

SERVICE INFORMATION BULLETIN

TITLE : Occupant Classification System (OCS) conversion to Capacitance Mat IEE

DOCUMENT # : 11 N 011

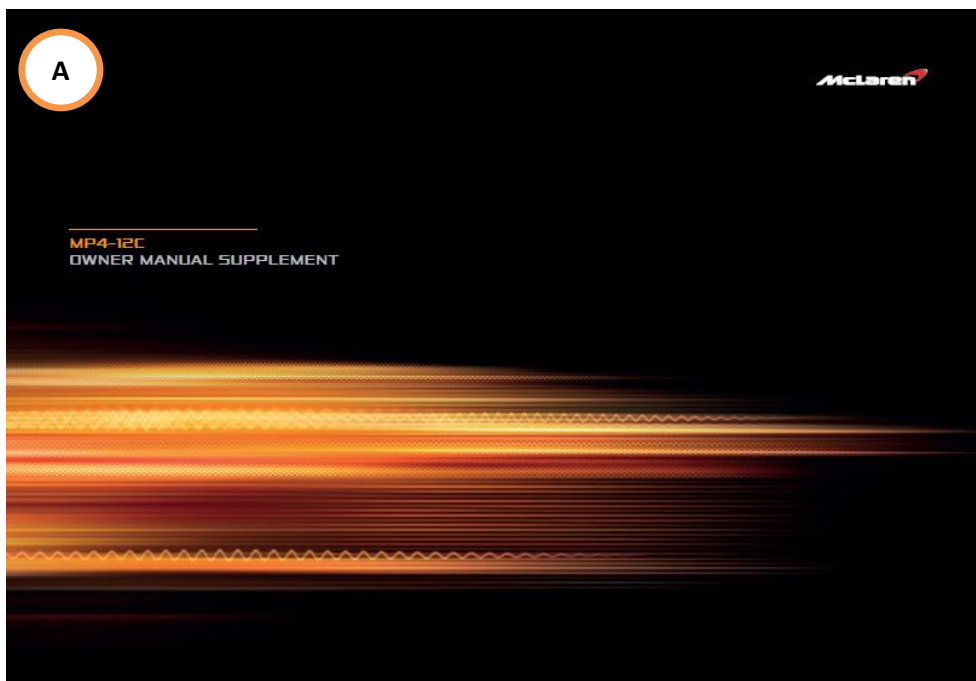
AFFECTED VEHICLES : 12C Coupe built with OCS sensor bolt system

SITUATION : Engineering at McLaren Automotive have released a service kit that allows vehicles built with the OCS sensor bolt system to be converted to the IEE Capacitance Mat type.

PROCEDURE : The conversion kit should be fitted to all vehicles that will be visiting the workshop with a diagnostic trouble code in the ORC module relating to the sensor bolt system.

A DTC PDF printout must be extracted from MDS and attached to the work package with all relevant DTCs logged in the ORC module. Failure to attach this document to the work package will result in the warranty claim being rejected.

Care point: The Platform 9.0 "Owner Manual Supplement" (A) must be placed in the vehicle once the seat has been converted. This only applies to vehicles that have not had 11 M 039 "Vehicle software platform update to 9.0" carried out previously. The Supplement includes information relating to the new IEE OCS system functionality.



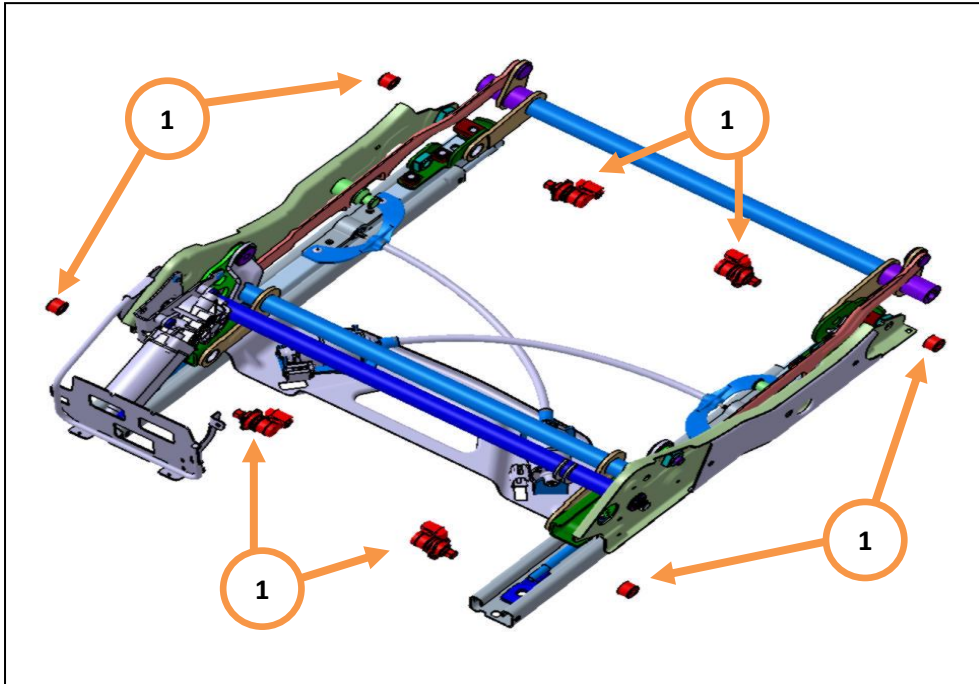
REMOVAL:

1. Please refer to AA-RM-06N03-01-008 – Remove/install seat
2. Please refer to AA-RM-06N03-01-019 – Remove/install seat – Back – Foam
3. Please refer to AA-RM-06N03-01-018 – Remove/install seat – Heating element – Back
4. Please refer to AA-RM-06N03-01-021 – Remove/install – Back – Cable
5. Please refer to AA-RM-06N03-01-001 – Remove/install seat – Cover – Back
6. Please refer to AA-RM-06N03-01-016 – Remove/install seat – Back – Shell
7. Please refer to AA-RM-06N03-01-004 – Remove/install seat – Switch pack
8. Please refer to AA-RM-05M03-01-008 – Remove/install Electronic Control Unit – Seat
9. Please refer to AA-RM-06N03-01-002 – Remove/install seat - Base – Foam
10. Please refer to AA-RM-06N03-01-017 – Remove/install seat – Cover – Base

Care point: Do not remove the old harness from seat base assembly until the new harness is to be installed. Old harness could be used as a guide of the new cable routing.

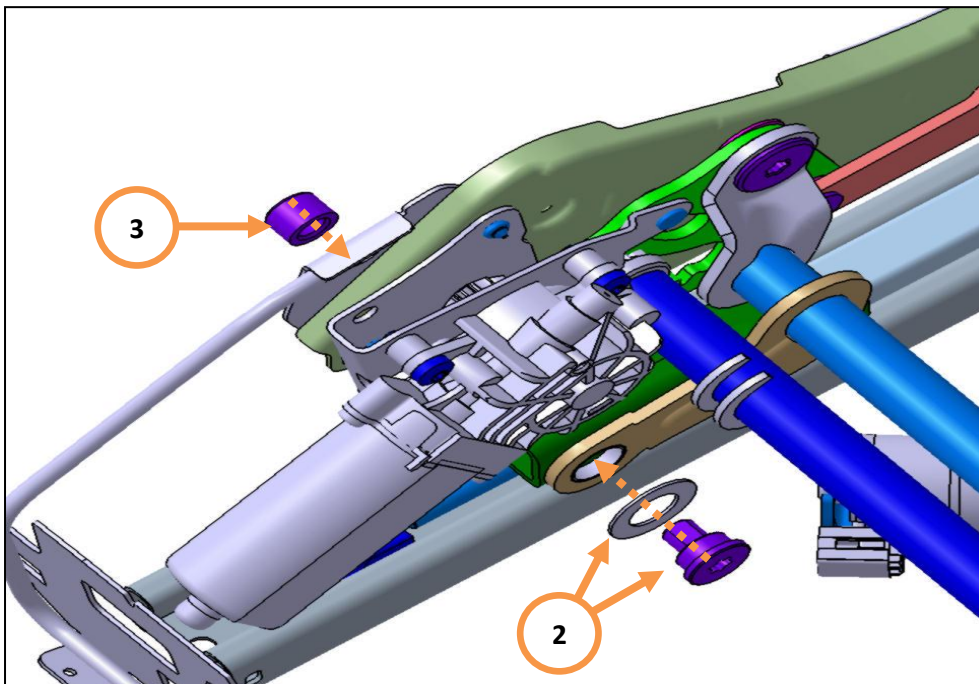
INSTALLATION:

1. Remove all four OCS sensors bolts with washers and nuts (1).

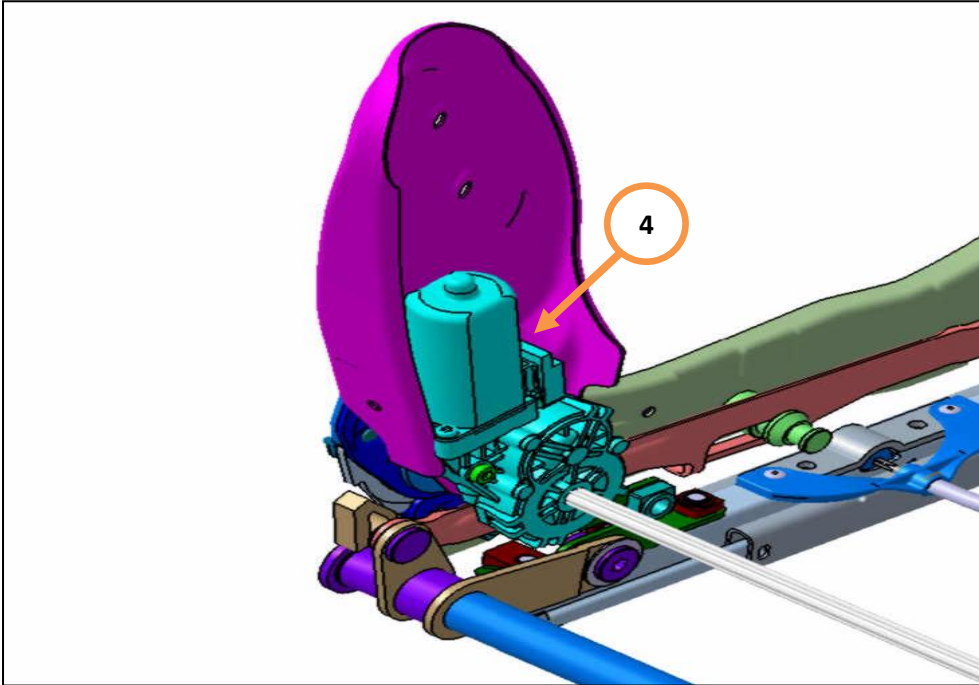


Care Point: Please ensure that the new bolts have pre-encapsulated Loctite applied to them. If not, apply Loctite 243 to each thread.

