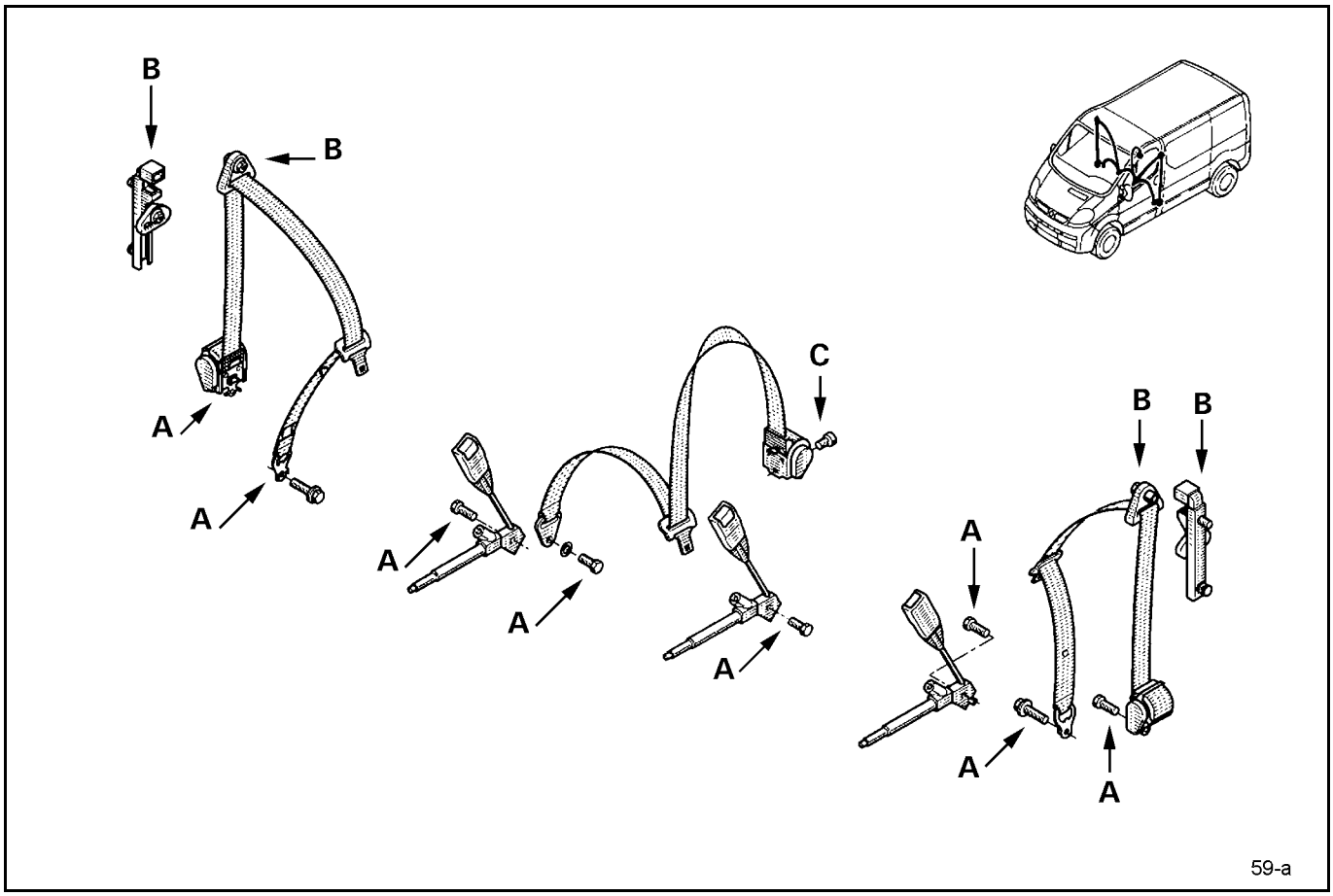


59-a

TIGHTENING TORQUES (in daNm)	▽
Mounting bolt A	3.7
Mounting bolt B	2.5
Mounting bolt C	1.9

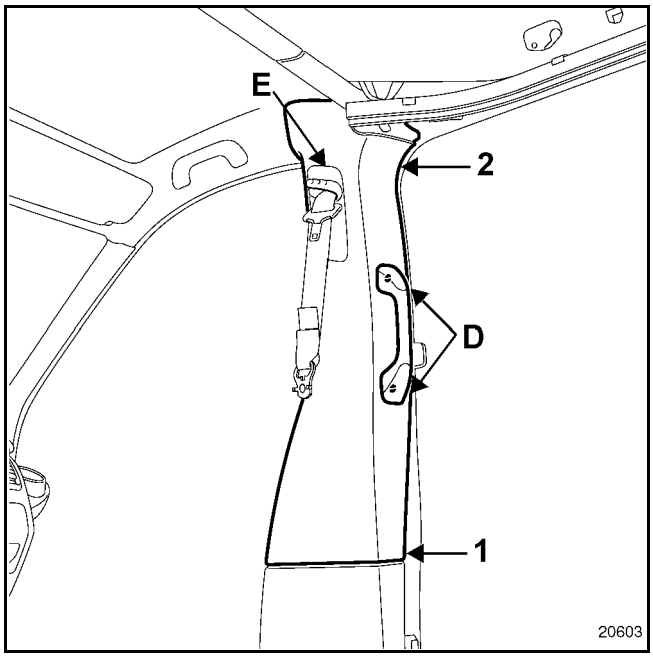
WARNING:
Pyrotechnic systems (airbags and pretensioners) must not be handled near to a heat source or a flame as they may be triggered.

IMPORTANT:
before removing an airbag pretensioner or seat belt fitted with a pretensioner, lock the electronic unit with a diagnostic tool, see Section **88 Airbag and pretensioners**.

When this function is activated, all the trigger lines are disabled and the airbag warning light on the instrument panel comes on.

REMOVAL of cab pillar seat belts

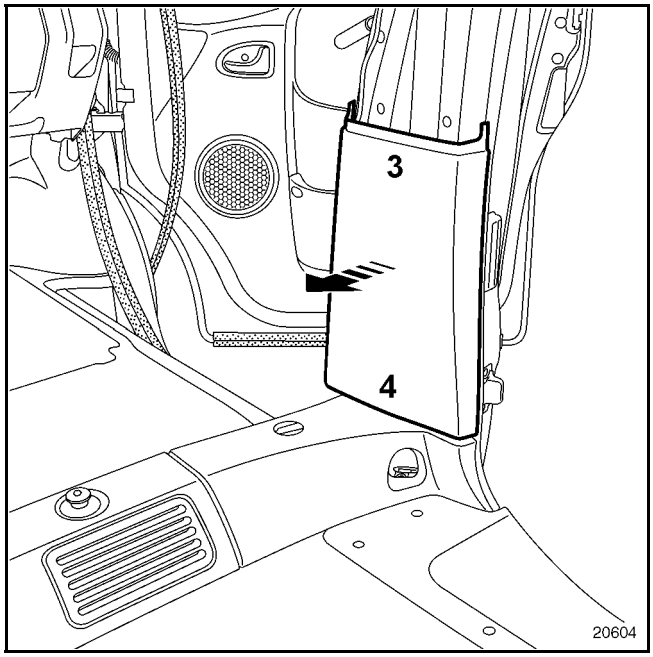
Remove:
– the seat belt mounting for the front seats,
– the upper runner trim from the sliding side door,
– the door frame seals from the front door and sliding side door (partially),



Unclip the two covers (**D**) to allow removal of the two mounting bolts for the grab handle.

Using the unclipping tool, unclip the lining at (**1**), then (**2**).

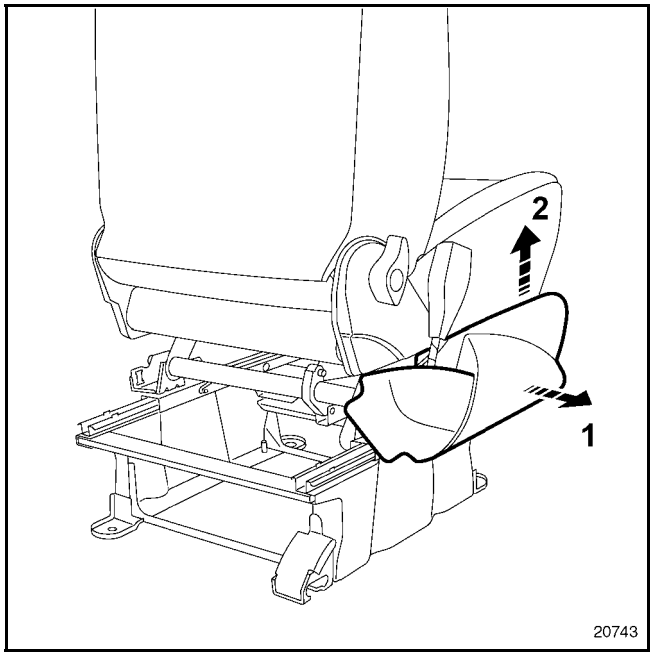
Release the lining carefully in order not to damage the trim strip (**E**).



Unclip the lining at the top (**3**), then at the bottom (**4**).

Remove the seat belt.

REMOVAL of the seat pretensioner

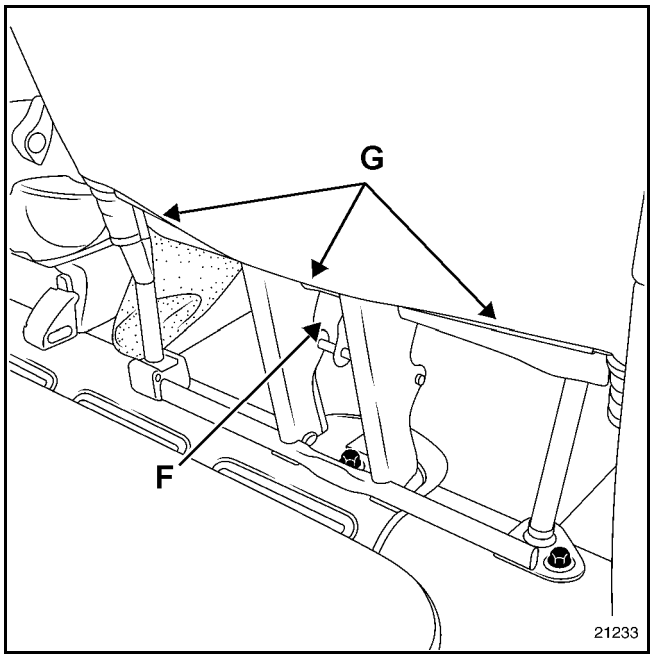


Unclip the seat cover at (**1**), then at (**2**).

Disconnect the supply connector from the pretensioner, then remove it.

REMOVAL of the seat belt from the front bench seat

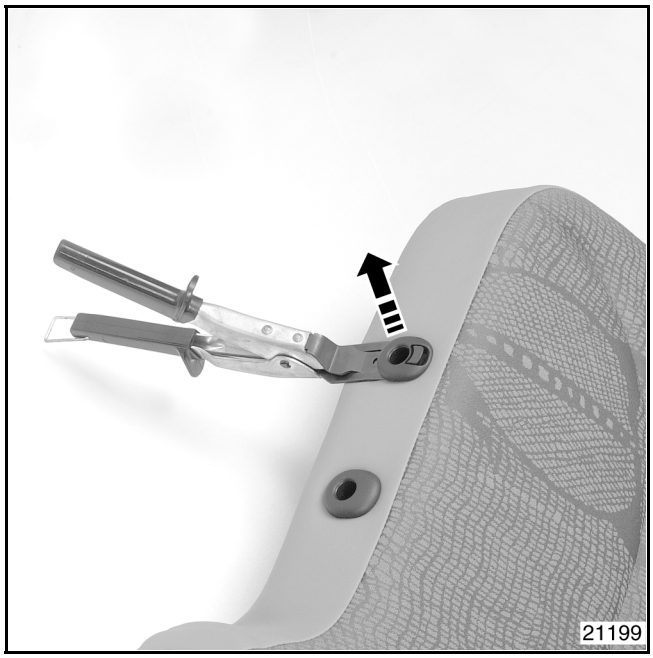
SPECIAL NOTE:
The bench seat will have to be removed on vehicles fitted with a partition.



