# CERTAIN 2011-2012 F-450/F-550 SUPER DUTY VEHICLES OVER 14,000 LBS. GVW WITH 6.7L ENGINE — EXHAUST MANIFOLD STUD REPLACEMENT

# **OVERVIEW**

In some of the affected vehicles, the exhaust manifold studs may break, causing the exhaust manifold to warp and create an exhaust leak.

If an affected vehicle exhibits this condition, dealers are to replace the broken exhaust manifold studs along with both exhaust manifolds and related hardware. This service must be performed at no charge to the vehicle owner.

## SERVICE PROCEDURE

**NOTE**: There are multiple possible root causes for symptoms associated with an exhaust leak. This field service action extends the warranty on the exhaust manifold studs. If the vehicle symptoms are found to be caused by broken exhaust manifold studs, proceed with this service procedure. If the root cause of the vehicle symptom is found to have another root cause, proceed with normal workshop manual diagnosis and repair.

#### **Recommended Tool List:**

General Tools	General Equipment
6" (152 mm) Flat Blade Screwdriver	Inspection Mirror
Small Right Angle Pick	Tape
Plastic and Metal Trim Removal Tool	Flexible Long Reach Magnet
Plastic Scraping Tool	
6" (152 mm) Pliers	
5lb (3 kg) Hammer	
37" (94 cm) Pry Bar	
3/8" Drive Adjustable Torque Wrench Adapter	
1/4", 3/8" Drive Ratchets	
1/4", 3/8" Torque Wrenches	
1/2", 1/4" Impact Wrenches	
3/8" Power Ratchet	
Adapter- 1/2" Drive to 3/8", 3/8" Drive to 1/4"	
1/4" Drive Extension- 3" (76 mm) and 6" (152 mm)	
1/4" Drive Extension- 10" (254 mm)	
1/4" Drive Wobble Extension- 10" (254 mm)	
1/4" Drive Socket- E7 Torx®	

# **General Tools**

1/4" Drive Shallow Sockets- 8mm and 5.5mm

1/4" Drive Shallow Swivel Socket-8mm

1/4" Drive Deep Sockets- 10mm and 11mm

3/8" Drive Extensions 3" (76 mm), 6" (152 mm), and 10" (254 mm)

3/8" Drive Shallow Sockets- 10mm, 11mm, and 13mm

3/8" Drive Mid-Lenth Socket- 13mm

3/8" Drive Crow Foot Wrenches- 13mm and 16mm

1/2" Drive Deep Impact Socket- 13/16"

Standard Wrenches- 13mm and 16mm

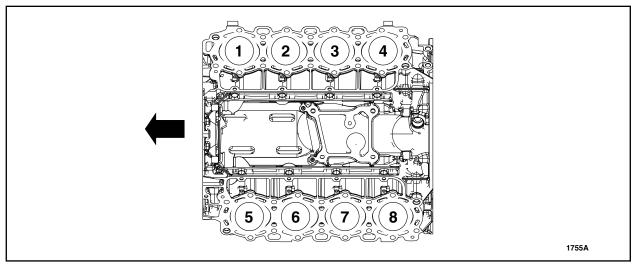
Flex Head Wrenches-8mm and 13mm

Torx® Wrench- E7

## **Special Tools**

Air Lift Coolant Fill System UVU550000

NOTE: See Figure 1 for cylinder identification.



# FIGURE 1

- 1. Does the engine exhibit an exhaust leak due to a broken exhaust manifold stud at the cylinder head?
  - No This procedure does not apply. Please follow normal Workshop Manual (WSM) diagnosis and repair procedures as needed.
  - Yes Replace both the right and left exhaust manifolds and the exhaust manifold heat shields. Please follow the WSM procedures in Section 303-01C. Continue to Step 2.

ATTACHMENT III
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2.	Replace the exhaust manifold studs for cylinders four (4) and eight (8) using the specific parts listed in
	the dealer bulletin.

3. For all other cylinders, only replace studs that are broken or that may have backed out during exhaust manifold removal.

**NOTE:** Remove broken exhaust manifold studs using industry accepted methods for broken fastener removal.