DESCRIPTION AND OPERATION

Body – Overview

General

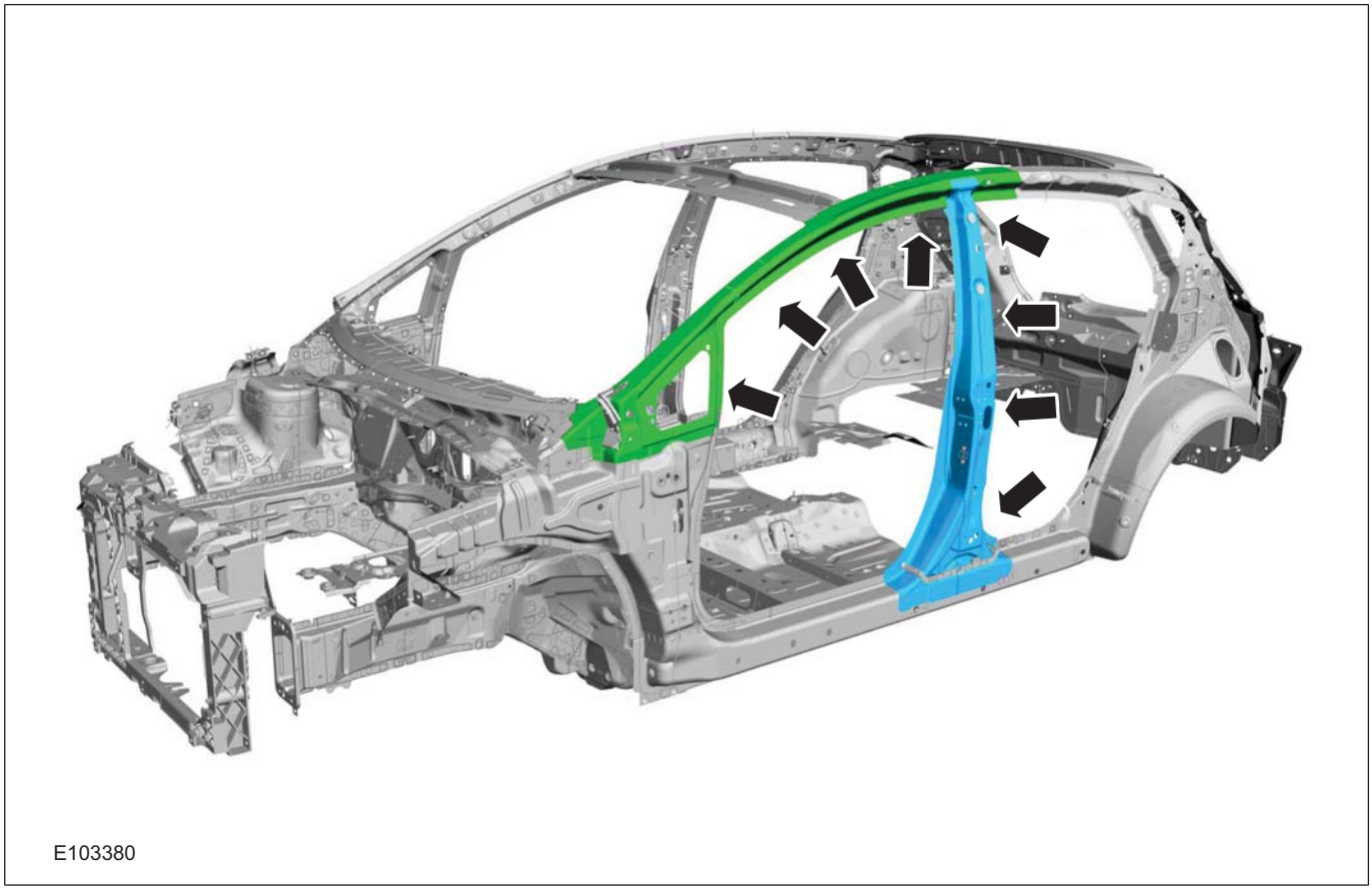
At introduction the following vehicle variants are initially available:

- 3-door and
- 5-door.

The equipment level can be chosen from the following:

- Ambiente (standard equipment level),
- Trend (medium equipment level),
- Ghia (high equipment level),
- Titanium (high equipment level),
- Sport (high equipment level).

A- and B-pillar reinforcement



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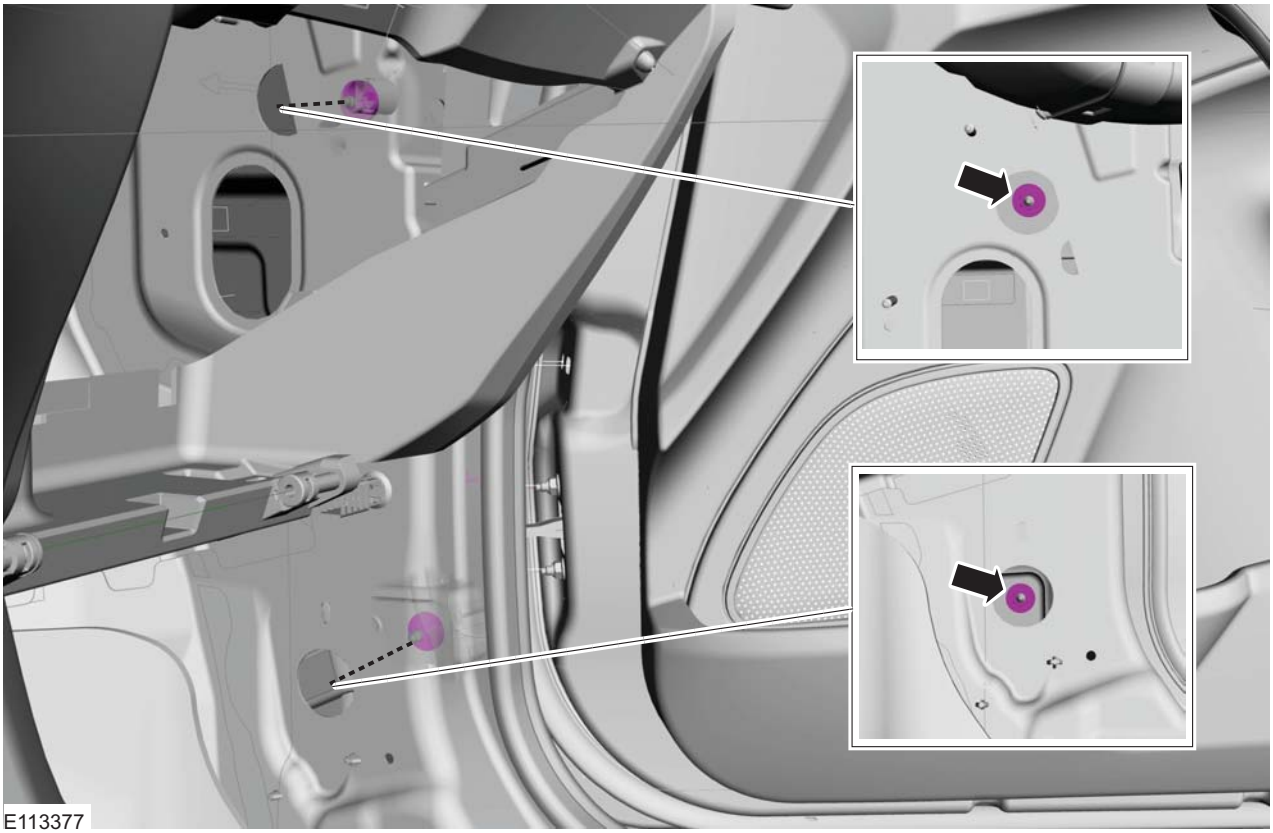
The A- and B-pillar reinforcement is made of the highest strength boron steel.

These sheet metal parts can only be replaced as a complete unit during repairs and that section repairs are not possible.

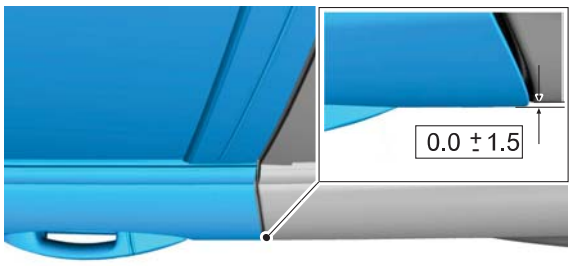
Special installation and removal requirements must be observed during repairs. Special tools are also required. Relevant instructions are available in the current service literature.

GENERAL PROCEDURES



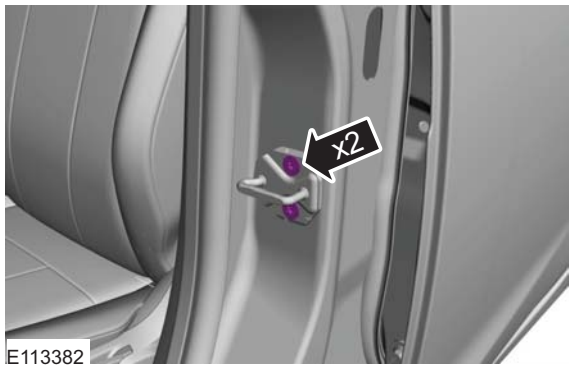
Inspection

13.