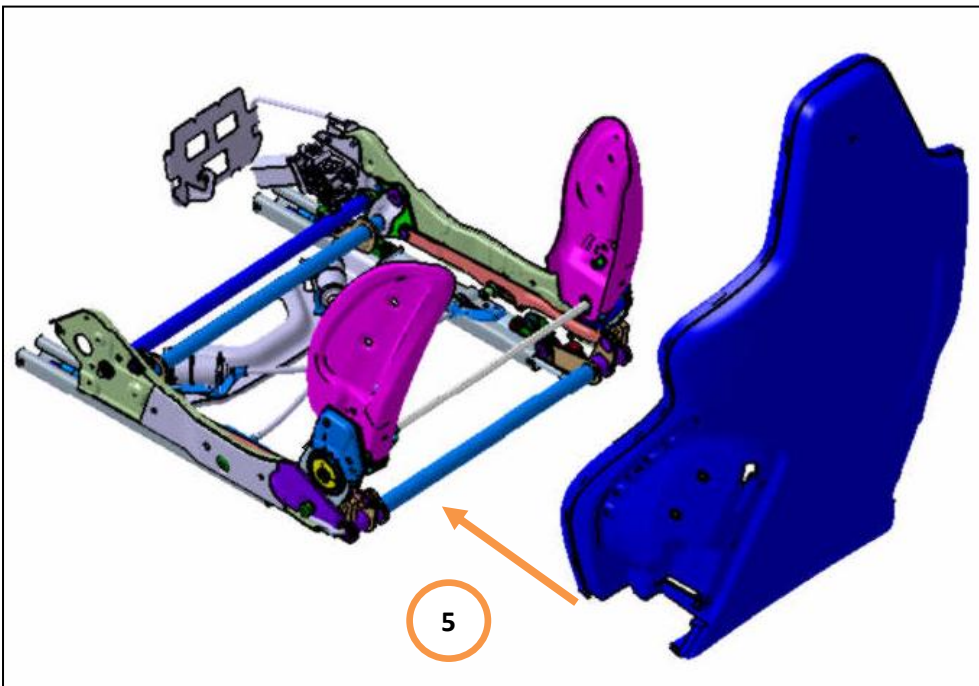
2. Install bolt with washer (2) and nut (3), 11N3158CP. Apply torque of 21Nm. Repeat process on all corners of the seat frame.



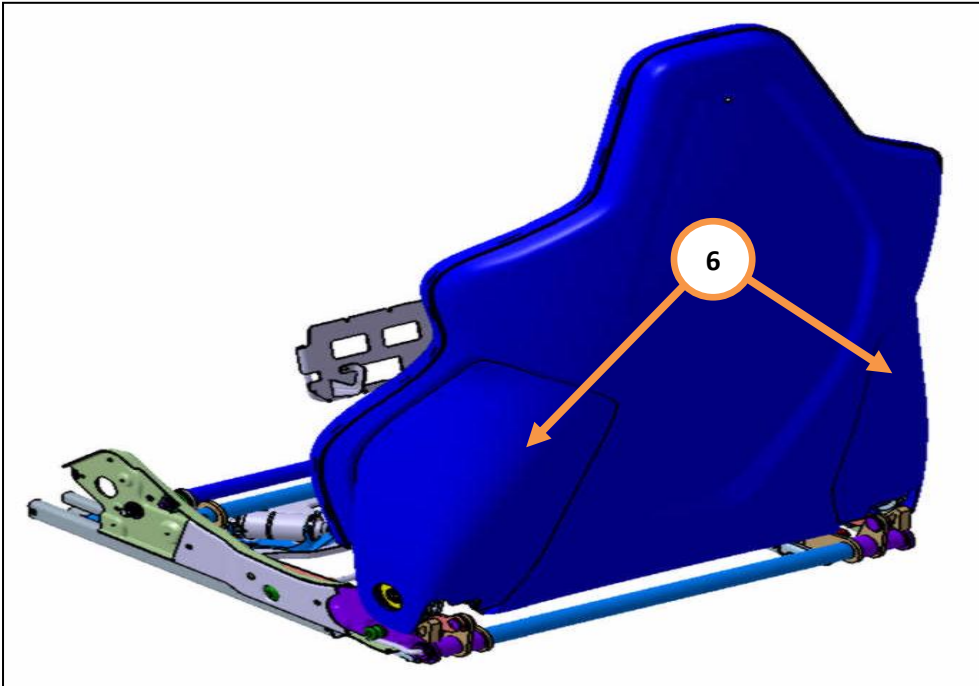
3. Install seat harness 11N3143CP or 11N3144CP by using the old harness as a guide for routing.
4. Connect the new harness to the seat back adjust motor (4).



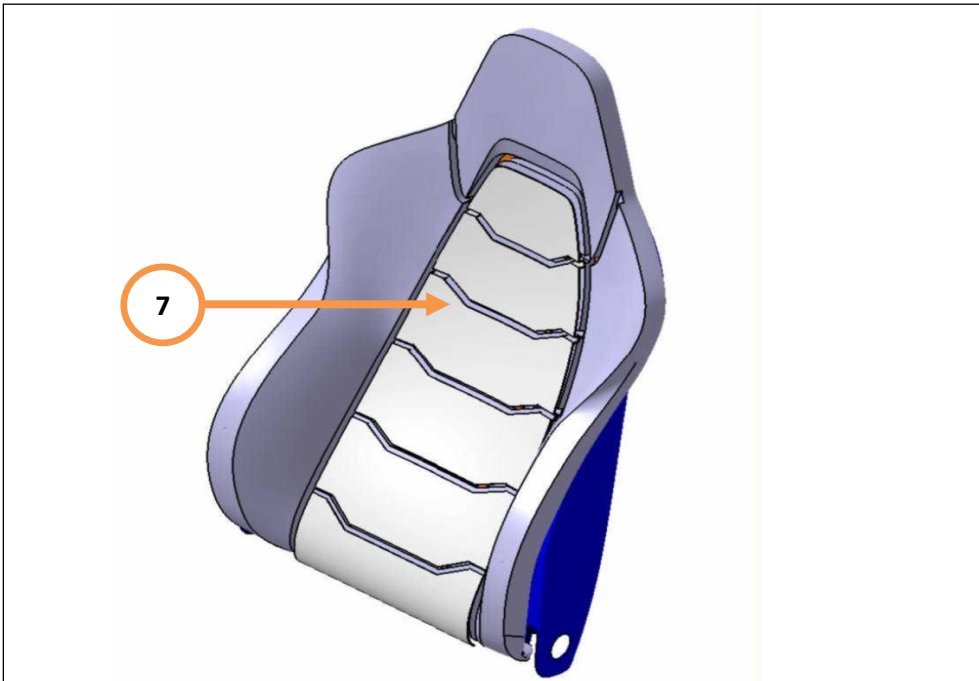
5. Install seat back shell to recliner (5).



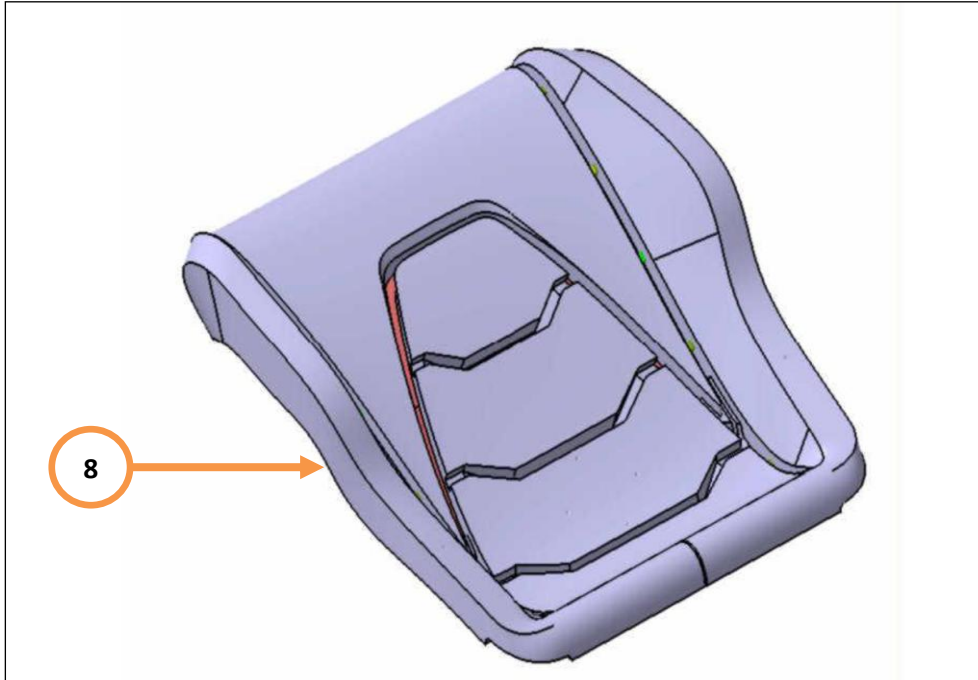
6. Install both side panels (6) using the original bolts.