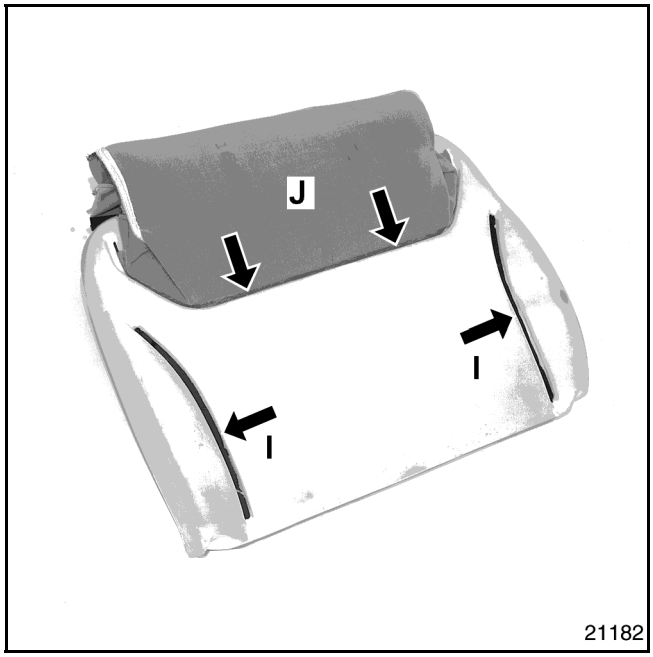
Remove the seat belt mounting bolt (**F**), under the bench seat.

Release the front and rear retainer strips (**G**), for the seatback cover.

Remove the two bolts (**H**) from the upper trim strip, then release it.



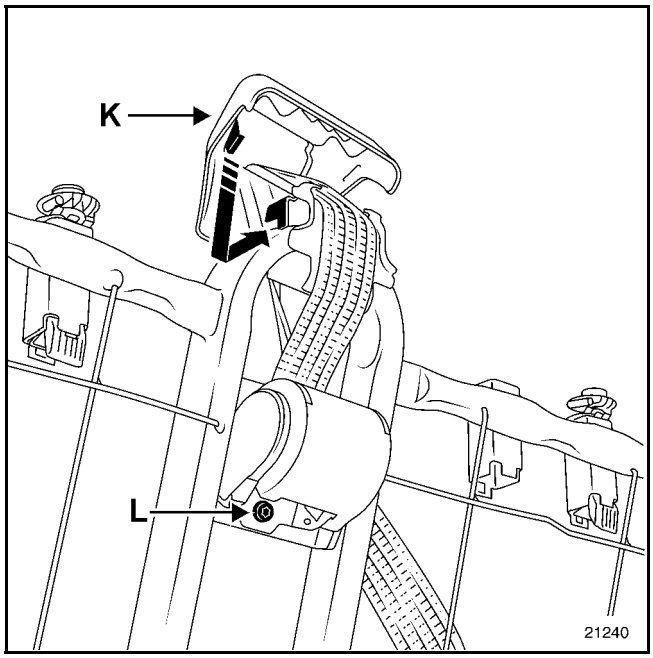
Unclip the four head restraint guide covers.



Simultaneously pull back the front and back of the seat cover upwards on the seatback.

The seat cover is held in place by Velcro (**I**) in the front section of the seatback.

NOTE:
You do not need to cut the cover retaining clips (**J**) to reach the seat belt inertia reel.

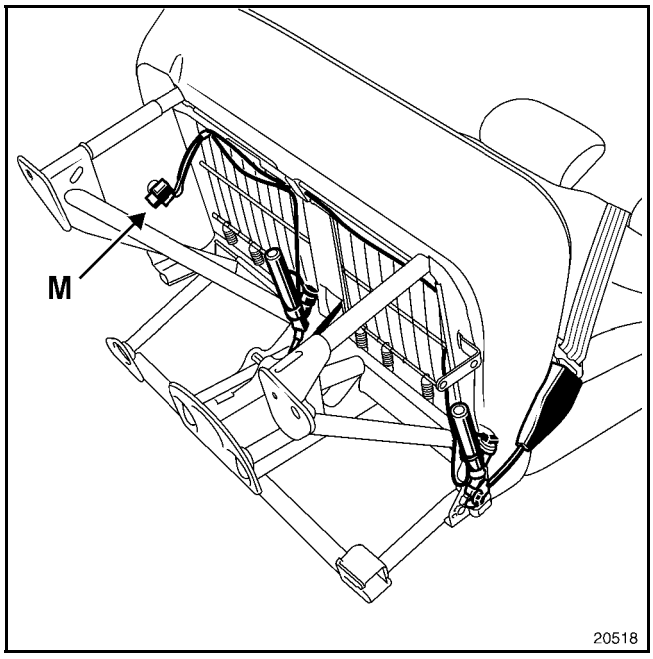


Unclip the belt guide at (**K**).

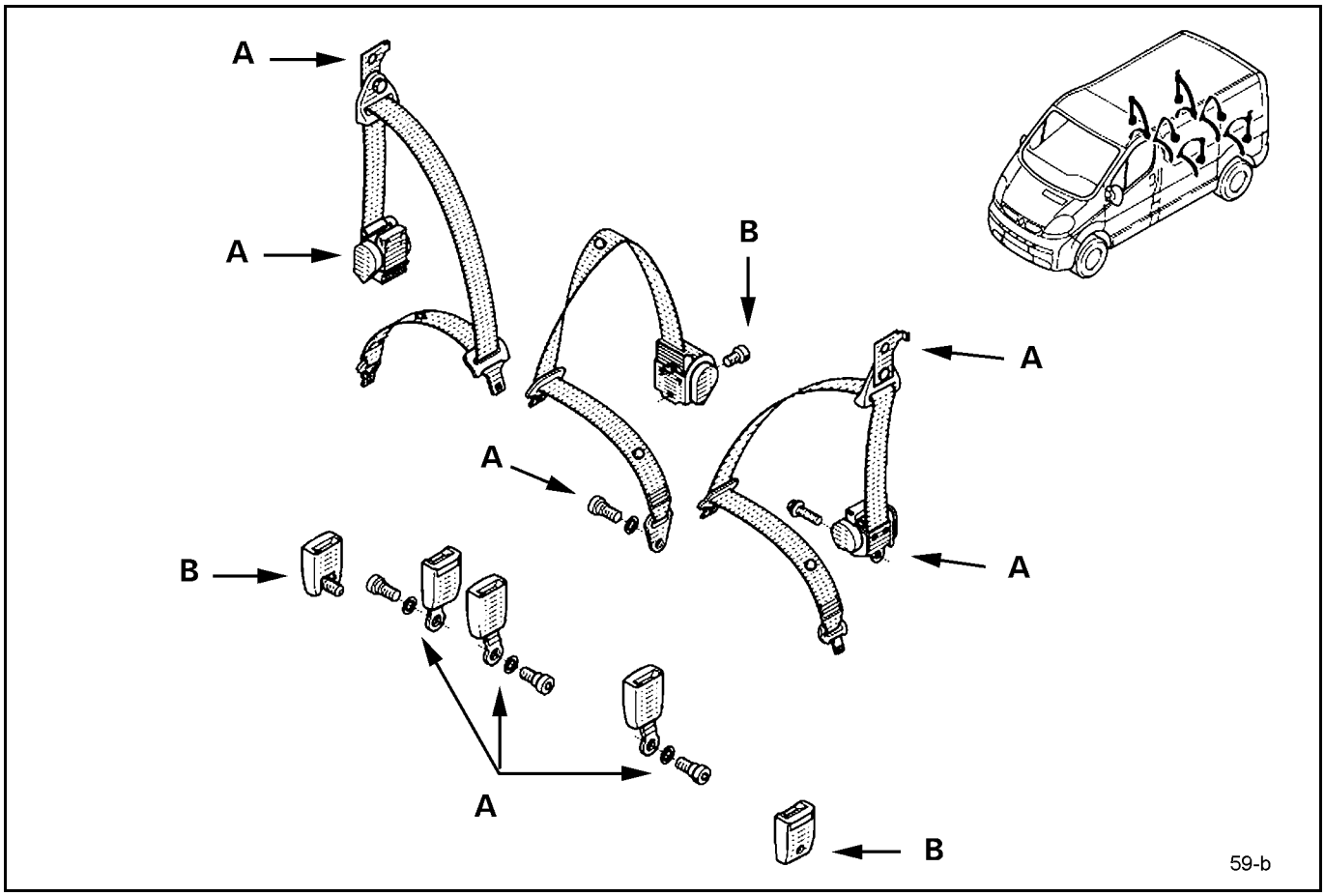
Remove the mounting bolt from the seat belt inertia reel (**L**), then release it.

REMOVAL of the bench seat pretensioners

It is not necessary to remove the bench seat to carry out this operation.



Disconnect the supply connector (**M**) from the pretensioners, then remove them.



TIGHTENING TORQUES (in daNm)	▽
Mounting bolt A	**3.7**
Mounting bolt B	**1.9**

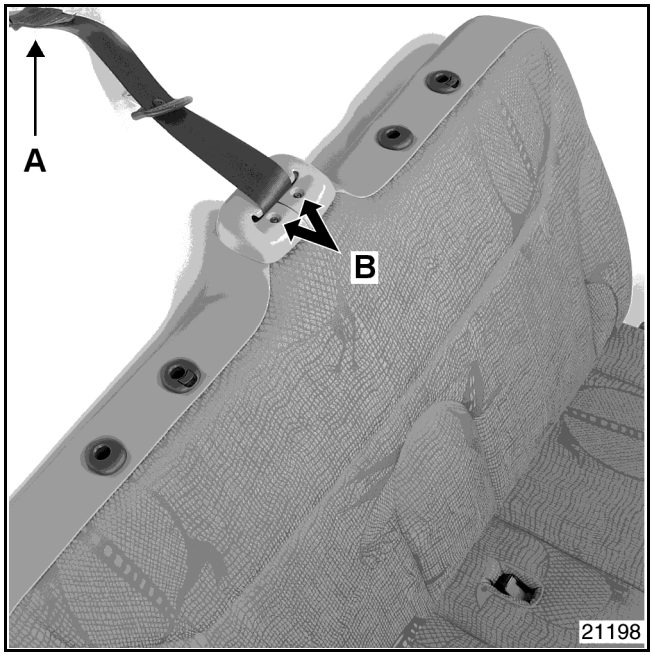
WARNING:
Pyrotechnic systems (airbags and pretensioners) must not be handled near to a heat source or a flame as they may be triggered.

IMPORTANT:
before removing an airbag pretensioner or seat belt fitted with a pretensioner, lock the electronic unit with a diagnostic tool, see Section **88 Airbag and pretensioners**.

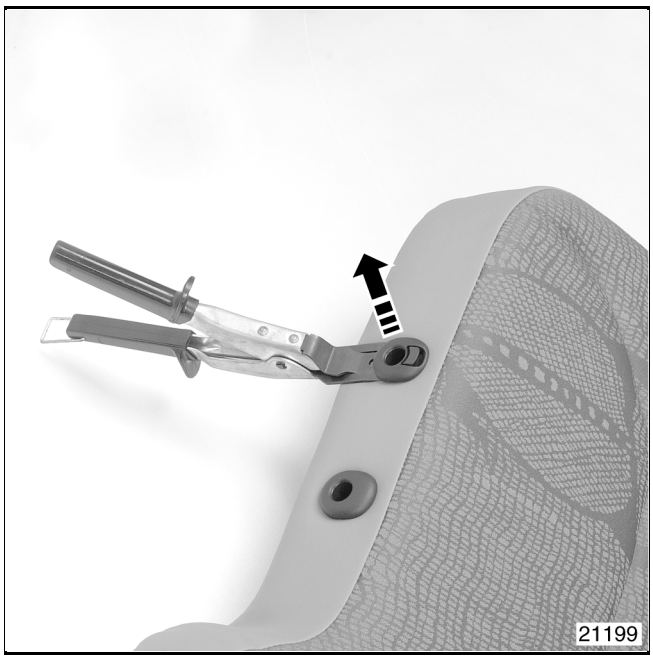
When this function is activated, all the trigger lines are disabled and the airbag warning light on the instrument panel comes on.

REMOVAL of the seat belt from the first row bench seat

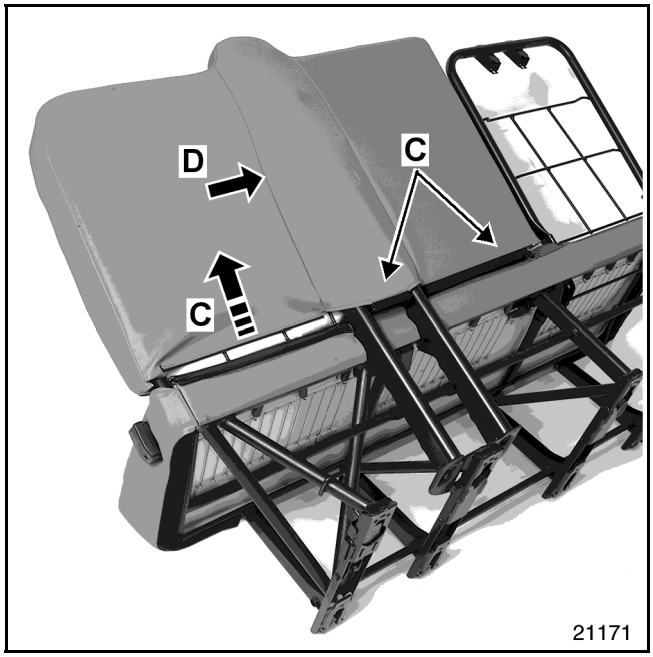
It is not necessary to remove the bench seat to carry out this operation.