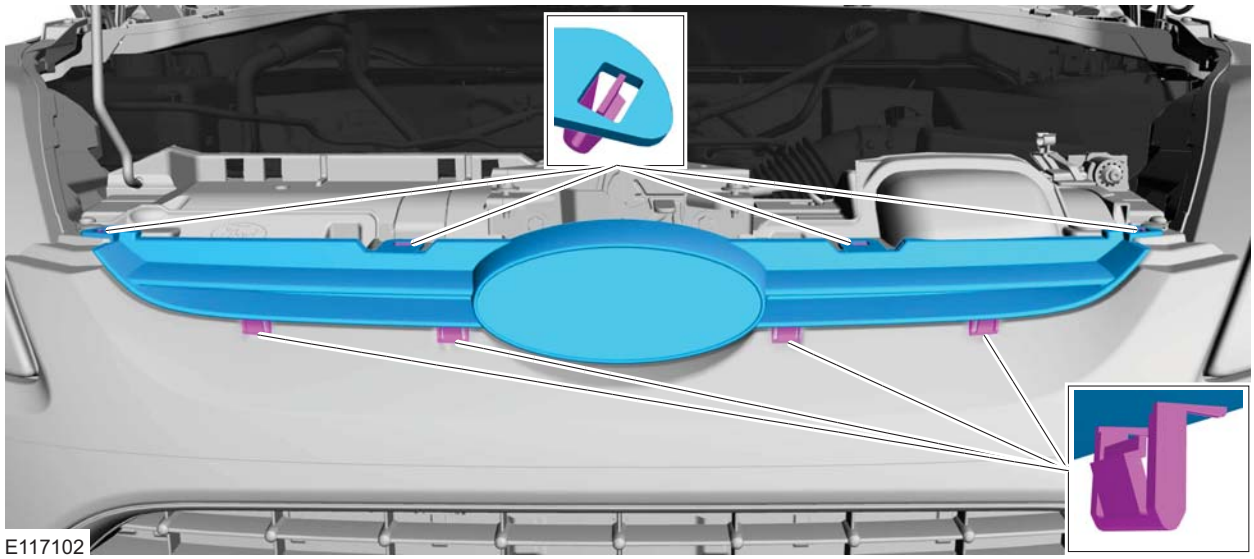


Adjustment

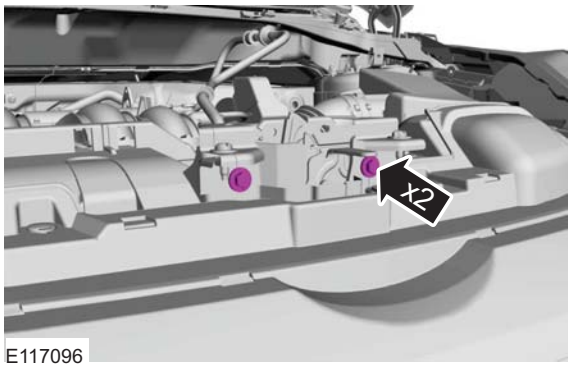
14. Loosen: 1 turn(s)



GENERAL PROCEDURES

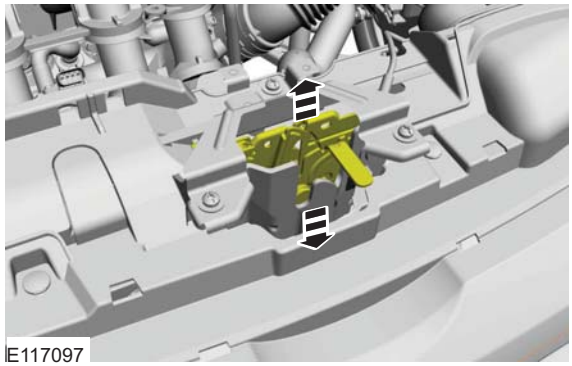


39. Loosen: 1 turn(s)

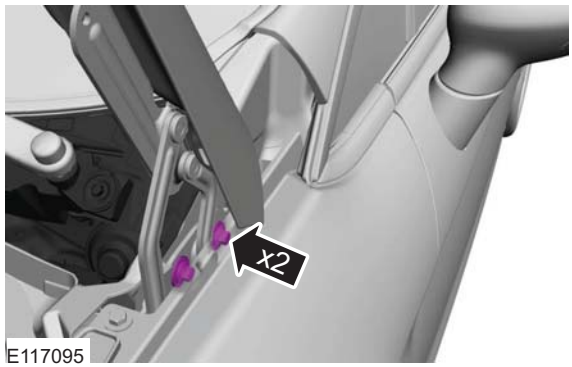


40.

41.



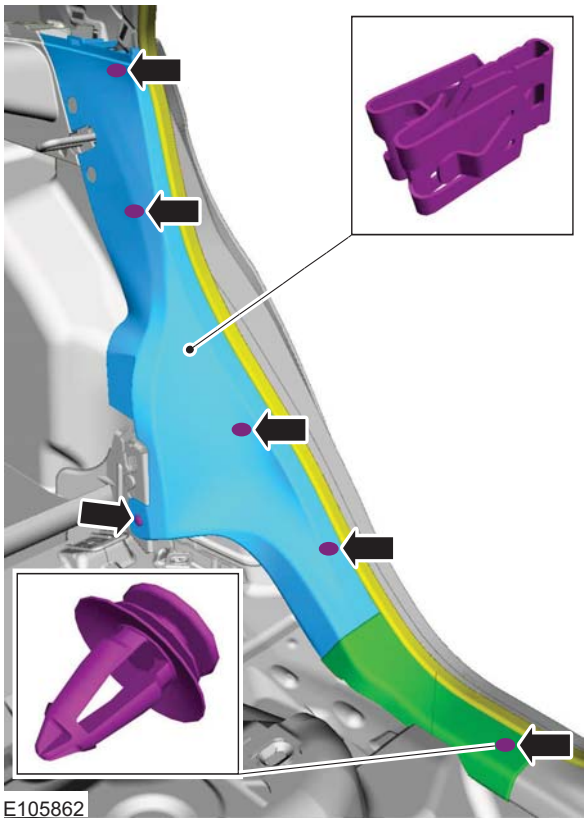
42. On both sides.
Torque: 25 Nm



43. Check the area for paintwork damage and repair if necessary.

REMOVAL AND INSTALLATION

3.