7. Refit seat cover back (7).

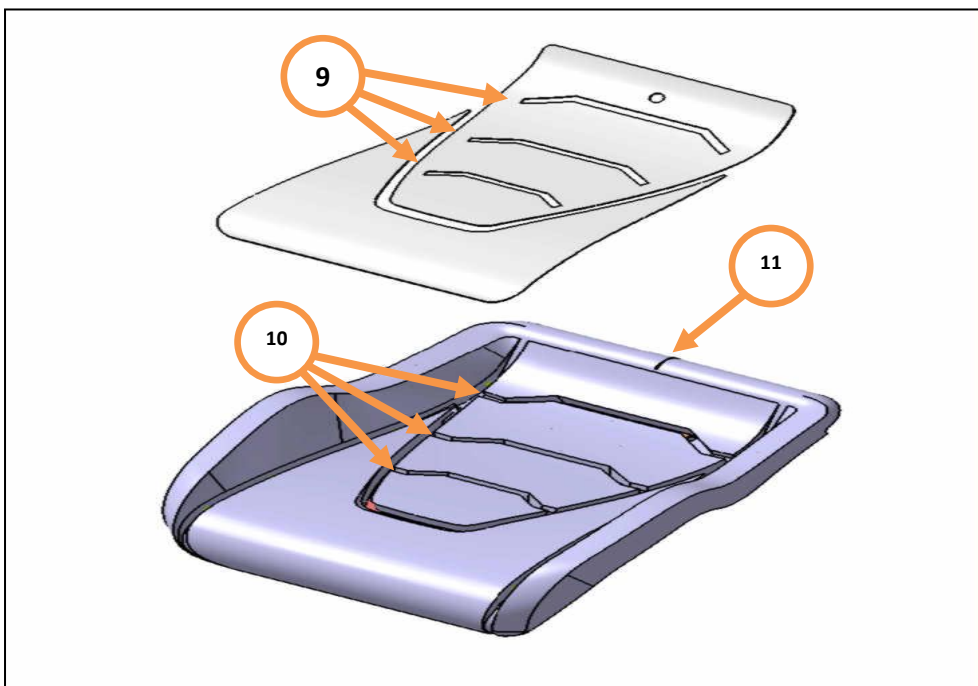


8. Use the new seat base foam 11N3145CP (8).



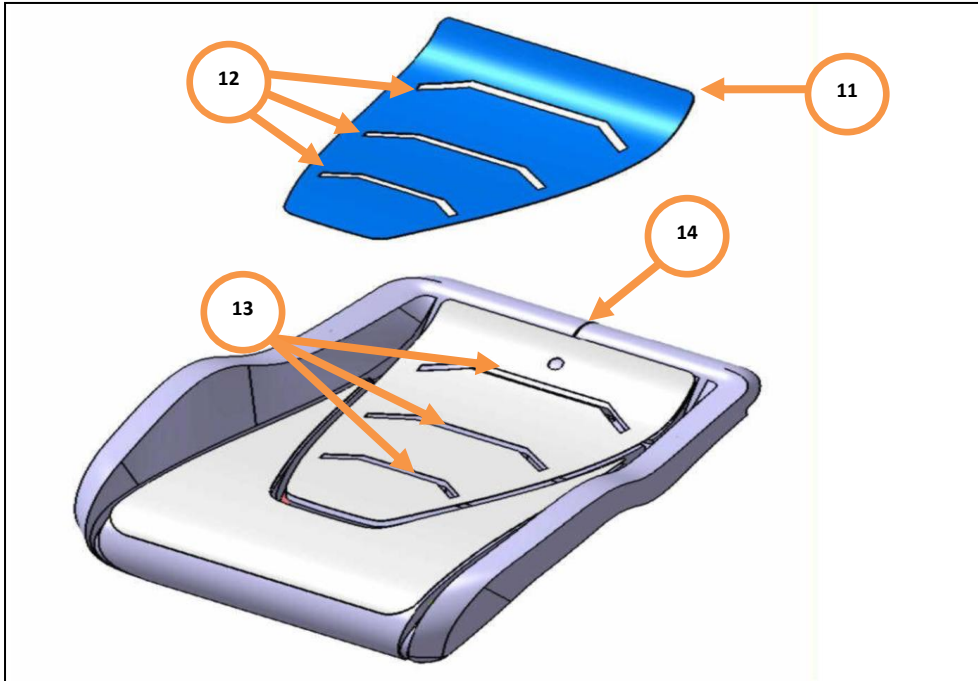
Care Point: Use the adhesive tape fixed on the heating element mat base.

9. Install the heating element mat base on the seat base foam. Follow the contours of the seat base foam and then mount the thin lateral stripes (9) in the fixation channels (10) on both sides. Guide the cable through cutout on rear of seat base foam (11).



Care Point – Use the adhesive tape fixed to IEE sensor mat.

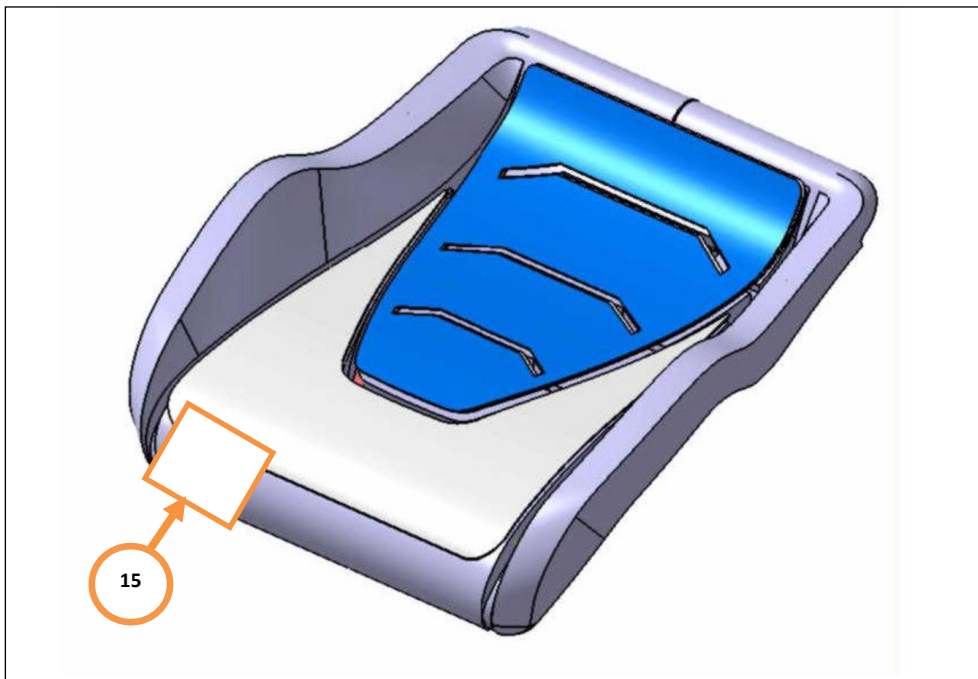
10. Install IEE sensor mat 11N3153CP (11) on to the seat heating element. Follow the contours of the seat heating element and mount the thin lateral stripes (12) in to the fixation channels (13). Guide the harness through heating element mat base and cutout on rear of the seat base foam (14).



Care Point: Stick second foam pad on top of the first pad. Pads have an adhesive backing.

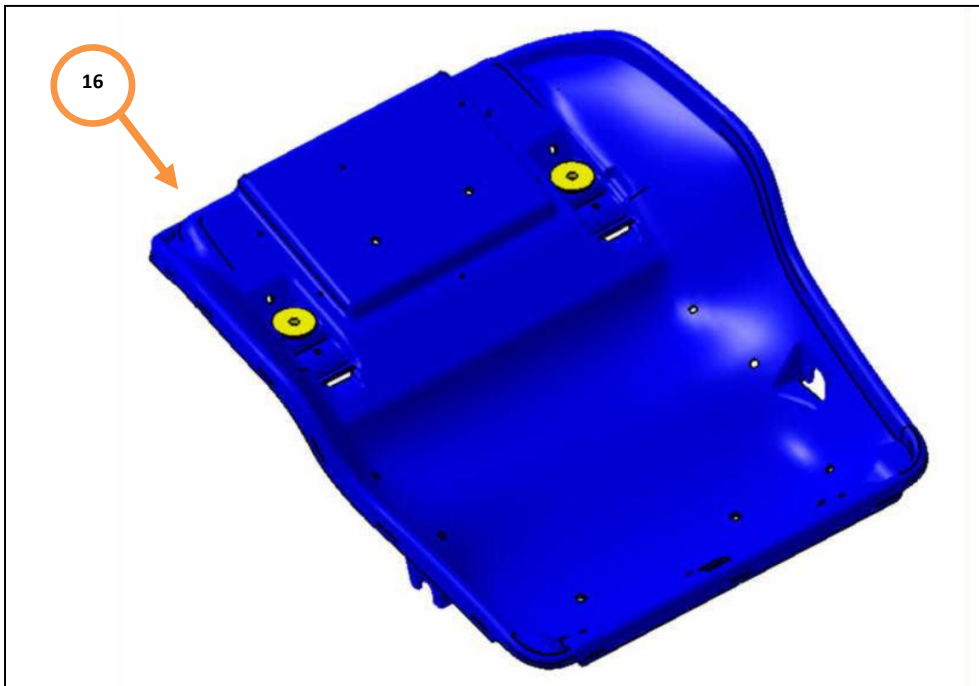
Care Point: Foam pads can be transferred from old seat cushion. Be careful not to damage the foam pads when removing them from the old cushion.

11. Install two foam pads to the area where the switch pack will be installed (15).

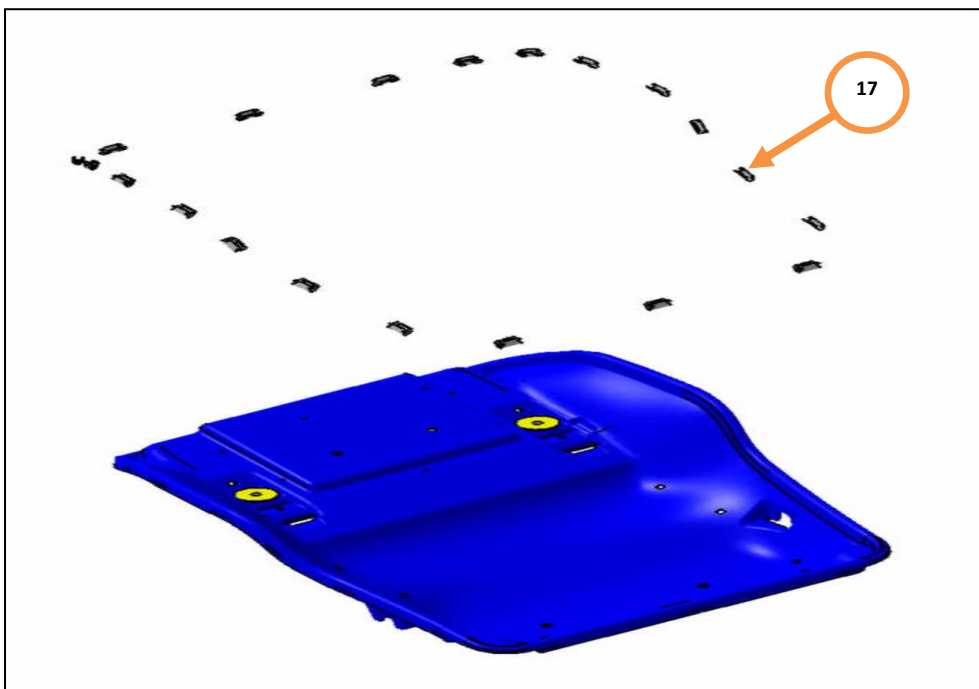


12. Seat base foam assembly is now ready for use.

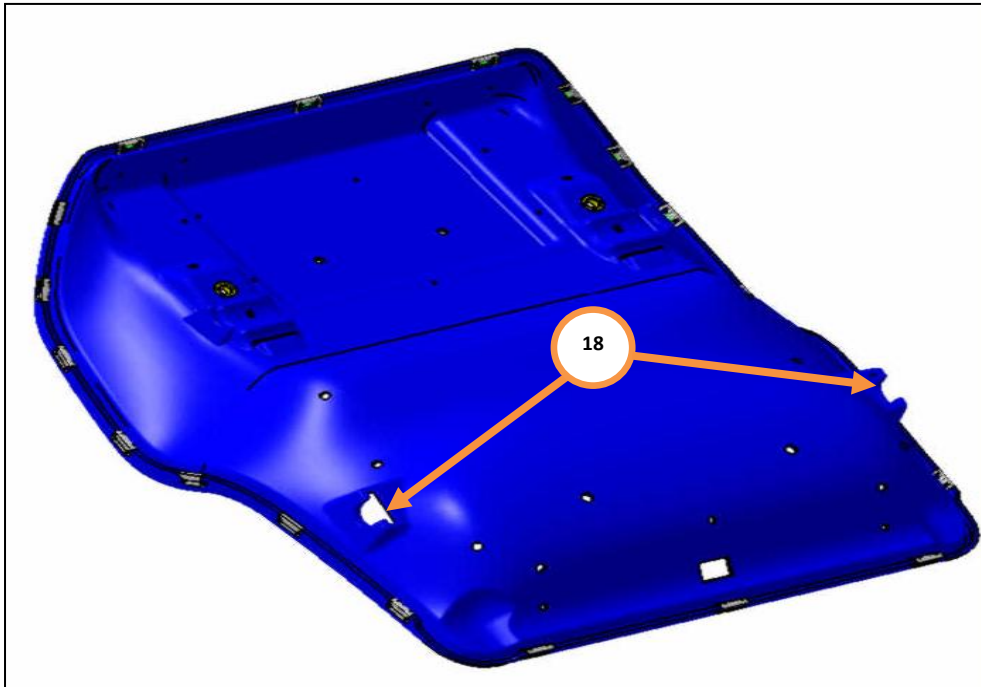
13. Use the new seat base plastic pan IEE 11N3154CP (16).



