BODY

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SPECIFICATIONS

N23CA--

GENERAL SPECIFICATIONS

1 74 \$

Items	Specifications _
Hood Type	Rear hinged, front opening type
Front doors Construction Regulator system Locking system	Front-hinged, sash construction Single-arm type Pin-fork type
Rear hatch Type	Inner-hinged, with gas damper
Glass installation method Windshield glass Quarter window glass Rear hatch window glass	Adhesive type Adhesive type Adhesive type
Glass thickness mm (in.) Windshield glass Quarter window glass Rear hatch window glass Door window glass	5.2 (.20) 3.5 (.14) 5 (.2) 4 (.16)
Power window motor assembly Type Revolutions under load rpm At 1 Nm (0.72 ft.lbs.) At 2 Nm (1.45 ft.lbs.) Bound current A Direction of rotation	Permanent magnet type (built-in circuit breaker) 60 – 90 50 – 80 34 or less Clockwise and counterclockwise
Power window switch assembly Type	Automatic reset type
Door lock actuator Range of voltage used V Locking current A Plunger pulling force kg (lbs.) Plunger complete stroke mm (in.)	9 – 15 4 or less 2 (4.4) 14 – 17 (.55 – .67)
Remote control mirror motor Type Rated current mA Remote control mirror switch Type Rated load mA	Ferrite magnet motor 75 Contact type (left/right switching, ring contact type)
Regular up-down or right-left direction Intermediate directions	75 150

Items	Specifications
Automatic seat belt motor	
Туре	Ferrite magnet motor
No-load speed rpm	180
No-load current A	4 or less
Load current at 125 Ncm (11 in.lbs.) A	6.4 – 6.8
Load speed at 125 Ncm (11 in.lbs.) rpm	125 – 225
Lock test current A	38 or less

SERVICE SPECIFICATIONS

N23CB--

mm (in.)

Items	Specifications
Standard value	
Play of inside handle	4 – 10 (.16 – .39)
Play of outer handle	3-8 (.1231)

TORQUE SPECIFICATIONS

N23CC--

Items	Nm	ft.lbs.
Hood hinge	9 – 14	6.5 – 10
Hood latch	7 – 11	5-8
Hood hook	4-6	2.9 – 4.3
Rear wiper arm locking nut	6-9	4 – 7
Windshield wiper arm locking nuts	10 – 16	7 – 12
Door hinge		
Body side	13 – 26	9-19
Door side	17 – 26	12 – 19
Hatch hinge		
Hatch side	5-8	4-6
Body side	10 – 15	7 – 11
Hatch latch	4-6	2.9 – 4.3
Air spoiler (center) attaching nuts	3.5 – 5.0	2.5 - 3.6
Front seat mounting nuts	24-36	17 – 26
Front seat mounting bolts	35 – 55	25 – 40
Rear seat cushion mounting bolts	4-6	3-4
Rear seat hinge bracket mounting bolts	9 – 14	6 – 10
Rear seat striker	4-6	3-4
Front/rear seat belt anchor plate	35 – 55	25 – 40
Rail guide	4-6	2.9 – 4.3
Outer casing (B)	4-6	2.9 – 4.3
Rail guide bracket attaching bolts	8-12	5.8 – 8.7
Retractor		
For shoulder belt	17 – 26	12 – 19
For lap belt	35 – 55	25 – 40
Buckle	35 – 55	25 – 40
Shoulder belt sub anchor	35 – 55	25 – 40

LUBRICANTS N23CD-

Items	Specified lubricants	Quantity
Spring of the hood lock	MOPAR Multi-Purpose Grease Part Number 2932524	As required
Sliding portion of rear hatch link	MOPAR Multi-Purpose Grease Part Number 2932524 or equivalent	As required .
Sliding portion of rear hatch hinge	MOPAR Multi-Purpose Grease Part Number 2932524 or equivalent	As required
Sliding portion of rear hatch latch	MOPAR Multi-Purpose Grease Part Number 2932524 or equivalent	As required
Sliding portion of front door hinge	MOPAR Multi-Purpose Grease Part Number 2932524 or equivalent	As required
Sliding portion of door glass guide	MOPAR Multi-Mileage Lubricant Part Number 2525035 ör equivalent	As required

SEALANTS AND ADHESIVES

N23CE··

Items -	Specified sealant and adhesive	Quantity
Between rear hatch glass and rear hatch moulding	Urethane adhesive (Essex Urethance "E" Auto Glass Sealant)	As required
Rear hatch glass to rear hatch garnish contact surface	Urethane adhesive (Essex Urethane "E" Auto Glass Sealant)	As required
Flange parts of the fender	Dry sealant	As required
Between windshield and body	Urethane adhesive (Essex Urethane "E" Auto Glass Sealant)	As required
Stud hole	Urethane adhesive (Essex Urethane "E" Auto Glass Sealant)	As required
Between windshield and moulding	MOPAR K101 CEMENT Part No. 383769	As required
Between quarter window and body	Urethane adhesive (Essex Urethane "E" Auto Glass Sealant)	As required
Waterproof film	MOPAR Rope Caulk Sealer 3/16 x 80" roll Part No. 4026044	As required
Door opening weatherstrip	MOPAR Pope Caulk Sealer 3/16 x 80" roll Part No. 4026044	As required
Roof lid female hinge	MOPAR Vinyl-Acrylic Sealant Part Number 4026043 or equivalent	As required
Air spoiler (center)	MOPAR Rope Caulk Sealer 3/16 x 80" roll Part No. 4026044	As required

SPECIAL TOOL

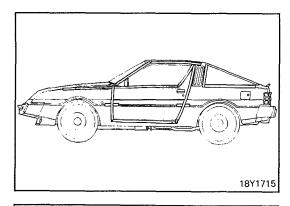
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TooL(Number and name)	Use
MB990449 Window moulding remover	Removal of the window moulding

TROUBLESHOOTING

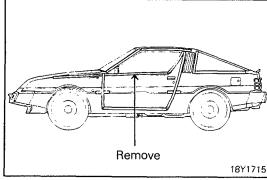
N23EAAO

Symptom	Probable cause	Remedy	
Sunroof Water leaks	Deteriorated roof lid weatherstrip	Replace	
	Excessive roof lid-to-body clearance and improperly fitted weatherstrip	Adjust	
Wind noise	Loose or deformed deflector	Retighten or replace	
Door glass fails to operate up and down	Dismount window glass regulator	Adjust	
operate up and down	Detached sash	Attach	
	Broken sash	Replace	
	Collapsed sash	Repair or replace	
	Collapsed window glass regulator arm	Repair or replace	
	Broken window glass regulator	Replace	
Door glass operates up and down hardly	Improper window glass position	Adjust	
up and down natury	Collapsed sash	Repair or replace	
	Collapsed window regulator arm	Repair or replace	
Wind noise from around door	Insufficient weatherstrip holding force	Adjust door installation	
around door	Improperweatherstrip installation or deteriorated weatherstrip	Repair or replace	
	Incomplete door closing	Adjust	
	Improper door installation	Adjust	
	Improper gap between door glass and weatherstrip	Adjust	
	Deformed door	Repair or replace	
Rear hatch is "heavy" when opened/closed; abnormal noise is heard from hinges	Insufficient grease on hinges	Apply chassis grease	
Wind noise from around rear hatch	Insufficient weatherstrip holding force.	Adjust rear hatch installation	
around real Haterr	Improper weatherstrip installation or deteriorated weatherstrip	Repair or replace	
	Uneven clearance between body and rear hatch	Adjust	
	Deformed rear hatch	Repair or replace	

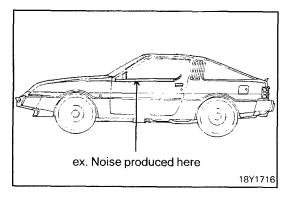


TROUBLESHOOTING OF WIND NOISE

- (1) Apply cloth tape to all potential sources of wind noise such as panel joints, protrusions, moulding joints, glass to body joints in the direction from which noises are heard.
- (2) Drive under this condition to make sure that wind noises are eliminated.

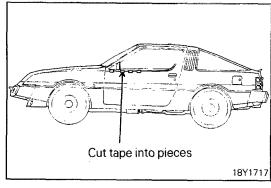


(3) Remove tape one after another until wind noises are produced again.

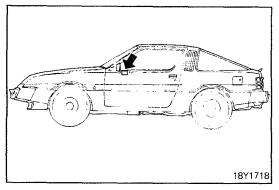


(4) If removal of a tape causes noise generation, apply tape again to that location and remove other tapes one after another to check that no noise is produced.

(5) The location with tape left applied to the last is responsible for wind noise.

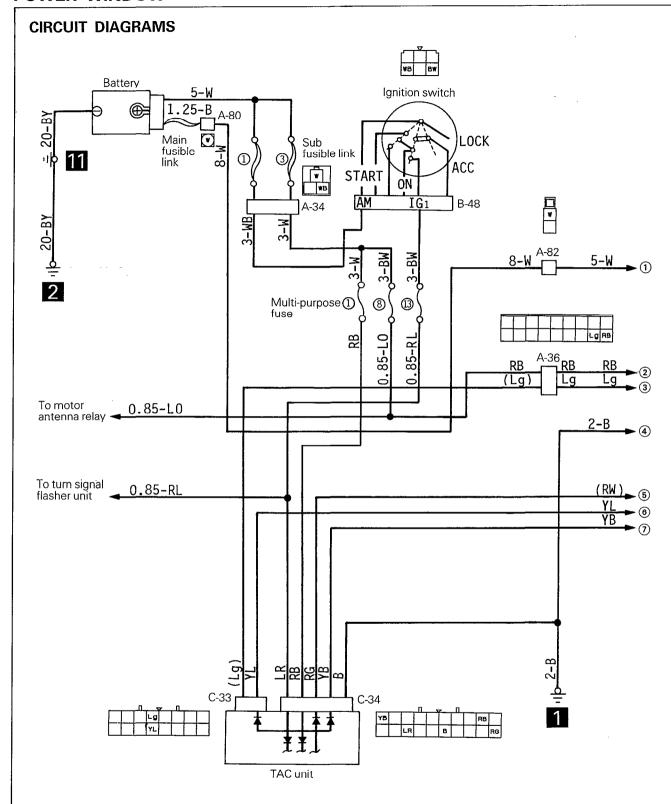


(6) Cut the left tape into smaller pieces and remove piece after piece in the same manner as before to localize suspected source.



- (7) Remove the last piece left and check that its removal causes wind noise and its application stops wind noise.
- (8) Apply butyl tape or body sealer to the thus located area to minimize gap.

POWER WINDOW



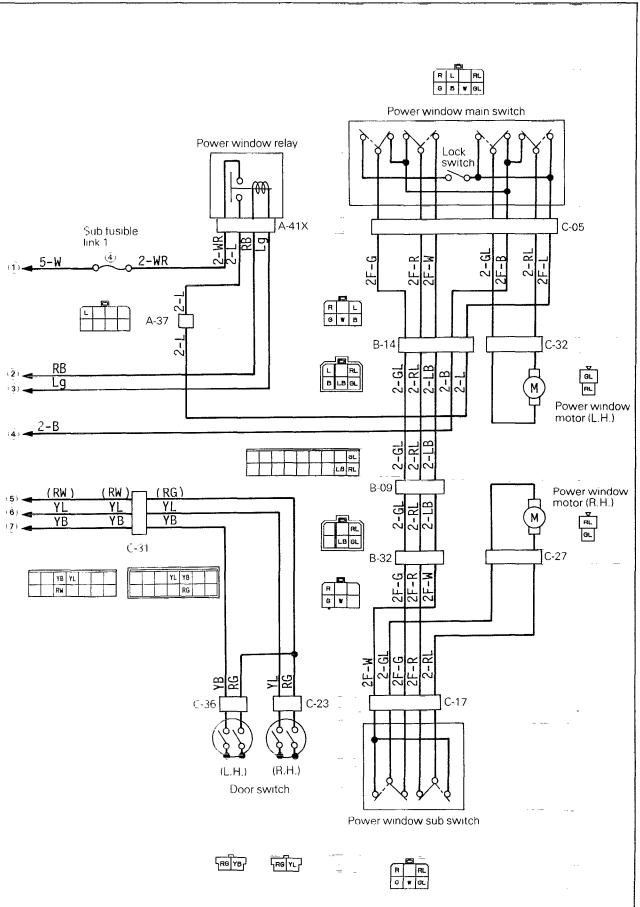
For details of grounding points (ex.: 2), refer to page 8-10. The circuit lines ended with number ①, ② and so on are in continuation to those with the corresponding number on opposed page. (i.e., the line ① on the left-hand page is connected to the line ① on the right-hand page.)

Wire color code

B: Black Gr: Gray

L: Blue O: Orange Ll: Light blue R: Red W: White

G: Green Br: Brown Lg: Light green
P: Pink
Y: Yellow



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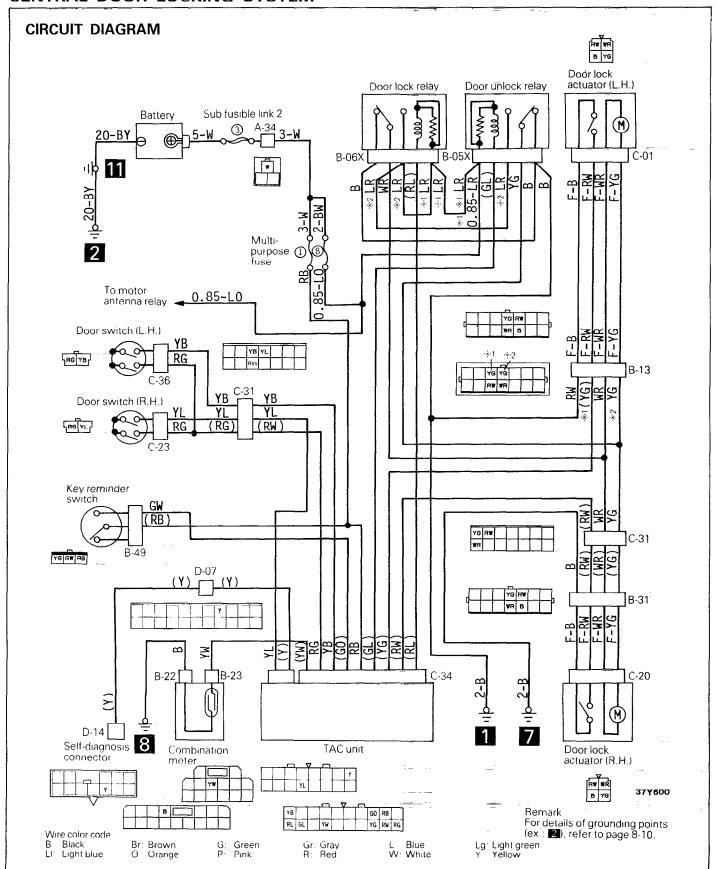
OPERATION

- When the ignition switch is turned to "ON", current flows through fuse No. 13, the power window relay (coil), and ground, closing the power window relay contacts.
- When the power window switch is set at the "UP" or "DOWN" position with the ignition switch turned to "ON", current flows through the power window relay (contact), the power window switch, and ground, and the power window motor revolves to raise or lower the door window glass.
- If the lock switch of the power window main switch block is set at "ON", however, the door window glass can neither be raised nor lowered by operating the sub switches.
- For operation of the power window timer, refer to GROUP 8 ELECTRICAL – ETACS.

TROUBLESHOOTING HINTS

- 1. The door windows cannot be operated by using the main switches.
 - Malfunctioning main switch
- 2. The door windows can be operated by using the main switches, but cannot be operated by using the sub switches.
 - Malfunctioning sub switch
- 3. The door windows can be operated (by using the sub switches) even though the lock switch is at "ON".
 - Malfunctioning main switch lock

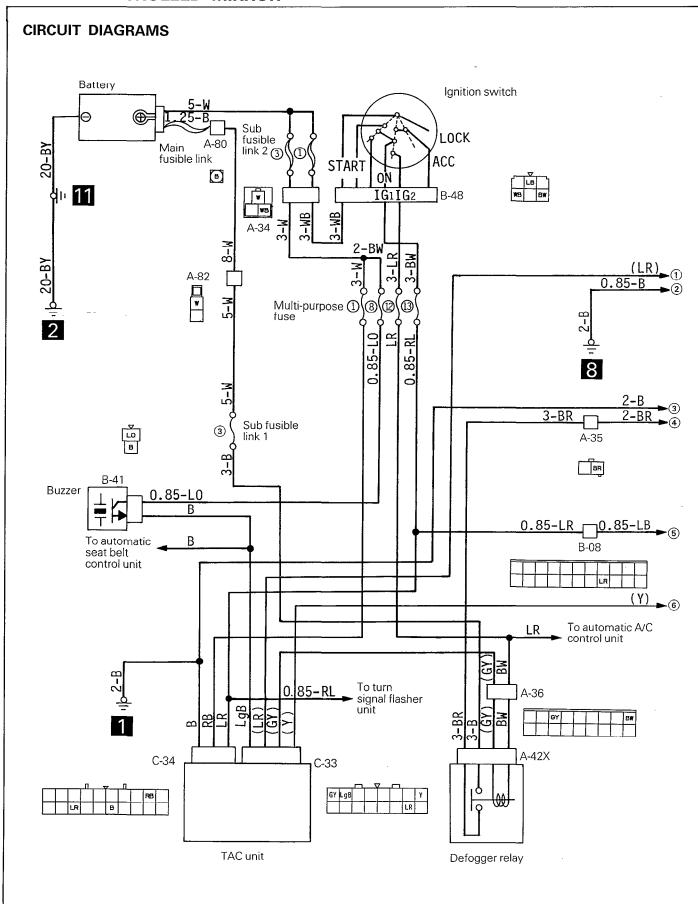
CENTRAL DOOR LOCKING SYSTEM



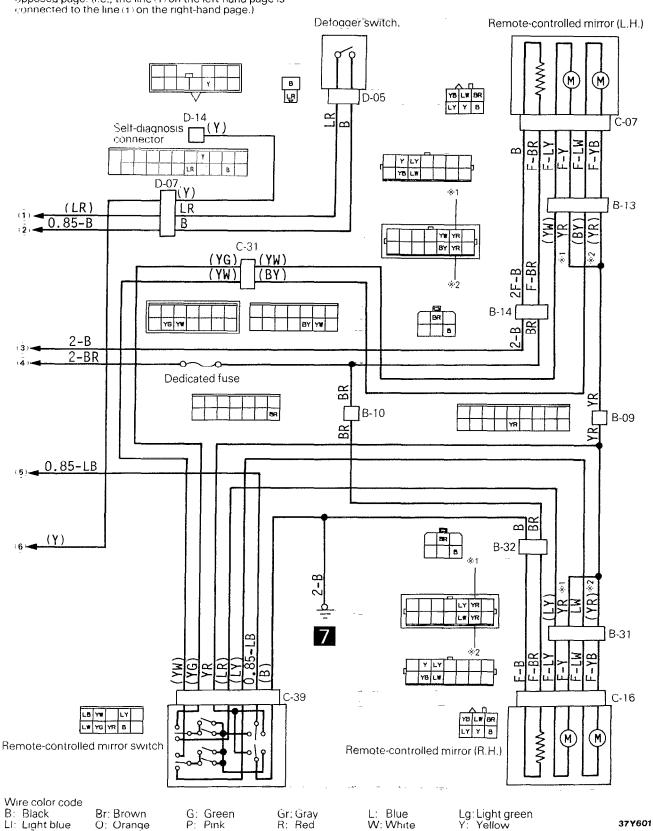
OPERATION AND TROUBLESHOOTING HINTS

Refer to GROUP 8 ELECTRICAL — ETACS for operation and troubleshooting hints for the central door locking system.

REMOTE-CONTROLLED MIRROR



(1) For details of grounding points (ex.: 2), refer to page 8-10.
(2) The circuit lines ended with number 1, 2 and so on are in continuation to those with the corresponding number on opposed page. (i.e., the line (1) on the left-hand page is connected to the line (1) on the right-hand page.)



LI: Light blue

O: Orange

Pınk

W: White

OPERATION

- When the remote-controlled mirror switch is operated while the ignition key is in "ON" position, current flows through fuse No. 13, remote-controlled mirror switch, remotecontrolled mirror, remote-controlled mirror switch, and ground, causing the mirror to move.
- For operation of the heated remote-controlled mirrors, refer to the "DEFOGGER TIMER" section in GROUP 8 ELECTRICAL — ETACS.

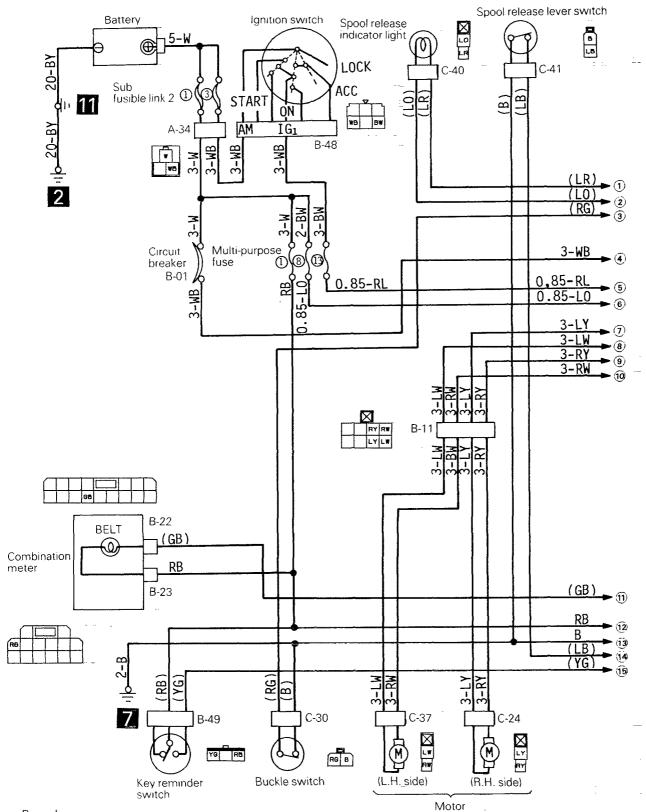
TROUBLESHOOTING HINTS

Neither right nor left mirror operates.

- 1. Also turn signal lights do not operate either.
 - Check the fuse.
- 2. Check the remote-controlled mirror switch.
 - Check the remote-controlled mirror switch.

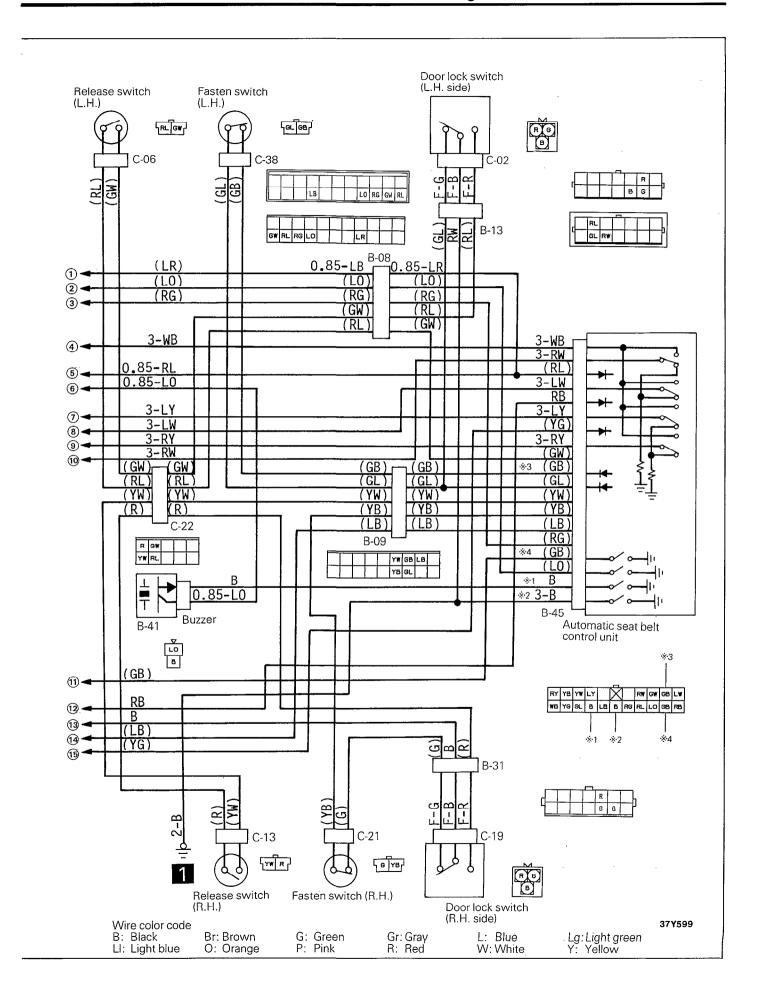
AUTOMATIC SEAT BELT

CIRCUIT DIAGRAMS



Remarks

The circuit lines ended with number (1), (2) and so on are in continuation to those with the corresponding number on opposed page. (i.e., the line (1) on the left-hand page is connected to the line (1) on the right-hand page.)
For details of grounding points (ex.: 21), refer to page 8-10.

