

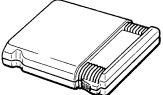

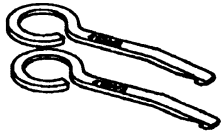


SPECIAL TOOLS

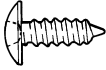
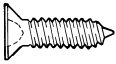
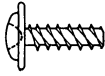
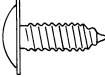


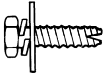


[Main Index](#)
[52A Index](#)

Tool	Tool number and name	Supersession	Application
	MB990784 Ornament remover	E23M6	Removal of switch, trim, etc.
	MB991502 (MUT-II)	–	diagnosis testing
	ROM pack	–	diagnosis testing
	MB991529 diagnosis check harness	–	diagnosis testing
	E52M2 Centre vent remover	–	Removal of centre vent

INSTRUMENT PANEL

REMOVAL AND INSTALLATION

For installation of the instrument panel, the bolts and screws described below are used. They are indicated by symbols in the illustration.

Name	Symbol	Size mm (D × L)	Colour	Shape
Tapping screw	A	4×12	–	
	B	5×10	–	
	C	5×12	–	
	D	5×16	–	
	E	5×12	–	
	F	5×16	Black	
	G	5×20	Black	
	H	5×12	–	
	I	5×6	Black	
Screw with washer	J	4×12	–	
	K	5×16	–	
Bolt with washer	L	6×16	–	
	M	6×16	–	
	N	6×12	–	
	O	6×16	–	
	P	8×20	–	

D = Thread diameter

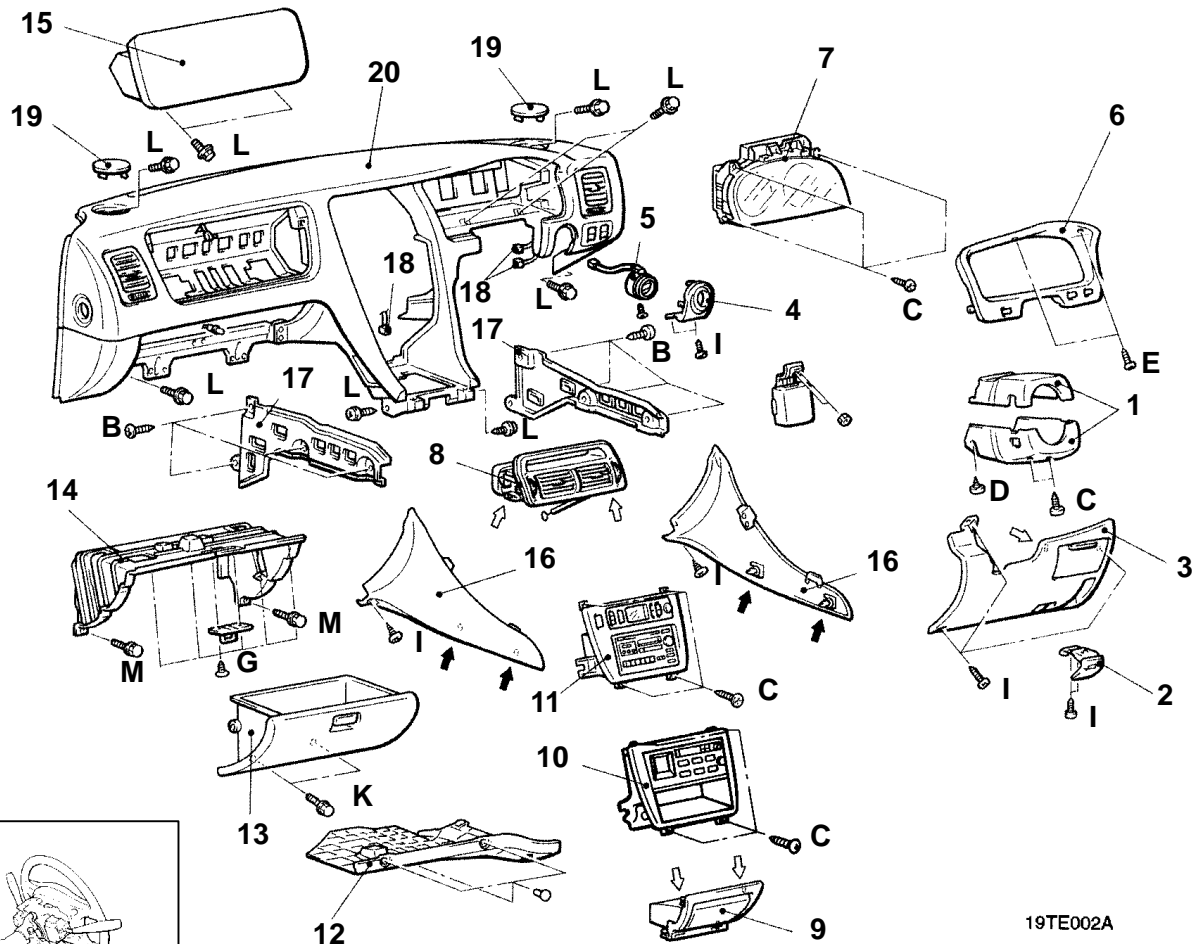
L = Effective thread length

Pre-removal and Post-installation Operation

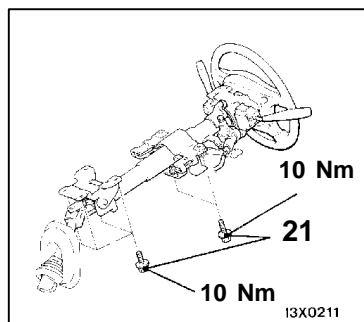
- Floor Console Assembly Removal and Installation (Refer [On vehicle service.](#)).
- Front Pillar Trim Removal and Installation (Refer [On vehicle service.](#)).

CAUTION: SRS Airbag

- (1)When removing and installing the floor console, do not let it bump against the SRS-ECU.
- (2)For the passenger side air bag module removal/installation, always observe the service procedures of [GROUP 52B](#) – Air Bag Modules and Clock Spring.



19TE002A



NOTE

- (1) \triangleleft : metal clip position
- (2) \blacktriangleleft : plastic clip position

19TH064A

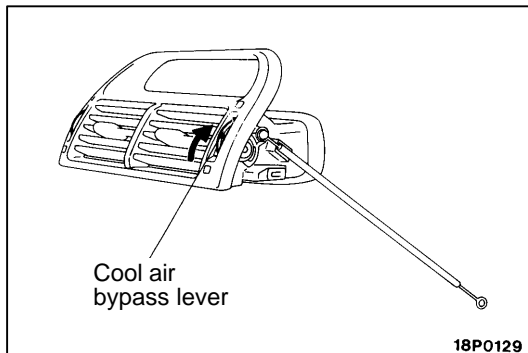
Removal steps

1. Column cover
2. Hood lock release handle
3. Instrument panel lower cover assembly (RH)
4. Key cylinder panel
5. Antenna ring
6. Meter bezel
7. Combination meter
8. Centre air outlet assembly
9. Ashtray
10. Audio unit <Non-auto air vehicles>
11. Air control panel assembly & audio unit <Auto air vehicles>
12. Undercover assembly
13. Glovebox assembly
14. Glovebox outer case
15. Passenger side airbag module / upper glove box
16. Console side cover assembly
17. Floor carpet rear reinforcement
18. Harness connector
19. Plug
20. Instrument panel
21. Steering column mounting bolt



REMOVAL SERVICE POINTS**◀A▶ CENTRE AIR OUTLET ASSEMBLY
REMOVAL**

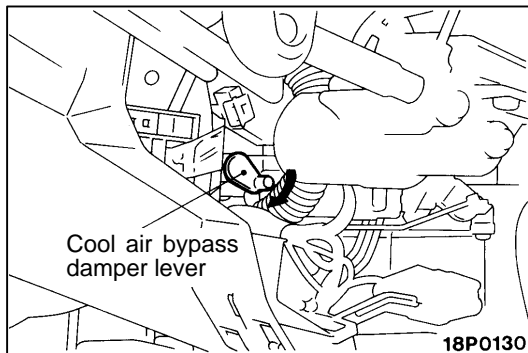
1. Turn the cool air bypass lever of the air outlet centre panel assembly fully upward.



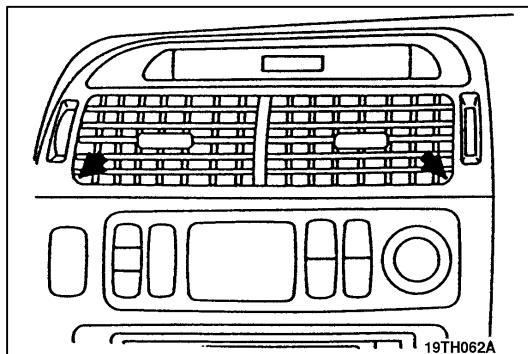
2. Disconnect the bypass lever cable at the heater unit end.

NOTE

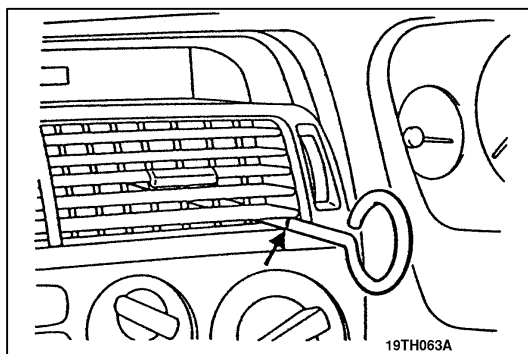
Ensure that you disconnect the correct cable.



3. With the notch on special tool E52M2 facing outward, insert one removal tool at the bottom corner on each side of the vent assembly.



4. Without levering against the vent assembly vane, apply outward force on the tip of the tool and push the tool forward until the indicator mark on the tool is aligned with the outer face of the vent assembly. At this point, the notch in the tool should engage on the rear edge of the vent assembly.
5. While maintaining slight outward pressure on the tip of the tool (to maintain engagement with the vent assembly), apply pulling force to the tool inserted in the right hand side until the retaining clip disengages.
6. Repeat step 5 on the left hand side to remove the vent assembly.

