Technical Service Bulletin

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 79 2023360/3 March 20, 2013. Supersedes Technical Service Bulletin Group 01 number 11-18 dated January 25, 2011 for reasons listed below.

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

Condition

REVISION HISTORY		
Revision	**Date**	**Purpose**
3	-	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.
- **DTC P0087** (Rail fuel pressure too low) or **DTC P0088** (Rail fuel pressure too high) stored in the memory of the engine control module (ECM), J623 (01).
- Excess rattling (“diesel clatter”) coming from engine.
- No start or hard starting condition.
- Loss of power while driving due to fuel system contamination.
- Contaminated fuel found in fuel system.
- Rust or metal debris found in fuel system.

Technical Background

Contaminated or incorrect fuel can cause performance, drivability, and/or fuel delivery problems. Rust or metallic debris found in the fuel system indicates a major component failure. 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 gas station's holding tanks, errors made in fuel transport, and incorrect fuel being dispensed into the vehicle via the customer or service station (full service) employees.

Production Solution

Not applicable.

Service

Tip: Fuel system damage incurred by the use of fuel not complying to ASTM-D-975 Grade 2 S15 (B5 or less biodiesel content) standards will not be covered under warranty. The best practice in this situation is to have the repairs covered by the insurance company of the gas station selling the contaminated fuel. This process can be initiated by vehicle owners contacting their own insurance company.

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

1. 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), **call the Technical Assistance Center (TAC) and open a ticket before attempting any repair.**

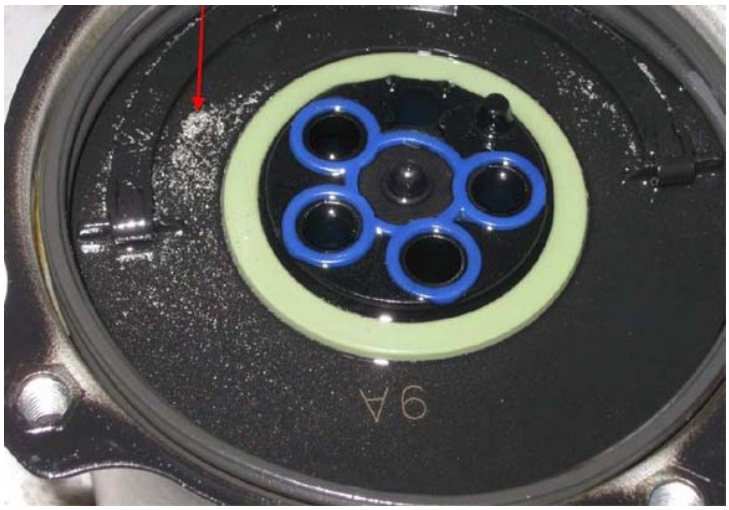

Figure 1. *Example of metal shavings and debris on top of fuel filter. Some shavings can be picked up with a magnet.*

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 will cause irreversible 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 hosing, 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), **call the Technical Assistance Center (TAC) and open a ticket before attempting any repair.**

Figure 3. *Metallic debris in N290 housing.*

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

2. Take a sample of fuel from the filter housing and place it in a clear container. Wait for the fuel to settle and take notice of any separation of fluids or debris/sludge within the fuel.

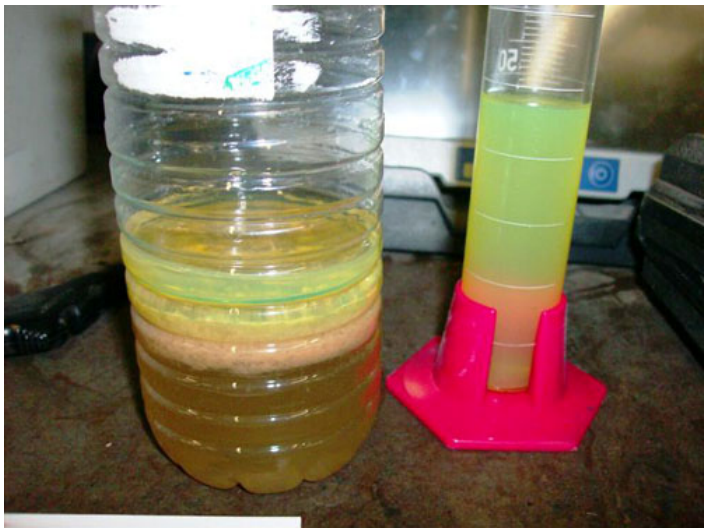

Figure 5. *Fuel in the left container is contaminated.*

3. If there is any evidence of fuel contamination, request that the customer produce any possible record of their last fuel purchase.

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.