CERTAIN 2010-2012 MODEL YEAR ESCAPE AND 2010-2011 MODEL YEAR MARINER VEHICLES WITH A 3.0L ENGINE — FUEL DELIVERY MODULE FLANGE REPLACEMENT — *SUPPLEMENT 3*

OVERVIEW

In the affected vehicles, the Fuel Delivery Module (FDM) may develop a crack in the fuel supply port, which could result in a leak. If a leak is present, customers are likely to detect a fuel odor and/or visible fuel on the ground under the fuel tank. A fuel leak in the presence of an ignition source may increase the risk of a fire. Dealers are to replace the fuel delivery module flange.

NEW! SERVICE PROCEDURE

NEW! Recommended Tool List:

1/4" Drive Ratchet
1/4" Drive 10mm Shallow Socket
1/4" Drive Torque Wrench
1/2" Drive Breaker Bar
Long Needle Nose Pliers
OLFA® Heavy Duty Adjustable Knife (Or Equivalent)
Hex Key
Oetiker® Clamp Pliers HIP 2000 / 387 (Or Equivalent)
Fuel Storage Tanker
Fuel Tank Wrench

***NOTE**: It is crucial when performing this repair that the correct tools and procedures are used. If the Oetiker® clamp is not properly clamped, a long crank or hard start condition will occur due to fuel pressure leak down.*

1. Remove the fuel delivery module (FDM) from the vehicle. Please follow the procedures in Workshop Manual (WSM) Section 310-01.

2. Disconnect the float arm from the fuel level sensor. See Figure 1.

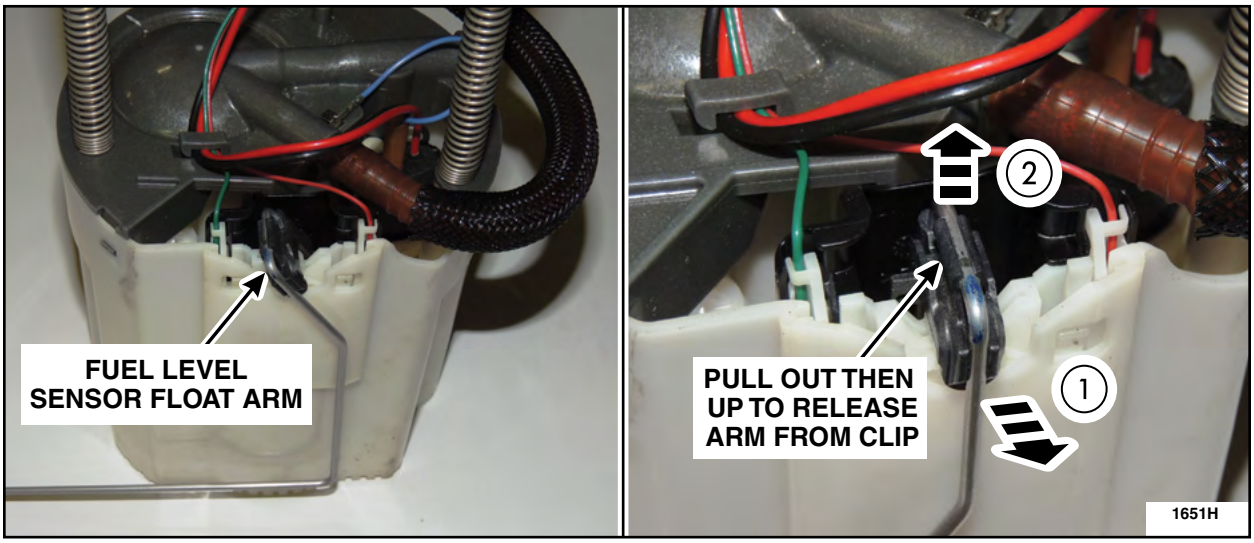

FIGURE 1

NOTE: Do not pull on the wires when disconnecting the electrical connectors.

NOTE: Be sure the rubber seal stays with the black connector during removal and installation.