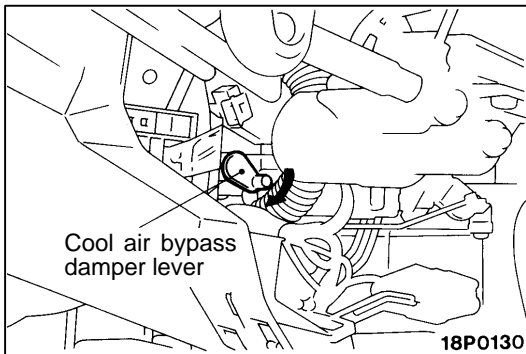
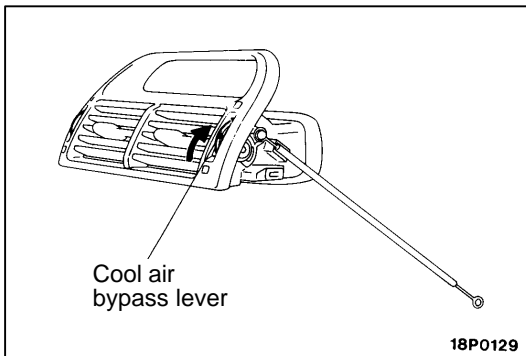
**NOTE**

A strong, steady pulling force is required to disengage the clips. If the clips do not disengage, increase pulling force. Do not jerk the tool as this may result in the tool dislodging and / or clip post breakage.

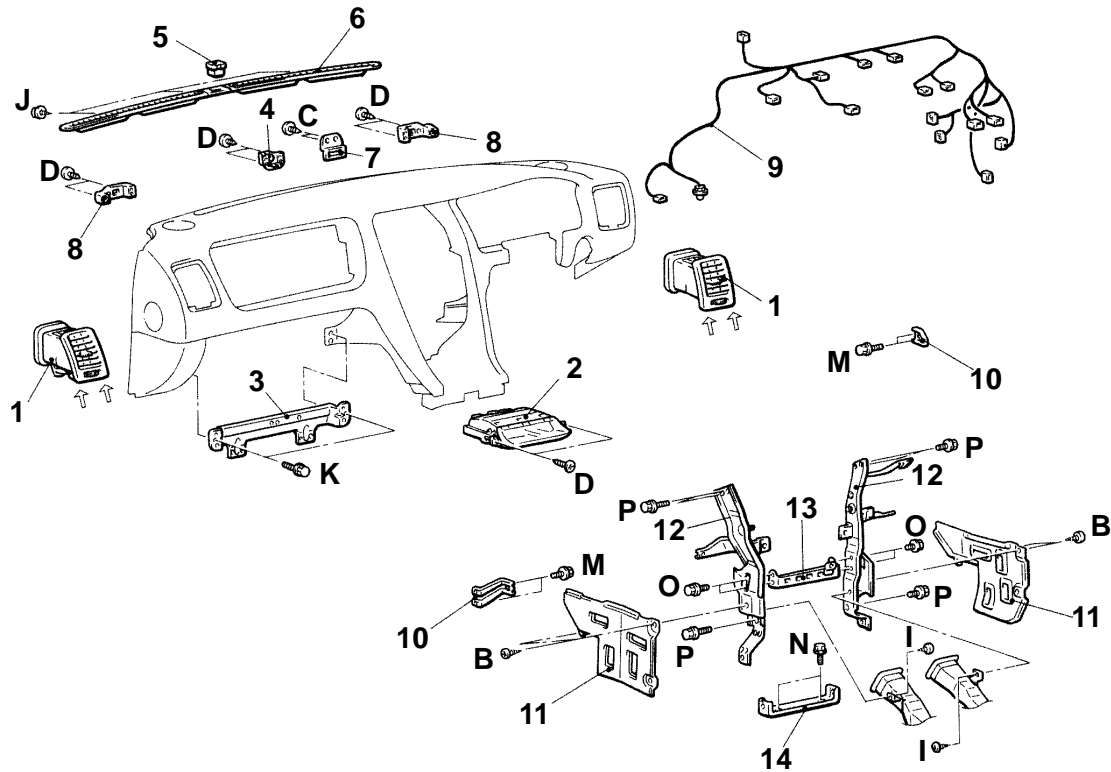
INSTALLATION SERVICE POINTS

►A◄ CENTRE AIR OUTLET ASSEMBLY INSTALLATION

1. Turn the cool air bypass lever of the air outlet centre panel assembly fully upward.
2. Feed the bypass air cable through to the RH side of the outlet duct and below the cross brace.
3. Clip the vent assembly into place.
4. With the air bypass lever on the heater unit in the upward position, attach the cable and clip into place.
5. Check the operation of the cold air bypass and air flow dials.



DISASSEMBLY AND REASSEMBLY



19 P0033

NOTE

⇐ : metal clip position

Disassembly steps

- Heater ducts (See [Group 55](#))
- 1. Side air outlet assembly
- 2. Centre display
- 3. Glovebox frame
- 4. Instrument panel centre support panel
- 5. Photo sensor
- 6. Defroster garnish
- 7. Centre display bracket

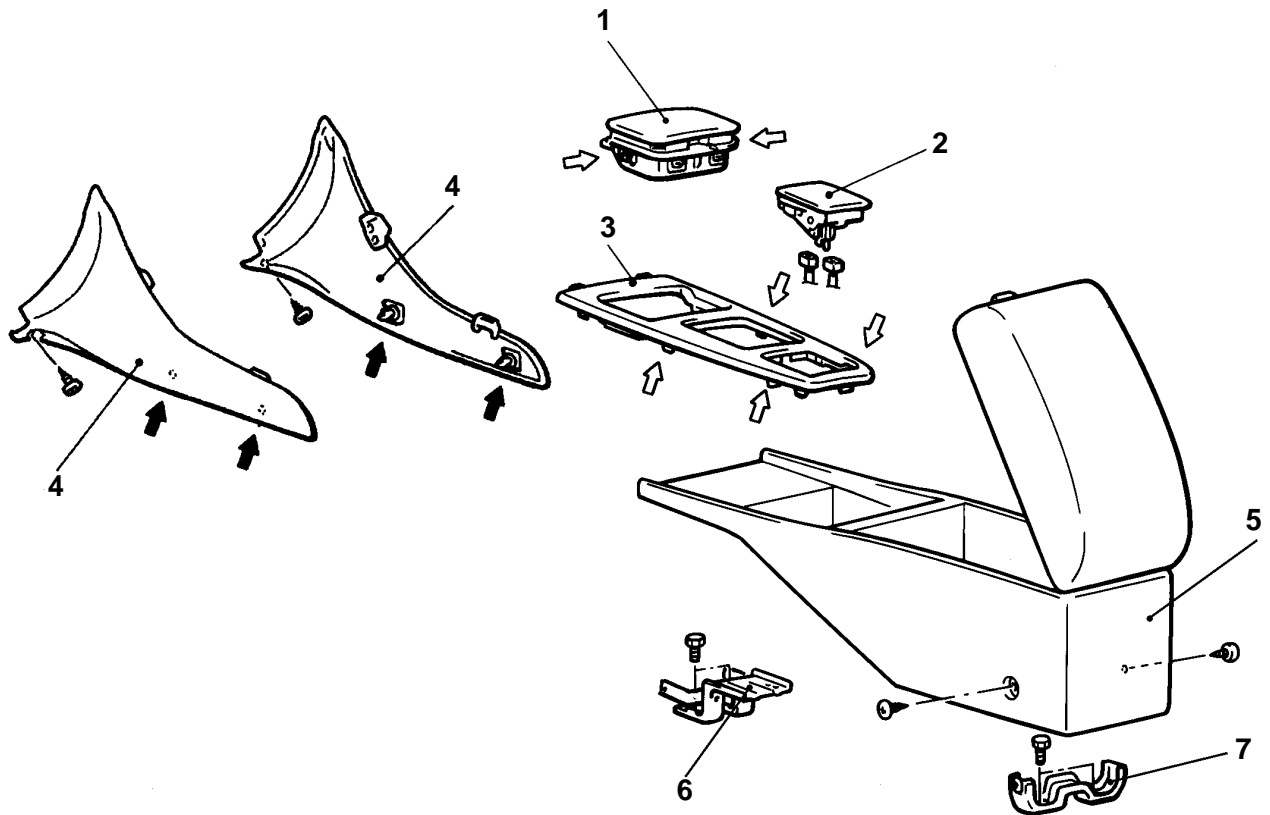
- 8. Instrument panel side support panel
- 9. Instrument panel wiring harness
- 10. Instrument panel lower bracket
- 11. Floor carpet front reinforcement
- 12. Centre stay assembly
- 13. Connector mounting bracket
- 14. Centre console bracket

FLOOR CONSOLE

REMOVAL AND INSTALLATION

CAUTION: SRS

When removing and installing the floor console assembly, do not let it bump against the SRS-ECU or other components.