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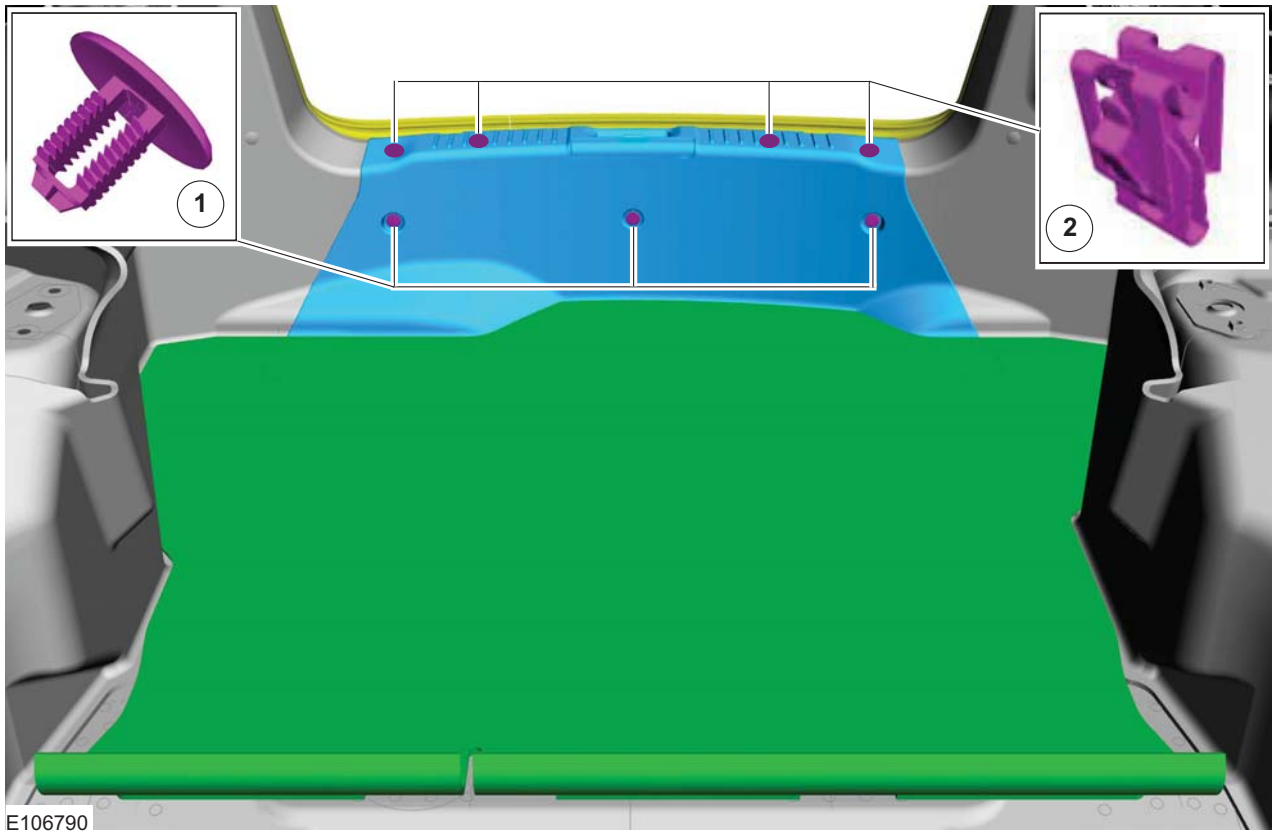
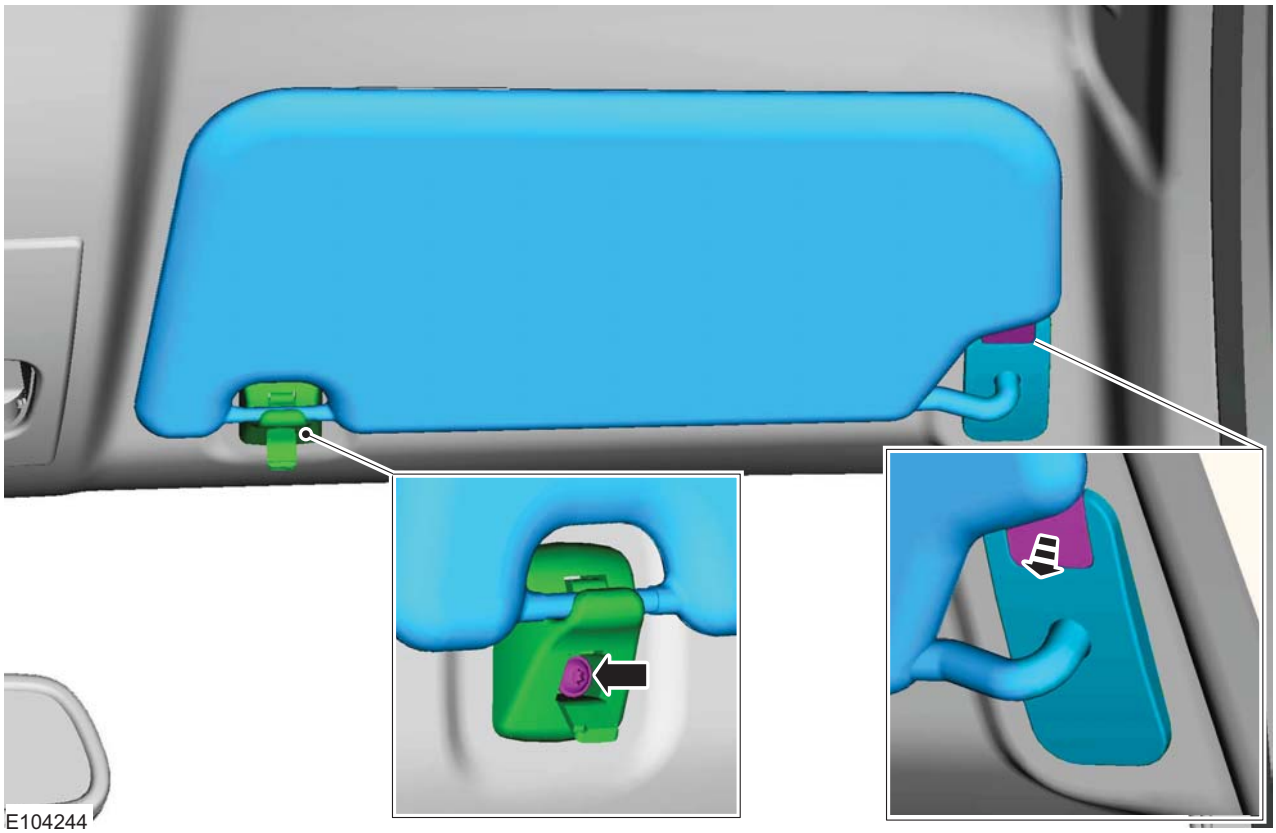
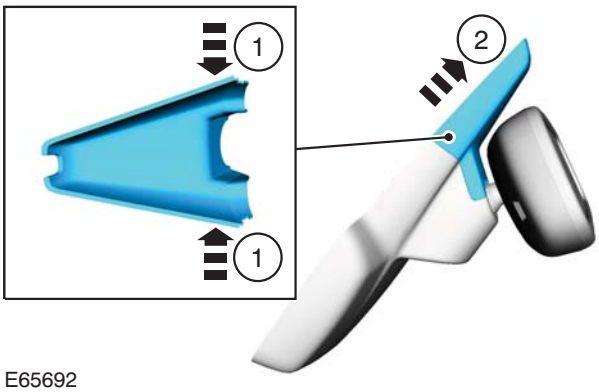


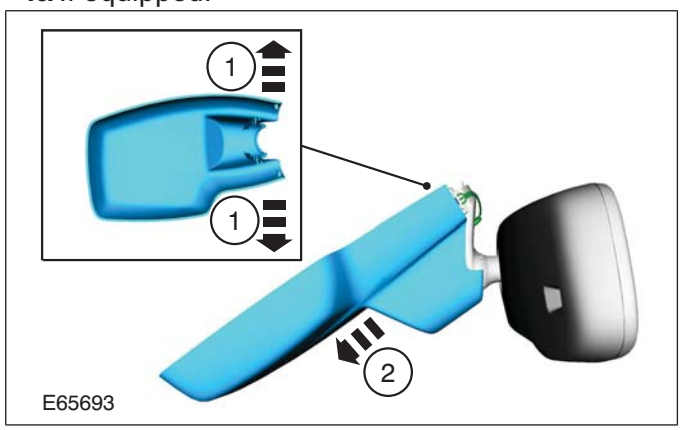
REMOVAL AND INSTALLATION



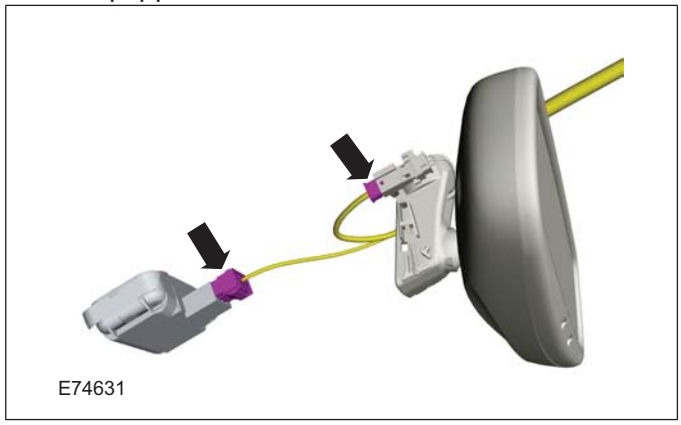
9. If equipped.



10. If equipped.



11. If equipped.



REMOVAL AND INSTALLATION

Front Seat(40 100 0; 40 100 4; 40 101 0)

Removal

WARNINGS:

The supplemental restraint system (SRS) is active for a certain length of time after the power supply has been disconnected. Wait for a minimum of 3 minutes before disconnecting or removing any SRS components.

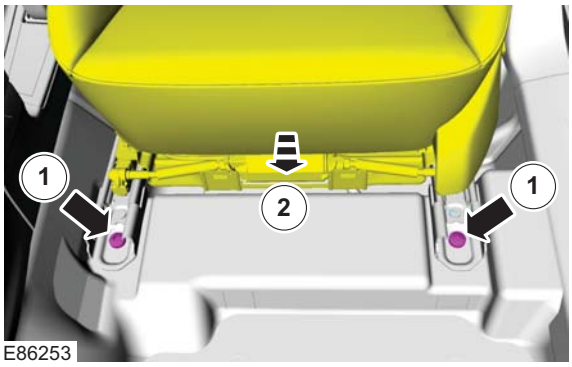
Make sure that the vehicle electrical system is fully depowered and no other power source is connected.

Wear safety goggles.

NOTE: Removal steps in this procedure may contain installation details.

1. Refer to: Supplemental Restraint System (SRS) Health and Safety Precautions (100-00 General Information, Description and Operation).
2. Refer to: Battery Disconnect and Connect (414-01 Battery, Mounting and Cables, General Procedures).

3.



