

SSV KIT - Smart Locker Kit Defender MY16 to MY18


Part number (SKU) : 715005331

Product:	Side-by-side
Project no:	487802965
Instruction Sheet P/N:	487802965
Revision no:	
Revision date:	
Item covered:	Smart Locker Kit Defender MY16–18

The following symbols may be used in this document:

 **WARNING**

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION:** Indicates a hazard situation which, if not avoided, could result in minor or moderate injury.

NOTICE Indicates an instruction which, if not followed, could severely damage vehicle components or other property.

 **WARNING**

- For safety reasons, this kit must be installed by an authorized BRP dealer.
- This kit is designed for specific applicable models only (authorized BRP dealers will confirm model(s)). It is not recommended for units other than the one (those) for which it was sold.
- Should removal of a locking device (e.g. lock tabs, self-locking fasteners, etc.) be required when undergoing disassembly/assembly, always replace with a new one.
- Torque wrench tightening specifications must strictly be adhered to.
- Always wear EYE PROTECTION AND APPROPRIATE GLOVES when using power tools.
- Some components may be HOT. Always wait for engine to cool down before performing work.

 **WARNING**

Some important safety information and/or operating instructions dedicated to the end user might be included in this instruction sheet. Make sure to give the kit part number as well as the instruction sheet included with this kit to the customer. Verify that the customer has access to all the information required for proper use of the accessory.

NOTE: USE TIGHTENING TORQUES IN THE FOLLOWING TABLE IF NOT OTHERWISE SPECIFIED.

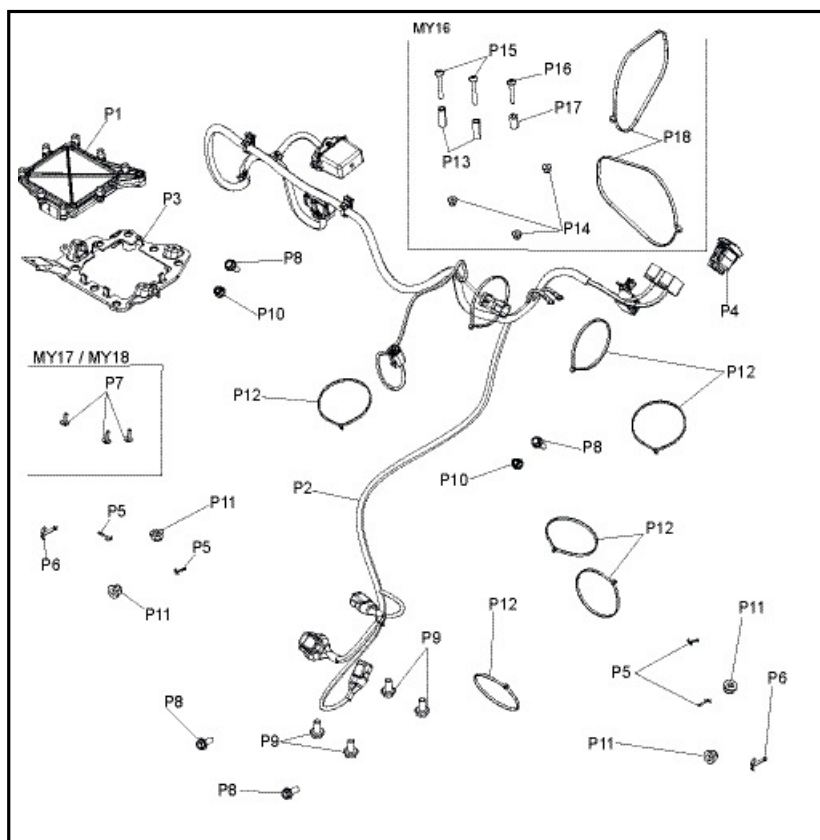
	GRADE			
	5.8	8.8	10.9	12.9
M4	1.8 ± 0.2 N•m (16 ± 2 lbf•in)	2.8 ± 0.2 N•m (25 ± 2 lbf•in)	3.8 ± 0.2 N•m (34 ± 2 lbf•in)	4.5 ± 0.5 N•m (40 ± 4 lbf•in)
M5	3.3 ± 0.2 N•m (29 ± 2 lbf•in)	5 ± 0.5 N•m (44 ± 4 lbf•in)	7.8 ± 0.7 N•m (69 ± 6 lbf•in)	9 ± 1 N•m (80 ± 9 lbf•in)
M6	7.5 ± 1 N•m (66 ± 9 lbf•in)	10 ± 2 N•m (89 ± 18 lbf•in)	12.8 ± 2.2 N•m (113 ± 19 lbf•in)	16 ± 2 N•m (142 ± 18 lbf•in)
M8	15.3 ± 1.7 N•m (135 ± 15 lbf•in)	24.5 ± 3.5 N•m (18 ± 3 lbf•ft)	31.5 ± 3.5 N•m (23 ± 3 lbf•ft)	40 ± 5 N•m (30 ± 4 lbf•ft)
M10	29 ± 3 N•m (21 ± 2 lbf•ft)	48 ± 6 N•m (35 ± 4 lbf•ft)	61 ± 9 N•m (45 ± 7 lbf•ft)	73 ± 7 N•m (54 ± 5 lbf•ft)
M12	52 ± 6 N•m (38 ± 4 lbf•ft)	85 ± 10 N•m (63 ± 7 lbf•ft)	105 ± 15 N•m (77 ± 11 lbf•ft)	128 ± 17 N•m (94 ± 13 lbf•ft)
M14	85 ± 10 N•m (63 ± 7 lbf•ft)	135 ± 15 N•m (100 ± 11 lbf•ft)	170 ± 20 N•m (125 ± 15 lbf•ft)	200 ± 25 N•m (148 ± 18 lbf•ft)
M16	126 ± 14 N•m (93 ± 10 lbf•ft)	205 ± 25 N•m (151 ± 18 lbf•ft)	255 ± 30 N•m (188 ± 22 lbf•ft)	305 ± 35 N•m (225 ± 26 lbf•ft)
M18	170 ± 20 N•m (125 ± 15 lbf•ft)	273 ± 32 N•m (201 ± 24 lbf•ft)	330 ± 25 N•m (243 ± 18 lbf•ft)	413 ± 47 N•m (305 ± 35 lbf•ft)