NOTE

(1) ⇐: metal clip position

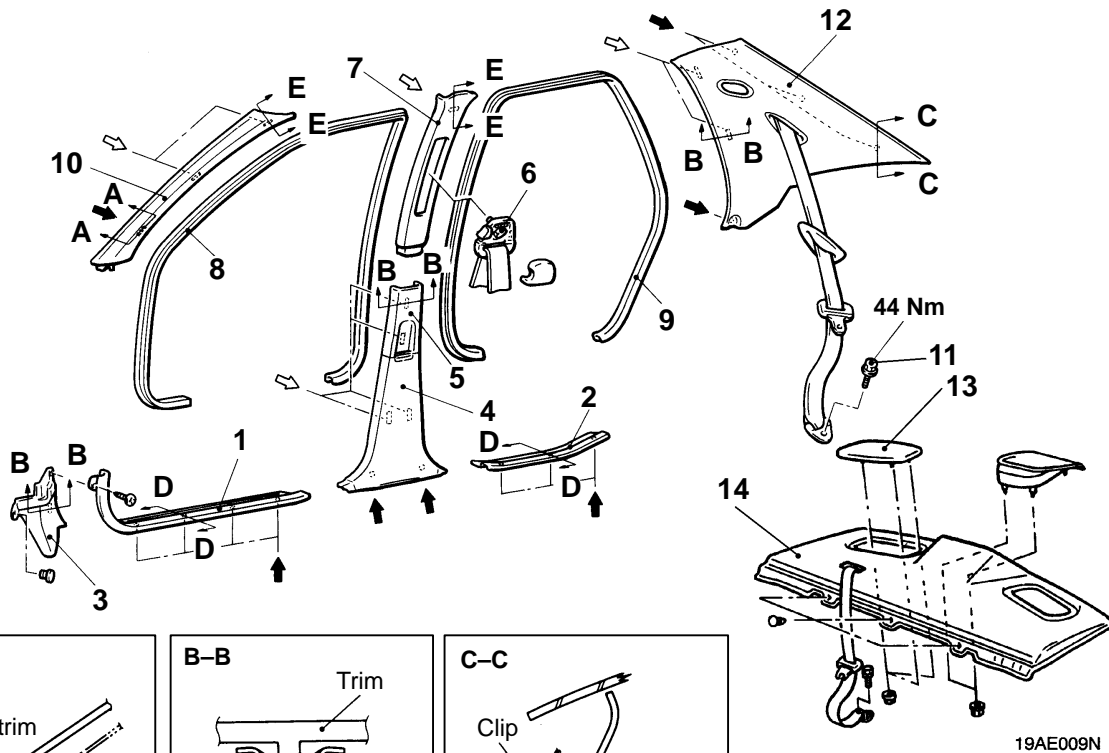
(2) ⇐: plastic clip position

19AE008N

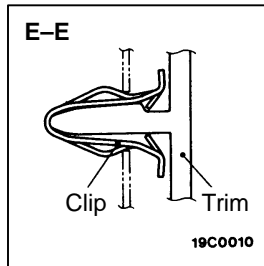
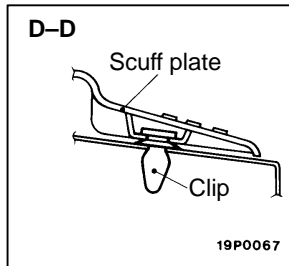
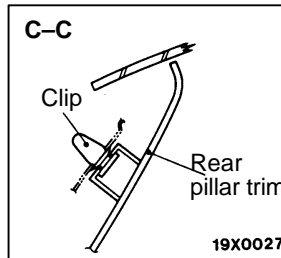
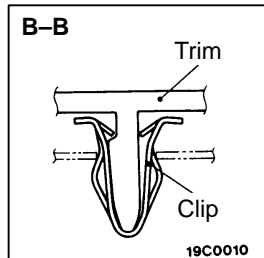
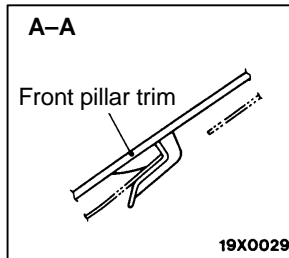
Removal steps

1. Cup holder assembly
2. Coin box assembly
3. Floor console panel
4. Console side cover assembly

5. Floor console box
6. Console bracket A
7. Console bracket B

TRIMS<SEDAN>**REMOVAL AND INSTALLATION**

19AE009N

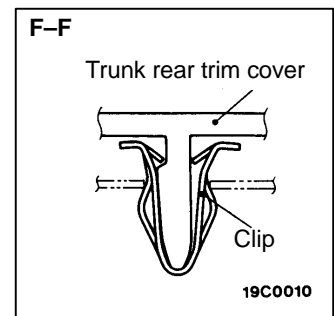
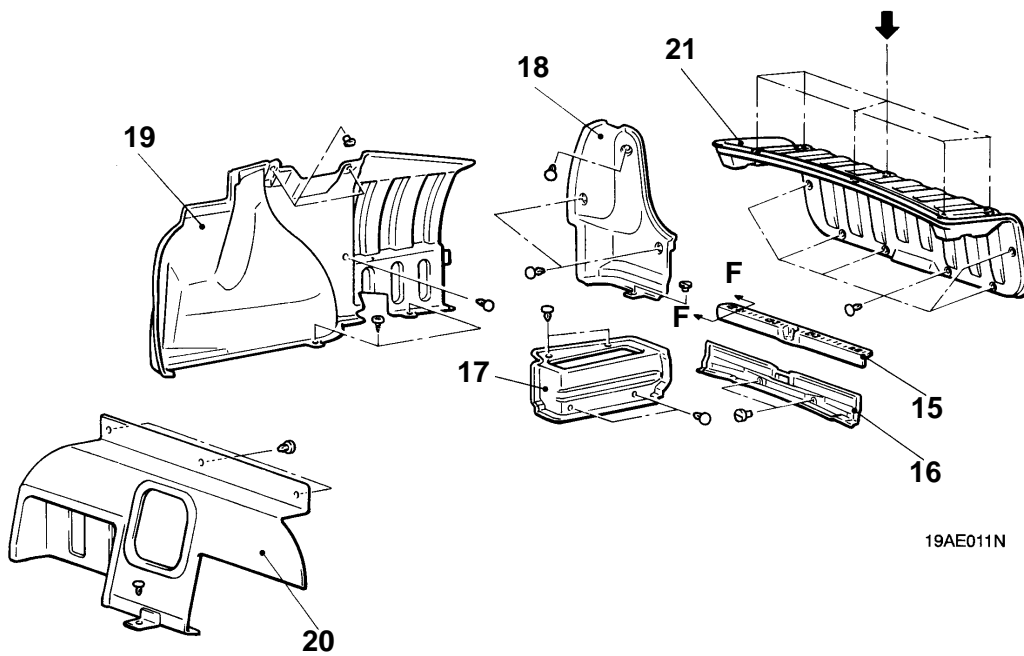
**NOTE**

- (1) ⇐ : metal clip position
 (2) ⇐ : plastic clip position

19AE010N

Removal steps

1. Front scuff plate
2. Rear scuff plate
3. Cowl side trim
4. Centre pillar lower trim B
5. Centre pillar lower trim A
6. Sash guide
7. Centre pillar upper trim
8. Front door opening trim
9. Rear door opening trim
10. Front pillar trim
 - Rear seat assembly (Refer [Remove & Install.](#))
11. Rear seatbelt anchor plate
12. Rear pillar trim
13. Speaker garnish
14. Rear shelf trim

TRIMS<SEDAN>**REMOVAL AND INSTALLATION**

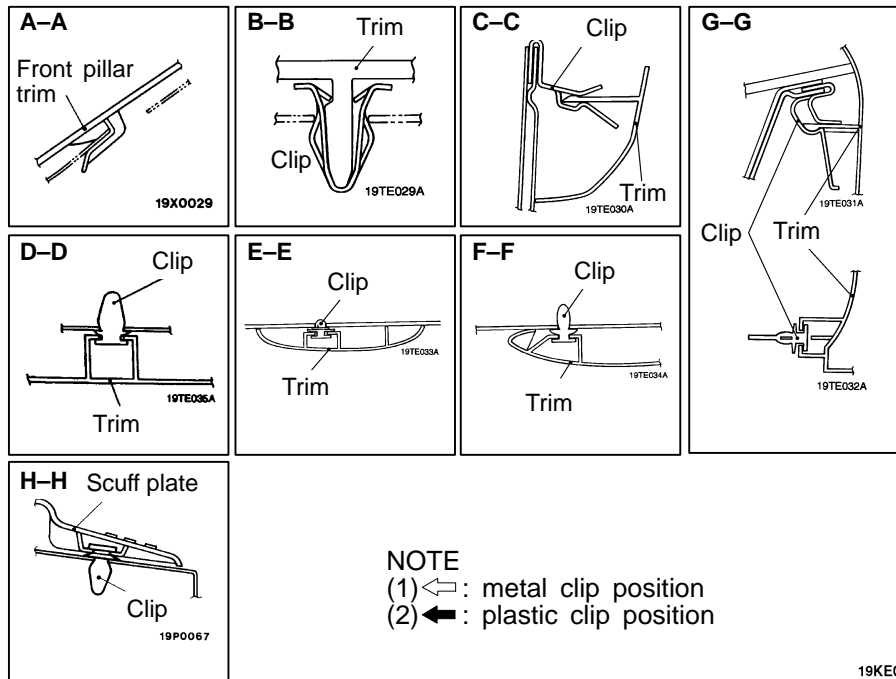
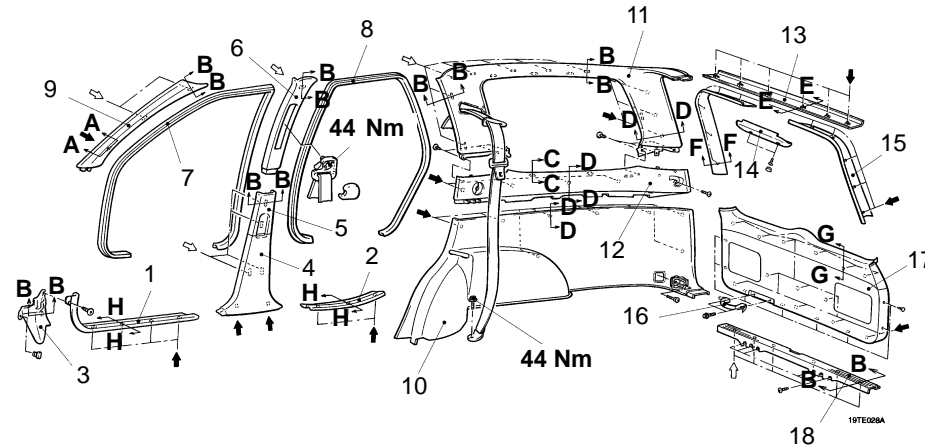
19AE012N

NOTE

← : plastic clip position

Removal steps

15. Trunk rear trim cover
16. Trunk rear centre trim
17. Trunk rear side trim
18. Trunk rear side trim
19. Trunk side trim
20. Trunk front trim
21. Trunk lid trim

TRIMS<WAGON>**REMOVAL AND INSTALLATION**

19KE049J

Removal steps

1. Front scuff plate
2. Rear scuff plate
3. Cowl side trim
4. Centre pillar lower trim B
5. Centre pillar lower trim A
6. Centre pillar upper trim
7. Front door opening trim
8. Rear door opening trim
9. Front pillar trim
10. Cargo compartment lower side trim B
11. Cargo compartment upper side trim A
12. Cargo compartment upper side trim B
13. Rear headlining trim panel
14. High mount stop lamp cover
15. Tailgate side trim
16. Grab handle
17. Tailgate lower trim
18. Tailgate sill scuff plate