14. Transfer the clips (approximately 20pcs) from the old pan in to the new one (17).

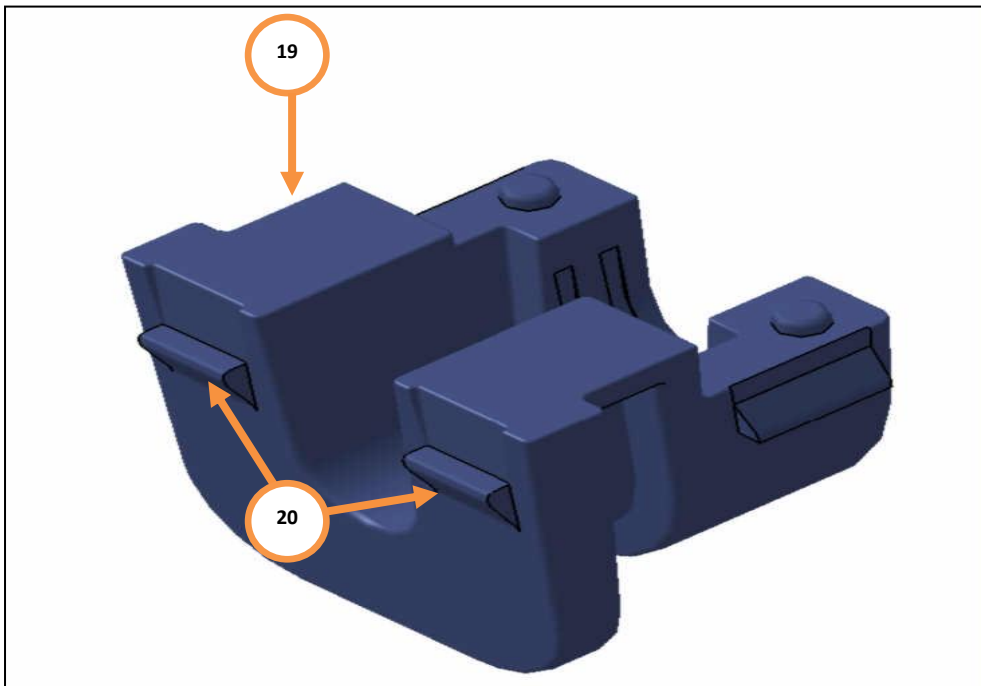


15. Turn the seat pan upside down and check if the rear bushings are already pre-assembled in the seat pan (18). If yes, proceed to step 20.

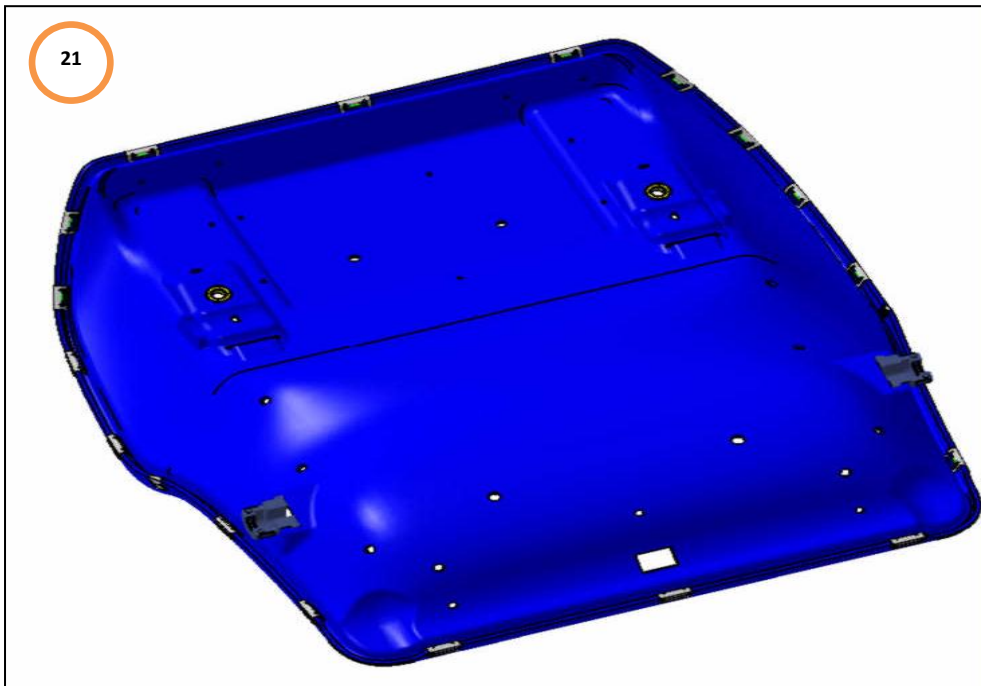
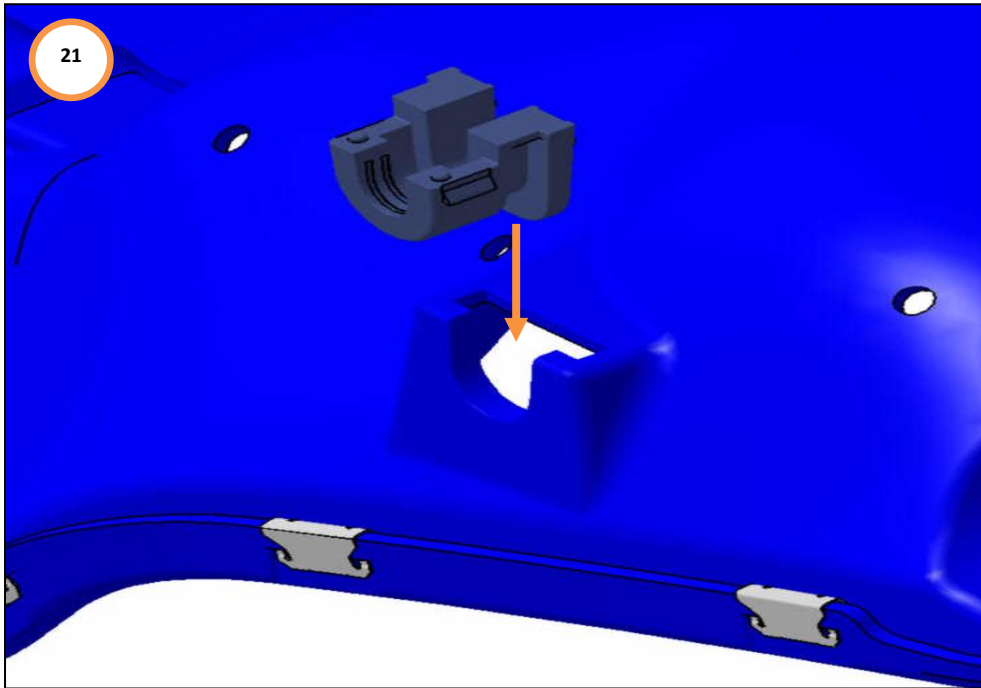


16. Get the two rear bushings (19) (available at the seat base fixing kit 11N3155CP).

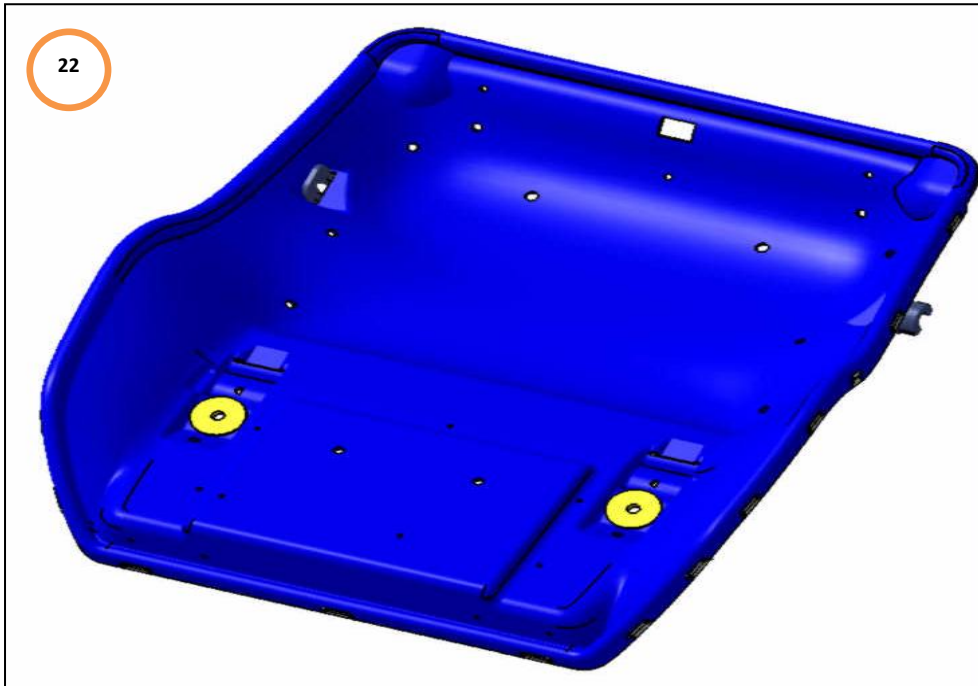
17. Lubricate the clamping area with a thin layer of grease (20).



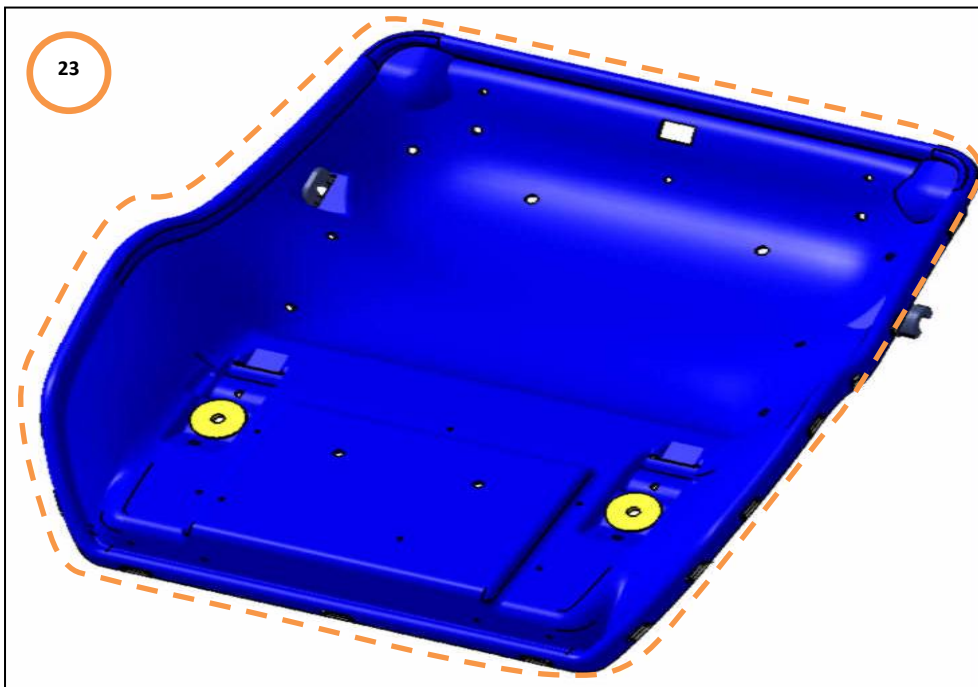
18. With the use of a hammer carefully install the bushings into the seat pan (21).