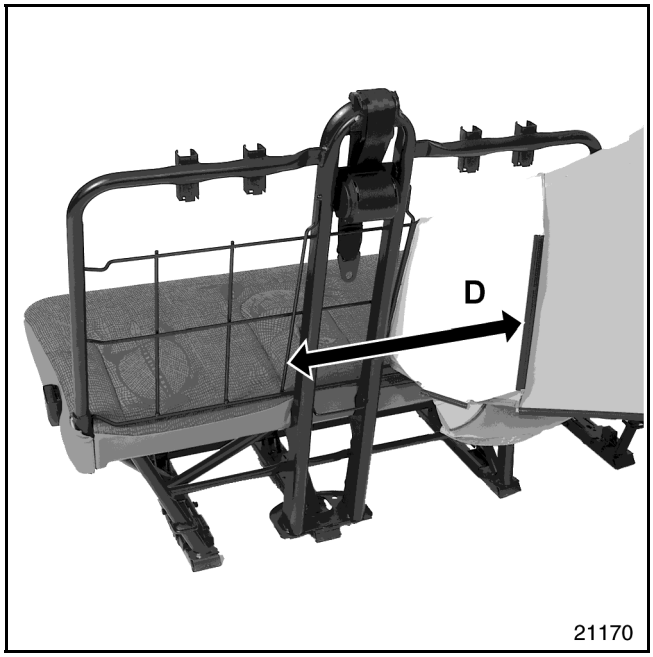
Remove:
– the seat belt mounting bolt (**A**), under the bench seat,
– the two bolts (**B**) from the upper trim strip, then release it.

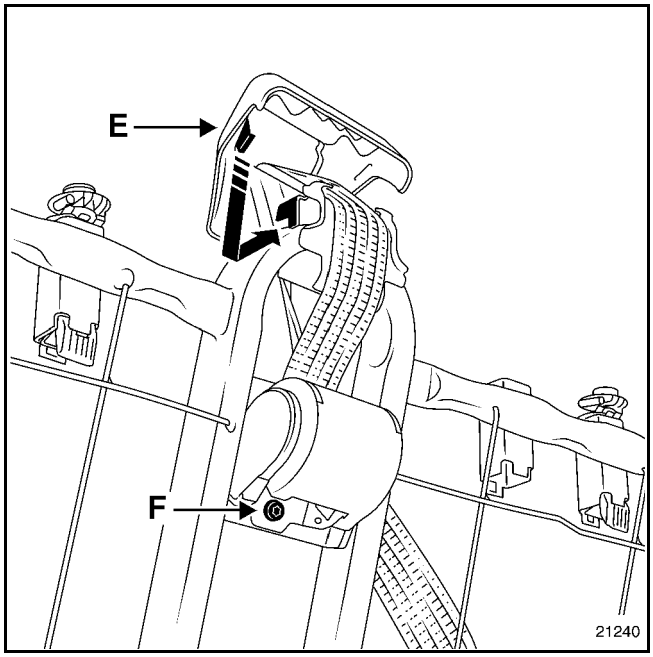


Unclip the four head restraint guide covers.



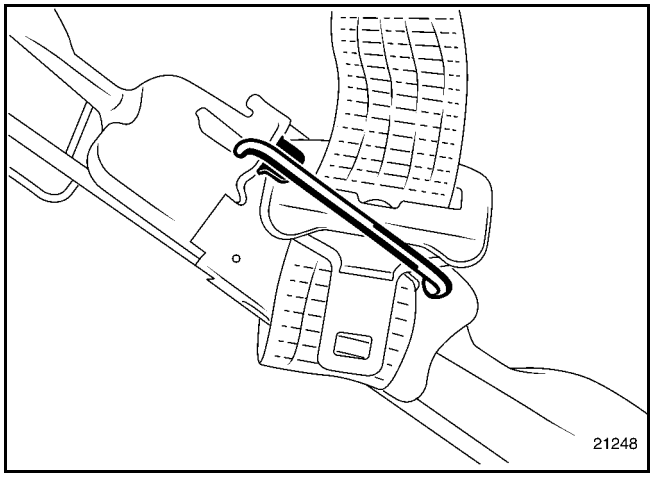
Remove:
– front and rear retainer strips (**C**), for the seatback cover,
– retainer strip (**D**) (see photo below).





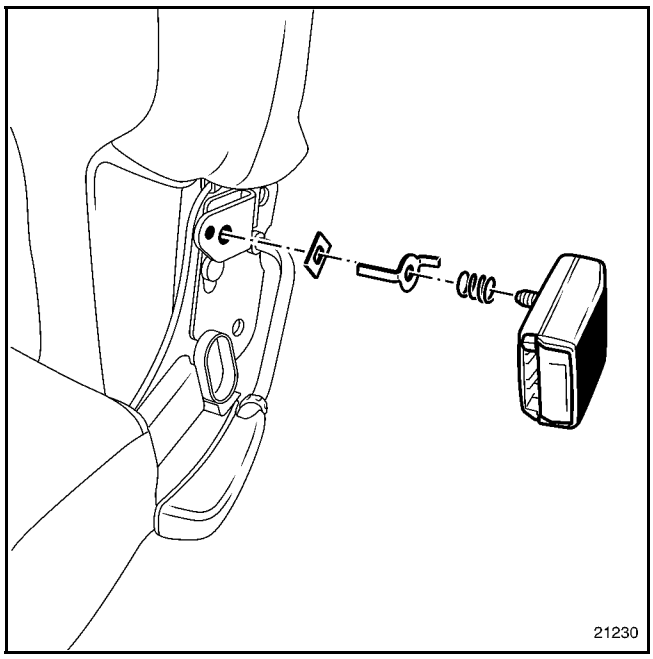
Unclip seat belt guide (**E**).

Remove seat belt inertia reel fastening bolt (**F**).



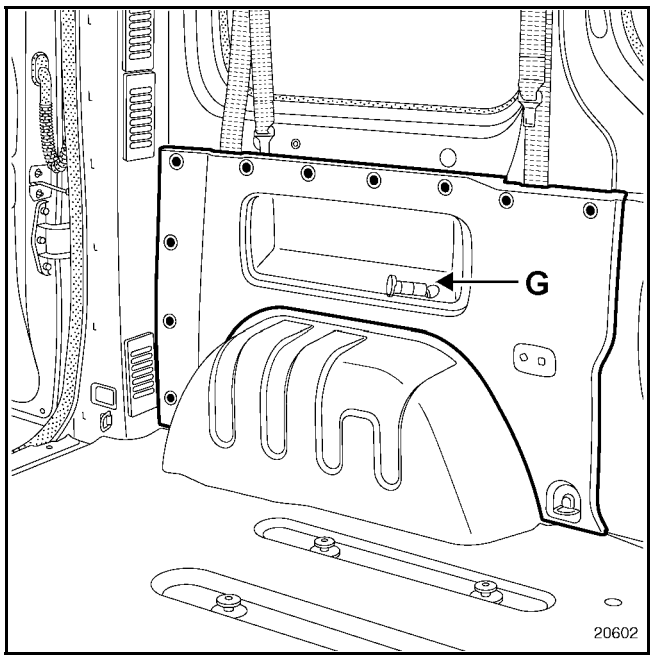
Release the seat belt buckle.

REMOVAL of the bench seat belt stalks



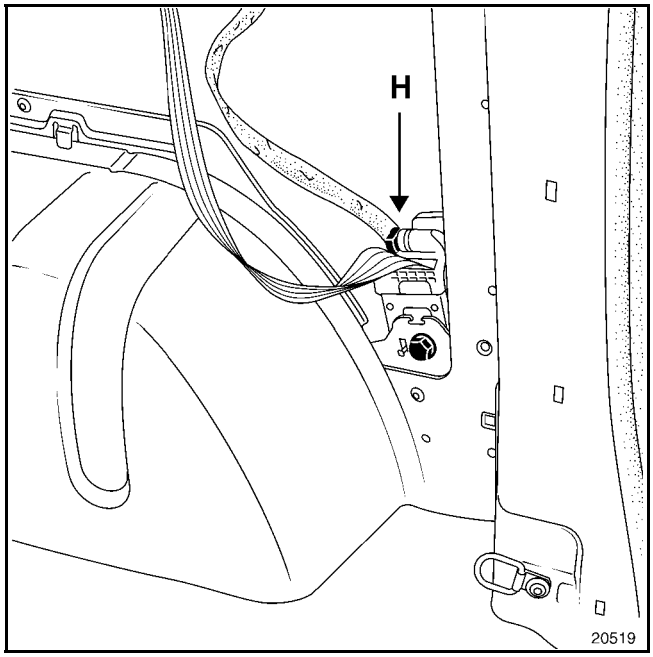
Remove the mounting bolt (**T30**) for the seatbelt stalk.

REMOVAL of the cab seat belts



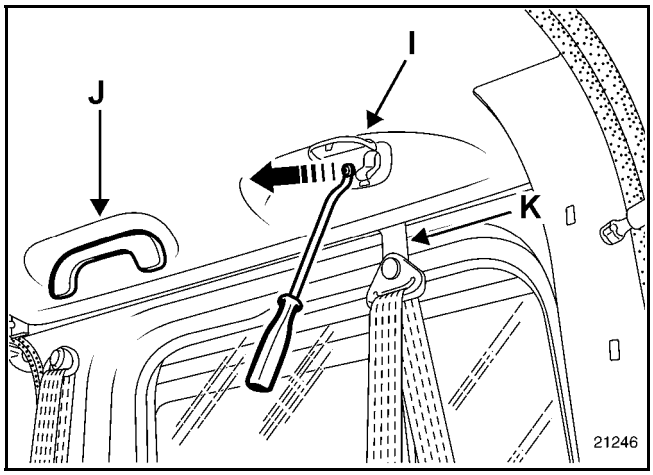
Using tool **Car. 1597** unclip the ten lining mounting clips (the female part of the clips stays on the wing panel lining).

Disconnect the supply connector from the socket (**G**), then release the lining.



Disconnect the supply connector (**H**) from the pretensioner.

Remove the mounting bolt from the seat belt inertia reel, then release it.



Using the tool (**Car. 1597**), remove:
– net mounting cover (**I**),
– grab handle (**J**).

Carefully remove the head lining, then remove the mounting bolt from the seat belt return support (**K**).

GENERAL INFORMATION

These vehicles are fitted with a passive safety system of the RPS type, comprising:
– a driver's front airbag with a Renault Protection System inflatable cushion,
– a passenger front airbag with a Renault Protection System inflatable cushion,
– front pretensioners,
– rear pretensioners (pyrotechnic seat belt retractors) (depending on the version),
– dedicated front seat belts with Renault Protection System, (400 daN)
– a computer (75-track).
– a fault warning light.

WARNING:
With this system, (Renault Protection System front airbags), the seat belts are linked to the airbag function.
The Renault Protection System is calibrated differently depending on whether the seat belts are to be fitted in front of an RPS airbag or not (always check the part number of each component before replacement).

On these vehicles, it is strictly forbidden to fit RPS seat belts to a seat not fitted with an airbag, or to disconnect the airbag.

NOTE:
Certain connectors are fitted with a new-generation locking system. It is essential to unclip the lock before removing the connector and ensure it is correctly positioned after fitting. An unlocked connector will not supply the trigger line.

During a front impact of sufficient severity:

- **the seatbelts** restrain the driver and passenger.
- **The pretensioners** (front and rear) tighten the seat belts against the body.
- **The Renault Protection System** limits the force of the seat belt against the body.
- **The airbag cushions** inflate:
  – from the centre of the steering wheel to protect the driver's head,
  – from the dashboard to protect the front passenger's head.

WARNING:
– Do not put covers on the front seats (except for NISSAN products).
– Do not place objects in the airbag deployment area.
– When working on the sill panel (on the bodywork, the seat belt retractor etc.), it is vital that you lock the airbag unit using a diagnostic tool and switch off the ignition.
– For special points regarding removal and replacement of seat trims, it is essential to read the **Bodywork** section.

Precautions during repair

All operations on airbag and pretensioner systems must be carried out by qualified trained personnel.

IMPORTANT:
Pyrotechnic systems (airbags and pretensioners) must not be handled near to a heat source or flame as they may be triggered.

The airbags have a pyrotechnic gas generator with an igniter and airbag which must not be separated.

IMPORTANT:
Before removing an airbag pretensioner or computer, lock the computer using a diagnostic tool. When this function is activated, all the trigger lines are disabled and the airbag warning light on the instrument panel comes on.

When a side airbag is triggered, the computer locks permanently and switches on the airbag warning light on the instrument panel. The computer must be replaced (certain components lose their nominal settings after the passage of the ignition power).

After refitting everything, carry out a check using the diagnostic tool.
If everything is correct, unlock the computer or see the **Fault finding** section.

