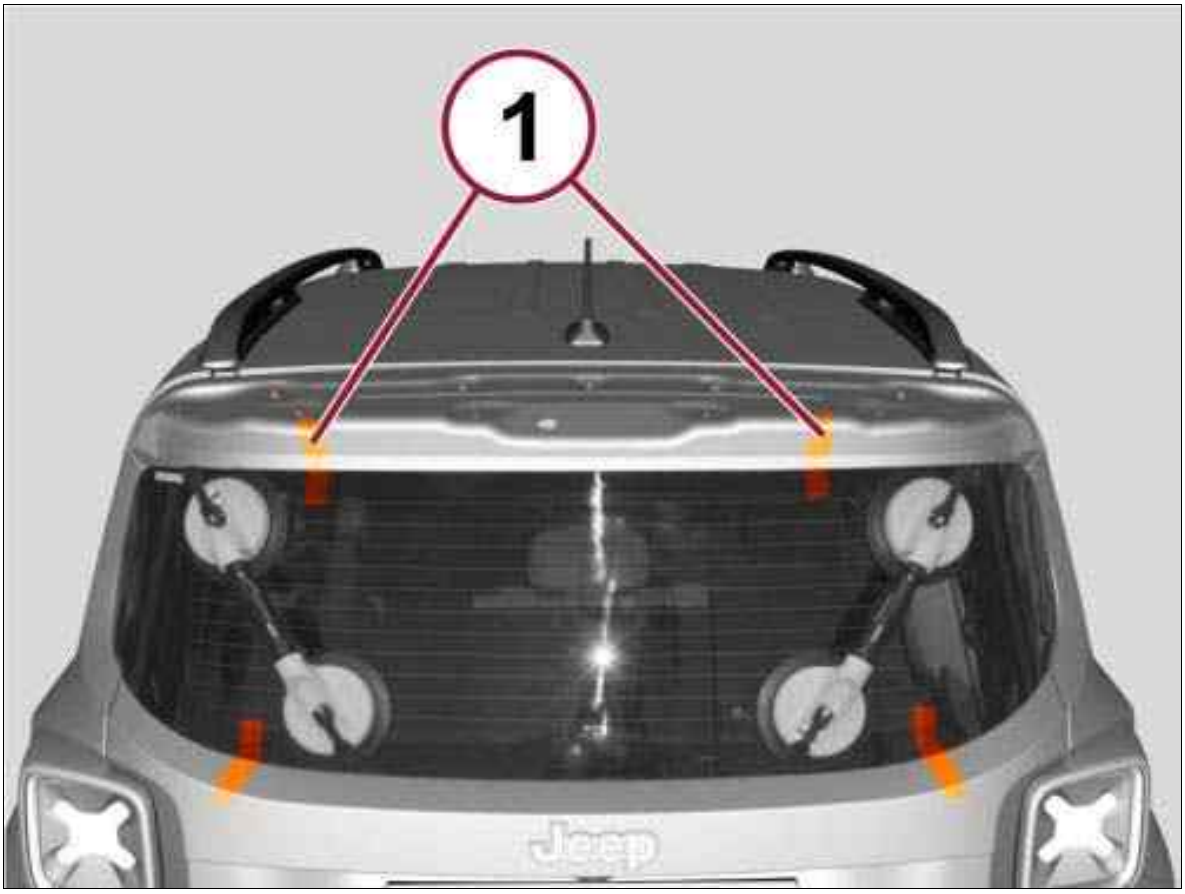


Courtesy of CHRYSLER GROUP, LLC

3. Apply a bead of adhesive (1) along the perimeter of the glass as evenly as possible.

> *NOTE:*
>
> *Start the operation from the lower center edge and continue without breaks along the entire perimeter of the glass.*

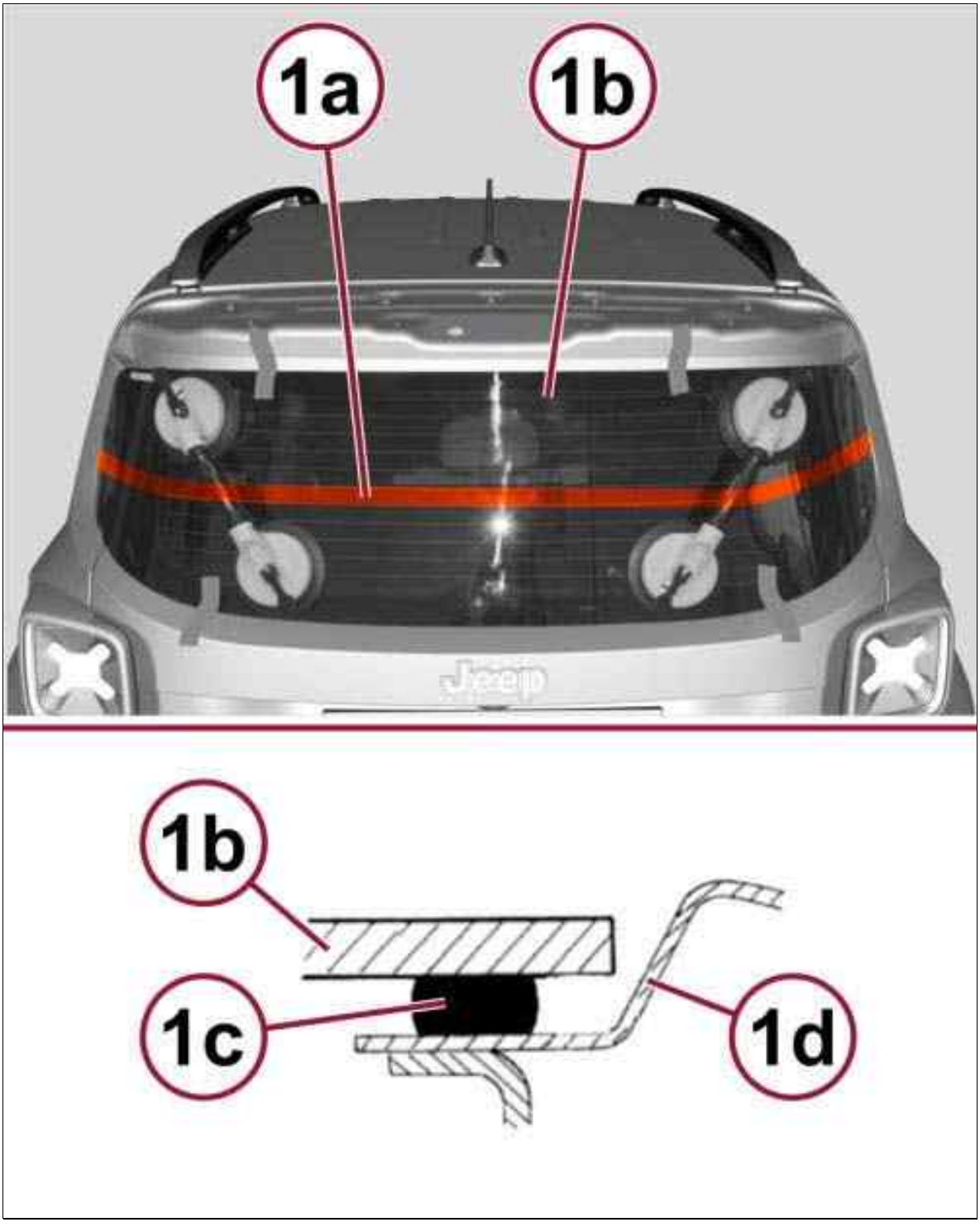
Fig 3: Glass



Courtesy of CHRYSLER GROUP, LLC

4. Position the glass (1) in its seat immediately after applying the adhesive and settle it into position using the tape applied previously as a guide.

Fig 4: Glass & Strap



Courtesy of CHRYSLER GROUP, LLC

5. Position a strap (1a), as shown in the illustration, and tension it so that even pressure is exerted on the entire glass (1b) to ensure that the bonding between the glass (1b), adhesive (1c) and fence line (1d) is correct.

NOTE:

Do not move the vehicle for the time recommended by the adhesive manufacturer.

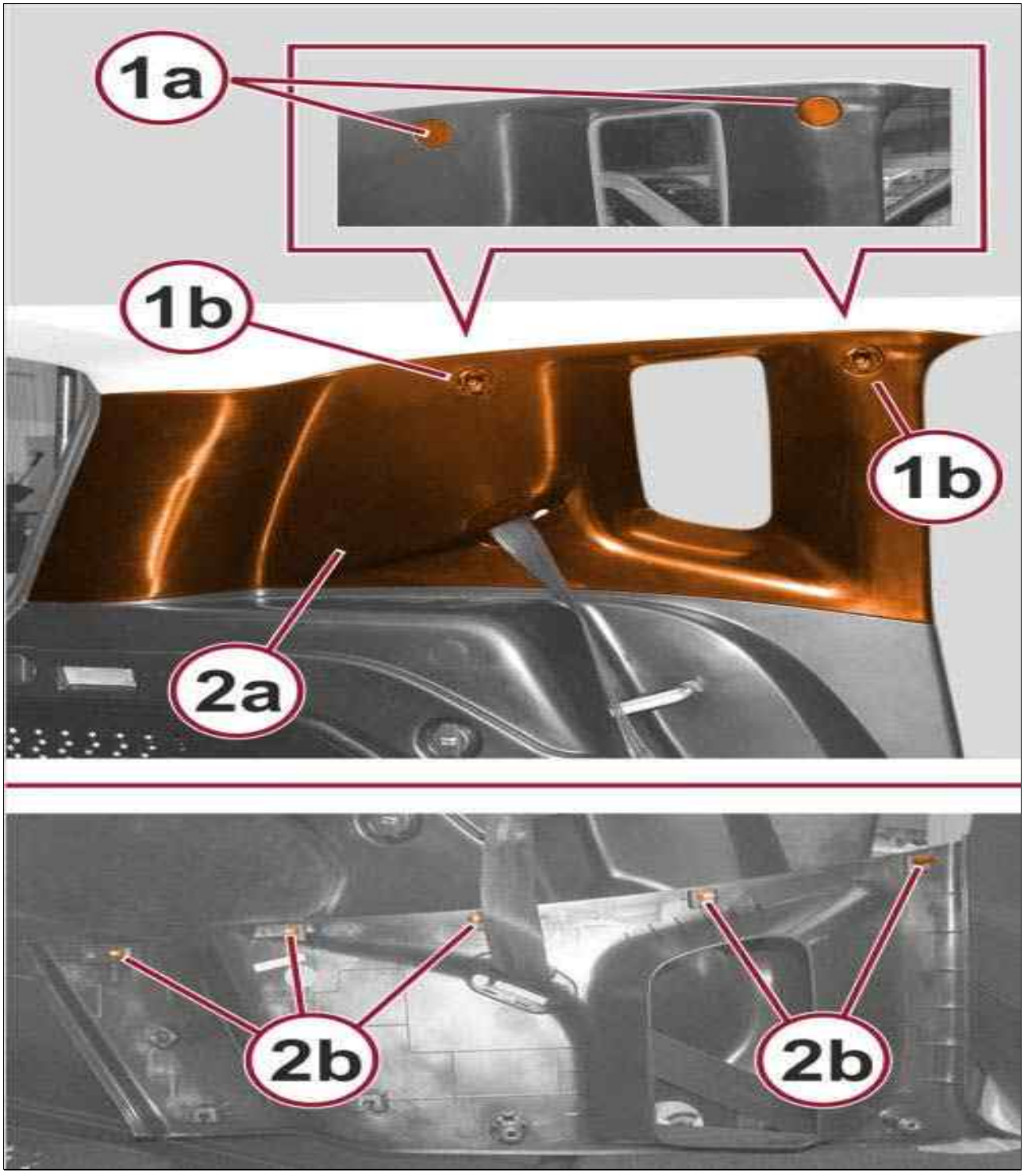
NOTE:

Before installing the components removed from the vehicle, check that there are no infiltration points by carrying out a water leakage test.

6. Connect the rear window defogger electrical connectors.
7. Position the spoiler back and connect the washer hose.
8. Connect the stop light electrical connector.
9. Install the spoiler.
10. Install the nuts and screws and install the caps.
11. Install the upper trim panel and seat the push pins fully.
12. Install the lower trim panel and seat the push pins fully.
13. Install the rear wiper arm. Refer to ARM, WIPER, REMOVAL AND INSTALLATION .
14. Connect the negative battery cable.

STATIONARY GLASS > GLASS, QUARTER > REMOVAL AND INSTALLATION > REMOVAL

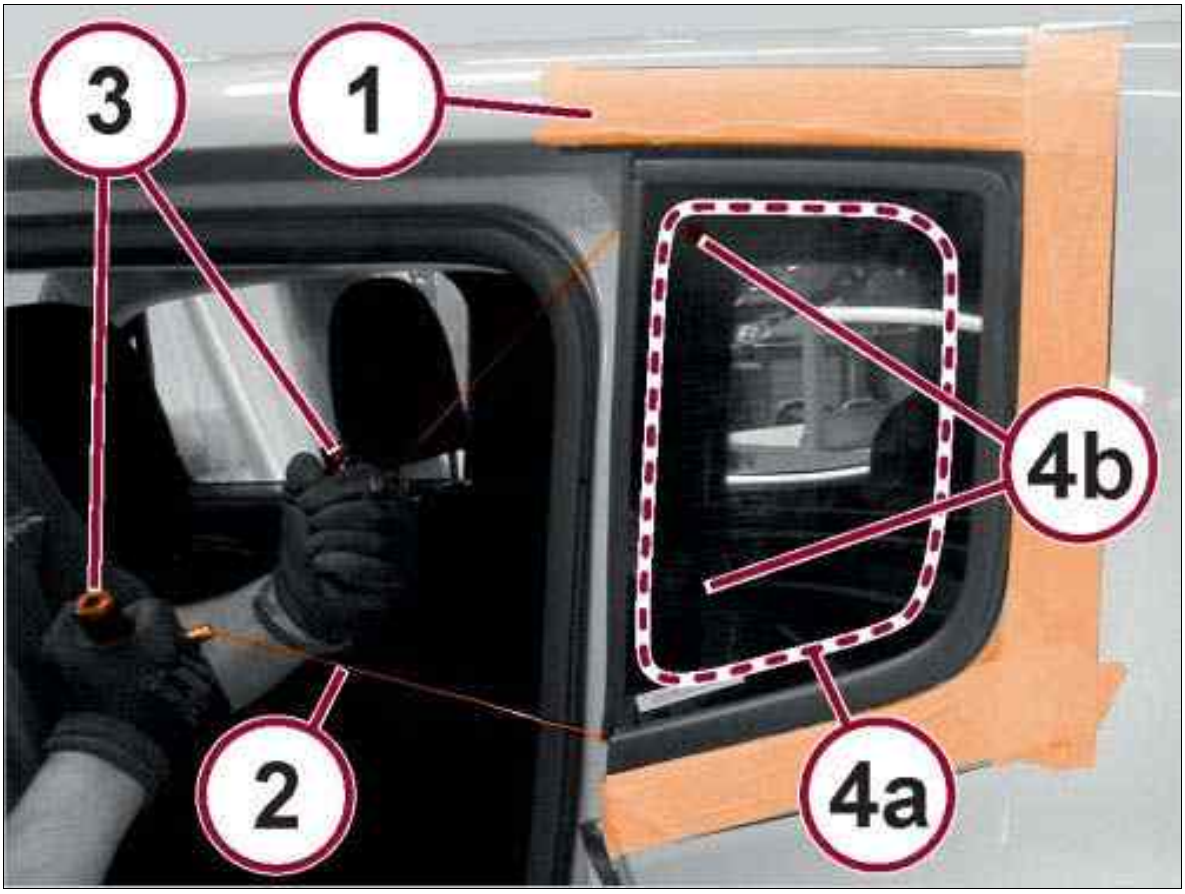
Fig 1: Upper Trim Panel, Covers, Clips & Screws



Courtesy of CHRYSLER GROUP, LLC

1. Using trim stick (special tool #C-4755, Trim Stick) or equivalent, remove the trim covers (1a).
2. Remove the screws (1b).
3. Using a trim stick or equivalent, release the retaining clips (2b) and separate the upper trim panel (2a).

