

# Technical Service Bulletin



## 01 MIL on (DTC P0491/P0492 secondary air system bank 1/2 through-flow too low/malfunction)

01 16 55 2035002/4 March 14, 2016. Supersedes Technical Service Bulletin Group 01 number 15-47 dated October 22, 2015 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A8	2010 - 2012	All	4.2FSI

## Condition

REVISION HISTORY		
Revision	Date	Purpose
4	-	Revised <i>Required Parts and Tools</i> (Updated part number)
3	10/22/2015	Revised <i>Production Solution</i> (Added solution) Revised <i>Service</i> (Completely revised) Revised <i>Warranty</i> (Updated TU for GFF) Updated <i>Required Parts and Tools</i> (Removed parts; updated part numbers)
2	10/8/2015	Revised header data (Added customer codes)

- MIL on.
- The following DTCs are stored in the engine control module, J623 (address word 01):
  - **DTC P0491** (secondary air system bank 1, low flow)
  - **DTC P0492** (secondary air system bank 2, low flow)

## Technical Background

The DTCs may appear during monitoring of the secondary air system during the engine cold starting phase. With the electric solenoid valves controlled, a diagnosis cycle is performed and the secondary air pressure is measured for a specified value.

The secondary air pressure can be influenced by several factors; which may include a leak in the vacuum system.

## Production Solution

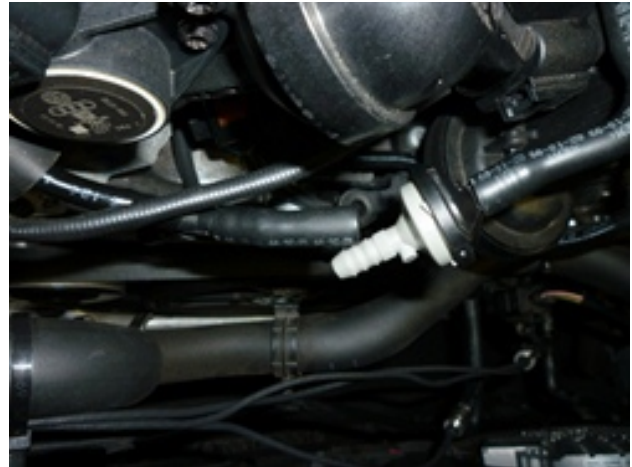
Improved combination valves.

## Service

During the catalyst heating phase, the secondary air valves could close too early if vacuum supply is low. Low vacuum supply can be a result of a leak in the vacuum system, so it is necessary to check the entire system for leaks.

1. Check the vacuum check valve for leaks (Figure 1). The direction of flow should only be towards the intake manifold.

If a leak is found at the check valve, replace the valve and recheck.



*Figure 1. Vacuum check valve.*

2. With the hose to the check valve disconnected, apply 400 mmHG of vacuum with the VAS 6213 hand vacuum pump (Figure 2).

If the vacuum supply drops during the first 10 minutes of the test, check all pipes of the vacuum system and solenoid changeover valves for leaks. Repair as necessary.



*Figure 2. VAS 6213 hand vacuum pump*

3. If the engine warning light is on due to DTC P0491 and/or DTC P0492, proceed as follows:
  1. Replace the following components:  
Bank 1 and Bank 2 - Combination valves and gaskets (**079131101AN** and **06A131120D**)

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2. Delete the DTC entry before setting the readiness code.
3. If the DTC is not logged after two cold engine starts, return the vehicle to the customer.

## 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>	2640		
<b>Damage Code:</b>	0010		
<b>Labor Operations:</b>	Combi valves remove + reinstall (both)	2640 2019	40 TU
<b>Diagnostic Time:</b>	GFF – Checking and clearing fault codes included in existing labor operations, including vacuum checks and cold start tests.	0150 0000	50 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)		
<b>Claim Comment:</b>	As per TSB #2035002/4		

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
06A131120D	Combination valve gaskets	2
079131101AN	Combination valves for secondary air system	2

Tool Number	Tool Description
VAS 6213	Hand Vacuum Pump

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## Additional Information

All parts and service references provided in this TSB (2035002) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.