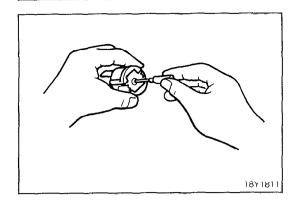


Trouble symptom	Cause	Check method	Remedy
The "fasten seat belt" indicator light and spool release indicator light neither go on nor blink,	Damaged or disconnected wiring of spool release indicator light and spool release lever switch circuit	Check by using check chart No. 5 (P.23-25)	Repair the harness or replace the spool release indicator light or spool release lever switch
and the buzzer does not sound when the ignition switch is turned from "LOCK" or "ACC" to "ON" while the spool	Damaged or disconnected wiring of ignition switch input circuit	Check by using check chart No. 2 (P.23-21)	Repair the harness or replace the ignition switch
release lever remains in its "release" position (spool release switch is turned	Damaged or disconnected wiring of ECU power supply and ground circuit	Check by using check chart No. 1 (P.23-20)	Repair the harness or replace the fuse No. 1
off).	Malfunction of ECU	-	Replace the ECU
The buzzer does not sound when the L.H. door is opened even with the key inserted in the cylinder (key-reminder switch is turned on).	Damaged or disconnected wiring of key-reminder switch input circuit	Check by using check chart No. 7 (P.23-27)	Repair the harness or replace the key-reminder switch
	Damaged or disconnected wiring of L.H. door lock switch input circuit	Check by using check chart No. 3 (P. <u>2</u> 3-22)	Repair the harness or replace the door lock switch
	Damaged or disconnected wiring of buzzer circuit	Check by using check chart No. 8 (P.23-28)	Repair the harness or replace the buzzer
	Damaged or disconnected wiring of ECU power supply and ground circuit	Check by using check chart No. 1 (P.23-20)	Repair the harness or replace the fuse No. 1
	Malfunction of ECU	-	Replace the ECU
Either the L.H. or R.H. system does not operate.	Damaged or disconnected wiring of door lock switch input circuit	Check by using check chart No. 3 (P.23-22)	Repair the harness or replace the door lock switch, fasten switch or release switch
	Damaged or disconnected wiring of motor drive input circuit	Check by using check chart No. 4 (P.23-24)	Repair the harness or replace the motor
	Malfunction of ECU	_	Replace the ECU
	Foreign matter caught in slide rail Foreign matter in tape guide	_	Remove foreign matter
	Tape guide locally deformed		Correct deformation

ECU: Electronic Control Unit

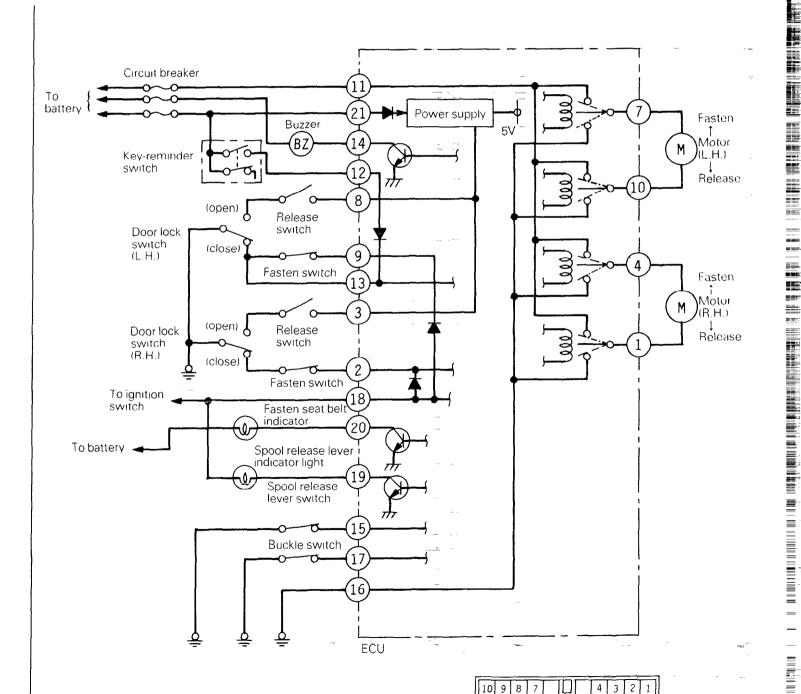
Trouble symptom	Cause	Check method	Remedy
The system performs fastening operations but not unfastening operations, or vice-versa.	Damaged or disconnected wiring of door lock switch input circuit	Check by using check chart No. 3 (P.23-22)	Repair the harness or replace the door lock switch, fasten switch or release switch
	Damaged or disconnected wiring of motor drive input circuit	Check by using check chart No. 4 (P.23-24)	Repair the harness or replace the motor
	Malfunction of ECU	_	Replace the ECU
Even after turning the ignition switch from "LOCK" or "ACC" to "ON" without fastening the L.H. seat lap belt, neither the "fasten seat belt" indicator light goes on nor does the buzzer sound.	Damaged or disconnected wiring of "fasten seat belt" indicator light and buckle switch input circuit	Check by using check chart No. 6 (P.23-26)	Repair the harness or replace the indicator light and buckle switch
	Damaged or disconnected wiring of buzzer circuit	Check by using check chart No. 8 (P.23-28)	Repair the harness or replace the buzzer
	Damaged or disconnected wiring of ECU power supply and ground circuit	Check by using check chart No. 1 (P.23-20)	Repair the harness or replace the fuse No. 1
	Malfunction of ECU	- -	Replace the ECU
The "fasten seat belt" indicator and the spool release indicator light neither go on nor blink, and the buzzer does not sound	Damaged or disconnected wiring of "fasten seat belt" indicator light and buckle switch input circuit	Check by using check chart No. 6 (P.23-26)	Repair the harness or replace the indicator light and buckle switch
when the ignition switch is turned from "LOCK" or "ACC" to "ON" while the spool release lever remains in its "release" position (spool release switch is turned off).	Damaged or disconnected wiring of buzzer circuit	Check by using check chart No. 8 (P.23-28)	Repair the harness or replace the buzzer

ECU: Electronic Control Unit



CIRCUIT BREAKER RESETTING

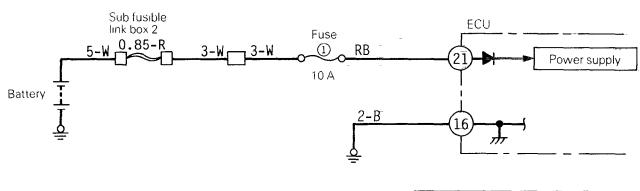
- (1) Insert wire in the reset hole and push lightly.
- (2) Check the circuit breaker for continuity across the circuit breaker terminals. If there is no continuity, replace the circuit breaker.
- (3) If the circuit breaker blows again, the circuit is shorted.



CHECKING CIRCUIT Index of Check Chart

Chart No.	Circuit name	Page No.
1	ECU power supply and ground circuit	23-20
2	Ignition switch (ON) input circuit	23-21
3	Door lock switch, fasten switch and release switch input circuit	23-22
4	Motor power supply and drive circuit	23-24
5	Spool release lever switch and indicator light circuit	23-25
6	Buckle switch and "fasten seat belt" indicator light circuit	23-26
7	Key-reminder switch input circuit	23-27
8	Buzzer circuit	23-28

1. ECU Power Supply and Ground Circuit



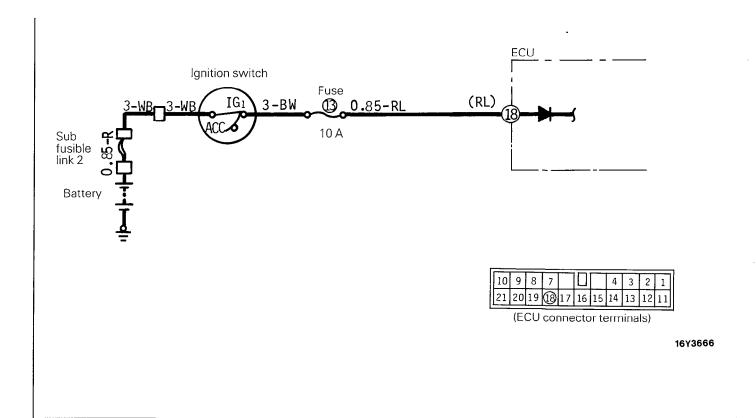
(ECU connector terminals)

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Step	Check method		Judgement		C	Dansadi
Steb	Condition	Check object	Normal	Malfunction	- Cause	Remedy
1		ECU terminal voltage	Battery voltage	0 V	Fuse ① blown or disconnected	Replace the fuse
		(21 – Ground)			Harness damaged or disconnected	Repair the harness
2	Disconnect ECU's harness connector	Continuity of ECU ground circuit (16 – Ground)	Continuity	∞ ()	Harness damaged or disconnected	Repair the harness

ECU: Electronic Control Unit

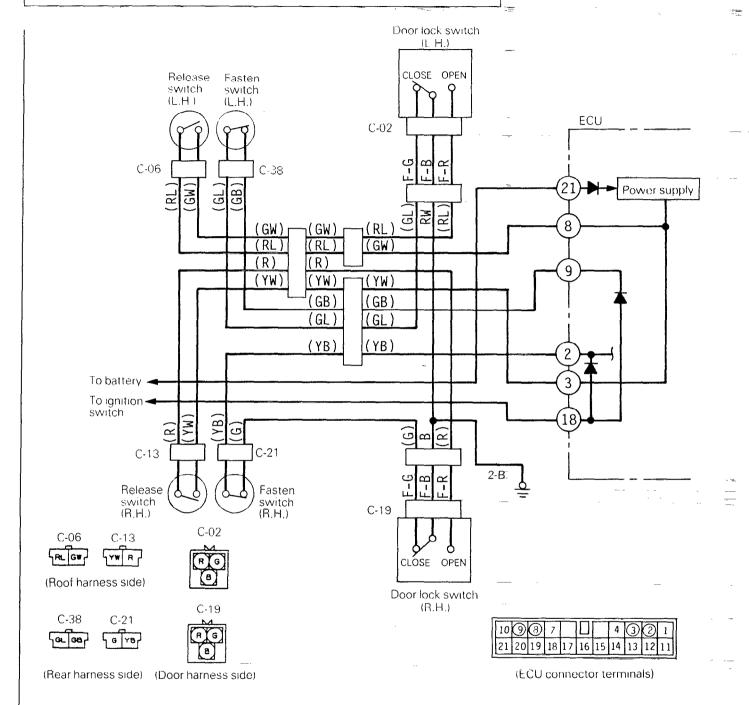
2. Ignition Switch (ON) Input Circuit



Cton	Check	method	Jud	gement	Course	Romadu
Step	Condition	Check object	Normal	Malfunction	Cause	Remedy
2	IG SW: ON	ECU terminal voltage	Battery voltage	0 V	Fuse (3) blown or disconnected	Repair the harness
		(18 – Ground)			Harness damaged or disconnected	Repair the harness

IG SW: Ignition Switch ECU: Electronic Control Unit

3. Door Lock Switch, Fasten and Release Switch Input Circuit

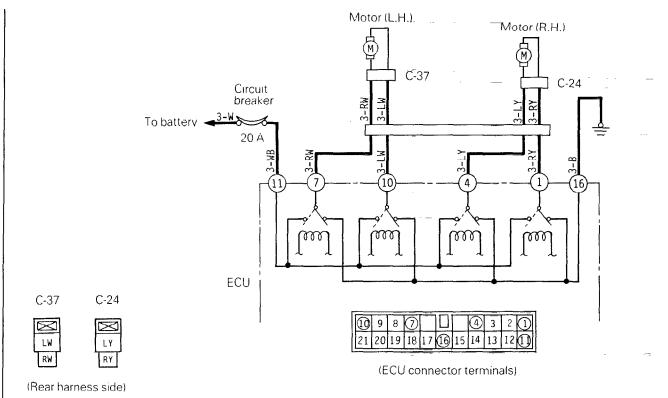


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Chaus	Check	method	Judgement		Causa	Damada
Step	Condition	Check object	Normal	Malfunction	Cause	Remedy
1	C-02 and C-19 connectors: Disconnected Door lock switch: CLOSE ↔ OPEN	Continuity be- tween C-02 and C-19 connector terminals (B – G), (B – R)	$\Omega \propto \leftrightarrow \Omega$	Remains $0~\Omega$ or $\infty~\Omega$	Door lock switch damaged	Replace the door lock switch (Refer to P.23-71.)
2	C-21 and C-38 connectors: Disconnected Fasten switch: ON ↔ OFF	Continuity be- tween C-38 con- nector terminals (GL – GB) Continuity be- tween C-21 con- nector terminals (YB – G)	$0 \Omega \leftrightarrow \infty \Omega$	Remains $0~\Omega$ or $\infty~\Omega$	Fasten switch damaged	Replace the fasten switch (Refer to P.23-119.)
3	C-06 and C-13 connectors: Disconnected Release switch: ON ↔ OFF	Continuity be- tween C-06 con- nector terminals (RL – GW) Continuity be- tween C-13 con- nector terminals (R – YW)	$0 \Omega \leftrightarrow \infty \Omega$	Remains 0 Ω or ∞ Ω	Release switch damaged	Replace the release switch (Refer to P.23-119.)
4	C-02 and C-19 connectors: Connected	Continuity between ECU	$\Omega \hookrightarrow \Omega$	Remains ∞ Ω	Harness damaged or disconnected	Repair the harness
	C-38 and C-21 connectors: Connected ECU connector: Disconnected	terminals and left and right door lock switch Left door lock switch (9 – Ground) Right door lock switch (2 – Ground)		Remains 0 Ω	Harness short- circuited	
5	C-06 and C-13 connectors:	Continuity between ECU	$0 \Omega \leftrightarrow \infty \Omega$	Remains ∞ Ω	Harness damaged or disconnected	Repair the harness
	Connected C-02 and C-19 connectors: Connected ECU connector: Disconnected Door lock switch: OPEN Release switch: ON ↔ OFF	terminals and left and right door lock switch Left door lock switch (8 – Ground) Right door lock switch (3 – Ground)		Remains 0 Ω	Harness short- circuited	

ECU: Electronic Control Unit

4. Motor Power-supply and Drive Circuit

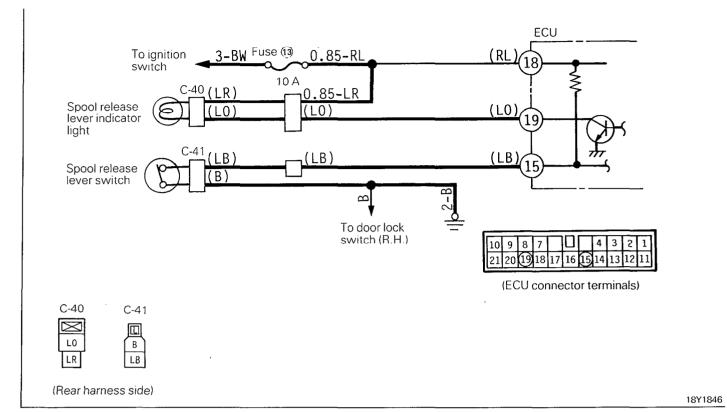


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Chair	Check	method	Judgement		Course	
Step	Condition	Check object	Normal	Malfunction	Cause	Remedy
1	C-37 and C-24 connectors: Disconnected	Continuity be- tween C-37 and C-24 connector terminals A (LW – RW) B (LY – RY)	ΟΩ	Remains 0 Ω or ∞ Ω	Motor damaged	Replace the motor (Refer to P.23-119.
2	C-37 and C-24 connectors:	Continuity between ECU	ECU	Remaīns ∞ Ω	Harness damaged or disconnected	Repair the harness
	Connected ECU connector: Disconnected (7 – 10) R.H. motor side (4 – 1)	Remains 0 Ω	Remains 0 Ω	Harness short- circuited		
3	C-37 and C-24 connectors: Connected ECU connector:	ECU connector terminal voltage (11 – Ground)	Battery voltage	0 V	Circuit breaker open	Reset or replace the circuit breaker (Refer to P.23-18, 120.)
	Disconnected				Harness damaged or disconnected	Repair the harness
4	connectors: tween ECU ter-	tween ECU ter-	0 Ω	Remains ∞ Ω	Harness damaged or disconnected	Repair the harness
ECU co	ECU connector: Disconnected			Remains 0 Ω	Harness short- circuited	

ECU: Electronic Control Unit

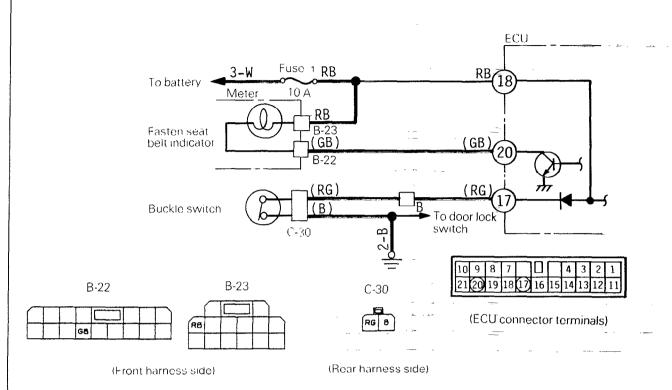
5. Spool Release Lever Switch and Indicator Light Circuit



C4	Check	k method	Jud	dgement	0	Remedy
Step Condit	Condition	Check object	Normal	Malfunction	— Cause	
1	C-41 connector: Disconnected	Continuity be- tween C-41 con- nector terminals (LB – B)	$0 \ \Omega \leftrightarrow \infty \ \Omega$	Remains 0Ω or $\infty \Omega$	Spool release switch damaged	Replace the spool release lever switch (Refer to P.23-119.)
2	C-40 connector: Disconnected	Continuity be- tween C-40 con- nector terminals (LR – LO)	ΟΩ	Remains ∞ Ω	Spool release lever indicator light damaged	Replace the spool release lever indicator light
3	0 11 001111001011	Continuity between ECU	$0 \Omega \leftrightarrow \infty \Omega$	Remains ∞ Ω	Harness damaged or disconnected	Repair the harness
	Spool release switch: ON ↔ OFF ECU connector: Disconnected	connector terminal (15 – Ground)		Remains 0 Ω	Harness short- circuited	
4	C-40 connector: Connected	ECU connector terminal voltage	Battery voltage	0 V	Fuse (3) blown or disconnected	Replace the fuse
	IG SW: ON ECU connector: Disconnected (19 – Ground)				Harness damaged, disconnected or short-circuited	Repair the harness

IG SW: Ignition Switch ECU: Electronic Control Unit

6. Buckle Switch and Fasten Seat Belt Indicator Light Circuit

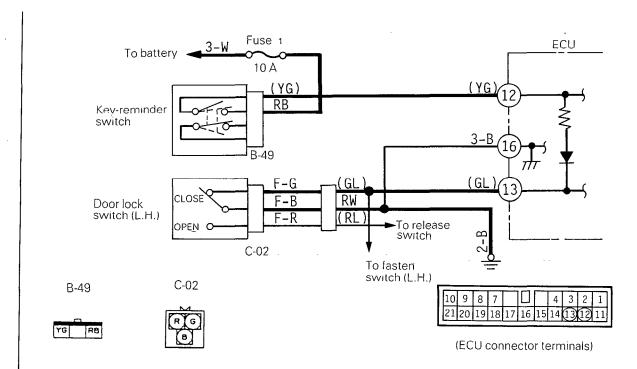


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Step	Check	method	Judo	gement	Cause	Remedy
Steb	Condition	Check object	Normal	Malfunction	Cause	·
1	C-30 connector: Disconnected Buckle switch. ON ↔ OFF	Continuity be- tween C-30 con- nector terminals (RG – B)	$0 \Omega \leftrightarrow \infty \Omega$	Remains 0 Ω or ∞ Ω	Buckle switch damaged	Replace the buckle switch (Refer to P.23-119.)
2	B-23 and B-22 connectors: Disconnected	Continuity be- tween B-23 and B-22 connector terminals (RB – GB)	ΟΩ	Remains ∞ Ω	"Fasten seat belt" indicator light damaged	Replace the "fasten seat belt" indicator light
3	C-30 connector: Connected	Continuity between ECU	$0 \Omega \leftrightarrow \infty \Omega$	Remāins 0 Ω	Harness damaged or disconnected	Repair the harness
	ECU connector: Disconnected Buckle switch: ON ↔ OFF	connector terminals (17 – Ground)		Remāins ∞ Ω	Harness short- circuited	
4	B-23 and B-22 connectors:	ECU connector terminal voltage	Battery voltage	0 V	Fuse ① blown or disconnected	Replace the fuse
	Connected ECU connector: Disconnected IG SW: ON	(20 – Ground)			Harness damaged, or short-circuited	Repair the harness

IG SW: Ignition Switch ECU: Electronic Control Unit

7. Key-reminder Switch Input Circuit



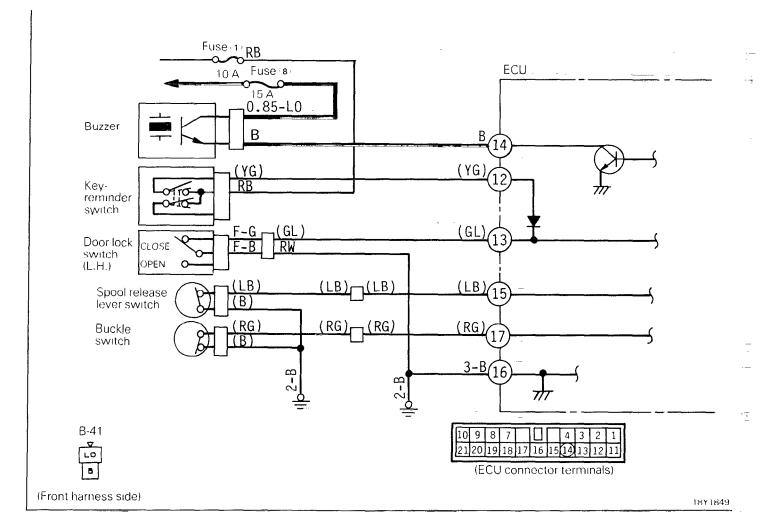
(Front harness side) (Door harness side)

18Y1848

Cton	Check	method	Jud	Judgement		Damadu
Step	Condition	Check object	Normal	Malfunction	Cause	Remedy
1	B-49 connector: Disconnected Key-reminder switch: ON (Key) ↔ OFF (No key)	Continuity be- tween B-49 con- nector terminals (YG – RB)	$0 \Omega \leftrightarrow \infty \Omega$	Remains $0~\Omega~{\rm or} \propto \Omega$	Key-reminder switch damaged	Replace the key- reminder switch (Refer to P.8-156.)
2	C-02 connector: Disconnected Door lock switch: CLOSE ↔ OPEN	Continuity be- tween C-02 con- nector terminals (G – B), (B – R)	$0 \Omega \leftrightarrow \infty \Omega$	Remains 0Ω or $\infty \Omega$	Door lock switch damaged	Replace the door lock switch (Refer to P.23-71.)
3	B-49 connector:	ECU connector	Battery voltage	0 V	Fuse 1 blown	Replace the fuse
	Connected ECU connector: Disconnected IG SW: ON	terminal voltage (12 – Ground)			Harness damaged, disconnected or short-circuited	Repair the harness
4	C-02 connector: Connected	Continuity be- tween ECU con- nector terminals	$\Omega \leftrightarrow \infty \Omega$	Remains ∞ Ω	Harness damaged or disconnected	Repair the harness
	ECU connector: Disconnected Door lock switch: CLOSE ↔ OPEN	(13 – Ground)		Remains 0 Ω	Harness short- circuited	

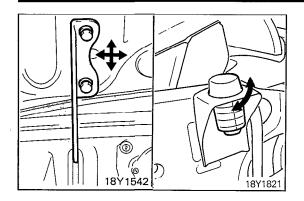
IG SW: Ignition Switch ECU: Electronic Control Unit

8. Buzzer Circuit



Step	Check method		Judgement		Cause	D:- 1
steb [Condition	Check object	Normal	Malfunction	Cause	Remedy
1	Separate the B-41 connector	B-41 connector (front harness	Battery voltage	0 V	Fuse (8) blown or disconnected	Replace the fuse
	side) termir voltage (LO – Grour				Harness damaged or disconnected	Repair the harness
2	Connect the B-41 connector Separate the ECU's harness connector	ECU harness side connector ter- minal voltage (14 – Ground)	Battery voltage	0 V = ==	Damaged or disconnected wiring of harness between B-41 con- nector and ECU	Repair the harness
					Malfunction of the buzzer	Check the buzzer (Refer to P.23-123.)

ECU: Electronic Control Unit

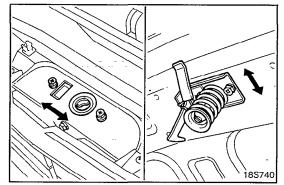


SERVICE ADJUSTMENT PROCEDURES

N23FAAI

HOOD FIT ADJUSTMENT

- 1. Adjust the longitudinal and lateral positions of the hood by utilizing the oblong holes in the hinge.
- 2. Adjust the vertical position of the hood by adjusting the hood bumper either up or down.

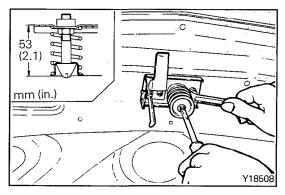


3. Adjust the position of the hood lock so that it is in proper alignment with the hook.

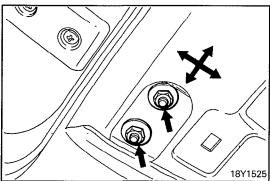
NOTE

Apply specified grease to the sliding part, the rotating part and the spring of the hood lock.

Specified grease: MOPAR Multi-purpose grease Part No. 2932524 or equivalent



4. Adjust the length of the hook bolt.



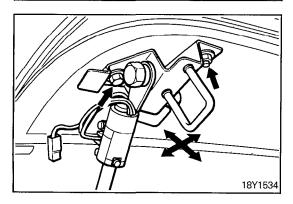
REAR HATCH FIT ADJUSTMENT

N23FLAA

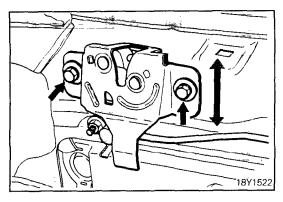
- 1. Loosen the hatch hinge mounting nuts on the body side.
- 2. Adjust the hatch by moving it so that the clearance is equal on all sides.

Caution

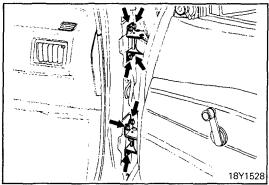
Do not loosen the hatch hinge mounting nuts more than two full turns.

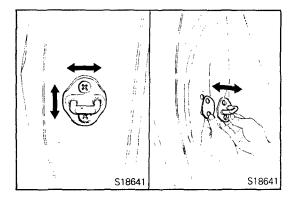


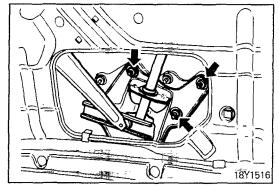
3. Adjust the position of the hatch striker so that it matches that of the hatch latch.

