

# Technical Service Bulletin



## 01 MIL on in sub-freezing conditions (DTC P0087); engine cranks but does not start

01 14 55 2036169/1 January 8, 2014.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A3, A6, A7, A8, Q5, Q7	2009 - 2015	All	TDI clean diesel engines

## Condition

- MIL on.
- The following DTC may be stored in the engine control module (ECM), J623 (address word 01):
  - **DTC P0087** (Fuel Rail/System Pressure - Too Low)
- Drivability concerns such as hard starting/no starting are present.
- Outside temperature is sub-freezing.
- In tank, fuel pump may be making a straining noise.

## Technical Background

Diesel fuel requires additive blending or “winterization” to be useable at low temperatures. At temperatures below 20° F (-7° C), No. 2 Diesel with insufficient winterization blending may lose its fluidity due to wax separation. This may clog the fuel filter or in-tank filter, preventing the engine from operating properly.

No. 2 Diesel is blended by refineries to various levels of winterization (minimum useable temperature) based on month, geographical location, and the 10<sup>th</sup> percentile minimum ambient air temperature for the given region. Although rare, during *sudden* periods of extreme low temperatures (record lows), fuel stations may not be adequately prepared with No. 2 Diesel fuel with sufficient winterization to resist wax formation or “gelling”.

Tips for optimal operation include:

- When traveling from a warmer location to a colder location during sub-freezing conditions, try to refill the tank locally in the cold destination area.
- Refuel using major name brand fuel stations with high turnover rates.
- Garage vehicle overnight during extreme cold conditions if possible.
- Utilize engine preheater (when equipped – A3 TDI only).
- **Do not** utilize any fuel additive on any common rail diesel engine.

## Production Solution

None; this issue is related to the diesel fuel and not a technical problem with the vehicle.

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## Service

1. If fuel gelling is suspected based on ambient temperature and vehicle condition, allow vehicle to warm to shop temperature before further diagnosis. If the vehicle starts and operates to specifications once it is warm, this TSB can be applied.
2. Inspect fuel level. If the fuel level is at ½ tank or less, top off with local No. 2 Diesel from a brand name station with high turnover.
3. If fuel level is greater than ½ tank, drain fuel tank contents and fully fill with local No. 2 Diesel from a brand name station with high turnover.
4. Replace fuel filter, drain water separator (if applicable).
5. Verify normal operation and release vehicle.

## Warranty

<b>Claim Type:</b>	1SP		
<b>Service Number:</b>	2010		
<b>Damage Code:</b>	0017		
<b>Labor Operations:</b>	Drain fuel tank	See Elsa	See Elsa
	Replace fuel filter	See Elsa	See Elsa
<b>Diagnostic Time:</b>	GFF	0150 0000	Max 30 TU
	Road test prior to service procedure	No allowance	0 TU
	Road test after service procedure	See Elsa	20 TU
	Technical diagnosis at dealer's discretion (Refer to Section 2.2.1.2 and Audi Warranty Online for DADP allowance details)		
<b>Claim Comment:</b>	As per TSB #2036169/1		

All warranty claims submitted for payment must be in accordance with the *Audi Warranty Policies and Procedures Manual*. Claims are subject to review or audit by Audi Warranty.

## Additional Information

All parts and service references provided in this TSB (2036169) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.