Fig 2: Removing Quarter Glass



Courtesy of CHRYSLER GROUP, LLC

4. Apply a double layer of adhesive tape (1) on the body, along the edges of the glass.
5. Cut a segment of a piano wire (2) with a length of about 70 cm.
6. Attach the wire tool handles (3) to the ends of the wire (2).
7. With the aid of a second operator, cut the cord of the sealant (4a) and the centering pins (4b) and remove the glass.

STATIONARY GLASS > GLASS, QUARTER > REMOVAL AND INSTALLATION > GLASS REMOVAL TOOLS

Fig 1: Common Glass Tools Needed To Remove Stationary Glass

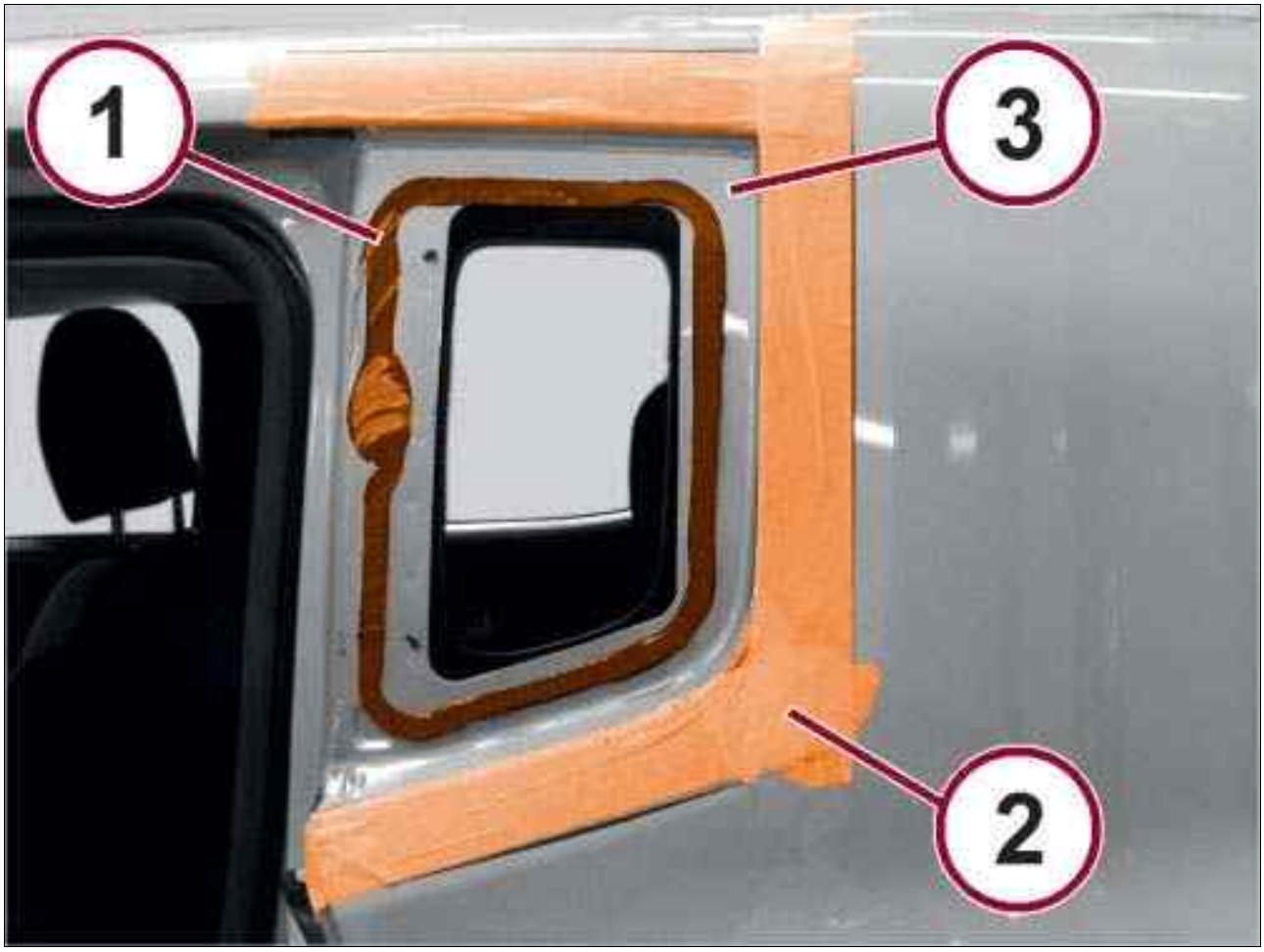
Courtesy of CHRYSLER GROUP, LLC

Common glass tools needed to remove Stationary Glass

- 1- Extractor® Express™ or equivalent, equipped with flat blade
- 2- Two handled wire type cut out tool
- 3- Cold knife equipped wit a 25 mm (1 in.) blade
- 4 - Cold knife equipped with an 38 mm (1.5 in.) blade
- 5 - Long knife

STATIONARY GLASS > GLASS, QUARTER > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Fence Line, Tape & Adhesive



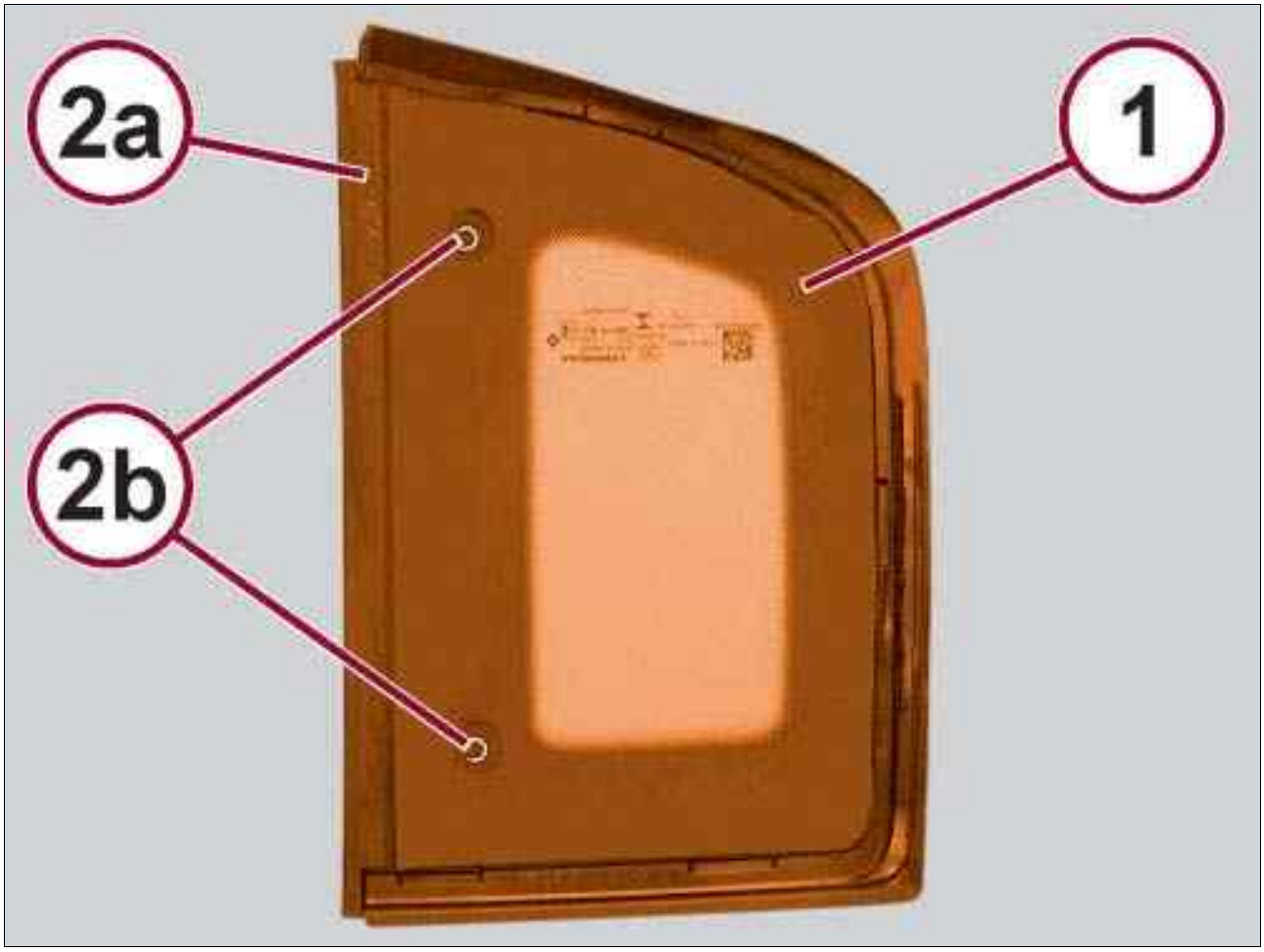
Courtesy of CHRYSLER GROUP, LLC

1. Using suitable equipment, cut and level the strip of adhesive (1) in the quarter glass housing, leaving a thickness of between 0.25 and 1 mm, taking care not to scratch the paintwork. The thickness of the adhesive remaining in the housing will act as a support for the new bonding.
2. Remove the adhesive tape (2).
3. Thoroughly clean the quarter glass fence line (3) and degrease fully using ammonia based glass cleaner.

> *NOTE:*
>
> *When bonding more than 60 minutes after the bead of adhesive has been cut and levelled, the surface of the adhesive must be treated using glass prep adhesion promoter and it is necessary to wait for 15 minutes before installing the glass.*

STATIONARY GLASS > GLASS, QUARTER > REMOVAL AND INSTALLATION > INSTALLATION > NEW GLASS PREPARATION

Fig 1: Glass Seal & Alignment Pins



Courtesy of CHRYSLER GROUP, LLC

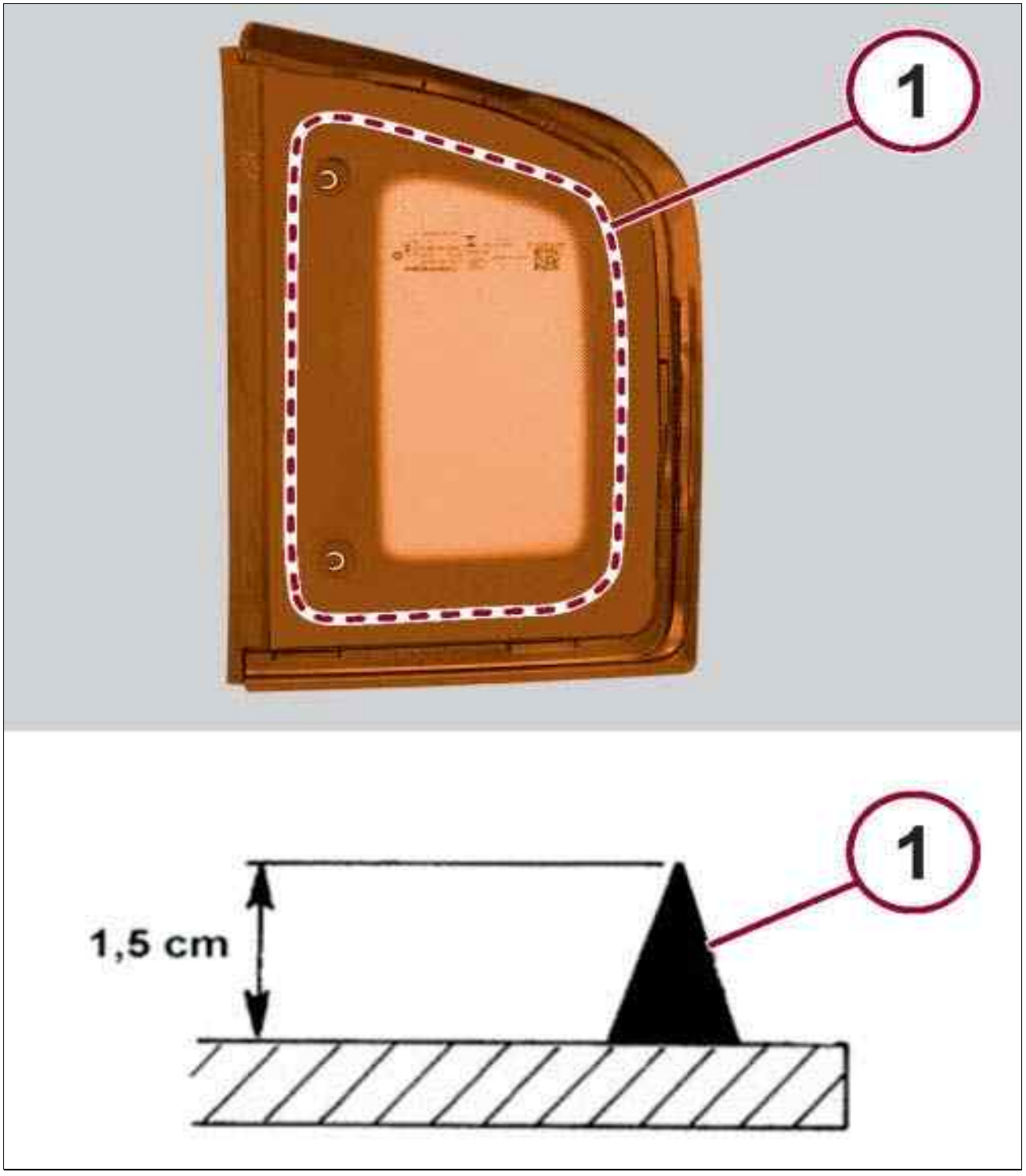
1. Degrease the perimeter (1) of the new glass to be bonded using an ammonia based glass cleaner.
2. Apply glass adhesion promoter (primer) to the entire perimeter (1) cleaned previously.