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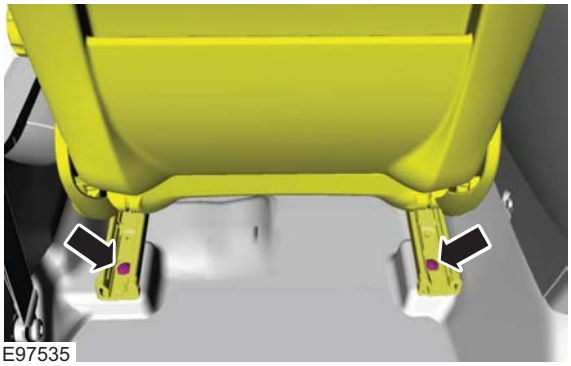

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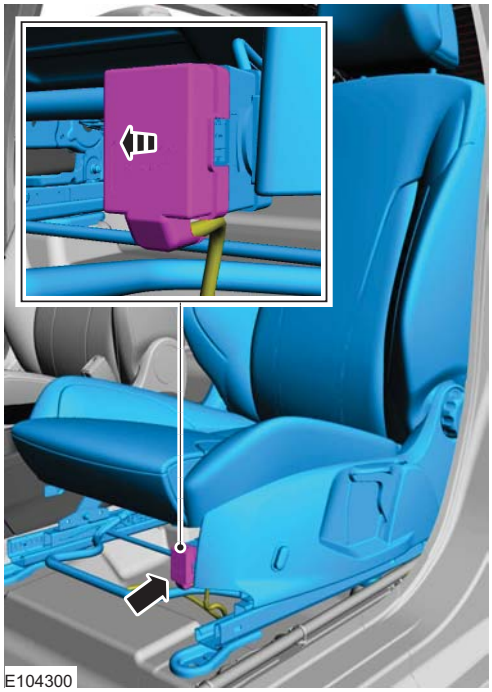
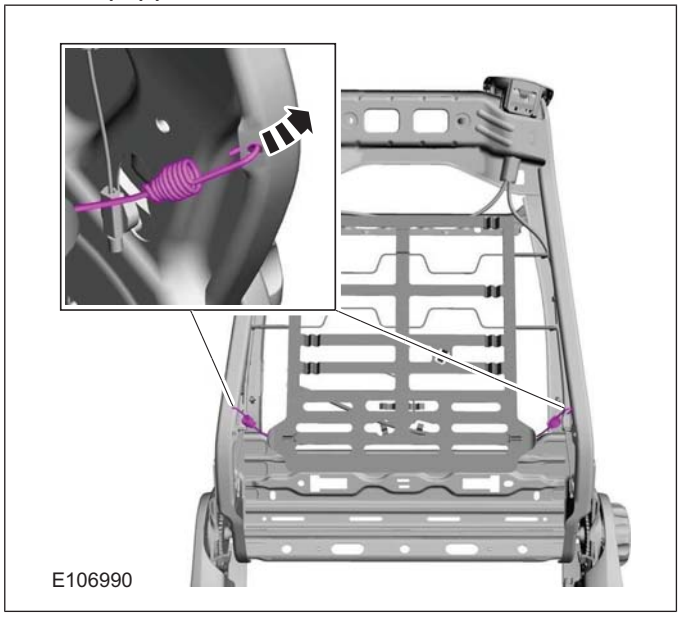


Installation

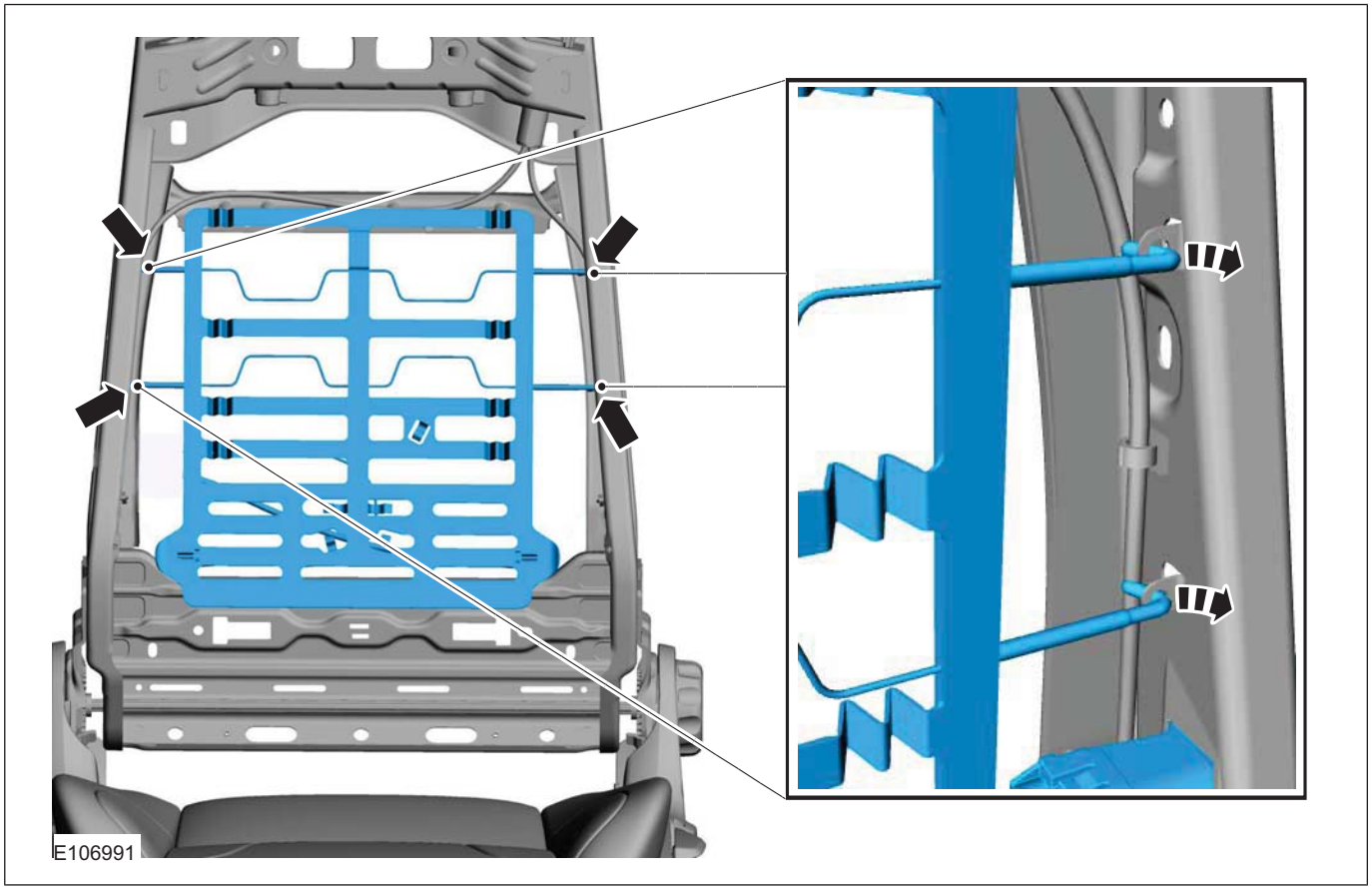
1. Torque: 35 Nm

DISASSEMBLY AND ASSEMBLY

8. If equipped.



9. If equipped.



REMOVAL AND INSTALLATION

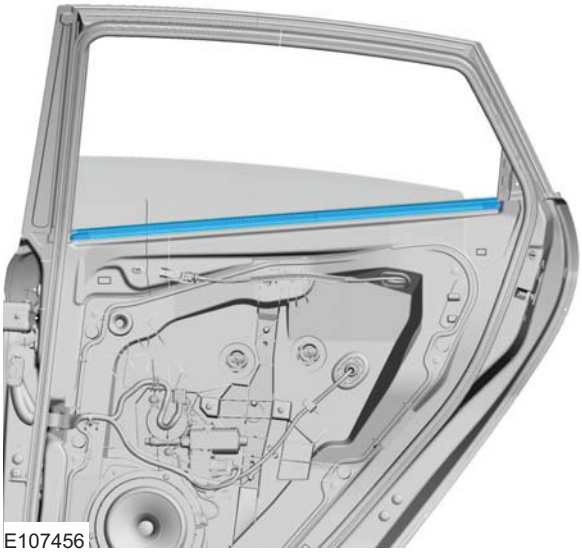
Rear Door Window Glass

Removal

NOTE: Removal steps in this procedure may contain installation details.

1. Refer to: Rear Door Trim Panel (501-05 Interior Trim and Ornamentation, Removal and Installation).

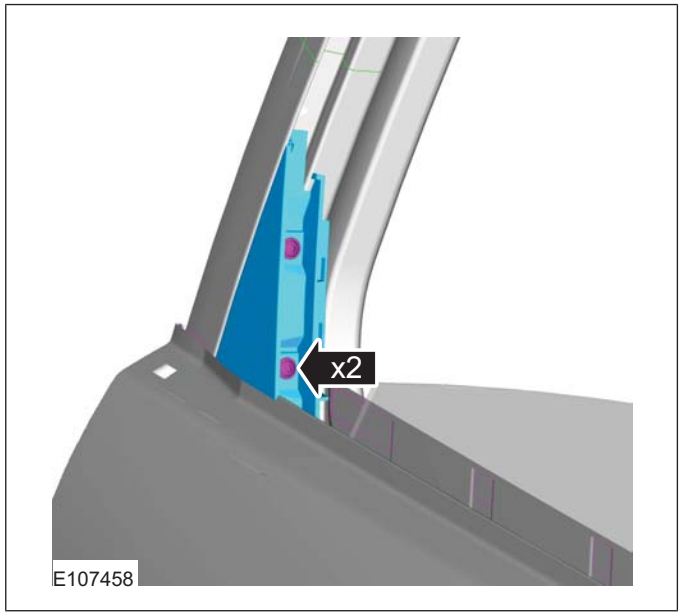
2.



3.

4.