19. Turn the seat pan upside down, the inner side pointing upwards (22).

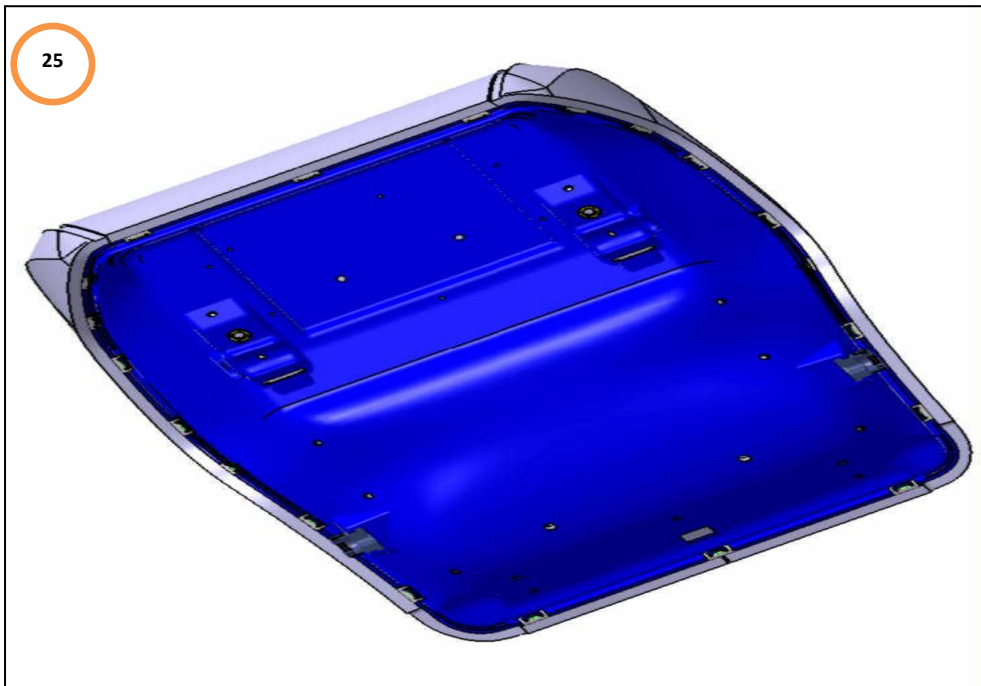
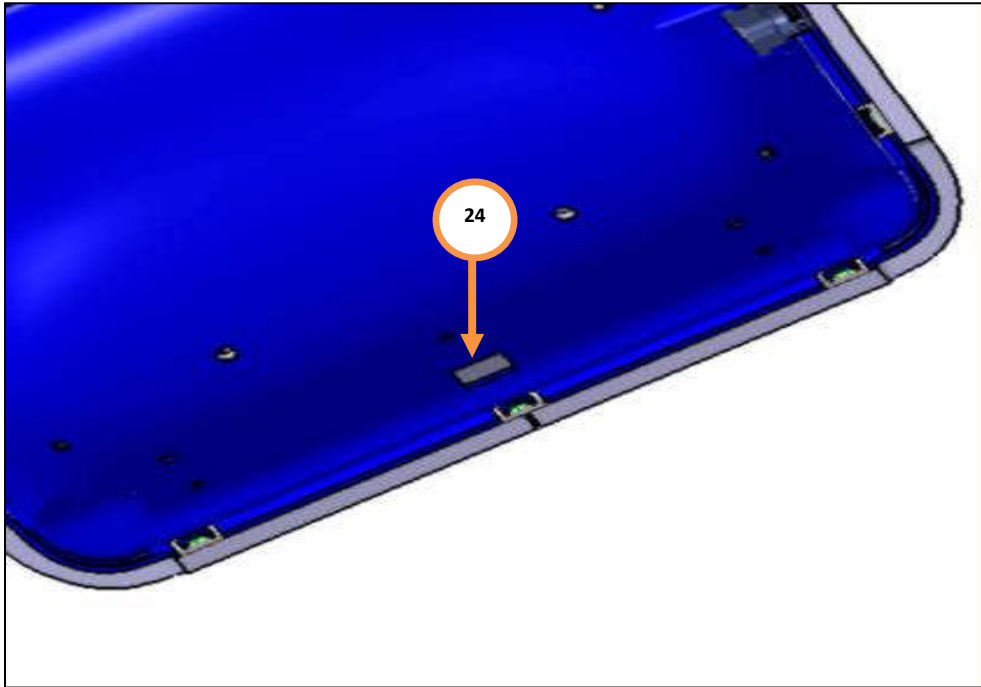


20. Apply some glue all around the seat pan in the trim area (23).

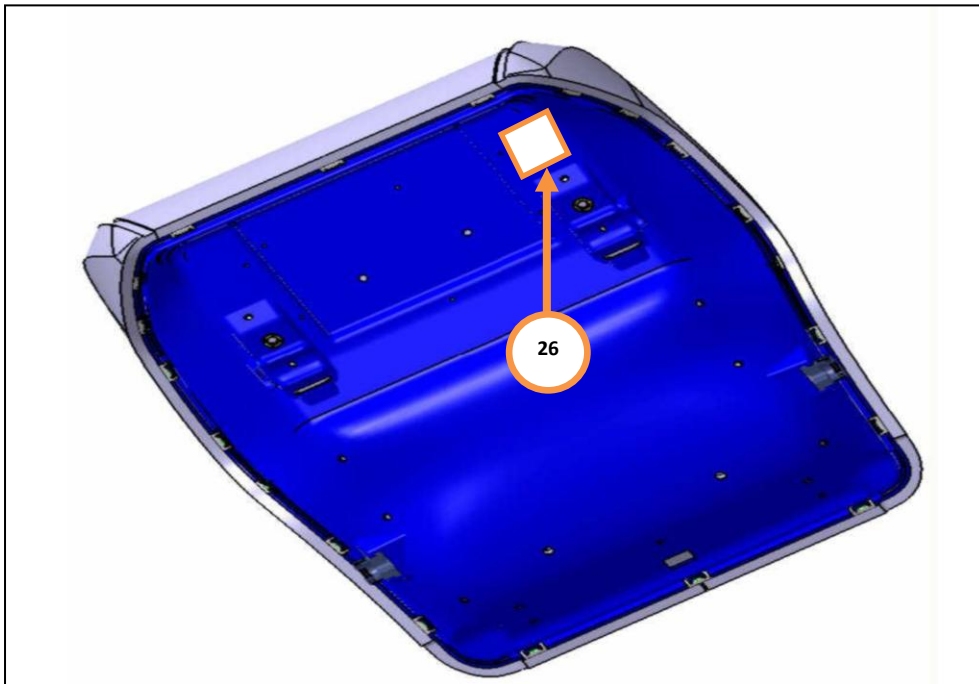


Care Point: Ensure harness is routed through the square cut out at the rear of the seat pan (24).

21. Get the seat base foam assembly and install it on the seat pan. Press seat base foam firmly against the glue stripe (25).

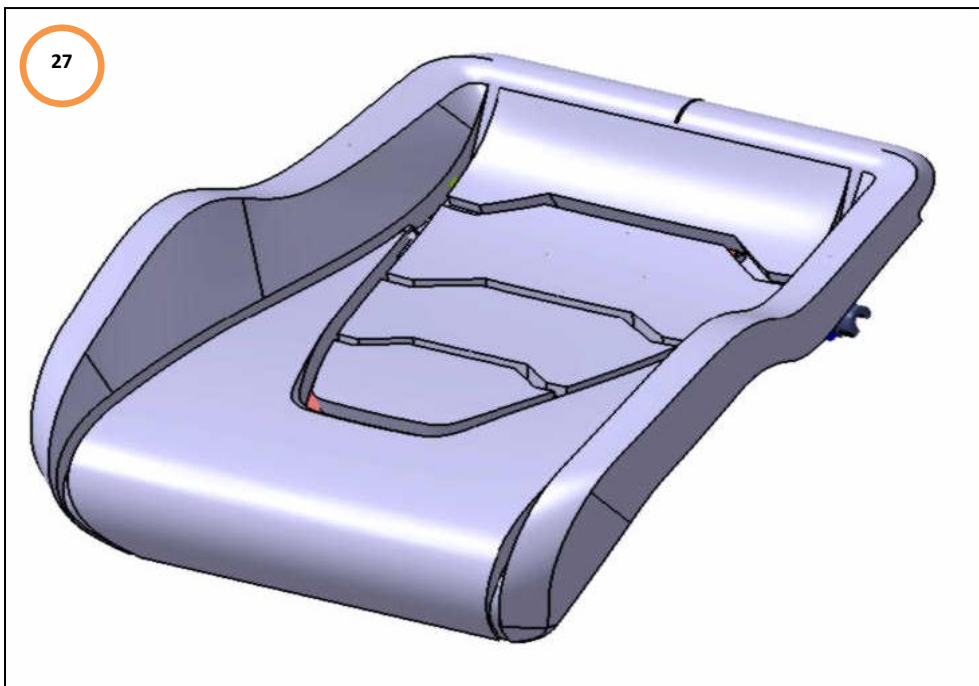


22. Remove sticker from IEE mat and stick it on lower side of seat pan on the opposite side to the switch pack (26).

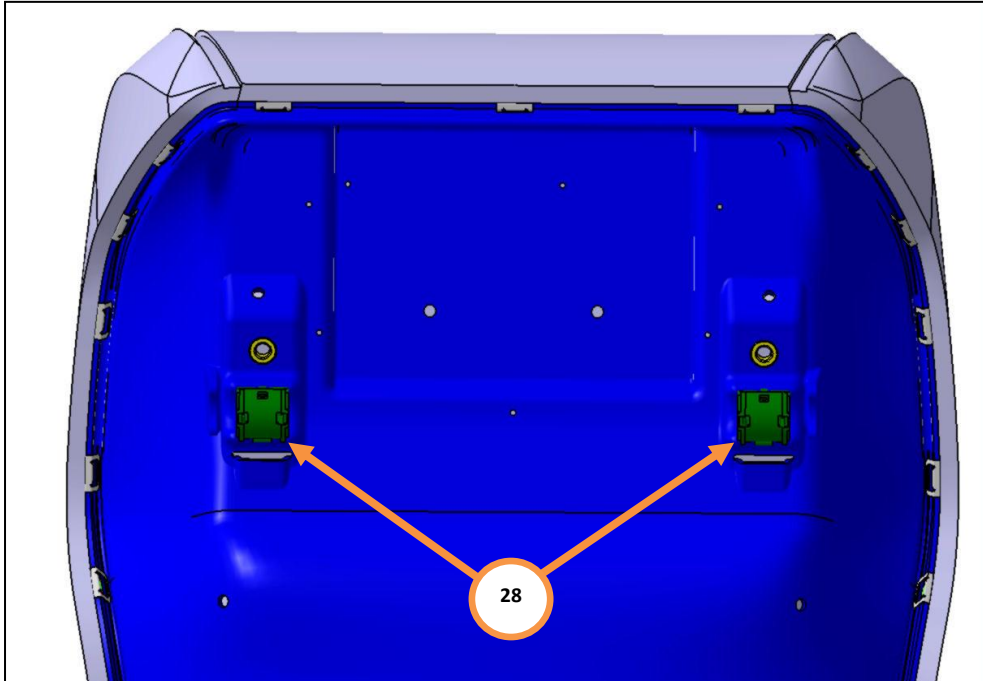


Care Point: If the trim cover is stretched or if it doesn't fit quite well enough, a hot air fan can be used to manipulate the trim cover surface.