> *NOTE:*
>
> *Wait for about 15 minutes before continuing with the next operation to allow the adhesion promoter (primer) to evaporate completely*

3. Verify the glass seal (2a) and the alignment pins (2b) are free of damage.

STATIONARY GLASS > GLASS, QUARTER > REMOVAL AND INSTALLATION > INSTALLATION > QUARTER GLASS INSTALLATION

Fig 1: Adhesive Area



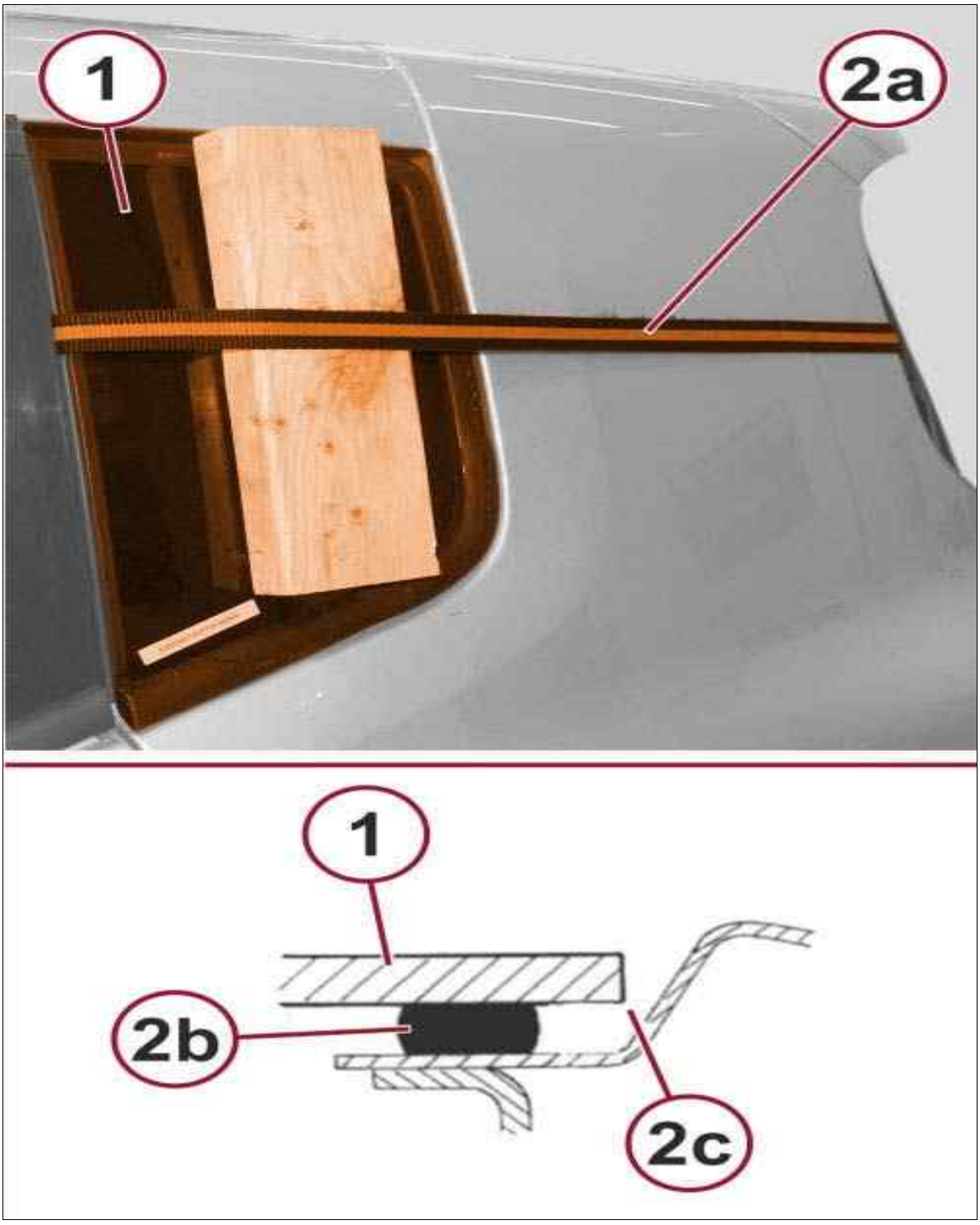
Courtesy of CHRYSLER GROUP, LLC

1. Apply a bead of adhesive (1) along the perimeter of the glass as evenly as possible.

NOTE:

Start the operation from the front center edge and continue without breaks along the entire perimeter of the glass.

Fig 2: Installing Quarter Glass



Courtesy of CHRYSLER GROUP, LLC

2. Position the glass (1) in its seat using the pins provided, immediately after applying the adhesive.
3. Place the strap (2a) as indicated in the illustration and tighten so as to exert an even pressure on the whole glass, in order to make sure the correct bonding between the glass (1), adhesive (2b) and the fenceline (2c).

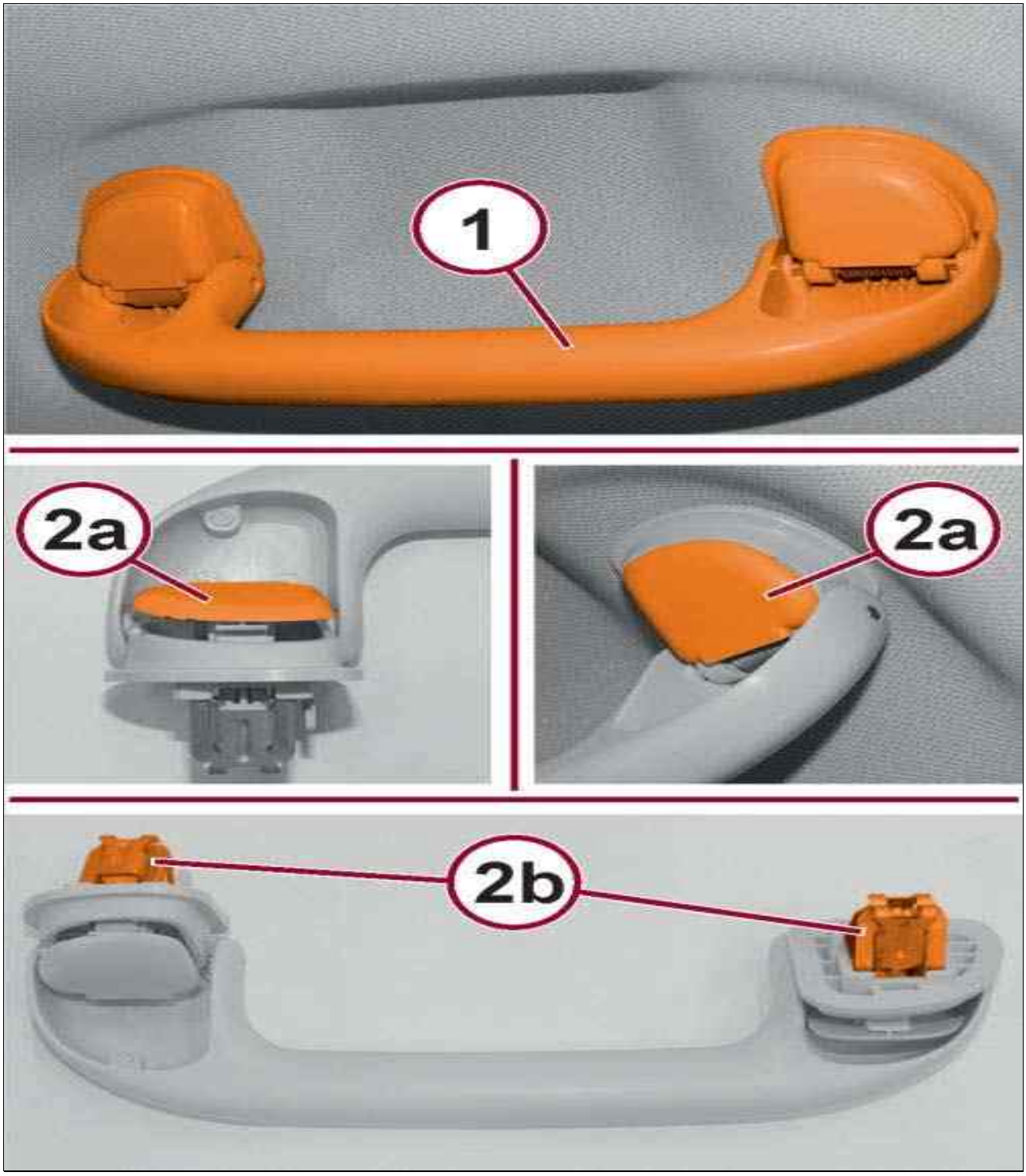
> *NOTE:*
>
> *Do not move the vehicle for the time recommended by the adhesive manufacturer.*

> *NOTE:*
>
> *Before installing the components removed from the vehicle, check that there are no infiltration points by carrying out a water leakage test.*

4. Install the upper quarter trim panel and seat the retaining clips fully.
5. Install the screws and install the screw covers.

STATIONARY GLASS > WINDSHIELD > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Grab Handle, Tabs & Retainers

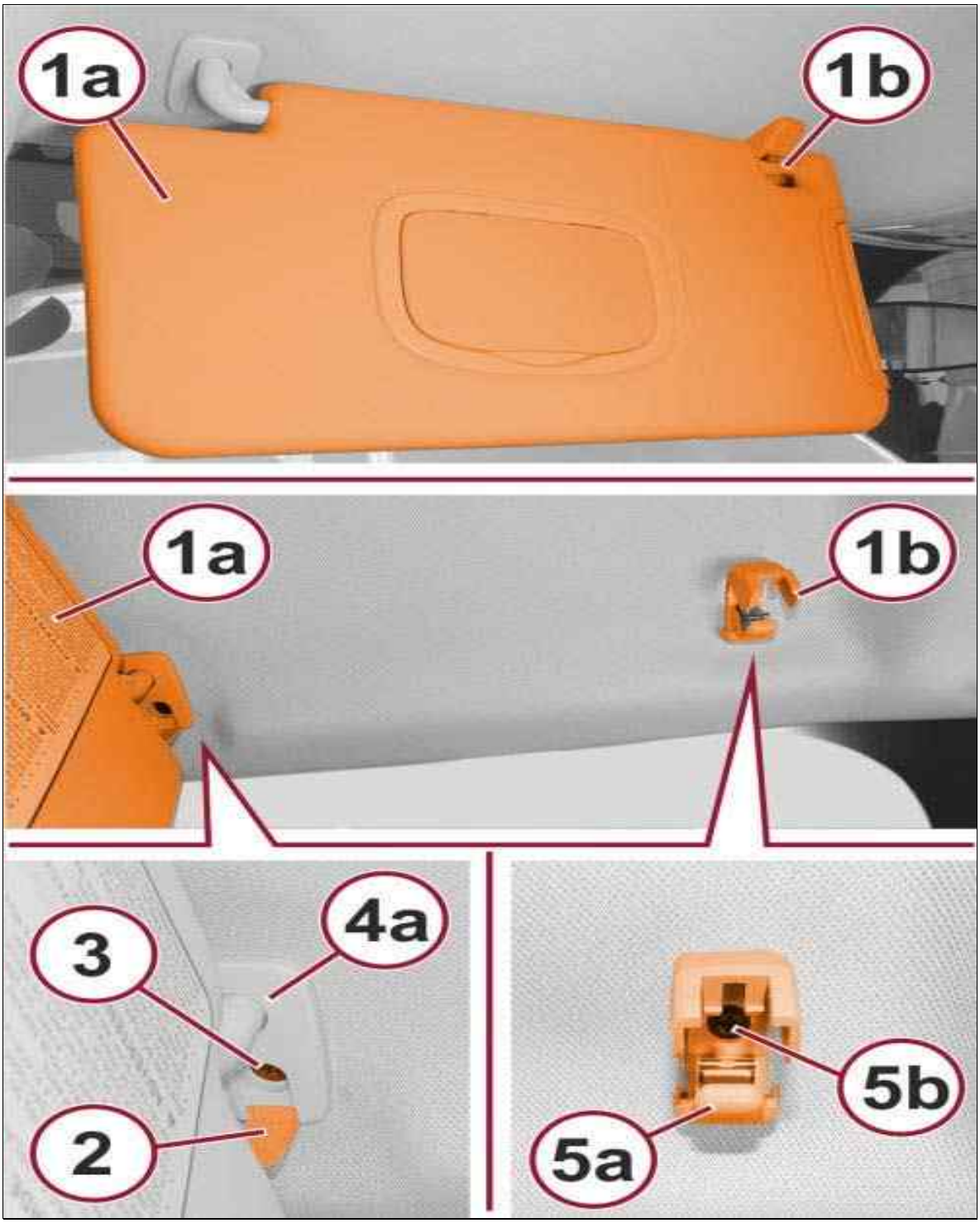


Courtesy of CHRYSLER GROUP, LLC

1. Disconnect and isolate the negative battery cable.
2. Remove the A-pillar trim. Refer to PANEL, A-PILLAR TRIM, REMOVAL AND INSTALLATION .
3. Remove the dome lamp assembly. Refer to LAMP, DOME, REMOVAL AND INSTALLATION .
4. Pull down the grab handle (1).

5. Remove the tabs (2a) and release the grab handle retainers (2b).
6. Remove both grab handle assemblies.

Fig 2: Visor, Support, Flange, Grip & Screws

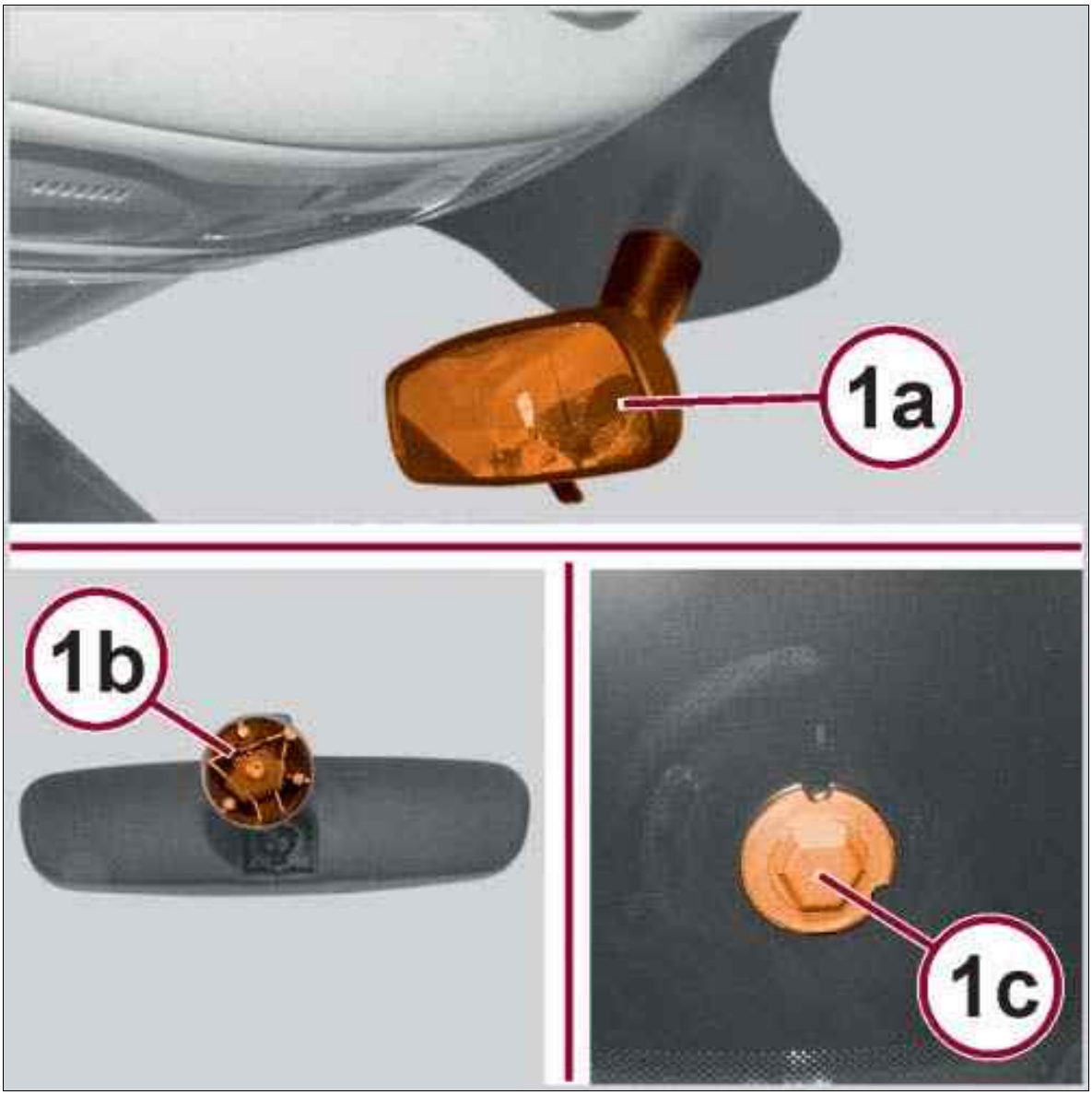


Courtesy of CHRYSLER GROUP, LLC

7. Disconnect the sun visor (1a) from the support (1b).
8. Unhook the flange (2).
9. Remove the screw (3).

10. Remove the sun visor (1a) releasing the retainer located inside the support (4a).
11. Remove the grip (1b) after opening its flange (5a) and remove the screw (5b).

