

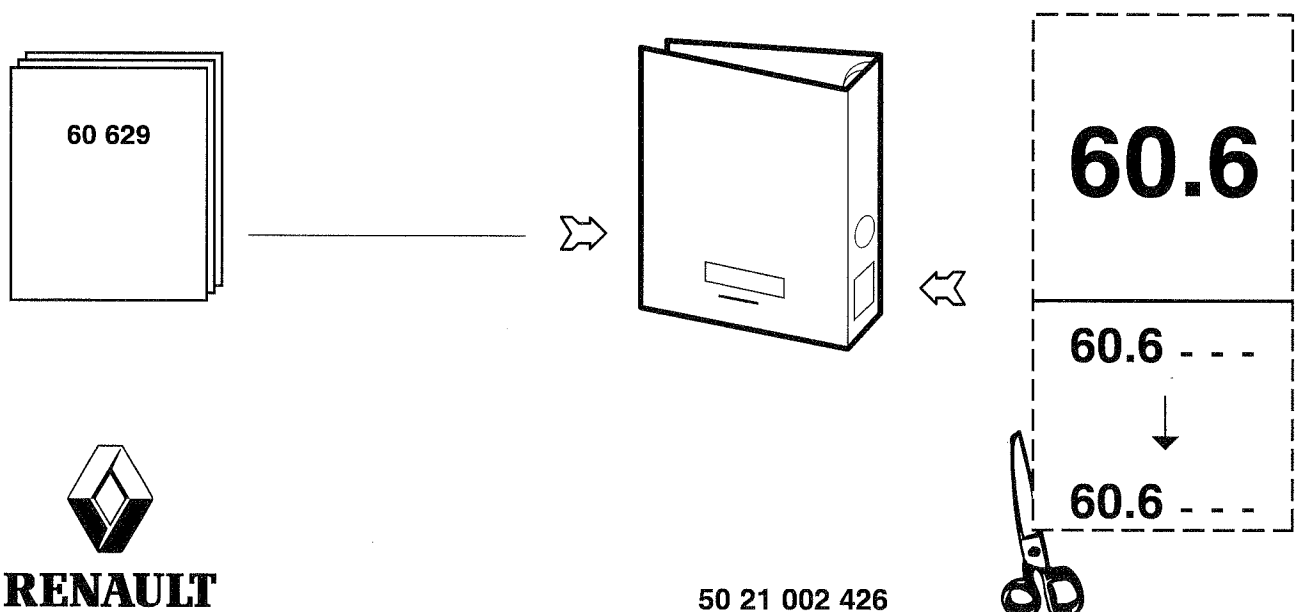
60 629 - AN - 06.2001**BODYWORK**

SEAT	VEHICLES
"ISRI" 6830/870 — 1030/870 (880)	RENAULT MAGNUM RENAULT PREMIUM RENAULT KERAX RENAULT MIDLUM

NOTE

The above information may change in the course of time.

Only the "Consult" section of the workshop manuals repertory in standard N° 10320 serves as reference.



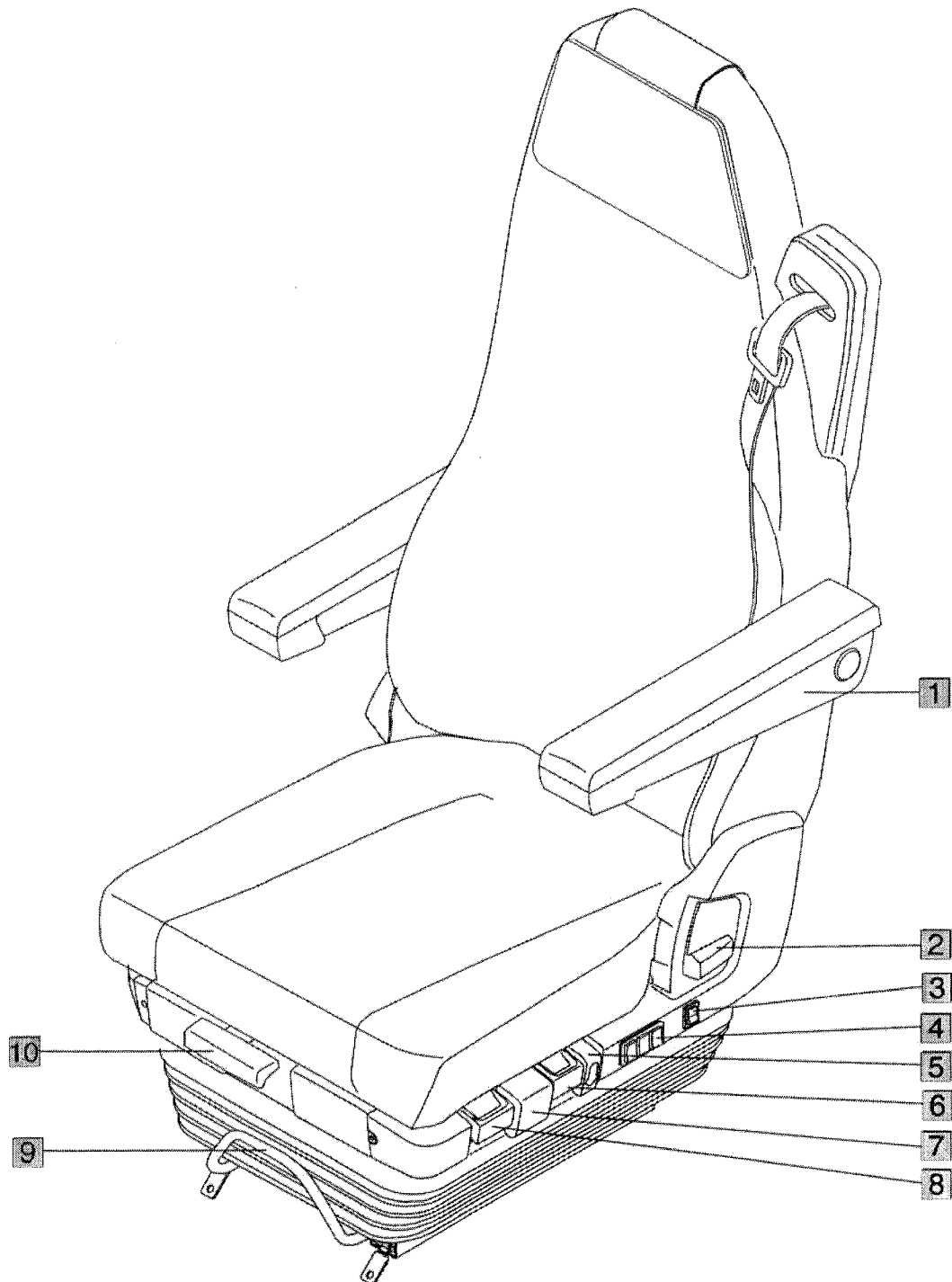
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BODY - "ISRI" 6830/1030 SEAT

