# CERTAIN 2007 – 2011 RANGER VEHICLES — PASSENGER AIRBAG INFLATOR REPLACEMENT

# **OVERVIEW**

Takata have determined that the propellant in certain Takata airbag inflators can experience an alteration over time with exposure to certain climate conditions. A combination of time, high temperature fluctuations, and humidity contribute to the degradation of the propellant in the inflators. This degradation can cause the propellant to burn too quickly, creating high pressure inside the inflator, and in extreme cases causing the inflator to rupture in the event of a crash necessitating airbag deployment. A ruptured inflator can send inflator parts toward vehicle occupants resulting in serious injury or death.

Dealers are to replace the passenger airbag inflator. The serial number from the new airbag inflator must be recorded on the repair order. If the serial number is not readable, a new inflator must be obtained. Place the replaced inflator into the packaging from the new part and provide to the appropriate dealership personnel for part returns.

# SERVICE PROCEDURE

#### **Recommended Tools:**

1/4" Drive Deep Socket - 7mm
1/4" Drive Ratchet
1/4" Drive Extension - 6" (152mm)
1/4" Drive Shallow Socket - 8mm
1/4" Drive Impact Driver
1/4" Drive Torque Wrench
Side Cutters
Utility Knife
Needle Nose Pliers
Pocket Screwdriver

# AIRBAG INFLATOR REPLACEMENT

**NOTE:** The following repair instructions only apply to 2007-2011 Ranger vehicles. Repair instructions are published in separate attachments for the other vehicle lines included in this recall.

**IMPORTANT:** The parts used in this safety recall may physically appear to be identical, but they have differing operating characteristics. It is crucial that parts are NOT interchanged or substituted. Do not disassemble, modify, or alter the parts or repair procedure in any way. Doing so may prevent the airbag from operating properly during a deployment.

WARNING: Failure to follow the instructions and warnings in the Workshop Manual (WSM) may result in injury.

**NOTE:** If the Airbag Readiness light indicates no Supplemental Restraint System (SRS) faults are present, it is not necessary to follow the WSM SRS Depowering and Repowering steps. Turn the ignition to OFF and wait 1 minute, then it is safe to proceed with airbag inflator replacement.

NOTE: The ignition must remain OFF until this service procedure is completed.

- 1. Remove the passenger airbag from the vehicle. Please follow the WSM procedures in Section 501-20B.
- 2. Set the airbag face down onto a surface that will not scratch or damage the airbag face.
- 3. Remove the wiring harness connector retainer from the passenger airbag assembly. See Figure 1.

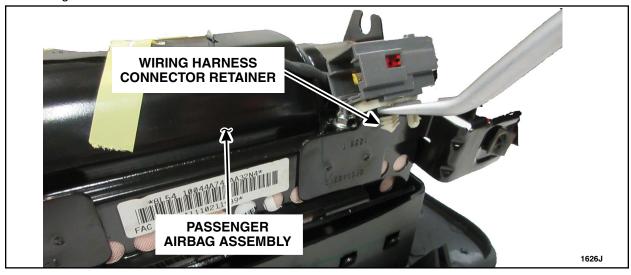


FIGURE 1

**NOTE:** Carry out this step on the shorter wire on the end opposite of the airbag inflator retaining bracket. See Figure 2.

4. Remove the conduit from the passenger airbag assembly wire harness in the area shown. See Figure 2.

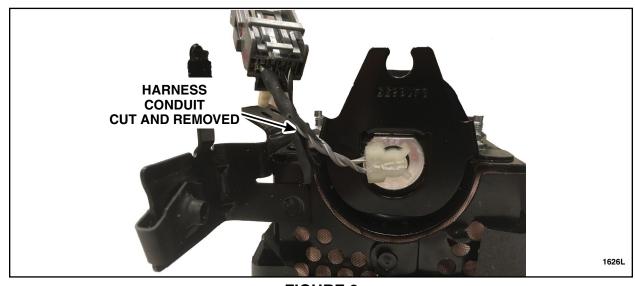


FIGURE 2

- 5. Position the shorting clip onto the harness wires, and crimp the shorting clip together one side at a time using pliers. See Figure 3.
- 6. Cut the harness wires between the shorting clip and the harness connector. See Figure 3.