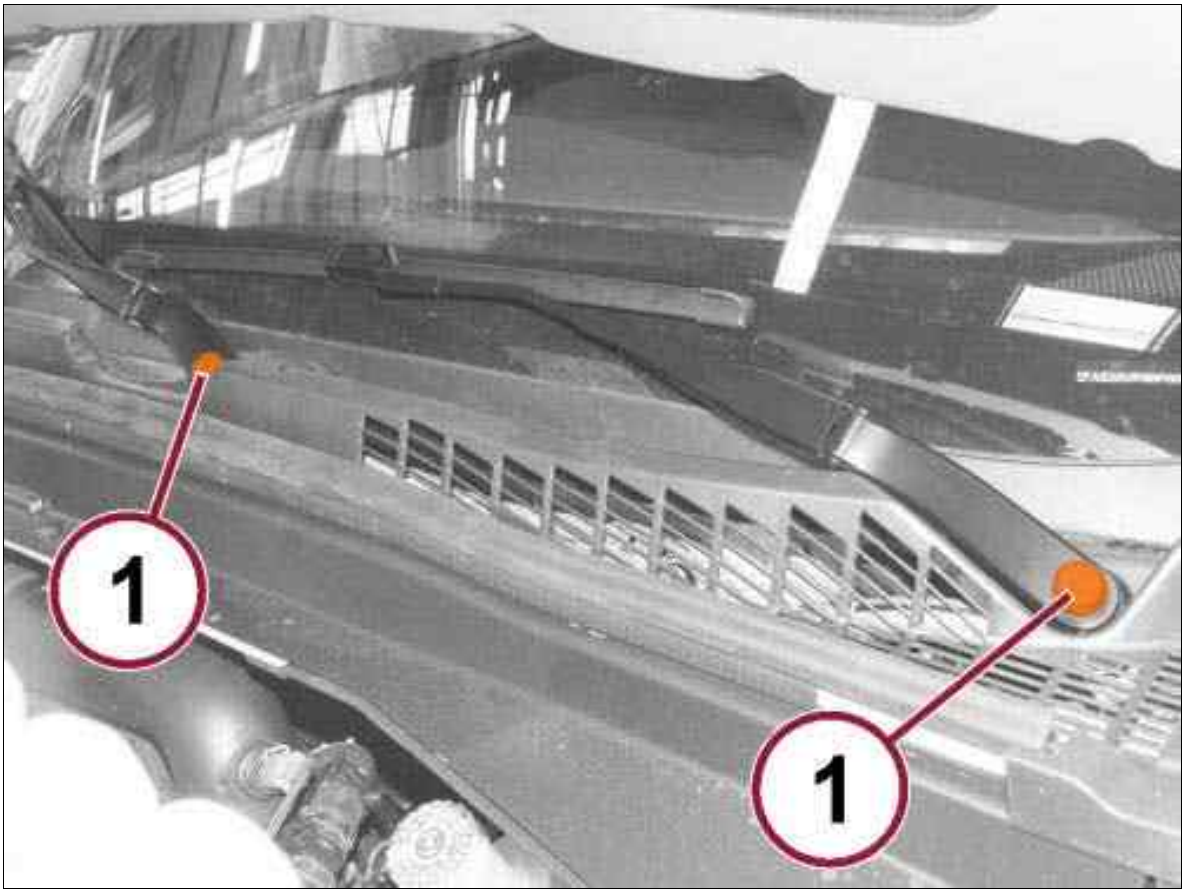
Fig 3: Mirror, Nut & Retainers



Courtesy of CHRYSLER GROUP, LLC

12. Turn the rear view mirror (1a) and release the retainers (1b) on the retaining nut (1c) on the windshield.
13. Remove the mirror.

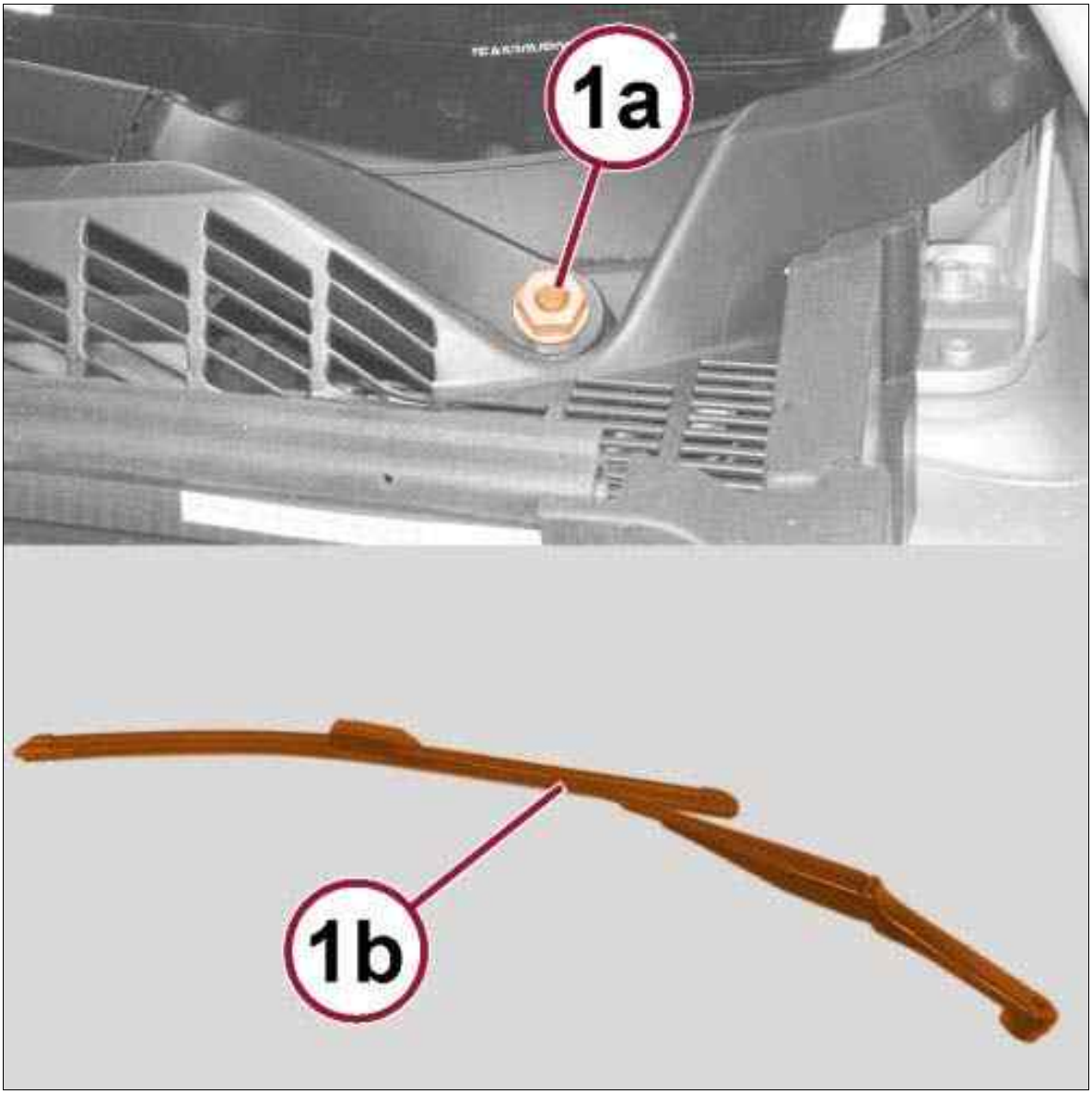
Fig 4: Bolt Cover



Courtesy of CHRYSLER GROUP, LLC

14. Pry off the bolt cover of the wiper arm.

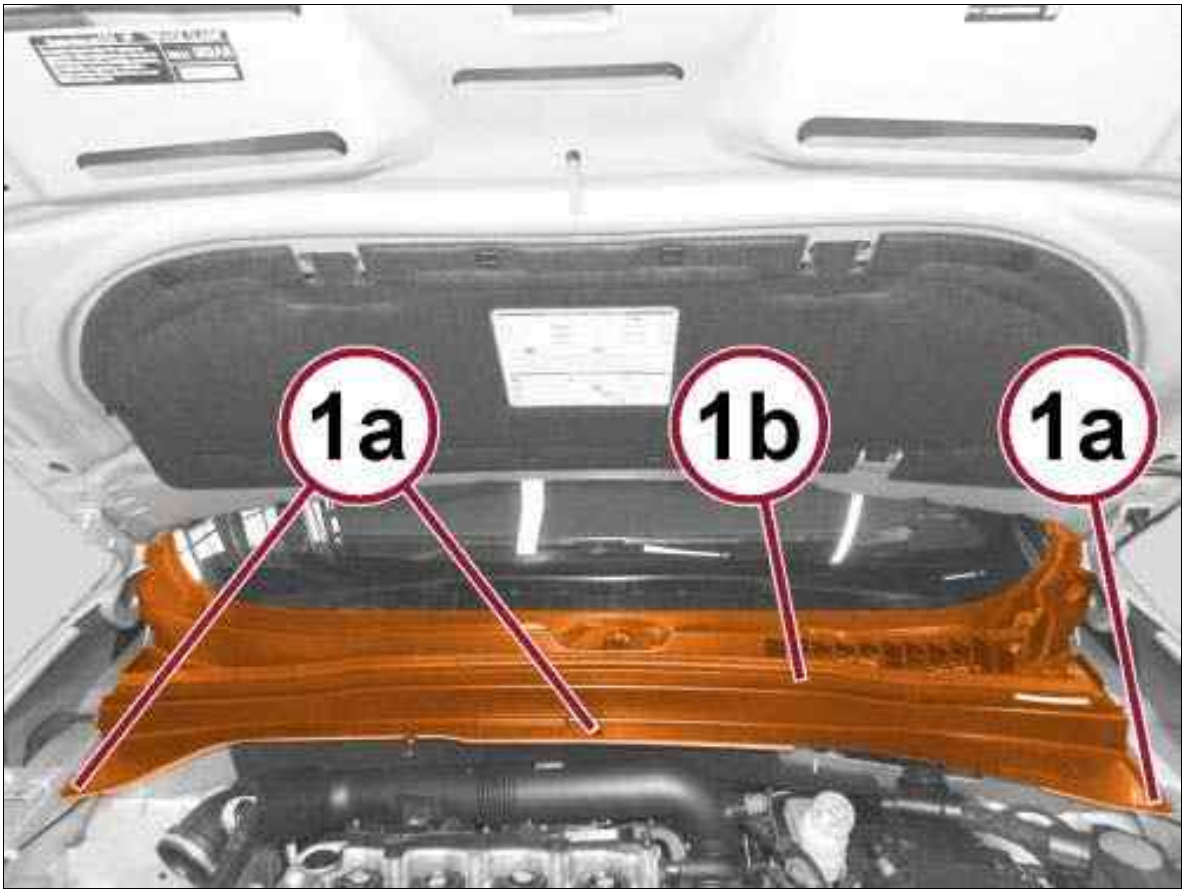
Fig 5: Wiper Arm & Nut



Courtesy of CHRYSLER GROUP, LLC

15. Remove the nut (1a) and remove the wiper arms (1b).

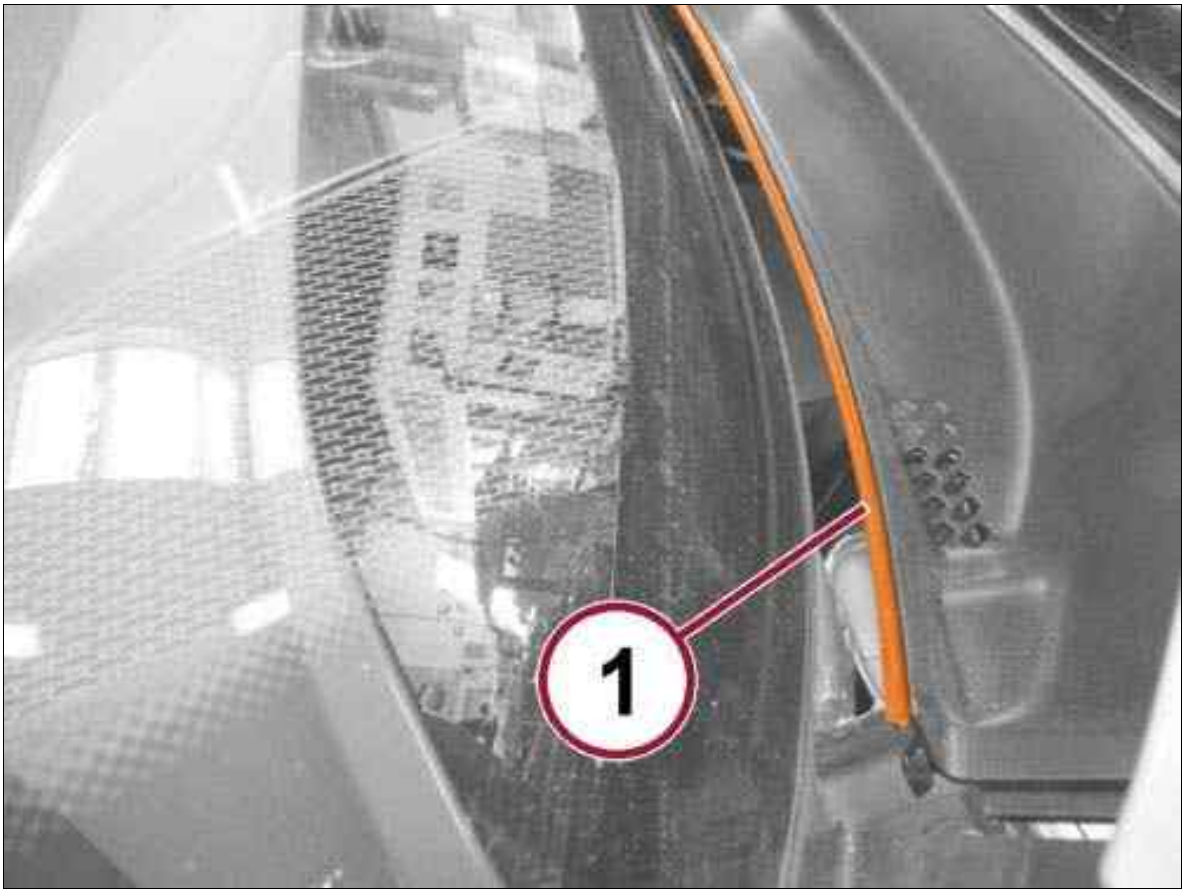
Fig 6: Cowl Trim Panel & Retaining Buttons



Courtesy of CHRYSLER GROUP, LLC

16. Using trim stick (special tool #C-4755, Trim Stick) or equivalent, release the retaining buttons (1a) and the center and side of the cowl trim panel (1b).