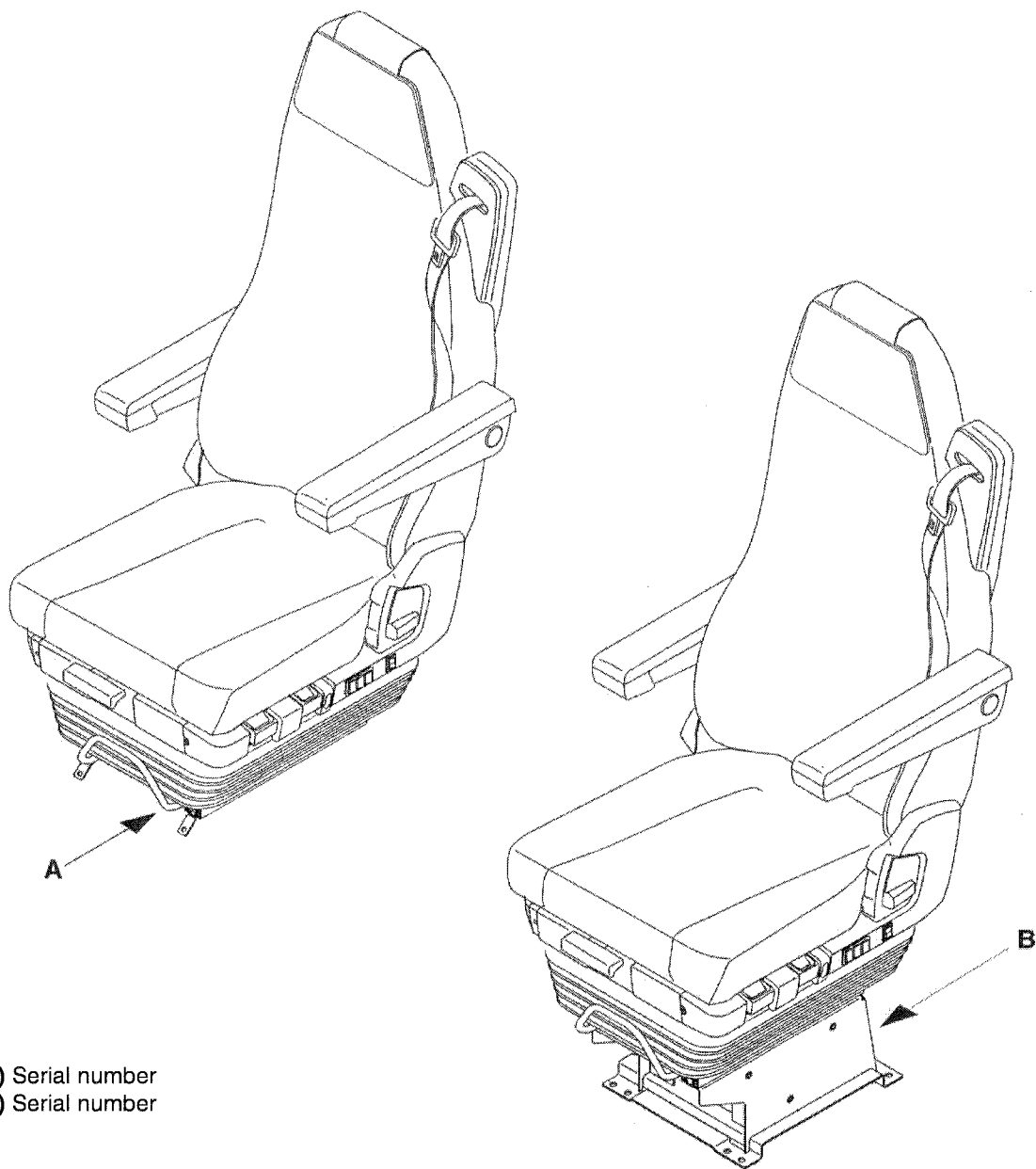
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Important recommendations

- Only qualified staff are authorised to carry out repairs on seats.
- The drawings featured in this manual generally represent the left seat or the left side of the seat. Repairs to the right seat or right side of the seat must be transposed accordingly.
- The descriptions featured in Chapter 2 explain the dismantling of various components making up the seat.
Generally speaking the re-assembly of the seat will be the same in reverse order.
- Before replacing any control parts (e.g. height adjustment valve, seat lowering lever) disconnect the main connection plug and the compressed air connection.
- The support elements for hoses and cables (e.g. cable links) as well as the cable terminals are not mentioned in detail.
It is nevertheless necessary to re-place, after the repair work is finished, the hoses and cables as well as their supports and their safety devices in their original positions¹.
Similarly, when mounting the hoses, ensure that their exact attributions are respected (colour coding).
- Hoses and cables must not be bent.
- For technical reasons, if exchanging parts situated in the force radius of the fixing points of the seat belt, ensure that they are correctly positioned and that the tightening torques of the fixing screws are respected.
- After each repair job, check the functions and if the repairs involved parts of the pneumatic system, check the air tightness.
- Do not use the lowered backrest as a support.

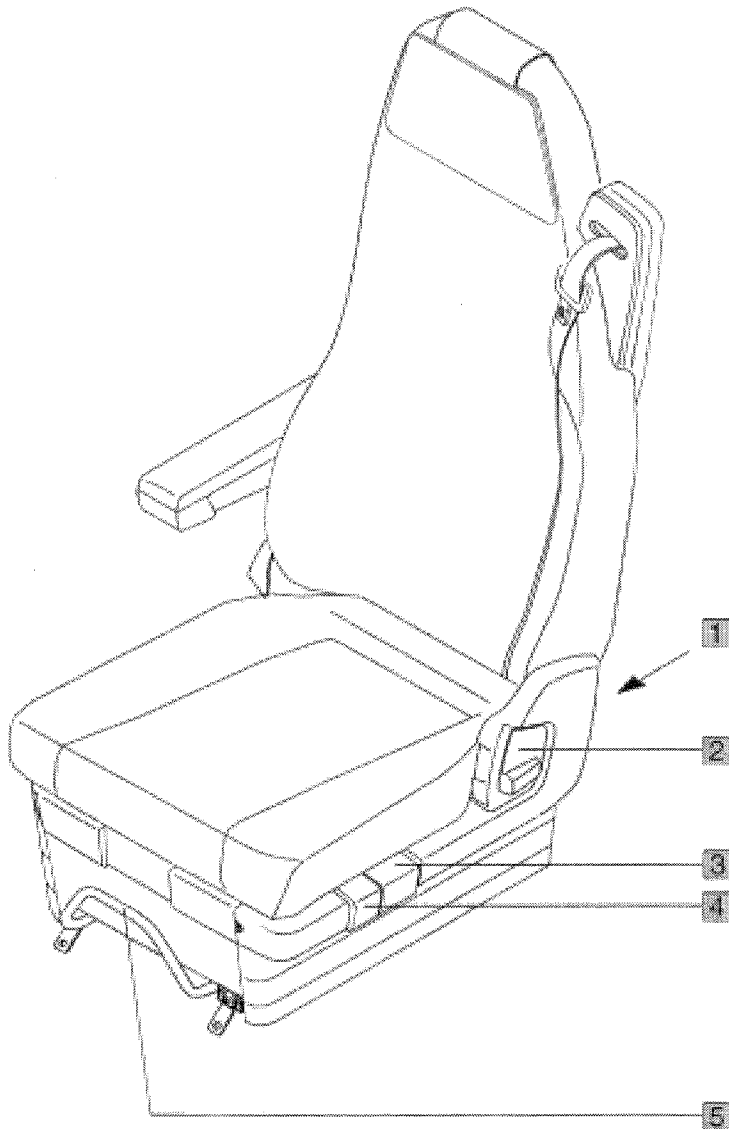


- (1) Armrests
- (2) Backrest adjustment
- (3) Heating
- (4) Lumbar support
- (5) Vertical lowering
- (6) Height adjustment
- (7) Angle adjustment
- (8) Adjustable vertical damper
- (9) Forward/backward position adjustment
- (10) Seat cushion depth adjustment