The illustrations in this document show typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts; however, they represent parts that have the same or similar function.

In the pictures below, parts may have been removed for clarity purposes.

Installation time is approximately 3.0 hour.

PARTS TO BE INSTALLED



ITEM	DESCRIPTION	Part number	QTY
P1	FDM module	710006479	1
P2	Front differential wiring harness	710005724	1
P3	FDM support	710005532	1
P4	4x4 mode differential switch	710006040	1
P5	Cotter pin	211400017	4
P6	Cotter pin	250400084	2
P7	PT type K-50 x 16 Screw	250000959	3
P8	M12 Elastic flanged nut	207582044	4
P9	M10 x 20 Flanged screw	207502046	4
P10	M8 Elastic flanged nut	233281414	2
P11	M10 Elastic flanged nut	233201416	3
P12	368mm Locking tie	293750008	15
P13	Spacer	708000664	2
P14	M6 Elastic flanged nut	233261494	3
P15	M6 x 50 Torx screw	250000868	2
P16	M6 x 40 Torx screw	250000780	1
P17	Spacer	517203200	1

INSTRUCTIONS

Vehicle preparation

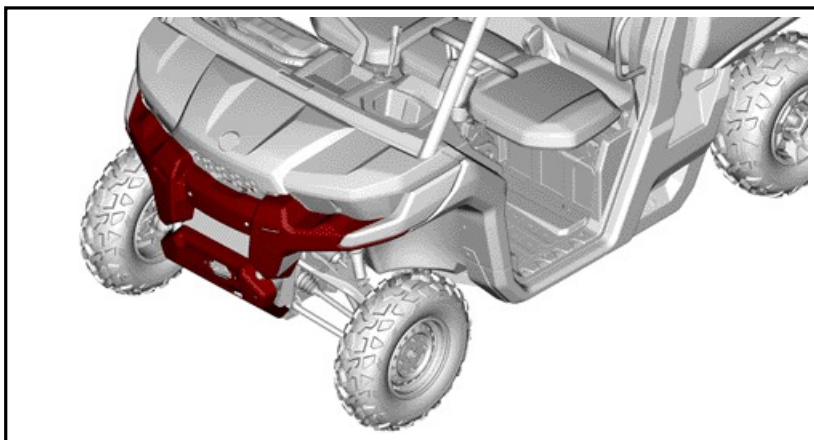
1. Disconnect the battery.