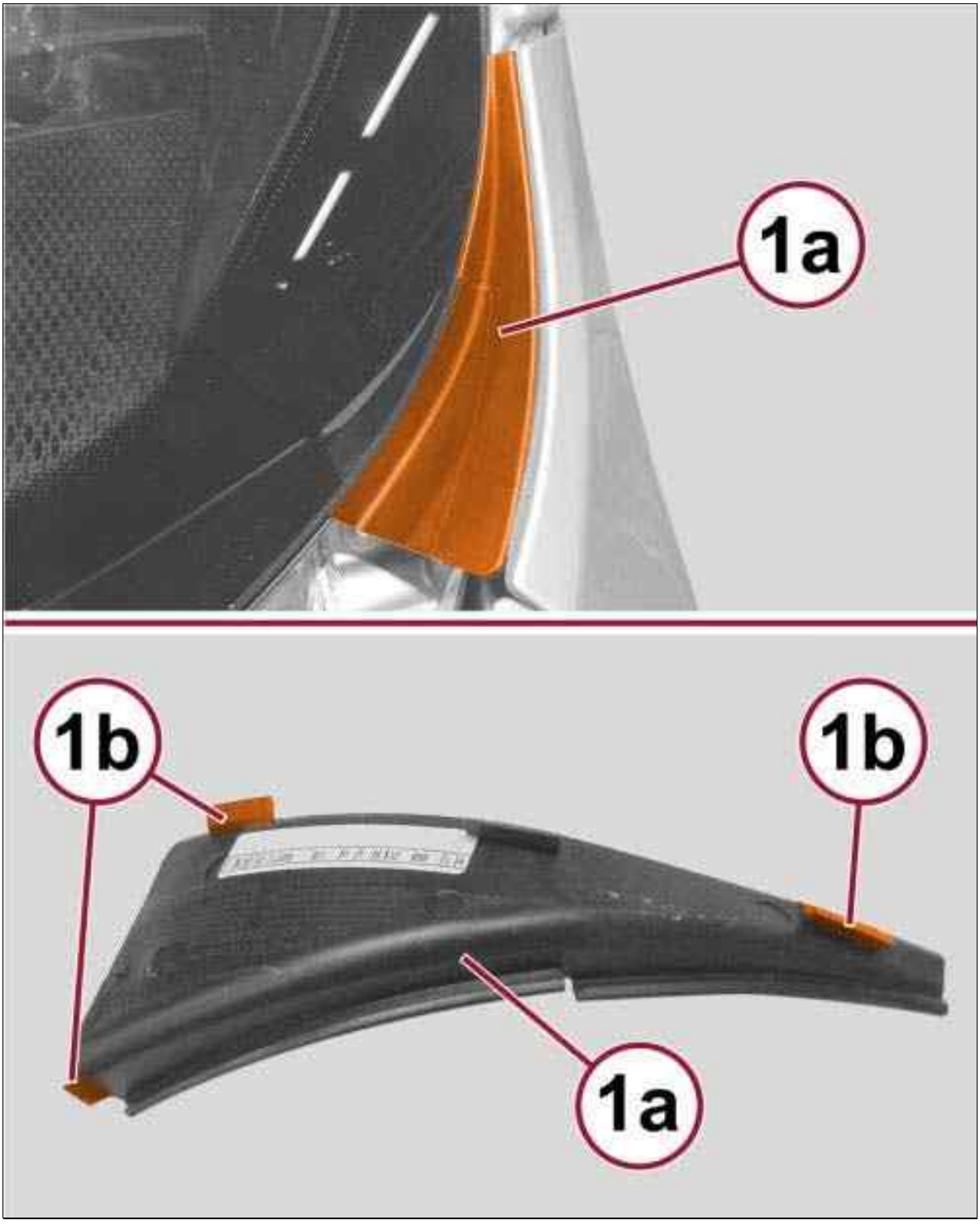
Fig 7: Upper Cowl Trim



Courtesy of CHRYSLER GROUP, LLC

17. Release the upper cowl trim (1) and remove the cowl trim panel.

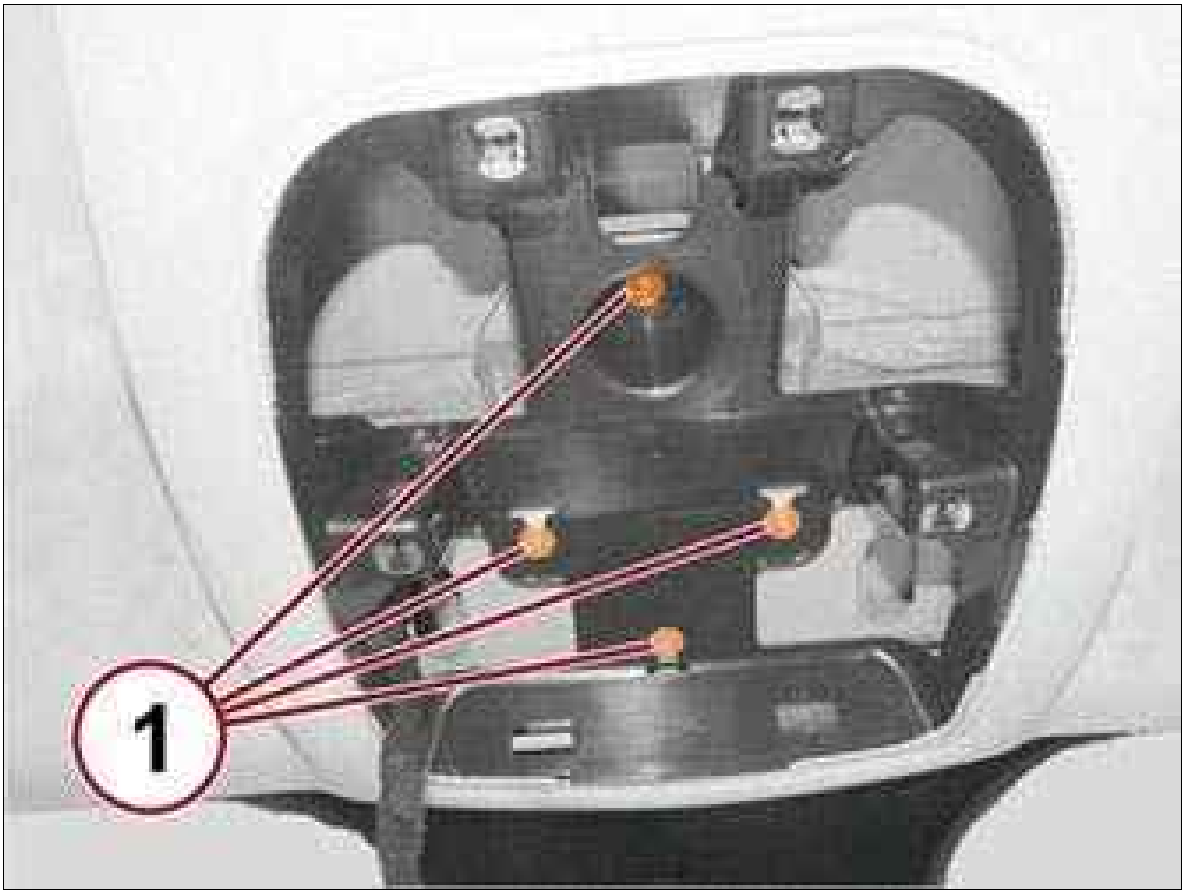
Fig 8: Molding & Retainers



Courtesy of CHRYSLER GROUP, LLC

18. Using a trim stick or equivalent, release the retainers (1b) and remove the molding (1a).

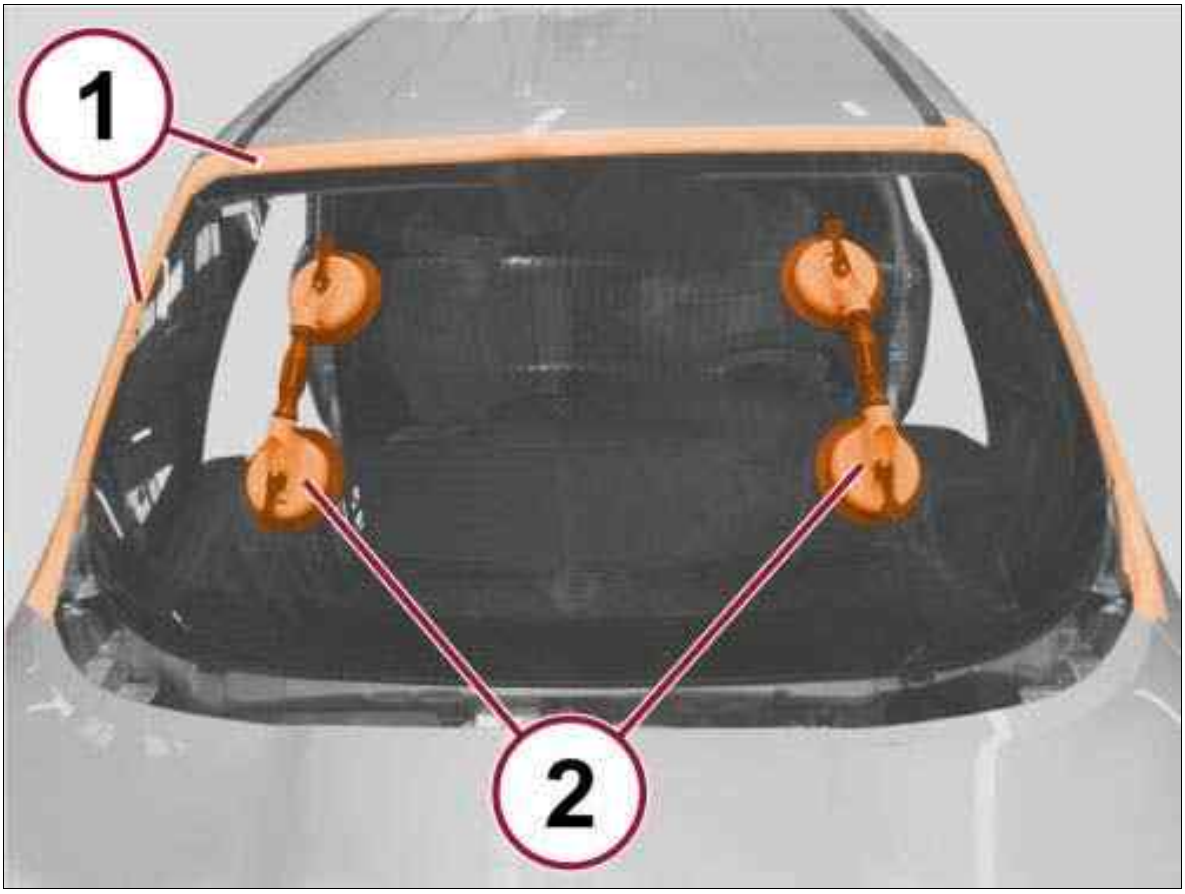
Fig 9: Retainers



Courtesy of CHRYSLER GROUP, LLC

19. Using a trim stick or equivalent, remove the retainers (1).
20. Slightly lower the front of the head liner and insert shims to keep it slightly lowered.

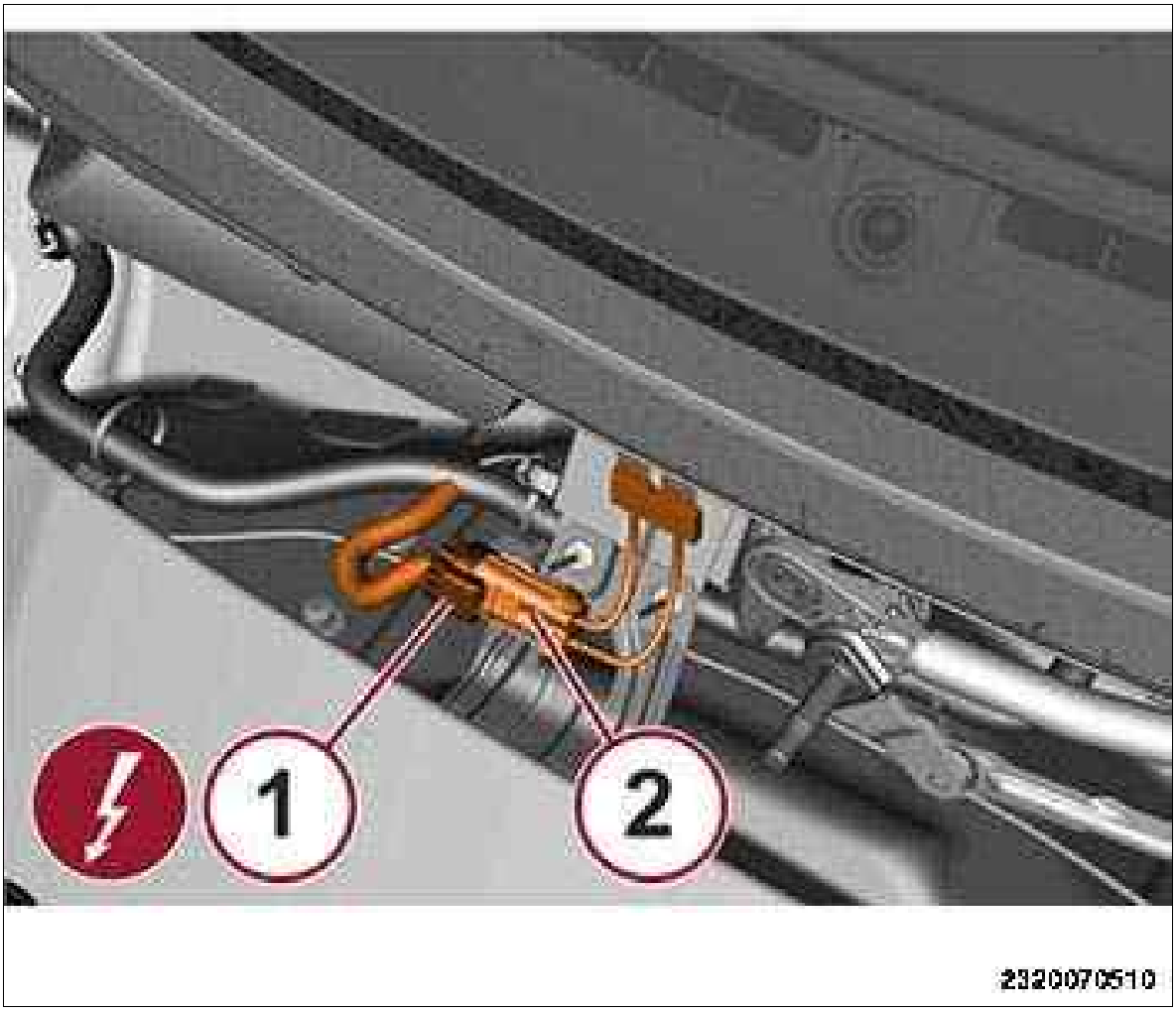
Fig 10: Suction Cups On Windshield



Courtesy of CHRYSLER GROUP, LLC

21. Protect the fascia and fenders as necessary.
22. Apply a double layer of adhesive tape (1) on the body, along the edges of the windshield.
23. Apply the glass two suction cups (2) for later removal.