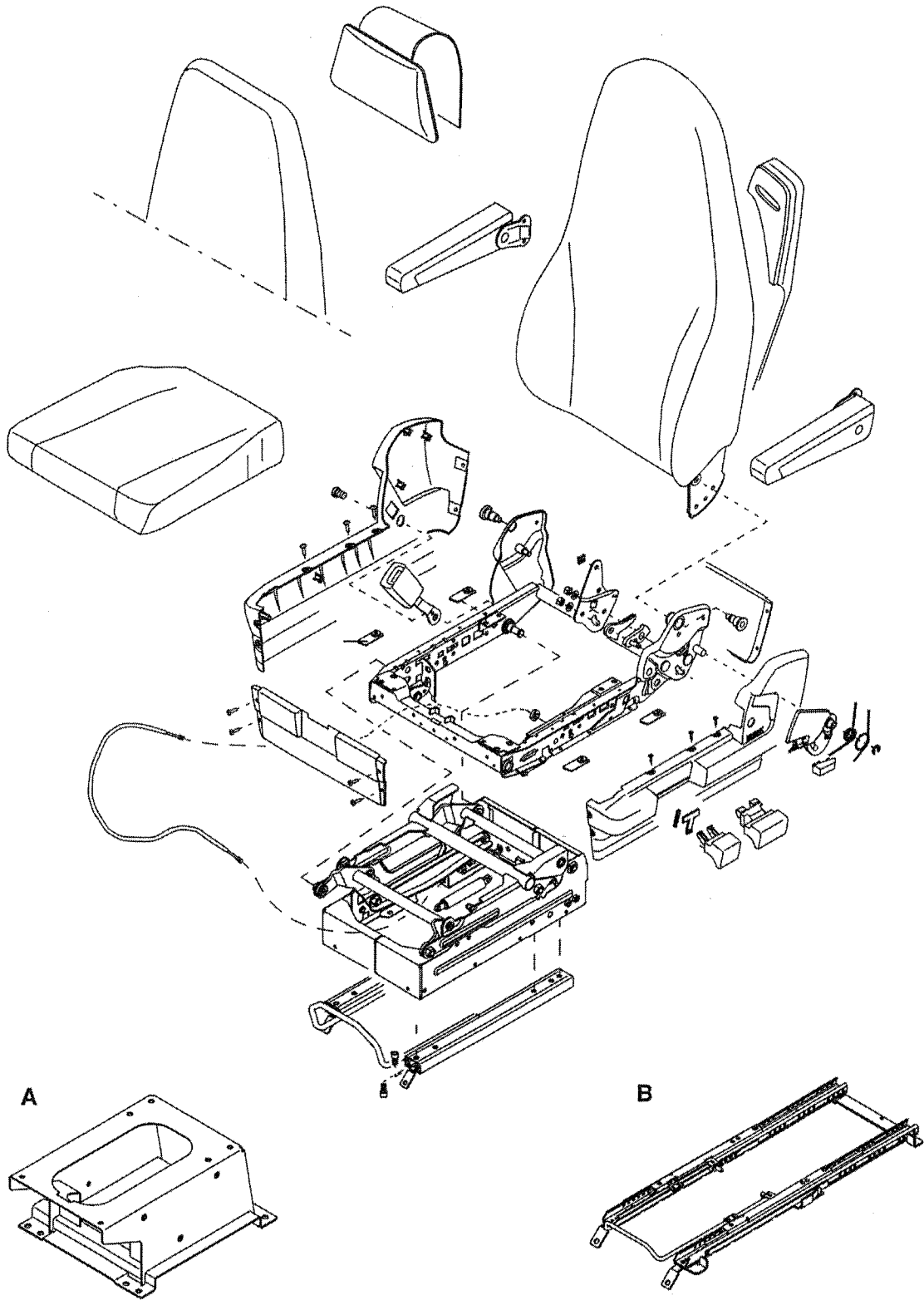


- (A) Serial number
- (B) Serial number

The serial number can be found on the back of the static underframe. On the rear side for seats mounted on a sheet metal underframe.

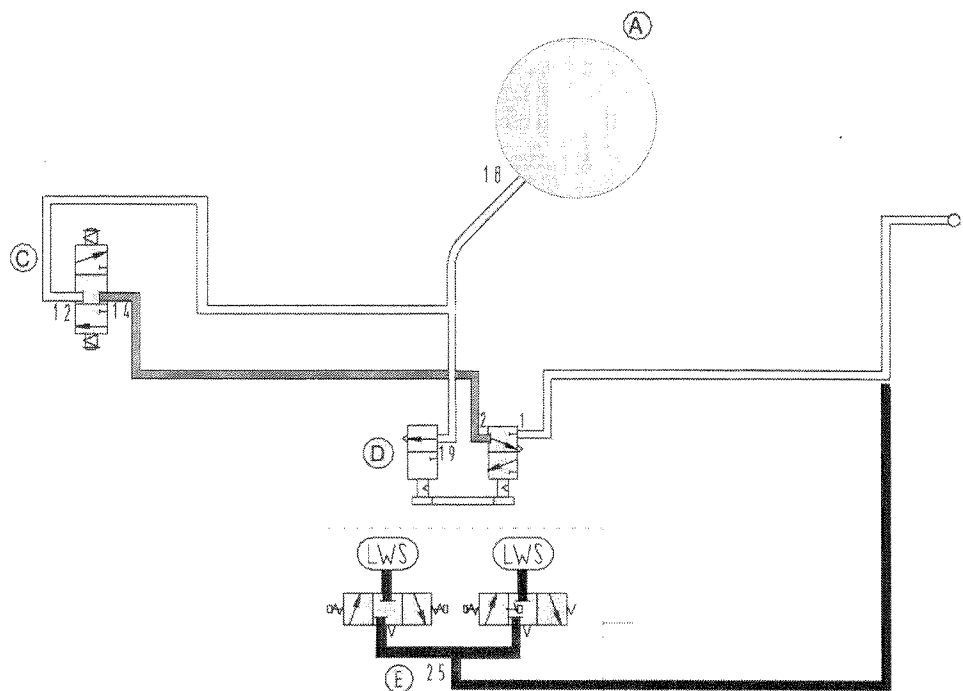


- (1) Serial number
- (2) Backrest adjustment
- (3) Height adjustment
- (4) Angle adjustment
- (5) Forward / back adjustment

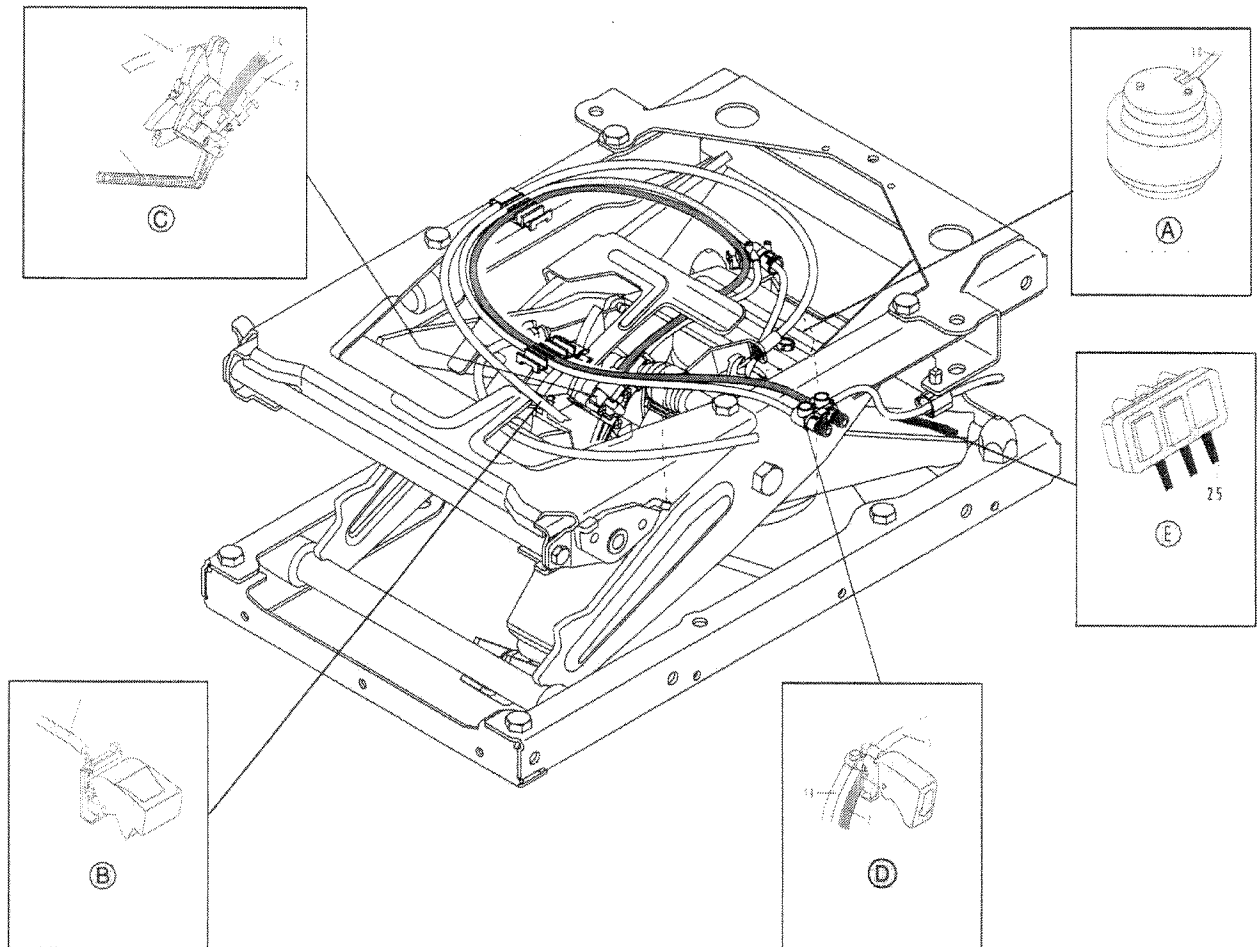


- A) Sheet metal underframe
- B) Long runners

Pneumatic diagram



- (A) – Air cushion
- (C) – Level valve
- (D) – Quick lowering valve
- (E) – Lumbar support valve (according to version)
- (P) – Air inlet (max. 12 bars)

Pneumatic components

- (A) – Air cushion
- (B) – Height adjustment
- (C) – Level valve
- (D) – Quick lowering valve
- (E) – Lumbar support valve (according to version)

SPECIFICATIONS

Consumables

Fastening, locking and sealing products	
Industrial reference	Automotive reference
Loctite Normal thread-locking compound	Loctite 243

Tightening torques

There are several types of tightening :

- Tightening to torque (in **Nm.**)
- Tightening to angle (in °)
- Tightening to torque and angle (in **Nm. + °**)

Torques given in **Nm** are nominal torques (average value calculated on the basis of the minimum torque and the maximum torque).

