Technical Service Bulletin

01 MIL on (DTC P0456 or DTC P0442 (EVAP emission control system leak detected))

01 13 40 2035519/2 November 4, 2013. Supersedes Technical Service Bulletin Group 01 number 13-38 dated October 23, 2013 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
Q7	2013 - 2014	All	Not Applicable

Condition

REVISION HISTORY		
Revision	**Date**	**Purpose**
2	-	Revised *Service* (Added shipping instructions)
1	10/23/2013	Initial publication

- MIL on.
- One of the following DTCs is stored in the engine control module (ECM), J623 (address word 01):
  - **DTC P0456** (EVAP Emission Contr. Sys. (very small leak) Leak Detected)
  - **DTC P0442** (EVAP Emission Contr. Sys. (small leak) Leak Detected)
- Drivability is not affected.

Technical Background

The leak detection pump (LDP) is a vacuum-driven, ECM-controlled, diaphragm pump. In order for the LDP to operate, the engine must be running and vacuum must be applied to the vacuum switch on the LDP. The LDP pressurizes the EVAP system and monitors any pressure drop within a specified amount of time in order to detect a leak.

DTC P0456 or DTC P0442 can be stored due to either of the following conditions:

- Static or sporadic air leaks in the EVAP system.
- Static or sporadic air leaks in the LDP.

Production Solution

Not applicable.

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Service

1. Visually inspect the EVAP system for any loose connections or damaged parts. If found, repair the loose connections and/or replace the damaged parts.
2. Pressurize the EVAP system using the KLI9210 Smoke/Pressure test:
   - Clamp off the hose that leads to the LDP air filter (Figure 1). Use hose clamps up to 25 mm diameter (Figure 2).
   - Pressurize the EVAP system to 12 inch/water (30mbar), and check pressure loss over time.

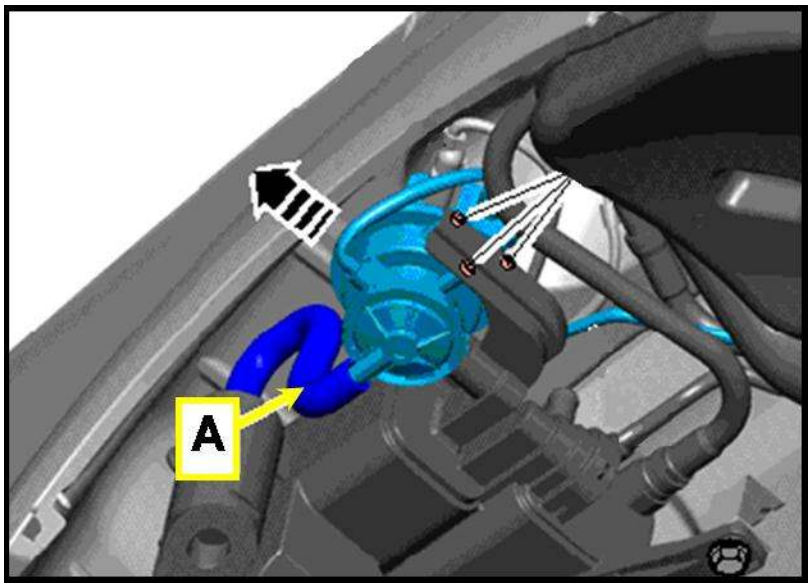

***Figure 1**. Hose leading to LDP air filter (A).*



***Figure 2**. Tool -3094-, hose clamps.*

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3. If remaining pressure after 3 minutes is 9 inch/water (22.4 mbar) or *higher*, the system has no leaks:

   - Replace the LDP with the latest part number (see parts catalog). Immediately put the old LDP into a plastic bag and seal it for shipment to Auburn Hills. Do not clean off the old LDP before shipping; all particles involved should be shipped with the part.

   If remaining pressure after 3 min is *lower* than 9 inch/water (22.4 mbar), the system has a leak.

   - Locate the leak with the smoke generator function of the Evaporative Emissions Tester KLI9210 and repair as necessary.

Warranty

Claim Type:	Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only.		
Service Number:	2048		
Damage Code:	0040		
Labor Operations:	EVAP system pressure test	2048 0199	70 TU
	Leak detection pump remove & reinstall	2048 1950	20 TU
	Rear wheel housing liner remove & reinstall	6676 1900	40 TU
Diagnostic Time:	GFF – Checking and clearing fault codes included in existing labor operations	0150 0000	Time stated on diagnostic protocol (Max 100 TU)
	Technical diagnosis at dealer's discretion (Refer to Section 2.2.1.2 and Audi Warranty Online for DADP allowance details)		
Claim Comment:	As per TSB #2035519/2		

Required Parts and Tools

Part Number	Part Description	Quantity
7L8906271A	Leak detection pump*	1

*Always check with your Parts Department and service manuals for the latest information.

Tool Number	Tool Description
3094	Hose clamps

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Additional Information

All parts and service references provided in this TSB (2035519) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.

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