IMPORTANT:
Refer to the section describing the Destruction procedure when scrapping a pyrotechnic system that has not been triggered.

The computer contains sensitive components, so it must not be dropped.

Identification

Vehicles fitted with front airbags are identified by:
– labels located in the lower corners of the windscreen, on both sides,
– by the wording **RPS airbag** in the centre of the steering wheel and on the dashboard.

IMPORTANT:
It is vital that pyrotechnic systems (pretensioners, front and side airbags) are checked using the diagnostic tools:
– after an accident which has not caused triggering,
– after theft or attempted theft of the vehicle,
– before selling a used vehicle.

Warning light on the instrument panel

This warning light confirms correct operation of:
- front pretensioners,
- rear pyrotechnic seat belt retractors (depending on the version),
- the front airbags,
- the battery (checking the supply voltage).

It should light up for a few seconds when the ignition is switched on, then switch off (and remain off).
If it does not light up when ignition is switched on or lights up when the vehicle is moving, this signals a fault in the system (see the **Fault finding** section).

NOTE:
Under certain starting conditions, the warning light may come on briefly and then go out.

WARNING:
Depending upon the type of computer, the airbag warning light may be controlled by a multiplex connection.

Operation of front pretensioners and airbags

After ignition, the airbag and pretensioner warning light comes on for a few seconds and then goes out.

NOTE:
The airbag warning light may come on because of low battery voltage.

The computer is then in standby mode and will respond to vehicle decelerations using the signal measured by the integrated electronic decelerometer.

1 During a frontal impact of sufficient severity, the decelerometer triggers simultaneous ignition of the pretensioner gas generators after receiving confirmation of impact detection from the electronic safety sensor.

2 If the frontal impact is more severe, the decelerometer waits for confirmation of the impact from the electronic safety sensor and then triggers ignition of the pyrotechnic gas generators on the front and side airbags.

IMPORTANT:
When triggered, the pyrotechnic gas generator produces an explosion combined with light smoke.

NOTE:
Power supply to the computer and ignition modules is usually provided by the vehicle battery. Nevertheless, a power reserve capacity is incorporated into the computer in case of battery failure on impact.

Working on trigger wiring

If a fault is detected on one of the wiring harness lines, the line must be replaced and not repaired.

This safety equipment cannot be subjected to any conventional wiring or connector repair operations.

As the ignition wiring for the airbags and pretensioners is incorporated into the passenger compartment wiring harness to facilitate repair, the method of replacing the wires is to cut the ends of the defective wire and to make the new wire follow the same routing by running it alongside the passenger compartment wiring harness.

IMPORTANT:
When fitting the new wiring, make sure that it is not chafing and that its original cleanliness is maintained.

COMPUTER

These computers consist of:
– an electronic safety sensor for the front airbags and the pretensioners,
– an electronic decelerometer for the front airbags and pretensioners,
– an ignition circuit for the various pyrotechnic systems,
– a power reserve for the various lines,
– a fault finding and detected fault memory circuit,
– a control circuit for the warning light on the instrument panel,
– a **K** communication interface via the diagnostic socket,
– a multiplex communication interface,
– an impact detection connection.

IMPORTANT:
A computer must be locked using one of the diagnostic tools before it can be removed.
When this function is activated, all the ignition lines are disabled and the airbag warning light on the instrument panel comes on (new computers are supplied in this state).

NOTE:
- In the event of incorrect operation of these systems during an impact, it is possible to check that no fault was present before the impact using the diagnostic tools.
- After locking following an impact, it is possible to check the trigger lines supplied by the control **reading breakdown contexts** with the diagnostic tool.

Locking procedure

Before removing the computer or before any operation on the airbag and pretensioner systems, it is vital that you lock the computer:

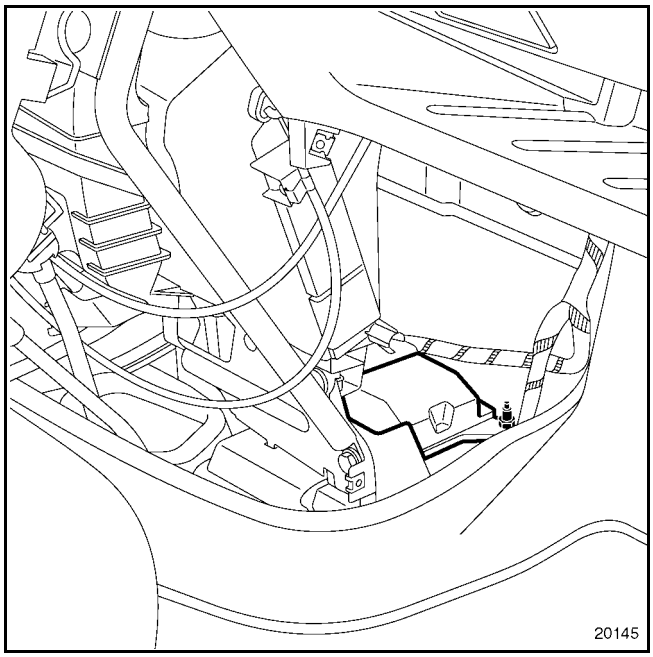
With Consult II.
1 Select the **Renault vehicle fault finding** menu,
2 Select and confirm the vehicle model
3 Select and confirm the system to be checked **Airbag**
4 Select the **command** menu.
5 Select and confirm the **Actuators** function.
6 Confirm the **VP 006 Computer locking** line,
7 In the **State** menu, check that the unit is locked. The **ET073 Computer locked with tool** state must be active and the airbag warning light on the instrument panel must be on (new computers are delivered in this condition).

NOTE:
To unlock the computer, use the same method, confirming the **Unlock computer VP007** line.
The **ET073 Computer locked with tool** state must not be active and the airbag warning light on the instrument panel must be off.

Removal

The computer is located behind the centre console (right-hand side).

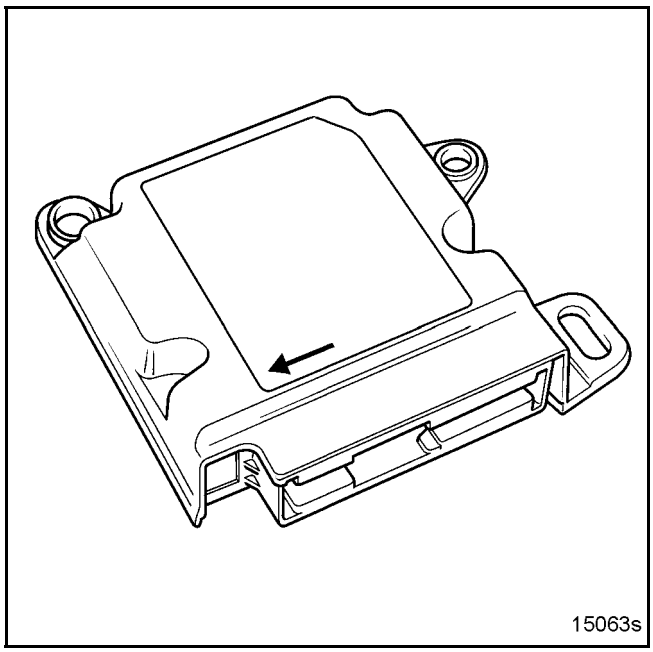
REMINDER:
A computer must be locked using one of the diagnostic tools before it can be removed.



WARNING:
- The computer contains sensitive components, so **it must not be dropped**.
- When working under the vehicle (exhaust system, bodywork, etc.), do not use a hammer or hits the floor without having locked the computer using the diagnostic tool.
- Electrical accessories fitted to the vehicle after sales (speaker, alarm unit and any device which may generate a magnetic field), must not be placed in close proximity to the airbag/ pretensioner computer.

Refitting

When refitting the computer, ensure that it is fitted the right way up and the right way round. The arrow must point towards the front of the vehicle.



Tighten the bolts to a torque setting of **0.8 daNm**.

Configuring the computers

The new units which can be recognised by the title **ACU3** on the diagnostic tool are delivered as configured pyrotechnic seatbelt retractors.
If this configuration is not carried out, the airbag warning light remains lit.

1 Select the **Fault finding** menu,
2 Select and confirm the vehicle model
3 Select and confirm the system to be checked **Airbag**
4 Select the **command** menu.
5 Select and confirm the **Settings** line to change the trigger lines.
6 It is essential to check the result in the **Reading configurations** menu.

Connection

Yellow 75-track connector

Track	Description
1	Not used
2	+ Passenger pretensioner (side)
3	+ Passenger pretensioner (central)
4 to25	Not used
26	- Driver's front airbag
27	+ Driver's pretensioner
28	- Passenger pretensioner (side)
29	+ Passenger's front airbag
30	+ after ignition
31	Earth
32	Not used
33	Not used
34	Diagnostic line **K**
35	- Pyrotechnic seat belt retractor 1st row on the driver's side
36	+ Pyrotechnic seat belt retractor 1st row on the passenger side
37	- Pyrotechnic seat belt retractor 2nd row on the driver's side
38	+ Pyrotechnic seat belt retractor 2nd row on the passenger side
39	Not used
40	Not used
41	Not used
42	Not used
43	Not used
44	Not used
45	Not used
46	Not used
47	Not used
48	Not used
49	Not used
50	Not used
51	+ Driver's front airbag
52	+ Driver's pretensioner
53	+ Passenger pretensioner (central)
54	- Passenger's front airbag
55	Not used
56	Not used
57	Not used
58	CAN H multiplex link
59	CAN L multiplex link
60	+ Pyrotechnic seat belt retractor 1st row on the driver's side
61	- Pyrotechnic seat belt retractor 1st row on the passenger side
62	+ Pyrotechnic seat belt retractor 2nd row on the driver's side
63	- Pyrotechnic seat belt retractor 2nd row on the passenger side
64	Not used
65	Not used
66	Not used
67	Not used
68	Not used
69	Not used
70	Not used
71	Not used
72	Not used
73	Not used
74	Not used
75	Not used

NOTE:
The computer has a configuration allowing it to operate with a bench seat fitted with two pretensioners or one passenger's seat.

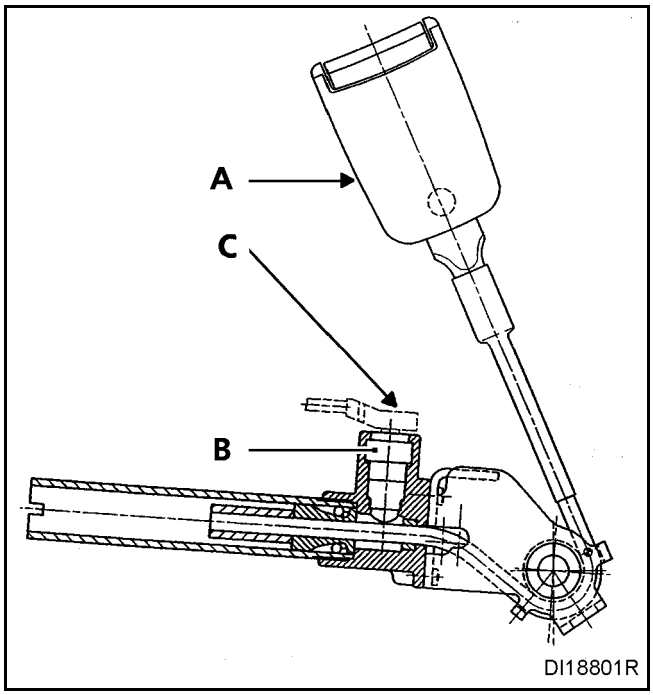
SEAT BELT PRETENSIONER

Description

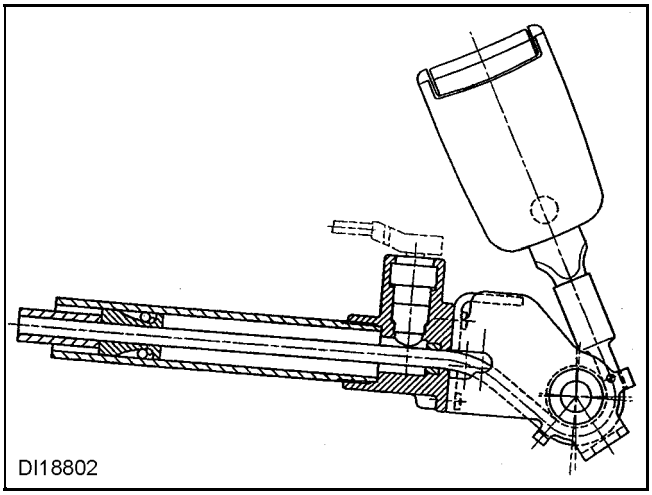
The vehicles are fitted:
– with a pretensioner on the driver's seat,
– with pretensioners on the passenger seat:
  – with an igniter if the vehicle is fitted with a single seat,
  – two igniters as standard if the vehicle is fitted with a two place bench seat,
– with pretensioners to wind round the seat belts to the rear side places (depending on the version).