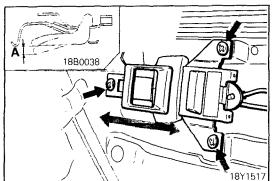


4. Adjust the position of the hatch latch so that it matches that of the hatch striker.









DOOR FIT ADJUSTMENT

N23FEAD

- 1. Loosen the hinge mounting bolts on the body side, and then move the door upward, downward, forward and backward to adjust it so that the clearance around it is equal.
- 2. Loosen the hinge mounting bolts of the door side, and then move the door to the left and right to adjust the surfaces.

Caution

Attach protection tape to the fender edges near the place where the hinge is installed.

- 3. Adjust fit between the front fender and front door panel by loosening the door side attaching bolts and increasing or decreasing shims.
- 4. Adjust engagement between the striker and door latch by increasing or decreasing striker shims and/or sliding the striker vertically or horizontally.

DOOR GLASS ADJUSTMENT

N23FFAI

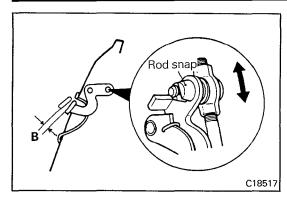
- 1. Remove the door trim and waterproof film. (Refer to P.23-64.)
- 2. Raise the door glass fully, and then adjust the following items so that the door glass fits evenly into the door glass channel all the way around:
 - (1) Loosen the door glass mounting nuts, and then adjust the door glass by moving it forward, backward, upward, downward, and to the left and right.
 - (2) Adjust the tilt of the door glass by tightening the door glass mounting nuts.

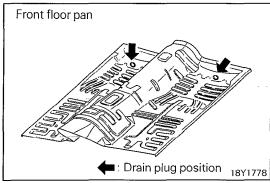
INSIDE HANDLE PLAY ADJUSTMENT

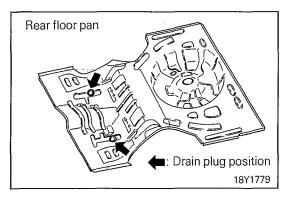
N23FGAD

- 1. Remove the door trim and waterproof film.
- 2. Move the mounting position of the inside handle longitudinally in order to adjust the play of the inside handle.

Standard value (A): 4 - 10 mm (.16 - .39 in.)







OUTSIDE HANDLE ADJUSTMENT

N23FHAD

- 1. Remove the door trim and waterproof film.
- 2. Remove the outside handle rod from the outside handle, and then adjust the play of the outside handle by turning the top of the rod.

Standard value (B): 3 - 8 mm (.12 - .31 in.)

NOTE

Be sure to install new rod snap.

FLOOR PAN INSPECTION

N23FIAA

A common result of bodyleaks is a soaked floor mat pad or carpet, and it's not unusual to find that the water is getting in through the floor pan to some other low point in the body. It is possible however, for water to enter higher up and run downward to soak the mat.

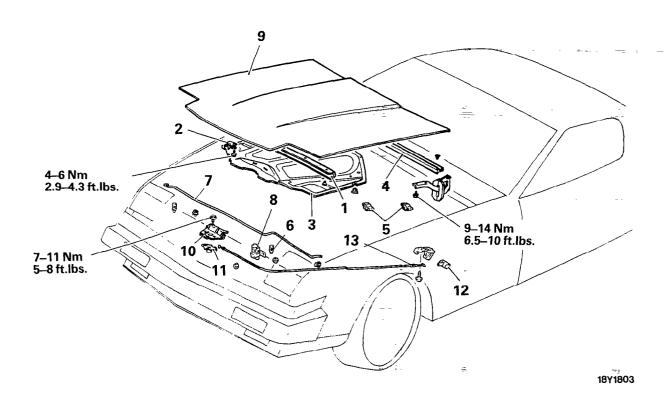
Since a soaked mat should be removed for drying, it's a good way to start your check. Of course, mat removal means you'll have to take off door sill plates and pull out seats or seat cushion. But, this gives you a clear field for action so you can check body seam sealing and the plugs in the floor pan. It's usually not practical to water test for floor pan or wheelhousing leaks unless a special underbody water spray arrangement is available. As an alternate, the best way to locate these leak points is to look for rusty seam edges or other traces of leaks after the mats and cushions are removed. Traces of mud are an indication that the water is coming in from below.

HOOD N23HAAH

REMOVAL AND INSTALLATION

Post-installation Operation

Adjusting Hood Fits (Refer to P.23-29.)



Hood panel removal steps

- 1. Hood weatherstrip, front
- 2. Hood hook
- 3. Heat protector
- 4. Hood weatherstrip, rear
- 5. Hood damper
- 6. Hood bumper
- 7. Hood support rod
- 8. Hood switch
- 9. Hood panel

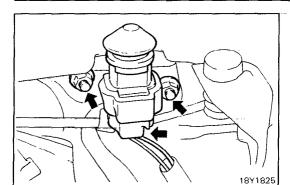
Release cable removal steps

- 10. Hood lock plate
- 11. Hood lock
- 12. Hood release handle
- 13. Release cable

NOTE

- Reverse the removal procedures to reinstall.

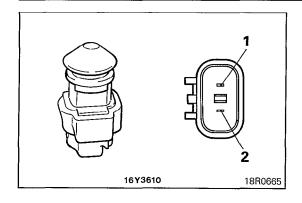
 Refer to "Service Points of Removal".



SERVICE POINT OF REMOVAL

8. REMOVAL OF HOOD SWITCH

Remove the hood switch as shown.



INSPECTIONHOOD SWITCH

- (1) Disconnect the hood switch connector.
- (2) Check the continuity between the terminals.

Terminal	1	2
Hood switch unpressed	0-	
Hood switch depressed		

NOTE

O–O indicates that there is continuity between the terminals.

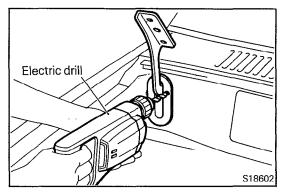
HOOD HINGE REPLACEMENT

When replacing the hood hinges, use a hood hinge kit by the following procedure:

(1) Remove the hood from the hood hinges.

Caution

Protect the front deck with a cloth so that the hood protrusions do not damage it.



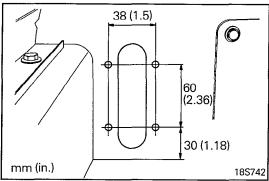
(2) Remove the hood hinges by breaking the spot welds fastening the hinges to the front deck by using a drill 8 mm (.32 in.) in diameter.

Caution

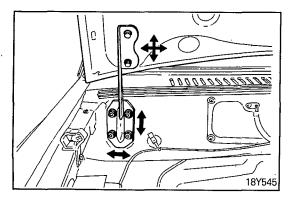
Be careful not to drill holes in the deck panel.

NOTE

After removing the hinges, make sure that the hinge mounting surfaces on the front deck are flat and level.



- (3) Mark the hinge mounting positions on the front deck by using a punch.
- (4) Drill the holes by using a drill 8 mm (.32 in.) in diameter.



- (5) Remove the access hole cover together with the boost sensor and the wiper motor. (Refer to GROUP 8 ELECTRIC-AL Windshield Wipers and Washer.)
- (6) Insert the brackets from the inside of the front deck, fit the hinges, and tighten the nuts temporarily.

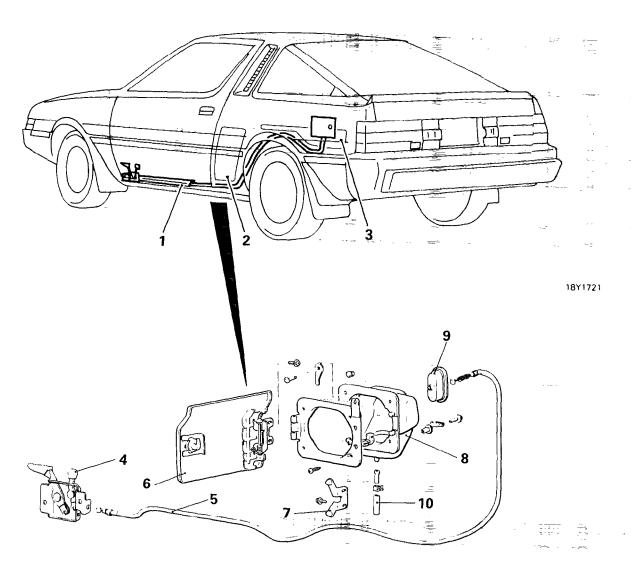
NOTE

The work of installing hinges will be facilitated if adhesive is applied to the surfaces of the brackets in contact with the front deck.

- (7) Install the hood.
- (8) Adjust the hood alignment.

FUEL FILLER DOOR REMOVAL AND INSTALLATION

N23JAAJ



18Y1844

Removal steps

- Scuff plate
 Quarter trim
- 3. Trunk room side trim
- 4. Lock release panel

 - 5. Lock release cable6. Filler door panel
 - 7. Stop assembly
 - 8. Filler neck cover
 - 9. Grommet
 - 10. Soft vinyl tube

- Reverse the removal procedures to reinstall.
- Refer to "Service Points of Removal".
 Refer to "Service Points of Installation".

SERVICE POINTS OF REMOVAL

1. REMOVAL OF SCUFF PLATE / 2. QUARTER TRIM / 3. TRUNK ROOM SIDE TRIM

Refer to P.23-95.

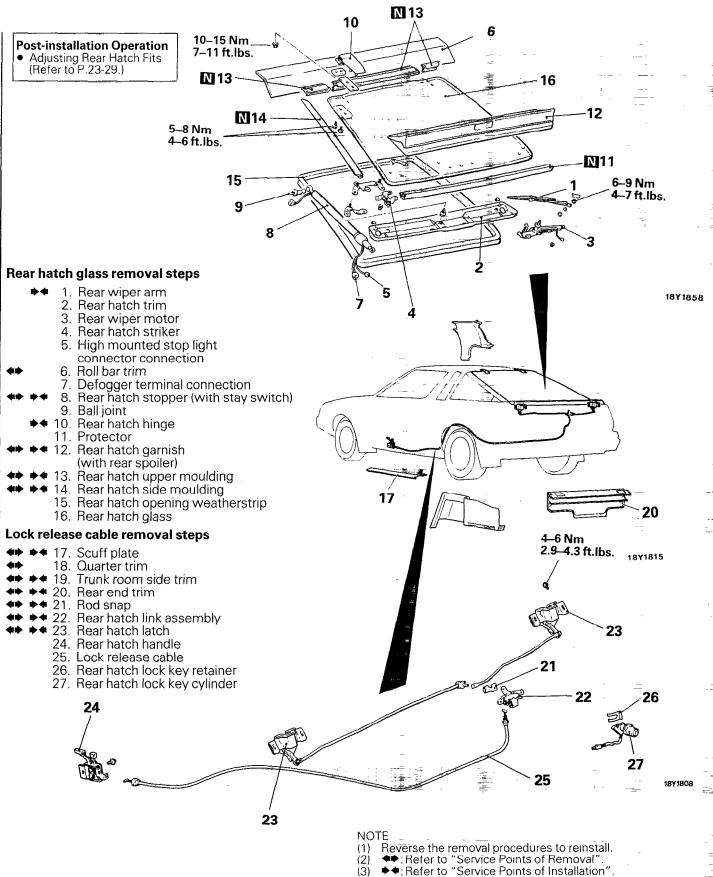
SERVICE POINTS OF INSTALLATION

3. INSTALLATION OF TRUNK ROOM SIDE TRIM / 1. SCUFF PLATE

Refer to P.23-95.

REAR HATCH N230AAG

REMOVAL AND INSTALLATION

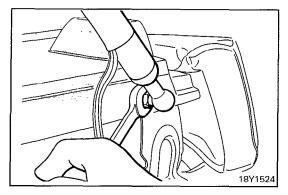


N: Non-reusuable parts.

SERVICE POINTS OF REMOVAL

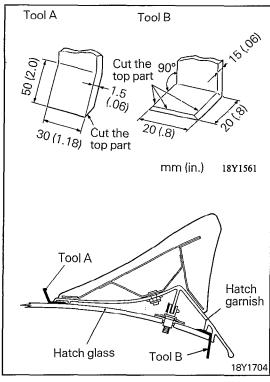
6. REMOVAL OF ROLL BAR TRIM

Refer to P.23-95.



8. REMOVAL OF REAR HATCH STOPPER (WITH STAY SWITCH)

(1) Remove the rear hatch stopper from the body.



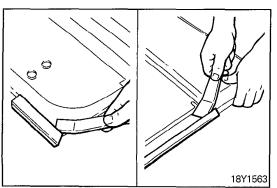
12. REMOVAL OF REAR HATCH GARNISH (WITH REAR SPOILER)

Align the tools shown in the illustration along the glass, press them in with a plastic hammer or similar tool, and cut the adhesive.

Remove the rear hatch garnish.

Caution

Remove foreign material from the gap between the glass and the garnish with compressed air. Be careful not to scratch the glass.

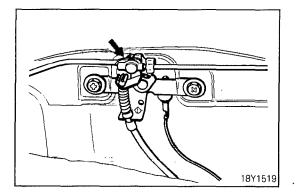


13. REMOVAL OF REAR HATCH UPPER MOULING / 14. REAR HATCH SIDE MOULDING

Remove the rear hatch mouldings while using tool A to cut the adhesive.

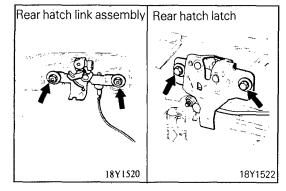
17. REMOVAL OF SCUFF PLATE / 18. QUARTER TRIM / 19. TRUNK ROOM SIDE TRIM / 20. REAR END TRIM

Refer to P.23-95.



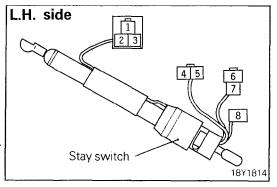
21. REMOVAL OF ROD SNAP

- (1) Disconnect the rod snap and the left and right rods from the rear hatch link assembly.
- (2) Disconnect the lock release cable from the rear hatch ___ link assembly.



22. REMOVAL OF REAR HATCH LINK ASSEMBLY / 23. REAR HATCH LATCH

- (1) Remove the rear hatch link assembly.
- (2) Remove the left and right rear hatch latches together with the rod.

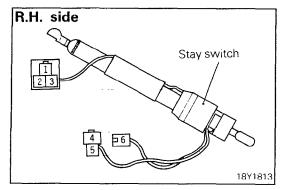


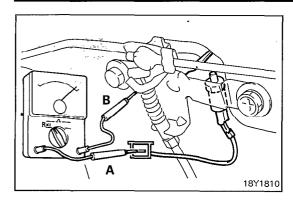
INSPECTION STAY SWITCH

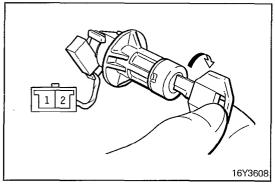
(1) Disconnect the stay switch connector. Then, with the rear hatch closed (with stay switch turned ON), check the stay switch for continuity across terminals.

Terminal	1	2	3	4	5	6	7	8
Stay switch (L.H. side)	999			\cap			9	9
		0	0-		0	- 0)	

Termiñal	1	2	3	4	5	6
Stay switch [(R.H. side)	0-	0—	-	— 0	- 0	0







REAR HATCH SWITCH

(1) Unlock the rear hatch link.

(2) Check the continuity between the terminals.

Terminal .	А	В
Rear hatch link locked		
Rear hatch link unlocked	0-	

NOTE

O—O indicates that there is continuity between the terminals.

REAR HATCH KEY CYLINDER UNLOCK SWITCH

- (1) Jurn the key to unlock the lock cylinder.
- (2) Check the continuity between the terminals.

Terminal	1	2
Rear hatch lock cylinder locked		
Rear hatch lock cylinder unlocked	0	0

NOTE

O-O indicates that there is continuity between the terminals.

- Check the rear hatch hinge for cracks and damage.
- Check the rear hatch stopper for deterioration.
- Check the rear hatch link assembly for wear, damage or malfunction.
- Check the rear hatch latch for wear, damage or malfunction.
- Check the rear hatch striker for wear.
- Check the rear hatch opening weatherstrip for cracks, damage or deformation.

SERVICE POINTS OF INSTALLATION

23. INSTALLATION OF REAR HATCH LATCH / 22. REAR HATCH LINK ASSEMBLY / 21. ROD SNAP

(1) Install the rear hatch latch.

NOTE

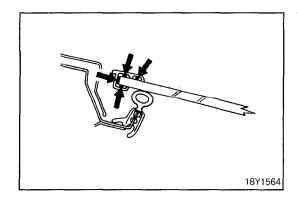
Be sure the rear hatch latch is unlocked. Install the rear hatch link assembly.

- (2) Install the left and right rods and secure them with the clip.
- (3) Apply the specified grease to the moving parts of the rear hatch link assembly and rear hatch latch assembly.

Specified grease: MOPAR Multi-purpose grease Part No. 2932524 or equivalent

20. INSTALLATION OF REAR END TRIM / 19. TRUNK ROOM SIDE TRIM / 17. SCUFF PLATE

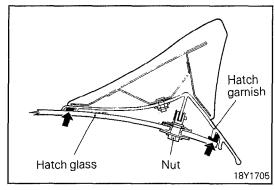
Refer to P.23-95.



14. APPLICATION OF SEALANT TO REAR HATCH SIDE MOULDING / 13. REAR HATCH UPPER MOULDING

Install the rear hatch mouldings after applying the specified sealant (from the kit) to the entire circumference at the positions indicated in the illustration.

Specified sealant: Urethane adhesive (Essex Urethane "E" ... Auto Glass Sealant)

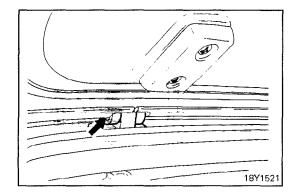


12. APPLICATION OF SEALANT TO REAR HATCH GARNISH (WITH REAR SPOILER)

(1) Apply the specified sealant (from the kit) to the entire circumference of the rear hatch garnish in the positions shown in the illustration.

Specified sealant: Urethane adhesive (Essex Urethane "E" ... Auto Glass Sealant)

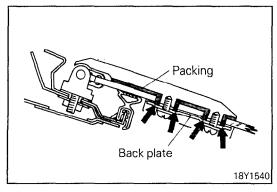
(2) Align the mounting position of the rear hatch garnish so that the left and right clearances between the garnish and the rear hatch glass, and between the garnish and the rear hatch side moulding, are equal, and tighten the nuts.



10. APPLICATION OF GREASE TO REAR HATCH HINGE

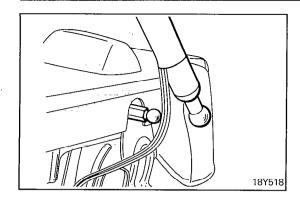
Apply the specified grease to the rear hatch hinge.

Specified grease: MOPAR Multi-purpose grease Part No. 2932524 or equivalent



Caution

When installing the hatch glass, be sure that the rib of the packing projects from the glass surface so that the back plate does not contact the glass directly.



8. INSTALLATION OF REAR HATCH STOPPER (WITH STAY SWITCH)

- (1) Install the ball joint on the body.
- (2) Install the stopper on the rear hatch, and then push the bottom tip of the stopper into the ball joint.

Caution

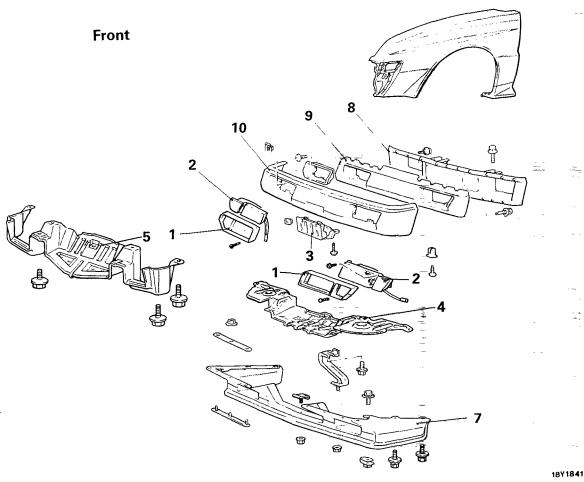
- Never attempt to disassemble the rear hatch stopper or dispose of it in a fire.
 When disposing of the rear hatch stopper, first drill
- 2. When disposing of the rear hatch stopper, first drill a hole at the label position to allow the gas inside it to escape.

1. INSTALLATION OF REAR WIPER ARM

Refer to GROUP 8 ELECTRICAL – Rear Window Wiper and Washer.

BUMPER N23ZAAM

REMOVAL AND INSTALLATION



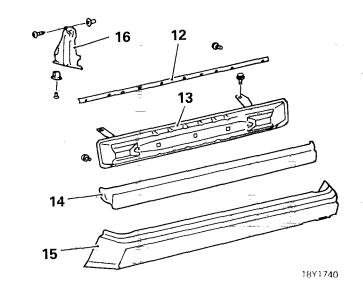
Rear

Front bumper removal steps

- 1. Front combination light bezel
- 2. Front combination light
- 3. Licence plate bracket
- 4. Air guide panel (Vehicles
- with a manual transmission)
 5. Air guide panel (Vehicles with an automatic transmission)
- 6. Front bumper assembly with front skirt panel (Parts 7 through 10)
- 7. Front skirt panel
- 8. Bumper reinforcement
- 9. Bumper core
- 10. Bumper face

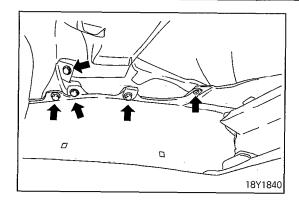
Rear bumper removal steps

- 11. Rear bumper assembly (Parts 12 through 15)
 - 12. Bumper plate
 - 13. Bumper reinforcement
 - 14. Bumper core
 - 15. Bumper face
 - 16. Bumper guide plate

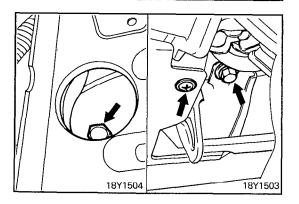


NOTE

- (1) Reverse the removal procedures to reinstall.
 - ◆◆: Refer to "Service Points of Removal".



18Y1545



SERVICE POINTS OF REMOVAL

6. REMOVAL OF FRONT BUMPER ASSEMBLY WITH FRONT SKIRT PANEL

(1) Remove the bolts (indicated by arrows) which attach the front skirt panel to the fender.

(2) Remove the stay bolts.

11. REMOVAL OF REAR BUMPER ASSEMBLY

Remove stay bolts from inside the trunk and from the rear end crossmember.

URETHANE BUMPER REPAIR REPAIRABLE RANGE

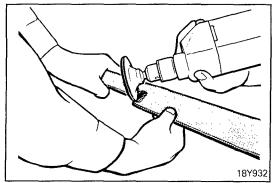
HOLES

The damaged area must be shaped to a round or oval hole so that it can be easily filled with the putty; however, the diameter or length of the hole must be within 50 mm (2.0 in.).

CRACKING - SPLITTING

If the two sides of the crack have not separated, the length must be within 200 mm (8.0 in.).

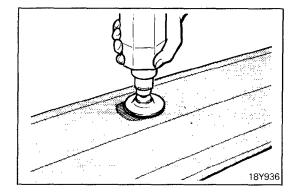
If one end of the crack extends to the edge of the bumper, not only must the length of the crack be within 200 mm (8.0 in.), but also the length of the crack must be less than one-half of the bumper in the damaged area.



URETHANE BUMPER REPAIR PROCEDURE

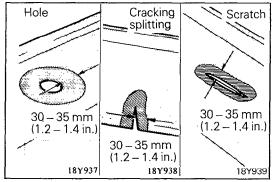
- 1. If the damage is a hole, use a knife or similar tool to shape the hole into a round or_oval opening.
- 2. If the damage is a crack or split, use a knife or similar tool to widen the opening to approximately 2 mm (.08 in.).
- 3. Grind the damaged area to tapering shape of approximately 10 to 15 mm (.4 to .6 in.) in width with a sanding disc (approx. #36 to #50).

4. After initial grinding, the 3 basic types of repairs should be as shown in the illustrations.

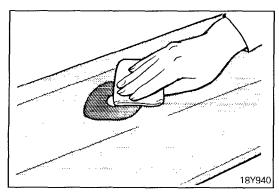


5. Using a disc, remove the surface coating around the damage, feather-edging the boundary line between the finish and the urethane at the same time.

Try to feather-edge for 30 mm (1.18 in.) around the damage.



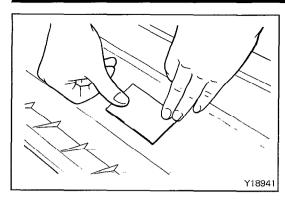
6. After feather-edging, the 3 basic types of repair should be as shown in the illustrations.



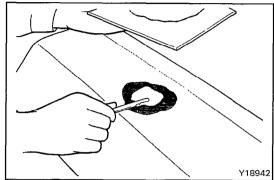
7. Remove any dirt adhering to the damaged area with a rag soaked in benzine.

Caution

Do not use a lacquer-type thinner.



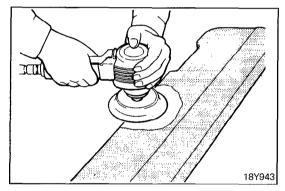
8. Cover the back surface of the damage with a piece of aluminum tape.



9. Prepare the adhesive, and apply it to the damaged area using a spatula.

NOTE

If the damage is large, apply two coats of adhesive. Apply the adhesive by moving the spatula from the edge of the damaged area toward the center, so that the damaged area will be filled with adhesive.

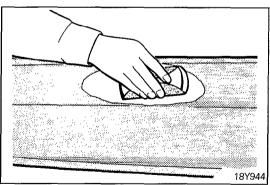


10. After applying the adhesive, let it dry.

11. Polish the repaired area, using a double-action sander with a disc.

NOTE

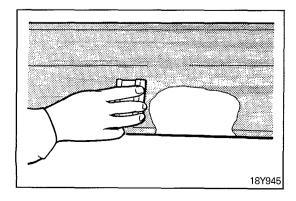
Sand repaired hole or cracks for about five minutes with the disc.