3. Disconnect the FDM electrical connectors. See Figure 2.

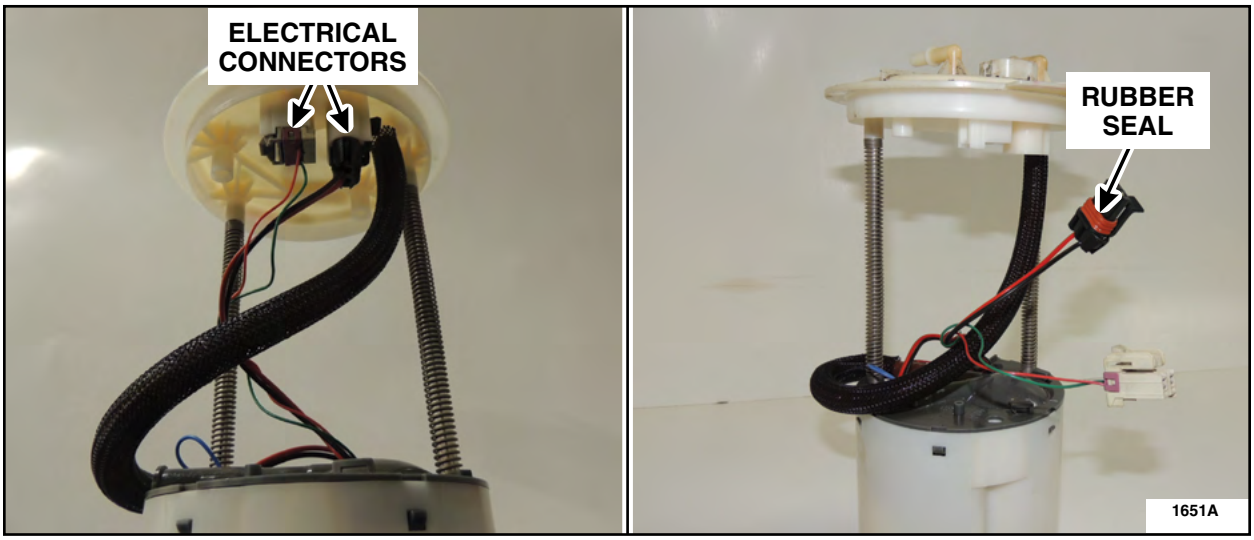

FIGURE 2

4. Using an adjustable blade tool (Olfa® heavy duty knife shown) set to 1/16 in (1 mm) depth, carefully cut the fuel supply tube to release it from the supply port. See Figures 3 and 4.

NOTICE: Use caution not to cut or damage the barbs on the fuel supply port when cutting the fuel supply tube.

NOTE: Cut or damaged barbs on the fuel supply port may result in a long crank or hard start concern due to fuel pressure bleed down.