NOTICE Always disconnect battery before doing any electrical modifications. Do not place tools on battery. Proceed exactly in this specific order:

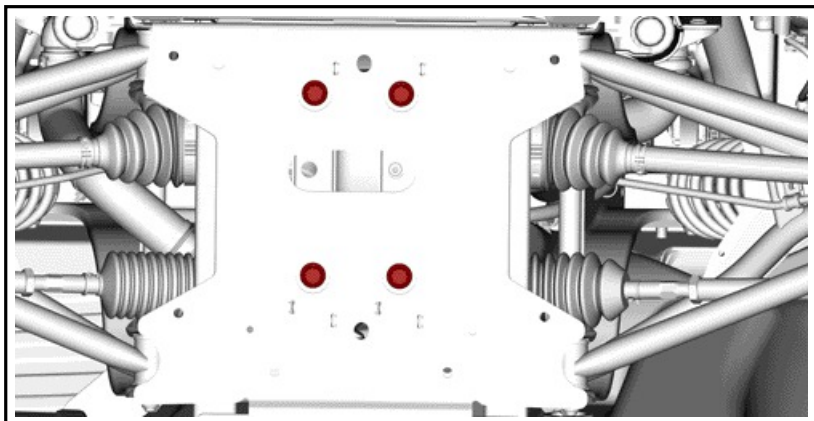
- Disconnect black cable (-) first.
- Disconnect red cable (+) after.

Differential Installation

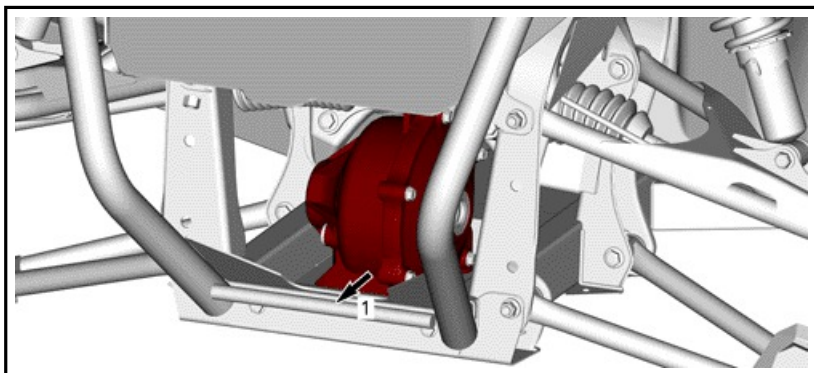
1. Drain the differential. Refer to *PERIODIC MAINTENANCE PROCEDURES* subsection in the shop manual.
2. Remove both drive shafts. Refer to *FRONT DRIVE* subsection in the shop manual.
3. Remove the front bumper. Refer to *FRAME* subsection in the shop manual.