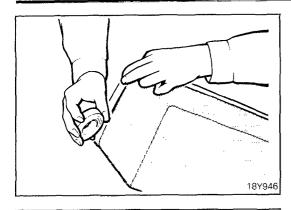
12. Finish the surface of the repaired area with a hand sanding block.

NOTE

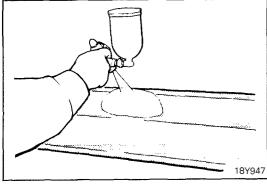
The area should be carefully sanded so that there is no step at the boundary line between the adhesive and the undamaged surface coating.



13. To improve the grip of the paint, wet-sand the entire surface of the bumper face while using #400-grit waterresistant sandpaper and a rubber pad.



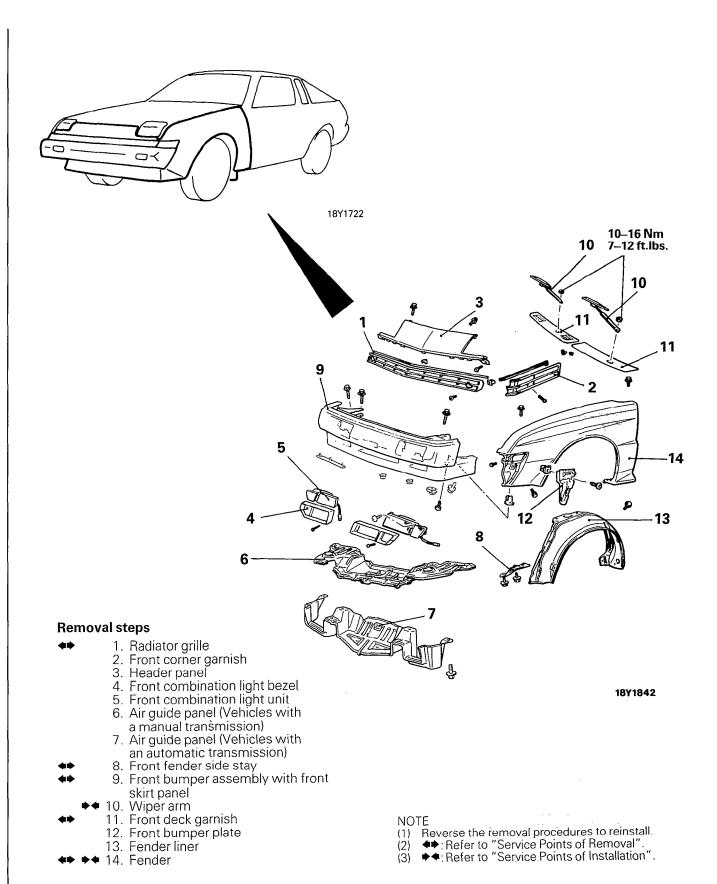
- 14. Cover the uncoated portion of the bumper face with masking tape.
- 15. Clean away any dirt from the bumper face with a rag soaked in benzine.

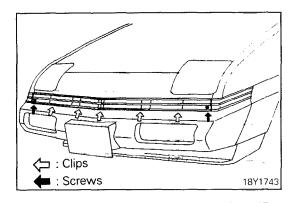


- 16. Spray a coat of primer on the damaged area.
- 17. Mix an appropriate combination of color coat and clear coat, and then spray the whole surface of the bumper face.

FENDERS N23KAAQ

REMOVAL AND INSTALLATION

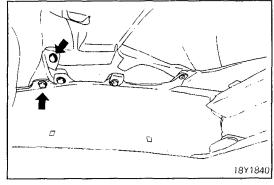




SERVICE POINTS OF REMOVAL

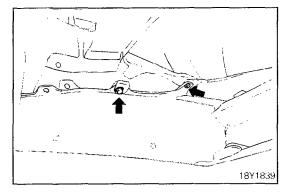
1. REMOVAL OF RADIATOR GRILLE

Remove screws, force out the clips from inside the engine room and remove the radiator grille.



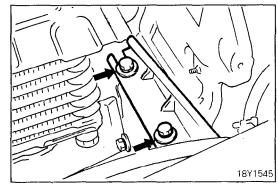
8. REMOVAL OF FRONT FENDER SIDE STAY

Remove the side stay bolts (indicated by arrows) and remove the front fender_side stay.

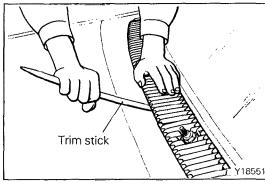


9. REMOVAL OF FRONT BUMPER ASSEMBLY WITH FRONT SKIRT PANEL

(1) Remove the bolts which attach the front skirt panel to fender.

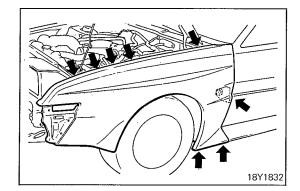


(2) Remove the bumper stay bolts and then remove the bumper assembly with front skirt panel.



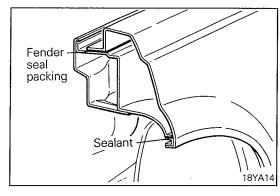
11. REMOVAL OF FRONT DECK GARNISH

Using the trim stick, remove the front deck garnish by prying at the clip positions.



14. REMOVAL OF FENDER

Remove the fender mounting bolts.



SERVICE POINTS OF INSTALLATION

14. INSTALLATION OF FENDER

- (1) Mount the fender seal packing in the position shown in the illustration.
- (2) Temporarily mount the fender in position, check whether clearance is uniform at all points, and then tighten securely.
- (3) Apply specified sealant to the flange part of the fender when installing the fender liner.

Specified sealant: Dry Sealant or equivalent

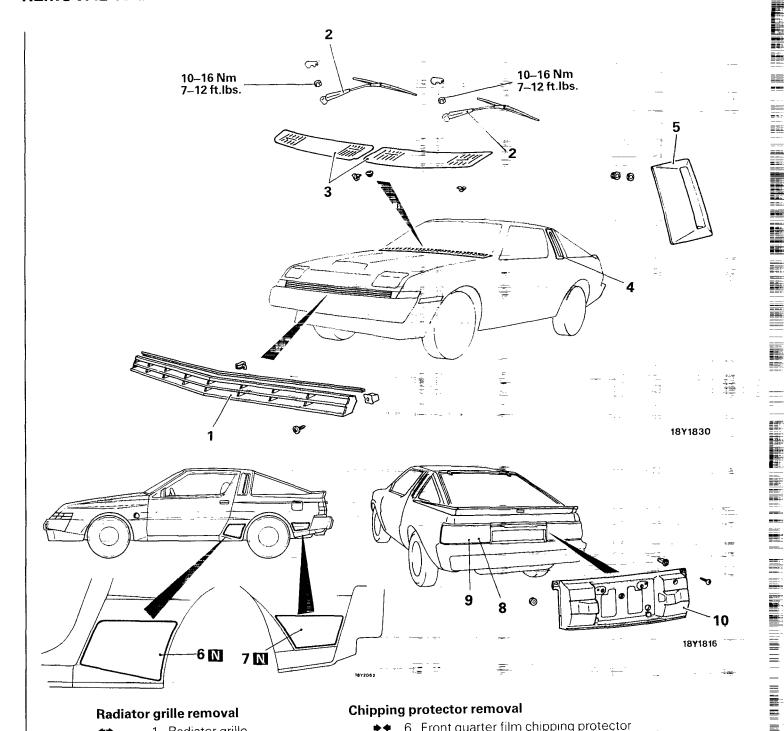
10. INSTALLATION OF WIPER ARM

Refer to GROUP 8 ELECTRICAL – Windshield Wiper and Washer.

GRILLE AND MOULDING

REMOVAL AND INSTALLATION

N23RAAO



Radiator grille removal

1. Radiator grille

Front deck garnish removal steps

- 2. Wiper arm
- 3. Front deck garnish

Air outlet garnish removal steps

- 4. Quarter trim
- 5. Air outlet garnish

Chipping protector removal

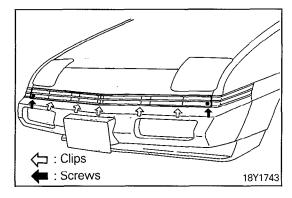
- 6. Front quarter film chipping protector7. Rear quarter film chipping protector

Rear panel garnish removal steps

- 8. Rear end trim
- 9. Rear combination lamp
- 10. Rear panel garnish

NOTE

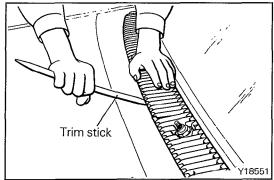
- Reverse the removal procedures to reinstall.
- Refer to "Service Points of Removal".
 Refer to "Service Points of Installation"
- (3)
- N: Non-reusable parts. (4)



SERVICE POINTS OF REMOVAL

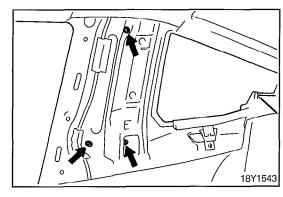
1. REMOVAL OF RADIATOR GRILLE

Remove radiator grille mounting nuts and clips and remove the radiator grille.



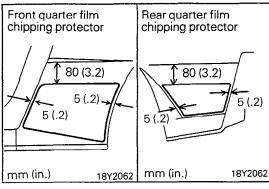
3. REMOVAL OF FRONT DECK GARNISH

Using the trim stick, remove the front deck garnish by prying at the clip positions.



5. REMOVAL OF AIR OUTLET GARNISH

Remove the air outlet garnish mounting nuts, and then remove the garnish outward.

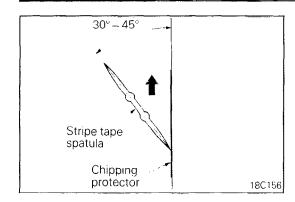


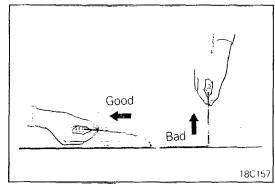
SERVICE POINTS OF INSTALLATION

- 7. INSTALLATION OF REAR QUARTER FILM CHIPPING PROTECTOR / 6. FRONT QUARTER FILM CHIPPING PROTECTOR
 - (1) Use lead-free gasoline to clean the mounting positions.
 - (2) After removing the paper protecting the back, affix the chipping protector at the correct location, paying heed to the measurements shown.

Caution

- 1. The application should be done in a place with little or no dust, and at an ambient temperature of 20 40°C (70 100°F).
- 2. If the ambient temperature is below 20°C (70°F), warm both the chipping protector and the body (application surfaces) to within 20 40°C (70 100°F).





(3) Use the stripe tape spatula to press on the chipping protector beginning at the center and moving evenly to both the top and bottom, in order to remove any trapped air bubbles.

Caution

Be sure to press on the chipping protector with enough force to prevent it from coming off.

- (4) Pull the paper protecting the front straight and slowly.
- (5) If there are any air bubbles in the chipping protector after the application is finished, use a sewing needle to make small holes in the bubbles, and use the corners of the spatula to press the air out.

WINDSHIELD AND QUARTER WINDOW

N23LAAF

GENERAL

The windshield glass is attached by an urethane-base adhesive to the window frame. This adhesive not only provides improved glass holding and sealing, but also permits use of body openings having a greater structural strength.

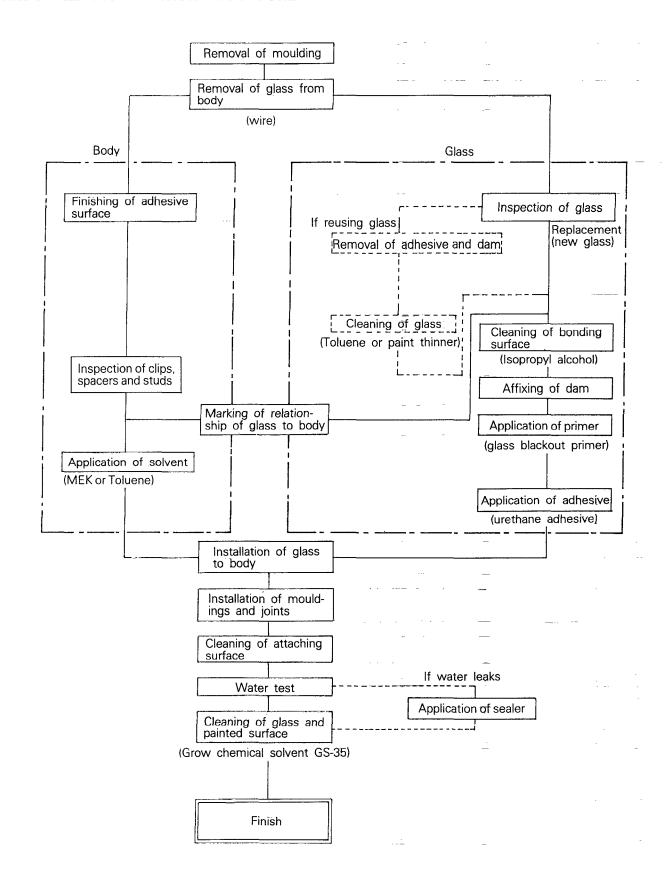
ADHESIVE KIT AND RESERVE ITEMS

Adhesive kit and reserve items	Applications	Quantity
Adhesive kit (Essex Chemical Corporation)		
Urethane adhesive (Essex Urethane "E" Auto Glass Sealant)		One cartridge
Dispensing nozzle		One
Glass blackout primer		As required
Dauber for applying blackout primer		One
Reserve items		
Wire (dia. x length)	for cutting adhesive	Five pieces of wire 0.6 x 1 mm (.024 x .040 in.)
Adhesive gun	for adhesive application	One
Isopropyl alcohol	for cleaning jointing surfaces	As required
Wiping rags		As required
Window weatherstrip sealant (MOPAR K101 CEMENT Part No. 383769)	for prevention of water leaks and gathering after adhesive application	As required
MEK (Methyl Ethyl Ketone) or Toluene		As required
Grow Chemical Solvent GS-35	for cleaning	As required
Glass holder		Two
Window moulding remover (Special Tool MB990449)		One
Spacers (Service Part)		Two
Dam (Service Part)		As required
Tectyl 506T (Valvoline Oil Company)		As required

NOTE

MEK (Methyl Ethyl Ketone), Toluol (Toluene), Grow Chemical Solvent GS-35 can be obtained directly from a chemical house handling these chemicals.

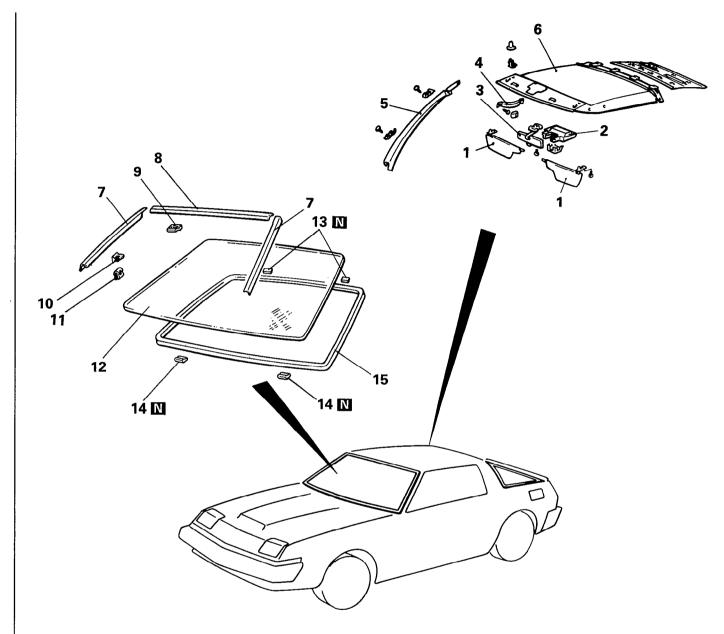
WINDSHIELD INSTALLATION PROCEDURE



N23LBAH

WINDSHIELD

REMOVAL AND INSTALLATION



Removal steps

- 1. Sunvisor

- Sunvisor
 Dome light assembly
 Inside rearview mirror
 Assist grip
 Front pillar trim
 Headlining
 Front side moulding
 Front upper moulding
 Window moulding clip
 Moulding retainer
 Windshield moulding retainer
 Windshield
- 12. Windshield
 - ★ 13. Window glass spacer B
 ★ 14. Window glass spacer A
 ★ 15. Window dam

NOTE

- (1) Reverse the removal procedures to reinstall.
 (2) ★→: Refer to "Service Points of Removal".
 (3) ★◆: Refer to "Service Points of Installation".
 (4) N: Non-reusable parts

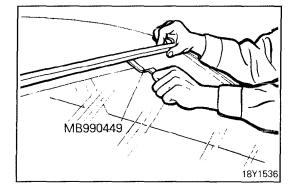
SERVICE POINTS OF REMOVAL

5. REMOVAL OF FRONT PILLAR TRIM

Refer to P.23-95.

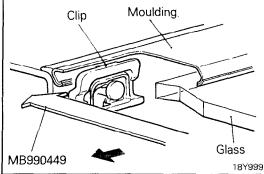
6. REMOVAL OF HEADLINING

Remove the headlining from the roof panel to provide space for extending wire between the top and bottom edges of windshield.



7. REMOVAL OF FRONT SIDE MOULDING / 8. FRONT UPPER MOULDING / 9. WINDOW MOULDING CLIP

(1) Remove the mouldings by using the special tool (MB990449).



(2) Remove the moulding clips by using the special tool (MB990449).

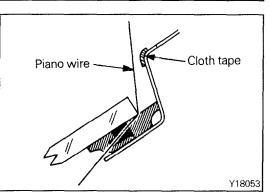
12. REMOVAL OF WINDSHIELD

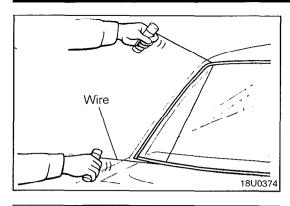
(1) Using a sharp-pointed drill, make a hole in the adhesive area of the windshield.

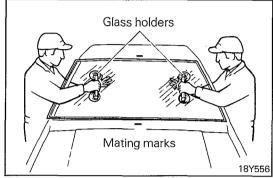
Insert a wire through the hole from the inside.

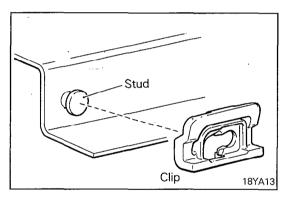
Caution

Use cloth tape to protect the painted body surfaces.









- (2) From inside the vehicle, insert one end of wire through adhesive at the upper edge of the windshield.
- (3) Insert the other end of wire from inside the vehicle through adhesive at the lower edge of the windshield.
- (4) Secure each end of wire to a wooden handle or the like.
- (5) Carefully cut through adhesive by pulling wire along the windshield from outside the vehicle in a sawing motion.

Caution

In order to protect the body from damage, apply cloth tape to all body areas around the installed glass before cutting the adhesive.

- (6) Make mating marks on the glass and body if the glass is to be reinstalled.
- (7) Take out the glass with glass holders.

NOTE

If the glass being removed is to be reinstalled, place it on a protected bench or holding fixture.

(8) Use a screwdriver or similar tool to pry up and remove the moulding clips.

INSPECTION

Check the moulding clips and studs. Replace them if they are damaged.

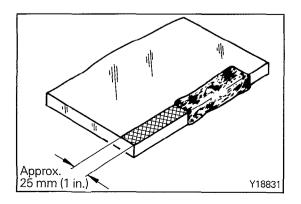
NOTE

If a moulding clip stud has been broken, drill a hole of 3 mm (.125 in.) in diameter in the stud, apply specified sealant to this hole, and then install the moulding clip with a self-tapping screw.

Specified sealant: Urethane adhesive (Essex Urethane "E" ... Auto Glass Sealant)

Caution

After installing the clip, apply antirust solvent to the screw head and the clip to protect them from rust.

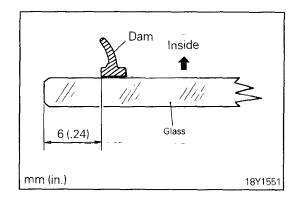


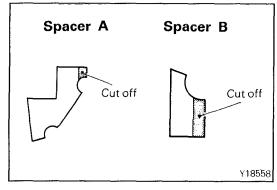
SERVICE POINTS OF INSTALLATION 15. INSTALLATION OF WINDOW DAM

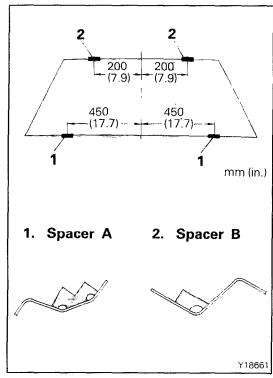
(1) Wipe surface of glass to which bead of adhesive will be applied [within 25 mm (1 in.) from the edge of glass] with a cloth dampened in isopropyl alcohol.

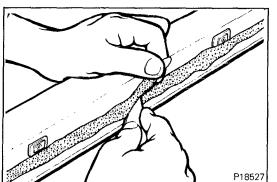
Caution

Do not touch surfaces that have been degreased with isopropyl alcohol.









- (2) Remove the back paper from the dam, and attach the dam to the glass.
- (3) Apply glass primer to the entire bonding surface of the glass, both to the inside surface and the edge of the glass. Allow to dry for ten minutes.

Caution

Use care to avoid spilling primer solution on trim or a painted surface. Wipe away any spilled solution immediately, because the primer will damage trim or painted surfaces. Do not touch the primer coated surface.

14. INSTALLATION OF WINDOW GLASS SPACER A / 13. WINDOW GLASS SPACER B

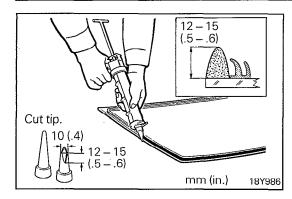
- (1) Using a clean lint-free cloth liberally dampened with solvent (MEK or Toluene), briskly rub over old adhesive material remaining on pinch-weld flange.
- (2) Cut off an amount from spacers A and B equal to the thickness of the adhesive remaining [within 2 mm (.08 in.)] on the pinch-weld flange.
- (3) Attach the spacers in the proper directions on the flange.

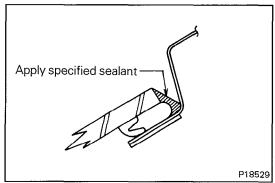
12. INSTALLATION OF WINDSHIELD

(1) Using a sharp knife, remove old adhesive on the body opening pinch-weld flange evenly to a thickness of within 2 mm (.08 in.) all around. Finish the flange surfaces so that they are smooth.

Caution

Be careful not to remove more adhesive than necessary, and also not to damage the paintwork on the body surface with the knife. If the paintwork is damaged, repair the damaged area with touch-up paint or anti-rust solvent.





(2) With an adhesive gun, apply the specified adhesive to the entire windshield mounting surface along the dam.

Specified adhesive: Urethane adhesive (Essex Urethane "E" ... Auto Glass Sealant)

NOTE

Cut the nozzle tip into a V shape to facilitate adhesive application. Adhesive material begins to cure after fifteen minutes when exposed to air.

(3) Using a glass holder, place the glass on the body opening.

Press the glass gently so that no adhesive appears.

Caution

Do not move the glass after installing it to the body. Place the glass in the previously marked position. Use care not to close the water groove (in the lower corner of the pinch-weld flange) with adhesive.

- (4) Wipe away excess adhesive from the glass.
- (5) Test for water leakage.
- (6) If there is leakage, fill the leaking area with specified sealant.

Specified sealant: MOPAR K101 CEMENT
Part No. 383769 or equivalent

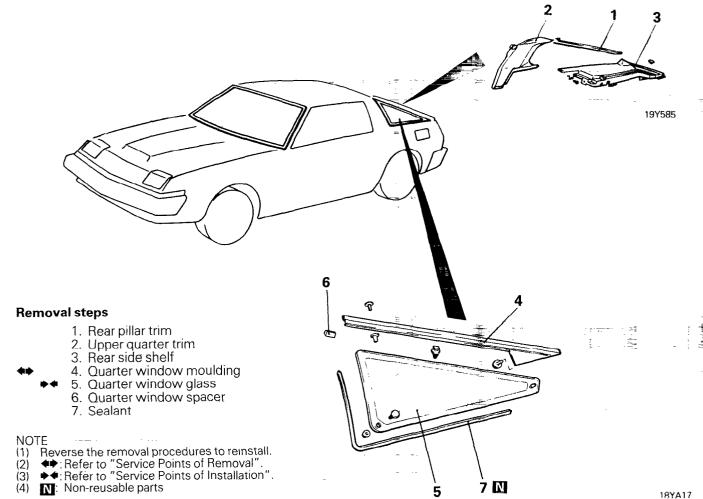
Caution

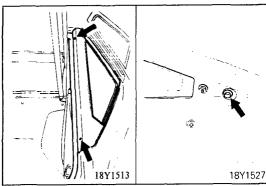
Do not apply water directly to the bonded area.

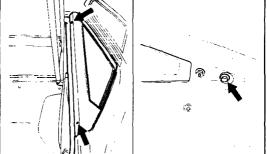
- (7) Install the clips to the body.
- (8) Apply tectyl to the clips.
- (9) Attach the mouldings to the clips by tapping.

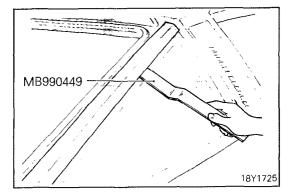
QUARTER WINDOW REMOVAL AND INSTALLATION

N23LEAC









SERVICE POINT OF REMOVAL

4. REMOVAL OF QUARTER WINDOW MOULDING

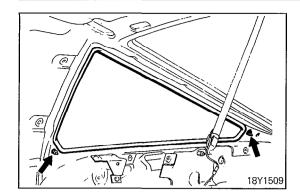
(1) Open the hatch.