The tightening accuracy class defines the tolerance of this torque in percent as a function of the nominal torque applied.

Tightening accuracy classes :

- **Classe I** : Special threaded hardware (tolerances variable depending on assembly)
- **Classe II** : Reserved for precise tightening (tolerance $\pm 10\%$ of the nominal torque)
- **Classe III** : Reserved for normal standard tightening (tolerance $\pm 20\%$ of the nominal torque)

For standard threaded hardware indicated in the table below, use tightening class **III**.

Seat belt (7/16"UNF-2B) 35 +5 Nm

All other hardware should be tightened in accordance with the table below.

Tightening torques for conventional "metric system" nut and bolt hardware to standard 01.50.4002		
Dia. and pitch of nuts and bolts (in mm)	Quality class 8.8	Quality class 10.9
	Tightening class III ($\pm 20\%$)	Tightening class III ($\pm 20\%$)
6 x 1.00	7.4	10.8
7 x 1.00	12.1	17.8
8 x 1.00	19.2	28.2
8 x 1.25	17.9	26.3
10 x 1.00	39.4	58
10 x 1.25	37.4	55
10 x 1.50	35.4	52
12 x 1.25	67	98
12 x 1.50	64	94
12 x 1.75	61	90
14 x 1.50	105	155
14 x 2.00	98	143
16 x 1.50	161	237
16 x 2.00	151	222
18 x 1.50	235	346
18 x 2.50	210	308
20 x 1.50	328	481
20 x 2.50	296	28.2
22 x 1.50	444	26.3
22 x 2.50	406	58

Complete seat

Take the seat off its sheet metal underframe :

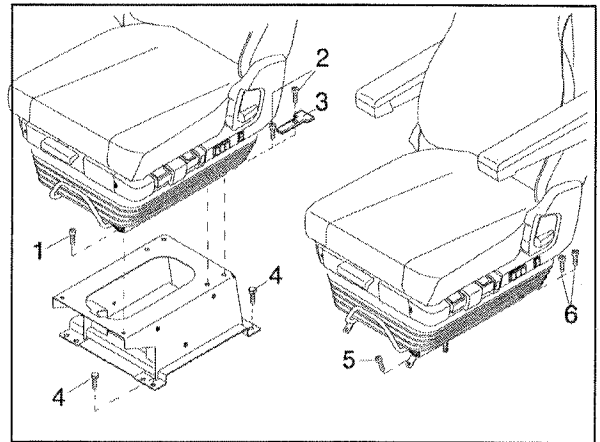
- Unfasten the electric connection and the air piping from the underframe.
- Move the seat back and remove the screws (1).
- Move the seat forward and remove the other four screws (2) . (Put back the the stops (3) when re-assembling)

Take out the seat, with the sheet metal underframe

- Disconnect the connections on the vehicle side and remove the fastening screws (4)

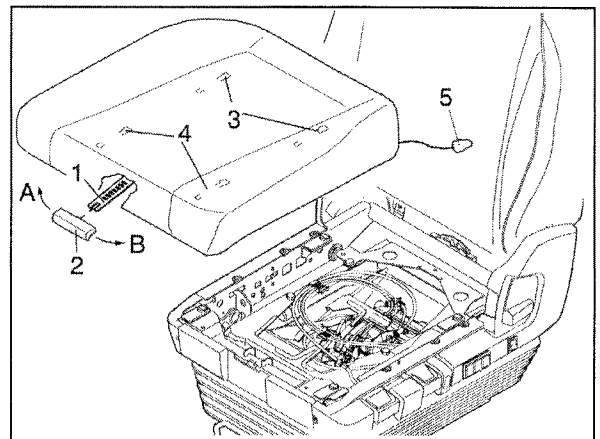
Take out the seat without a sheet metal underframe :

- Disconnect the connections on the vehicle side.
- Move the seat back and remove the screws (6).
- Remove screw (5).



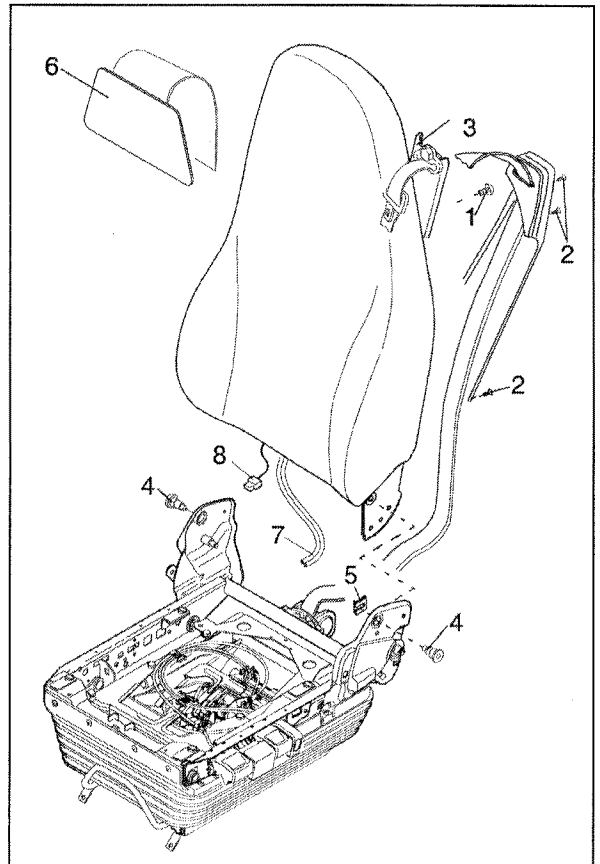
Seat cushion

- Lift the lever (1) and move the seat cushion forward as far as it will go.
- Where required, undo the the flap of fabric at the back of the seat cushion.
- Push the lever (1) in the lifted position in direction A, pull the seat cushion forward and lift.
- Where applicable, unplug the heating connector (5).
- Take the handle (2) off the lever – it will be re-used when the new cushion is fitted.



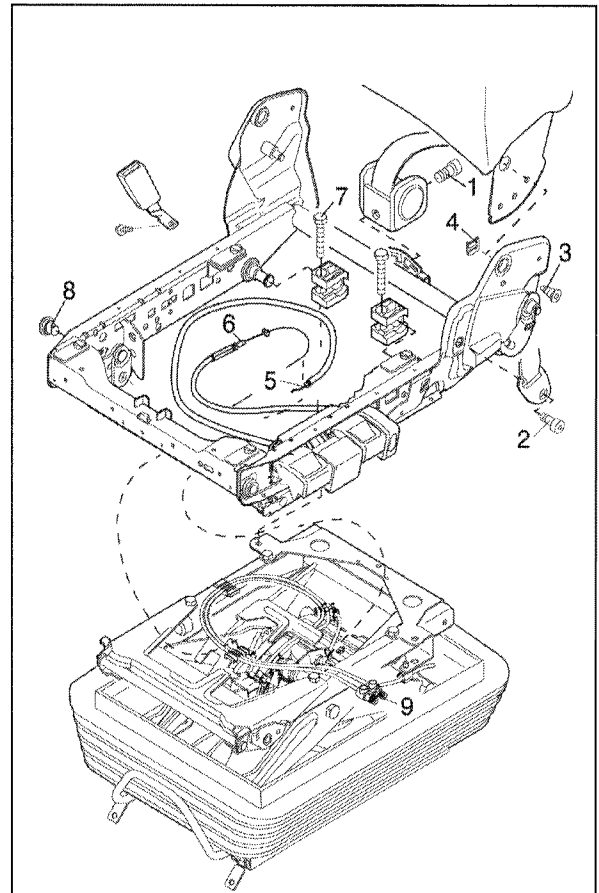
Backrest

- Remove the seat cushion (see above)
- Remove the side covers – see page (B4)
- Remove the screws (2) of the belt cover and push the cover of the belt guide (3)
- Remove screw (1).
- Remove the backrest screws (4) and clip (5).
- Remove the headrest (6).
- Disconnect the air piping for the lumbar support (7).
- Where applicable, unplug the heating connector (8).