4. Remove the four retaining screws from the bottom skid plate.



5. Remove the differential from the front of vehicle while disconnecting the propeller shaft.



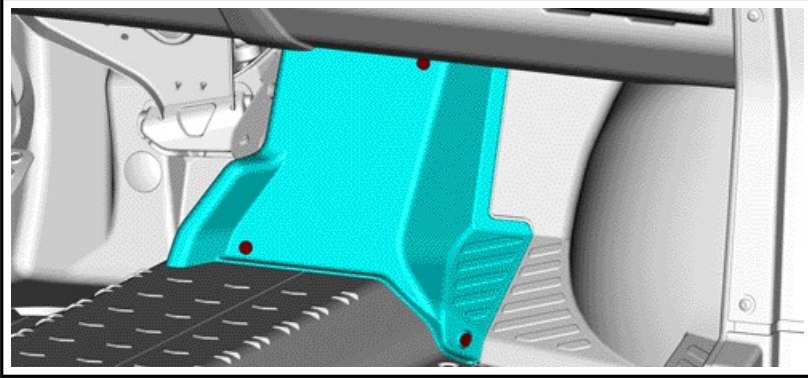
1. Remove

6. Install the new Smart-Lok differential and fix it with the four new bolts in this kit.

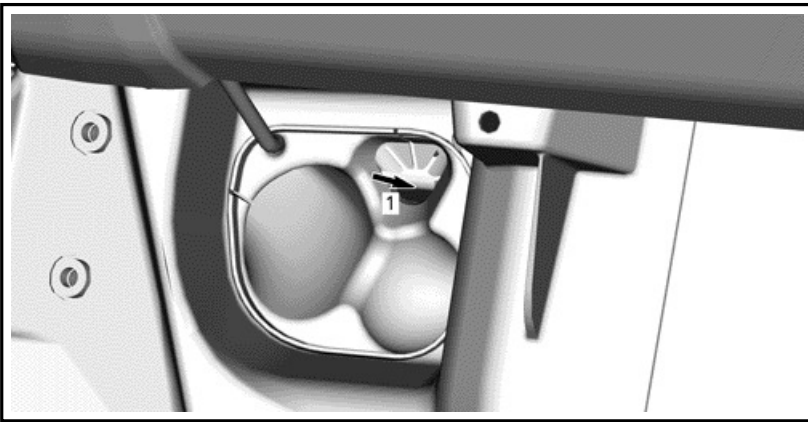
7. Install the new differential with associated half-shafts (sold separately) and reinstall all previously removed parts with provided hardware.