Front pretensioners

NOTE:
The system is operational after the ignition is switched on.



When it is triggered, the system is able to retract the seat belt catch by up to **100 mm** (maximum)

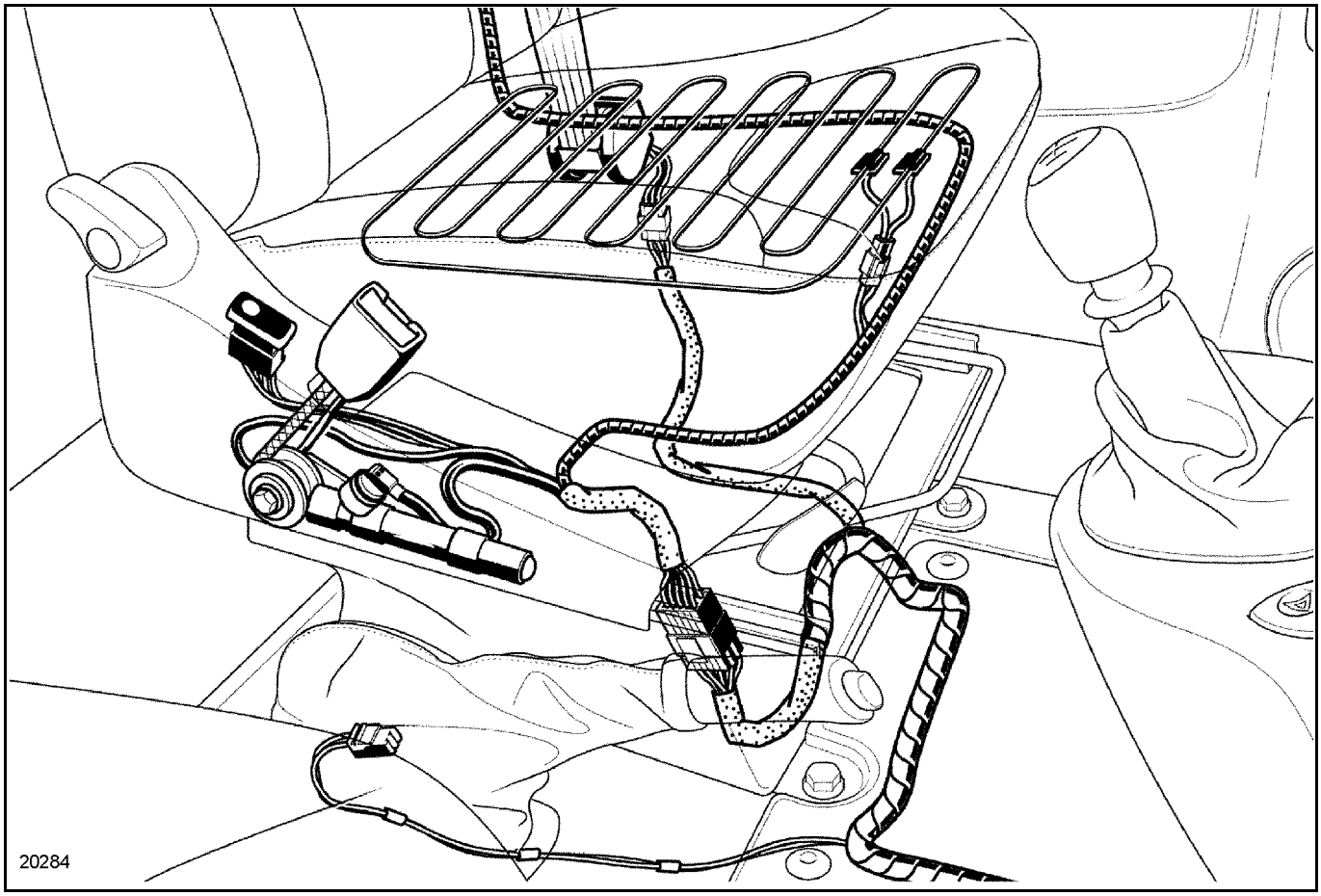


Removal:

IMPORTANT:
Before removing a pretensioner, lock the computer using one of the diagnostic tools. When this function is activated, all the trigger lines are disabled and the airbag warning light on the instrument panel comes on.

NOTE:
Removing pretensioners does not entail removal of the seats.

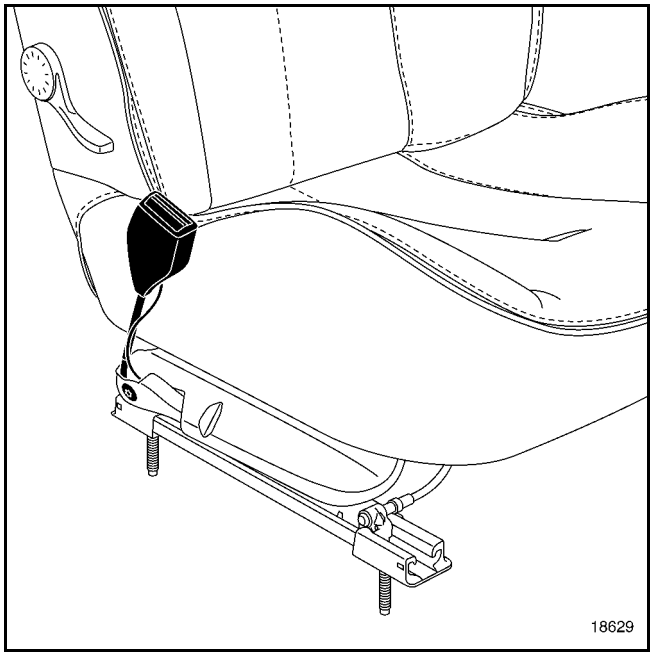
IMPORTANT:
Refer to section describing the Destruction procedure when scrapping a pretensioner that has not been triggered (except for parts to be returned under warranty).



Features of the driver's side

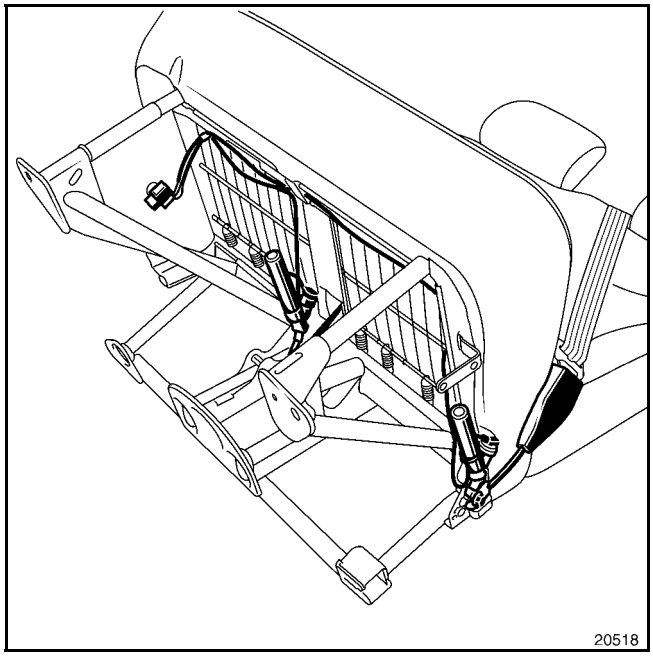
The seat belt catch on the driver's side has an electrical switch which operates a warning light on the instrument panel to indicate that the belt is not fastened.

To unclip the connector, remove the mounting bolts from the two buckle half-shells.



Features of the passenger side

If the vehicle is fitted with a two seater bench seat, it has two pretensioners supplied in turn by the same trigger line (in series by the computer). Checking the computer configuration.



Refitting

Follow the correct routing of the wiring and the wiring mounting points under the seat.

Connect the pretensioner connector after fitting it and tightening it to a torque of **3.7 daNm**.

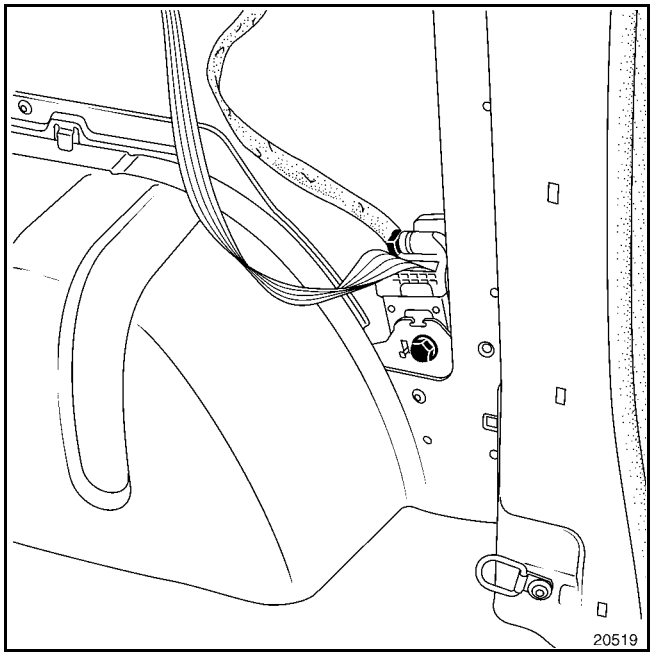
After replacing faulty parts and reconnecting the connectors, carry out a check using the diagnostic tool.

If everything is correct, unlock the computer or see the **Fault finding** section.

Rear pretensioners (pyrotechnic seat belt retractors)

Removal:

The pretensioners are fitted in the seat belt retractors. The rear trims need to be removed to remove them. Refer to the method described in the **Bodywork section**.



Refitting

Ensure that the wiring is correctly routed using the wiring attachment points.

Tighten the mounting bolt to a torque setting of **3.7 daNm**.

After replacing faulty parts and reconnecting the connectors, carry out a check using the diagnostic tool.

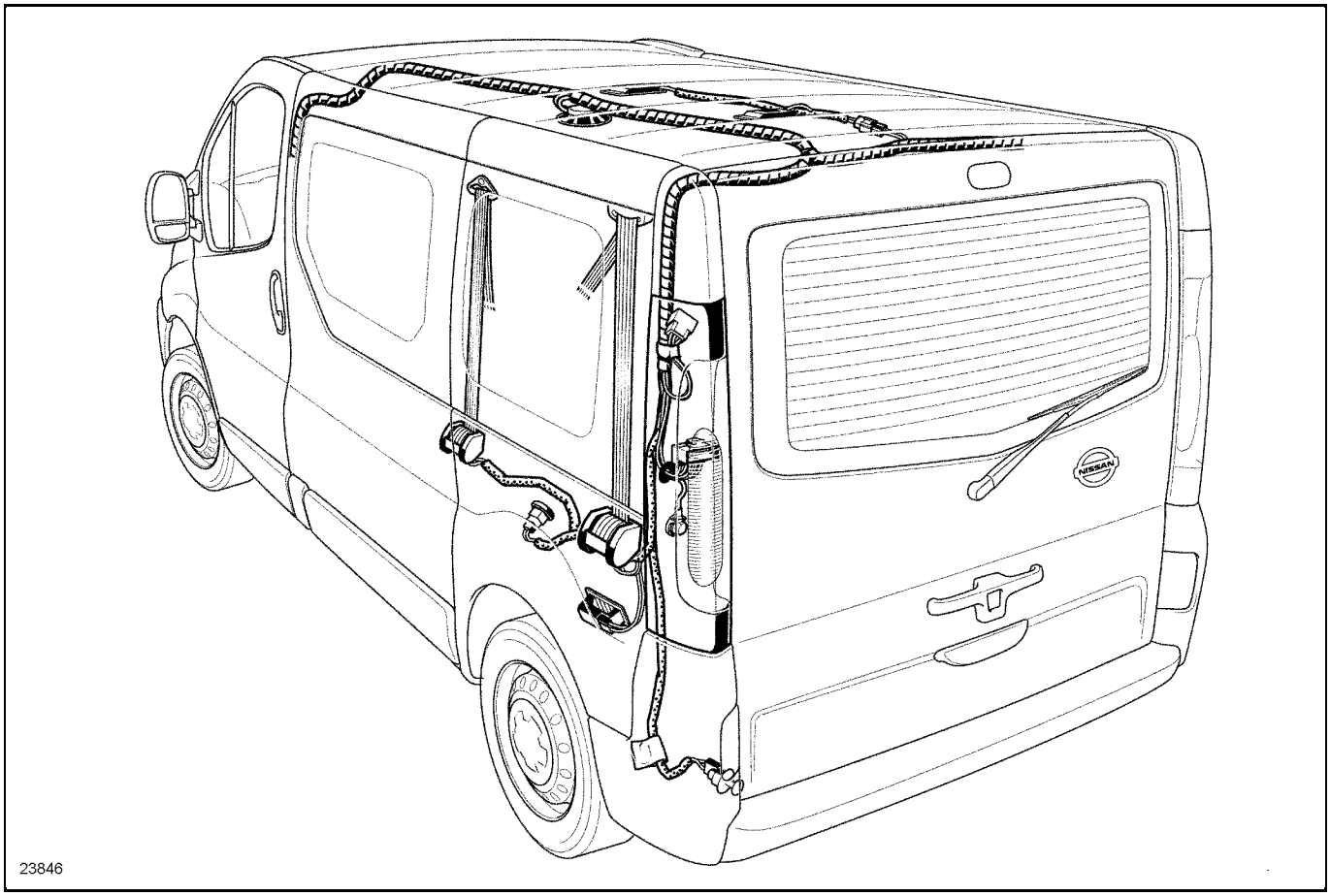
If everything is correct, unlock the computer or see the **Fault finding** section.