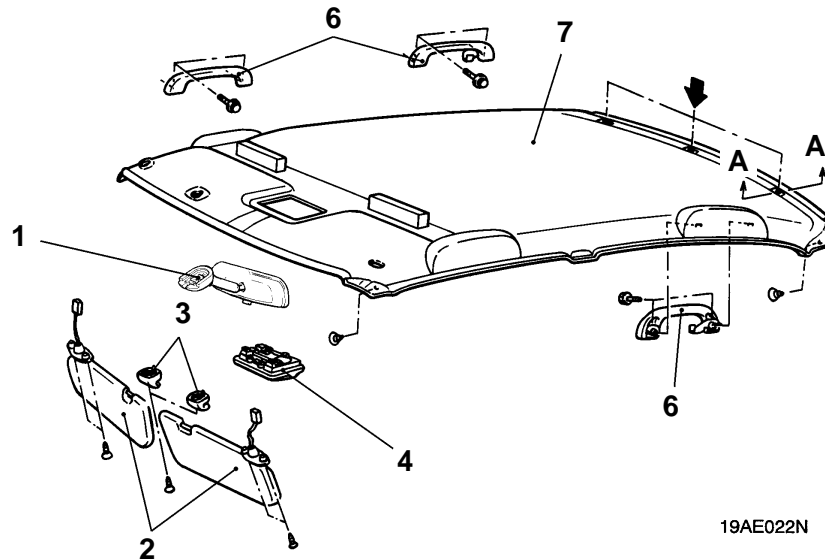
HEADLINING AND INSIDE REAR VIEW MIRROR<SEDAN>

REMOVAL AND INSTALLATION

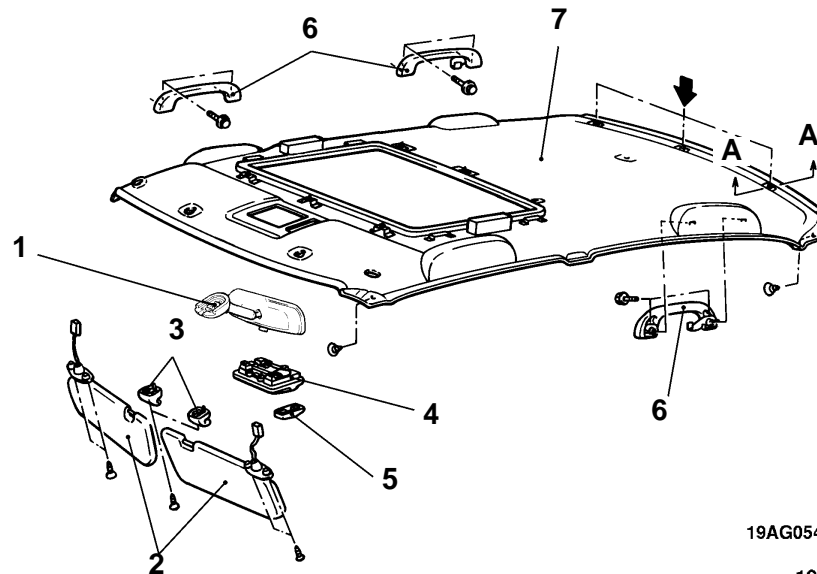
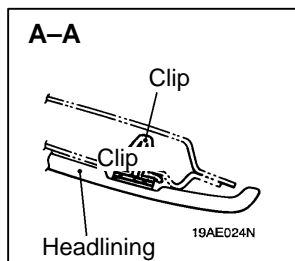
Pre-removal and Post-installation Operation

- Door opening trim, Front Pillar Trim, Centre Pillar Upper Trim and Rear Pillar Trim, Refer [Removal and Installation](#).

<Vehicles without sunroof>



<Vehicles with sunroof>



NOTE

← : plastic clip position



Inside rear view mirror removal

1. Inside rear view mirror



3. Sunvisor holder

Headlining removal steps

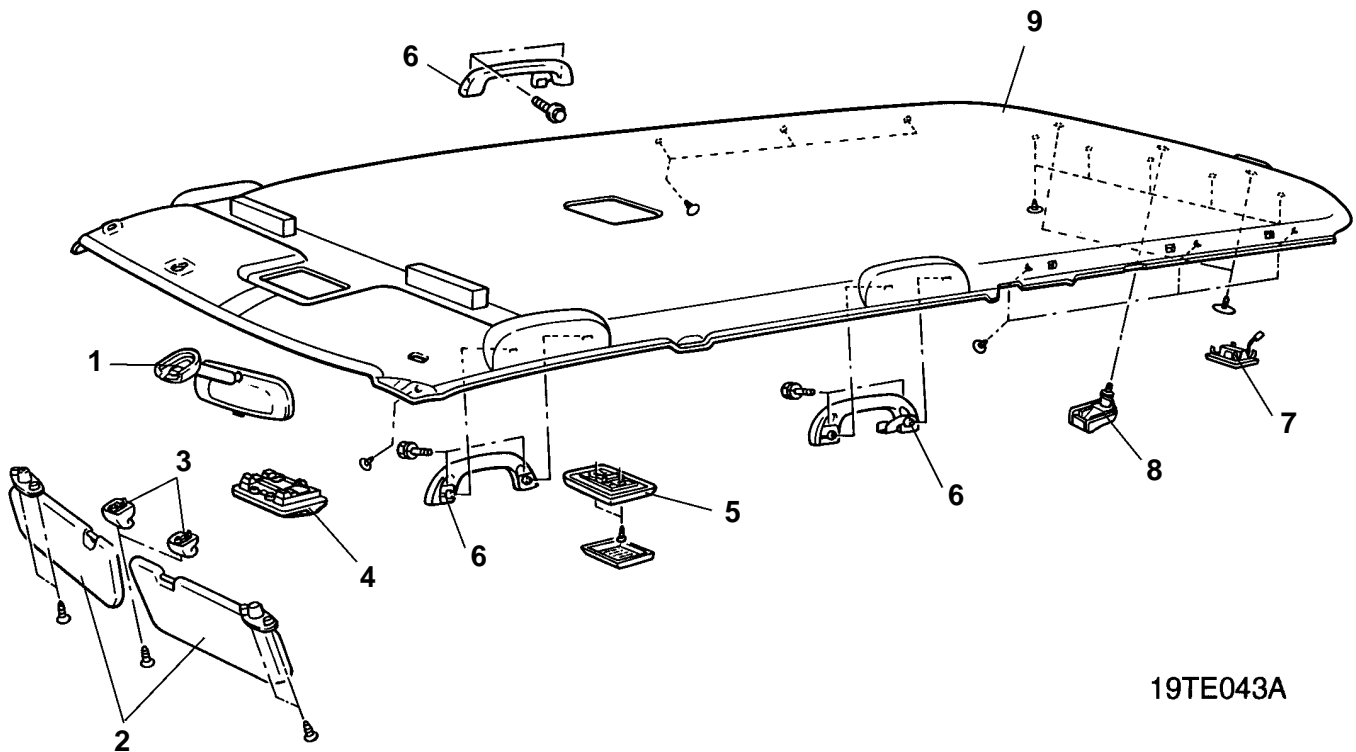
2. Sunvisor assembly



4. Room light assembly
5. Sunroof switch cover
6. Assist grip
7. Headlining

HEADLINING AND INSIDE REAR VIEW MIRROR<WAGON>**REMOVAL AND INSTALLATION****Pre-removal and Post-installation
Operation**

- Door opening trim, Front Pillar Trim, Centre Pillar Upper Trim, Cargo compartment lower side trim B, Cargo compartment upper side trim A and Rear headlining trim panel. Refer [Trim Removal and Installation](#).



19TE043A

NOTE

◀ : plastic clip position

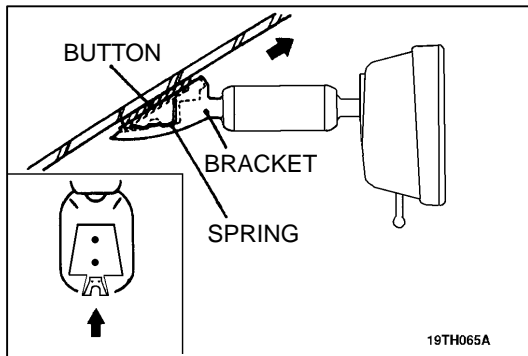
**Inside rear view mirror removal**

1. Inside rear view mirror

**Headlining removal steps**

2. Sunvisor assembly
3. Sunvisor holder

4. Room light assembly<Altera & Veranda>
5. Room light assembly<Magna>
6. Assist grip
7. Luggage compartment light
8. Child restraint anchorage
9. Headlining



REMOVAL SERVICE POINTS

◀A▶ INSIDE REAR VIEW MIRROR REMOVAL

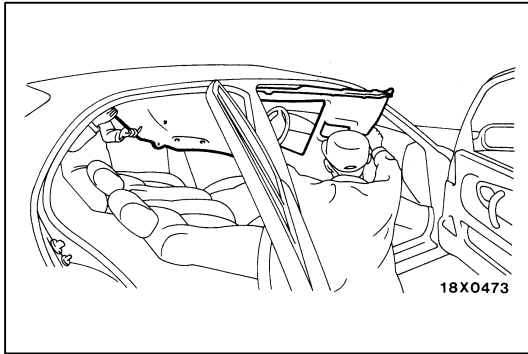
Insert a narrow flat-tip screwdriver between the retaining spring and the button at the bottom section of the rear view mirror bracket, keep the spring pushed in and remove the rear view mirror in the direction of the arrow in the illustration.

