PREVOST

Instruction Sheet IS-20025A

PREVOST AWARE ADAPTIVE CRUISE BRAKING (ACB) – FLR10 TO FLR21 RADAR SENSOR UPGRADE

APPLICABLE TO: H3 SERIES VEHICLES EQUIPPED WITH ACB SYSTEM FLR10 RADAR SENSOR

Revision: A kit number changed for 140289 March 2021

MATERIAL

Kit # 140289 includes the following parts:

Part No.	Description	Qty
060672	HARNESS, ACB GENERATION 2	1
140290	MOUNTING PLATE, RADAR SENSOR	1
140291	FIXTURE	1
560468	FLR21 RADAR SENSOR	1
564257	STAND-OFF ADJUSTER KIT - Stand-off adjuster (3x) - Mounting screw (6x)	1
504637	NYLON TIE	6
500119	SCREW, CAP HEXS SS NSS M8-1.25 X20 mm LG	2
5001161	WASHER, LOCK SPT SS 8.1X14.8X2(M8,5/16, #18)	2
IS-20025	INSTRUCTION SHEET	1
FI-20025	FEUILLE D'INSTRUCTION	1

NOTE
Material can be obtained through regular channels.

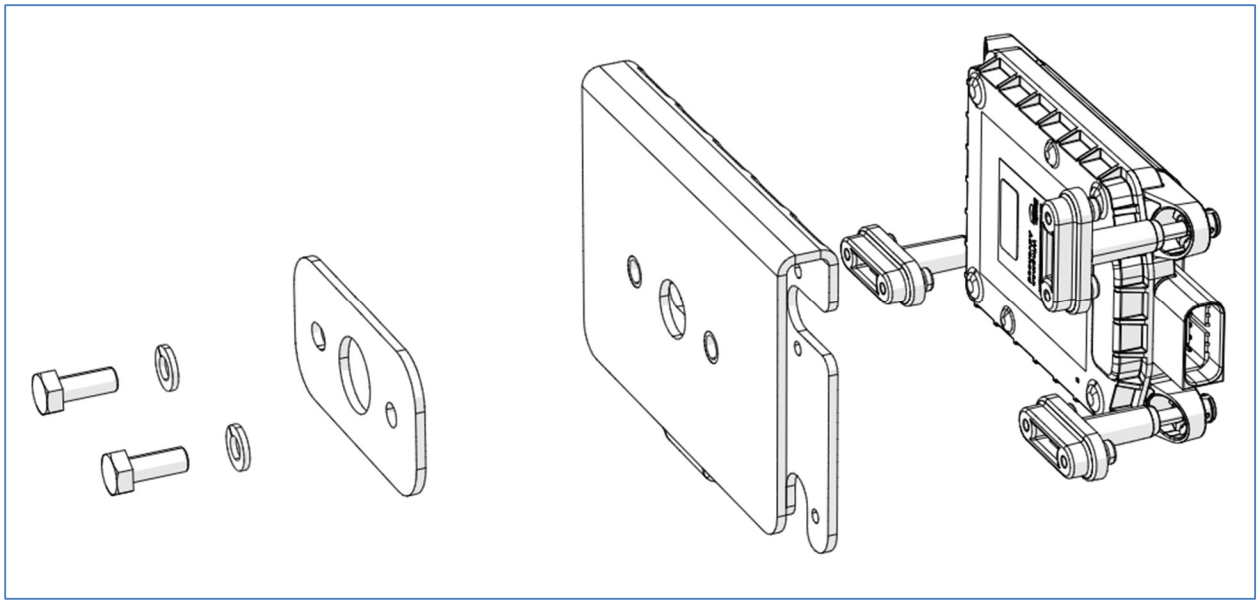


FIGURE 1: FLR21 RADAR SENSOR ASSEMBLY OVERVIEW

PROCEDURE

DANGER

Park vehicle safely, apply parking brake, stop the engine. Prior to working on the vehicle, set the ignition switch to the OFF position and trip the main circuit breakers equipped with a trip button. On Commuter type vehicles, set the battery master switch (master cut-out) to the OFF position.

Lock out & Tag out (LOTO) must be performed during set-up, maintenance or repair activities. Refer to your local procedure for detailed information regarding the control of hazardous energy.

IMPORTANTE NOTE

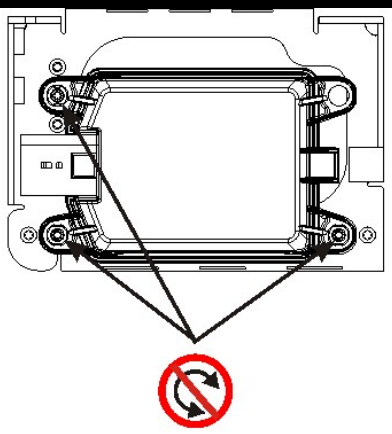
BEFORE PROCEEDING TO THE REPLACEMENT, MAKE SURE THAT THE BUMPER IS PROPERLY POSITIONED, IF NOT THE RADAR SENSOR AND ACB SYSTEM MAY NOT OPERATE PROPERLY.