Renault Protection System seat belts

The front seat belts are fitted with a specific Renault Protection System (**4 daN**).

In this equipment, the seat belts are linked to the airbag function. (The Renault Protection System is calibrated differently depending on whether the seat belts are to be fitted in front of an RPS airbag or not).

When the pretensioners have been triggered the front seat belt or belts must always be replaced if they were being worn when pretensioning took place (if there is any doubt as to whether the belt was being worn it must be replaced). The physical stresses exerted on the buckle are transmitted to the inertia reel and may damage its mechanism.


23846

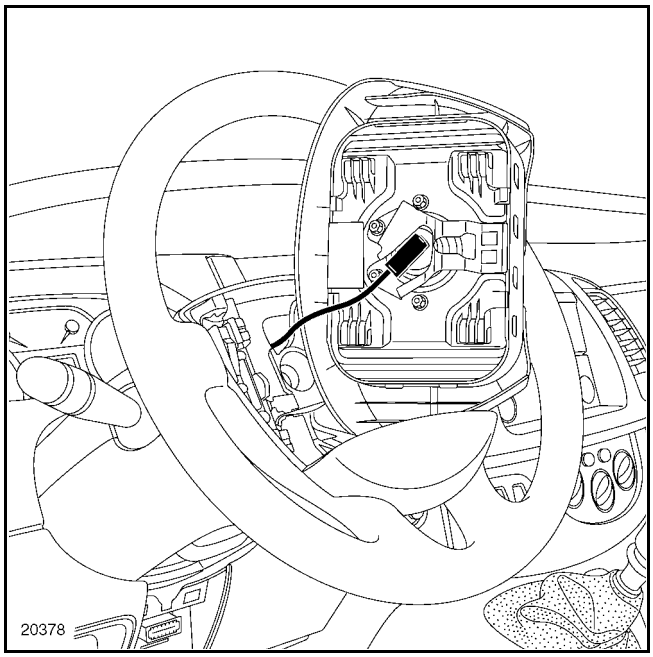
DRIVER'S AIRBAG MODULE

The driver's airbag is fitted with a specific cushion (airbag with RPS marking) linked to the seat belt opposite it.

The Renault Protection System seat belt is calibrated specifically and is complementary to this type of airbag cushion.

Description

It is located in the centre of the steering wheel When triggered, the inflatable bag deploys by bursting through the steering wheel cover.



Removal:

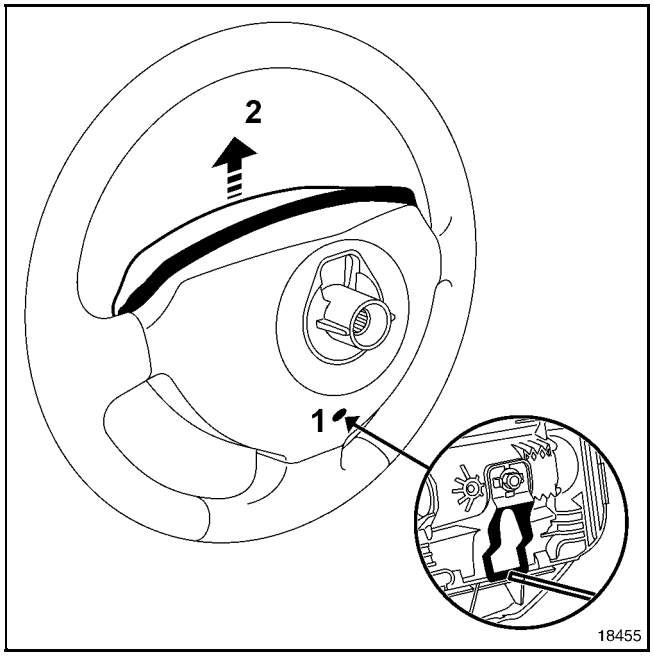
IMPORTANT:
Before removing a passenger airbag module, lock the computer using a diagnostic tool.
When this function is activated all the ignition lines are disabled and the airbag warning light on the instrument panel lights up when the ignition is switched on.

Insert a screwdriver into opening (1) behind the steering wheel.

Lift (2) the airbag module in order to slide it.

Unclip the connector safety clips.

Disconnect the two generator power supply connectors.



IMPORTANT:
Refer to the section describing the Destruction procedure when scrapping an airbag that has not been triggered.

Refitting

NOTE:
When replacing an airbag after an impact, it is essential to replace the steering wheel and its mounting bolt (tightening torque: **4.4 daNm**).

Put the connector in place and lock it.

Position the airbag module on the steering wheel.

Slide it backwards in order to clip it in place.

IMPORTANT:
After refitting everything, carry out a check using a diagnostic tool.
If everything is correct, unlock the computer or see the **Fault finding** section.

PASSENGER AIRBAG MODULE

The Renault Protection System passenger airbag is fitted with a two-level inflatable cushion linked to the seat belt opposite it.

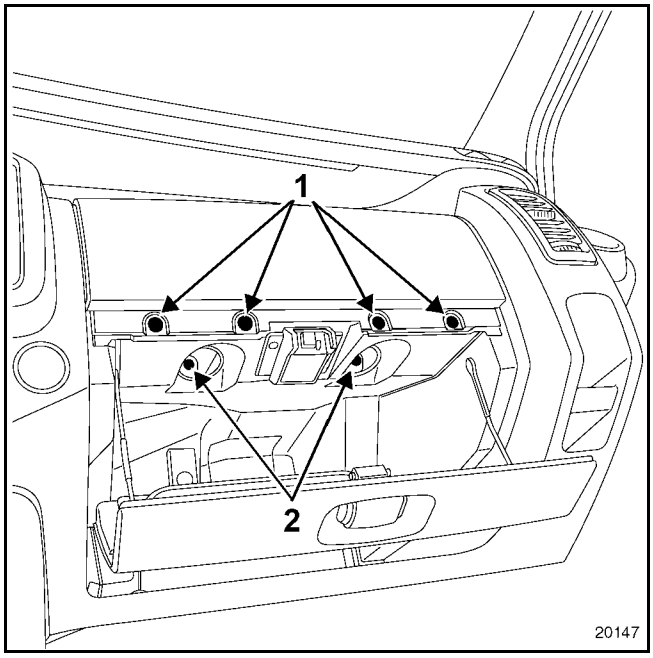
The Renault Protection System seat belt is calibrated specifically and is complementary to this type of airbag module.

Removal:

The airbag module is attached to the instrument panel opposite the front passenger but does not need to be removed.

IMPORTANT:
Before removing a passenger airbag module, lock the computer using a diagnostic tool.
When this function is activated, all the trigger lines are disabled and the airbag warning light on the instrument panel comes on.

Remove the mounting bolts.



Disconnect the connector.

IMPORTANT:
When the passenger airbag module is triggered, the consequent deformation and damage caused to the attachments always requires the dashboard to be replaced.
Do not forget to affix the label on the side of the new dashboard prohibiting a rear-facing child seat to be fitted on the passenger seat (label available in the collection with part no. **77 01 206 809**).

IMPORTANT:
Refer to the section describing the Destruction procedure when scrapping an airbag that has not been triggered.

Refitting

Carry out the refitting operation in the reverse order to removal, observing the correct torque values for the mounting bolts.
- bolt (1) to **2 Nm**
- bolt (2) to **8 Nm**

IMPORTANT:
- Check for foreign bodies (bolts, clips, etc.) when fitting the airbag module.
- On the module side, make sure that the connector is properly clipped (powerful clip) and position the safety lock.
- Attach a blue adhesive **Tamperproof system warning light** label sold under part no. **77 01 040 153** (other vehicles).

Check the module using the diagnostic tool.

If everything is correct, unlock the computer or see the **Fault finding** section.

DESTRUCTION PROCEDURE

WARNING:
This does not apply if local legislation requires a specific procedure **validated and circulated** by the Procedures, Fault Finding and Repair service.

In order to avoid any risk of an accident, the pyrotechnic gas generators must be triggered before the vehicle is scrapped or the part is scrapped.

Triggering tool KV 99106400 and adapter KV 999R0050 must be used.

IMPORTANT:
Do not reuse pyrotechnic components as replacement parts. The pretensioners or airbags on a vehicle which are to be scrapped must always be completely destroyed.

Pretensioners

IMPORTANT:
Do not trigger pretensioners which are to be returned under warranty because of a problem with the seat belt catch. This makes analysis of the part by the supplier impossible.
Return the part in the packaging of the new part.

Destruction of the part fitted to the vehicle

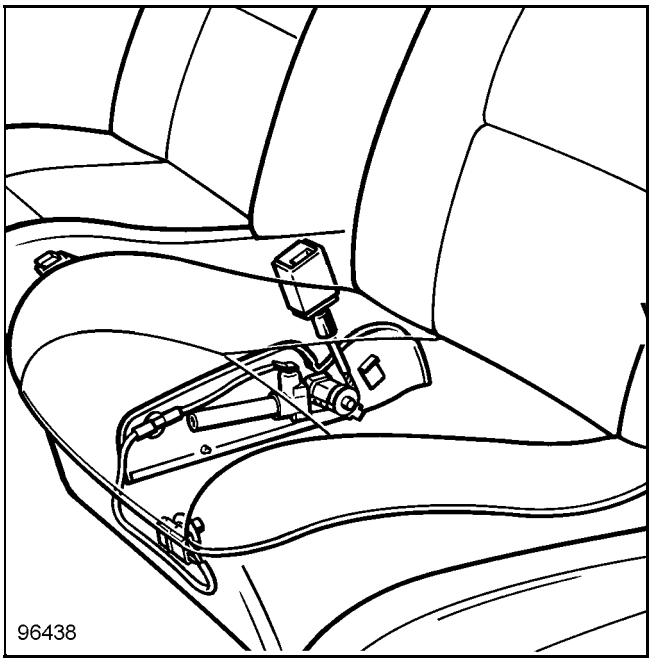
Move the vehicle outside the workshop.

Connect the destruction tool to the pretensioner after removing the seat runner cover.

Unwind all the tool wiring so that it is far enough away from the vehicle (approximately **10 m**) during triggering.

Connect the two supply wires on the tool to a battery.

After checking that there is no-one nearby, destroy the pretensioner by pressing the two buttons on the tool at the same time.



Destruction of the part removed from the vehicle

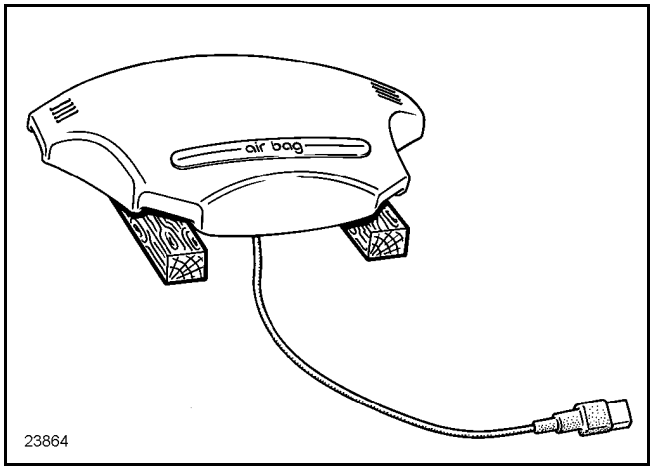
Proceed in the same way as for the driver's airbag, in a stack of old tyres (see below).

Front airbag

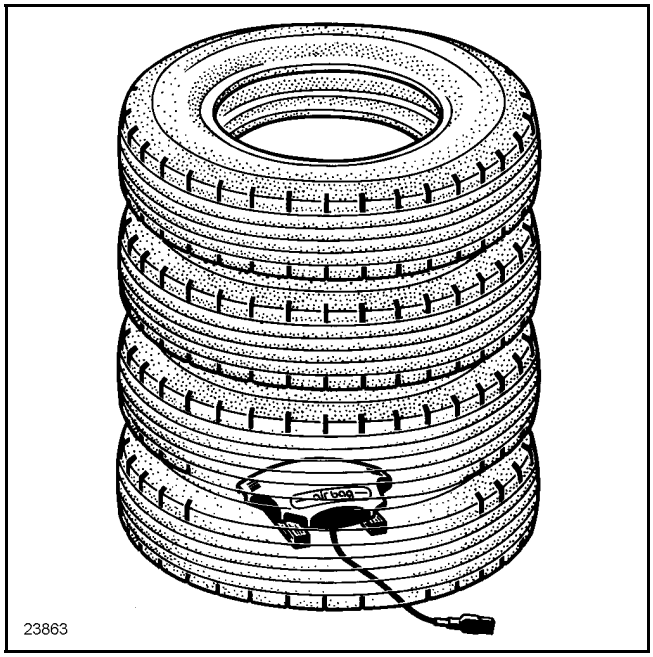
The part must be removed from the vehicle for destruction.