NOTE

1. While the spring is pushed in, connection between the spring and the pawl of the button is released.

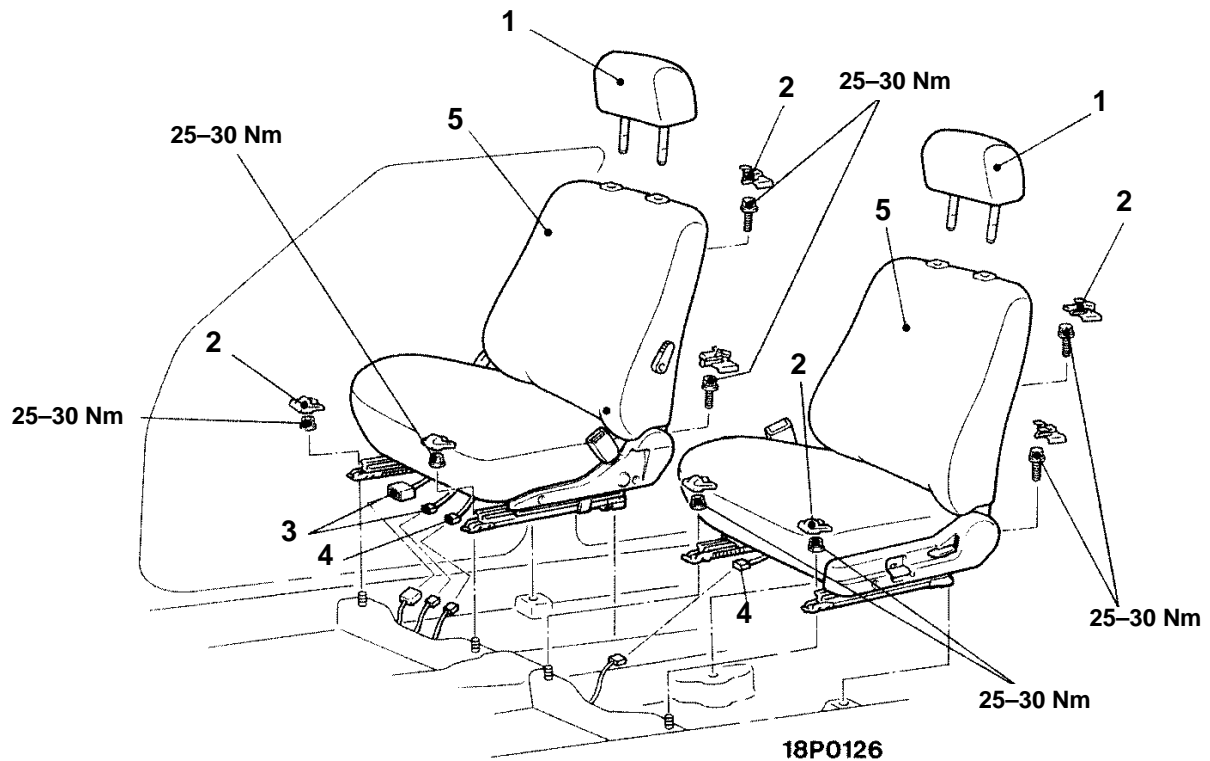
◀B▶ ROOM LIGHT ASSEMBLY REMOVAL

1. Insert a screwdriver into the notch of the room light lens and pry gently to remove it.
2. Remove the mounting screws and pull the room light assembly downwards to remove it.



◀C▶ HEADLINING REMOVAL

While bending the headlining slightly, pull it through the front door opening to the outside of the vehicle.

FRONT SEAT**REMOVAL AND INSTALLATION****Head rest removal**

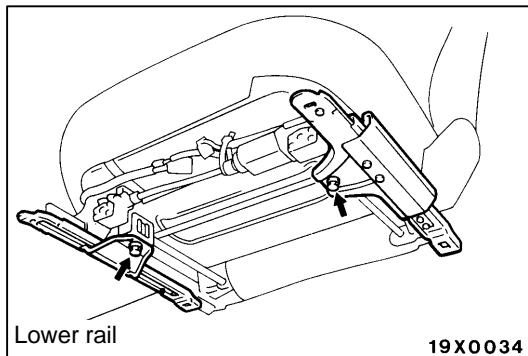
1. Head rest

Front seat assembly removal steps

2. Harness connector – power seat
3. Harness connector – seat belt
4. Seat anchor cover
5. Front seat assembly

NOTE

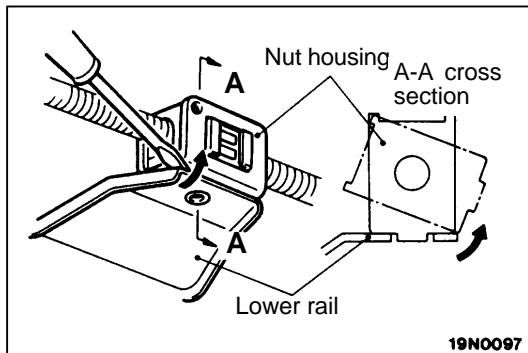
1. After provisionally tightening the seat assembly mounting nuts and bolts in every installation location, fully tighten them to the specified torque.
2. When installing a manual seat assembly, tighten after firmly locking the seat adjuster



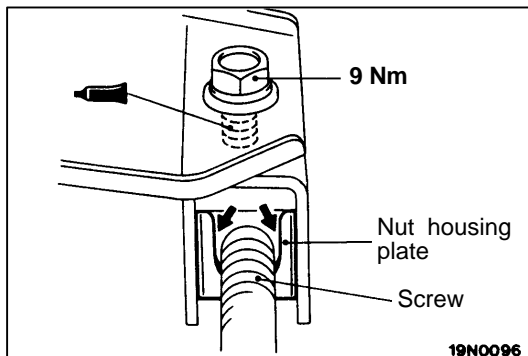
REMOVAL AND INSTALLATION

If removal of the seat mounting nut and bolt is impossible when there is a malfunction in the slide motor or the slide switch and the seat cannot slide, remove and install the front seat assembly by the following procedure.

1. Remove the bolts below the seat cushion as shown in the illustration.



2. Insert a flat-tipped screwdriver in between the lower rail and the nut housing, and detach the nut housing from the lower rail hole and turn it.
3. Slide the seat, and remove the seat mounting nuts and bolts.



4. When reusing the power height adjuster assembly, apply specified adhesive to the mounting bolt, and tighten to the specified torque.

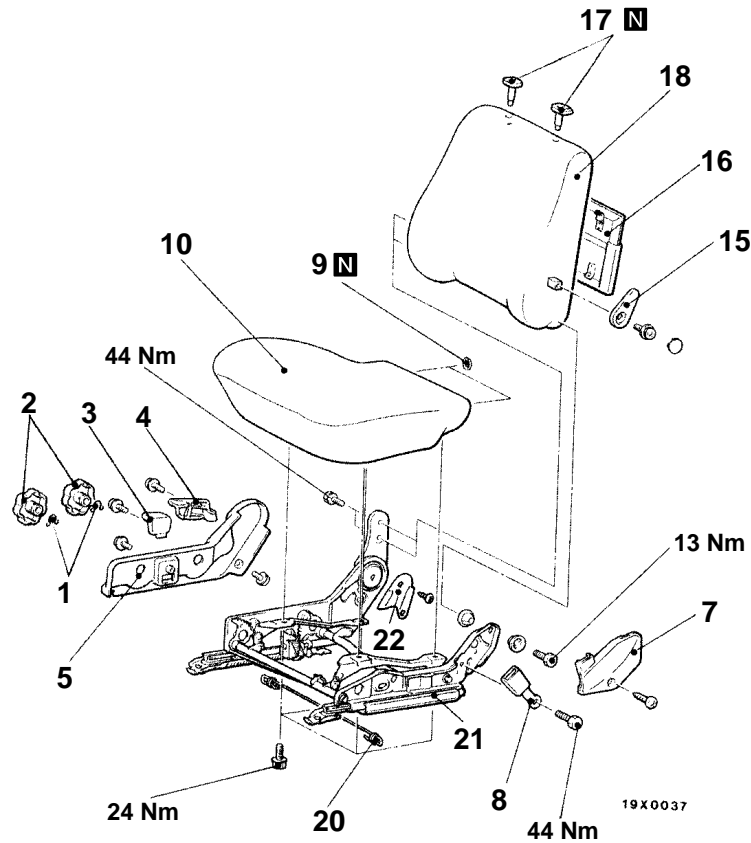
Specified adhesive: 3M Stud Locking Part No.4170 or equivalent

Caution

1. Match to the left and right nut housing positions.
2. Install so that the screw and nut housing plate do not cause interference.

DISASSEMBLY AND REASSEMBLY

<Manual seat>

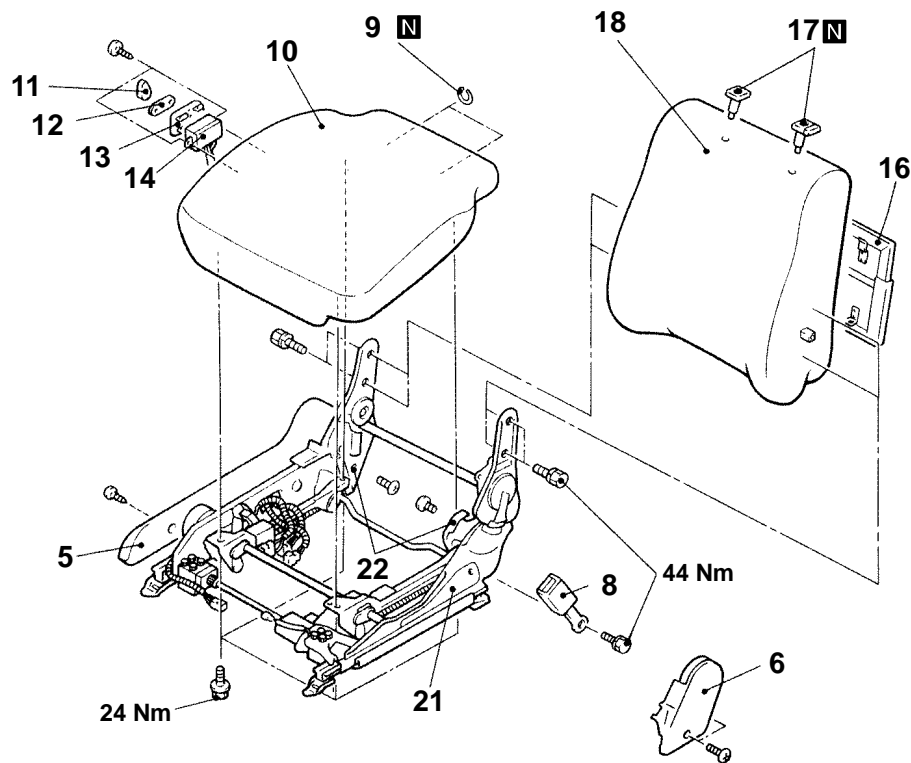
**Disassembly steps**

1. Clip
2. Height adjustment knob <driver side>
3. Slide adjustment knob
4. Reclining adjustment knob
5. Front seat side shield cover
7. Front seat hinge cover
8. Inner seat belt
9. Hog ring



10. Seat cushion assembly
15. Lumbar support lever <driver side>
16. Front back panel assembly
17. Head rest guide
18. Seat back assembly
20. Pull wire
21. Seat adjuster assembly
22. Reclining adjuster inner cover