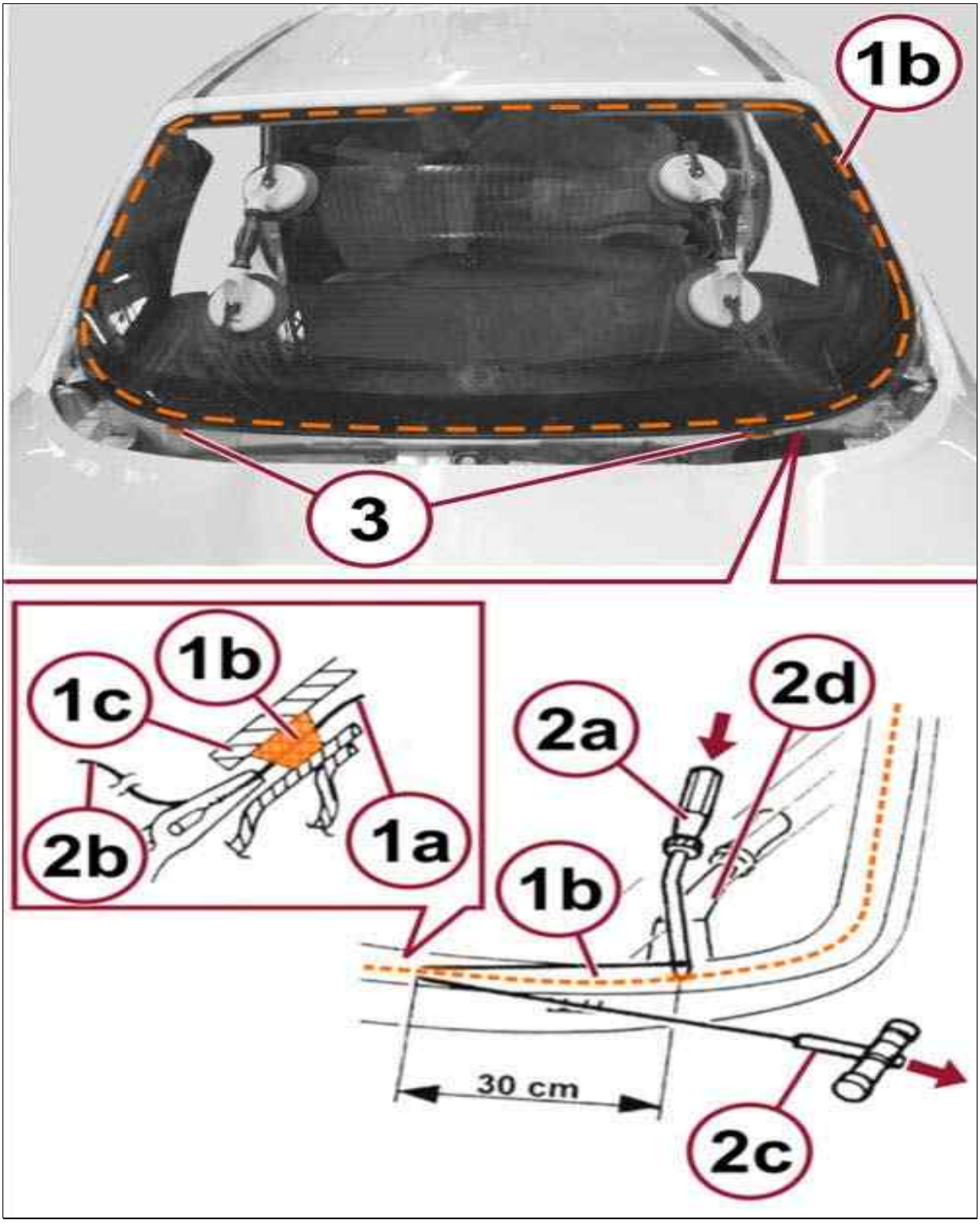
Fig 11: Heated Windshield Connector



Courtesy of CHRYSLER GROUP, LLC

24. Disconnect the heated windshield electrical connector (1).
25. Fold connector (2) over the windshield and secure with tape to prevent damage.

Fig 12: Removing Windshield



Courtesy of CHRYSLER GROUP, LLC

> *NOTE:*
>
> *The strip of windscreen sealant can be cut using piano wire. To cut with a vibrating cutter, an adequate cutter usage capacity is required, as well as an appropriate choice of blades in accordance with the cutting areas and the obstructions present.*

To cut using a piano wire, proceed as described below.

1. Cut a length of piano wire of about 50 cm then, using pliers, introduce one end (1a) of the piano wire through the bead of sealant (1b) securing the windscreen (1c).
2. Fasten one end (1a) of the wire to the special retaining tool (2a) located inside the vehicle. Fasten one end (2b) of the wire to the traction handle (2c) located outside the vehicle.
3. Before proceeding to the cutting step, lower the pins (3) so that they can be reused.
4. The operator inside the car must keep the end of tool (2a) on the sealant bead (1b) about 30 cm from the point where the wire passes through. The other technician, outside the vehicle, should pull the handle (2c) following the surround of the windshield and they should cut the bead of sealant (1b). When necessary, position an adequately-sized spatula (2d) by the tool (2a) to protect the inner parts of the car. Repeat the operation in sections of about 30 cm until the bead of sealant (1b) is completely cut.

> *NOTE:*
>
> *Be careful to avoid damaging the heated glass wiring during the cutting process.*

5. After cutting around the bead of sealant remove the glass using the suction cups positioned above. Place the glass on a suitable support stand.

STATIONARY GLASS > WINDSHIELD > REMOVAL AND INSTALLATION > GLASS REMOVAL TOOLS

Fig 1: Common Glass Tools Needed To Remove Stationary Glass

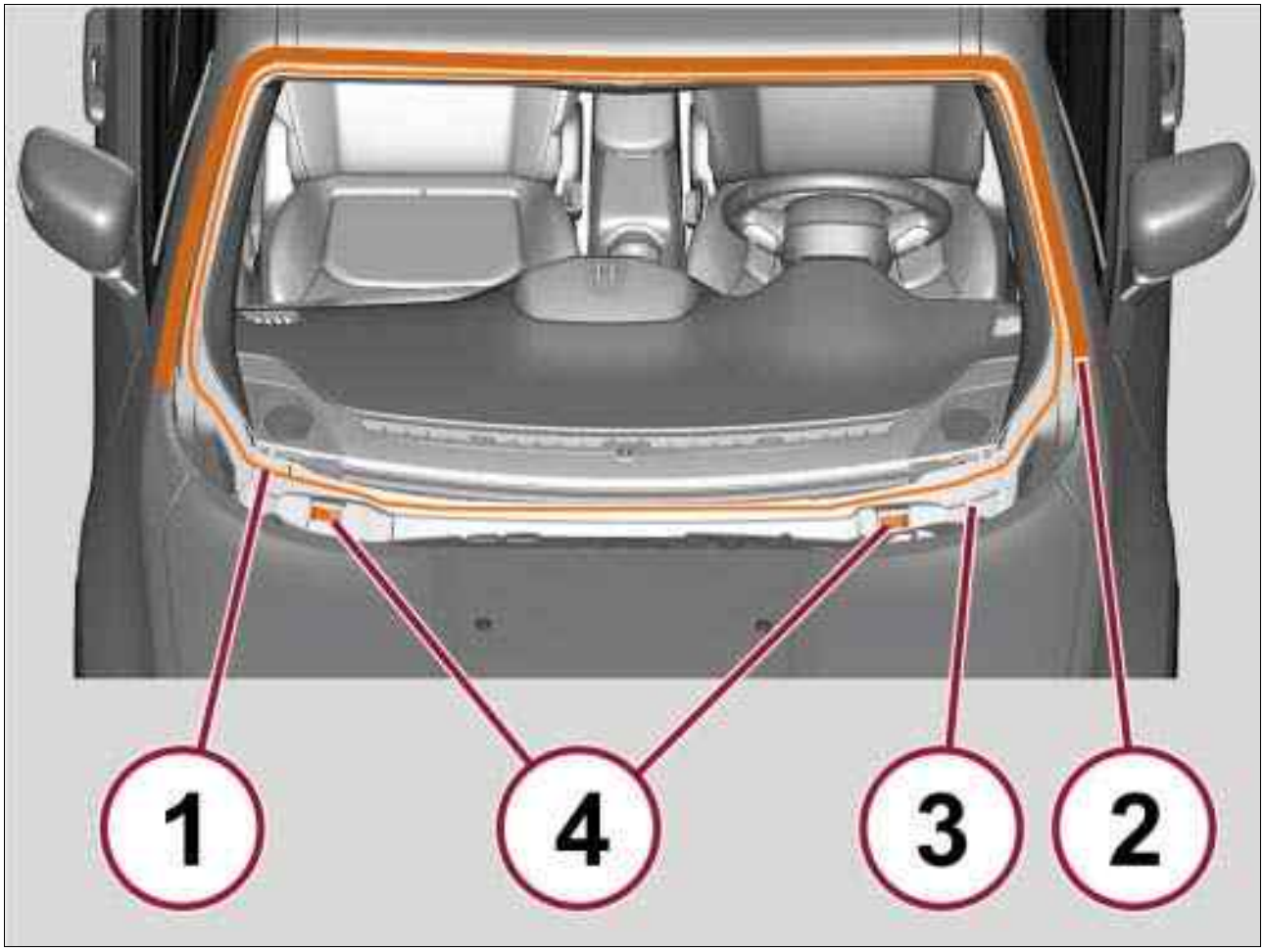
Courtesy of CHRYSLER GROUP, LLC

Common glass tools needed to remove Stationary Glass

- 1- Extractor® Express™ or equivalent, equipped with flat blade
- 2- Two handled wire type cut out tool
- 3- Cold knife equipped wit a 25 mm (1 in.) blade
- 4 - Cold knife equipped with an 38 mm (1.5 in.) blade
- 5 - Long knife

STATIONARY GLASS > WINDSHIELD > REMOVAL AND INSTALLATION > INSTALLATION > FENCE CLEANING

Fig 1: Sealant, Tape, Fence Line & Support Pins



Courtesy of CHRYSLER GROUP, LLC

WARNING:

Do not operate the vehicle within 24 hours of windshield installation. It takes at least 24 hours for urethane adhesive to cure. If it is not cured, the windshield may not perform properly if the vehicle is in an accident.

WARNING:

Failure to follow these instructions may result in possible serious or fatal injury.

CAUTION:

To help prevent water leaks, partially roll down the left and right door glass before installing the windshield. This avoids pressurizing the passenger compartment if a door is slammed before the urethane is cured.

CAUTION:

Protect all painted and trimmed surfaces from coming in contact with urethane or primers.

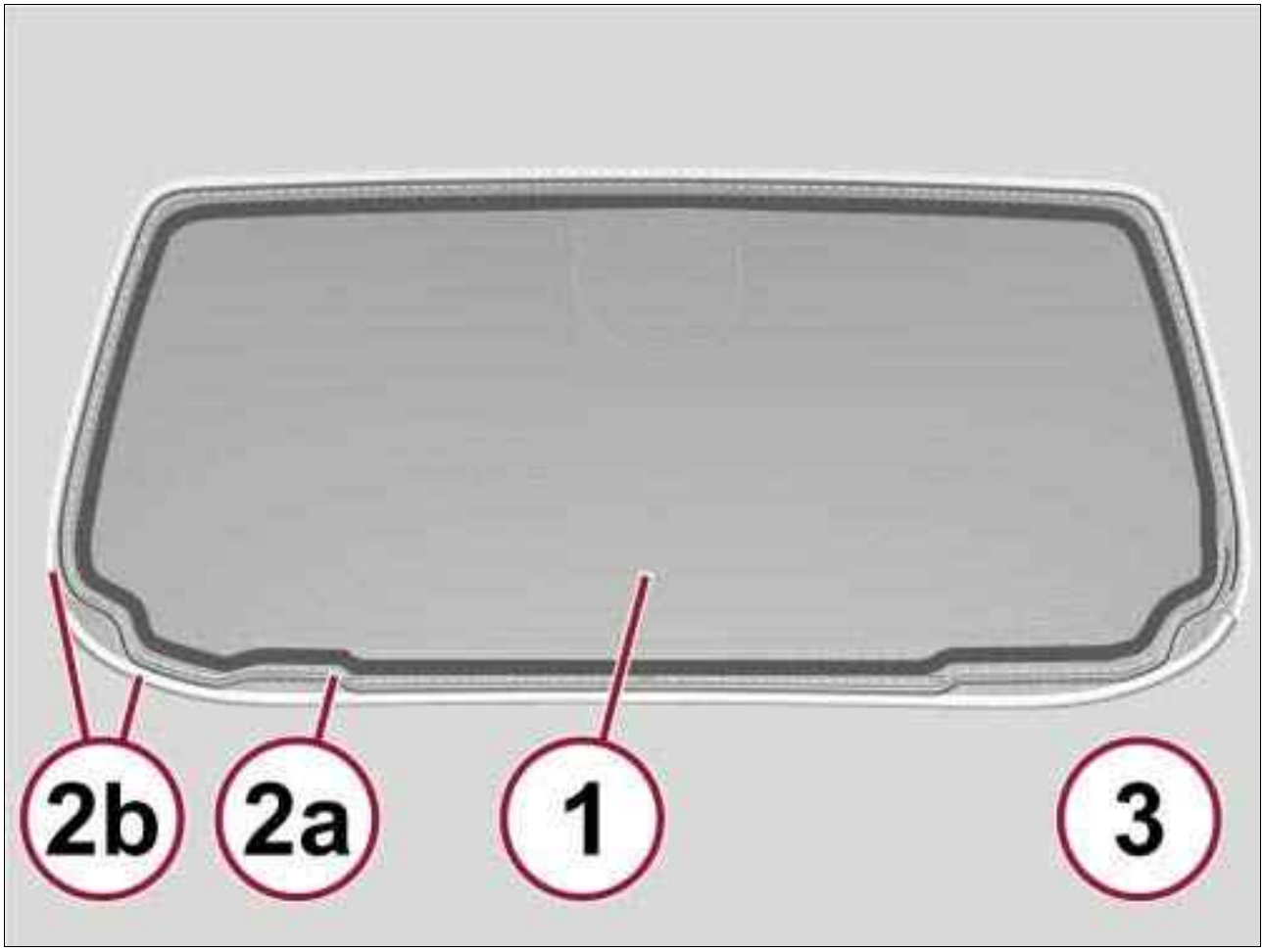
1. Using suitable equipment, cut and level the bead of sealant (1) in the windscreen housing leaving a thickness of between 0.25 and 1 mm, taking care not to scratch the paint. The thickness of the sealant remaining in the housing will act as a support for the new bonding.
2. Remove the tape (2).
3. Thoroughly clean the windshield fence line (3) and degrease fully using ammonia based glass cleaner.
4. Check the support pins (4) for damage and replace if necessary.

NOTE:

When bonding more than 60 minutes after the bead of adhesive has been cut and levelled, the surface of the adhesive must be treated using glass prep adhesion promoter and it is necessary to wait for 15 minutes before installing the windshield.

STATIONARY GLASS > WINDSHIELD > REMOVAL AND INSTALLATION > INSTALLATION > PREPARATION OF THE REMOVED GLASS

Fig 1: Glass, Adhesive & Seals



Courtesy of CHRYSLER GROUP, LLC

1. Repair any paint damage if necessary.

> *NOTE:*
>
> *The glass (1) that is removed can only be reused if it has not been damaged during the removal.*

2. Using a suitable tool, cut and level the bead of adhesive (2a) on the glass so that it is as thin as possible. The remaining adhesive does not have to be completely removed; take care not to damage the black screen-printing on the glass perimeter, the perimeter seals (2b) and the circuit of the heated windscreen.