FIGURE 3

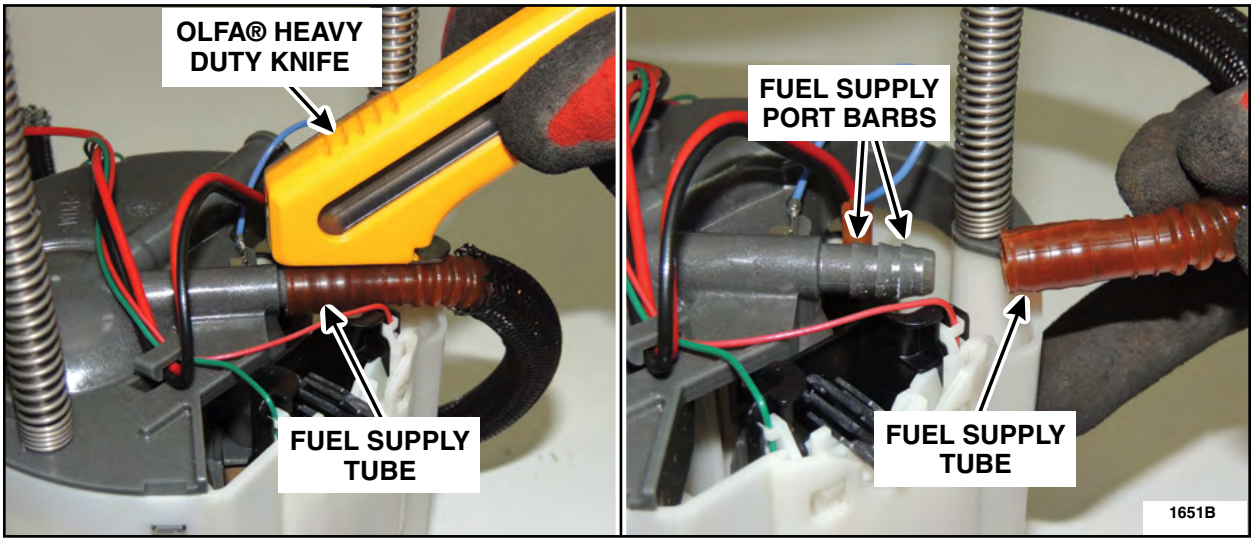

FIGURE 4

5. Using a pair of needle nose pliers, round the lower flared portion of the guide post. When the guide post on each side of the FDM has been sufficiently rounded, the upper flange can be removed. See Figure 5.