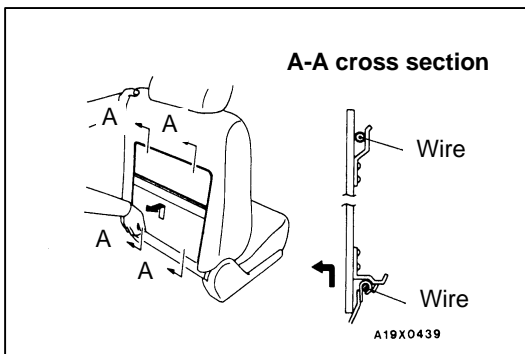
<Power seat>

**Disassembly steps**

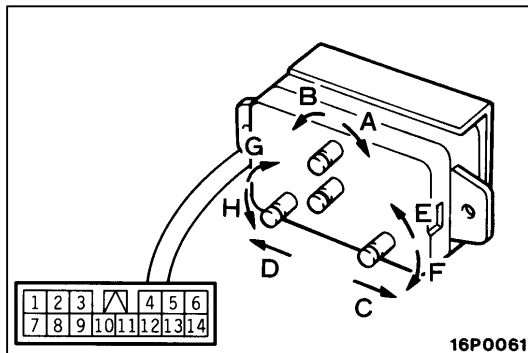
5. Front seat side shield cover
6. Reclining adjuster cover
8. Inner seat belt
9. Hog ring
10. Seat cushion assembly
11. Power seat reclining lever
12. Power seat adjuster lever



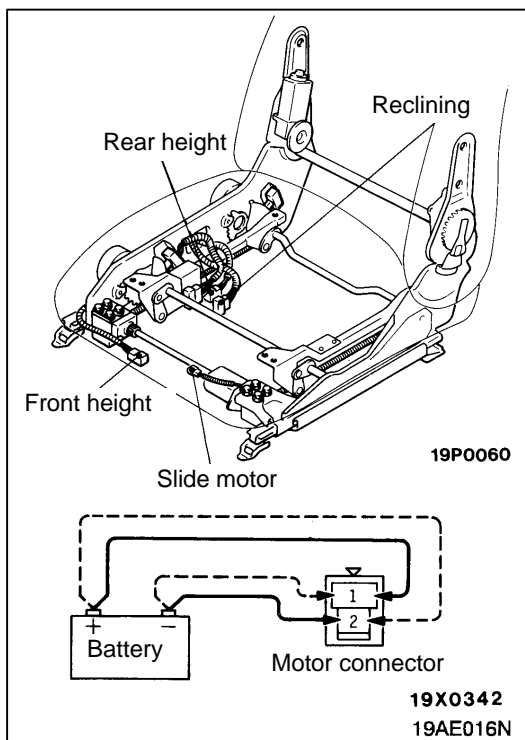
13. Garnish
14. Power seat switch
16. Front back panel assembly
17. Head rest guide
18. Seat back assembly
21. Seat adjuster assembly
22. Reclining adjuster inner cover

**DISASSEMBLY SERVICE POINT****◀A▶ FRONT-BACK PANEL ASSEMBLY REMOVAL**

Lift the front-back panel assembly upwards, and pull the lower portion towards you to remove.

**INSPECTION****POWER SEAT SWITCH CONTINUITY CHECK**

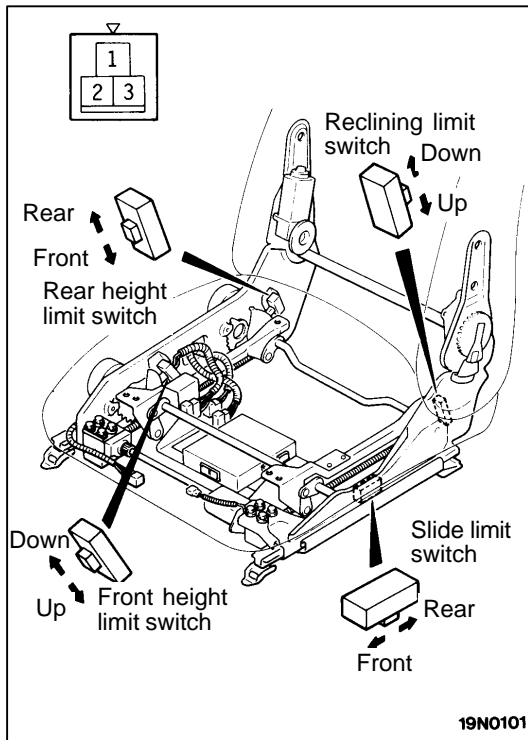
Terminal Number			Terminal No.													
			1	2	3	4	5	6	7	8	9	10	11	12	13	14
Reclining switch	Front (Rear)	A			○	○									○	○
	Rear (Front)	B			○	○			○	○					○	○
Slide switch	Front (Rear)	C							○	○					○	○
	Rear (Front)	D	○	○								○				○
Front height switch (Rear height switch)	Up	E					○	○					○			○
	Down	F					○	○						○		○
Rear height switch (Front height switch)	Up	G														
	Down	H														

**POWER SEAT MOTOR CHECK**

Check the operation of each motor using the following procedure.

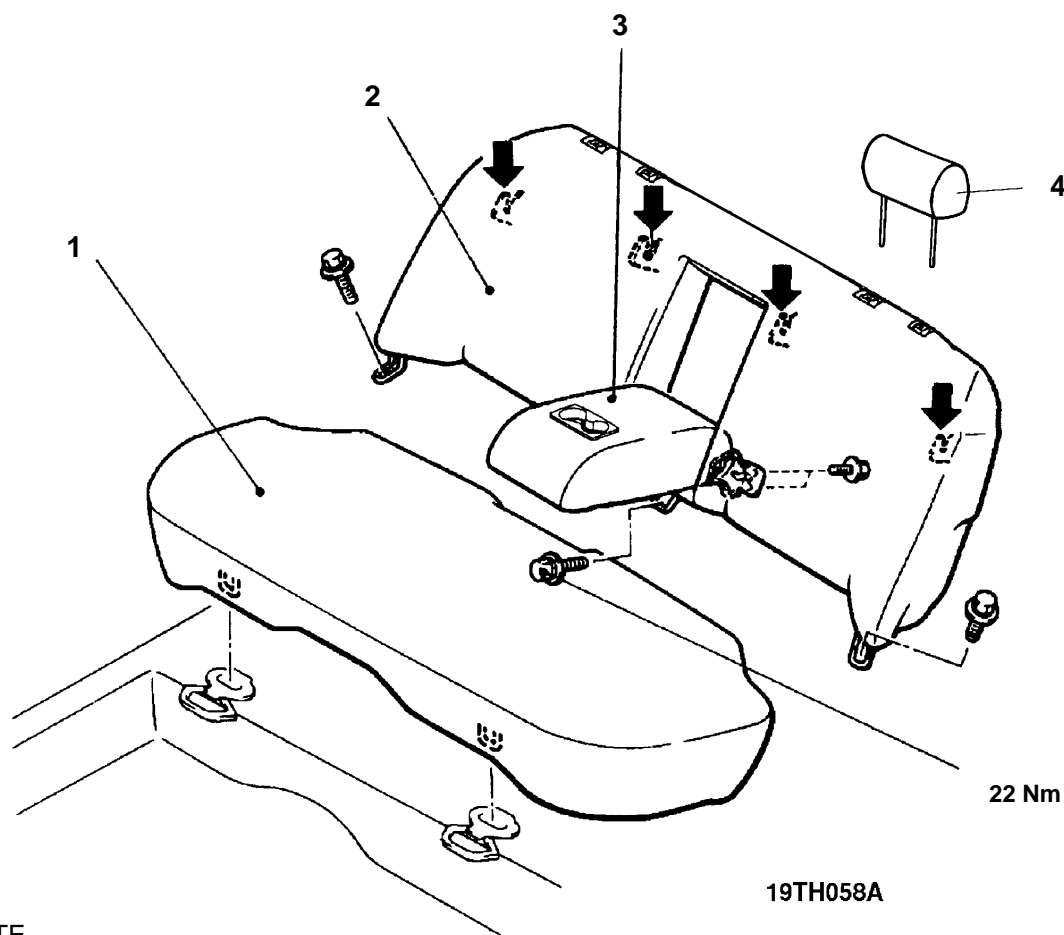
1. Disconnect the connector for each motor.
2. Check that each motor runs smoothly when the battery is directly connected to the motor terminals, and that each adjustment mechanism operates in the directions in the table below.
3. If there is a problem, replace the power seat adjuster assembly.

Motor Name	Operating Direction	Terminal No.		Stop Position
		1	2	
Front height	Down	+	-	Stops at limit switch OFF
	Up	-	+	
Rear height	Down	+	-	Stops at limit switch OFF
	Up	-	+	
Slide	Down	+	-	Stops at operating range limit
	Up	-	+	
Reclining	Down	+	-	Stops at operating range limit
	Up	-	+	

**LIMIT SWITCH CONTINUITY CHECK**

1. Disconnect the limit switch connector and connect a circuit tester to the terminals.
2. Operate the switch and check that there is continuity between the terminals.
3. If there is a problem, replace the power seat adjuster assembly.

Switch Name	Switch position	Terminal No.		
		1	2	3
Front height limit switch	Up	○ — ○		
	Down	○ —		○
Rear height limit switch	Up	○ — ○		
	Down	○ —		○
All limit switches	Middle (ON)	○ —	○ —	○ —