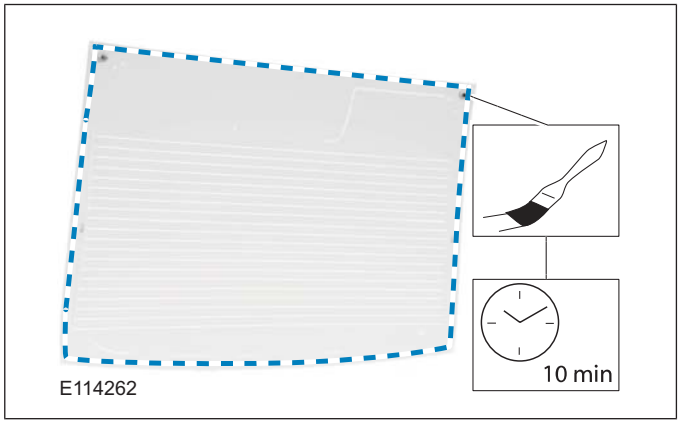
5.



6. Torque: 7 Nm

REMOVAL AND INSTALLATION

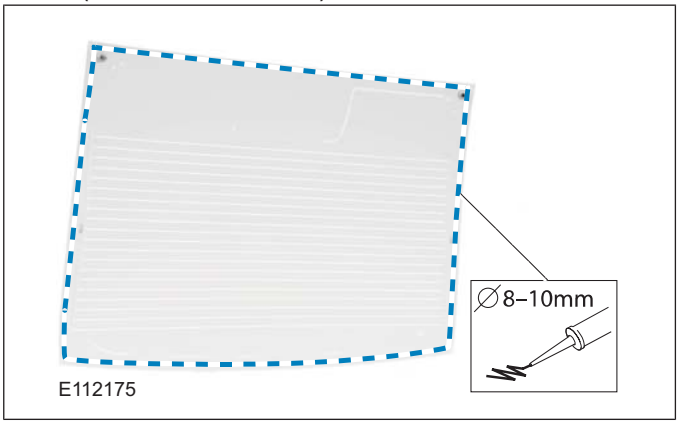
5. Apply the primer supplied with the glass adhesive kit.



6. **NOTE:** Discard the first 100 mm of adhesive as this may have a reduced working time.

NOTE: Make sure that any breakage in the continuous bead of adhesive is overlapped by 20 mm.

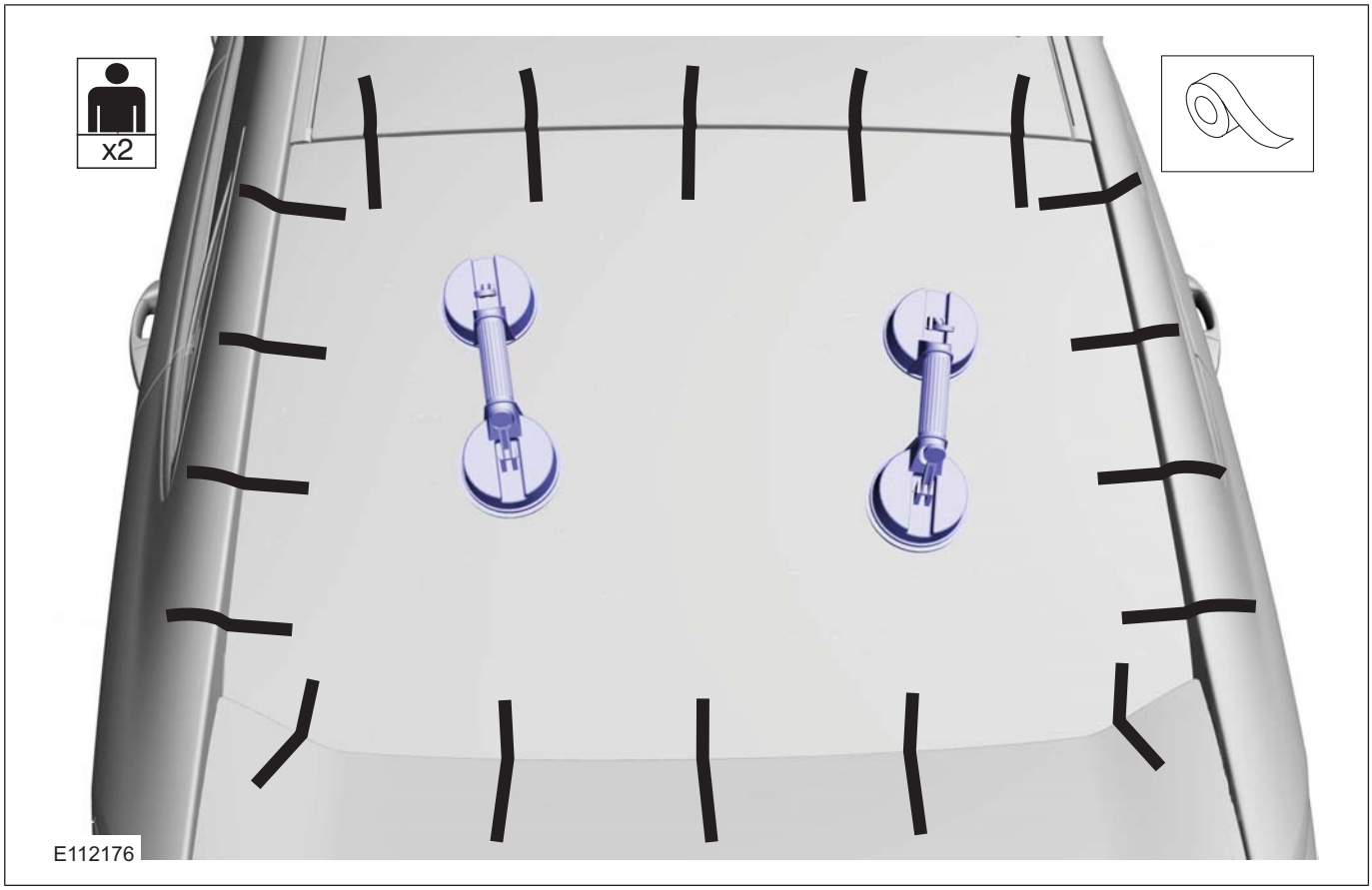
Material: Windshield Adhesive Kit (WSS-M11P57-A5)



7. **CAUTION: During the curing time of the polyurethane (PU) adhesive, the door windows must be left open.**

Use suction cups to handle the window glass.

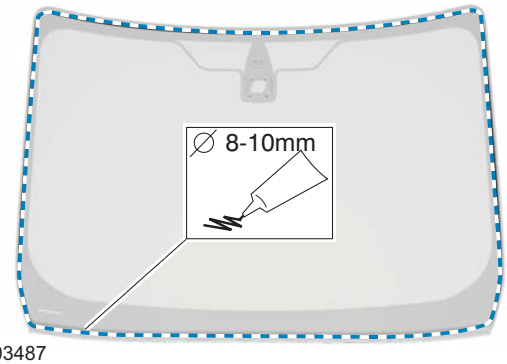
General Equipment: Adhesive Tape



REMOVAL AND INSTALLATION

NOTE: Make sure that any breakage in the continuous bead of adhesive is overlapped by 20 mm.

General Equipment: Direct Glazing Removal/Replacement Equipment
Material: Windshield Adhesive Kit (WSS-M11P57-A5)
Material: Windscreen Adhesive Kit - 1 Component (WSK-M11P57-A3 / 7U7J-T03863-AA)