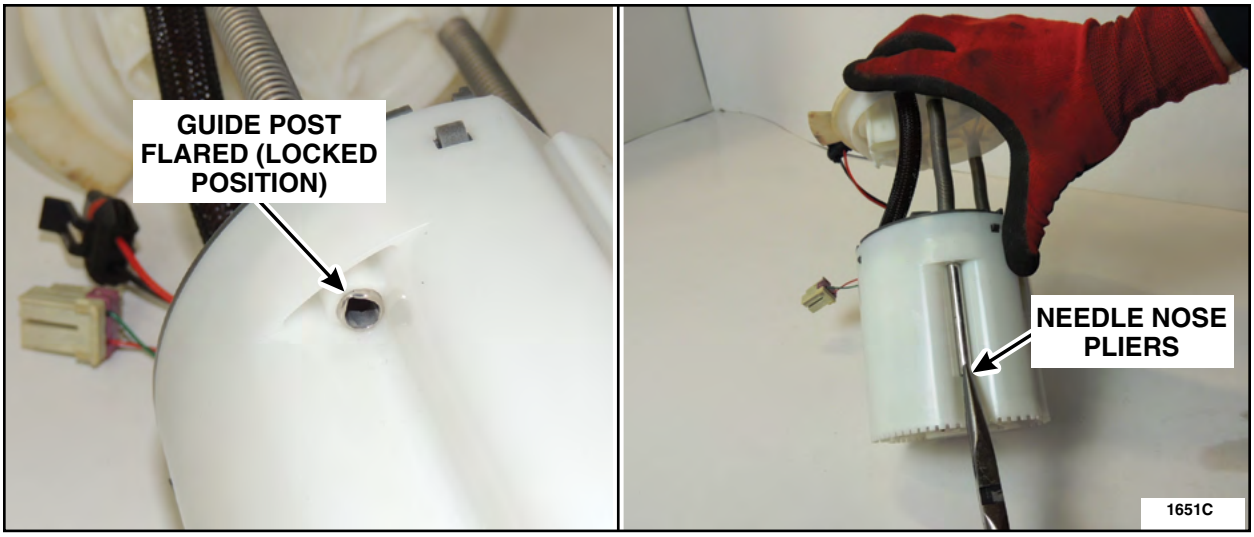

FIGURE 5

6. Remove the guide post springs and the fuel tube anti-abrasive sleeve from the old FDM flange. See Figure 6.

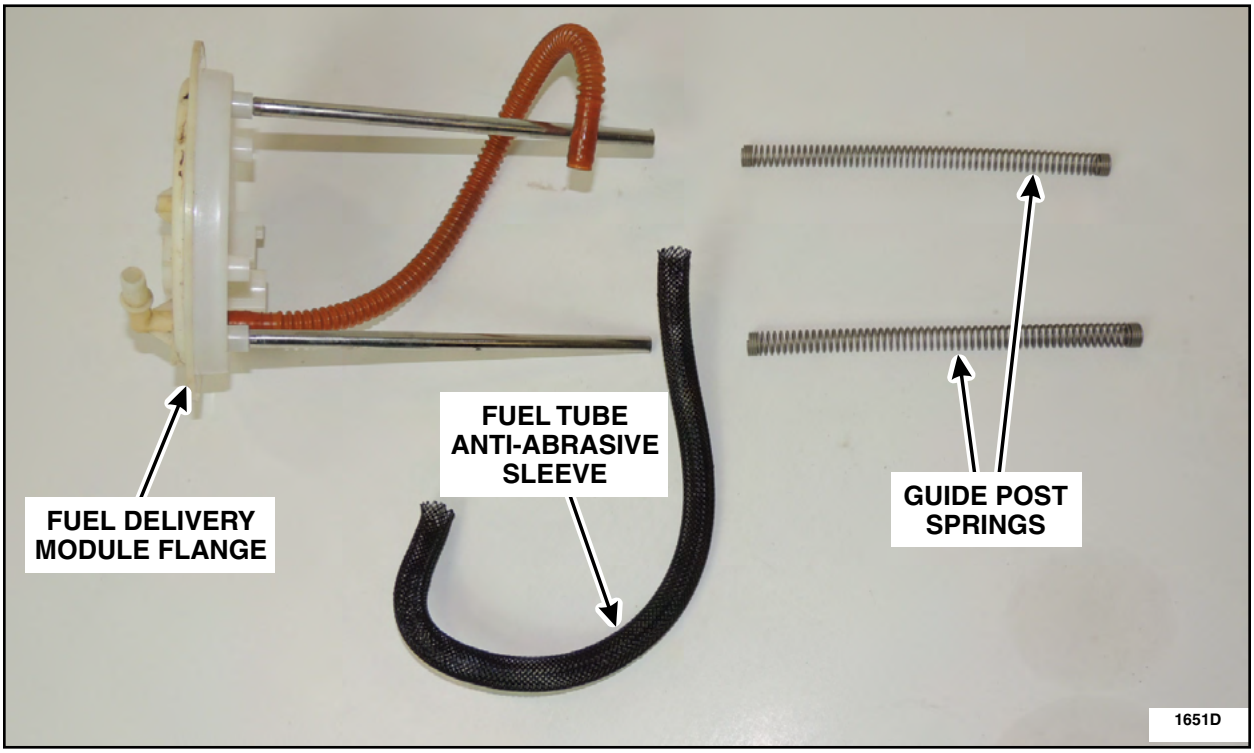

FIGURE 6

7. Install the guide post springs and the fuel tube anti-abrasive sleeve onto the *new* FDM flange. See Figure 7.

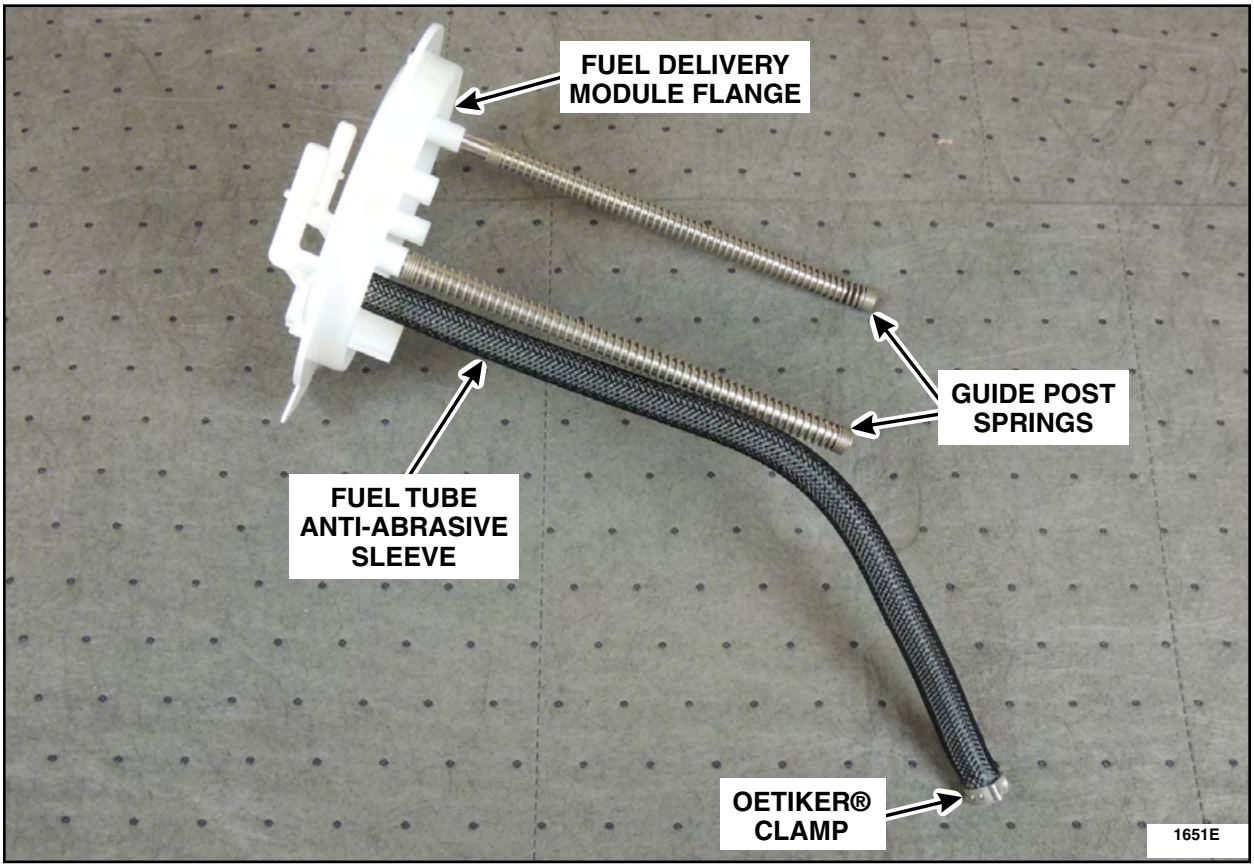

FIGURE 7

8. Connect the new fuel supply tube to the supply port and mark the installation position of the Oetiker® clamp prior to tightening. Improper location can cause a fuel pressure bleed down. See Figure 8.

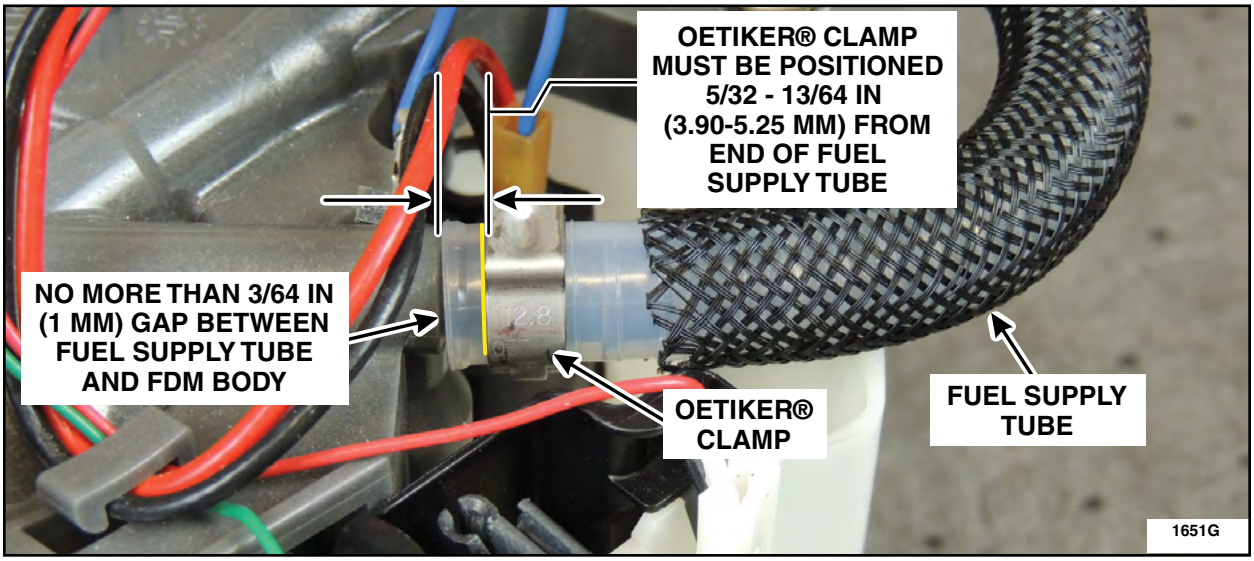

FIGURE 8

9. Tighten the Oetiker® clamp using Oetiker® HIP 2000 / 387 (or equivalent) clamp pliers. See Figures 9 and 10.

***NOTE**: Only Oetiker® clamp pliers (or equivalent) should be used to clamp the Oetiker® clamp. If any other type of pliers are used such as side cutters or CV axle clamp pliers, a long crank or hard start condition will likely occur due to fuel pressure bleed down.*

NOTE: *Do not replace the fuel delivery module or fuel delivery module flange kit for long crank or hard start symptoms that result after preforming this repair.* In the event an Oetiker® clamp is damaged or improperly clamped during installation, the Oetiker® clamp is available to order separate from the Fuel Delivery Module Flange Kit. Refer to the dealer bulletin for parts ordering information.