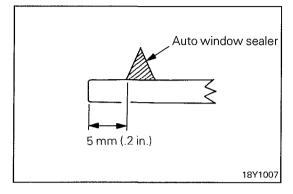
(2) Remove the quarter window moulding mounting screws and bolt.

(3) With the special tool (MB990449), remove the quarter ___ window moulding by prying at the clip position of the quarter window moulding.

Caution

Be careful not to scratch the painted surface of the body.





- (4) Remove the quarter window mounting bolts.
- (5) Cut the butyl tape and remove the quarter window glass.

SERVICE POINT OF INSTALLATION

5. APPLICATION OF ADHESIVE TO QUARTER WINDOW GLASS

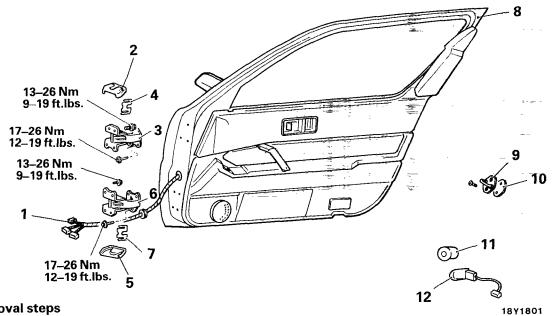
When the window glass is installed, apply the specified adhesive all around the circumference of the inside of the glass.

Specified adhesive: Urethan adhesive (Essex Urethane "E" ... Auto Glass Sealant)

DOOR ASSEMBLY

REMOVAL AND INSTALLATION

N23MAAJ



Door removal steps

- 1. Door wiring harness connection
- 2. Upper hinge cover
- 3. Door upper hinge
 - 4. Door upper hinge shim
 - 5. Lower hinge cover
- 6. Door lower hinge
 - 7. Door lower hinge shim
 - 8. Door

Striker removal steps .

- 9. Striker 10. Striker shim

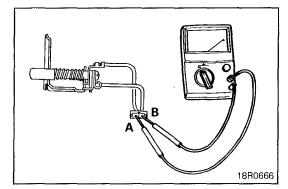
Door switch removal steps

- 11. Door opening switch cap
- 12. Door switch

NOTE

- Reverse the removal procedures to reinstall.

 Refer to "Service Points of Installation".



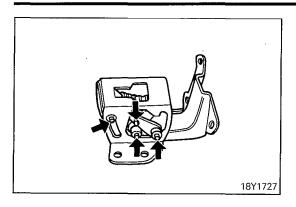
INSPECTION DOOR SWITCH

Operate the switch, and check the continuity between the terminals.

-Test probe	А	В
Release	0	
Push		

O-O indicates that there is continuity between the terminals.

- Cracks, damage, or abnormal noise of door hinges
- Looseness of door hinge attaching bolts
- Damage or deformation of door panel



SERVICE POINT OF INSTALLATION

6. REMOVAL OF DOOR LOWER HINGE / 3. DOOR UPPER HINGE

Apply specified grease to the door hinge sliding portions.

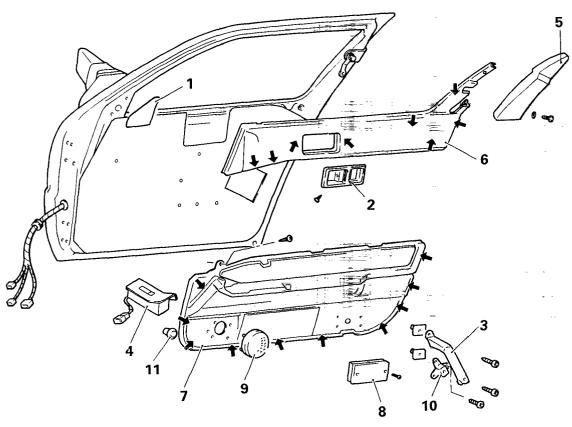
Specified grease: MOPAR Multi-purpose grease Part No. 2932524 or equivalent

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9 1 2

DOOR TRIM N23MBAI

REMOVAL AND INSTALLATION



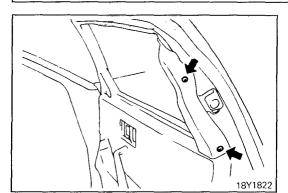
18Y1802

Removal steps

- 1. Door corner trim
- 2. Inside handle cover
- 3. Door grip
- 4. Power window switch
- 5. Door sash trim
 - 6. Door upper trim
 - 7. Door lower trim
 - 8. Door light
 - 9. Speaker garnish
 - 10. Door grip bracket
 - 11. Trim clips

NOTE

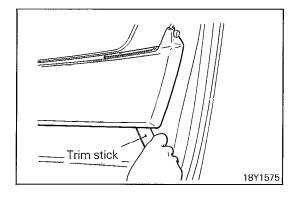
- (1) Reverse the removal procedures to reinstall.
 (2) : Refer to "Service Points of Removal".
 (3) : denotes clip position



SERVICE POINTS OF REMOVAL

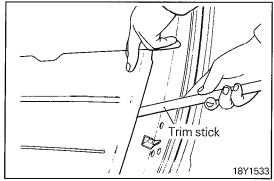
5. REMOVAL OF DOOR SASH TRIM

Remove the front door sash trim mounting screws, and then remove the trim by pulling it upward.



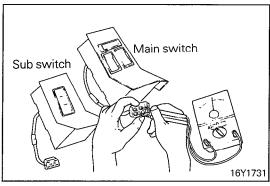
6. REMOVAL OF DOOR UPPER TRIM

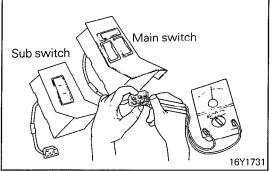
Remove the clips with the trim stick. From the outside of the vehicle, remove the trim by pulling it upward while holding the sheet-metal part of the door upper trim.



7. REMOVAL OF DOOR LOWER TRIM

Remove the clips from the edge of the door lower trim by using the trim stick.





Main switch Sub switch 16Y1732

INSPECTION **POWER WINDOW SWITCH**

Operate the switch, and check for continuity between the terminals.

MAIN SWITCH

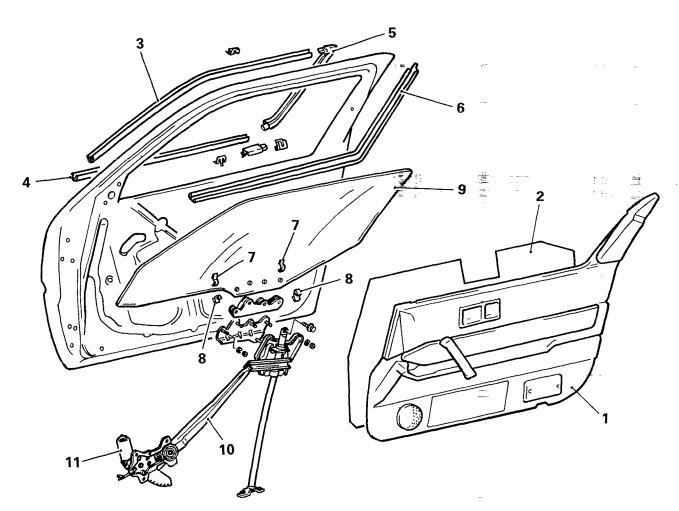
Terminal	Loo swi		Terminal	Driv	er's swi	windo tch)W	F	asser ndow	nger's swite	s ch
Switch	2	5	Switch	2	1	4	6	2	3	7	6
			UP	0	-0	0.	0	\circ	-	0	9
NOR- MAL	\circ	-0	OFF		0	0	-0		0-	-0-	0
IVIAL	:		DOWN	0-	0-	-0	-0	0-	0-	0	0
			UP	0-	-0	0-	9			0	0
LOCK			OFF		0	-	9		0	0	-0
			DOWN	0-	0	9	-0		0-		-0

SUB SWITCH

Terminal Switch	1	2	4	5	6
UP	0		0	0	0
OFF	0	<u> </u>	0—		_0
DOWN	0	<u> </u>	0-	<u> </u>	

FRONT DOOR GLASS AND REGULATOR **REMOVAL AND INSTALLATION**

N23MCAH



18Y18O4

Removal steps

- 1. Door trim
- 2. Waterproof film
- 3. Door drip moulding
- 4. Door belt moulding5. Door window rear sash moulding6. Door belt inside weatherstrip

 - Door bert fiside Weatherstiff
 Door glass stabilizer (inner)
 Door glass stabilizer (outer)
 Front door glass
 Power window regulator

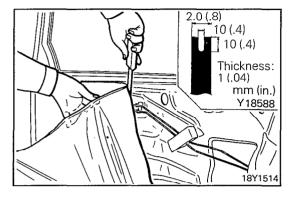
- 11. Power window motor

- (1) Reverse the removal procedures to reinstall.
 (2) ** Refer to "Service Points of Removal".
 (3) ** Refer to "Service Points of Installation".

SERVICE POINTS OF REMOVAL

1. REMOVAL OF DOOR TRIM

Refer to P.23-64.

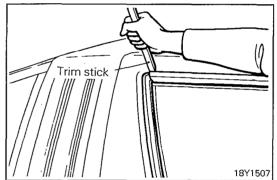


2. REMOVAL OF WATERPROOF FILM

Cut away the non-drying adhesive around the waterproof film with a cutter or similar tool.

Caution

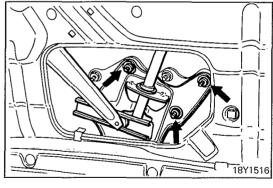
If the clip for the door trim is still in the mounting hole in the body, remove it with the tool shown in the illustration.



3. REMOVAL OF DOOR DRIP MOULDING / 4. DOOR BELT MOULDING / 5. DOOR WINDOW REAR SASH MOULDING

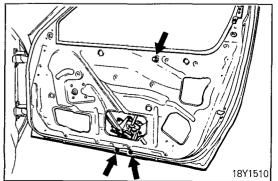
Insert the trim stick at the position of the moulding clips, and then pry the mouldings to remove them in the following order:

- (1) Door drip moulding
- (2) Door belt moulding
- (3) Door window rear sash moulding



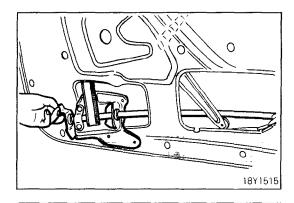
9. REMOVAL OF FRONT DOOR GLASS

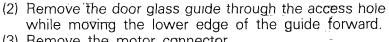
- (1) Turn on the ignition switch and operate the windows. Be sure to turn the ignition switch off after finishing.
- (2) Remove the door glass stabilizer.
- (3) Remove the glass mounting nuts.
- (4) Pull the glass upward and remove it.



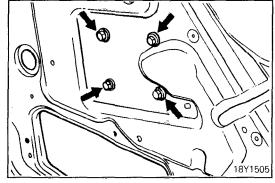
10. REMOVAL OF POWER WINDOW REGULATOR

(1) Remove the door glass guide.



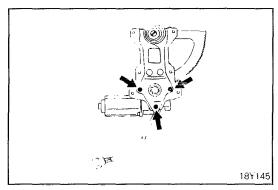


(3) Remove the motor connector.



(4) Remove the regulator mounting bolts.

(5) Remove the regulator through the access hole.

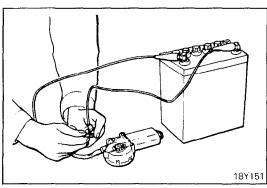


11. REMOVAL OF POWER WINDOW MOTOR

Remove the power window motor from the regulator assembly.

Caution

When loosening the connecting screws of the regulator and the motor assembly, the compressed force of the regulator spring may cause the regulator arm to spring up.



INSPECTION **POWER WINDOW MOTOR**

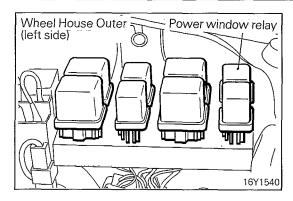
(1) Remove the power window motor and regulator.

(2) Connect the motor terminals directly to the battery and check that the motor operates smoothly. Next, reverse the polarity and check that the motor operates-smoothly in the reverse direction.

To check the circuit breaker built in the motor, install the motor and regulator to the body and then proceed as follows:

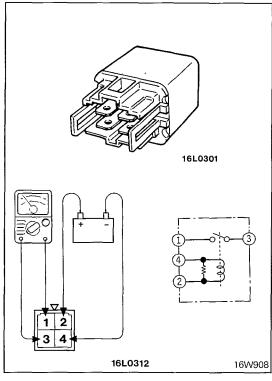
1) Press the UP switch to wide open the door window glass and hold down the switch for about 10 seconds. Upon releasing the UP switch, press the DOWN switch.

(2) The circuit breaker is judged good if the door window glass starts to open in 60 seconds or less.



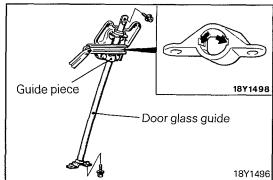
POWER WINDOW RELAY

(1) Remove the power window relay.



(2) Check continuity between terminals 1 and 3 when the battery voltage is applied to terminal 2, and terminal 4 is grounded.

Voltage applied	Terminals 1 – 3	Conductive	
Voltage not applied	Terminals 1 – 3	Non-conductive	
applied	Terminals 2 – 4	Conductive	



18Y1516

SERVICE POINTS OF INSTALLATION

10. APPLICATION OF GREASE TO POWER WINDOW REG-**ULATOR**

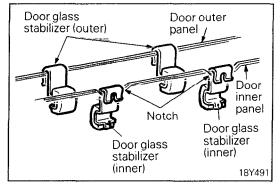
Apply the specified grease to the door glass guide and guide piece.

Specified grease: MOPAR Multi-mileage lubricant Part No. 2525035 or equivalent

9. INSTALLATION OF FRONT DOOR GLASS

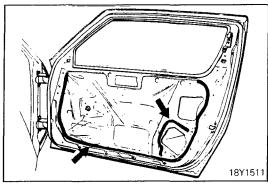
- (1) Lower the power window regulator until the door glass and regulator installation point is visible through the service hole.
- (2) Install the door glass to the power window regulator and temporarily tighten the nuts.
- (3) Loosely tighten nuts A.
- (4) After making the adjustment of the door glass tilt, tighten nuts A.

BODY - Front Door Glass and Regulator



8. INSTALLATION OF DOOR GLASS STABILIZER (OUTER)
/ 7. DOOR GLASS STABILIZER (INNER)

Install the door glass stabilizers to the door panel at the positions shown in the illustration.



2. APPLICATION OF SEALANT TO WATERPROOF FILM

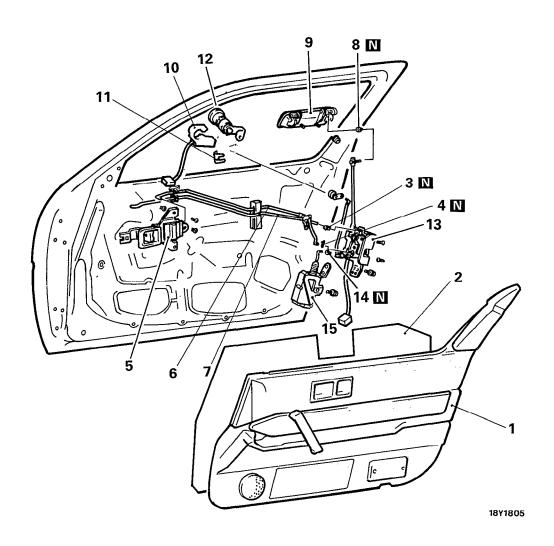
Apply the specified sealant at the position shown in the illustration, and then attach the waterproof film.

Specified Sealant: MOPAR Rope Caulk Sealer 3/16 x 80" roll Part No. 4026044 or equivalent.

FRONT DOOR HANDLE AND LATCH

REMOVAL AND INSTALLATION

N23MDAM



Removal steps

- 1. Door trim
 - Waterproof film
 Rod snap
 Rod snap
- 5. Door inside handle
 - 6. Inside lock rod
 - 7. Inside handle rod
 - 8. Rod snap
 - 9. Door outside handle
- 10. Reed switch

 - 11. Lock cylinder retainer

 ◆ 12. Key cylinder

 13. Door latch (with door lock switch)
 - ◆
 ◆
 14. Rod snap
 - ◆◆ 15. Door lock actuator

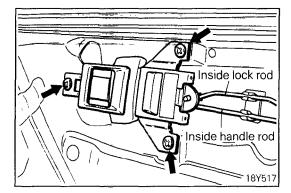
NOTE

- (1) Reverse the removal procedures to reinstall.
 (2) *: Refer to "Service Points of Removal".
 (3) *: Refer to "Service Points of Installation".
- (4) N: Non-reusable parts

SERVICE POINTS OF REMOVAL

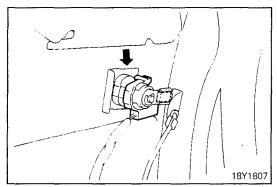
1. REMOVAL OF DOOR TRIM

Refer to P.23-64.



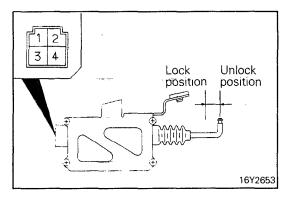
5. REMOVAL OF DOOR INSIDE HANDLE

Remove the inside handle mounting screws, and then disconnect the inside lock rod and the inside handle rod from the inside handle.



10. REMOVAL OF REED SWITCH

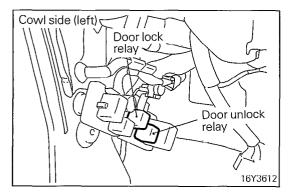
- (1) Disconnect the reed switch connector from the door harness.
- (2) Remove the reed switch from the key cylinder.



INSPECTION DOOR LOCK ACTUATOR

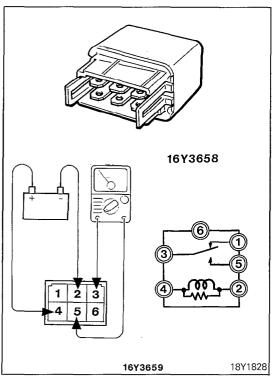
- (1) Remove the door lock actuator from the door panel.
- (2) The actuator switch circuit is functioning properly if continuity exists between actuator connector terminals (2) and (4) while the actuator plunger is out (while the door lock actuator switch is OFF), and ceases to exist when the plunger goes in (when the door lock actuator switch becomes ON).

(3) Connect the battery source to the actuator terminals (1) and (3), and check the shaft for operation. If the shaft moves in opposite direction when the connection polarity is changed, the actuator should be considered to be in normal condition.



DOOR LOCK RELAY AND DOOR UNLOCK RELAY

(1) Remove the door lock relay and door unlock relay.

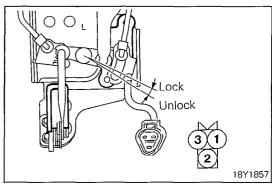


(2) Check continuity between terminals 3 and 5 when the battery voltage is applied to terminal 2, and terminal 4 is grounded.

Voltage applied	Terminals 3 – 5	Conductive		
Voltage not applied	Terminals 3 – 5	Non-conductive		
applied	Terminals 1 – 3	Conductive		
	Terminals 2 – 4	Conductive		

Caution

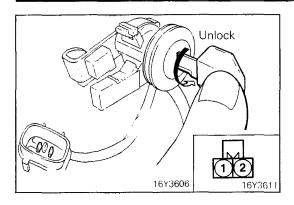
The battery voltage should not be applied for longer than one minute.



DOOR LOCK SWITCH

(1) With the latch placed at the lock and unlock positions, check for continuity.

Terminal	1	2	3
Door unlock	0		
Door lock		0-	



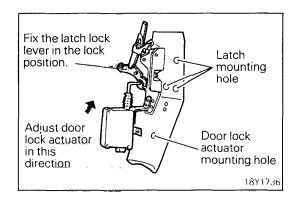
DOOR KEY CYLINDER UNLOCK SWITCH

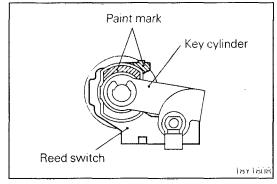
- (1) Unlock the lock cylinder_by turning the key.
- (2) Check the continuity between the terminals.

- Terminal Condition	1	2
Door lock cylinder locked		
Door lock cylinder unlocked	0-	

NOTE

indicates that there is continuity between the terminals.





SERVICE POINTS OF INSTALLATION

- 15. INSTALLATION OF DOOR LOCK ACTUATOR / 14. ROD SNAP / 13. DOOR LATCH (WITH DOOR LOCK SWITCH)
 - (1) Mount the rod snap in the latch lock lever and mount the actuator rod to the rod snap.

- (2) Fix the actuator rod and latch lock lever in the lock position and tighten temporarily the latch mounting bolts.
- (3) Lightly force up (toward the lever) the door lock actuator and tighten the latch mounting bolts. Tighten_the door lock actuator mounting bolts.
- 12. INSTALLATION OF KEY CYLINDER / 10. REED SWITCH

Install the key cylinder and the reed switch as shown with their paint mark directed upward.

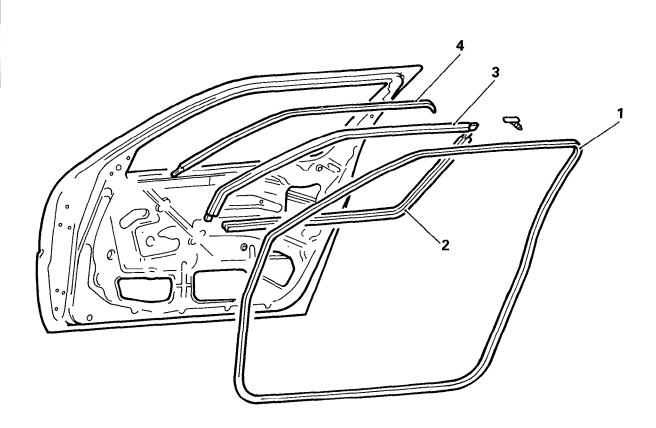
2. INSTALLATION OF WATERPROOF FILM

Refer to P.23-66.

FRONT DOOR WEATHERSTRIP

N23MEAH

REMOVAL AND INSTALLATION



Removal steps

- 1. Door opening weatherstrip
- 2. Door belt inside weatherstrip 3. Door sash inside weatherstrip
- 4. Door drip weatherstrip

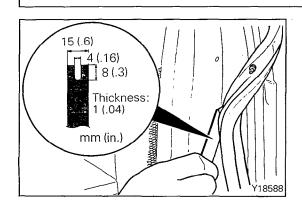
NOTE.

- Reverse the removal procedures to reinstall.

 ** Refer to "Service Points of Removal".

 ** Refer to "Service Points of Installation".

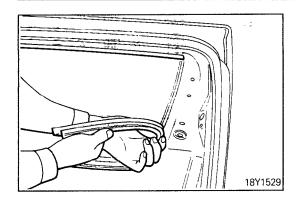
18Y1737



SERVICE POINTS OF REMOVAL

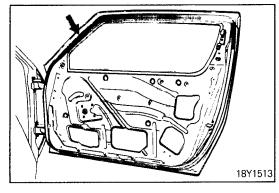
1. REMOVAL OF DOOR OPENING WEATHERSTRIP

Remove the door opening weatherstrip by using the tool shown in the illustration.



2. REMOVAL OF DOOR BELT INSIDE WEATHERSTRIP / 3. DOOR SASH INSIDE WEATHERSTRIP

Remove the door sash inside weatherstrip and the door belt inside weatherstrip by hand.



SERVICE POINT OF INSTALLATION

1. INSTALLATION OF DOOR OPENING WEATHERSTRIP

Apply the specified adhesive at the position shown in the \pm illustration, and then attach the door opening weatherstrip. \pm

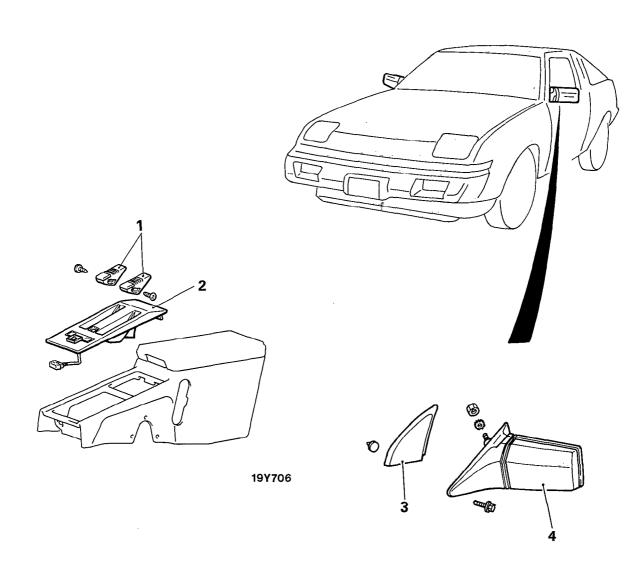
Specified adhesive: MOPAR Rope Caulk Sealer 3/16 x 80" roll Part No. 4026044 or equivalent.

INSPECTION

 Check door inside handle and latch for wear, damage or malfunction.

DOOR MIRROR REMOVAL AND INSTALLATION

N23QAAD



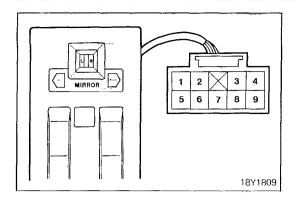
Mirror switch removal steps

- Spool release lever
 Rear console panel (with mirror switch)

Mirror removal steps

- 3. Door corner trim4. Door mirror assembly

Reverse the removal procedures to reinstall.



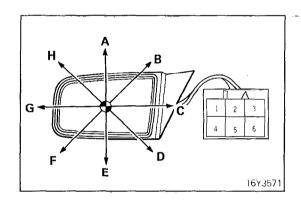
INSPECTION MIRROR SWITCH

Operate the switch and check for continuity between the terminals.