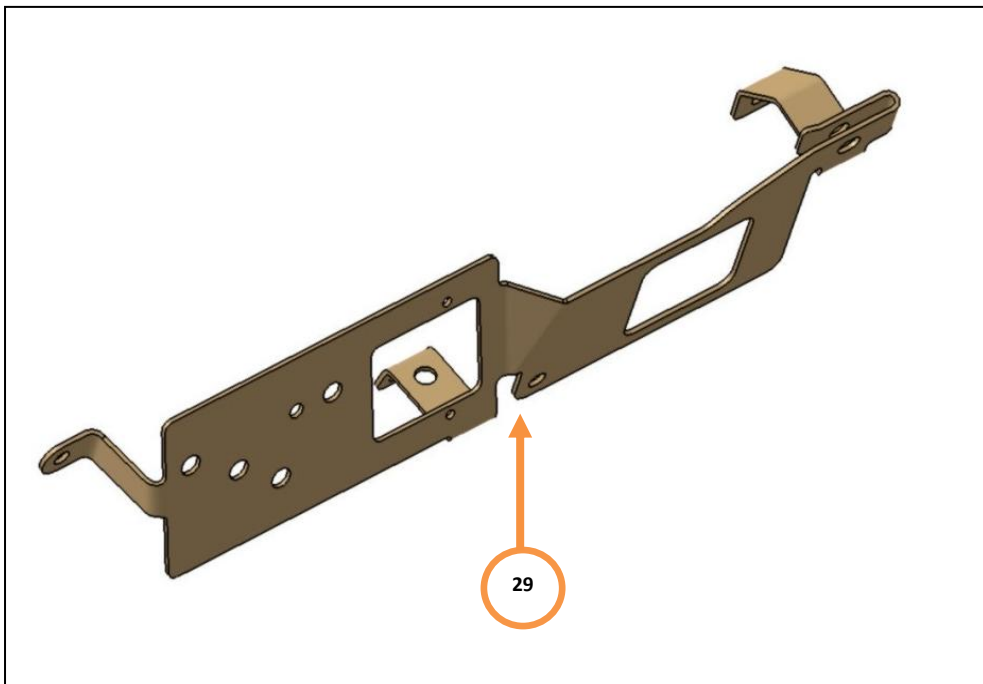
23. Install trim cover and mount from inner to outer side. First mount trim cover to fixation channels and then mount retention strips to clamps in foam. Finally pull trim cover over outer edges of seat pan and clip into circumferential groove (27).



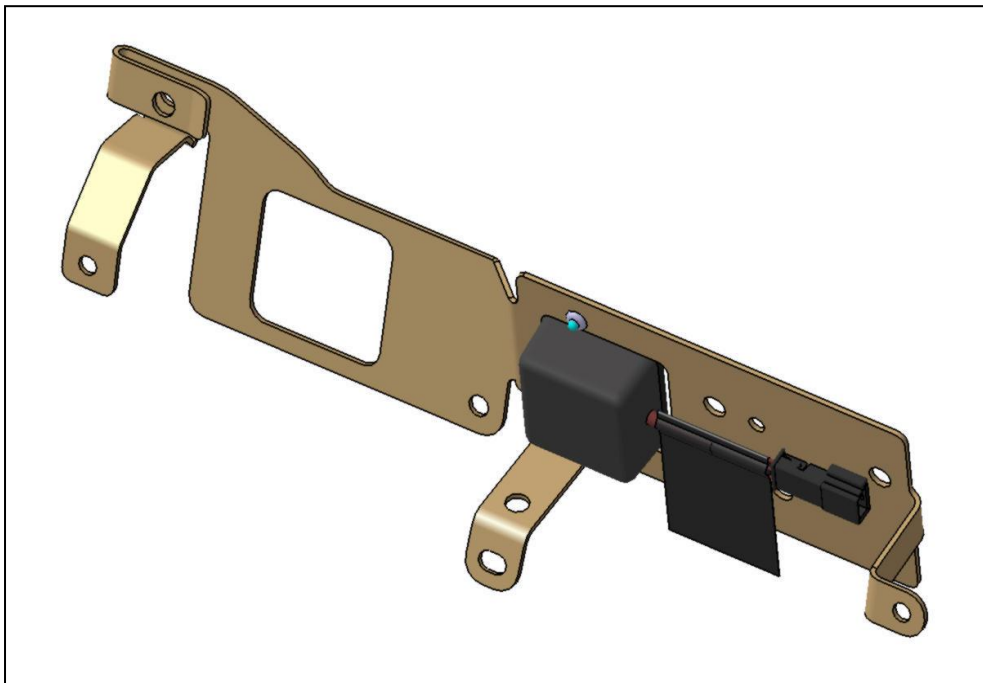
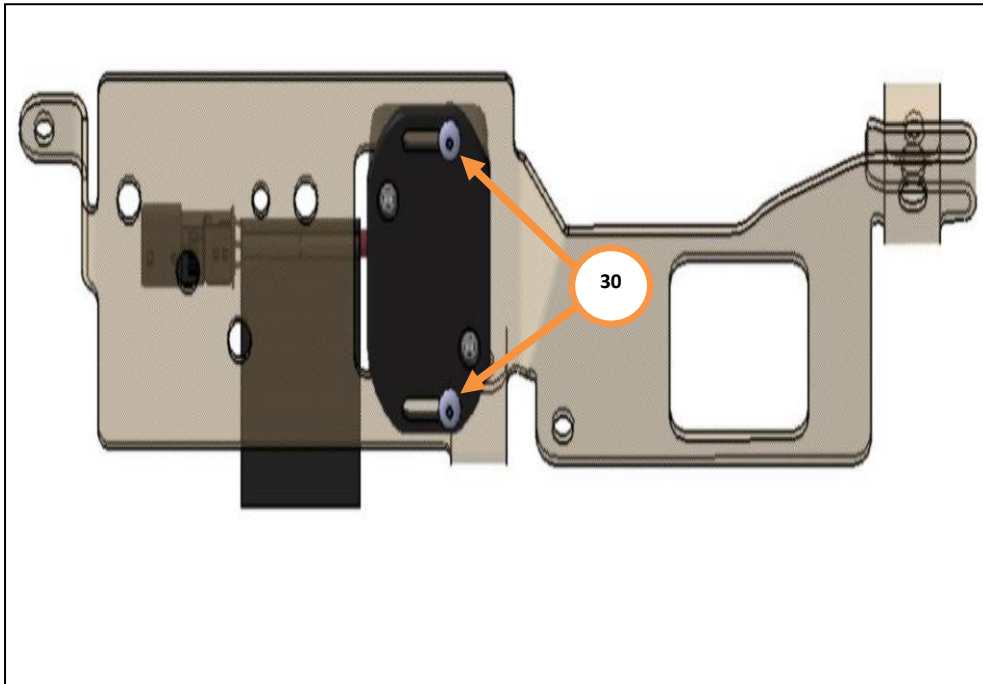
24. Install the two front bushings (available at the seat base fixing kit 11N3155CP) (28).



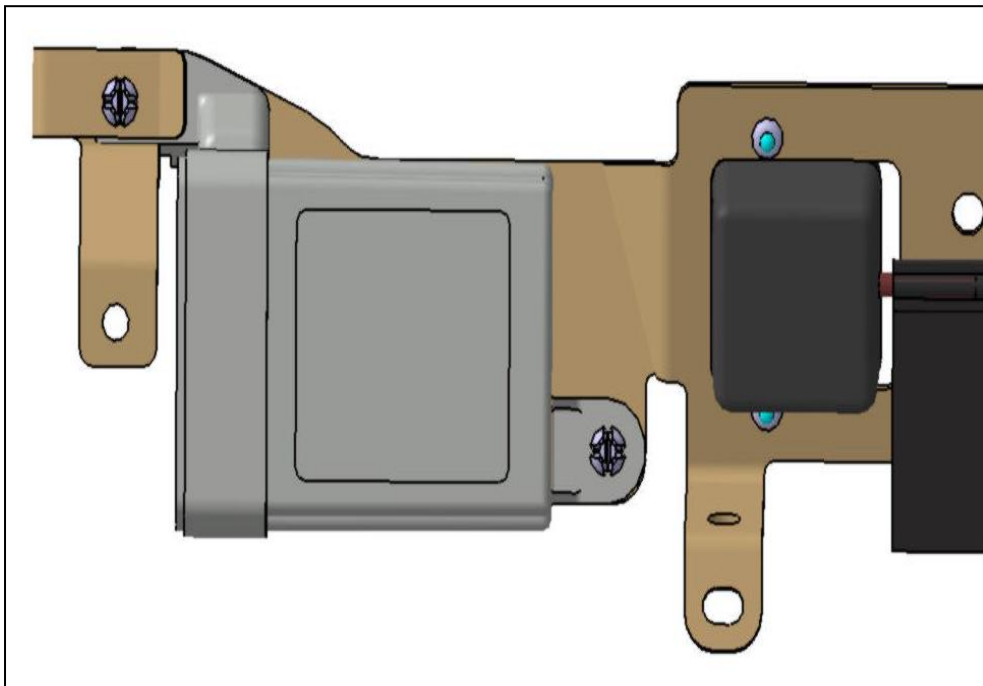
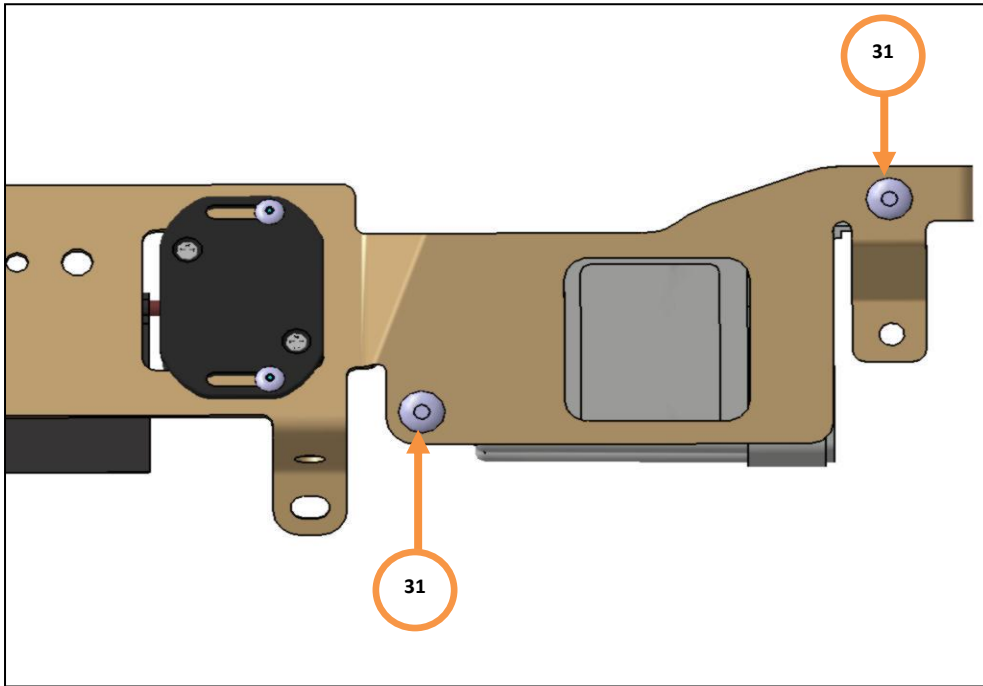
25. Get the bracket-electronic 11N3159CP (29).