Harness Installation

1. Remove the inside cover of the deflector by removing the four retaining Tuflok plastic rivet.

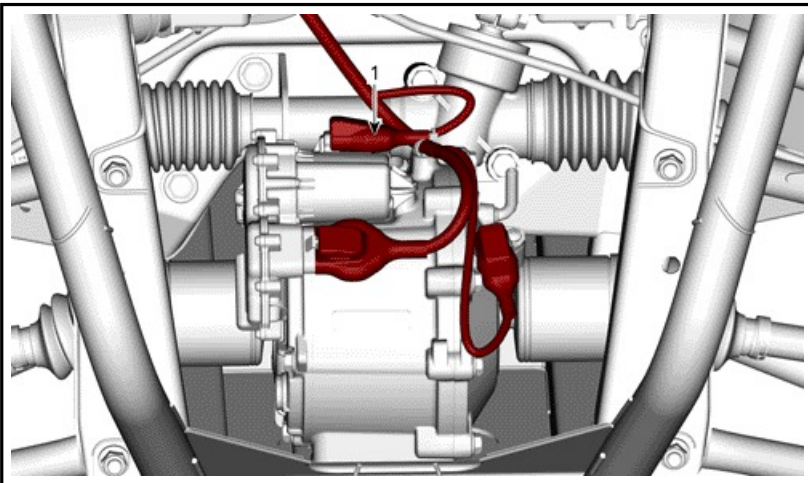


2. Insert the three connectors of the differential harness inside the vehicle by the deflector.



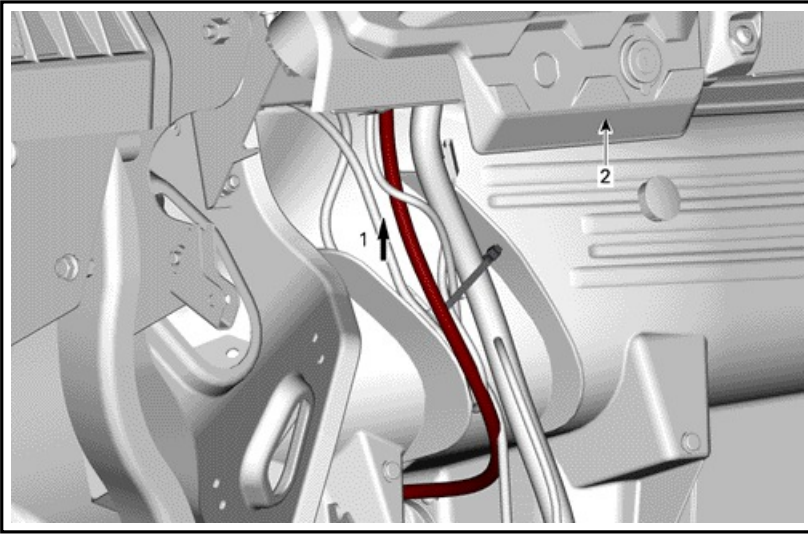
1. Insert

3. Connect the three connectors to the Smart-Lok differential as shown.



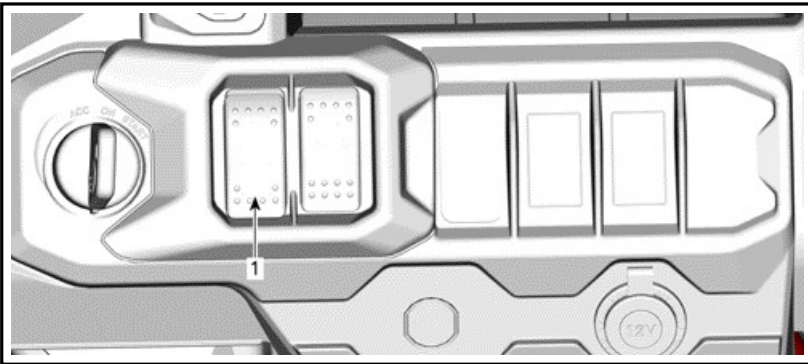
1. Connector with a yellow tape

4. Route the harness toward the location of the vehicle 4x4 switch.



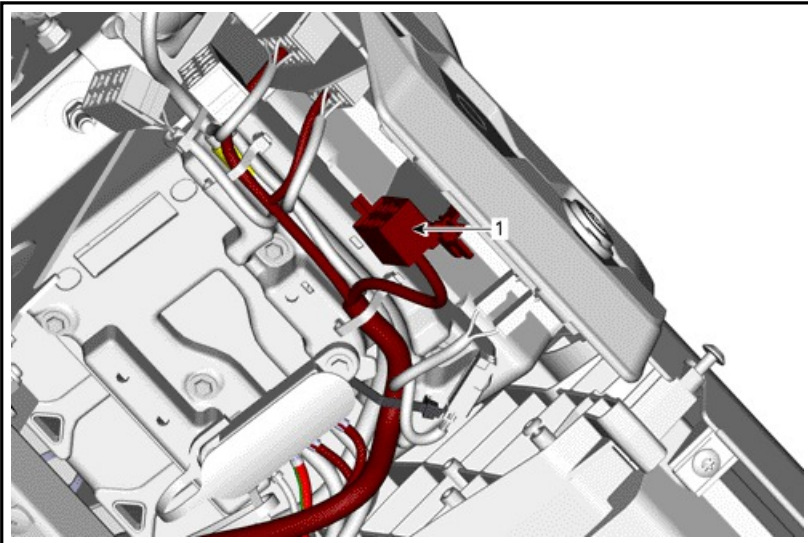
1. Send to the console
2. Console

5. Disconnect and discard the factory installed 4x4 switch from the console.



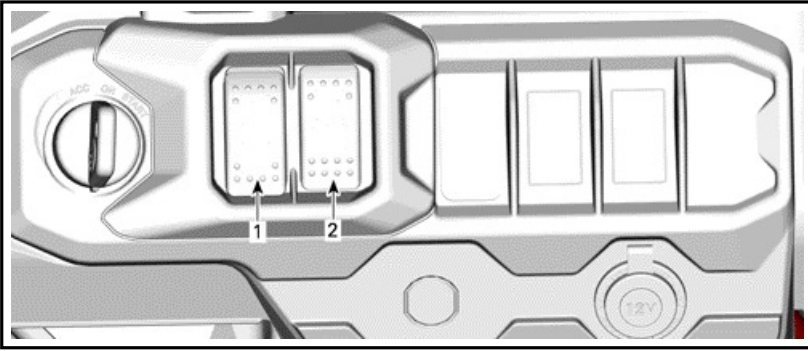
1. 4x4 switch

6. Connect the vehicle 4x4 mode connector to the Smart-Lok harness [P2].



1. Connect the 4x4 mode connector from the vehicle

7. Connect the 4x4 mode differential switch [P4] and the Smart-Lok mode switch (if bought) to the new connectors.



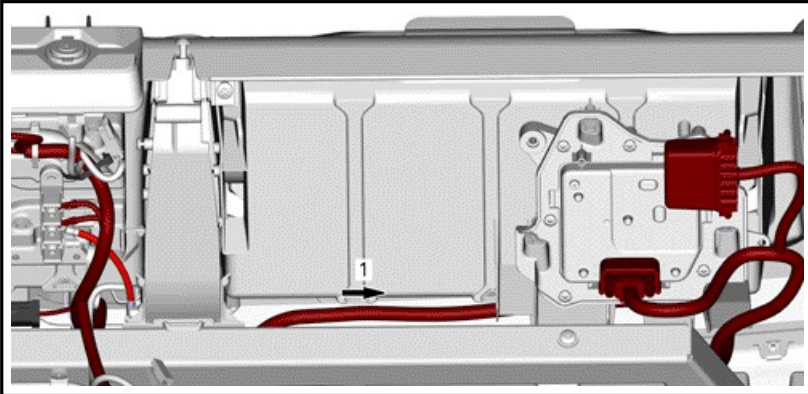
- 1. 4x4 mode differential switch [P4]
- 2. Smart-Lok mode switch