Carry out the operation outside the workshop.

After connecting the appropriate wiring, set the airbag module on two blocks of wood to avoid damaging the connector on the ground.



Cover the assembly with a stack of four old tyres.



Unwind all the tool wiring so that it is far enough away from the unit (approximately **10 m**) during triggering and connect it to the airbag cushion.

Connect the two supply wires on the tool to a battery.

After checking that there is no-one nearby, destroy the airbag by pressing the two buttons on the tool at the same time.

DIAGNOSTICS- PRELIMINARIES

This manual describes the diagnostics for all AIRBAG AUTOLIV ACU3 computers - with VDIAG 10 mounted on PRIMASTAR.

To carry out fault finding on this system, it is essential to have the following items:

- the wiring diagram of the function for the vehicle concerned,
- the tools listed in Special tooling required.

GENERAL APPROACH TO FAULT FINDING:

- Use one of the diagnostic tools for identifying the system fitted on the vehicle (reading the computer type, program number, Vdiag number, etc.).
- Locate the Fault finding documents corresponding to the system identified.
- Include information contained in the introductory sections.
- Read the faults stored in the computer memory and use the Interpretation of faults section of the documents.

  Follow closely the fault finding procedure as described for each present or stored fault. Only the "computer" fault leads to replacement of the computer whether the fault is present or simply stored.
- Perform the conformity check (appearance of possible incorrect operations not yet stated by the system's self diagnosis procedure) and apply the associated diagnostic strategy according to results.
- Confirm the repair (customer complaint disappears).
- Use the fault finding procedure for each Customer complaint if the fault persists.

Special tooling required for operations on the air bag and seat belt pretensioner systems:

- Consult II diagnostic tools,
- Multimeter.

DIAGNOSTICS - PRELIMINARIES

Diagnostic function:

The SRS self-diagnostic function with the airbag indicator lamp does not exist on the Primastar model; technicians can only find and fix the problem using "Diagnostic Mode".

REMINDER:
During operations on the air bag/seat belt pretensioner systems it is vital that you lock the computer using the diagnostic tool to prevent any risk of accidental triggering (all the ignition lines will be inhibited). The locked mode is signalled when the instrument panel warning light comes on.

Without the fault finding tool, switch off the ignition and remove the supply fuse from the system, then wait at least **2 seconds** for the power reserve capacity to discharge.

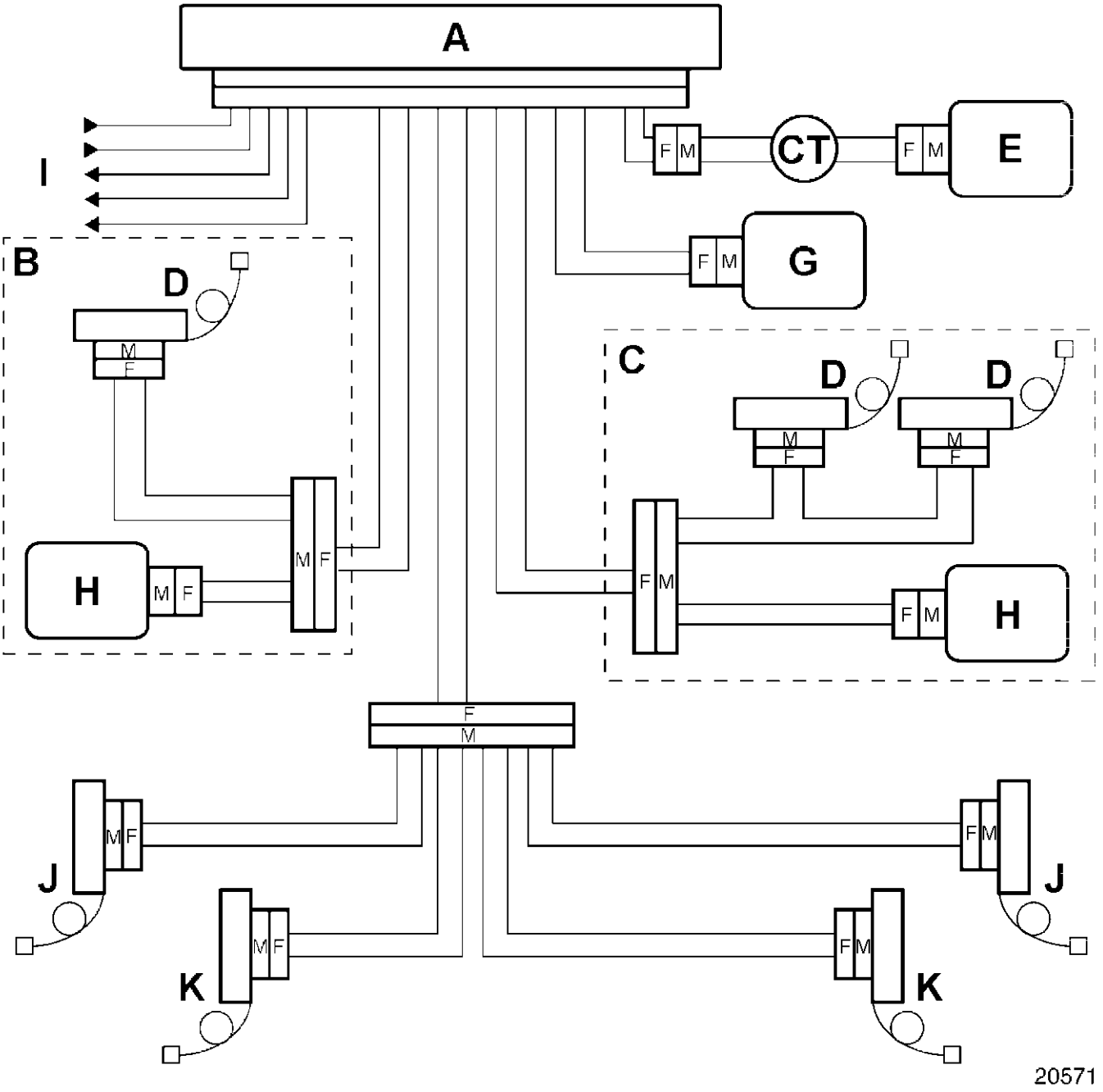
Never take airbag ignition line or pretensioner readings with a multimeter or the CONSULT II tool.

While working, make sure the computer power supply does not drop below **10 V**.

DIAGNOSTICS - PRELIMINARIES

DIAGRAM OF THE SYSTEM

Front and side air bags + pretensioners/inertia reels (front + rear) with central unit.



DIAGNOSTICS - PRELIMINARIES

SYSTEM CONFIGURATION DIAGRAM

A Central unit

B Driver's seat

C Passenger seat

D Buckle pretensioner

E Driver's front air bag ignition module

G Passenger's front air bag ignition module

H Front side air bag ignition module

I
- + 12 V / Ground
- Warning light/Diagnostic lines
- Impact sensors / Impact information

J Rear pyrotechnic seat belt retractor, row 1

K Rear pyrotechnic seat belt retractor, row 2

CT Rotary switch

FAULT FINDING - FAULT INTERPRETATION

DF002 **PRESENT**	COMPUTER SUPPLY VOLTAGE 1.DEF : Too many micro-breaks 2.DEF : Voltage beyond tolerance

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

1.DEF - 2.DEF	***NOTES***	None.

Carry out the operations necessary to obtain the correct computer voltage:
10.5 V ± 0,1 < voltage OK < 16 V ± 0.1.
- Check the battery charge.
- Check the charge circuit.
- Check the tightening and the condition of the battery terminals.
- Computer earth check.
- Check the condition of the computer and that it is locked.

AFTER REPAIR	Deal with any faults detected by the diagnostic tool. Clear the computer memory.

FAULT FINDING - FAULT INTERPRETATION

DF003 **PRESENT**	DRIVER'S FRONT AIR BAG CIRCUIT CC : Short circuit

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Cut the contact and remove the two driver's front airbag module mounting bolts. Check that it is correctly connected.
With the ignition switched off, disconnect and reconnect the connector of the rotary switch at the steering wheel. Check the connections if the fault has become stored (fault no longer declared present).
Visually inspect the wiring harness connection.
Replace the wiring harness if it is visibly damaged.
Replace the rotary switch.
Replace the driver's front airbag module (it should be opened out before being discarded).
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and airbag module ignition, then replace the contact. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the driver's front airbag module if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF003 **PRESENT**	DRIVER'S FRONT AIR BAG CIRCUIT CO : Open circuit

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Cut the contact and remove the two driver's front airbag module mounting bolts. Check that it is correctly connected.
With the ignition switched off, disconnect and reconnect the connector of the rotary switch at the steering wheel. Check the connections if the fault has become stored (fault no longer declared present).
Visually inspect the wiring harness connection.
Replace the wiring harness if it is visibly damaged.
Replace the driver's front airbag module (it should be opened out before being discarded).
Replace the rotary switch.
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and airbag module ignition, then replace the contact. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the driver's front airbag module if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF003 **PRESENT**	DRIVER'S FRONT AIR BAG CIRCUIT CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Cut the contact and remove the two driver's front airbag module mounting bolts. Check the condition of the firing lines.
Visually inspect the wiring harness connection.
Replace the wiring harness if it is visibly damaged.
Replace the rotary switch.
Replace the driver's front airbag module (it should be opened out before being discarded).
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and airbag module ignition, then replace the contact. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the driver's front airbag module if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF003 **SAVE**	DRIVER'S FRONT AIR BAG CIRCUIT CC : Short circuit CO : Open circuit

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Cut the contact and remove the two driver's front airbag module mounting bolts. Check that it is correctly connected.
With the ignition switched off, disconnect and reconnect the connector of the rotary switch at the steering wheel. Check the connections if the fault has become stored (fault no longer declared present).
Visually inspect the wiring harness connection.
Replace the wiring harness if it is visibly damaged.
If the wiring harness is OK, replace the driver's front airbag module (before being removed, it must be opened out), airbag computer and rotary switch.

AFTER REPAIR	Reconnect the computer and airbag module ignition, then replace the contact. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the driver's front airbag module if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF003 **SAVE**	DRIVER'S FRONT AIR BAG CIRCUIT CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Cut the contact and remove the two driver's front airbag module mounting bolts. Check the condition of the firing lines.
Visually inspect the wiring harness connection.
Replace the wiring harness if it is visibly damaged.
If the wiring harness is OK, replace the driver's front airbag module (before being removed, it must be opened out), airbag computer and rotary switch.

AFTER REPAIR	Reconnect the computer and airbag module ignition, then replace the contact. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the driver's front airbag module if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF004 **PRESENT**	PASSENGER FRONT AIR BAG CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool.
Visually inspect the wiring harness connection.
Replace the wiring harness if it is visibly damaged.
Replace the passenger's front airbag module (it should be opened out before being discarded).
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and airbag module ignition, then replace the contact. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the airbag module if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF004 **SAVE**	PASSENGER FRONT AIR BAG CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool.
Visually inspect the wiring harness connection.
Replace the passenger's front airbag module wiring harness if it is visibly damaged.
If the wiring harness is OK, replace the passenger's front airbag module (before it is removed, it must be opened out) and computer.

AFTER REPAIR	Reconnect the computer and airbag module ignition, then replace the contact. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the airbag module if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF010 **PRESENT** **OR** **SAVE**	FAULT WARNING LIGHT CIRCUIT 1.DEF : Dashboard diagnostics.

NOTES	**Special notes:** None.

Apply the diagnostic procedure relevant to this fault in the instrument panel diagnostic information section.

AFTER REPAIR	Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer.

FAULT FINDING - FAULT INTERPRETATION

DF016 **PRESENT**	COMPUTER CONFIGURATION

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual.

This fault indicates an inconsistency between the computer configuration and the vehicle equipment detected by the computer. The computer has detected the presence of an element additional to its configuration.
Change the computer configuration using the diagnostic tools "Configuration" command.

AFTER REPAIR	Erase the computer memory then switch off the ignition. Check again using the diagnostic tool.