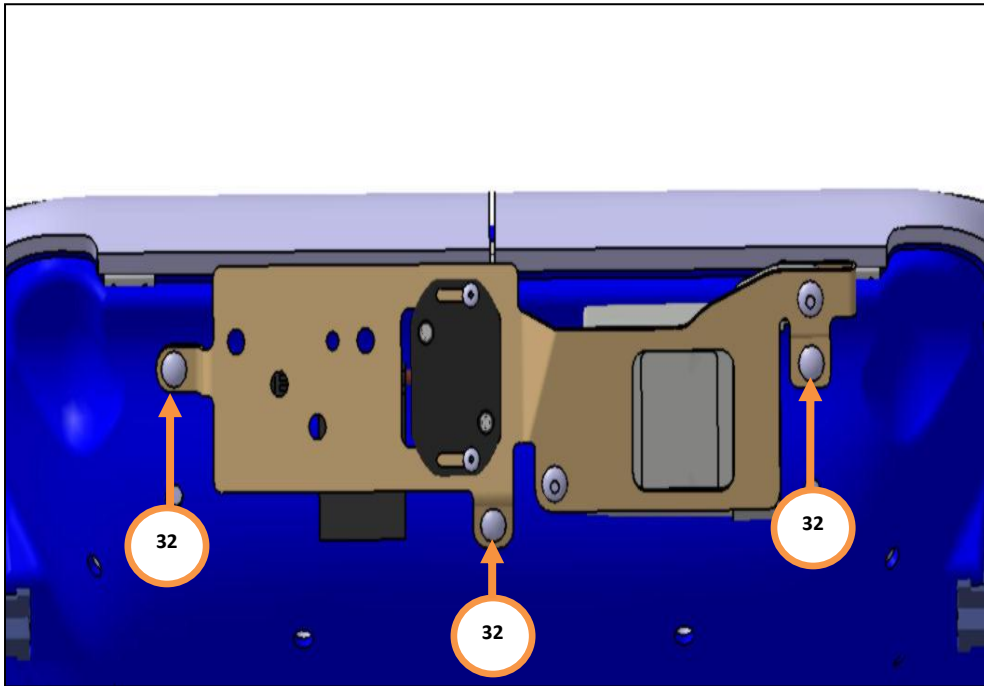
26. Install the pull-up circuit 11N3156CP to the bracket using the two rivets supplied in the kit (30).



27. Install IEE OCS module 11N3133CP to the bracket using the two expanding pins supplied in the kit (31).

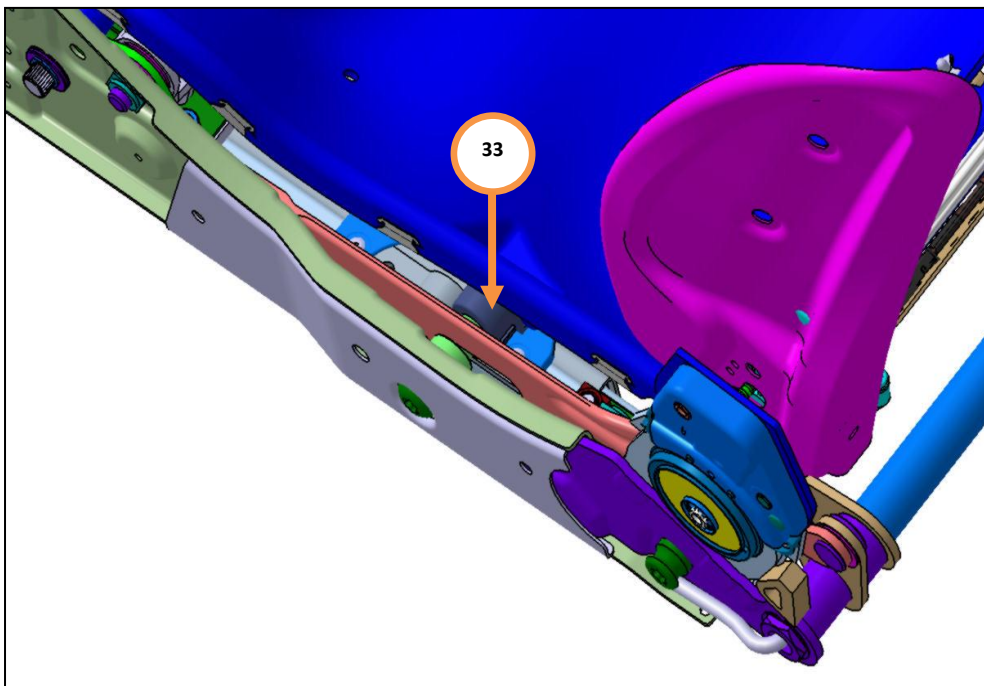


28. Install the bracket assembly into the seat base using the three rivets supplied in the kit (32).

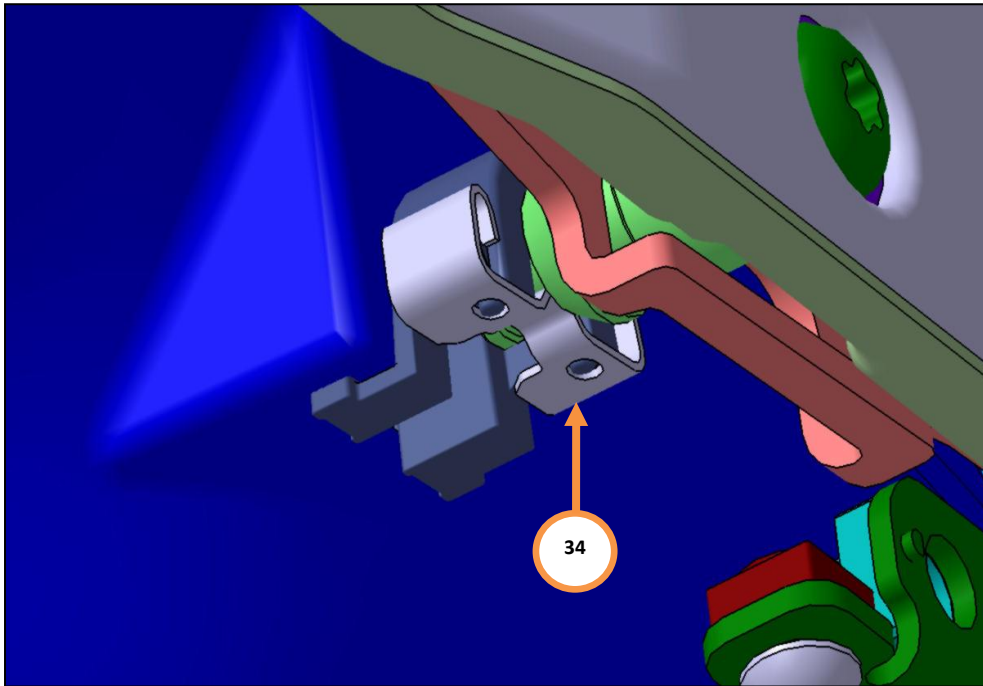


29. Mount the seat base assembly into the seat frame.

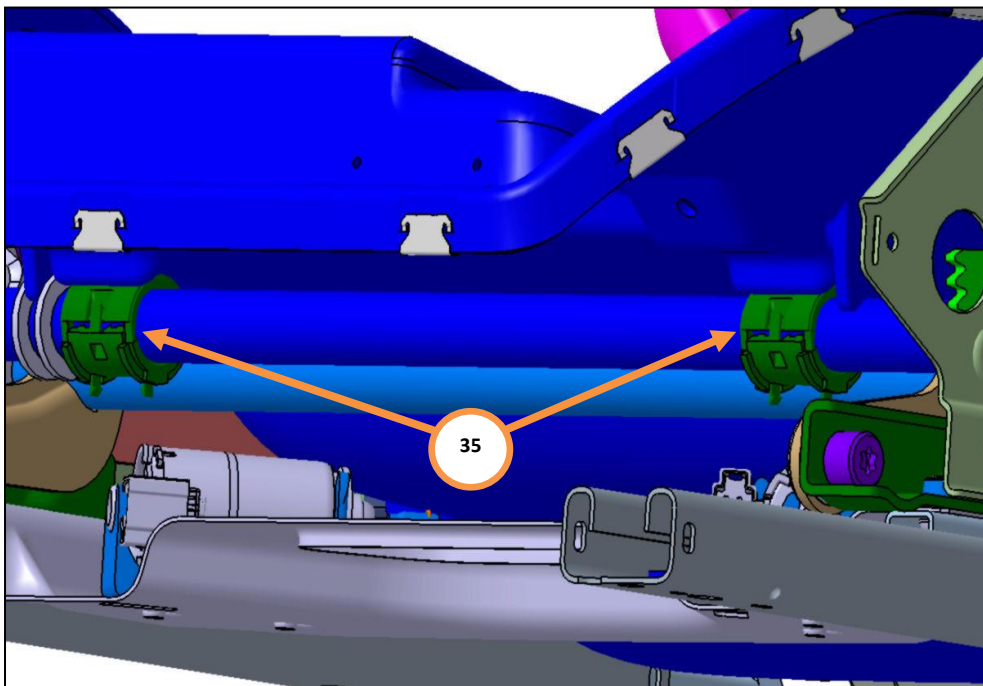
30. Install the seat base over the side frame bolts (33).