8. Connect the two ring terminals on the vehicle junction block under the dash. Respect the polarity of the harness.



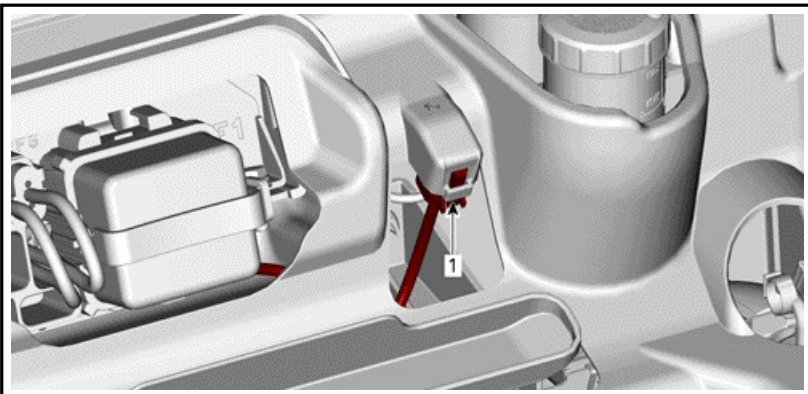
- 1. Connect supply connector

9. Move the fuse box and the FDM connector toward the vehicle glove box.



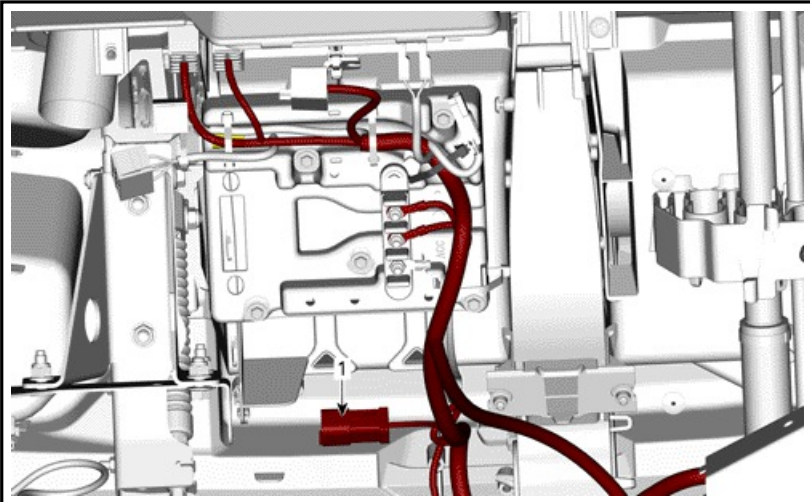
- 1. Move under the glove box

10. Lift the front service cover and disconnect the diagnostic connector.



- 1. Diagnostic connector

11. Bring the diagnostic connector of the vehicle inside and connect it to the front differential wiring harness [P2].



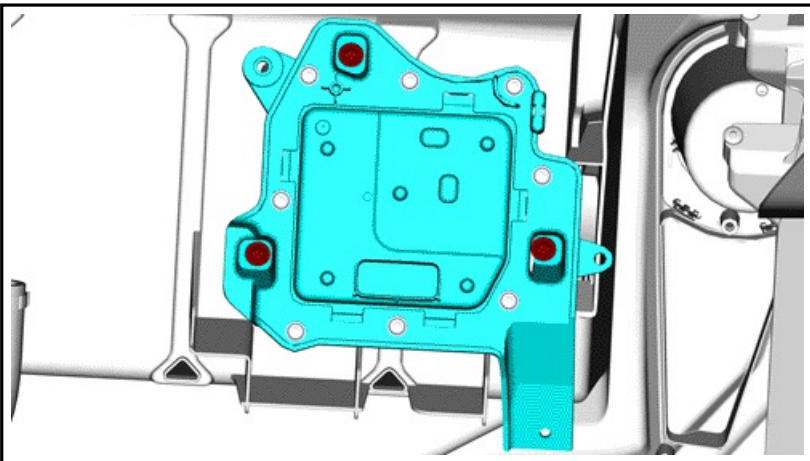
1. Connect diagnostic connector of the vehicle

12. Install the diagnostic connector of the harness in the original location of the differential connector of the vehicle.