FIGURE 9

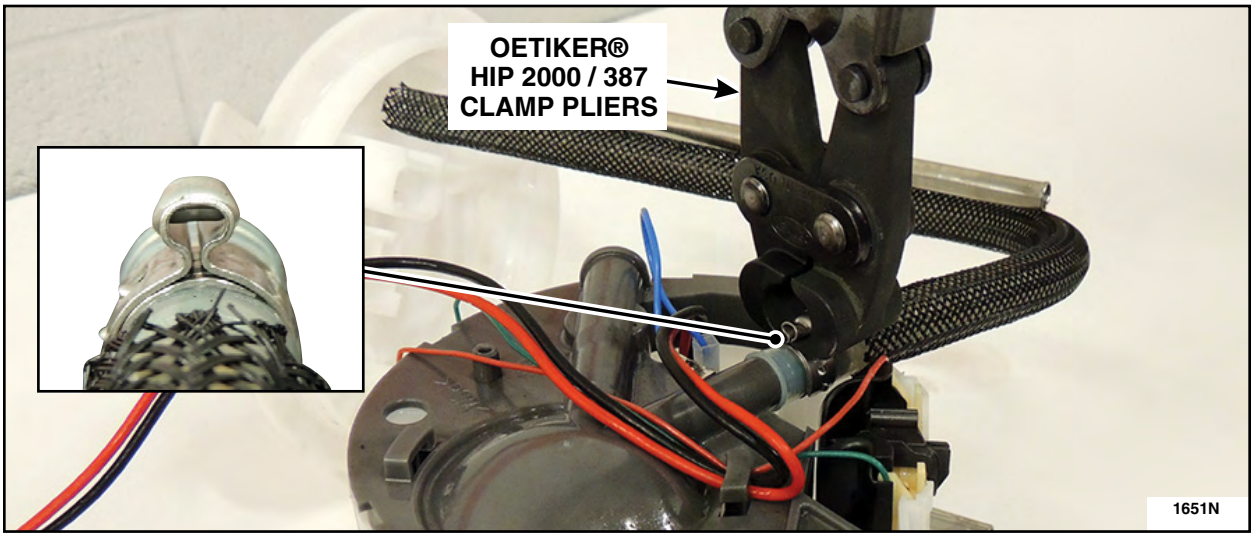

FIGURE 10

10. Install the *new* FDM flange, paying close attention to the proper orientation of the FDM flange to FDM. *See Figures 11 and 12*.

    - Using a suitable tool, such as a hex key, flare the end of each guide post to secure the flange to the lower module.
    - *After both guide posts have been flared, gently pull on the FDM flange to ensure it is properly secured to the FDM.*

NOTE: When installing the *new* FDM flange, the flange must be aligned properly so the ports are pointing towards the sending unit side of the FDM.

NOTICE: When flaring the end of each guide post, only apply enough pressure to prevent the guide post from pulling through the lower module. Using excessive pressure when flaring may cause bending of the guide post, which can limit the necessary travel of the flange. The flared guide post should look similar to Figure 5, and no more than 1/2 in (12.7 mm) of the guide post should be exposed on the bottom side of the FDM after flaring.