31. Secure the seat base with the two retaining clips (available at the seat base fixing kit 11N3155CP) (34).

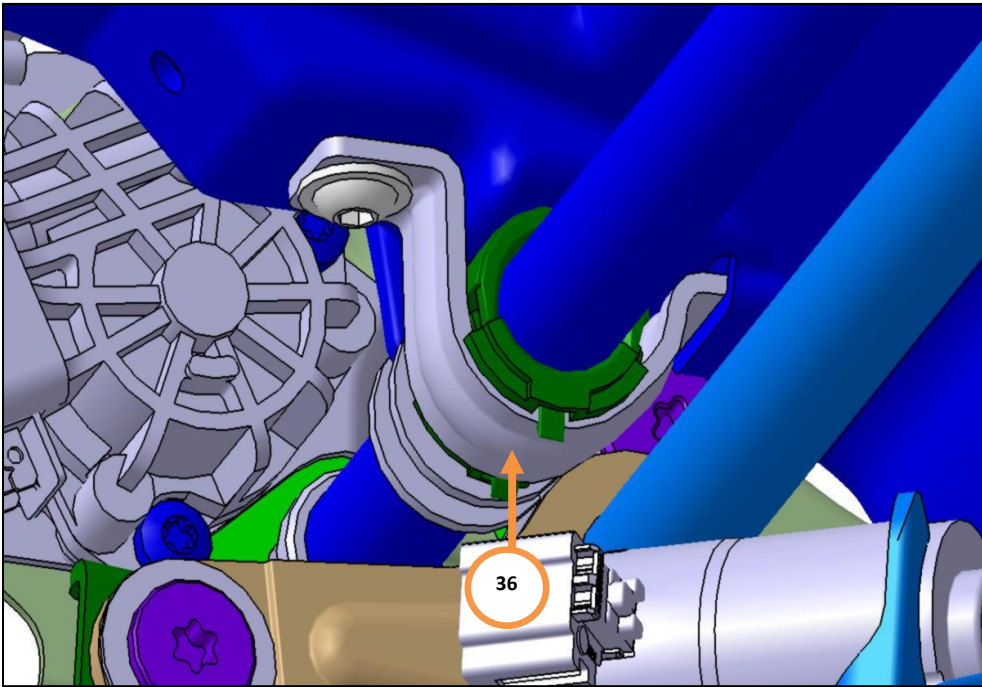


32. Secure the two front bushings (35) around front tube and ensure that they are firmly closed.



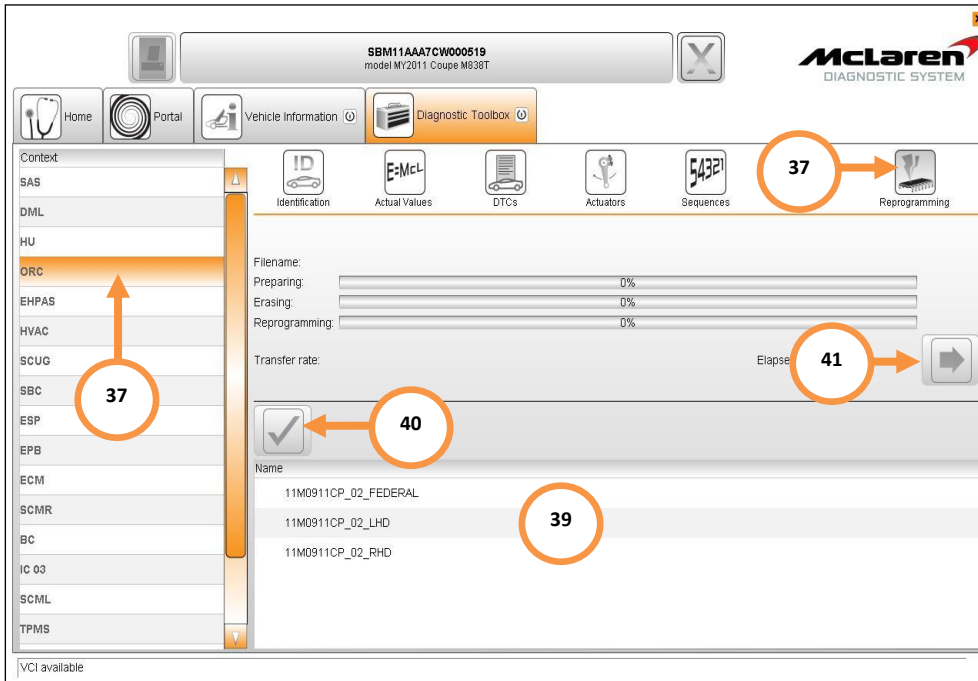
Care Point: Please ensure that the new bolts have pre-encapsulated Loctite applied to them. If not, apply Loctite 243 to each thread.

33. Install the two U-brackets (36) and secure them with the screws supplied (available at the seat base fixing kit 11N3155CP). Apply torque of 24Nm +/- 1 Nm.



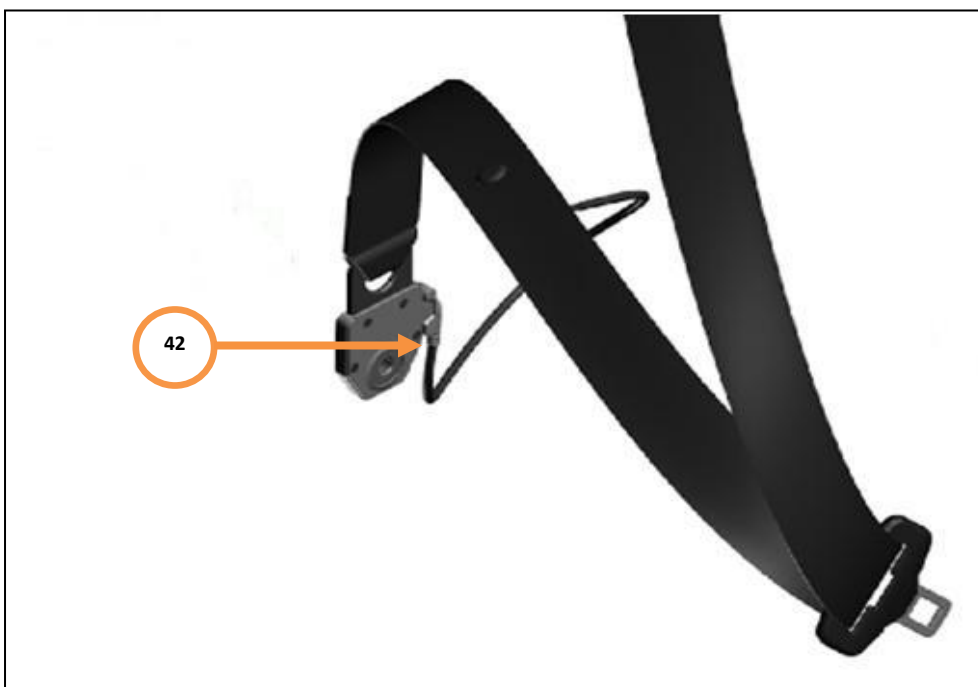
34. Connect the new harness to all peripheral units of the seat (module, heating mat, belt buckle, height adjuster switch, height adjuster motor, switch pack, length adjuster motors).

35. Replace the ORC module – Please refer to AA-RM-05M03-01-009 - Remove/install control unit - Occupant restraint controller.
36. Select ORC_02 (37), then Reprogramming (38), select the software variant applicable to the vehicle (39) then proceed to the software download by selecting the tick button (40), followed by the arrow button (41). Select 'YES' to initiate programming.

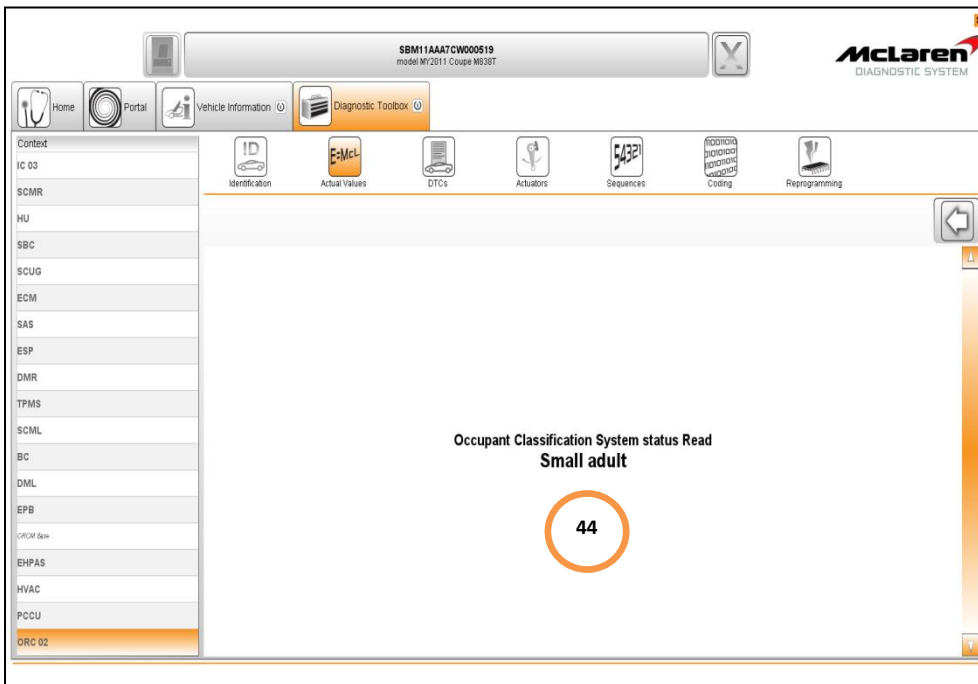
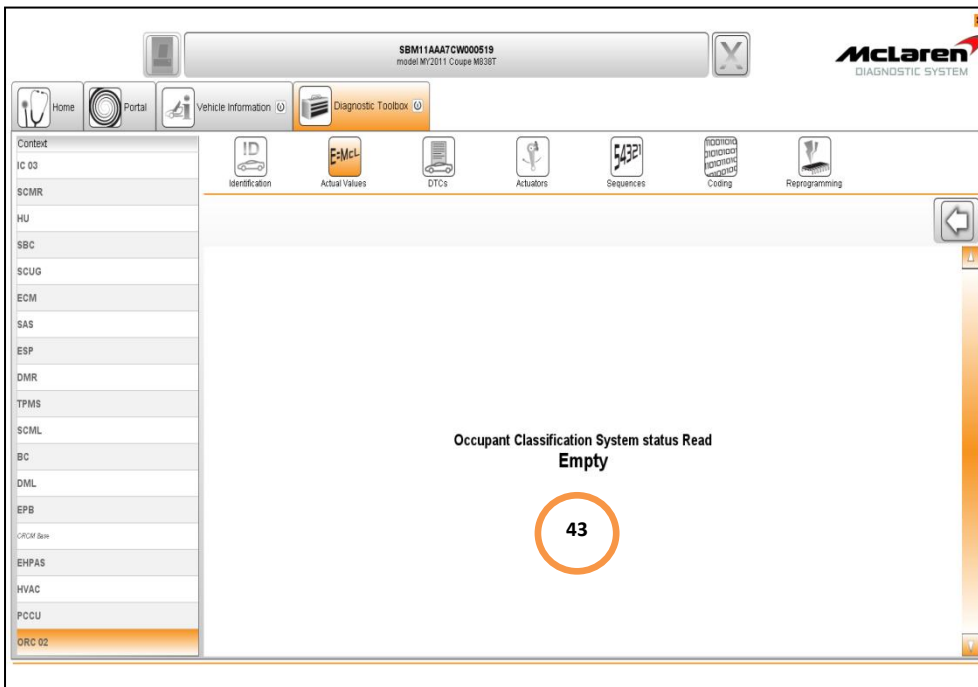


Care Point: Ensure that the cut cable is not visible to the customer.

37. BTS cable (42) must be cut close to the BTS sensor.



38. Check functionality of the system after reprogramming of the ORC module. Enter to ORC_02 / Actual Values and check the Occupant Classification System status read. The reading should change from Empty (when seat is empty) (43) to Small adult (when seat is occupied) (44).



39. Install components in reverse order.

Please contact your Regional Aftersales Manager should you have any questions relating to the information contained in this bulletin.

Warranty Information: Please ensure that all parts removed from the seat during the conversation will be returned to McLaren via the normal parts warranty return route.

WARRANTY INFORMATION

DESCRIPTION	RESOLUTION CODE	TOTAL REPAIR TIME
Conversion to Capacitance Mat IEE	N0N301D9A33B4H01	5.0 hours

PARTS INFORMATION

PART DESCRIPTION	PART NUMBER	QUANTITY	ORDER PROCESS
Control Unit ORC Airbag	11M2359CP	1	Unipart
IEE Upgrade Kit – Manual seat	11N3567CP	1	Unipart
IEE Upgrade Kit – Electric seat	11N3568CP	1	Unipart
