

01 MIL on, no start or rough running (DTC P0087 - Rail fuel pressure too low or DTC P0088 - Rail fuel pressure too high)

01 13 96 2023360/4 May 13, 2013. Supersedes Technical Service Bulletin Group 01 number 13-79 dated March 20, 2013 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
Audi A3	2010 - 2013	All	2.0 TDI clean diesel Engine
Audi Q7	2009 – 2013	All	3.0 TDI clean diesel Engine
Audi A8	2014	All	3.0 TDI clean diesel Engine

#### **Condition**

REVISION HISTORY			
Revision	Date	Purpose	
4	-	Revised header data (Changed MY and applicable models) Revised Condition (Clarified information) Revised Technical Background (Clarified information) Revised Service (Removed steps)	
3	3/20/2013	Revised header data (Added MY and applicable models)	
2	1/25/2011	Revised header data (Added MY) Revised Service and Condition Revised title	
1	5/17/2010	Original publication	

- MIL on.
- One of the following DTCs is stored in the engine control module (address word 01):
  - DTC P0087 (Rail fuel pressure too low)
  - DTC P0088 (Rail fuel pressure too high)
- Excess rattling ("diesel clatter") coming from engine.
- No start or hard starting condition.
- Contaminated fuel found in fuel system.
- Rust or metal debris found in fuel system.

# Audi

## Technical Service Bulletin

## **Technical Background**

Contaminated or incorrect fuel can cause performance, drivability, and/or fuel delivery problems. Additional component replacement may be necessary to ensure that no contamination or debris remains after repair.

Reasons for fuel contamination can include: water ingress in the fuel station's holding tanks, errors made in fuel transport, or incorrect fuel has been dispensed into the vehicle.

#### **Production Solution**

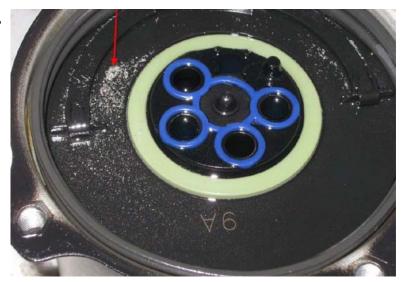
Not applicable.

#### **Service**

Note: Failure to follow these directions may result in immediate damage to any replacement parts due to fuel system contamination.

Inspect the fuel filter housing:

If there is any indication of fuel contamination, metal shavings/debris, or rust inside the fuel filter housing (Figures 1 and 2), open a ticket with the Technical Assistance Center (TAC) **before** attempting any repair.



**Figure 1.** Example of metal shavings and debris on top of fuel filter. Some shavings can be picked up with a magnet.





**Figure 2.** Example of rust in fuel system caused by water contamination.

If the fuel filter is not a serviceable unit (example: MY 2011+ Q7 TDI), then inspection must be performed at the fuel metering valve N290:

Note: Exercise caution when removing the N290. Any dirt/contamination entering the pump may cause damage.

- 1. Before removing the N290, carefully clean the surrounding area.
- 2. If there is no metallic debris found on the N290 or within its housing, refit the N290 valve immediately. Make sure both O rings are undamaged. If there is any damage to either O ring, the high pressure fuel pump must be replaced.
- 3. When fitting the N290, slightly wet the lower O ring with diesel fuel or oil.
- 4. Push in the N290 using only light pressure.
- 5. Tighten both M5 bolts hand tight do *not* lubricate the thread.
- 6. Pre-tighten with 2 Nm, then 6.5-7 Nm.



If there is any indication of fuel contamination, metal shavings/debris, or rust inside the N290 valve (Figures 3 and 4), open a ticket with the Technical Assistance Center (TAC) **before** attempting any repair.



Figure 3. Metallic debris in N290 housing.



Figure 4. Metallic debris on screen of N290 metering valve.

## **Warranty**

This TSB is informational only and not applicable to any Audi warranty.



### **Additional Information**

All parts and service references provided in this TSB are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.