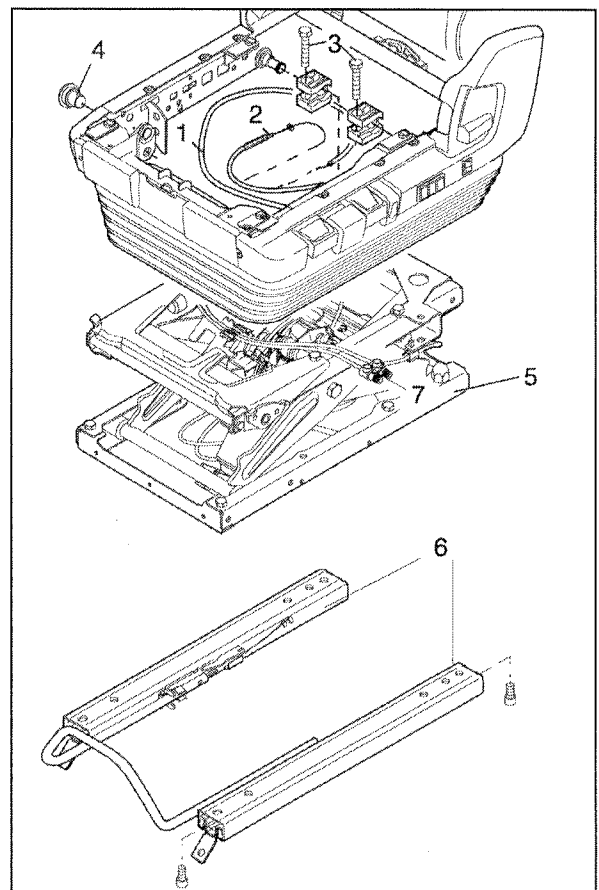
Seat frame

- Take off the seat cushion (see page B1).
- Remove the side covers (see page B4).
- Remove the front cover and rear cover (see page B3) and (see page B4)
- Remove the screws (1) and (2).
- Remove the screws (3) and the clip (4) and take off the backrest.
- Remove the gaiter attached to the seat frame.
- Disconnect the cables for adjusting the damper (5) and the height (6) on the suspension (see page B5, Dismantling of the damper and height adjustment mechanism).
- Remove the 2 screws at the back (7).
- Tilt the seat and remove the quick lowering valve (9) from the seat frame (see page B8 set of hoses)
- Tilt the seat frame as far as possible and loosen the 2 screws at the front (8).
- Unhook the air hose and flexible electric cable, the fastening lug, and, where applicable, unscrew the fastening elements.



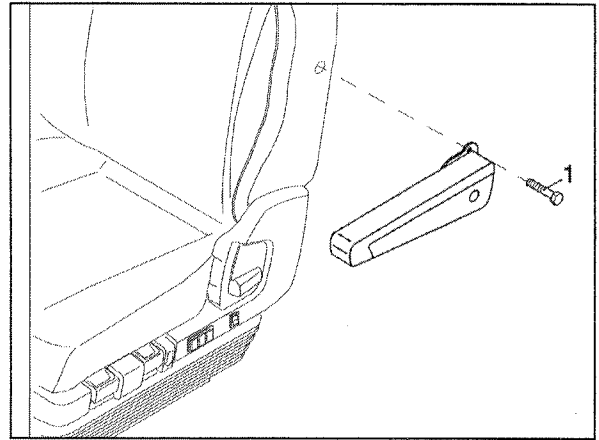
Suspension

- Dismantle the seat (see page B1)
- Undo the gaiter on the seat frame (5).
- Disconnect the cables for adjusting the damper (1) and the height (2) on the suspension (see page B5 Dismantling of the damper and height adjustment mechanism).
- Tilt the seat and remove the quick lowering valve (9) from the seat frame (see page B8 pneumatic bundle).
- Remove the 2 screws at the back (3).
- Tilt the seat frame as far as possible and loosen the 2 screws at the front (4).
- Unhook the air hose and flexible electric cable, the fastening lug, and, where applicable, unscrew the fastening elements.
- Remove the runners (6) from the suspension (5) (see page B7).



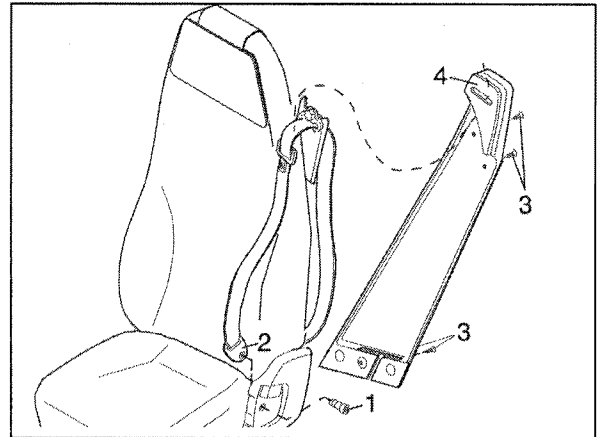
Armrests

- Remove the two screws (1).



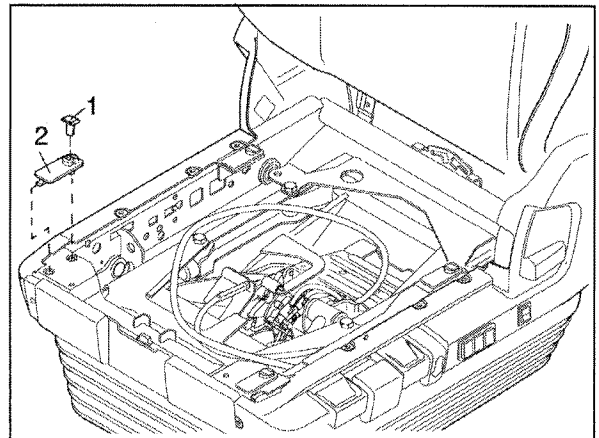
Belt cover

- Pull the backrest handle upwards remove the screw (1) from the belt fastener (2) and the 4 screws (3) from the belt cover.
- Take off the belt cover and push it upwards. Slide the belt fastening tab (2) through the opening (4).



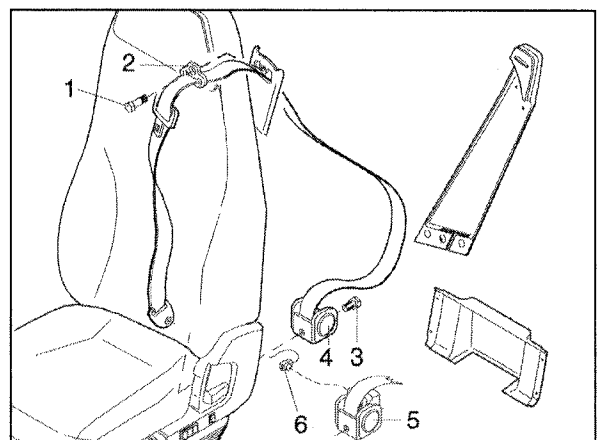
Seat cushion guides :

- Remove the cushion (see page B1)
- Remove the tightening rivet (1) from the guide (2) and remove the latter from the seat frame.
- When fitting a new guide, press in the tightening rivet (1) (flush with the upper surface of the guide).



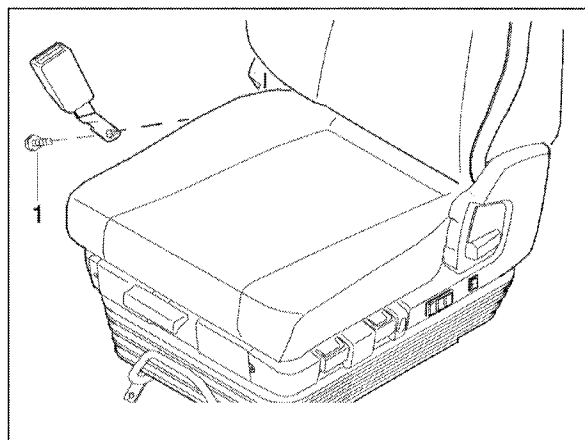
3-point seat belt

- Remove the belt cover (see above)
- Remove the rear cover (see above)
- Take out the screw (1) from the belt guide (2) and the screw (3) from the winder (4).
- If the winder is fitted with a pre-tensioner (5), unplug the connector (6).
- Tightening torque : 7/16"UNF-2B = 35 Nm + 5 Nm
- Replace seatbelts if they have been forced in an accident. Check the seatbelt anchorage. Replace damaged seat belts.
Do not pass the belt over any sharp edges.