FDM Module Installation

For MY17 and MY18

1. Install the FDM module [P1] on the FDM support [P3] by pressure and install the assembly under the dash with three PT type K-50 x 16 screw [P7].



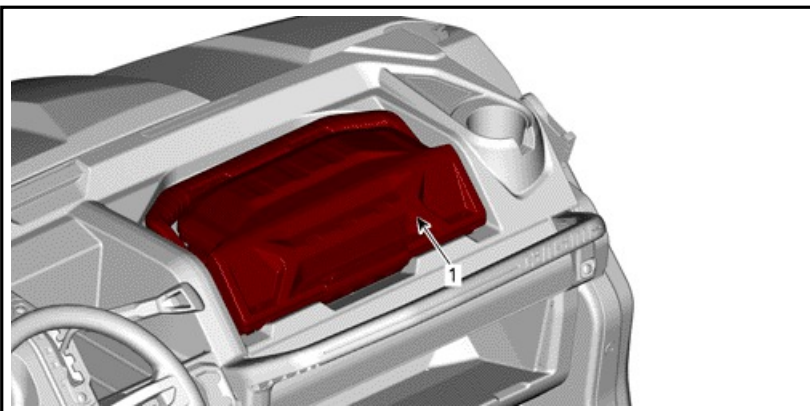
Tightening torque	
PT type K-50 x 16 screw [P7]	1.2 to 2 N•m (11 to 18 lbf•in)

2. Connect the connector on the FDM module [P1] and fix the fuse box to the FDM support [P3].

For MY16 only

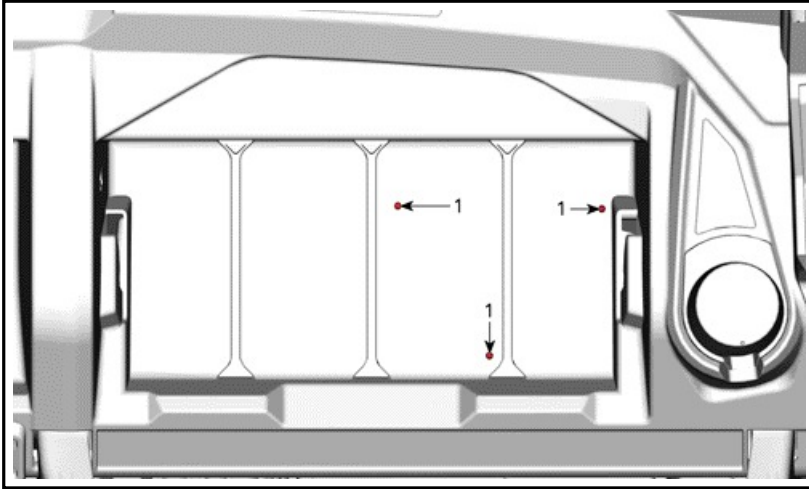
NOTE: To install the FDM support [P3], you need to install with spacers [P13] and [P17], screws [P15] and [P16] and nuts [P14] because fixation post are missing on MY16 models.

1. Remove the tool box.



1. Tool box

2. Drill three holes in the dash using the template included in this kit.

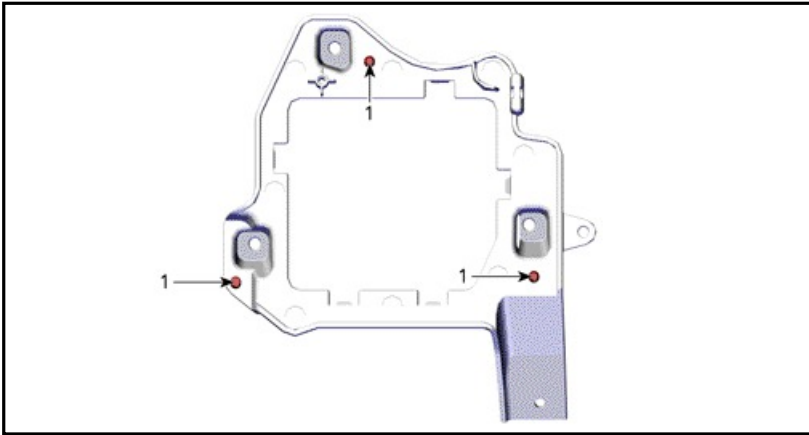


1. Drill holes

Drill size

7 mm (9/32 in)