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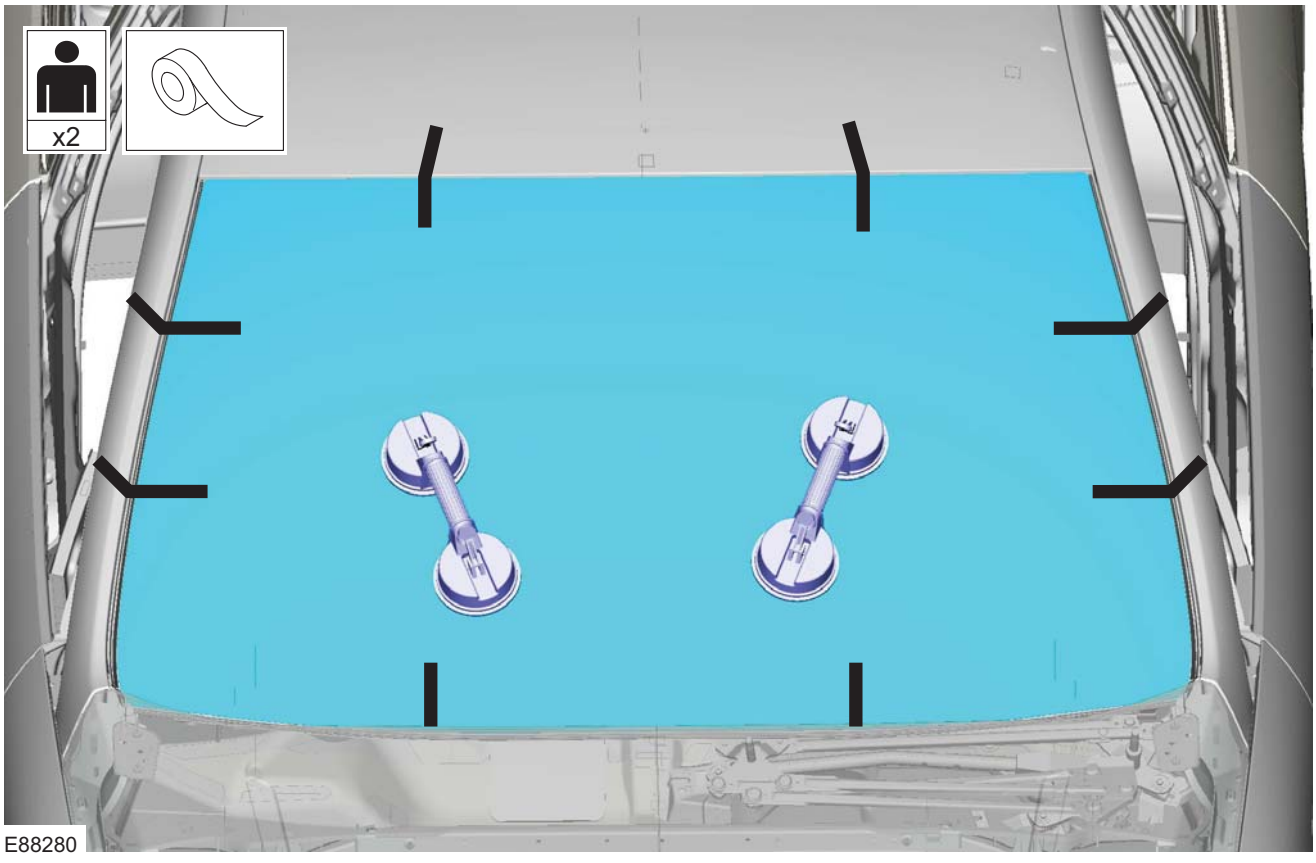
6. • Press firmly and evenly into position.

   General Equipment: Direct Glazing Removal/Replacement Equipment

   • **CAUTION: During the curing time of the polyurethane (PU) adhesive, the door windows must be left open.**

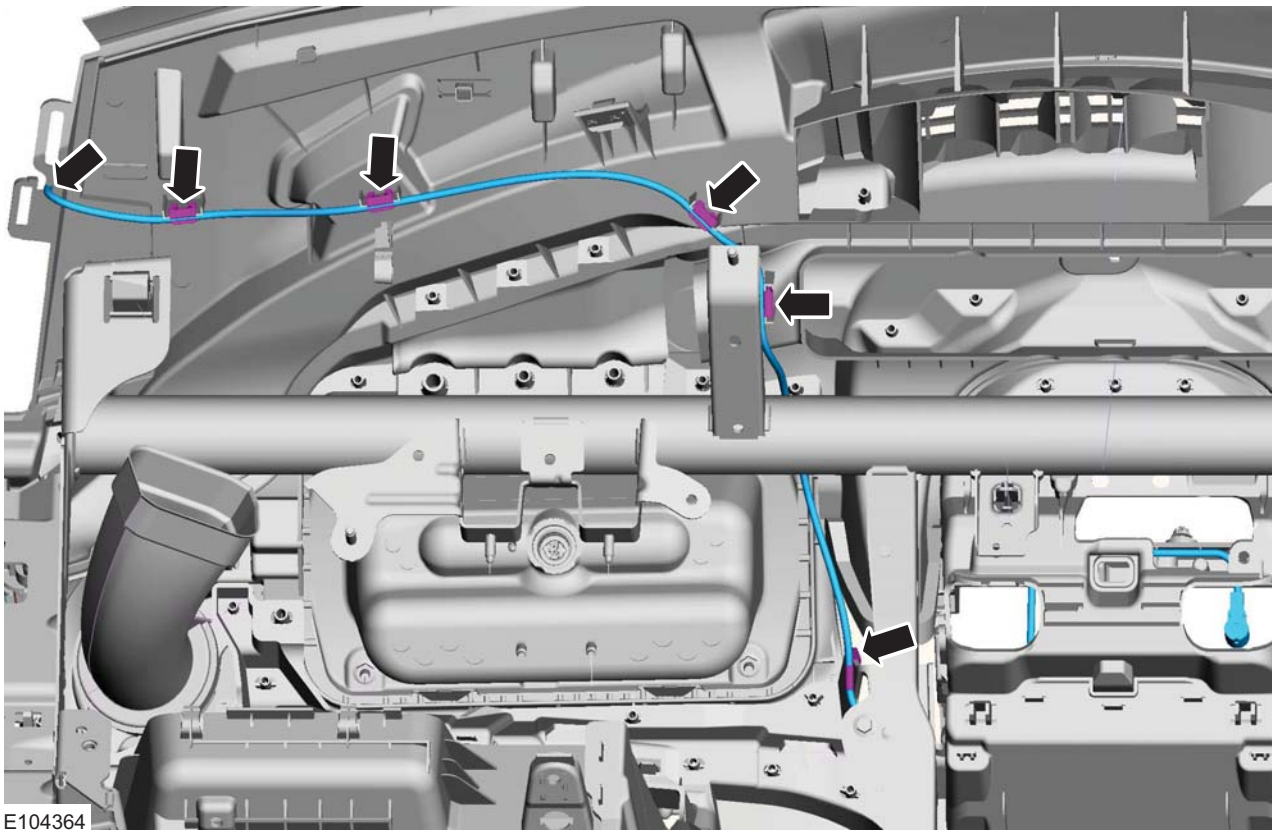
   Using tape, secure the windshield glass in the correct position until the PU adhesive has cured.

   General Equipment: Adhesive Tape



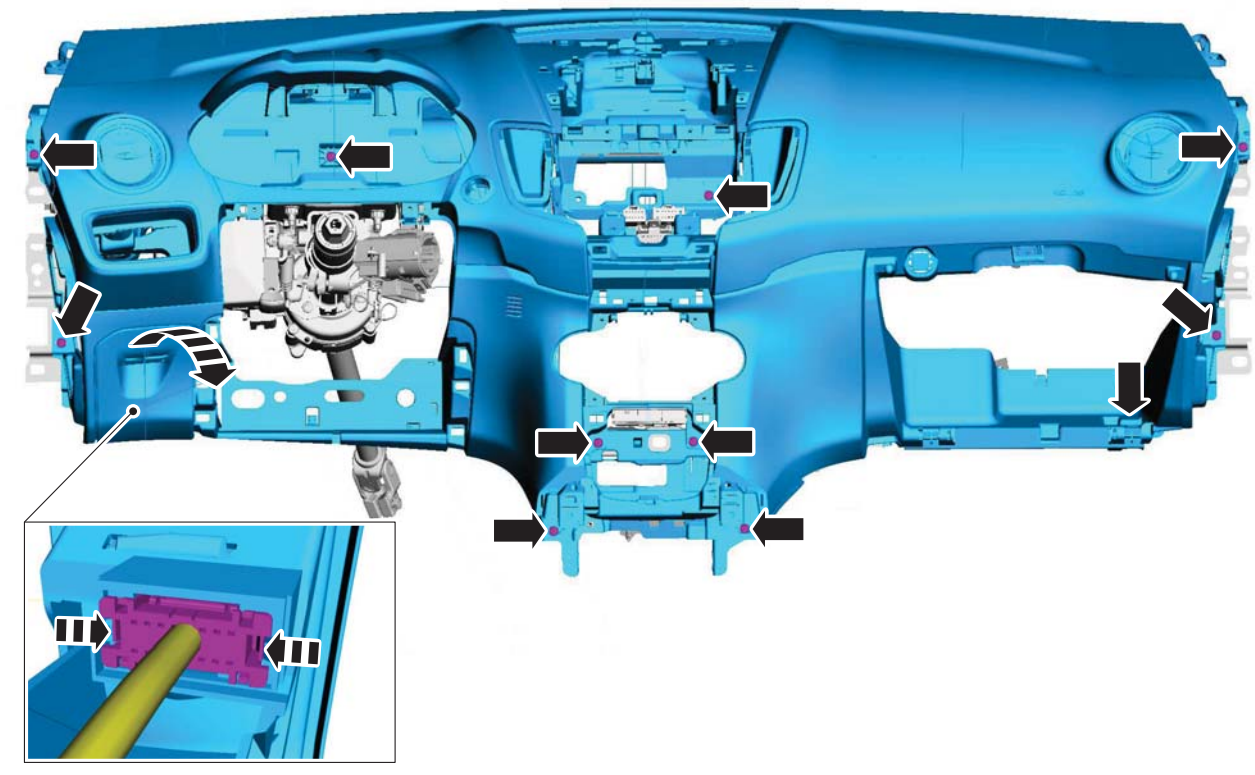
E88280

REMOVAL AND INSTALLATION



E104364

28.