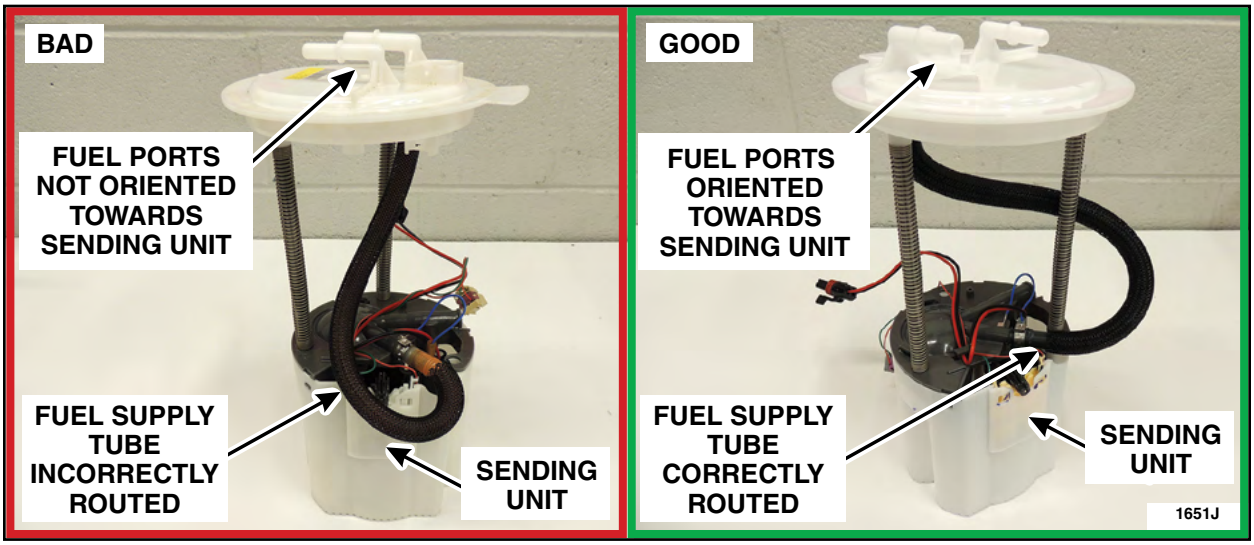

FIGURE 11

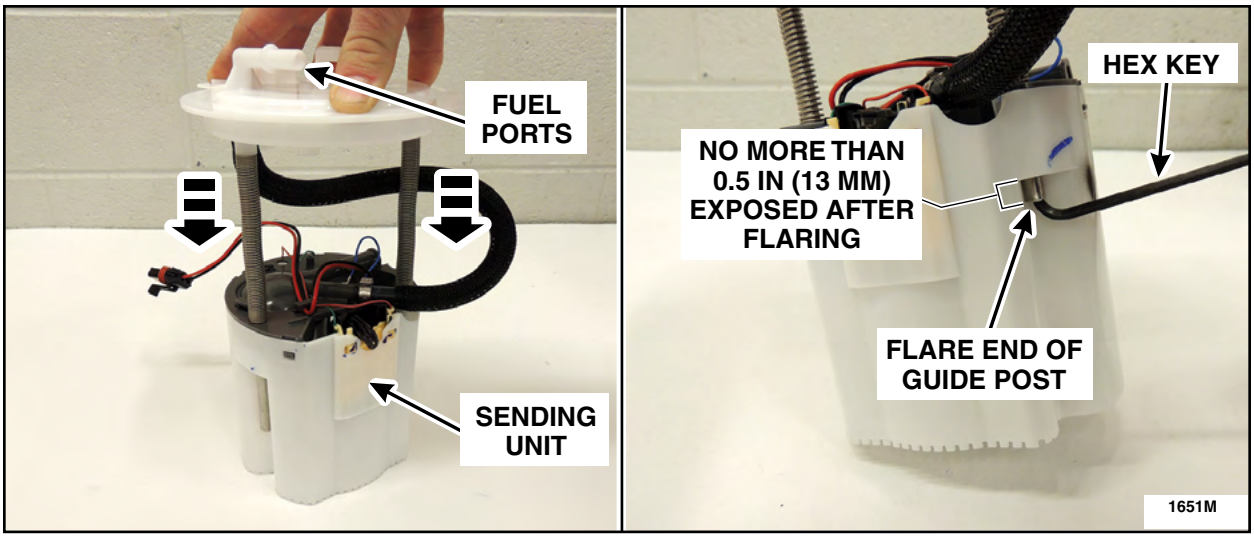

FIGURE 12

11. Connect the FDM electrical connectors. See Figure 2.

12. Install the float arm onto the fuel level sensor. See Figure 1.

13. Reinstall the FDM. Please follow the procedures in WSM Section 310-01.