

01 Engine warning lamp on; DTC entries about AVS adjustment

01 15 45 2042071/1 October 5, 2015.

| Model(s) | Year | VIN Range | Vehicle-Specific Equipment |
|------------|-------------|-----------|----------------------------|
| A6, A7, A8 | 2013 - 2015 | All | 4.0TFSI |

Condition

- One or more of the following conditions is present:
 - · Engine warning lamp is illuminated.
 - · EPC lamp is illuminated.
 - The engine runs irregularly.
- DTCs related to the cylinder on demand (COD) function are stored in the engine control module, J623 (address word 01). See the *Service* section of this bulletin for a complete list.

Technical Background

A delay during the actuation of the COD adjusting mechanism is possible during the switch between 8 and 4 cylinder mode.

Production Solution

Optimized production.

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Technical Service Bulletin

Service

1. Use the following image (Figure 1) and chart to identify the installation position of the affected actuator based on the DTC.



Figure 1. Use this image to identify the installation position of the affected actuator.



| DTC Entry | Position in illustration | Cylinder | Description | Component Code |
|--|--------------------------|----------|--------------------|-------------------|
| P11A8 (Cam shift actuator "B" cylinder 2 range/performance) | А | 2 | Inlet camshaft 2 | F453 |
| P12B1 (Camshaft adjuster "B" cylinder 2 malfunction) | А | 2 | Inlet camshaft 2 | F453 |
| P11D6 (Cam shift actuator outlet "B" cylinder 2 range/performance) | В | 2 | Exhaust camshaft 2 | F455 |
| P12C1 (Exhaust camshaft adjuster "B" cylinder 2 malfunction) | В | 2 | Exhaust camshaft 2 | F455 |
| P11A6 (Cam shift actuator "A" cylinder 2 range/performance) | С | 2 | Inlet camshaft 1 | F452 |
| P12A9 (Camshaft adjuster "A" cylinder 2 malfunction) | С | 2 | Inlet camshaft 1 | F452 |
| P11D5 (Cam shift actuator outlet "A" cylinder 2 range/performance) | D | 2 | Exhaust camshaft 1 | F454 |
| P12B9 (Exhaust camshaft adjuster "A" cylinder 2 malfunction) | D | 2 | Exhaust camshaft 1 | F454 |
| P11AA (Cam shift actuator "A" cylinder 3 range/performance) | E | 3 | Inlet camshaft 1 | F456 |
| P12AA (Camshaft adjuster "A" cylinder 3 malfunction) | E | 3 | Inlet camshaft 1 | F456 |
| P11D7 (Cam shift actuator outlet "A" cylinder 3 range/performance) | F | 3 | Exhaust camshaft 1 | F458 |
| P12BA (Exhaust camshaft adjuster "A" cylinder 3 malfunction) | F | 3 | Exhaust camshaft 1 | F458 |
| P11AC (Cam shift actuator "B" cylinder 3 range/performance) | G | 3 | Inlet camshaft 2 | F457 |
| P12B2 (Camshaft adjuster "B" cylinder 3 malfunction) | G | 3 | Inlet camshaft 2 | F457 |
| P11D8 (Cam shift actuator outlet "B" cylinder 3 range/performance) | Н | 3 | Exhaust camshaft 2 | F459 |
| P12C2 (Exhaust camshaft adjuster "B" cylinder 3 malfunction) | Н | 3 | Exhaust camshaft 2 | F459 |