Terminal	Left switch				Right switch				Lamp			
Switch position	4	8	3	7	6	4	2	9	7	6	1	5
Up	0-	-0		0-	-0	0-	-0		0-	0		
Down	0-	0-		9	9	0-	\Diamond		0	0		
Left	Ò		0-	9	-0	0-		0	9	9		
Right	6		9	0	- 0	0		9	Ь	9		

NOTE

indicates that there is continuity between the terminals.



DOOR MIRROR ASSEMBLY

(1) Confirm that the mirror moves correctly when battery voltage is applied to the mirror side terminals as indicated below.

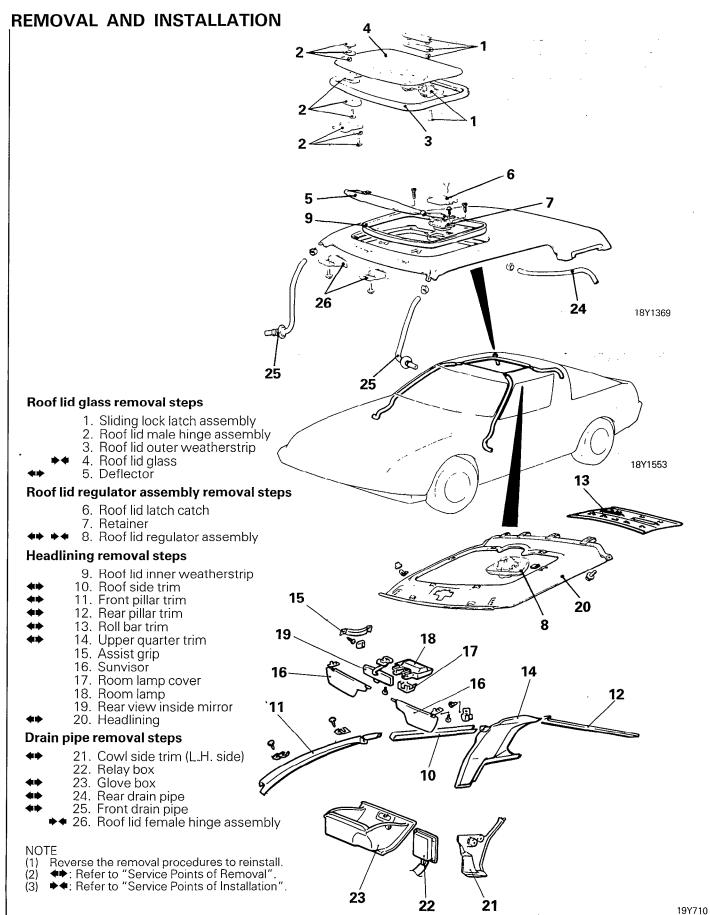
Terminal Direction	*B	**E	1	2	3	4	5	6
А	0	0					~	<u> </u>
В	0	0-		-0-	<u> </u>			-0
С	0	0		0	-0			
D	0-	0		0	0		0	-
Е	0	0					0	<u> </u>
F	0-	0			_0_		- 0	-0
G	0	0		<u> </u>	_0			
Н	0	0-		-0-	<u> </u>		- 0	- ○

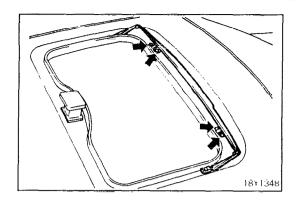
^{*}Battery (Electrical source)

TE (Ground)

⁽²⁾ Check to see that there is continuity between heater terminals 1 and 4.

SUNROOF

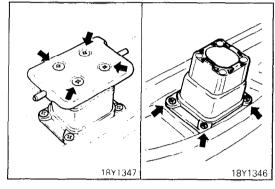




SERVICE POINTS OF REMOVAL

5. REMOVAL OF DEFLECTOR

Remove the deflector assembly.



8. REMOVAL OF ROOF LID REGULATOR ASSEMBLY Remove the roof lid regulator assembly.

10. REMOVAL OF ROOF SIDE TRIM / 11. FRONT PILLAR TRIM / 12. REAR PILLAR TRIM / 13. ROLL BAR TRIM / 14. UPPER QUARTER TRIM

Refer to P.23-95.

20. REMOVAL OF HEADLINING

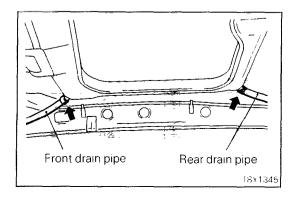
Refer to P.23-101.

21. REMOVAL OF COWL SIDE TRIM (L.H. SIDE)

Refer to P.23-95.

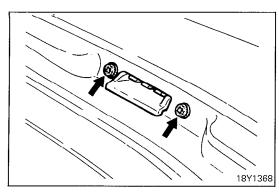
23. REMOVAL OF GLOVE BOX

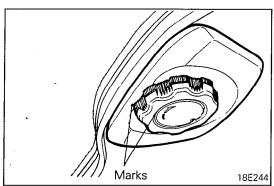
Refer to P.23-88.

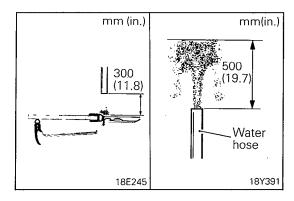


24. REMOVAL OF REAR DRAIN PIPE / 25. FRONT DRAIN PIPE

Remove the front and rear drain pipe.







SERVICE POINTS OF INSTALLATION 26. INSTALLATION OF ROOF LID FEMALE HINGE ASSEMBLY

- (1) For installation, insert front drain pipe from above, and rear drain pipe from below.
- (2) After installing the roof lid female hinge assembly, apply the specified sealant to illustrated screw heads.

Specified sealant: MOPAR Vinyl-Acrylic Sealant Part Number 4026043 or equivalent

8. INSTALLATION OF ROOF LID REGULATOR ASSEMBLY

With the roof lid fully closed, check to ensure that the regulator knob marks are in alignment.

4. INSTALLATION OF ROOF LID GLASS

- (1) Before installing the headlining, perform a water test by following procedure.
 - (1) Fully close the roof lid.
 - 2 Spray water against the seam between the roof lid and roof all around. Hold the hose and roof about 300 mm (11.8 in.) from the roof and spray water for more than five minutes.

NOTE

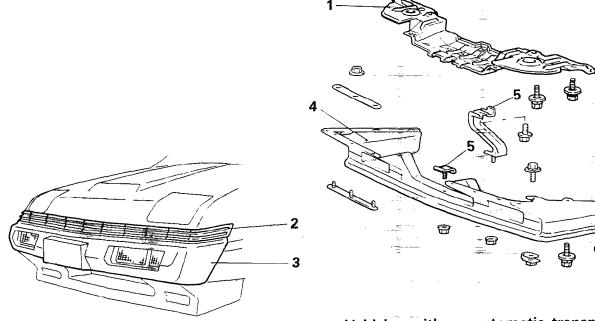
Adjust the water pressure so that the height of water sprayed will be about 500 mm (19.7 in.) as shown in illustration.

- 3 Check for water leaks in the passenger compartment.
- 4) If water leaks are evident, refer to troubleshooting and correct.
- (2) If there are no leaks after the water test, remove the regulator, retainer and latch catch and install the headlining.
- (3) Reinstall the regulator, retainer and latch catch.

AERO PARTS

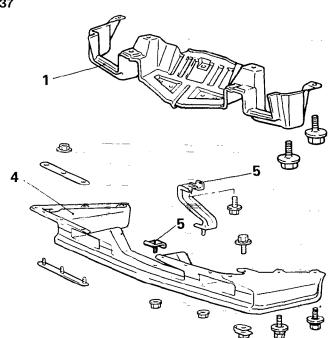
REMOVAL AND INSTALLATION (FRONT)

Vehicles with a manual transmission



Vehicles with an automatic transmission

18Y1837



Front skirt panel removal steps

- 1. Air guide panel
- ◆◆ 2. Radiator grille
 - 3. Front bumper assembly with front skirt panel
 - 4. Front skirt panel
 - 5. Air dam bracket

NOTE

- (1) Reverse the removal procedures to reinstall.
- (2) *: Refer to "Service Points of Removal"

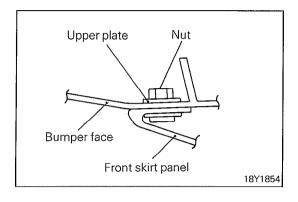
SERVICE POINTS OF REMOVAL

2. REMOVAL OF RADIATOR GRILLE

Refer to P.23-51.

3. REMOVAL OF FRONT BUMPER ASSEMBLY WITH FRONT SKIRT PANEL

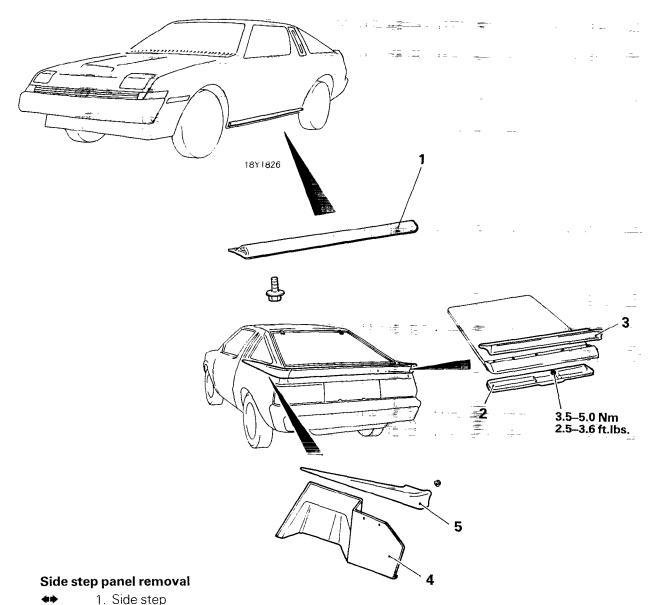
Refer to P.23-43.



4. REMOVAL OF FRONT SKIRT PANEL

Remove the nuts which attach the front skirt panel and the upper plate from the front bumper face, and then remove the front skirt panel.

REMOVAL AND INSTALLATION (SIDE AND REAR)



Air spoiler removal steps

- 2. Rear hatch trim3. Air spoiler (center)
- 4. Trunk room side trim
- 5. Air spoiler (side)

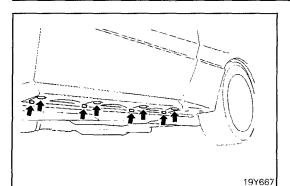
NOTE

Reverse the removal procedures to reinstall.

Refer to "Service Points of Removal".

Refer to "Service Points of Installation".

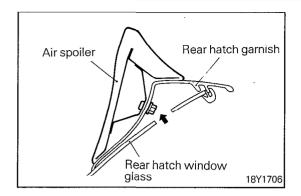
18Y1714

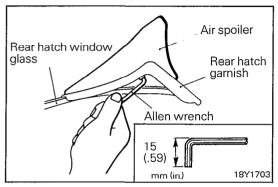


SERVICE POINTS OF REMOVAL

1. REMOVAL OF SIDE STEP PANEL

Remove the plugs and remove the side step panel mounting bolts.





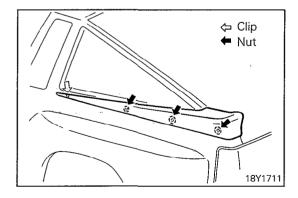
3. REMOVAL OF AIR SPOILER (CENTER)

(1) Remove the air spoiler attaching nut through the service hole provided in the rear hatch window glass.

- (2) Using an allen wrench, remove the special bolt from each end of the air spoiler to remove the air spoiler.
 - Cut the allen wrench [with a width across the flats of 5 mm (.20 in.)] to the dimension shown in the illustration.
- (3) Remove the air spoiler mounting nuts from the rear hatch garnish.
- (4) Remove the air spoiler from the rear hatch garnish with a sharp knife to cut the adhesive.

4. REMOVAL OF TRUNK ROOM SIDE TRIM

Refer to P.23-95.



5. REMOVAL OF AIR SPOILER (SIDE)

- (1) Remove the plug from the rear end of the side spoiler.
- (2) Remove the side spoiler mounting nuts and clips to remove the side spoiler.

SERVICE POINTS OF INSTALLATION

4. INSTALLATION OF TRUNK ROOM SIDE TRIM

Refer to P.23-95.

3. INSTALLATION OF AIR SPOILER (CENTER)

(1) Before installing the air spoiler, apply specified adhesive to entire periphery of installation surface.

Specified adhesive: MOPAR Rope Caulk Sealer 3/16 x 80" roll Part No. 4026044 or equivalent

- (2) Because the air spoiler is made of urethane resin, be sure to follow the instructions below concerning maintenance.
 - The air spoiler will be discolored or stained if such things as brake fluid, engine oil, grease, paint thinner, battery fluid, ordinary wax, etc. become adhered to it. If any of these things accidentally spill onto the air spoiler, they should be immediately cleaned by using alcohol.
 - Do not use a compound-type wax or a hard brush, etc. to clean the air spoiler; doing so could scratch the air spoiler.
 - If the possibility exists that the air spoiler might be subjected to high temperature during repair procedures, it should either be removed, or treated in some way so as to protect it from heat.
 - The air spoiler surface will become whitish if ordinary wax or mud adheres to it. After cleaning the surface well, apply a coating of black upholstery cleaner.

INSTRUMENT PANEL

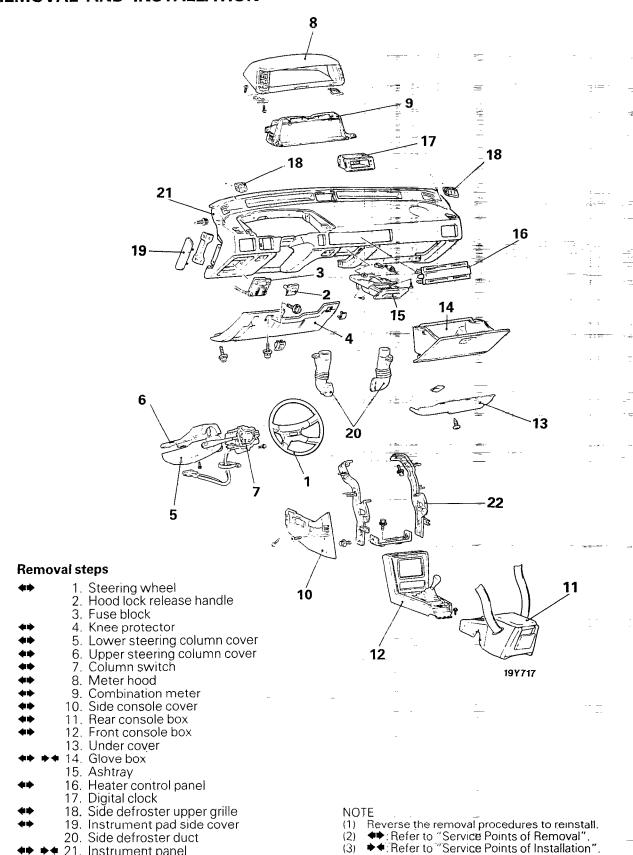
N23VAAH

The following bolts and screws are used for instrument panel installation. In the illustration for "Service Points of Removal", they are identified by symbols.

Symbol	Name and shape	Dimension mm (in.)	Symbol	Name and shape	Dimension mm (in.)
F	Washer assembled screw	O.D. = 5 (.20) L = 16 (.63)	А	Washer assembled screw	O.D. = 5 (.20) L = 16 (.63)
				Almin	
	18U0419			19W654	
G	Washer assembled bolt	O.D. = 6 (.24) L = 16 (.63)	E	Tapping screw	O.D. = 5 (.20) L = 12 (.47)
:					
	19W651			18U0418	
Н	Washer assembled bolt	O.D. = 6 (.24) L = 16 (.63)	D	Tapping screw	O.D. = 5 (.20) L = 16 (.47)
				(Julius	
	18U0420			18U0418	
В	Tapping screw	O.D. = 5 (.20) L = 20 (.78)	l	Washer assembled screw	O.D. = 5 (.20) L = 12 (.47)
	18U0418			19W564	
С	Washer assembled screw	O.D. = 5 (.20) L = 25 (1.0)			
	19Y709				

INSTRUMENT PANEL REMOVAL AND INSTALLATION

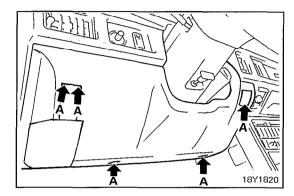
21. Instrument panel22. Center reinforcement



SERVICE POINTS OF REMOVAL

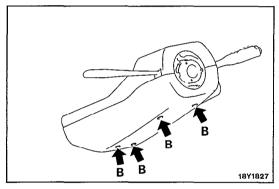
1. REMOVAL OF STEERING WHEEL

Refer to GROUP 19 STEERING – Power Steering Column Shaft.



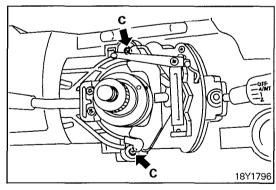
4. REMOVAL OF KNEE PROTECTOR

Remove the hole cover and remove the knee protector attaching screws and then remove the knee protector.



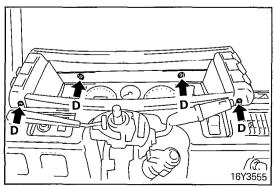
5. REMOVAL OF LOWER STEERING COLUMN COVER / 6. UPPER STEERING COLUMN COVER

(1) Remove the column cover attaching screws and then remove the column cover.



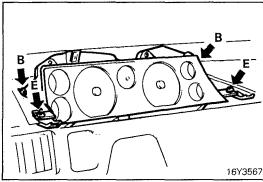
7. REMOVAL OF COLUMN SWITCH

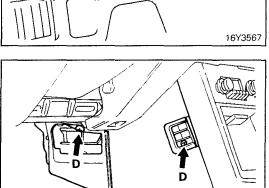
- (1) Remove the column switch attaching screws.
- (2) Disconnect the column switch harness connectors and then remove the column switch.



8. REMOVAL OF METER FOOD

- (1) Remove the meter hood mounting screws.
- (2) Pull both edges of the bottom side of the hood forward, and then, while still holding it in this position, pull it obliquely upward and out.
- (3) Disconnect the cluster switch connectors on both sides of the meter hood.





19Y605

9. REMOVAL OF COMBINATION METER

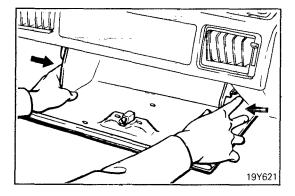
- (1) Remove the screws on the bottom part of the case.
- (2) Remove the nuts on the upper part of the case. Pull both sides of the lower part of the case up while pulling it forward at the same time.

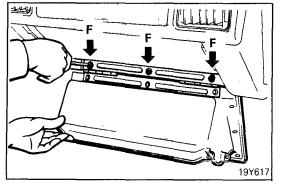
10. REMOVAL OF SIDE CONSOLE COVER

- (1) Remove the side console cover screws.
- (2) Remove the cover downward while pushing it slightly forward.

11. REMOVAL OF REAR CONSOLE BOX / 12. FRONT CONSOLE BOX

Refer to P.23-94.

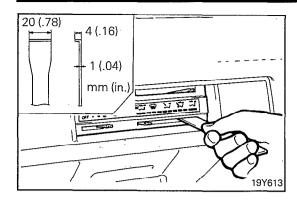




14. REMOVAL OF GLOVE BOX

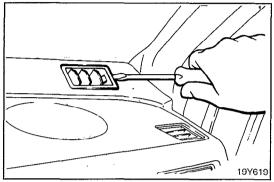
(1) Grasp and release the glove box lid lock to open the lid. Pull the glove box forward while pressing both sides inward.

(2) Remove the glove box.



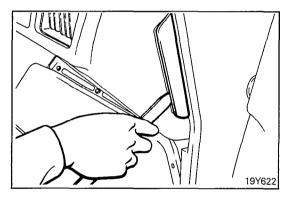
16. REMOVAL OF HEATER CONTROL PANEL

- (1) Pull off the heater control knobs.
- (2) Insert the tool shown in the illustration into the lever hole of the heater control panel, and pull to remove. Remove the connector for the control panel light.



18. REMOVAL OF SIDE DEFROSTER UPPER GRILLE

Insert a screwdriver from the door glass side, and twist and pry the side defroster upper grille forward to pull it out.

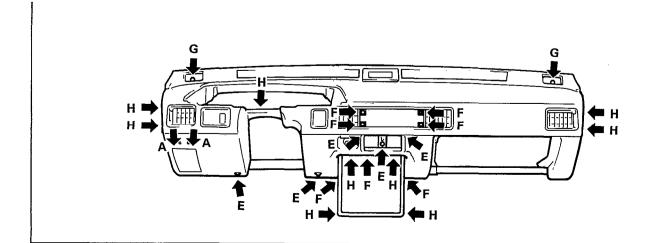


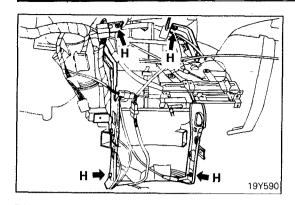
19. REMOVAL OF INSTRUMENT PAD SIDE COVER

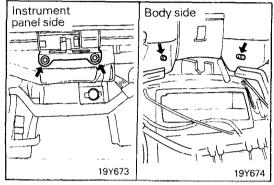
Insert the tip of the trim stick into the space between the instrument panel side cover and the instrument pad, and then twist to remove the left and right instrument panel side covers.

21. REMOVAL OF INSTRUMENT PANEL

- (1) Remove the installation screws and bolts from the places shown below.
- (2) Remove the front harness and glove compartment harness combination.
- (3) Pull the instrument panel outward.







22. REMOVAL OF CENTER REINFORCEMENT

- (1) Remove the center reinforcement bolts.
- (2) Loosen the clamp for the main harness, and remove the panel.
- (3) Take out the center reinforcement.

SERVICE POINTS OF INSTALLATION 21. INSTALLATION OF INSTRUMENT PANEL

- (1) Place the guide pin so that it catches in the body of the heater unit (upper part).
- (2) Check to be sure that the ventilator duct, wiring harness, etc., are correctly installed.

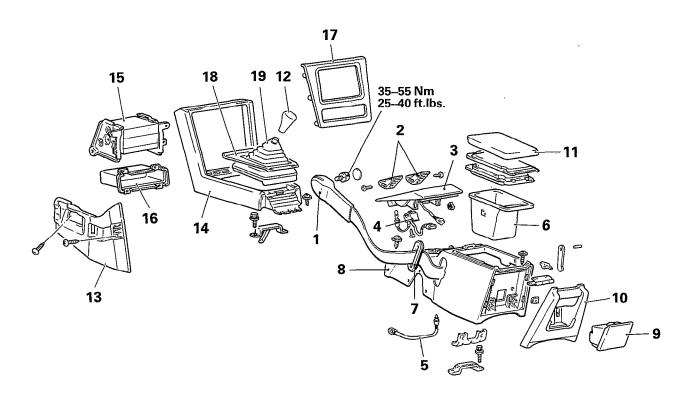
14. INSTALLATION OF GLOVE BOX

When the glove box is being installed, first temporarily tighten each screw, and then, after checking the left and right clearances between the glove box lid and the instrument pad while the lid is locked, tighten the screws completely.

FLOOR CONSOLE

N23UBAH

REMOVAL AND INSTALLATION



19Y708

Removal steps

- 1. Anchor plate connection
- 2. Spool release lever
- 3. Rear console panel
- 4. Remote control mirror switch
- 5. Rear console box harness
- 6. Inner box
- 7. Bezel
- - 8. Rear console box 9. Ashtray

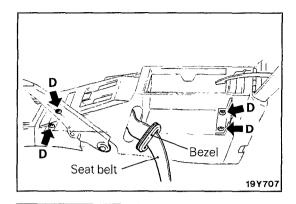
 - 10. Accessory panel 11. Accessory box lid
 - 12. Shift lever knob
- 13. Side console cover14. Front console box
 - - 15. Radio
 - 16. Parcel box

 - 17. Radio panel 18. M/T garnish
 - 19. Shift lever cover

NOTE

- (1) Reverse the removal procedures to reinstall.
 (2) ★→: Refer to "Service Points of Removal".
 (3) ★◆: Refer to "Service Points of Installation".

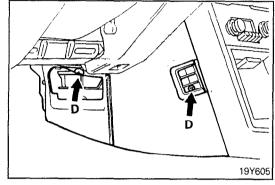
it is



SERVICE POINTS OF REMOVAL

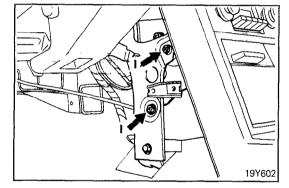
8. REMOVAL OF REAR CONSOLE BOX

- (1) Remove the installation screws for the rear console box.
- (2) Remove the bezel. Put the seat belt in the console box.



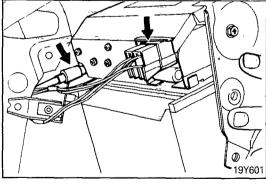
13. REMOVAL OF SIDE CONSOLE COVER

- (1) Remove the side console cover screws.
- (2) Remove the cover downward while pushing it slightly forward.

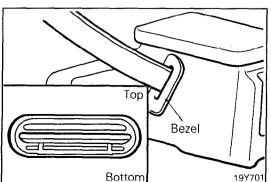


14. REMOVAL OF FRONT CONSOLE BOX

- (1) Remove the radio installation screws from the center reinforcement.
- (2) Move the shift lever to 4th gear.
- (3) Pull the front console box slightly backward.



- (4) Remove the part where the radio antenna feeder line is inserted and the connector for the radio.
- (5) Pull the front console box out toward the passenger seat.