IF THE BUMPER SUFFERS DAMAGES AFTER A SHOCK AND IS IMPROPERLY POSITIONED, A REPOSITIONING OR ADJUSTMENT OF THE BUMPER WILL BE NECESSARY BEFORE PROCEEDING TO THE ALIGNMENT OF THE RADAR SENSOR. THE RADAR SENSOR ALIGNMENT IS DONE IN RELATION TO THE BUMPER, IF THE BUMPER POSITION IS NOT ADEQUATE, THE RADAR AND ACB SYSTEM MAY NOT OPERATE PROPERLY.

RADAR SUPPORT PREASSEMBLY

STAND-OFF ADJUSTOR ASSEMBLIES ARE PRE-ADJUSTED BEFORE DELIVERY IN ORDER TO RESPECT A PRECISE MEASUREMENT BETWEEN THE RADAR SENSOR AND THE SUPPORT, **DO NOT SCREW, UNSCREW OR ALTER THE INITIAL POSITION OF THE STAND-OFFS ADJUSTMENT SCREW**.

DO NOT SEPARATE THE STAND-OFF CLIP FROM THE RADAR SENSOR RECEPTACLE. DOING SO WILL DAMAGE THE STAND-OFF CLIP.



PRE-ADJUSTED STAND-OFF SCREWS
DO NOT SCREW, UNSCREW OR ALTER THE INITIAL POSITION OF THE STAND-OFFS ADJUSTMENT SCREW

1. Remove existing radar sensor complete with support.

2. Secure the three (3) stand-offs to the radar sensor mounting plate #140290. Use the six (6) mounting screws included with the stand-off kit.

   Prescribed torque: 25 lb-ft

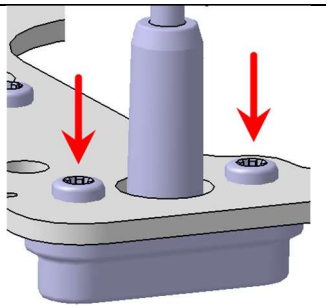


FIGURE 2

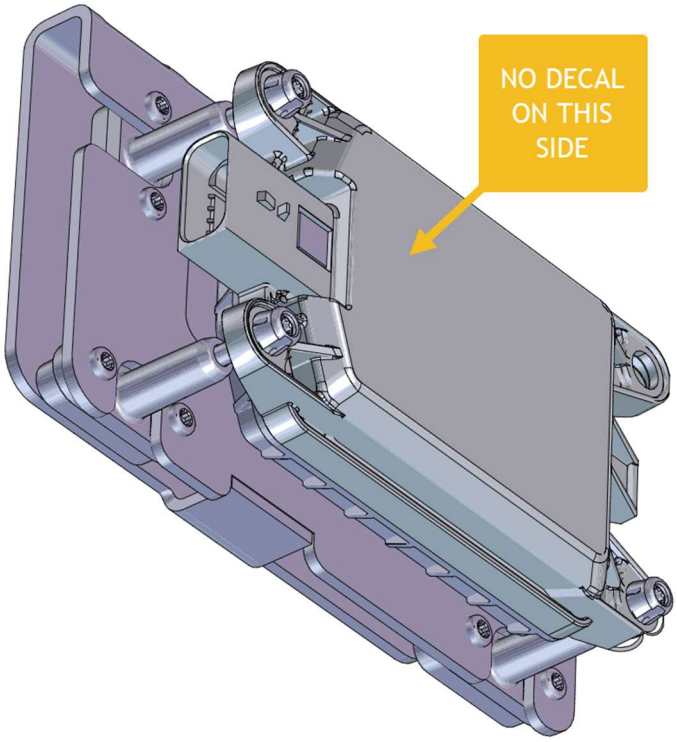


FIGURE 3

3. Stand-off height is pre-adjusted. However, validate dimension A at the three stand-offs and adjust the height only if necessary.