| | 1 | 1 | | 1 |
|--|---|---|--------------------|------|
| P11DB (Camshift actuator outlet "A" cylinder 5 range/performance) | I | 5 | Exhaust camshaft 2 | F467 |
| P12BC (Exhaust camshaft adjuster "A" cylinder 5 malfunction) | I | 5 | Exhaust camshaft 2 | F467 |
| P11B2 (Cam shift actuator "A" cylinder 5 range/performance) | J | 5 | Inlet camshaft 2 | F465 |
| P12AC (Camshaft adjuster "A" cylinder 5 malfunction) | J | 5 | Inlet camshaft 2 | F465 |
| P11DC (Cam shift actuator outlet "B" cylinder 5 range/performance) | К | 5 | Exhaust camshaft 1 | F466 |
| P12C4 (Exhaust camshaft adjuster "B" cylinder 5 malfunction) | К | 5 | Exhaust camshaft 1 | F466 |
| P11B4 (Cam shift actuator "B" cylinder 5 range/performance) | L | 5 | Inlet camshaft 1 | F464 |
| P12B4 (Camshaft adjuster "B" cylinder 5 malfunction) | L | 5 | Inlet camshaft 1 | F464 |
| P11E2 (Cam shift actuator outlet "A" cylinder 8 range/performance) | М | 8 | Exhaust camshaft 1 | F478 |
| P12C7 (Exhaust camshaft adjuster "B" cylinder 8 malfunction) | М | 8 | Exhaust camshaft 1 | F478 |
| P11D2 (Cam shift actuator "B" cylinder 8 range/performance) | N | 8 | Inlet camshaft 1 | F476 |
| P12B7 (Camshaft adjuster "B" cylinder 8 malfunction) | N | 8 | Inlet camshaft 1 | F476 |
| P11E1 (Cam shift actuator outlet "A" cylinder 8 range/performance) | 0 | 8 | Exhaust camshaft 2 | F479 |
| P12BF (Exhaust camshaft adjuster "A" cylinder 8 malfunction) | 0 | 8 | Exhaust camshaft 2 | F479 |
| P11D1 (Cam shift actuator "A" cylinder 8 range/performance) | Р | 8 | Inlet camshaft 2 | F477 |
| P12AF (Camshaft adjuster "A" cylinder 8 malfunction) | Р | 8 | Inlet camshaft 2 | F477 |

2. Replaced the affected COD adjusting mechanism.





Note:

The engine could be damaged.

 Bring all of the replaced cam adjustment actuator pins into the installed position. Press the pins down in the direction of the arrow (Figure 2) by hand. The pins must not be in the outward position.

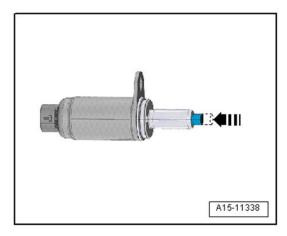


Figure 2. Press the pins down in the direction of the arrow.

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Technical Service Bulletin

Warranty

| Claim Type: | Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only. | | | | |
|-------------------|---|-----------------|-------|--|--|
| Service Number: | 1551 | | | | |
| Damage Code: | 0040 | | | | |
| Labor Operations: | For A8/S8: | | | | |
| | Adjusting mechanism for valvelift system (COD) remove+reinstall Bank 2 | 1551 1921 | 20 TU | | |
| | Adjusting mechanism for valvelift system (COD) remove+reinstall Bank 1 (Includes air hose remove+reinstall) | 1551 1922 | 30 TU | | |
| | For S6/S7/RS 7: | | | | |
| | Adjusting mechanism for valvelift system (COD) remove+reinstall Bank 2 | 1551 1921 | 30 TU | | |
| | Adjusting mechanism for valvelift system (COD) remove+reinstall Bank 1 | 1551 1922 | 40 TU | | |
| Diagnostic Time: | GFF – Checking and clearing fault codes included in existing labor operations | 0150 0000 | 10 TU | | |
| | Road test prior to service procedure | No allowance | 0 TU | | |
| | Road test after service procedure | 0121 0004 | 10 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 #2042071/1 | | | | |

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.

Required Parts and Tools

| Part Number | Part Description | Quantity |
|-------------|-------------------|-------------------------------|
| 06E103697L | Camshaft adjuster | As needed (One per DTC entry) |



Additional Information

All parts and service references provided in this TSB (2042071) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.