Seat belt buckle strap

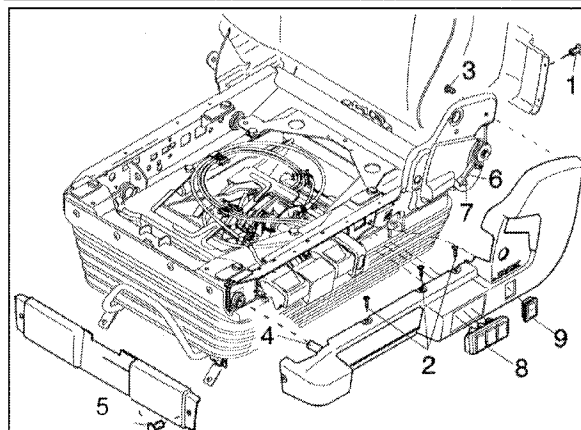
- Remove the screw (1)
- For buckle straps fitted with contactors, dismantle the seat cushion (see page B 1) and unplug the electric connector.
- Tightening torque 7/16"UNF-2B = 35 Nm + 5 Nm



Side covers / Front cover / Rear cover

Side cover on control side :

- Remove the 2 rivets (1) from the rear cover.
- Remove the 3 screws (2), tilt the backrest forward and remove the screw (3).
- Lift the backrest adjustment handle and remove the side cover over the handle.
Warning ! When you lift the backrest handle, the latter is not in the engaged position and you must hold it back.
- Remove the side cover over the handles, remove the stirrup (4) from the hole and remove the rivet (5) from the front cover.
- Where applicable, dismantle the lumbar support valve (8) and the heating switch (9) (see page B8)
If the backrest no longer engages after the cover is removed, the torsional spring (6) must be placed on the pin (7).



Side cover on opposite side :

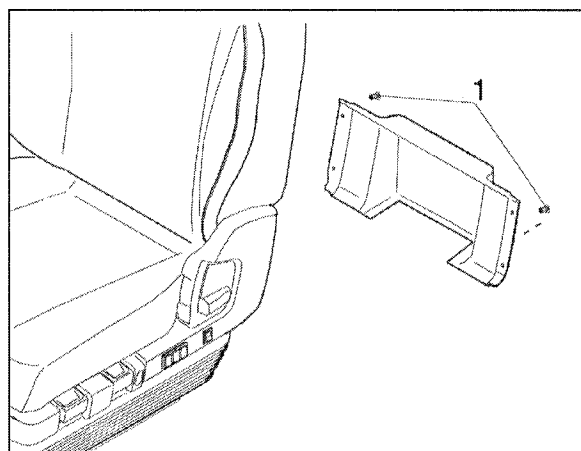
- Proceed as with the side cover on the control side.
- However, this time also remove the seat belt buckle strap (see above).

Front cover :

- Remove the rivets (5).
- Remove the front cover, and, where applicable, unfasten the side cover at the front.

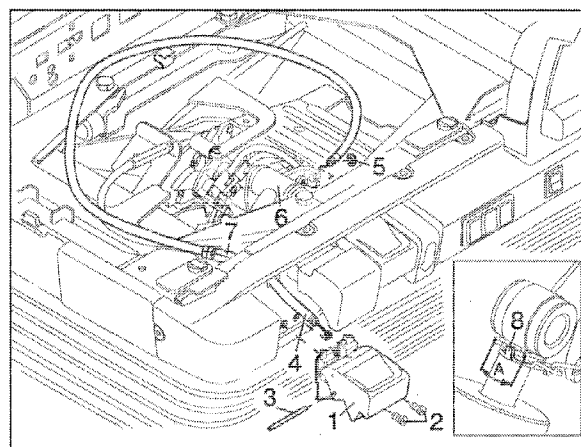
Rear cover :

- Remove the 4 rivets (1) from the rear cover.



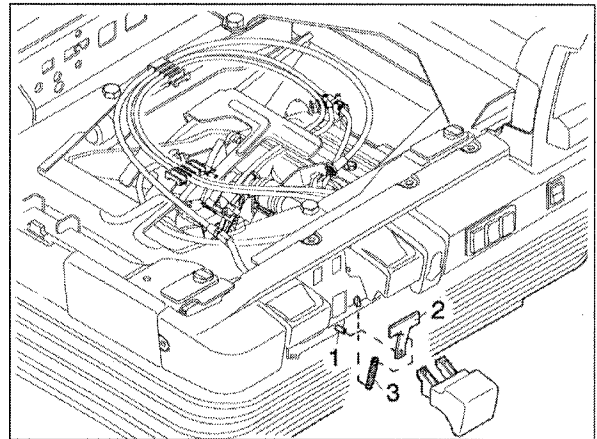
Adjustment of the damper

- Pull the damper adjustment handle (1) as far up as it will go.
- Unscrew the 2 screws (2) and take the handle out of the side cover.
- Remove the pin (3), unfasten the adjusting cable (4) and take it out from the back.
- Remove the safety clip (5) from the damper (6) and take the adjusting cable (4) off the damper adjustment lever.
- *When inserting the new sheathed cable, undo the counternut of the adjustment of the adjusting cable (7) and adjust the cable so that in the top position of the adjusting lever, the lowest vertical damping is obtained. Tighten the counternuts.*
- *By activating the damper handle, the damper tab (8) must be able to cover all zone A (see diagram).*



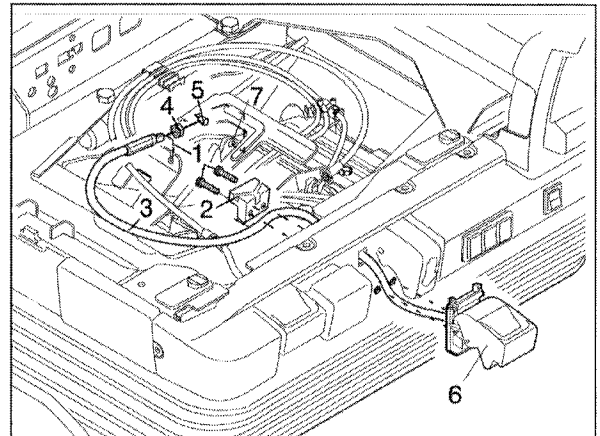
Angle adjustment

- Press the pin (1) until the lever (2) comes off.
- Unhook the spring (3) and remove the lever (2).
- Detach the handle from the side plate.



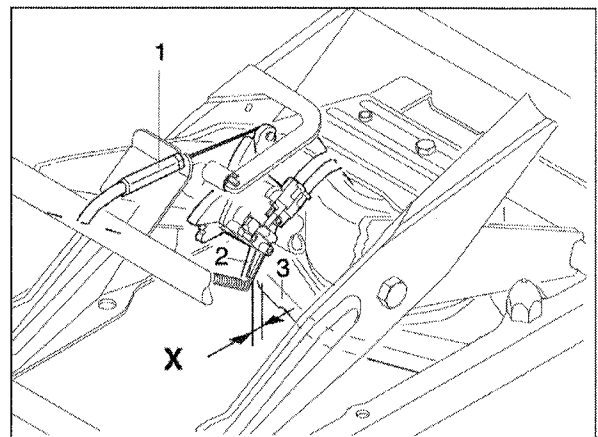
Height adjustment

- Press the lever (6) downwards.
- Remove the 2 screws (1).
- Push the adjusting cable (3) out of the groove (2).
- Loosen the nut (4) and remove the adjusting cable.
- Detach the threaded cable stop (5) from the toothed segment of the valve (7).
- Once the new lever is in place, adjust the cable (see below)



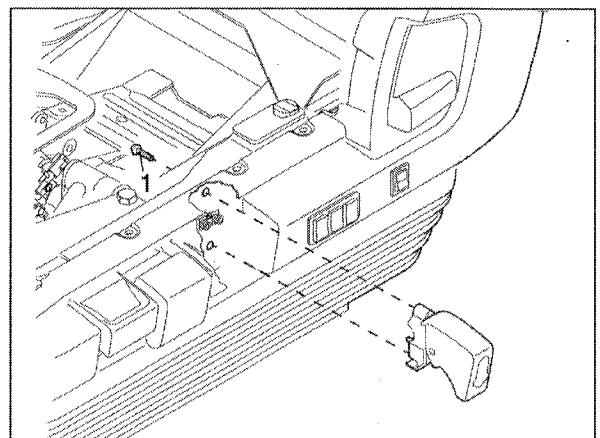
Adjusting the height adjustment cable

- Loosen the counternut of the adjustment of the adjusting cable (1) and adjust the sheathed cable so that with the adjusting lever in the top position and after having lowered the seat, the fastening lug (2) of the height adjustment valve spring is placed at least 1 mm, at most 2mm (dimension X) from the air cushion support (3).
- Tighten the counter nut again (1).



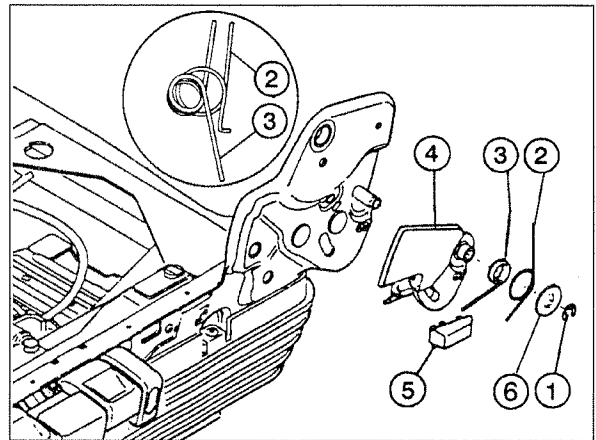
Lowering

- Remove the seat cushion (see page B1)
- Tilt the seat as far back as it will go.
Remove the 2 screws (1).