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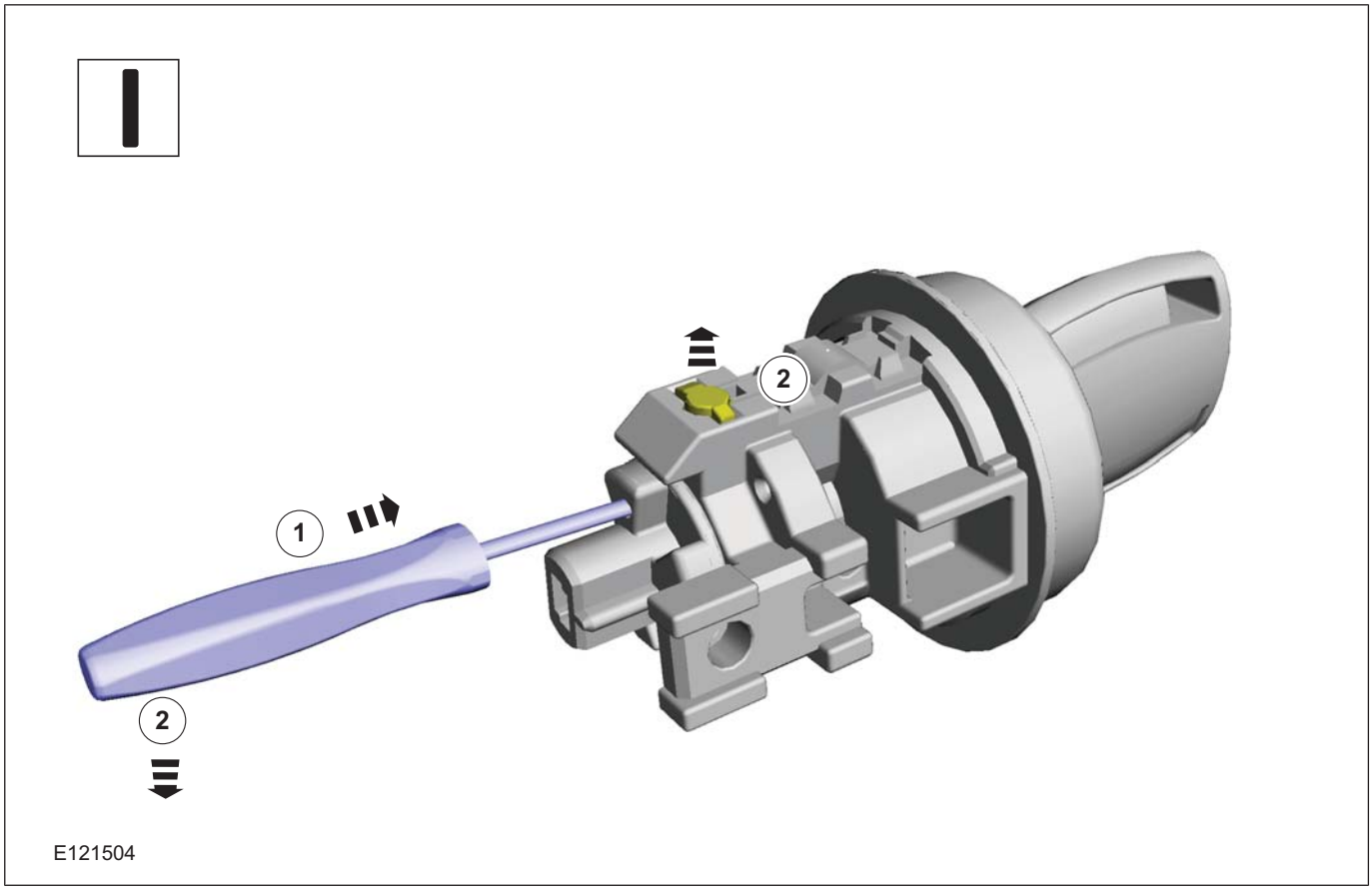
DISASSEMBLY AND ASSEMBLY



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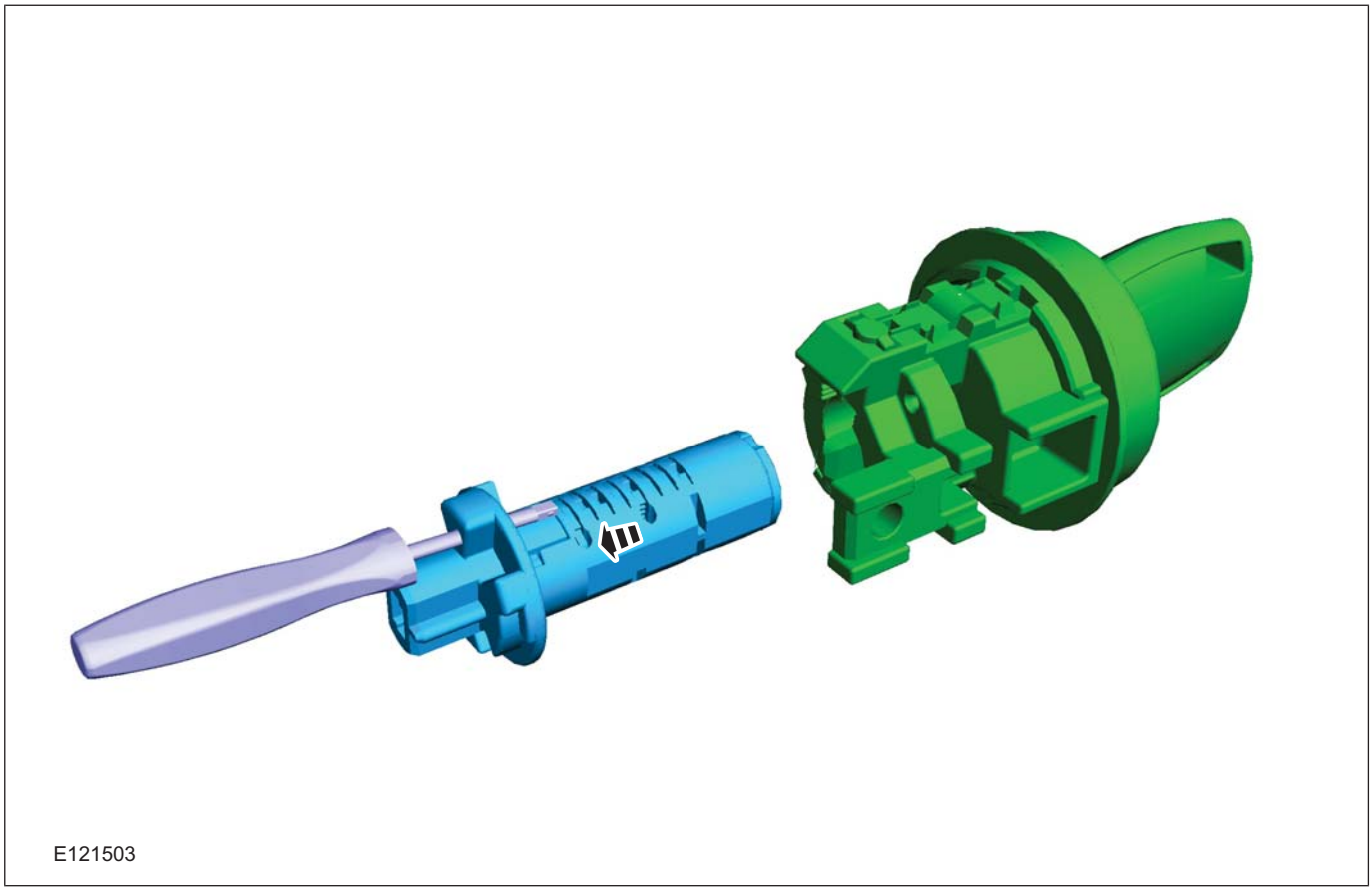
6.



E121503

DIAGNOSIS AND TESTING

Safety Belt System

General Equipment

Ford diagnostic equipment

Principles of Operation

WARNING: All safety belt components including retractors, buckles, front safety belt buckle support assemblies (slider bar), child safety seat tether brackets and attaching hardware in use during a collision must be removed and new components installed. New safety belt components should also be installed where safety belts not in use during a collision, are inspected and found to be damaged or operate incorrectly. Failure to follow these instructions may result in personal injury.

Vehicles equipped with the supplemental restraint system (SRS) are equipped with a driver and passenger safety belt retractor(s) and pretensioner. The safety belt pretensioners are controlled as part of the SRS.

REFER to: Air Bag and Safety Belt Pretensioner Supplemental Restraint System (SRS) (501-20 Supplemental Restraint System, Description and Operation).

The rear seat safety belt buckles are mounted directly to the floor pan underneath the rear seat cushion. When the ignition is turned on the RUN position the SRS warning indicator will illuminate for three seconds. If the SRS, including the safety belt electrical system, is operating correctly the SRS warning indicator will be extinguished. If a fault is detected the SRS warning indicator will generate a lamp fault code.

REFER to: Air Bag and Safety Belt Pretensioner Supplemental Restraint System (SRS) (501-20 Supplemental Restraint System, Description and Operation).

The safety belt retractor, mounted within the base of the B-pillar, incorporates a torsion bar load limiting device. The device consists of a retractor reel which is mounted onto a spindle (torsion bar) which, once the sensor has locked the retractor reel and predetermined load is applied, twists and pays out additional webbing into the system. The deceleration force required to initiate this sequence is approximately the same as that required to initiate air bag deployment. The torsion bar load limiting device will only react if the safety belt is in use at the time of impact.

Rear seat safety belt retractors do not use this type of retractor, they are equipped with a conventional retractor.