FAULT FINDING - FAULT INTERPRETATION

DF029 **PRESENT**	DRIVER'S PRETENSIONER CIRCUIT. CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Switch off the ignition and check that the driver's pretensioner ignition module is connected correctly.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
Replace the pretensioner (turn it off before discarding it).
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and pretensioner, then replace the contact. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the pretensioner if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF029 **SAVE**	DRIVER'S PRETENSIONER CIRCUIT. CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Switch off the ignition and check that the driver's pretensioner ignition module is connected correctly.
Visually inspect the wiring harness connection.
Replace the wiring harness if it is visibly damaged.
If the checks on the wiring harness are satisfactory, replace the computer and the left-hand seat belt (the seat belt pretensioner must be opened out before removal).

AFTER REPAIR	Reconnect the computer and pretensioner, then replace the contact. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the pretensioner if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF039 **PRESENT**	DRIVER'S SIDE SENSOR CIRCUIT CC.0 : Short circuit to earth 2.DEF : No communication 3.DEF : Disrupted communication

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Cut the contact and make sure the sensor is properly connected.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
Replace the sensor.
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and the driver's side sensor then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer.

FAULT FINDING - FAULT INTERPRETATION

DF039 PRESENT CONTINUED	DRIVER'S SIDE SENSOR CIRCUIT 4.DEF : Faulty sensor

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Replace the driver's side computer.

AFTER REPAIR	Reconnect the computer and the driver's side sensor then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer.

FAULT FINDING - FAULT INTERPRETATION

DF039 **SAVE**	DRIVER'S SIDE SENSOR CIRCUIT CC.0 : Short circuit to earth 2.DEF : No communication 3.DEF : Disrupted communication

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Cut the contact and make sure the sensor is properly connected.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
If the wiring harness is OK, replace the computer and sensor.

AFTER REPAIR	Reconnect the computer and the driver's side sensor then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer.

FAULT FINDING - FAULT INTERPRETATION

DF039 SAVE CONTINUED	DRIVER'S SIDE SENSOR CIRCUIT 4.DEF : Faulty sensor

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Replace the driver's side sensor.

AFTER REPAIR	Reconnect the computer and the driver's side sensor then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer.

FAULT FINDING - FAULT INTERPRETATION

DF040 **PRESENT**	PASSENGER SIDE SENSOR CIRCUIT CC.0 : Short circuit to earth 2.DEF : No communication 3.DEF : Disrupted communication

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Cut the contact and make sure the sensor is properly connected.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
Replace the sensor.
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and the passenger's side sensor then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer.

FAULT FINDING - FAULT INTERPRETATION

DF040 PRESENT CONTINUED	PASSENGER SIDE SENSOR CIRCUIT 4.DEF : Faulty sensor

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Replace the passenger's side sensor.

AFTER REPAIR	Reconnect the computer and the passenger's side sensor then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer.

FAULT FINDING - FAULT INTERPRETATION

DF040 **SAVE**	PASSENGER SIDE SENSOR CIRCUIT CC.0 : Short circuit to earth 2.DEF : No communication 3.DEF : Disrupted communication

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Cut the contact and make sure the sensor is properly connected.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
If the wiring harness is OK, replace the computer and sensor.

AFTER REPAIR	Reconnect the computer and the passenger's side sensor then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer.

FAULT FINDING - FAULT INTERPRETATION

DF040 SAVE CONTINUED	PASSENGER SIDE SENSOR CIRCUIT 4.DEF : Faulty sensor

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Replace the passenger's side sensor.

AFTER REPAIR	Reconnect the computer and the passenger's side sensor then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer.

FAULT FINDING - FAULT INTERPRETATION

DF060 PRESENT	MULTIPLEX NETWORK

NOTES	None.

Apply the diagnostic procedure for the multiplexed network.

AFTER REPAIR	Erase the computer memory then switch off the ignition. Check again using the diagnostic tool.

FAULT FINDING - FAULT INTERPRETATION

DF062 **PRESENT**	CONFIGURATION OF SIDE SENSORS

NOTES	None.

This fault indicates an inconsistency between the computer configuration and the vehicle equipment detected by the computer. The computer has detected the presence of an element additional to its configuration.
Change the computer's configuration with the diagnostic tool's "Configuration" command.

AFTER REPAIR	Erase the computer memory then switch off the ignition. Check again using the diagnostic tool.

FAULT FINDING - FAULT INTERPRETATION

DF068 **PRESENT**	PASSENGER CHEST FRONT SIDE AIR BAG CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool.
Cut the contact and make sure the airbag module is properly connected (the seat cover must be removed for this procedure).
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
Replace the airbag module (it should be opened out before being discarded).
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and the ignition module of the passenger's front side air bag module then switch on the ignition. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Replace the seat cover. Destroy the chest side airbag module if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF068 **SAVE**	PASSENGER CHEST FRONT SIDE AIR BAG CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Cut the contact and make sure the airbag module is properly connected (the seat cover must be removed for this procedure).
Visually inspect the wiring harness connection.
Replace the wiring harness if it is visibly damaged.
If the wiring harness is OK, replace the computer and airbag module (the module must be opened out before removal).

AFTER REPAIR	Reconnect the computer and the ignition module of the passenger's front side air bag module then switch on the ignition. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Replace the seat cover. Destroy the chest side airbag module if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF077 **PRESENT**	DRIVER'S CHEST FRONT SIDE AIR BAG CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool.
Cut the contact and make sure the airbag module is properly connected (the seat cover must be removed for this procedure).
Visually inspect the wiring harness connection.
Replace the wiring harness if it is visibly damaged.
Replace the airbag module (it should be opened out before being discarded).
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and the ignition module of the driver's front side air bag module then switch on the ignition. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Replace the seat cover. Destroy the chest side airbag module if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF077 **SAVE**	DRIVER'S CHEST FRONT SIDE AIR BAG CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Cut the contact and make sure the airbag module is properly connected (the seat cover must be removed for this procedure).
Visually inspect the wiring harness connection.
Replace the wiring harness if it is visibly damaged.
If the wiring harness is OK, replace the computer and airbag module (the module must be opened out before removal).

AFTER REPAIR	Reconnect the computer and the ignition module of the driver's front side air bag module then switch on the ignition. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Replace the seat cover. Destroy the chest side airbag module if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF094 to DF153 PRESENT OR STORED	COMPUTER FAULT

NOTES	None.

Replace the air bag computer (consult the **Help section** for this operation).

AFTER REPAIR	None.

FAULT FINDING - FAULT INTERPRETATION

DF158 **PRESENT**	FRONT PASSENGER'S PRETENSIONER CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Vehicle with 1 or 2 passenger pretensioner(s)

Lock the computer using the command on the diagnostic tool. Switch off the ignition and check that the pretensioner ignition module is connected correctly.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
Replace the passenger side seat belt(s) (the pretensioner must be deactivated before it is discarded).
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and the pretensioner, then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the pretensioner if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF158 **SAVE**	FRONT PASSENGER'S PRETENSIONER CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Vehicle with 1 or 2 passenger pretensioner(s)

Lock the computer using the command on the diagnostic tool. Switch off the ignition and check that the pretensioner ignition module is connected correctly.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
If the checks on the wiring harness are satisfactory, replace the computer and the passenger side seat belts (the seat belt pretensioner must be opened out before being discarded).

AFTER REPAIR	Reconnect the computer and the pretensioners, then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the pretensioner if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF159 PRESENT	DRIVER'S SIDE ROW 1 PRETENSIONER CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Switch off the ignition and check that the pretensioner ignition module is connected correctly.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
Replace the pretensioner (turn it off before discarding it).
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and the pretensioner, then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the pretensioner if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF159 **SAVE**	DRIVER'S SIDE ROW 1 PRETENSIONER CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Switch off the ignition and check that the pretensioner ignition module is connected correctly.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
If the wiring harness is OK, replace the computer and pretensioner (the seat belt pretensioner must be opened out before removal).

AFTER REPAIR	Reconnect the computer and the pretensioner, then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the pretensioner if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF160 **PRESENT**	PASSENGER SIDE ROW 1 PRETENSIONER CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Switch off the ignition and check that the pretensioner ignition module is connected correctly.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
Replace the pretensioner (turn it off before discarding it).
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and the pretensioner, then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the pretensioner if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF160 **SAVE**	PASSENGER SIDE ROW 1 PRETENSIONER CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Switch off the ignition and check that the pretensioner ignition module is connected correctly.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
If the wiring harness is OK, replace the computer and pretensioner (the seat belt pretensioner must be opened out before removal).

AFTER REPAIR	Reconnect the computer and the pretensioner, then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the pretensioner if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF161 **PRESENT**	DRIVER'S SIDE ROW 2 PRETENSIONER CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Switch off the ignition and check that the pretensioner ignition module is connected correctly.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
Replace the pretensioner (turn it off before discarding it).
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and the pretensioner, then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the pretensioner if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF161 **SAVE**	DRIVER'S SIDE ROW 2 PRETENSIONER CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Switch off the ignition and check that the pretensioner ignition module is connected correctly.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
If the wiring harness is OK, replace the computer and pretensioner (the seat belt pretensioner must be opened out before removal).

AFTER REPAIR	Reconnect the computer and the pretensioner, then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the pretensioner if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF162 **PRESENT**	PASSENGER SIDE ROW 2 PRETENSIONER CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Switch off the ignition and check that the pretensioner ignition module is connected correctly.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
Replace the pretensioner (turn it off before discarding it).
Replace the air bag computer.
Replace the corresponding wiring harness.

AFTER REPAIR	Reconnect the computer and the pretensioner, then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the pretensioner if it was replaced.

FAULT FINDING - FAULT INTERPRETATION

DF162 **SAVE**	PASSENGER SIDE ROW 2 PRETENSIONER CIRCUIT CC : Short circuit CO : Open circuit CC.1 : Short circuit to 12 V CC.0 : Short circuit to earth

NOTES	Do not use electrical testing equipment on circuits connected to the SRS, unless otherwise instructed in the Workshop Repair Manual. Order of repair: check the SRS system each time a part is replaced.

Lock the computer using the command on the diagnostic tool. Switch off the ignition and check that the pretensioner ignition module is connected correctly.
Visually inspect the wiring harness connections.
Replace the wiring harness if it is visibly damaged.
If the wiring harness is OK, replace the computer and pretensioner (the seat belt pretensioner must be opened out before being removed).

AFTER REPAIR	Reconnect the computer and the pretensioner, then switch on the ignition again. Erase the computer memory then switch off the ignition. Carry out the check again using the diagnostic tool and, if there are no faults, unlock the computer. Destroy the pretensioner if it was replaced.

FAULT FINDING - CONFORMITY CHECK

NOTES	Only carry out conformity check after a full check using the diagnostic tool.

Order	Function	Parameter or state check or action	Display and notes	Fault finding procedure
1	Diagnostic tool dialogue	-	Air bag ACU 3	**CHART 1**
2	Computer conformity	Vehicle type parameter	Primastar 10	**DF094**
3	Computer configuration	Use the following commands: "configuration of ignition modules" "configuration of side sensors"	Ensure that the computer configuration defined in the Current column corresponds to the vehicle equipment.	None
4	Warning light operation Computer initialisation check.	Switch on the ignition	Warning light comes on for 3 seconds when the ignition is switched on	**DF010**

DIAGNOSTICS - HELP

Replacing the air bag computer

The air bag computers are sold in locked mode to avoid all risk of accidental triggering (all ignition lines are inhibited).

The locked mode is signalled when the air bag fault warning light lights up on the instrument panel.

Follow this procedure when replacing an air bag computer:

– Ensure that the ignition is switched off.
– Replace the computer.
– Modify the computer configuration if necessary.
– Switch off the ignition.
– Carry out a check using the diagnostic tool.
– Unlock the computer only no faults are indicated by the diagnostic tool.

DIAGNOSTICS - DIAGNOSTIC CHARTS

CHART 1	Absence of dialogue with the air bag computer

NOTES	None.

Try to establish dialogue with a computer on another vehicle to make sure that the diagnostic tool is not faulty.
If the tool is not causing the fault and dialogue cannot be established with any other computer on the same vehicle, it may be that a faulty computer is disrupting diagnostic line **K** .
Disconnect the computers one at a time to locate the fault.
Check the battery voltage and make whatever adjustments are necessary to obtain the proper reading (**10.5 V** < battery voltage < **16 V**).

Check the presence and condition of the air bag computer supply voltage fuse.
Check that the computer connector is properly connected and check the condition of its wiring.
Check that the computer is correctly supplied:
- Disconnect the air bag computer.
- Check and make sure **+ after contact** between **tracks 30** (**+ after contact**) and **31** (**connector**) ground **75 tracks**.

Check that the diagnostic socket is correctly supplied:
- **+ before ignition** on **track 16**.
- **Earth** on **tracks 4 and 5**.

Check the continuity and insulation of the lines of the diagnostic socket/air bag computer connection:
- Between the terminal marked **K** and **track 7** of the diagnostic socket.

If dialogue is still not established after these various checks, replace the airbag computer (consult the "Aid" section for this operation).

AFTER REPAIR	When communication is established, deal with any faults indicated.