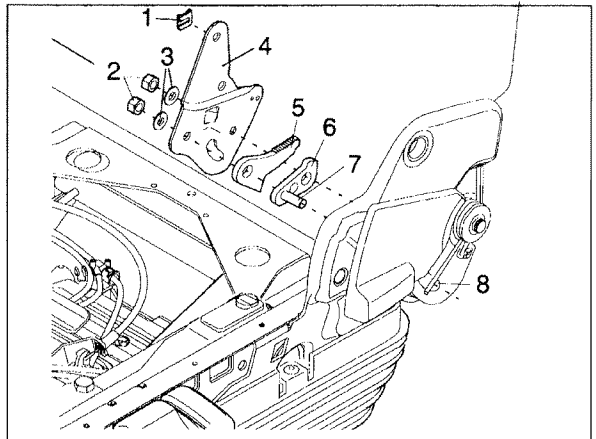
Backrest handle

- Remove the side cover on the control side (see page B4)
- Remove the clip (1), the washer (6) and the springs (2) and (3).
- When re-assembling the backrest handle (4) clip the articulated part (5) onto the handle.



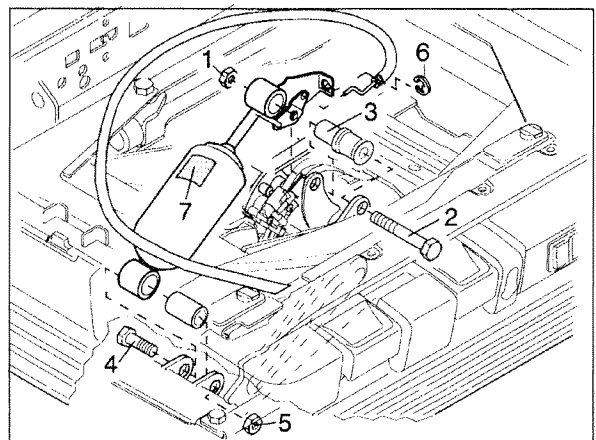
Backrest notching

- Remove the seat cushion (see page B1)
- Detach the torsional spring (8) from the peg (7).
- Press the backrest backwards in the notched zone and remove the clip from the pin (1).
- Remove the nuts (2) and the washers (3).
- Remove the interior support (4), the toothed lever (5) and the locking lever (6).



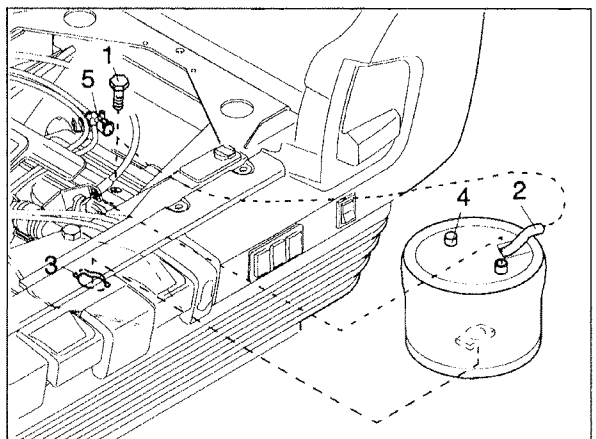
Damper

- Remove the seat cushion (see page B1).
- Bring the mechanism into its highest position and block it, so that it cannot be lowered (see page B8).
- Remove the nut (1).
- Remove the screw (2) and remove the bushing (3).
- Detach the gaiter located on the lower frame.
- Remove the nut (5) from the screw (4).
- Remove the safety clip (6) and disengage the adjusting cable.
- *Warning ! When re-assembling the damper, ensure that :*
 - the cable is properly adjusted (see page B5)
 - the sticker (7) is facing upwards.



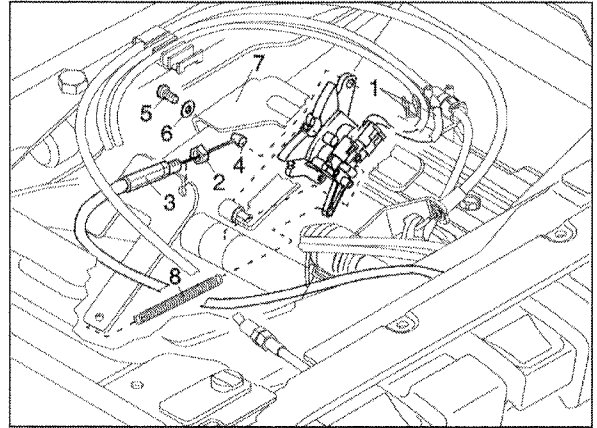
Air cushion

- Remove the seat cushion (see page B1).
- Undo the lower fastening of the gaiter at the back and the side.
- Bring the mechanism into its highest position and block it to avoid any uncontrolled lowering (see page B8).
- Remove the screw (1).
- Undo the hose connection (2) on the Y-piece (5).
- Remove the sleeve (2) and the hose connection.
- Turn the air cushion 90° and extract it from the support (3).
- Lift the gaiter and remove the air cushion from behind.
- When putting in the new air cushion, ensure that the tab (4) engages in the hole in the retaining stirrup.



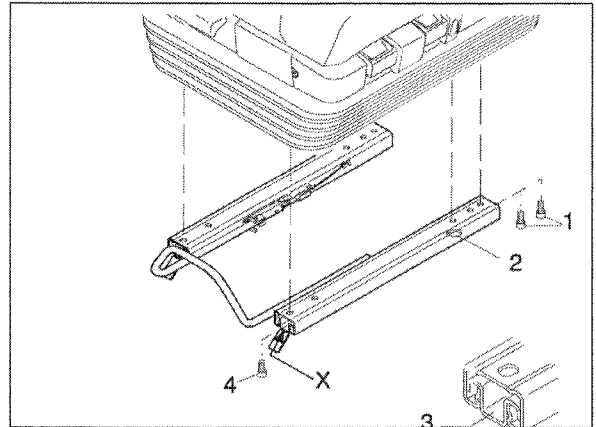
Height regulation valve

- Remove the seat cushion (see page B1)
- Take the hoses (1) off the valve.
- Loosen the nut (2) and the adjusting cable (3).
- Remove the end cap (4) from the toothed segment of the valve.
- Remove the spring (8).
- Take the gaiter off sideways, remove the screw placed on the front (5) and the washer (6) from the stirrup (7).
- Tilt the stirrup (7) backwards.
- Adjust the cable (see page B5)



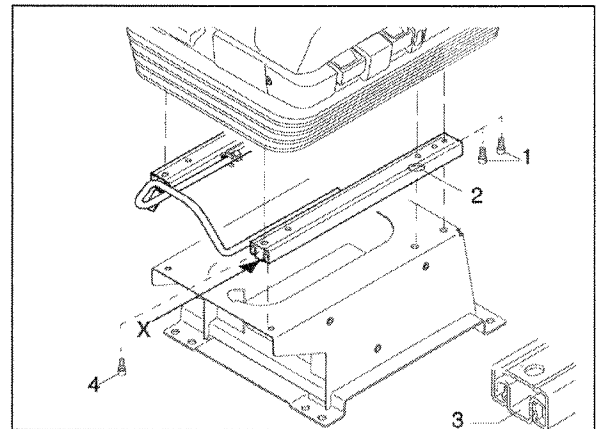
Premium runners (seat without sheet metal underframe)

- Take the seat out of the vehicle (see page B1)
- Adjust the runners so that on each runner two screws (1) are accessible through the mounting hole (2) situated in the lower profile of the runner (3).
- Unscrew the screws (1).
- Adjust the runners so that on each runner the screw (4) is accessible.
- Unscrew the screws (4).