Emergency Locking Retractor

The retractors in all seat positions feature emergency locking retractor(s). The emergency locking retractor is part of the safety belt system that in normal operation allows free movement of the belted occupant. In an emergency the emergency locking retractor will lock, preventing webbing payout and hence forward movement of the occupant. Locking may be achieved by one of two mechanisms:

Vehicle Motion Sensor

vehicle motion sensor is operated by sudden deceleration of the vehicle or excessive tilt. Once operated the vehicle motion sensor causes a locking pawl to be engaged, thus locking the retractor, preventing webbing payout. When the vehicle is stationary, the vehicle motion sensor stabilizes, causing the pawl to disengage and unlock the retractor, allowing webbing payout.

Webbing Motion Sensor

The emergency locking retractor webbing motion sensor is operated by rapid acceleration of the webbing. Once operated, it causes a locking pawl to be engaged thus locking the retractor. Webbing payout is prevented in the same manner as vehicle motion sensor.

Inspection and Verification

1. Verify the customer concern.
2. Visually inspect for obvious signs of mechanical and electrical damage.

Visual Inspection Chart

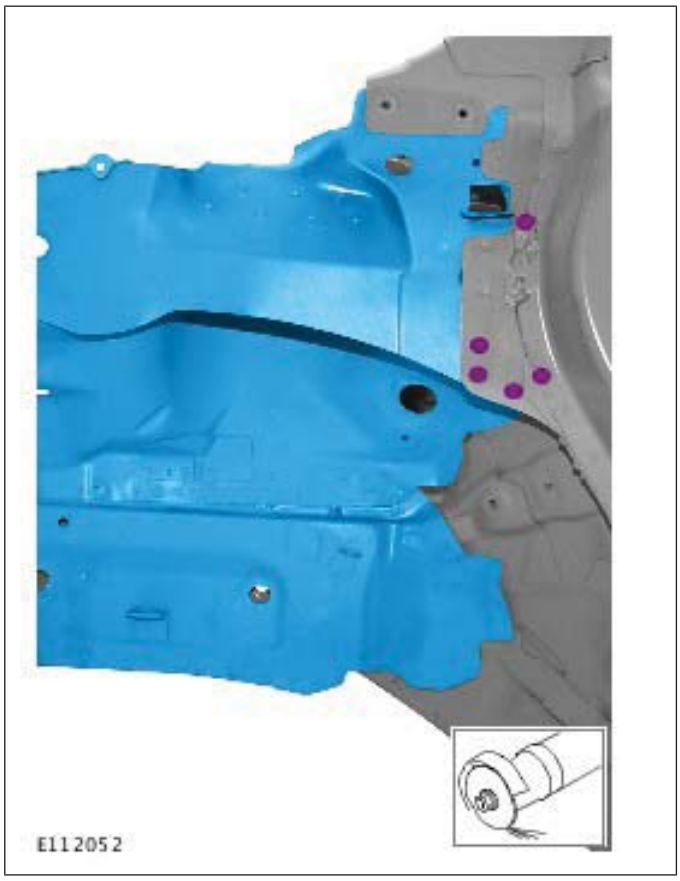
Mechanical
• Safety belt retractor • Safety belt buckle • Safety belt retractor and pretensioner

3. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next stop.
4. If the cause is not visually evident, verify the symptom and refer to the Symptom Chart.

DESCRIPTION AND OPERATION

Color coding

Different colors or shading can be used to depict special areas and components.



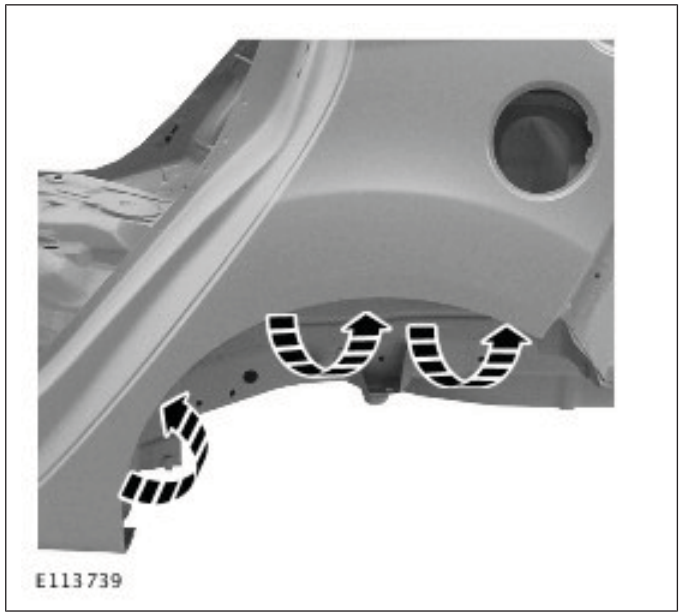
- Blue: Main component which will be removed or installed. Only actual movements will be shown in blue in the diagram.
- Magenta: Materials or fixings, e.g. spot welds or adhesives.

In an assembly operation, the colors show the sequence of removal steps.

- Green: First component or the first partial replacement section.
- Blue: Second component or the second partial replacement section.
- Brown: Third component or the third partial replacement section.

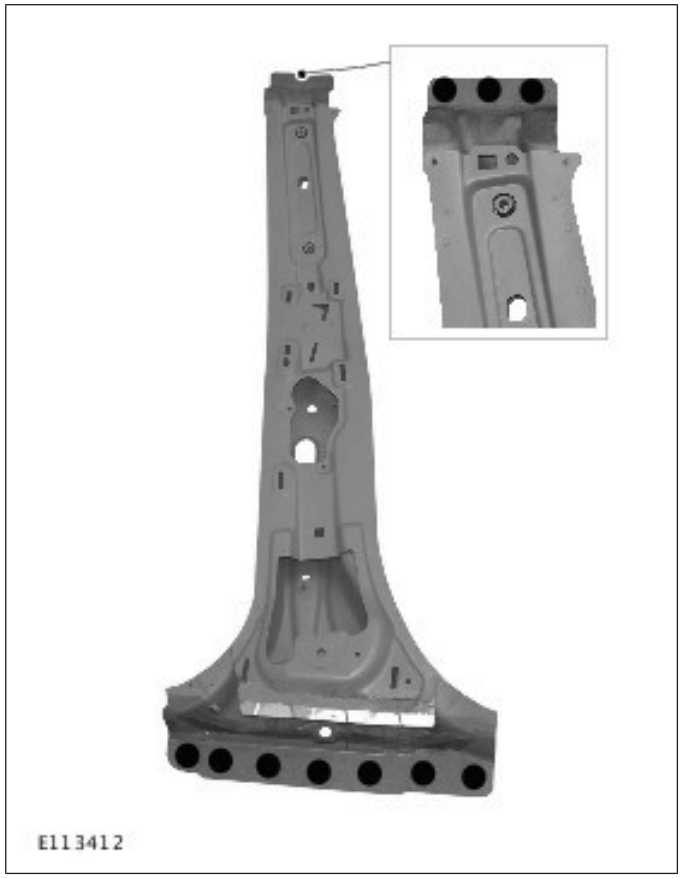
Movement arrows

Necessary work such as clinching flanges or moving lugs etc. will be represented by broken arrows.



Magnified and detailed views

If a detail cannot be clearly seen in the illustration because of its size or location, it is shown enlarged in a separate window.



Position lines within a diagram

A position line is used to indicate a special position or a component. A spot weld which must be drilled out through two panel thicknesses is indicated here, different to all the others.

DESCRIPTION AND OPERATION

Dirt embedded in top coat

Inclusions of contamination in top coat or under paint layers, of different sizes and shapes (grains or lint). Optical adverse effect.

Cause/damage pattern:

- Dust was not properly removed from the surface to be painted.
- Paint material not sieved.
- Function of the painting facilities not optimum.
- Filter contaminated.
- Wearing unsuitable clothing.

Repair of damage:

- Single inclusions: after thorough hardening, sand out using 1200 - 1500 grade paper and repolish using a suitable silicone-free sanding or painting paste.
- Large area contamination: sand and repaint.

Water marks

Ring shaped marks appearing on the paint surface.

Cause/damage pattern:

- Evaporation of water droplets on freshly painted and not yet fully hardened paint finishes (mostly only found on horizontal surfaces).
- Layer too thick.
- Drying time too short.
- Hardening faults or hardener no longer useable.
- Use of unsuitable thinners.

Repair of damage:

- Rub down only slight marks with sanding paper grade P1000 - P1200 and then polish.
- For heavy marking, sand the surface matt, clean with silicone remover and repaint.

Paint runs

Wave-like paint run tracks in top coat or in an intermediate layer on vertical surfaces. Mostly in the area of swage lines, seams or openings (there they are paint runs, otherwise curtains).

Cause/damage pattern:

- Uneven paint application.
- The specified viscosity was not complied with.
- Use of unsuitable thinner materials.
- Air, material or room temperature too low.
- Layers too thick.
- Spray gun (nozzle) not perfect.

Repair of damage:

- After thorough drying, sand unevenness flat, if necessary leave to dry afterwards.
- Small areas of damage can be equalised using the paint plane, then sand, polish or repaint.