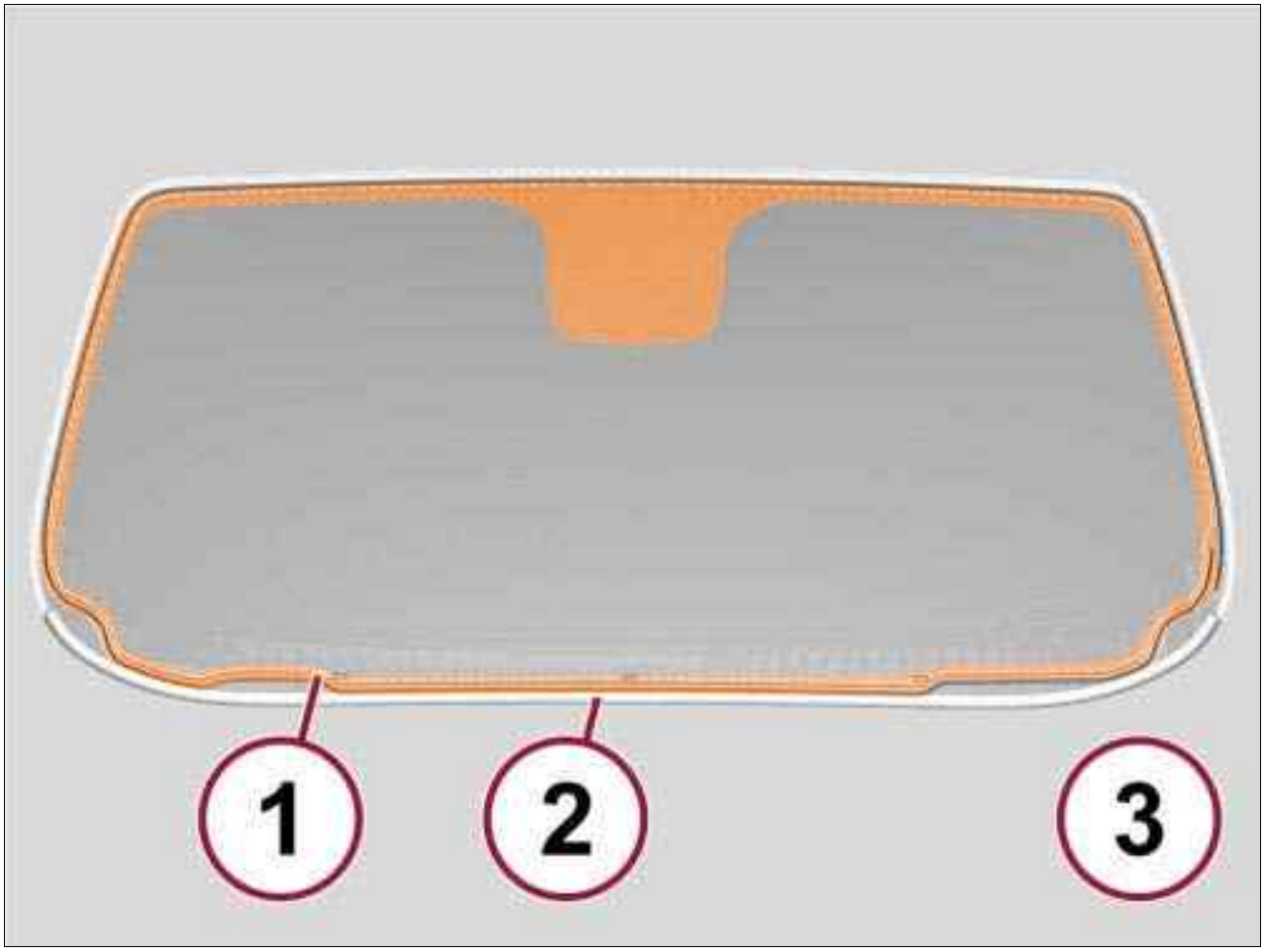
> *NOTE:*
>
> *The perimeter seals (2b) also act as spacers to prevent the glass from sinking in relation to the body, during the bonding stage.*

3. Clean the perimeter area (3) of the glass thoroughly and degrease fully ammonia based glass cleaner. Check that the glass is not damaged.

> *NOTE:*
>
> *When bonding more than 60 minutes after the bead of adhesive has been cut and levelled, the surface of the adhesive must be treated using glass prep adhesion promoter and it is necessary to wait for 15 minutes before installing the windshield.*

STATIONARY GLASS > WINDSHIELD > REMOVAL AND INSTALLATION > INSTALLATION > NEW WINDSHIELD PREPARATION

Fig 1: Perimeter & Locating Pins



Courtesy of CHRYSLER GROUP, LLC

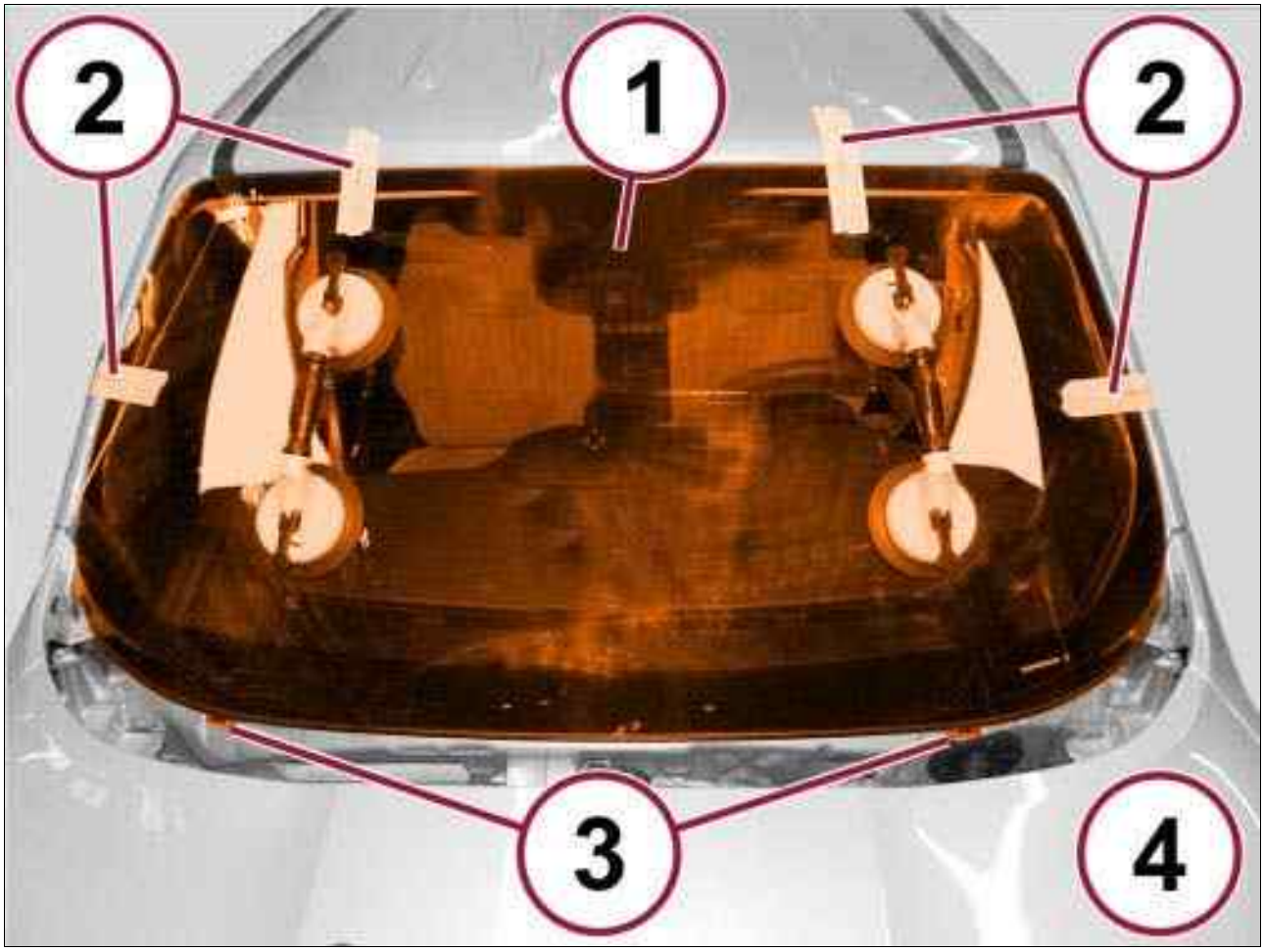
1. Degrease the perimeter (1) of the new glass to be bonded using an ammonia based glass cleaner.
2. Check for the presence of locating pins (2).

3. Apply glass adhesion promoter (primer) to the entire perimeter (3) cleaned previously.

> *NOTE:*
>
> *Wait for about 15 minutes before continuing with the next operation to allow the adhesion promoter (primer) to evaporate completely*

STATIONARY GLASS > WINDSHIELD > REMOVAL AND INSTALLATION > INSTALLATION > WINDSHIELD INSTALLATION

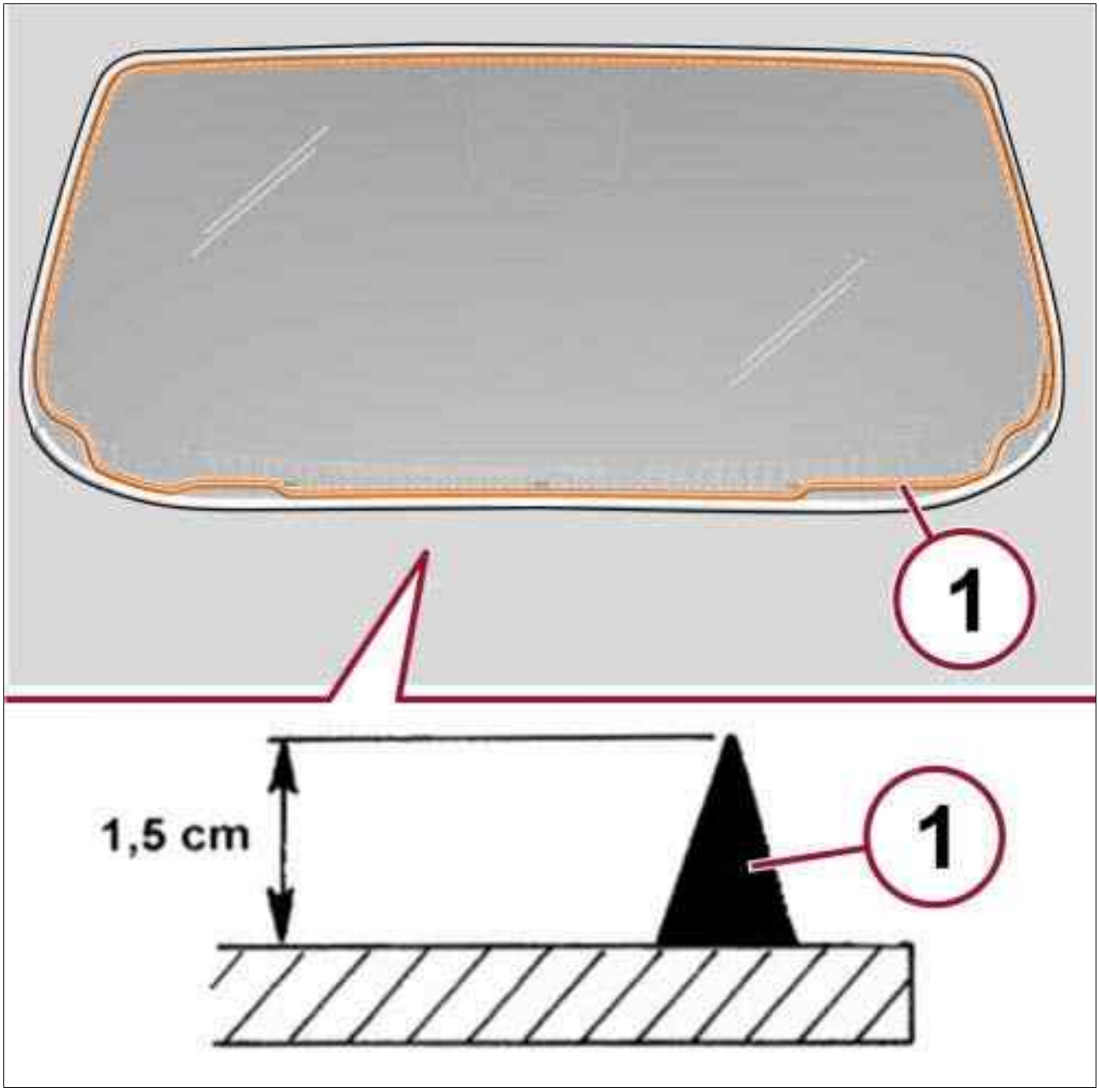
Fig 1: Glass, Tape & Adjustment Pins



Courtesy of CHRYSLER GROUP, LLC

1. Test fit the glass (1) centering in the windshield opening and mark the position using masking tape (2) as a reference.
2. Lift the adjustment pins (3).
3. Cut the strips of tape and remove the glass.

Fig 2: Bead Of Adhesive On Glass

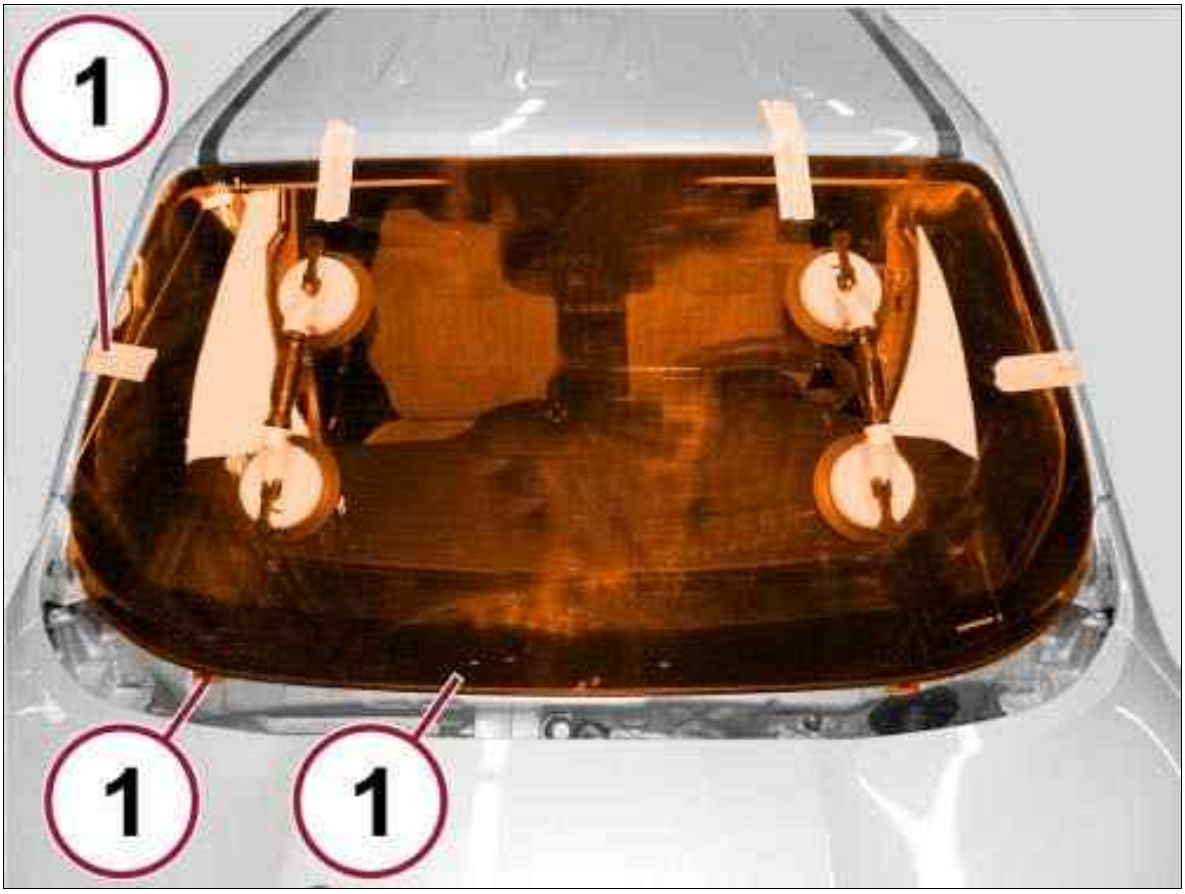


Courtesy of CHRYSLER GROUP, LLC

1. Apply a bead of adhesive (1) along the perimeter of the glass as evenly as possible.

> *NOTE:*
>
> *Start the operation from the lower left edge and continue without breaks along the entire perimeter of the glass.*