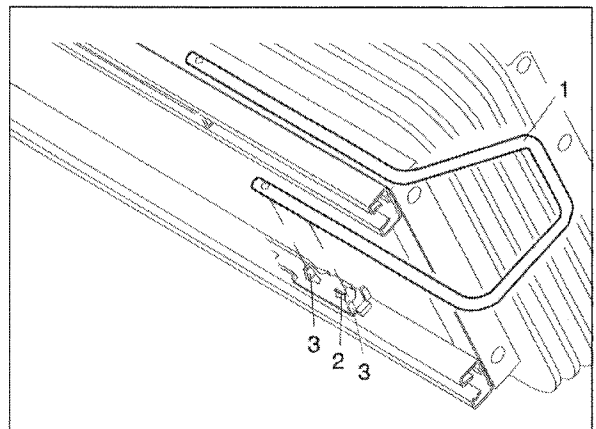
Magnum runners (seat with sheet metal underframe)

- Remove the seat from its support (see page B1)
- Adjust the runners so that on each runner two screws are accessible through the mounting hole (2) situated in the lower profile of the runner (3).
- Unscrew the screws (1).
- Adjust the runners so that on each runner the screw (4) is accessible.
- Unscrew the screws (4).



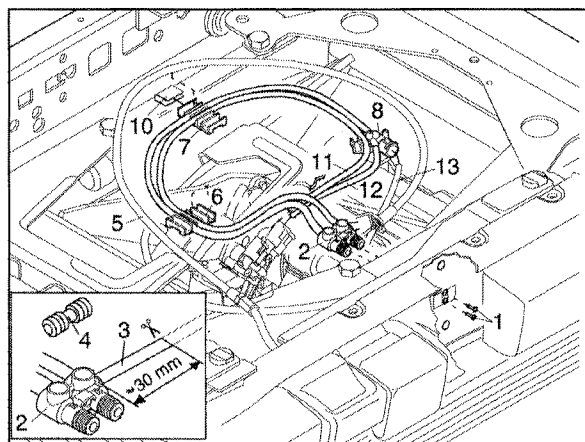
Runner control bar

- Bring the seat as far forward as it will come.
- Remove the bar (1) first on one side out of the fastener (2) and the peg (3) by pressing on them then disengage them on the other side.



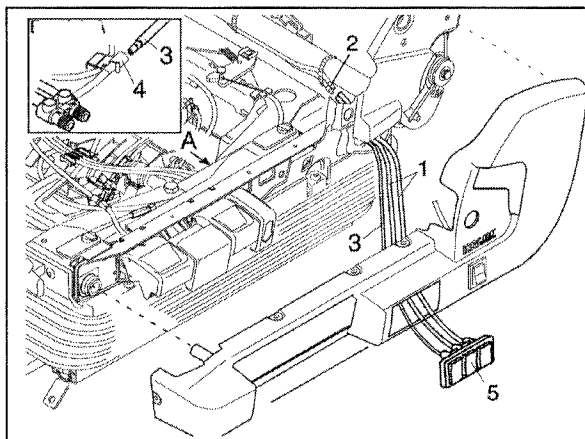
Pneumatic bundle

- Remove the seat lowering control (**see page B5**)
- Remove the 2 screws (1) and push the lowering valve (2) backwards to remove it.
- Separate the hose (3) (natural) about 30 mm from the valve. When re-assembling the pneumatic bundle, connect the hose (3) using a connecting piece (4) fixed onto the new valve (where necessary, adjust the hoses).
- Remove the support (7) from the clamp (10) and undo the damper adjusting cable (5) at the support (7).
- Remove the hoses (11) (red) and (12) (yellow) from the height adjustment valve and the hose (13) (yellow) from the support (8).



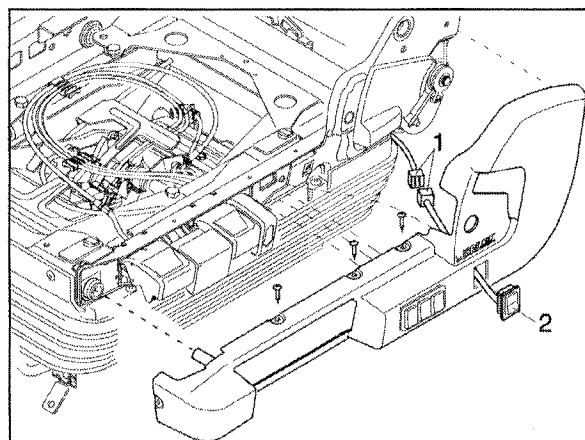
Lumbar support

- Remove the side cover on the control side (**see page B4**)
- Undo the rubber hoses (1) at the junction (2) of the transverse tube.
Warning ! When putting the bundle in, check the attribution of the two rubber hoses (white strip).
- Undo the hose (3) (black) from the distribution device (4).
- Press the hooks at the bottom of the lumbar support valve (5) and remove the valve from the side cover.



Heating switch

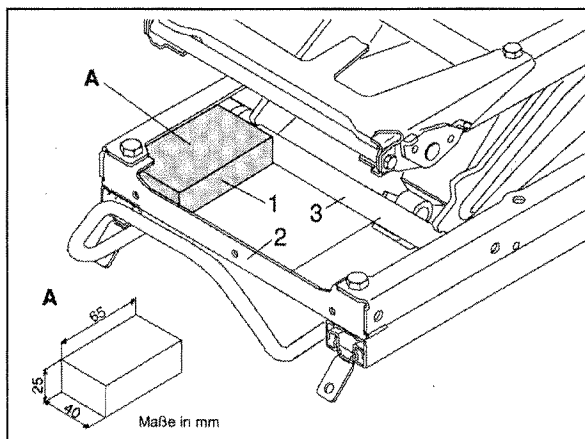
- Remove the side cover on the control side (**see page B4**)
- Disconnect the connector (1) and unclip the heating switch (2) from the side cover.



Making the seat safe against any accidental lowering

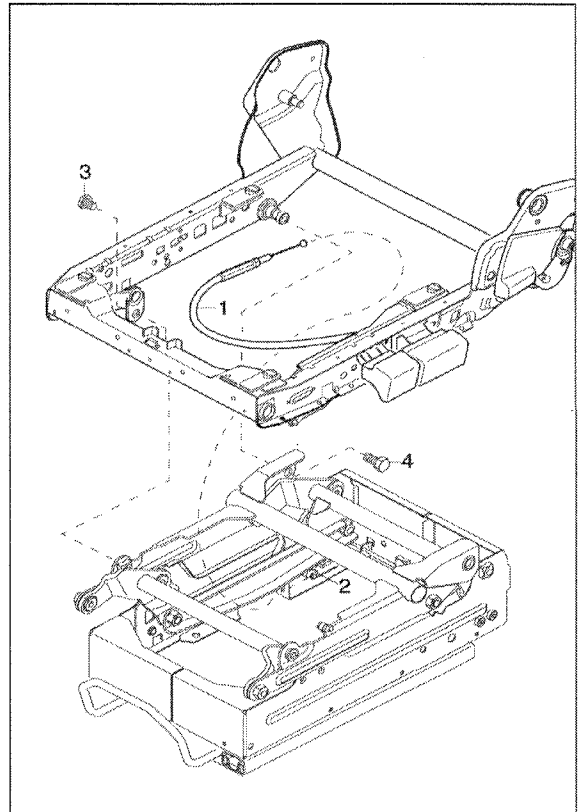
- In order to avoid any accidental lowering of the suspension during repair work, place a block (1) between the lower frame (2) and the lower transverse tube of the cross-brace (3).

Dimensions in mm.



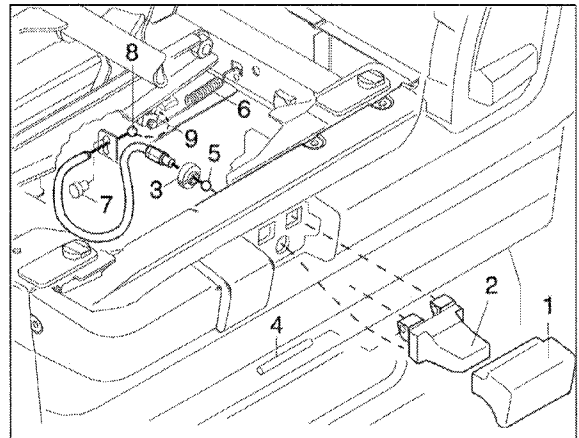
Seat frame

- Remove the bottom of the seat (see page B1).
- Remove the backrest (see page B1).
- Remove the adjusting cable (1) from the lever (2) (see page B4).
- Adjust the seat angle to the maximum height and unscrew the two screws (3) as well as the two screws (4).



Height adjustment handle / cable

- Remove the seat cushion (see page B1).
- Remove the handle (1) from the lever (2).
- Take the stop (3) off the adjusting cable.
- Remove the pin (4).
- Remove the end cap of the adjusting cable from the lever (2).
- Unhook the spring (6).
- Remove the plug (7) and remove the end cap of the adjusting cable (8) from the lever (9).



Gas cylinder

- Remove the seat cushion (see page B1).
- Remove the nut (1) and the clip (2).
- Remove the gas cylinder (3).