   A = 39.5mm ±0.5 (1.55 in ± 0.02)

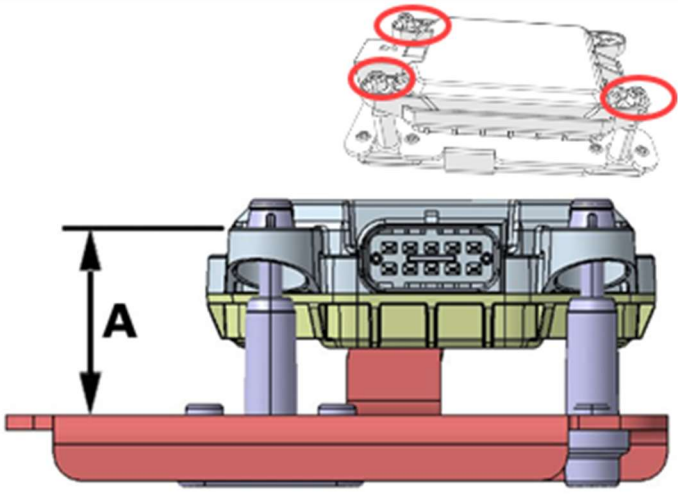


FIGURE 4

4. Mount the radar sensor assembly onto the bumper as shown on Figure 5.

FIGURE 5

5. Plug the radar sensor harness. Secure the harness using nylon ties.

CUTTING OUT OF THE BUMPER SKIN

6. It is necessary to cut out an opening larger than the existing one on the bumper skin.

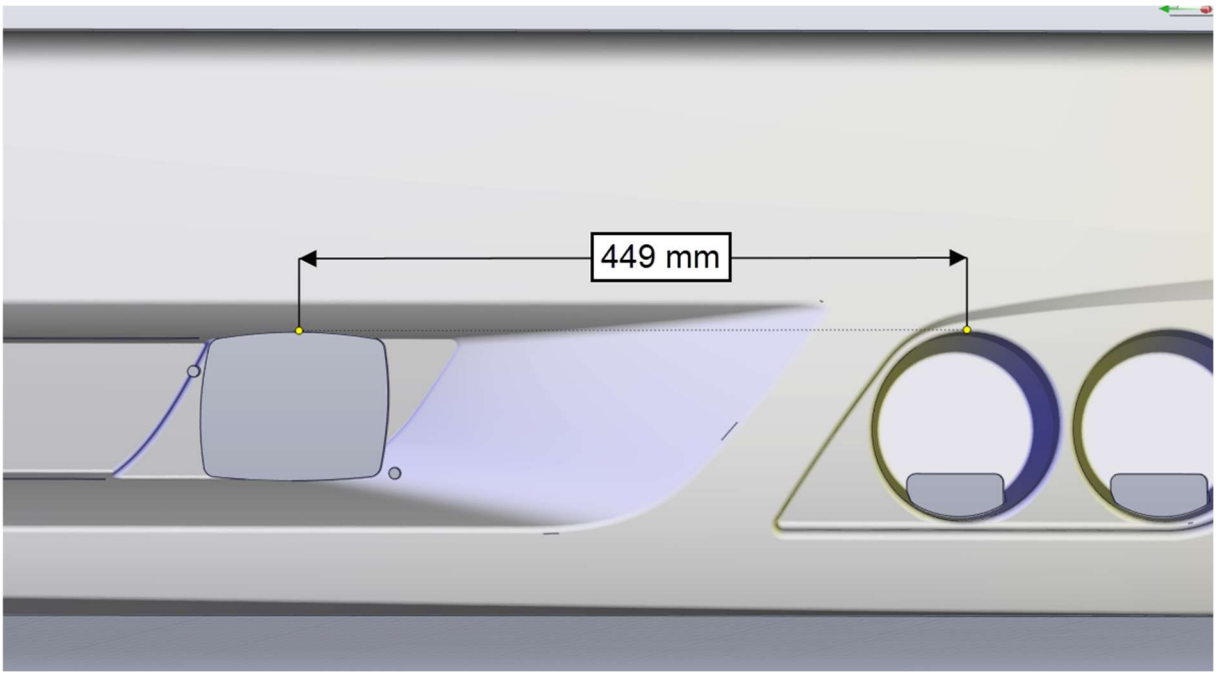


FIGURE 6

7. Using the template (Figure 7), cut the bumper skin as shown on Figure 6.

NOTE: opening to be centered with the radar sensor.

Using an oscillating multi-tool gives good results.

NOTE: Print the template on a sheet of paper. Set the printing size (%) so that the measurement center to center between the holes respects 137 mm when measuring with a ruler on the printing.

8. Drill two (2) holes of 7 mm diameter.

FIGURE 7: TEMPLATE – HOLE DIAMETER= 7 mm (2x)

RADAR ALIGNMENT

9. After installation, a realignment of the radar sensor may be necessary. Refer to Maintenance Information **MI14-34** for the alignment procedure. This document is available on the Technical Publications website.

https://techpub.prevostcar.com/

MI14-34

PARTS / WASTE DISPOSAL

Discard waste according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)