

# Technical Service Bulletin



## 20 MIL on (DTC P045600 - EVAP system leak detected NVLD (very small leak))

20 15 52 2035073/11 October 28, 2015. Supersedes Technical Service Bulletin Group 20 number 15-48 dated October 15, 2015 for reasons listed below.

| Model(s)     | Year        | VIN Range                              | Vehicle-Specific Equipment |
|--------------|-------------|----------------------------------------|----------------------------|
| A3 Sedan     | 2015        | 000001 - 122823                        | With NVLD                  |
| A3 Cabriolet | 2015        | 000001 - 122834                        | With NVLD                  |
| A4           | 2013 - 2014 | All                                    | With NVLD                  |
| A4           | 2015        | A000001 - A106622<br>N000001 - N033839 | With NVLD                  |
| allroad      | 2013 - 2014 | All                                    | With NVLD                  |
| allroad      | 2015        | 000001 - 110433                        | With NVLD                  |
| A5           | 2013 - 2014 | All                                    | With NVLD                  |
| A5           | 2015        | 000001 - 048917                        | With NVLD                  |
| RS 5         | 2013 - 2014 | All                                    | With NVLD                  |
| RS 5         | 2015        | 900001 - 901489                        | With NVLD                  |
| A5 Cabriolet | 2013 - 2014 | All                                    | With NVLD                  |
| A5 Cabriolet | 2015        | 000001 - 008878                        | With NVLD                  |
| Q5           | 2013 - 2014 | All                                    | With NVLD                  |
| Q5           | 2015        | 000001 - 111804                        | With NVLD                  |
| A6, A7       | 2012 - 2015 | All                                    | With NVLD                  |
| A6, A7       | 2016        | 000001 - 009518                        | With NVLD                  |
| RS 7         | 2012 - 2015 | All                                    | With NVLD                  |
| RS 7         | 2016        | 900001 - 900125                        | With NVLD                  |
| A8           | 2011 - 2014 | All                                    | With NVLD                  |
| A8           | 2015        | 000001 - 033269                        | With NVLD                  |

# Technical Service Bulletin



## Condition

| REVISION HISTORY |            |                                                                                                                                        |
|------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Revision         | Date       | Purpose                                                                                                                                |
| 11               | -          | Revised header data (Corrected Elsa display error)                                                                                     |
| 10               | 10/15/2015 | Revised header data (Added VIN breaks)<br>Revised <i>Required Parts and Tools</i> (Updated pressure switch part numbers)               |
| 9                | 5/15/2015  | Revised <i>Warranty</i> (Added labor operations)<br>Revised <i>Required Parts and Tools</i> (Updated filter part number for Q5 hybrid) |

- MIL on.
- **DTC P045600** (EVAP System Leak Detected NVLD (very small leak)) is stored in the engine control module (ECM), J623 (address word 01).
- Drivability is not affected.

## Technical Background

The NVLD pressure switch may erroneously detect a very small leak.

## Production Solution

New NVLD pressure switches and NVLD filters in production.

## Service

1. Ensure that **DTC P045600** (EVAP System Leak Detected NVLD (very small leak)) is stored in the engine control module (ECM), J623 (address word 01). If DTC P045600 is not present, this bulletin does not apply.
2. Replace the NVLD pressure sensor G400 and the NVLD filter with the latest part number available (Figure 1).



**Figure 1.** NVLD pressure sensor (left) and NVLD filter (right).



**Note:**

Read the following information for correct installation of the NVLD switch grommet. The following information applies only if the sensor is directly installed into the charcoal canister.

- Align grommet and sensor outer edges (Figure 2).



**Figure 2.** Align grommet and sensor outer edges.

- To aid installation, wrap several (~10) layers of vinyl tape behind the grommet to ensure that it does not slip during installation (Figure 3 and Figure 4).



**Figure 3.** Wrapping vinyl tape behind the grommet.



**Figure 4.** Vinyl layer supporting grommet.

- Apply a small amount of grease to create a film on the outer surface of the grommet before installing the sensor (Figure 5).



**Figure 5.** Grease film on outer surface of grommet.

- When the sensor and grommet have been correctly installed, the grommet and canister will be flush (Figure 6). At this point, the vinyl tape can be removed (or it can be left in place).



**Figure 6.** Correctly-installed sensor and grommet.

# Technical Service Bulletin



- An incorrectly-installed sensor and grommet (Figure 7) can cause an EVAP leak and repeat failures. Issues can occur when the NVLD switch is pressed too far into the canister, then pulled back out in an attempt to align the NVLD switch with the mounting holes.  
Do not apply any lubricant between the sensor and the grommet.