3. Drill three holes in the FDM support [P3] using the template included in this kit.

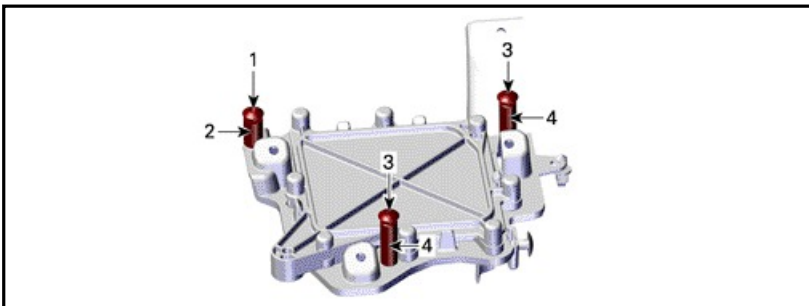


1. Drill holes

Drill size

7 mm (9/32 in)

4. Install the FDM module [P1] on the FDM support [P3] and position the spacers [P13 and P17] and M6x40 Torx screw [P16] or M6x50 Torx screw [P15] as shown.



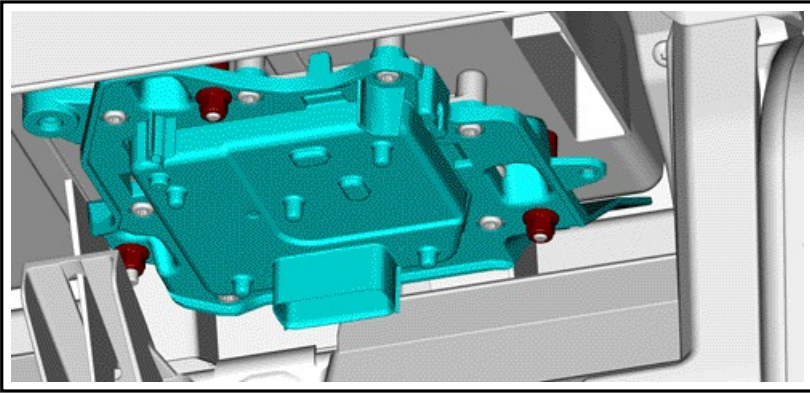
1. M6x40 Torx screw [P16]

2. Spacer [P17]

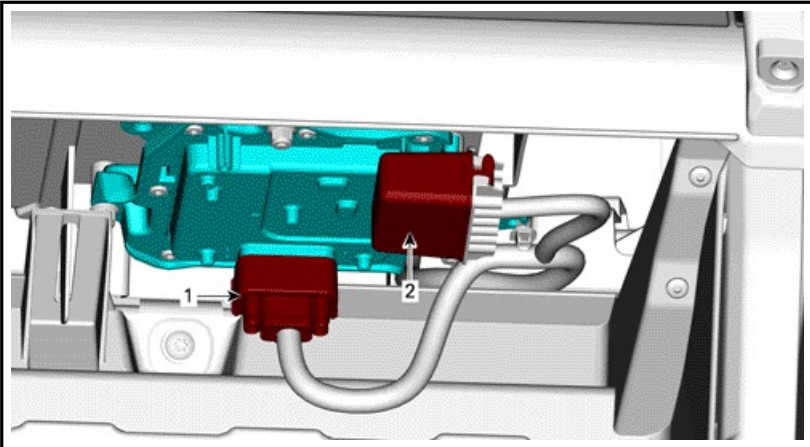
3. M6x50 Torx screw [P15]

4. Spacer [P13]

5. Install the assembly under the dash with three M6 Elastic flanged nut [P14].



6. Connect the connector on the FDM module [P1] and fix the fuse box to the FDM support [P3].



1. Connector
2. Fuse box

All models

1. Secure all wires using locking ties.
2. Reconnect battery.

NOTICE Connect RED cable (+) first then BLACK cable (-).

3. Turn on the vehicle.
4. Verify on the multifunction dial for any error message.
5. Put the switch in 4x4 position. The switch should lit up.
6. Verify on the multifunction dial for any new error message.
7. If the switch doesn't light up:
 - 7.1 Turn off the vehicle.
 - 7.2 Verify all connections (module, switches, differential, power, etc.)
 - 7.3 Turn the vehicle back on.
 - 7.4 Repeat step 11 and 12. If switch doesn't turn on, contact your local BRP dealer fore a more in-depth troubleshooting.

NOTICE Make sure power harness does not come into contact with any sharp edge, mobile parts and hot surfaces before securing it in place.