

#### 01 MIL on, DTC entries about AVS adjustment

01 18 57 2042071/2 March 2, 2018. Supersedes Technical Service Bulletin Group 01 number 15-45 dated October 5, 2015 for reasons listed below.

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

### Condition

REVISION HISTORY			
Revision	Date	Purpose	
2	-	Revised title	
		Revised header data (Updated DTCs)	
		Revised Service (Updated Step 3 information)	
		Revised Warranty (Added Claim Types)	
1	10/06/2015	Initial publication	

#### **Customer states:**

One or more of the following conditions is present:

- MIL on.
- EPC lamp is illuminated.
- The engine runs irregularly.

#### Workshop findings:

• DTCs related to the cylinder on demand (COD) function are stored in the engine control module (ECM), J623 (address word 0001). 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.

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### **Production Solution**

Optimized production.

### 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
<b>P11A8</b> (Cam shift actuator "B" cylinder 2 range/performance)	А	2	Inlet camshaft 2	F453

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#### Page 2 of 7



<b>P12B1</b> (Camshaft adjuster "B" cylinder 2 malfunction)	A	2	Inlet camshaft 2	F453
<b>P11D6</b> (Cam shift actuator outlet "B" cylinder 2 range/performance)	В	2	Exhaust camshaft 2	F455
<b>P12C1</b> (Exhaust camshaft adjuster "B" cylinder 2 malfunction)	В	2	Exhaust camshaft 2	F455
<b>P11A6</b> (Cam shift actuator "A" cylinder 2 range/performance)	с	2	Inlet camshaft 1	F452
<b>P12A9</b> (Camshaft adjuster "A" cylinder 2 malfunction)	с	2	Inlet camshaft 1	F452
<b>P11D5</b> (Cam shift actuator outlet "A" cylinder 2 range/performance)	D	2	Exhaust camshaft 1	F454
<b>P12B9</b> (Exhaust camshaft adjuster "A" cylinder 2 malfunction)	D	2	Exhaust camshaft 1	F454
<b>P11AA</b> (Cam shift actuator "A" cylinder 3 range/performance)	E	3	Inlet camshaft 1	F456
<b>P12AA</b> (Camshaft adjuster "A" cylinder 3 malfunction)	E	3	Inlet camshaft 1	F456
<b>P11D7</b> (Cam shift actuator outlet "A" cylinder 3 range/performance)	F	3	Exhaust camshaft 1	F458
<b>P12BA</b> (Exhaust camshaft adjuster "A" cylinder 3 malfunction)	F	3	Exhaust camshaft 1	F458
<b>P11AC</b> (Cam shift actuator "B" cylinder 3 range/performance)	G	3	Inlet camshaft 2	F457
<b>P12B2</b> (Camshaft adjuster "B" cylinder 3 malfunction)	G	3	Inlet camshaft 2	F457
<b>P11D8</b> (Cam shift actuator outlet "B" cylinder 3 range/performance)	н	3	Exhaust camshaft 2	F459
<b>P12C2</b> (Exhaust camshaft adjuster "B" cylinder 3 malfunction)	н	3	Exhaust camshaft 2	F459
<b>P11DB</b> (Cam shift actuator outlet "A" cylinder 5 range/performance)	1	5	Exhaust camshaft 2	F467

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

2. Replace the affected COD adjusting mechanism.

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### 3. (!) Note:

The camshaft sleeves 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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### Warranty

Claim Type:	• 110 up to 48 Months/50,000 Miles.				
	G10 for CPO Covered Vehicles – Verify Owner.				
	<ul> <li>If vehicle is outside any warranty, this Technical Service Bulletin is informational only.</li> </ul>				
Service Number:	1551				
Damage Code:	0040				
Labor Operations:	rations: For A8 and 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, and 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	Time stated on diagnostic protocol (Max 10 TU)		
	Road test prior to service procedure	No allowance	0 TU		
	Road test after service procedure	0121 0004	10 TU		
Claim Comment:	As per TSB #2042071/2				

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.

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#### **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. Please check the Repair Manual for fasteners, bolts, nuts, and screws that require replacement during the repair.

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