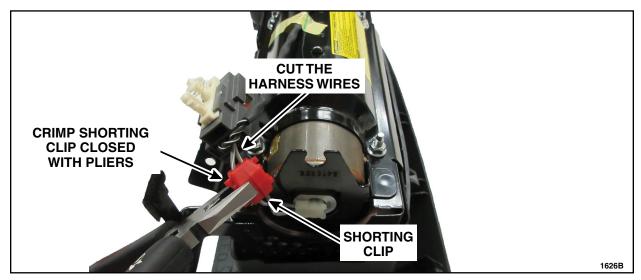


FIGURE 3

7. Remove and discard the four passenger airbag inflator retaining bracket nuts and the retaining bracket. See Figure 4.

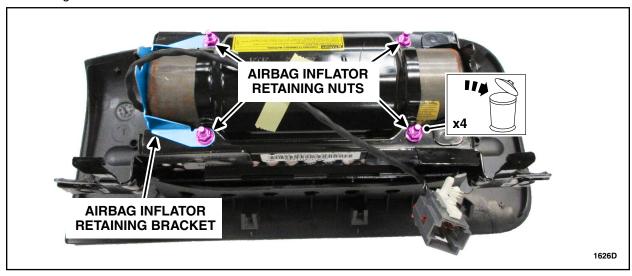


FIGURE 4

# ▲ WARNING: Do not allow any debris on or around the airbag once the inflator is removed.

- 8. With an assistant holding the passenger airbag assembly, remove the inflator from the assembly by pushing outward on the inflator. Set the airbag inflator aside for return shipping. See Figure 5.
  - If required, use of a brass punch is permitted (only at the location shown) to free the inflator from its mounted position.

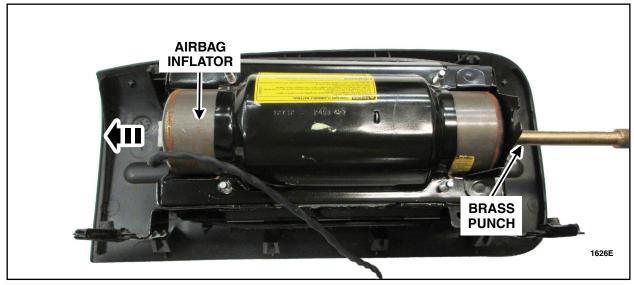


FIGURE 5

NOTE: The serial number of the new airbag inflator must be provided to Ford for the warranty claim to be processed.

9. Record the 11 character serial number of the *new* airbag inflator on the repair order. See Figure 6.

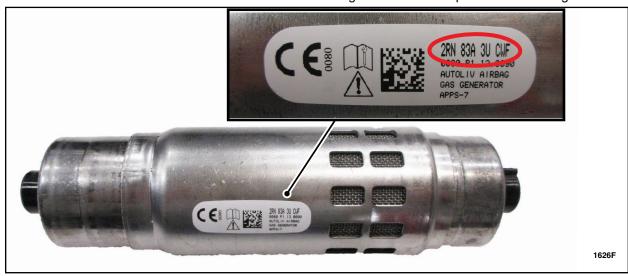


FIGURE 6

10. **NOTE**: Both *new* inflator end caps are specific to their respective end of the inflator and must be fully seated.

**NOTE**: The tail end cap does not have an alignment tab and may be installed in any orientation. Make sure the tail end cap is fully seated or you will not be able to install the inflator retaining bracket.

Install both *new* inflator end caps making sure the alignment feature on the cap nearest the inflator retaining bracket is properly oriented. See Figure 7.