REAR SEAT<SEDAN>**REMOVAL AND INSTALLATION****NOTE**

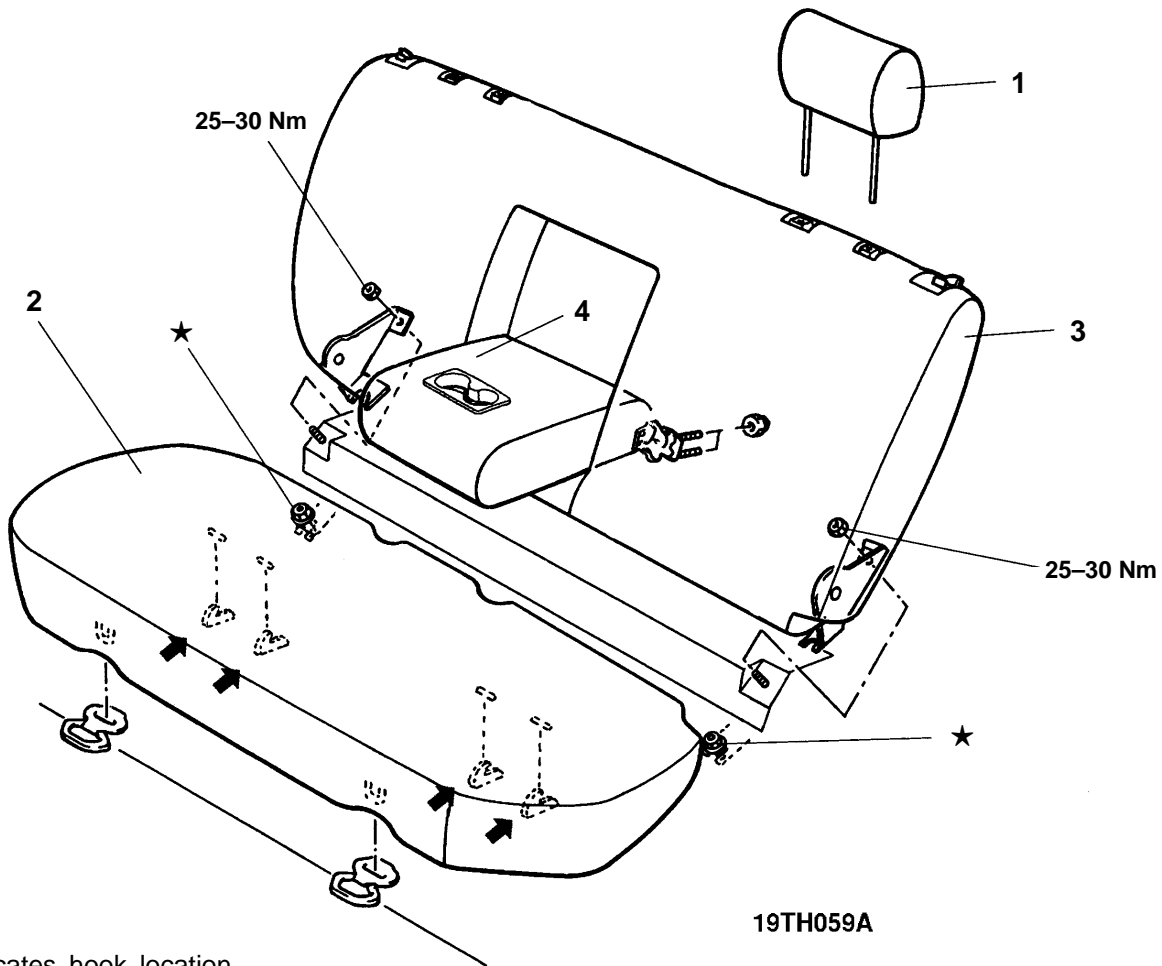
➡ : Indicates hook location

Seat cushion removal

1. Seat cushion

Rear seat back removal

2. Rear seat back assembly
3. Armrest
4. Headrest <Verada only>

REAR SEAT<WAGON>**REMOVAL AND INSTALLATION****NOTE**

← : Indicates hook location

Seat removal

1. Headrest <Verada only>

- 2. Seat cushion
- 3. Rear seat back assembly
- 4. Arm rest

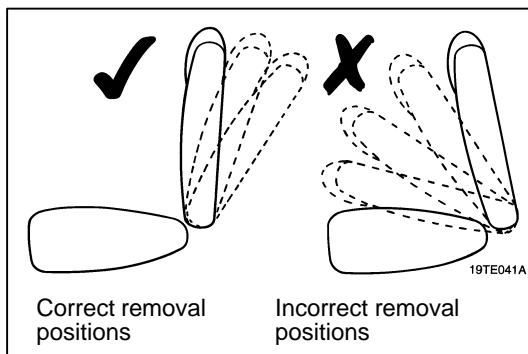
Caution

When removing.. the seat back the shoulder bolts marked with a ★ are not to be removed as the seat back assembly mounting brackets have provisions to enable the seat back to be lifted from under these bolts.

If these bolts must be removed to perform a body repair etc. they must be installed with Loctite and torqued to 15 to 20 Nm.

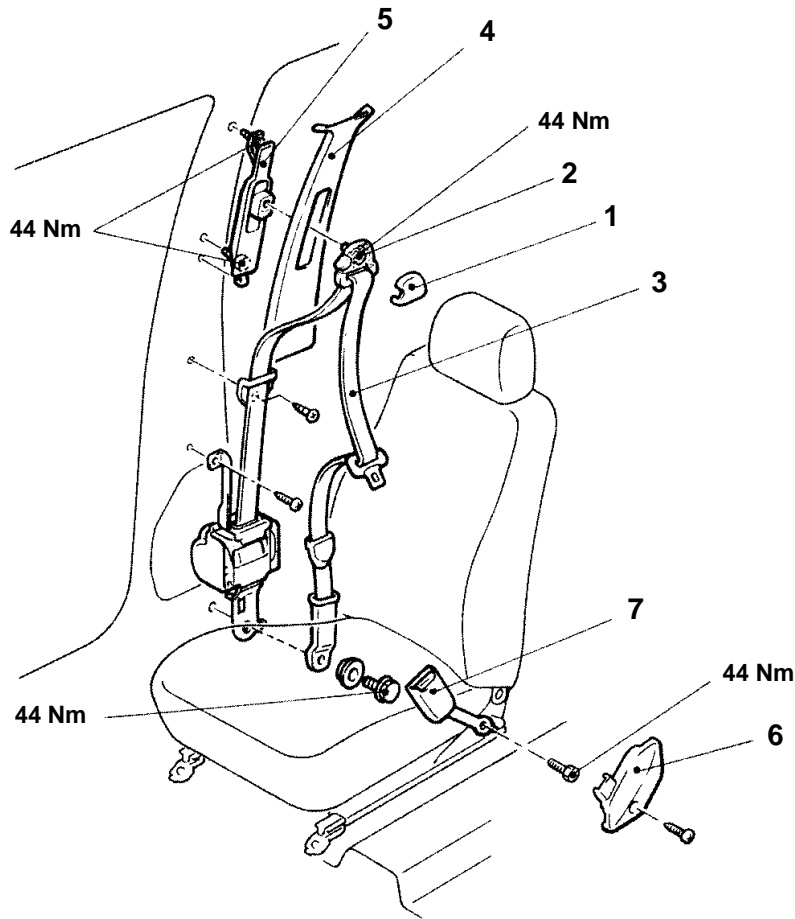
Caution

The seat back assembly left hand mounting bracket, is pre-tensioned by an assist spring therefore the seat back must be kept in an upright or vertical position (as shown) when being removed or installed. Failure to observe the correct procedure may result in a disabling injury.



FRONT SEAT BELT

REMOVAL AND INSTALLATION



19P0063

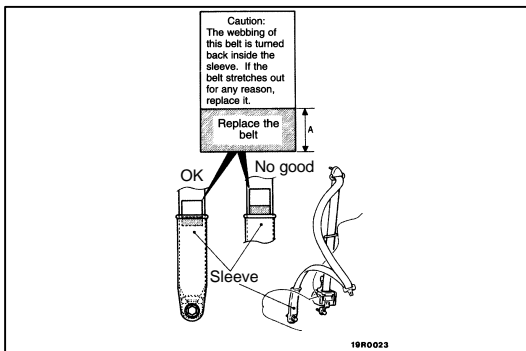
Outer seat belt removal steps

- Front scuff plate and rear scuff plate
(Refer [on vehicle service.](#)).
- Centre pillar lower trim
(Refer [on vehicle service.](#)).
- 1. Sash guide cover
- 2. Sash guide
- 3. Outer seat belt
- 4. Centre pillar upper trim
(Refer [on vehicle service.](#)).

5. Adjustable seat belt anchor

Inner seat belt removal steps

- Front seat assembly
(Refer [On vehicle service.](#)).
- 6. Front seat belt hinge cover
- 7. Inner seat belt