**Figure 7.** Plastic port extending past the grommet (A) causing installation issues (B).



## Note:

Due to the functionality of the new tank leak diagnostic system (NVLD), it is not possible to check the system using a basic setting or an output diagnostic test mode like the previously-used LDP system.



**Note:** Always use a VIN to search parts in ETKA.

## Warranty

|                          |                                                                                                                       |           |       |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------|-------|
| <b>Claim Type:</b>       | Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only. |           |       |
| <b>Service Number:</b>   | 2041                                                                                                                  |           |       |
| <b>Damage Code:</b>      | 0040                                                                                                                  |           |       |
| <b>Labor Operations:</b> | <b>For A3 and A3 cabriolet:</b>                                                                                       |           |       |
|                          | NVLD pressure switch remove + reinstall                                                                               | 2041 1950 | 20 TU |
|                          | Rear wheel housing liner remove + reinstall                                                                           | 6676 1900 | 40 TU |
|                          | <b>For A4, A5, A5 cabriolet:</b>                                                                                      |           |       |
|                          | NVLD pressure switch remove + reinstall                                                                               | 2041 1950 | 10 TU |
|                          | Activated charcoal filter remove + reinstall                                                                          | 2025 1910 | 50 TU |
|                          | Rear wheel housing liner remove + reinstall (includes time for filter replacement)                                    | 6676 1999 | 40 TU |

# Technical Service Bulletin

|                         |                                                                                                                              |           |                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------|
|                         | <b>For A6 and A7:</b>                                                                                                        |           |                                                |
|                         | NVLD pressure switch remove + reinstall                                                                                      | 2041 1950 | 10 TU                                          |
|                         | Activated charcoal filter remove + reinstall                                                                                 | 2025 1900 | 40 TU                                          |
|                         | Rear wheel housing liner remove + reinstall (includes time for filter replacement)                                           | 6676 1999 | 40 TU                                          |
|                         | <b>For Q5 and Q5 hybrid:</b>                                                                                                 |           |                                                |
|                         | NVLD pressure switch remove + reinstall                                                                                      | 2041 1950 | 10 TU                                          |
|                         | Activated charcoal filter remove + reinstall                                                                                 | 2025 1910 | 50 TU                                          |
|                         | Rear wheel housing liner remove + reinstall (includes time for filter replacement)                                           | 6676 1999 | 40 TU                                          |
|                         | <b>For A8:</b>                                                                                                               |           |                                                |
|                         | NVLD pressure switch remove + reinstall                                                                                      | 2041 1950 | 30 TU                                          |
|                         | Wheel remove + reinstall                                                                                                     | 4405 1900 | 20 TU                                          |
| <b>Diagnostic Time:</b> | GFF – Checking and clearing fault codes included in existing labor operations                                                | 0150 0000 | Time stated on diagnostic protocol (Max 20 TU) |
|                         | Technical diagnosis at dealer's discretion<br>(Refer to Section 2.2.1.2 and Audi Warranty Online for DADP allowance details) |           |                                                |
| <b>Claim Comment:</b>   | As per TSB #2035073/11                                                                                                       |           |                                                |

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.

# Technical Service Bulletin



## Required Parts and Tools

| Part Number                                                                         | Part Description | Quantity |
|-------------------------------------------------------------------------------------|------------------|----------|
| 5Q0906253B or 5Q0906253C (For A3 sedan)<br>(Backwards-compatible for all A3 sedans) | Pressure switch  | 1        |
| 8K0906253K (For A8, Q5 hybrid, and<br>A3 cabriolet)                                 | Pressure switch  | 1        |
| 8K0906253L (For A4, A5, A5 cabriolet, Q5, A6, and A7)                               | Pressure switch  | 1        |
| 1C0906621A (For A3 sedan and A3 cabriolet)                                          | Filter           | 1        |
| 8R0906621E (For A8)                                                                 | Filter           | 1        |
| 8F0201997D (For A5 cab)                                                             | Filter           | 1        |
| 8R0201997T (For Q5)                                                                 | Filter           | 1        |
| 8R0906621F (For Q5 hybrid)                                                          | Filter           | 1        |
| 4G0201997BA (For A6,A7)                                                             | Filter           | 1        |
| 8K0201997AL (For A4,A5)                                                             | Filter           | 1        |

## Additional Information

All parts and service references provided in this TSB (2035073) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.