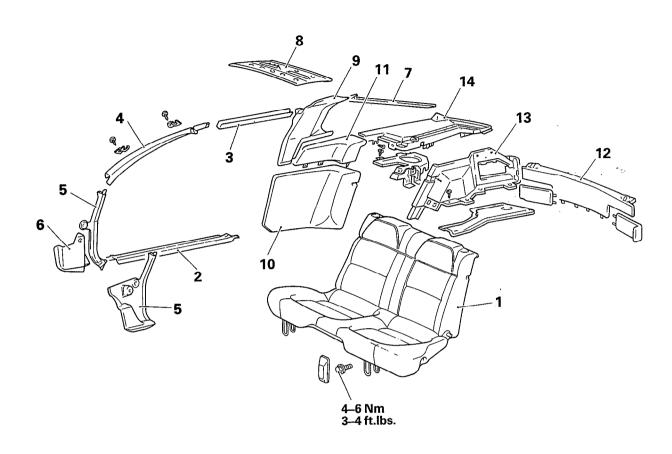
SERVICE POINT OF INSTALLATION

7. INSTALLATION OF BEZELS

Draw out the shoulder belts from the console box, and install bezels to the console box while paying attention to the installation direction. If the bezel is installed in the wrong way, the belt will twist in the console box.

TRIMS N23VCAI

REMOVAL AND INSTALLATION



Removal steps

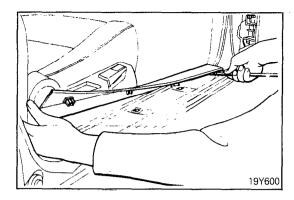
- Rear seat
 Scuff plate
 Roof side trim
 Front pillar trim
 Cowl side trim

- 6. ECI cover 7. Rear pillar trim 8. Roll bar trim

- 8. Roll bar trim
 9. Upper quarter trim
 10. Quarter trim
 11. Lap-round trim
 12. Rear end trim
 13. Trunk room side trim
- 14. Rear side shelf

NOTE

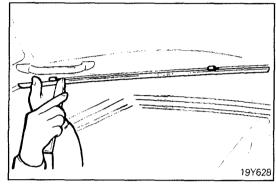
- (1) Reverse the removal procedures to reinstall.
 (2) *: Refer to "Service Points of Removal".
 (3) *: Refer to "Service Points of Installation".



SERVICE POINTS OF REMOVAL

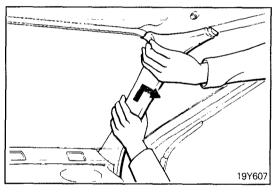
2. REMOVAL OF SCUFF PLATE

Insert the trim stick between the clip and the body, and remove the scuff plate.



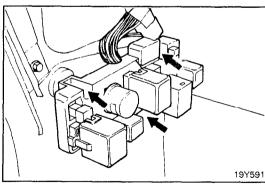
3. REMOVAL OF ROOF SIDE TRIM

Insert the trim stick into the upper part of the roof side trim from inside the vehicle, and then pull it forcefully while prying downward.



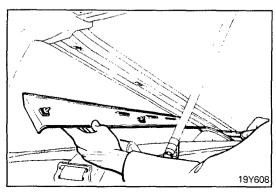
4. REMOVAL OF FRONT PILLAR TRIM

Remove the front pillar trim by pulling it in the direction of the arrow.



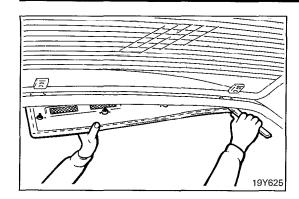
5. REMOVAL OF COWL SIDE TRIM / 6. ECI COVER

- (1) Remove the relay box installation screws (driver's side), and then remove the cowl side trim (driver's side).
- (2) Remove the ECI cover (passenger side), and then remove the cowl side trim (passenger side).



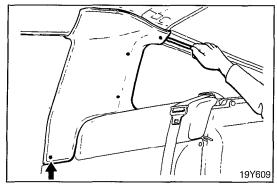
7. REMOVAL OF REAR PILLAR TRIM

- (1) Open the rear hatch.
- (2) Insert the trim stick between the body and the clip, twist downward, and remove the rear pillar trim.



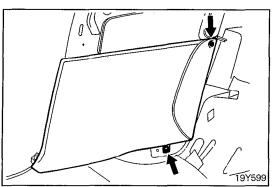
8. REMOVAL OF ROLL BAR TRIM

Pull the rear edge of the roll bar trim downward, insert the trim stick between the body and the clip, remove the clips, and then pull out the roll bar trim to the rear.



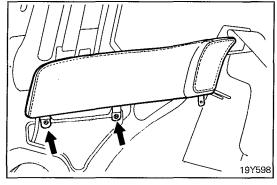
9. REMOVAL OF UPPER QUARTER TRIM

- (1) Insert the trim stick from the center of the body into the upper right end of the upper quarter trim, and then remove the clip.
- (2) Insert the trim stick from the lower side of the lower left end of the quarter trim, and then remove the clip.
- (3) The trim stick cannot be used for the remaining clips, so insert a hand to the clip position, pull out the quarter trim, and then remove the clips.
- (4) The quarter trim should be removed by pulling it forward.



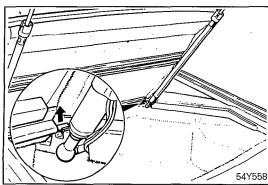
10. REMOVAL OF QUARTER TRIM

- (1) Remove the quarter trim installation bolt and screw.
- (2) Pull out the quarter trim forward at an angle.



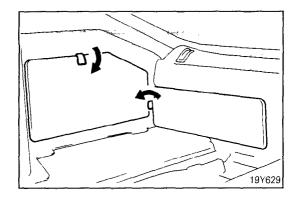
11. REMOVAL OF LAP-ROUND TRIM

- (1) Remove the lap-round trim installation screws.
- (2) Remove the lap-round trim by pulling it to the lower front side.

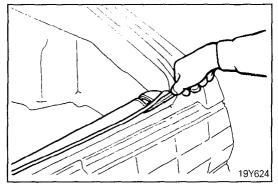


12. REMOVAL OF REAR END TRIM

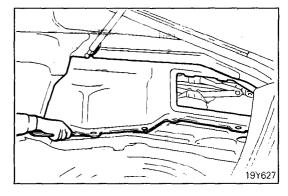
- (1) Remove the trunk room mat. At this time, detach the parcel strap and gather it at the end of the trunk room near the rear combination lights.
- (2) Pull both sides of the front of the rear center shelf upward, and remove the rear center shelf.



- (3) Remove the jack storage cover from the trunk room side trim.
- (4) Remove the rear end trim lid.

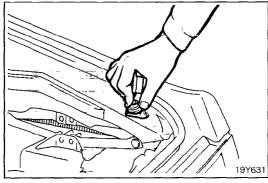


- (5) Insert the trim stick into the gap between the weatherstrip at the top of the tail lights and the rear end trim, and remove the clips.
- (6) While pulling the rear end trim slightly upward, push the end toward the rear seat, and remove the trim.



13. REMOVAL OF TRUNK ROOM SIDE TRIM

- (1) Remove the trunk room side trim mounting screw, and then remove the clips by using the trim stick.
- (2) Pull the lower end of the trunk room side trim toward the center of the vehicle, and remove the trim.



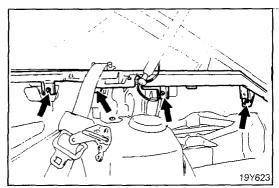
14. REMOVAL OF REAR SIDE SHELF

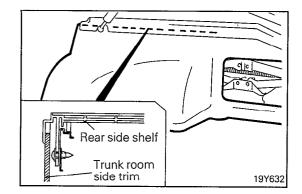
(1) After removing the cap of the rear washer tank, detach the tube from the rear side shelf.

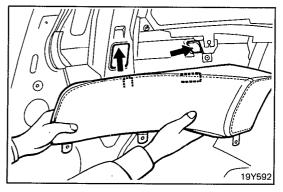
NOTE

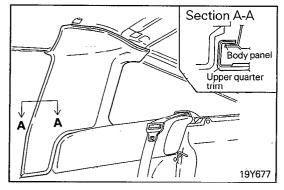
Be sure to drain the washer fluid before removal in order to avoid the possibility of the fluid spilling in the vehicle interior during the removal procedure.

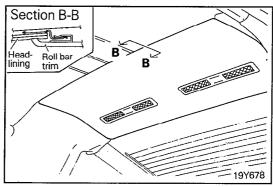
- (2) Disconnect the trunk room illumination connector.
- (3) Disconnect the rear speaker connector.
- (4) Disconnect the rear_defogger connector.
- (5) Remove the mounting screws of the rear side shelf.
- (6) Close the rear hatch.
- (7) Pull the rear side shelf forward.
- (8) Remove the rear seat belt cover by passing it through the hole of the rear side shelf.

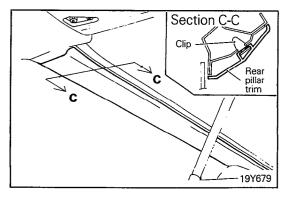












SERVICE POINTS OF INSTALLATION

13. INSTALLATION OF TRUNK ROOM SIDE TRIM

When installing the trunk room side trim, fit it securely into the groove in the rear side shelf.

12. INSTALLATION OF REAR END TRIM

When installing the rear end trim, be sure to use new clips, and insert them, beginning from the clips at the lower part of the trim.

11. INSTALLATION OF LAP-ROUND TRIM

When installing the lap-round trim, insert and set the hooks on the back of the lap-round trim into the holes on the body at an angle from the lower front side.

9. INSTALLATION OF UPPER QUARTER TRIM

When installing the upper quarter trim, align the positions of the right bottom end of the trim and the rear side shelf while fitting the upper quarter trim in from the front (the body flange should be overlapped by the trim), and then tap in the clips at both ends of the trim lightly by hand.

NOTE

Be sure to use new clips.

8. INSTALLATION OF ROLL BAR TRIM

When installing the roll bar trim, fit the hooks at the end of the roll bar trim into the hooks at the back end of the headlining, and then tap in the clips from the bottom side of the trim lightly by hand.

Begin by first tapping in the clip in the center, and then tap in the clips on the left and right sides.

NOTE

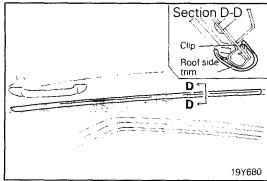
Be sure to use new clips.

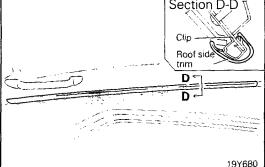
7. INSTALLATION OF REAR PILLAR TRIM

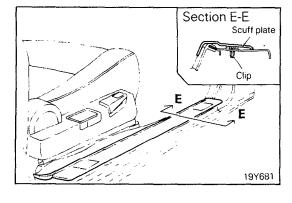
When installing the rear pillar trim, tap in the clips by fitting them in while tapping lightly by hand from the end of the trim.

NOTE

Be sure to use new clips.







3. INSTALLATION OF ROOF SIDE TRIM

- (1) When installing the roof side trim, attach the trim to the clips (the clips are fastened to the body by screws) by tapping the end of the trim lightly with your hand.
- (2) Be sure that the gaps at places where the various trims meet are uniform.

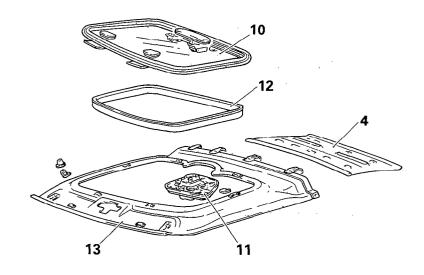
2. INSTALLATION OF SCUFF PLATE

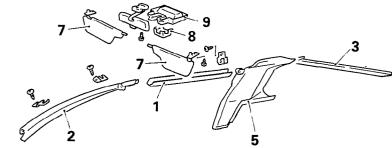
- (1) When installing the scuff plate, be sure that the gaps at places where it meets any of the trims are uniform.
- (2) Attach the clip by tapping lightly by hand from the end of the trim.

HEADLINING N23UDAJ

REMOVAL AND INSTALLATION

Vehicles with sunroof





19Y684

Headlining removal steps (Vehicles with a sunroof)

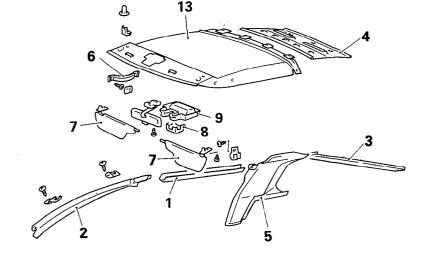
- Roof side trim
 Front pillar trim
 Rear pillar trim
 Roll bar trim

- 5. Upper quarter trim
 - 6. Assist grip
- 7. Sunvisor assembly8. Dome light cover
- 9. Dome light
- 10. Roof lid glass11. Roof lid regulator assembly12. Roof lid inner weatherstrip
- 13. Headlining

Headlining removal steps (Vehicles without a sunroof)

- 1. Roof side trim
- 2. Front pillar trim
 - 3. Rear pillar trim
- 4. Roll bar trim
- 5. Upper quarter trim
 6. Assist grip
 7. Sunvisor assembly
 8. Dome light cover
- 9. Dome light
- 13. Headlining

Vehicles without sunroof



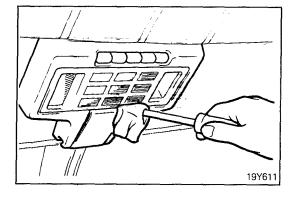
NOTE

- (1) Reverse the removal procedures to reinstall.
- ♣ : Refer to "Service Points of Removal".♠ : Refer to "Service Points of Installation".

SERVICE POINTS OF REMOVAL

1. REMOVAL OF ROOF SIDE TRIM / 2. FRONT PILLAR TRIM / 3. REAR PILLAR TRIM / 4. ROLL BAR TRIM / 5. UPPER QUARTER TRIM

Refer to P.23-95.

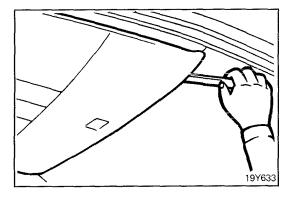


8. REMOVAL OF DOME LIGHT COVER / 9. DOME LIGHT

- (1) Use a screwdriver to remove the cover of the dome light.
- (2) Remove the dome light installation screws, and then pull out the dome light slightly.
- (3) Remove the connector, and then remove the dome light.

11. REMOVAL OF ROOF LID REGULATOR ASSEMBLY

Refer to P.23-79.



13. REMOVAL OF HEADLINING

- (1) Remove the mounting screws at the rear edge of the headlining.
- (2) Insert the trim stick into the gap between the body and the headlining from the front of the headlining, then pry downward to remove the retainers.

SERVICE POINT OF INSTALLATION

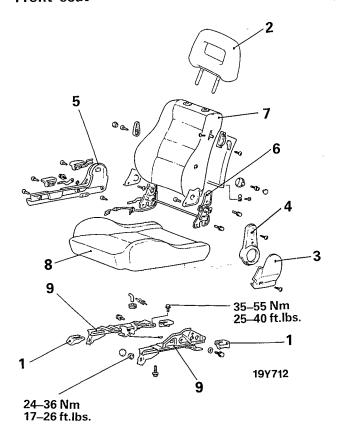
11. INSTALLATION OF ROOF LID REGULATOR ASSEMBLY / 10. ROOF LID GLASS

Refer to P.23-79.

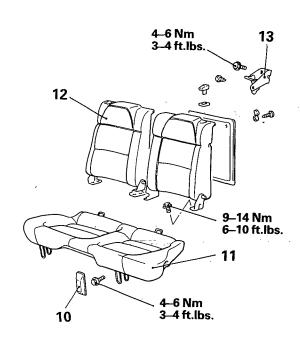
SEATS N23UEAH

REMOVAL AND INSTALLATION

Front seat



Rear seat



Front seat removal steps

- 1. Cover
- 2. Head restraint
- 3. Upper reclining cover
- 4. Lower reclining cover
- 5. Cushion shield
- 6. Reclining adjuster
- 7. Seat back
- 8. Seat cushion
- 9. Seat side adjuster

Rear seat removal steps

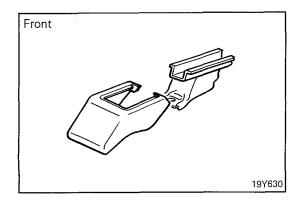
- 10. Cover
- 11. Rear seat cushion
- 12. Rear seatback

 - 13. Striker

NOTE

- (1) Reverse the removal procedures to reinstall.
 (2) ★⇒: Refer to "Service Points of Removal".
 (3) ★◆: Refer to "Service Points of Installation".

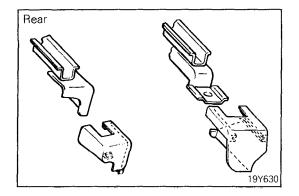
19Y670

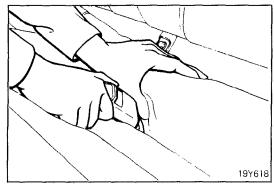


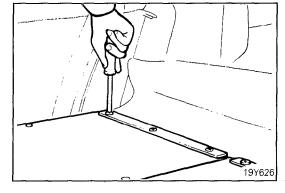
SERVICE POINTS OF REMOVAL

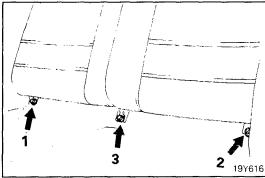
1. 10. REMOVAL OF COVER

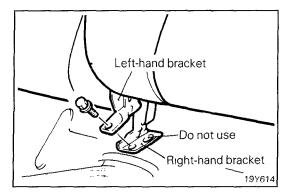
- (1) Disconnect the seat-belt indication light connector located beneath the front seat on the driver's side.
- (2) While pushing open the end of the front and rear seat anchor covers to the outside, pull out the covers.











11. REMOVAL OF REAR SEAT CUSHION

- (1) Remove the mounting bolts at the front of the seat cushion.
- (2) Lift up the seat cushion, and then pull out the rear seat belts (backbone side) through the hole in the cushion.
- (3) Remove the seat cushion.

12. REMOVAL OF REAR SEATBACK

- (1) Fold down the seatbacks, and then remove the carpet cover screws which fasten both the trunk room floor mat and the lower part of the seatbacks.
- (2) Raise the seatbacks and then lock them so that they do not fold down.

- (3) Remove the seatback mounting bolts in the order indicated in the illustration.
- (4) Release the left and right seatback locks, and then remove both seatbacks simultaneously.

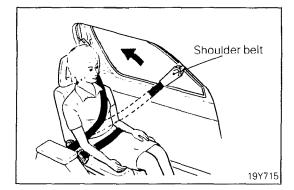
SERVICE POINTS OF INSTALLATION 12. INSTALLATION OF REAR SEATBACK

- (1) When assembling and installing the left and right seatbacks, the right-hand bracket should be on the bottom (the left-hand bracket should be on the top).
- (2) Tighten the left and right brackets together.
- (3) If there are two different size holes in the seatback mounting brackets, use the smaller hole.

(4) Temporarily tighten each mounting bolt, confirm that both seatbacks fold up and down properly and that the locks function correctly, and then tighten the bolts securely.

9. INSTALLATION OF SEAT ADJUSTER

Install the seat adjuster in the position farthest back (because of the positioning bolts on the body) from the front. At this time, first temporarily tighten the mounting nuts and bolts, confirm that the lock of the adjuster functions correctly and the adjuster opertes back and forth correctly, and then tighten the nuts and bolts securely.



AUTOMATIC SEAT BELTS

N23UGAQ

GENERAL INFORMATION

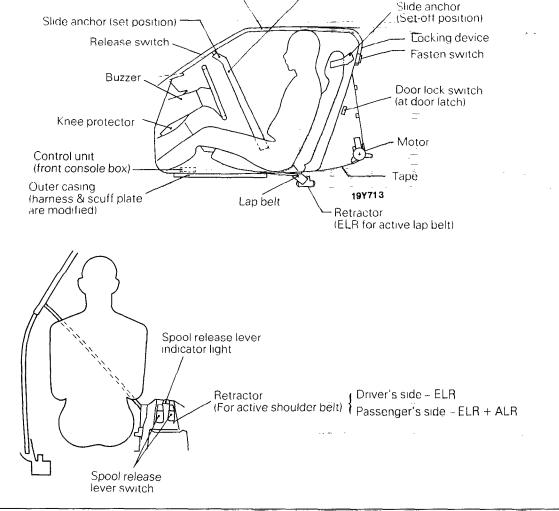
Shoulder belt

The Automatic Seat Belts are designed to automatically wrap themselves around the driver and front passenger as they get into the car and close the door, thereby protecting them from second collisions during a front-end crash or similar accident. The shoulder belt, which interlocks the opening and closing of the door, is designed to automatically wrap itself around, or unwrap itself from, the occupant within 2.5 sec.

The lap belt for the driver's seat is provided with the ELR (ELR: Emergency Locking Retractor), and that for the front passenger's seat with the ELR-ALR* to support the Child Restraint System incorporated into the seat. (*ALR: Automatic Locking Retractor)

The seat belts consist of a shoulder belt with emergency release mechanism, manual lap belt, knee protector, and other components.

COMPONENTS



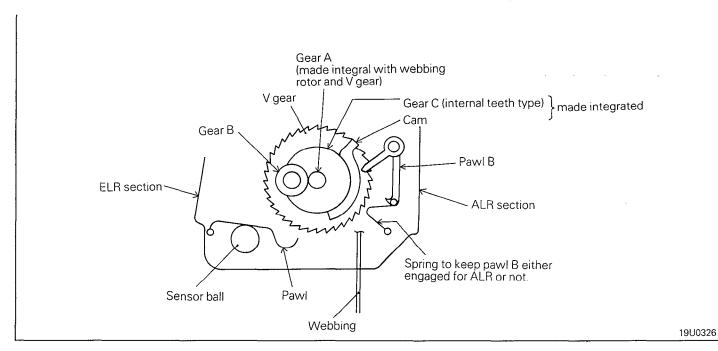
Rail quide

OPERATION OF AUTOMATIC SEAT BELTS

The operation of the Automatic Seat Belts is as follows.

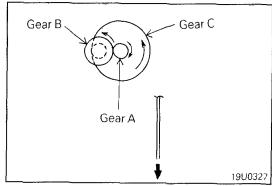
- (1) The belts unwrap itself from the occupant when the door is opened with the ignition switch in the ON or LOCK or ACC position.
- (2) The belts wrap itself around the occupant when the door is closed with the ignition switch in the ON position.
- (3) The belts cease to wrap itself around the occupant if the ignition switch is turned to LOCK or ACC during the belt motion.
- (4) The spool release lever (indicated as "LIFT FOR EMERGEN-CY EXIT") fitted to the rear floor console, if pulled when the ELR is locked by a collision shock, causes the ELR to be unlocked allowing the occupant to leave the car or to be rescued from it.
- (5) When the body rolls by an accident, the slide anchor moves upward to be locked in position via the locking device. (The longer holes in the tape drive, in mesh with the plastic gear, permits the slide anchor to move upward.)
- (6) When a binding load is applied to the belts or slide anchor due to a driver or passenger rushing into or out of the car, it causes the slide anchor to be locked up immediately.
- (7) The seat belts and door for the driver's and front passenger's seats operate independently of each other.

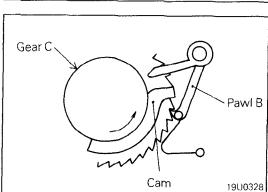
OPERATION OF ELR + ALR EQUIPPED BELT FOR FRONT PASSENGER'S SEAT

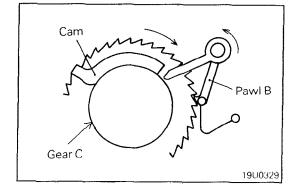


(1) ELR

The webbing is locked when the G-sensor senses an abrupt deceleration of vehicle. The sensor ball is moved by the inertia and pushes the pawl up to lock the V-gear (ratchet wheel), thus preventing the webbing from extracting.







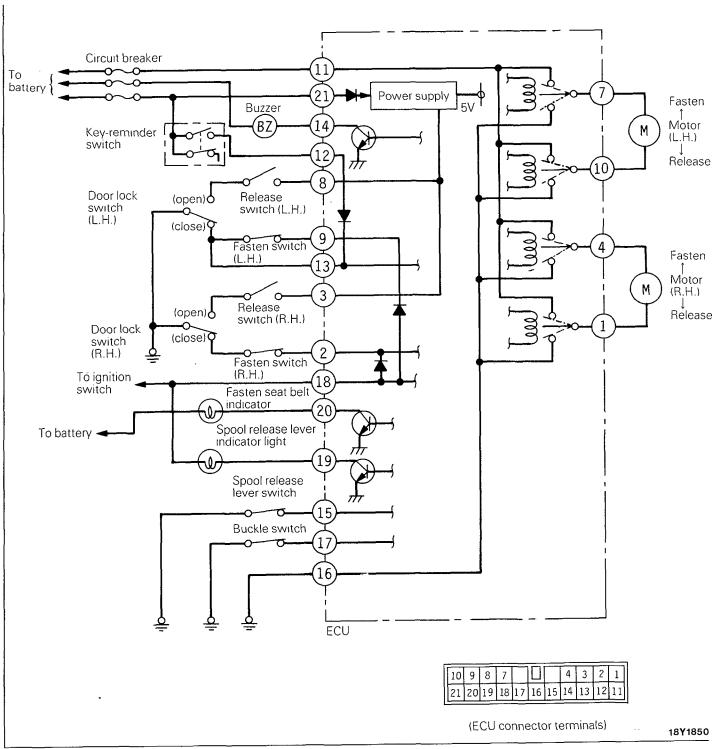
(2) ALR

Pull out the webbing.
 The number of webbing rotor revolutions is reduced by gears A, B and C to rotate the cam.

2. When the webbing has been extended almost fully, the cam strikes pawl B to engage it with V-gear and locks the webbing.

3. Then, retract the webbing. When it has been retracted almost fully, the cam returns pawl B to its original position, bringing the system into ELR state.