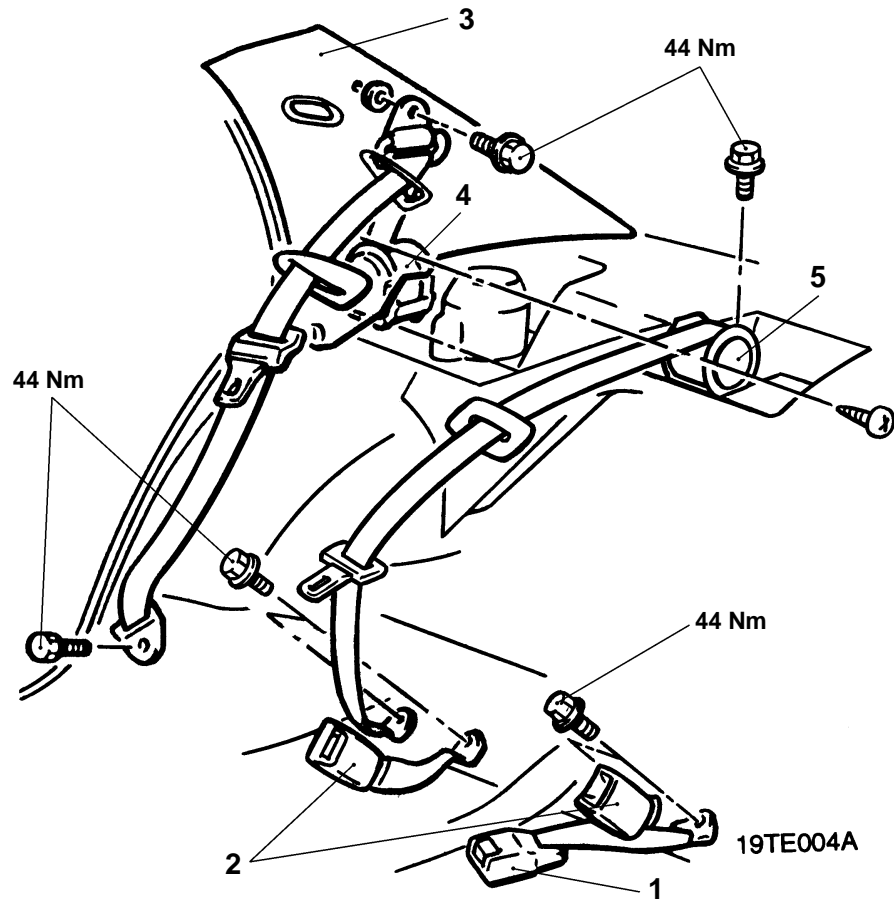
INSPECTION

SEAT BELT

1. Confirm that label A is not exposed outside the seat belt sleeve. If exposed, replace the seat belt.

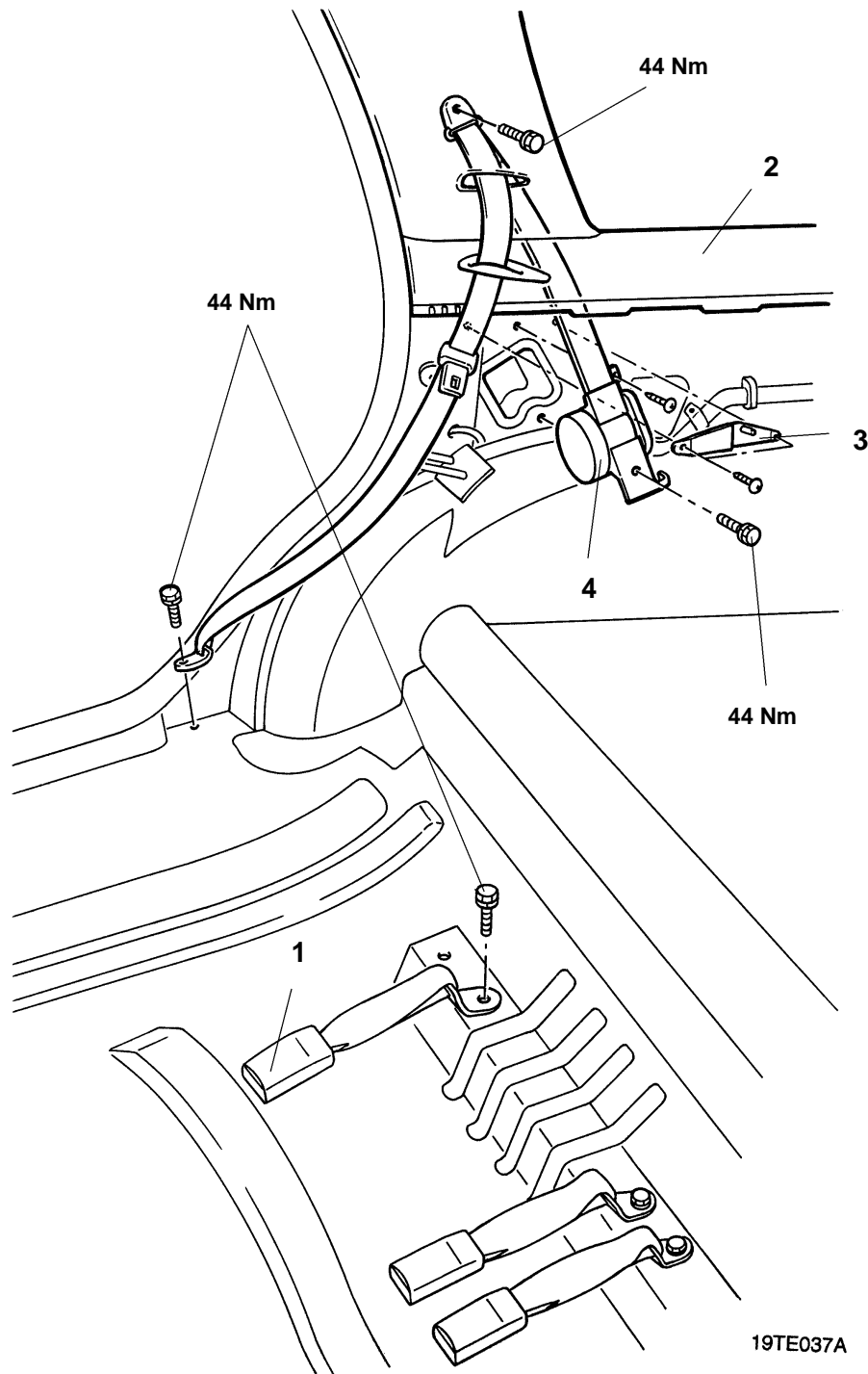
REAR SEAT BELT<SEDAN>

REMOVAL AND INSTALLATION



Removal steps

- Rear seat cushion
(Refer [On vehicle service.](#)).
 - 1. Inner seat belt
(centre seat belt)
 - 2. Inner seat belt
(outer seat belt)
 - Rear seat back assembly
(Refer [On vehicle service.](#)).
- Rear shelf trim
(Refer [On vehicle service.](#)).
 - 3. Rear pillar trim
(Refer [On vehicle service.](#)).
 - 4. Outer seat belt
 - 5. Centre seat belt

REAR SEAT BELT<WAGON>**REMOVAL AND INSTALLATION****Removal steps**

- Rear seat cushion
(Refer [On vehicle service.](#)).
- 1. Inner seat belt
- 2. Cargo compartment upper side trim
A & B (Refer [On vehicle service](#))

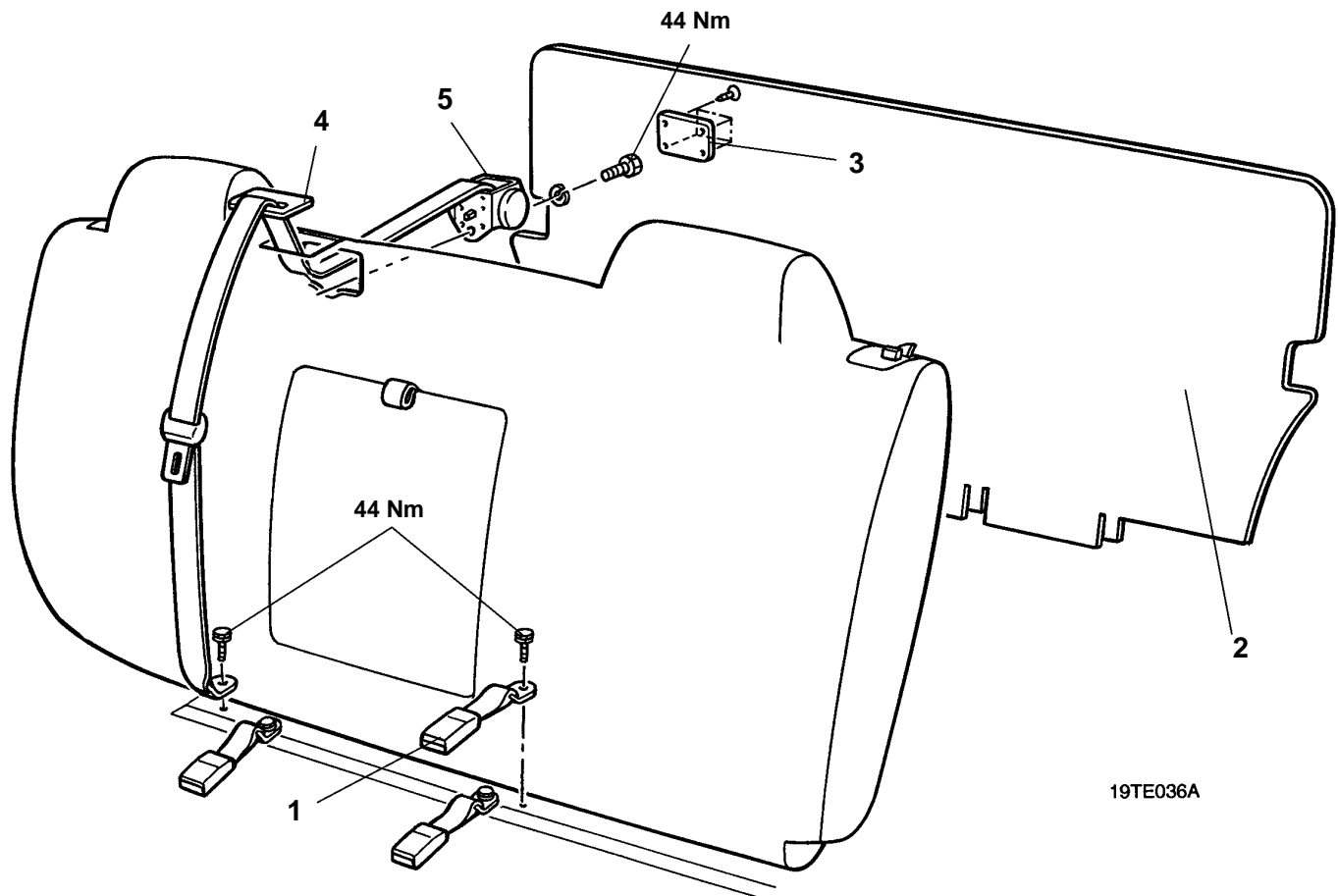
- Rear seat back assembly
(Refer [On vehicle service](#)).
- 3. Bracket
- 4. Outer seat belt

REAR CENTRE SEAT BELT<WAGON>

REMOVAL AND INSTALLATION

Pre-removal and Post-installation Operation

- Cargo compartment lower side trim (Refer [On vehicle service.](#))



Removal steps

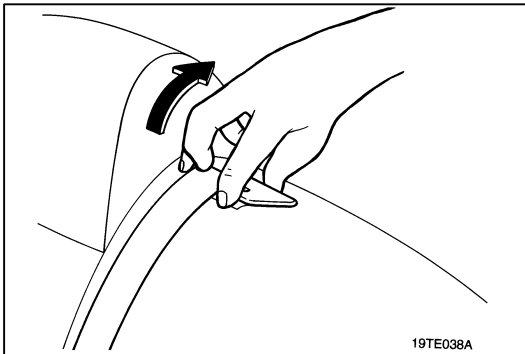
1. Inner seat belt (for centre seat)
2. Rear seat back mat assembly
3. Anchor cover panel



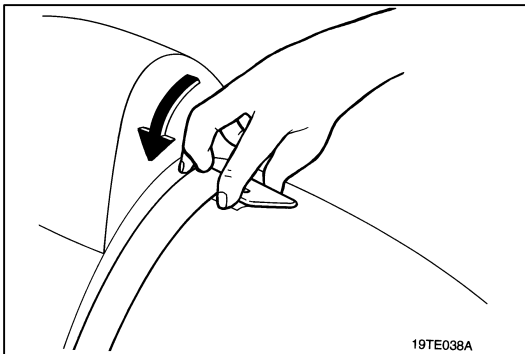
4. Trim guide
5. Centre seat belt

REMOVAL SERVICE POINTS**◀A▶ TRIM GUIDE**

1. Pull the front of the trim guide upwards as shown in the illustration to remove it.

**INSTALLATION SERVICE POINTS****▶A◀ TRIM GUIDE**

1. Locate the rear of the trim guide into the seat back then push down on the front section to lock the trim guide into the seat back.

**▶B◀ REAR SEAT BACK MAT ASSEMBLY**

1. Ensure the cut outs in the rear seat back mat assembly align and are fitted into the slots of the rear seat before installing the rear seat back assembly.