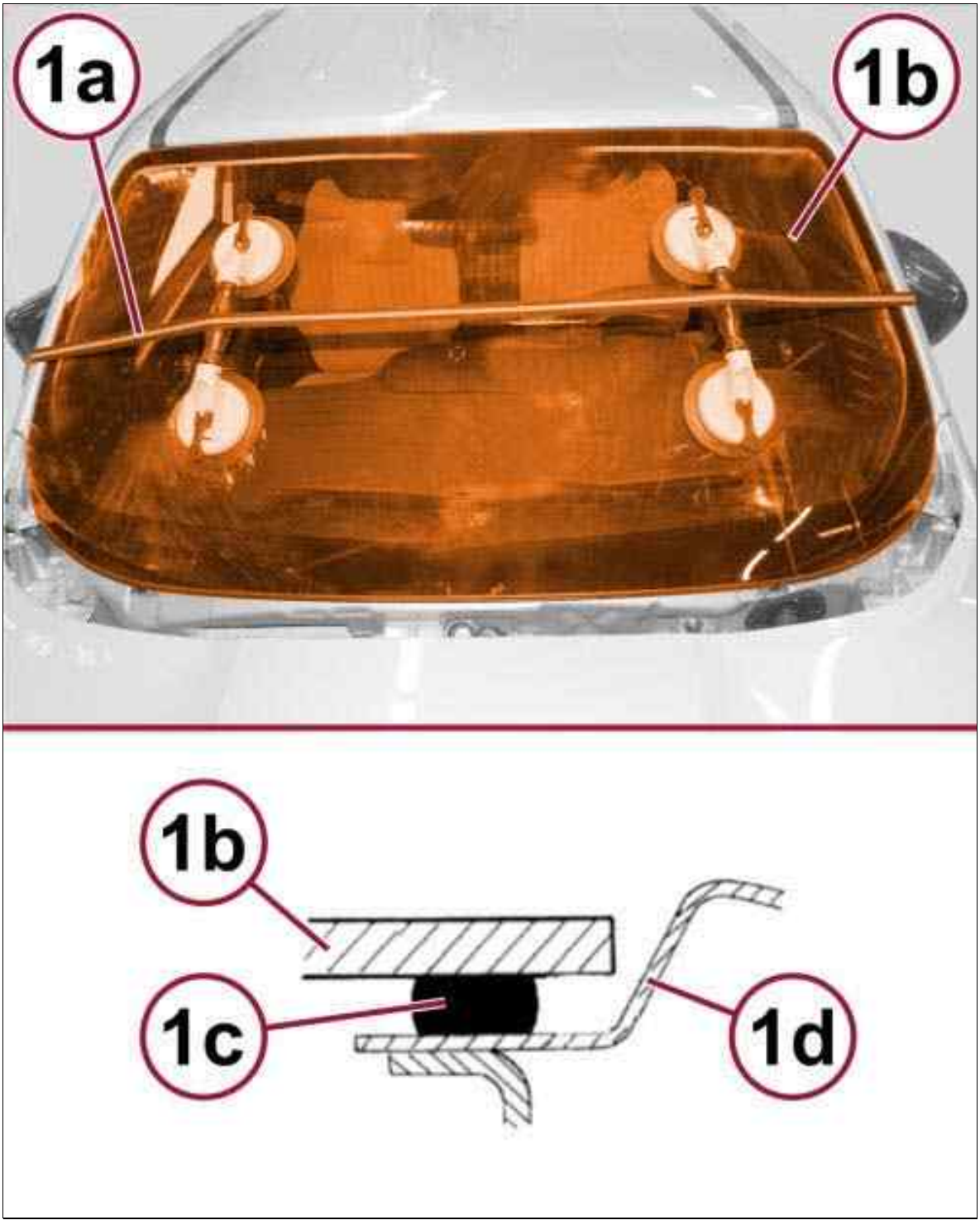
Fig 3: Glass In Position



Courtesy of CHRYSLER GROUP, LLC

2. Position the glass (1) in its seat immediately after applying the adhesive and settle it into position using the tape applied previously as a guide.

Fig 4: Strapping Glass In Position



Courtesy of CHRYSLER GROUP, LLC

3. Position a strap (1a), as shown in the illustration, and tension it so that even pressure is exerted on the entire window (1b) to ensure that the bonding between the glass (1b), adhesive (1c) and fence line (1d) is correct.

> *NOTE:*

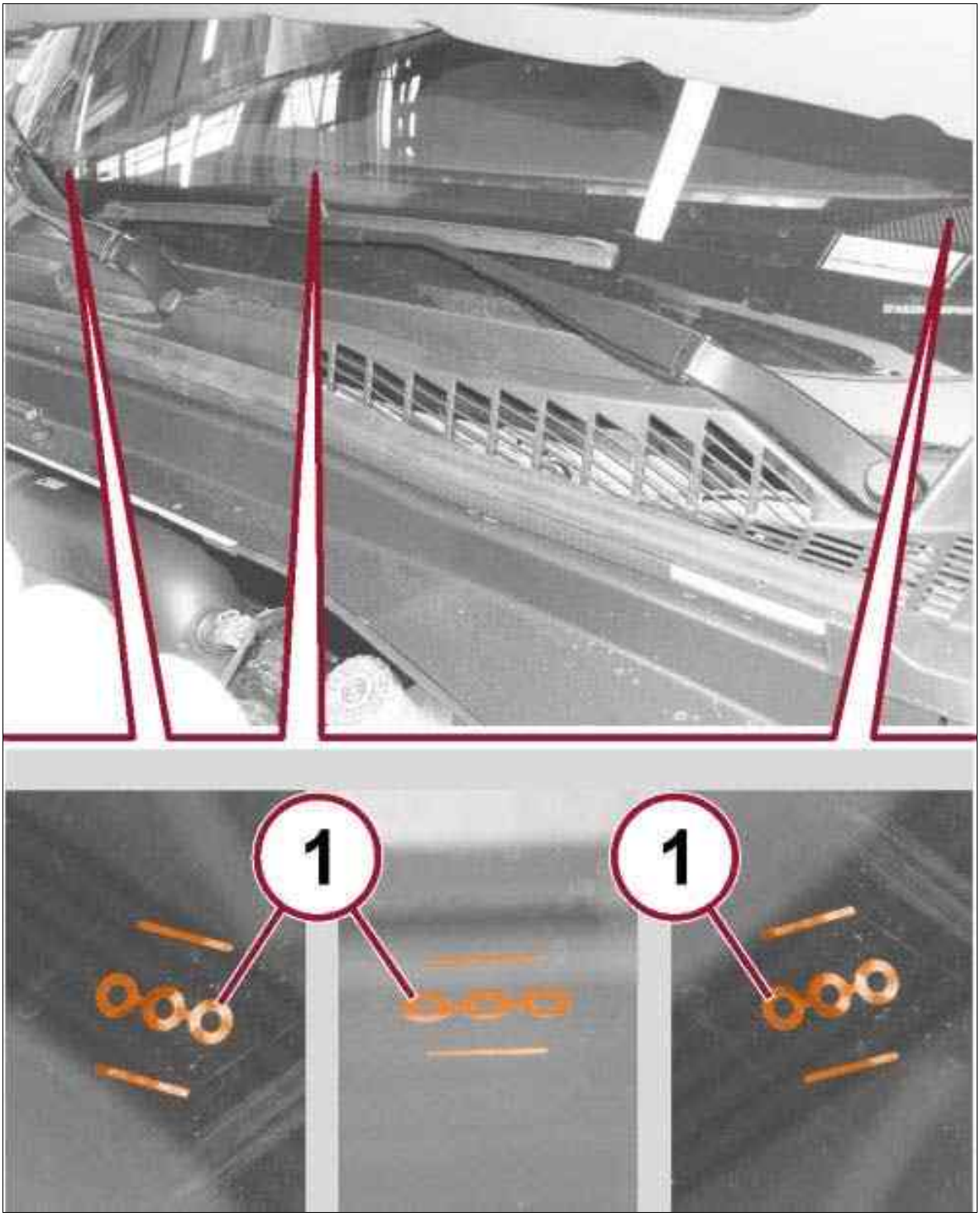
Do not move the vehicle for the time recommended by the adhesive manufacturer.

NOTE:

Before installing the components removed from the vehicle, check that there are no infiltration points by carrying out a water leakage test.

4. Remove the tape securing the heated glass electrical connector.
5. Secure the upper cowl trim panel and install the panel.
6. Install the push pin fasteners and seat fully.
7. Install the wiper arms and install the nuts without tightening.

Fig 5: Wiper Alignment Marks



Courtesy of CHRYSLER GROUP, LLC

8. Position the wiper arm pivot end onto the wiper pivot shaft so that the lower edge of the wiper blade is aligned with the wiper alignment marks (1), which are etched marks near the lower margin of the windshield.
9. Tighten the nut that secures the wiper arm to the pivot shaft. Tighten the nut to specification. Refer to SPECIFICATIONS .
10. Install the wiper arm bolt covers.

11. Install the cowl trim panel side retainers.
12. Remove the shims placed in the headliner during removal.
13. Install the rearview mirror onto the retaining nut on the windshield.
14. Install the visors and the visor supports. Install the screws securing the visor and the support.
15. Install the front door seals.
16. Install the dome lamp assembly. Refer to LAMP, DOME, REMOVAL AND INSTALLATION .
17. Install the A-pillar trim. Refer to PANEL, A-PILLAR TRIM, REMOVAL AND INSTALLATION .
18. Connect the negative battery cable.

WEATHERSTRIP/SEALS > CAUTION > CAUTION

Some body mounted weatherstrips are sealed to the body using a white mastic compound.

> ⚠ *CAUTION:*
>
> *Door and Liftgate weatherstrip seals that use a white mastic sealant must be replaced with a new weatherstrip and any mastic must be cleaned from attachment flanges whenever the weatherstrip is removed.*

> ⚠ *CAUTION:*
>
> *Failure to follow these recommendations could result in damage or failure to the part and the related parts.*

WEATHERSTRIP/SEALS > SEAL, DOOR OPENING, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

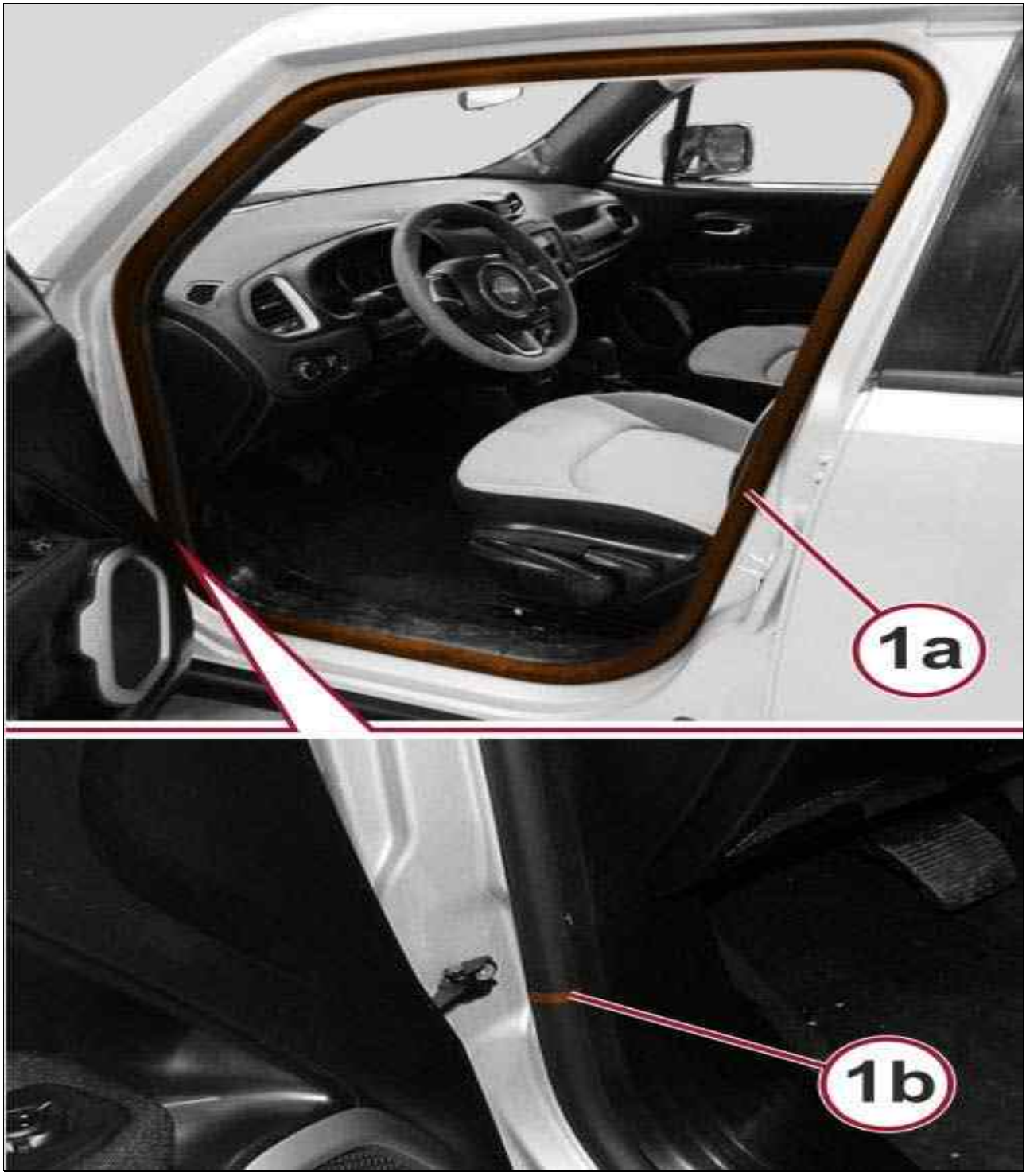
Fig 1: Front Door Seal

Courtesy of CHRYSLER GROUP, LLC

1. Separate and remove the seal (1).

WEATHERSTRIP/SEALS > SEAL, DOOR OPENING, FRONT > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Front Door Seal & Junction Mark



Courtesy of CHRYSLER GROUP, LLC

1. Check that the seal is not damaged.
2. Position the seal (1a), by placing the junction mark (1b) in the area of the door check, as shown in the illustration.
3. Check for correct door operation.

WEATHERSTRIP/SEALS > SEAL, DOOR OPENING, REAR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > REMOVAL

Fig 1: Rear Door Seal

Courtesy of CHRYSLER GROUP, LLC

1. Separate and remove the seal (1).

WEATHERSTRIP/SEALS > SEAL, DOOR OPENING, REAR > REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION > INSTALLATION

Fig 1: Rear Door Seal & Junction Mark

Courtesy of CHRYSLER GROUP, LLC

1. Check that the seal is not damaged.
2. Position the seal (1), by placing the junction mark (2) in the area of the door check, as shown in the illustration.
3. Check for correct door operation.