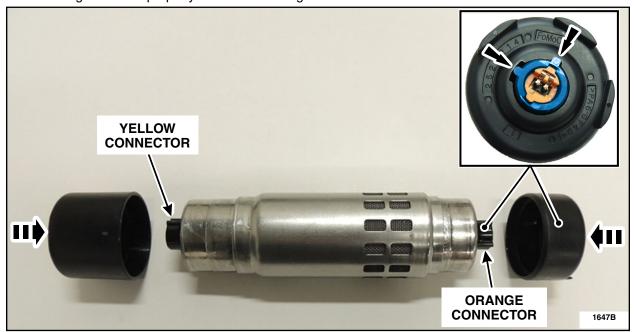
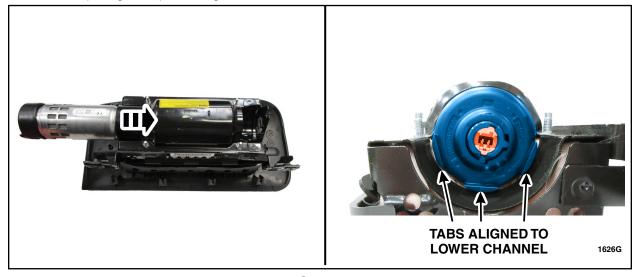


FIGURE 7

11. Install the inflator into the passenger airbag assembly with the orange connector end facing out. Align the three tabs on the cap nearest the inflator retaining bracket with the airbag module lower channel (facing down). See Figure 8.



# FIGURE 8

**NOTE:** If the inflator retaining bracket is unable to be installed, ensure the inflator tail end cap is fully seated.

- 12. Install the new passenger airbag inflator retaining bracket and new nuts. See Figure 9.
  - Torque the new retaining nuts in the sequence shown below. Tighten to 4 Nm (35 lb in).

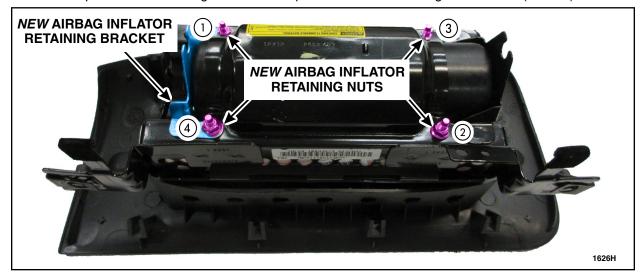


FIGURE 9

13. Align the T-shape index on both the wiring harness electrical connector and the airbag inflator. Install the *new* wiring harness onto the passenger airbag module and connect to both sides of the inflator and fully seat the black tabs. See Figure 10.

**NOTE:** Pull gently on the wiring harness to ensure it is properly seated.

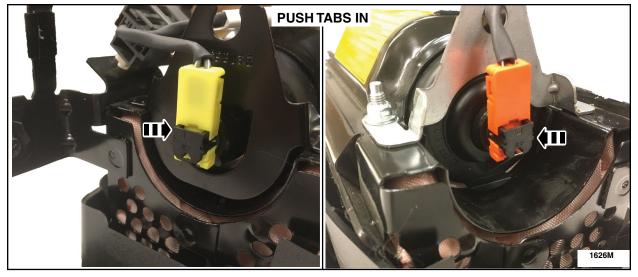


FIGURE 10

14. Install the *new* tape to the wiring harness and airbag assembly, do not cover the airbag warning label with the new tape. For correct placement See Figure 11.

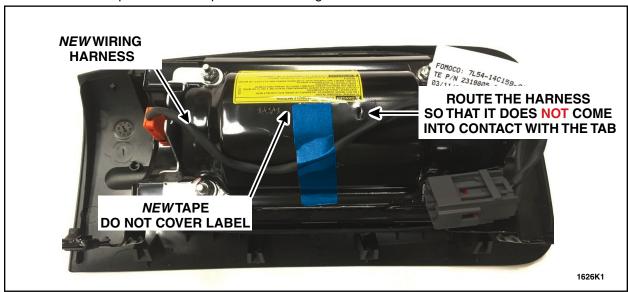


FIGURE 11

- 15. Re-install the passenger airbag. Please follow WSM procedures in Section 501-20B.
- 16. Package the replaced inflator in the *new* part box and provide to the appropriate dealership personnel for part returns.