CIRCUIT DIAGRAM



ECU: Electronic Control Unit

COMPONENT PARTS AND FUNCTION

Automatic Seat Belt Control Unit		Located at the front console box. Controls the system based on the various input signals.
	19 Y69 8	
Release Switch (L.H., R.H.)		Located at the front of the rail guide.
		This switch is for turning the shoulder belt drive motor on or off. It transmits an OFF signal to the control unit when the shoulder belt is completely unfastened. Once the OFF signal is received, the control unit shuts off the motor.
	GS. LODE	
	8Y 1855	
Fasten Switch (L.H., R.H.)		Located at the rear of the rail guide. This switch is for turning the shoulder belt drive motor on or off. It transmits an OFF signal to the control unit when the shoulder belt is completely fastened. Once the OFF signal is received, the control unit shuts off the motor.
	8Y1856	
Spool Refease Lever Switch Spool Release Indicator Light	 69Y516	 Located at the rear section of the console box. The spool release lever switches are for unlocking the ELR in an emergency. The control unit normally receives an ON signal from the switches, but when the spool release lever is pulled (the ELR is unlocked), the switches transmit an OFF signal to the control unit. The spool release indicator light blinks to warn the driver when the spool release lever is pulled (the ELR is unlocked) while the ignition switch is set at "ON"
Fasten Seat Belt Indicator Light		Located at the combination meter.
	* æ.	This light remains illuminated for approx. 6 seconds after the ignition switch is turned to "ON" to remind the drivers to fasten the lap belt. It also blinks when the spool release lever is pulled up (the ELR is unlocked). This light operates under control of the control unit.
18	8Y1853	

Buckle Switch (L.H.)	Located at the driver's seat belt buckle. This switch transmits an OFF signal to the control unit when the lap belt is fastened and an ON signal when it is not fastened.
18Y1859	
Motor (L.H., R.H.)	Located at the inner quarter panel. The motor operates to move the shoulder belt. It receives direction of rotation, start, and stop signals from the control unit, and operates according to these signals.
Door Lock Switch (L.H., R.H.)	Located at the door latch.
18Y1857	These switches detect the open/close condition of the doors.

The following components also constitute the automatic seat belts system.

Ignition Switch (ON position)	This switch sends a HIGH signal to the control unit when the ignition key is at the ON position.
Key-reminder Switch (for lighting monitor)	Located at the door latch. These switches detect the open/close condition of the doors.
Buzzer	Located at the center reinforcement. The power for this buzzer is supplied from the battery through fuse No. 8.
19Y704	

OPERATION

1. BELT WRAPPING MOTION

seconds.

(1) If the belt is not in the wrap position (the L.H. or R.H. door lock switch at Door Closed position; the L.H. or R.H. fasten switch at ON position) when the door is closed with the ignition switch in the ON position, the belt automatically moves to the wrap position. For the period between the imitiation and completion of the belt's motion in the wrap direction, the "fasten seat belt" indicator light either stays lit or blinks. From the initiation of the belt's wrapping motion (i.e., from the time when the door is closed), the "fasten seat belt" indicator light stays lit for approximately 6

seconds, then blinks for another approximately 3

-

(2) With a lapse of approximately 60 seconds after the belt has stopped its wrapping motion due to foreign object wedged in the mechanism, the protective timer of the CPU is activated causing the motor output to be cut off. The circuit description of this operation is as follows: When the L.H. or R.H. door lock switch is turned ON to the Door Closed position, a Door Closed signal is input to the CPU, which causes a driver drive signal to be output via the driver circuit from the CPU, closing the relay b to the Belt Wrap side.

As a result, a HIGH signal (wrap motion signal, 12 V) is applied to the coil of relay b by the driver circuit, closing relay b contacts to energize motor M_D. This completes the belt's wrapping motion.

When the belt completes its wrapping motion, the L.H. or R.H. fasten switch is turned OFF, which cuts off the current flowing to the relay coil. As a result, relay b is deactuated shutting off the motor current.

The output of the driver circuit then drops from HIGH to LOW.

The same operation is also true with the belt on the front passenger's seat.

2. BELT UNWRAPPING MOTION

- (1) When the door is opened, the L.H. or R.H. door lock switch (door lock switch) is turned ON to the Unwrap side regardless of whether the ignition switch is in the ON or LOCK or ACC position. This actuates the L.H. or R.H. release switch (seat belt unwrap switch) causing the belt to move in the unwrapping direction. The L.H. or R.H. release switch is deactuated when the belt completes its unwrapping motion.
 - The buzzer on the instrument panel sounds for approximately 0.7 seconds since the start of the belt's motion.
- (2) If the belt is still in the process of unwrapping with a lapse of approximately 60 seconds after the start of motion, the protective timer in CPU is activated causing the motor output to be shut off.

3. BELT UNWRAP POSITION

When the belt is not in the unwrap position, the L.H. or R.H. release switch (seat belt unwrap switch) is in the ON position. When the L.H. or R.H. door lock switch is turned ON to the Door Open position, a Door Open signal is input to the CPU, which causes a driver drive signal to be output via the driver circuit from the CPU, closing the relay a to the Belt Unwrap side. As a result, a HIGH signal (unwrap motion signal, 12 V) is applied to the coil of relay a by the driver circuit, closing relay a contacts to energize motor M_D. This completes the belt's unwrapping motion.

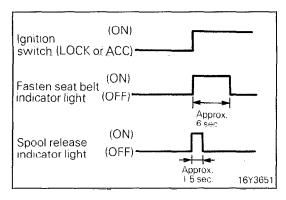
When the belt completes its unwrapping motion, the L.H. or R.H. release switch is turned OFF, which cuts off the current flowing to the relay coil. As a result, relay a is deactuated shutting off the motor current. The output of the driver circuit then drops from HIGH to LOW.

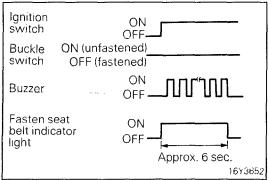
The same operation is also true with the belt on the front passenger's seat.

4. EMERGENCY STOP

- (1) If a shock is applied to the belt anchor or a sudden tension force is applied to the shoulder belt during the belt unwrapping motion, a motor current will increase. This increase in the motor current (approximately 5 A or more within approximately 0.4-sec. interval) is detected by the current increase detecting circuit installed between the CPU and relay circuit and the detecting circuit causes relay a to be turned OFF, thus temporarily halting the belt's unwrapping motion for approximately 1.7 seconds. This is called the emergency stop. During this period of emergency stop (for approximately 1.7 seconds), the buzzer on the instrument panel kept sounding. Then, the circuit resets to allow the belt to restart its unwrapping motion.
- (2) The number of emergency stops made until the belt reaches its unwrap position is three. The fourth or more emergency stop will not be made even when a shock is applied. The emergency stop count is reset to 0 once the belt reaches its unwrap position.
- (3) If the door is closed during an emergency stop being under way, that particular emergency stop is canceled to bypass the belt unwrapping mode. The belt unwrapping mode refers to a series of operation mode in which the belt unwrapping motion is temporarily halted by the emergency stop, the circuit resets, and the belt resumes its unwrapping motion.
- (4) The emergency stop is not activated for an approximately 0.6-sec. interval from the start of the belt's unwrapping motion after the door has been opened. The emergency stop is activated and deactivated for the belt on the driver's seat independently of that on the front passenger's seat.

(CPU: Computer)





WARNING SYSTEM

1. IGNITION SWITCH INITIAL WARNING

When the ignition switch is turned from LOCK or ACC to ON, the "fasten seat belt" indicator light lights up and stays lit for approximately 6 seconds and spool release indicator light lights up and stays lit for approximately 1.5 seconds. The lights go off if the ignition switch is turned LOCK or ACC during the predetermined period of time.

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2. DRIVER'S SEAT LAP BELT WARNING

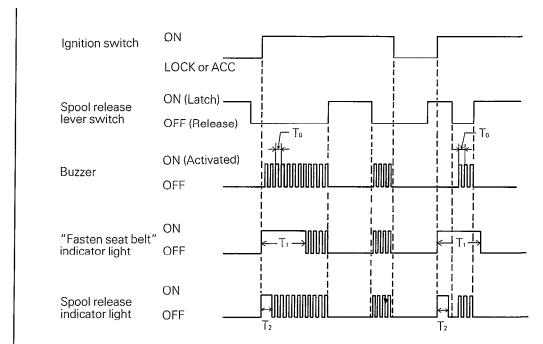
If the lap belt on the driver's seat is not buckled when the ignition switch is turned ON from the LOCK or ACC position, buzzer is activated for approximately 6 seconds. The "fasten seat belt" indicator light, at the same time, lights up and stays lit for the same period of time.

3. AUTOMATIC SEAT BELT LATCH RELEASE WARNING

When the ignition switch is turned ON with the spool release lever pulled (spool release lever switch in OFF position), intermittent buzzer sounds.

When the ignition switch is turned ON from the LOCK or ACC position, the "fasten seat belt" indicator light lights up and stays lit for approximately 6 seconds, then starts blinking. The spool release indicator light lights up and stays lit for approximately 1.5 seconds, then starts blinking. If the spool release lever is pulled with a lapse of approximately 6 seconds after the ignition switch has been turned ON, buzzer sounds intermittently.

At the same time, the "fasten seat belt" indicator light and the spool release indicator light blink intermittently.

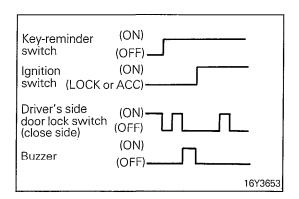


 T_0 : For approximately 0.7 sec.

T₁: For approximately 6 sec.

T₂: For approximately 1.5 sec.

19U0323



4. KEY REMINDER

When the door lock switch on the driver's side door is turned LOCK or ACC from ON position (close \rightarrow open), the buzzer will sound without interruption in case the steering lock switch is ON (key inserted in key cylinder) and the ignition switch is in LOCK or ACC position.

AUTOMATIC SEAT BELT CONTROL UNIT INPUT/ OUTPUT SIGNALS

1. POWER SUPPLY AND GROUND CIRCUIT

Name	Terminal No.	Voltage level
Battery (+B)	21	Н
Automatic seat belt motor (+B)	11	Н
GROUND (GND)	16	L

NOTE

H and L in the voltage level column indicate the terminal voltage of each signal.

H: Battery voltage

L: Ground voltage (0.8V or less)

2. INPUT SIGNALS

Input signals (to the computer) corresponding to the ON/OFE condition of each of the switches and sensors are as shown in the table below.

Note that the checking should be done with the ignition key at the ON position, otherwise the correct voltage measurement might not be obtained.

Input name	Terminal No.	Switch operation and cond	Switch operation and condition		Input signal wa	iveform
Key-reminder switch	12	Ignition key is inserted	ON_	Н	ON _	
		Ignition key is removed	OFF	L	OFF —	16R0919
Release switch _ (driver's side, front)	8	Driver's door is open or shoulder belt is not released completely	ON	L	OFF _	
		Driver's door is closed or shoulder belt is released completely	OFF	Н	ON —	16R0919
Fasten switch (driver's side, rear)	9	Driver's door is closed or shoulder belt is not fastened	ON	L	OFF	
		Driver's door is open or shoulder belt is fastened completely	OFF	Н	ON	16R0919
Door lock switch (driver's side)	13	Driver's door is closed	ON (lock)	L	ON (unlock)	
		Driver's door is open and key-reminder switch is ON	ON (unlock)	Н	ON (lock)	16R0919
Release switch	3	Passenger's door is open	ON	L		
(passenger's side, front)		Passenger's door is closed or shoulder belt is released completely	OFF	Н	OFF ON	16R0919
Fasten switch (passenger's side,	2	Passenger's door is closed or shoulder belt is not fastened	ON	L	OFF	
rear)		Passenger's door is open or shoulder belt is fastened completely	OFF	Н	ON	16R0919
IG.	18	Ignition switch	ON .	Н	ON.	
			ACC or LOCK	L	ACC or LOCK	16R0919
Spool release lever	15	Lever is not operated	ON	L	OFF	
switch		Lever is pulled up	OFF	Н	ON	16R0919
Buckle switch	17	Lap belt is fastened	OFF	Н	OFF _	
(driver's seat)		Lap belt is not fastened	ON	L	ON	16R0919

3. OUTPUT SIGNALS

Signals output from the computer in accordance with changes of input signals are as shown in the table below.

(1) Buzzer drive (terminal No. 14)

Condition at input side			Output signal waveform and its operation		
Condition at input side		Output signal	Buzzer		
Buckle switch at ON (not fastened)	Ignition switch	LOCK or ACC	0.7 sec.	OFF	
		ON	6 sec. 16R0028	ON	
Ignition switch at LOCK and ACC and	Door lock switch (close side)	ON (lock)	H — Door closed — Door open —	OFF	
key-reminder switch at ON		OFF (unlock)	L 16R0016	ON	
Spool release lever switch at OFF	Ignition switch	LOCK or ACC	0.7 sec. H	OFF	
		ON	L 16R0017	ON	
Door lock switch at ON (open side) and	Belt anchor and shoulder belt	FREE		OFF	
release switch at ON	Silvaidei beit	An impact or sudden pull force is applied	H L 0.7 sec. → 1.7 sec. 16Y3654	ON	

(2) Fasten seat belt indicator light drive (terminal No. 20)

				Output signal waveform and its	operation
Condition at input side				Output signal	Fasten seat belt indicator light
_	Ignition switch	LOCK or ACC	Н		OFF
		ON	L	6 sec.	ON
Spool release lever switch at OFF or	Ignition switch	LOCK or ACC	Н	6 sec. 0.7 sec.	OFF
door lock switch at ON (close side)		ON	L	16Y3656	ON
Buckle switch at ON (not fastened)	Ignition switch	LOCK or ACC	Н		OFF
		ON	L	16R0019	ON .

(3) Spool release indicator light drive (terminal No. 19)

Condition at input side			Output signal waveform and its operation			
Condition at input side			Output signal	Spool release indicator light		
	Ignition switch	LOCK or ACC	Н		OFF	
		ON	L	1,5 sec.	ON 023	
Spool release lever switch at OFF	Ignition switch	LOCK or ACC	H •	1.5 sec.	OFF	
		ON	L	16Y3	ON	

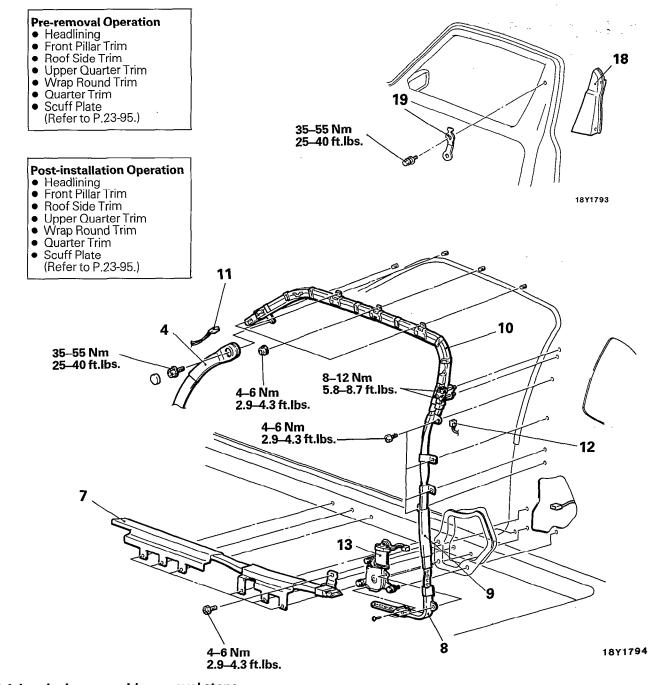
(4) Motor (shoulder belt release side: terminal No. 7 – driver's side and terminal No. 4 – passenger's side)

Condition of local dist			Output signal waveform and its operation		
Cor	Condition at input side		Output signal		Motor
Door lock switch at	Ignition switch	ON	Н		Operate
ON (open side)		LOCK	L .		Stop
		or ACC		16R0919	

(5) Motor (shoulder belt fasten side: terminal No. 10 – driver's side and terminal No. 1 – passenger's side)

			Output signal waveform and its operation			operation
Condition at input side			Output signal		Motor	
Door lock switch at Ignition switch		ON	Н			Operate
ON (close side)		LOCK or ACC	L .			Stop
		Of ACC			16R0919	

REMOVAL AND INSTALLATION

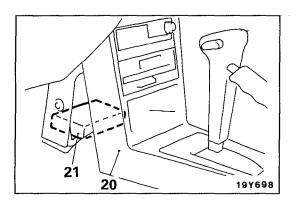


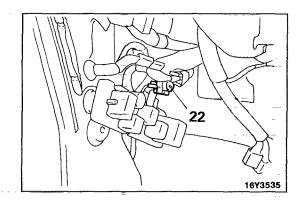
Driving device assembly removal steps

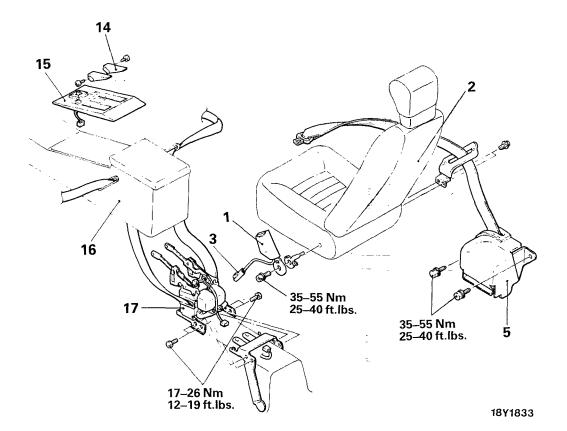
- 1. Buckle
- 2. Front seat
- 3. Buckle switch connector connection (driver's side only)
- 4. Anchor plate connection
- 5. Retractor (for lap belt)
- 6. Driving device assembly (Parts 7 through 10)
- 7. Outer casing (B)
 - 8. Tape guide
 - 9. Outer casing (A)
 - 10. Rail guide
 - 11. Release switch connector connection
 - 12. Fasten switch connector connection
 - 13. Motor

NOTE

- (1) Reverse the removal procedures to reinstall.
- ♣: Refer to "Service Points of Removal".
 ♠: Refer to "Service Points of Installation".







Shoulder belt removal steps

- 4. Anchor plate connection
- 14. Spool release lever
- 15. Rear console cover
- 16. Rear console box
 - ◆ 17. Retractor (for shoulder belt)

Shoulder sub anchor removal steps

- 18. Door sash trim
- 19. Shoulder sub anchor

Automatic seat belt control unit removal steps

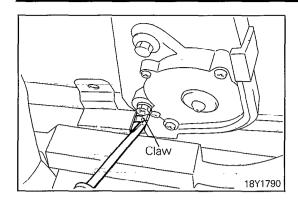
- ◆◆ ◆◆ 20. Floor console
 - 21. Automatic seat belt control unit

Circuit breaker removal

- 22. Circuit breaker

NOTE

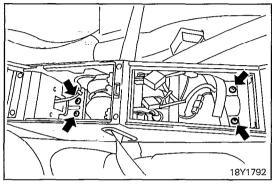
- (1) Reverse the removal procedures to reinstall (2) ◆▶ Refer to "Service Points of Removal" (3) ▶◆: Refer to "Service Points of Installation"



SERVICE POINTS OF REMOVAL

7. REMOVAL OF OUTER CASING (B)

Raise the claw of the outer casing (B) and disconnect the outer casing (A) from the tape guide. Then, with the tape pulled all the way out, remove the outer casing (B).



16. REMOVAL OF REAR CONSOLE BOX

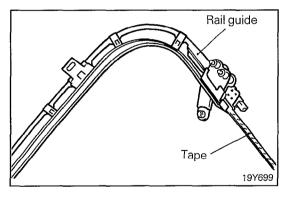
Remove the inner box cover and remove the rear console box attaching screws shown. Then, remove the rear console box.

18. REMOVAL OF DOOR SASH TRIM

Refer to P.23-64.

20. REMOVAL OF FLOOR CONSOLE

Refer to P.23-93.

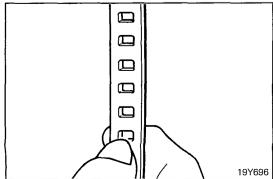


INSPECTION

RAIL GUIDE

(1) Check the tape moves smoothly and does not catch when pulled and pushed.

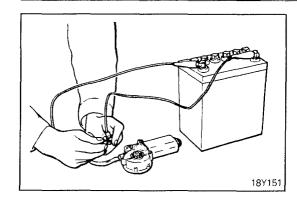
If not, check the guide rail for foreign particles.



(2) Check the tape for wear or damage.

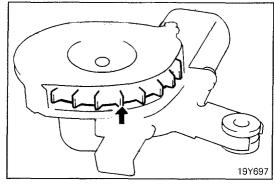
Caution

Do not wipe off the grease and take care not to soil the tape.

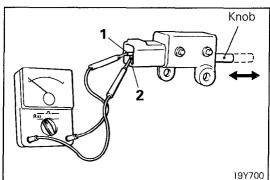


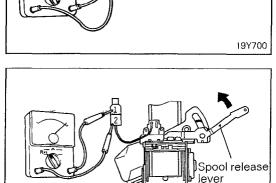
MOTOR

- (1) Remove the motor.
- (2) Connect the motor terminals directly to the battery and check that the motor operates smoothly. Next, reverse the polarity and check that the motor operates smoothly in the reverse direction.



(3) Check the gear for wear or damage.





RELEASE SWITCH AND FASTEN SWITCH

- (1) Remove the release switch and fasten switch.
- (2) Check the continuity between the terminals.

Condition	1	2
Release the switch knob	0	
Push the switch knob -		N MACL

NOTE

—O indicates that there is continuity between the terminals.

SPOOL RELEASE LEVER SWITCH

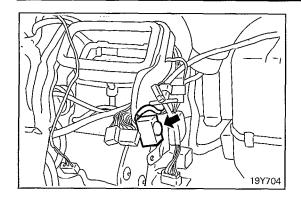
- (1) Disconnect the spool release lever switch connector.
- (2) Check the continuity between the terminals.

- Terminal Condition	1	2
Spool release lever does not operate	0-	0
Spool release lever lift up		T SMITH

NOTE

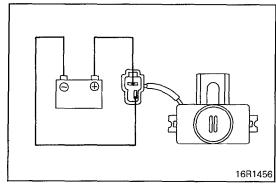
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indicates that there is continuity between the terminals.

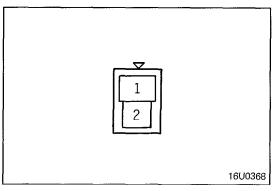


BUZZER

(1) Remove the buzzer from the center reinforcement.



(2) Check that buzzer sounds when battery voltage is applied to the buzzer terminal.



BUCKLE SWITCH

- (1) Disconnect the buckle switch connector (L.H. only).
- (2) Check the continuity between the terminals.

Terminal	1	2
Buckle unlock	0	
Buckle lock		

NOTE

O-O indicates that there is continuity between the terminals.

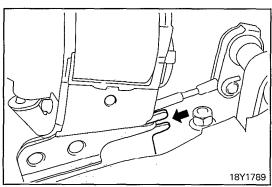
SERVICE POINTS OF INSTALLATION

20. INSTALLATION OF FLOOR CONSOLE

Refer to P.23-93.

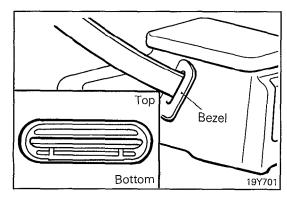
17. INSTALLATION OF RETRACTOR (FOR SHOULDER BELT)

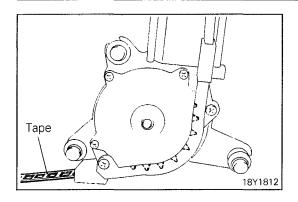
When installing the retractor, make sure that the retractor locking tab fits into bracket hook as illustrated.



16. INSTALLATION OF REAR CONSOLE BOX

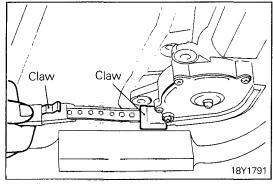
When passing the shoulder belt out through the bezel of console box after the rear consle box has been installed, ensure that the bezel is positioned with correct top-to-bottom orientation and the belt is not twisted inside the console box.





8. INSTALLATION OF TAPE GUIDE

- (1) Pass the tape into the tape guide.
- (2) Mesh the hole in tape with the motor gear with proper tension. Then, mount the tape guide to the motor.

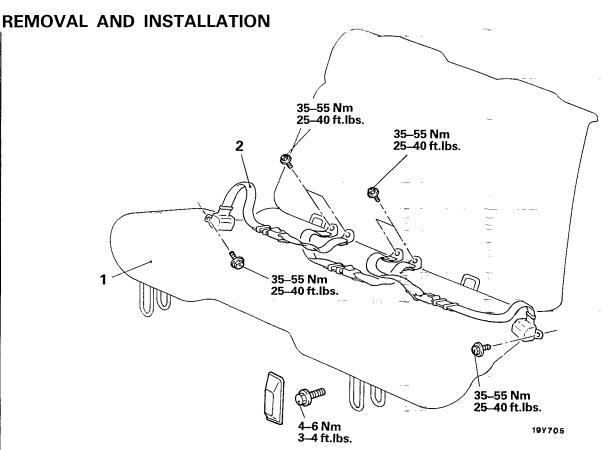


7. INSTALLATION OF OUTER CASING (B)

After the tape has been passed into the outer casing (B), insert until the outer casing (B) claw catches the tape guide claw.

REAR SEAT BELTS

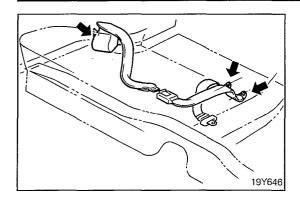
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Removal steps

- 1. Rear seat cushion
- 2. Rear seat belt

- NOTE Reverse the removal procedures to reinstall. (1)
- Refer to "Service Points of Removal".
 ★ : Refer to "Service Points of Installation".



SERVICE POINT OF REMOVAL

2. REMOVAL OF REAR SEAT BELT

Remove the rear seat belt.

NOTE

Special bolts (inch-size) are used for the seat belt mounting bolts.

SERVICE POINT OF INSTALLATION

2. INSTALLATION OF REAR SEAT BELT

Position the anchor plates by using the following procedure, and then secure the plates with the bolts.

- (1) Install the plates at the center of the vehicle so that the belts are parallel to the vehicle center line.
- (2) Install the anchor plates at the sides of the vehicle with retractor vertical.

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