





AD07.61-P-4000-15A	ME-SFI secondary air injection malfunction (causal chain) - Fault code description		 AD
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1	Fault code	P0410
2	Fault storage  Actuation of the engine diagnosis indicator lamp (EURO3/4) or CHECK ENGINE (MIL) malfunction indicator lamp 	after expiry of test duration and fault  after two successive driving cycles with faults
3	Checking frequency	once per driving cycle
4	Checked signal or status	Closed-loop mixture control
5	Limit value Checking duration	Increase of lambda control factor by at least +23 % ("rich" - stop) approx. 10 s
6	Check prerequisites	<ul style="list-style-type: none"> <li>- Coolant temperature when starting is less than 40 °C</li> <li>- Coolant temperature during test 70 up to 106 °C</li> <li>- Air conditioning OFF</li> <li>- Engine at idle</li> <li>- Vehicle stationary</li> <li>- Lambda control enabled</li> <li>- Air pump activated at least once after engine start</li> <li>- no fault in voltage supply for purge control valve, air pump control valve and electric air pump</li> <li>- No fault in purge system</li> <li>- no fault in throttle valve actuator</li> <li>- no combustion misfires</li> <li>- No fault in oxygen sensor upstream of TWC, aging</li> <li>- No fault in CAN data bus</li> <li>- Self-adaption of the mixture formation not at limit</li> <li>- Air pressure more than approx. 780 hPa (i.e. no test is performed above a height of approx. 2500 m)</li> </ul>
7	 After a repair, carry out test and driving instructions	<ul style="list-style-type: none"> <li>- Start cold engine (coolant temperature &lt; 40 °C)</li> <li>- Abrupt acceleration &gt; 1400 rpm</li> <li>- Let engine warm-up with increased rpm or drive vehicle until the coolant temperature is 70 up to 106 °C</li> </ul>

		<p>- Let engine run with increased rotational speed for another approx. 7 minutes or drive vehicle for approx. 7 minutes</p> <p>- Then let engine run in idle for approx. 6 seconds, vehicle must be stationary</p> <p>If the test is performed, this is displayed in the HHT as follows: If the test is passed without a fault, "-V-" is placed in dark (repair is successful). If the test is passed with a fault, "-F-" is placed in dark. After ignition OFF the tests are again restored (white field). Only after the test has been performed once again, the corresponding fields are once again placed in dark.</p> <p>Carry out a new test only after approx. 10 seconds ignition OFF.</p>
8		<p>- If a prerequisite changes during the test, the test is interrupted and started again later.</p> <p>If in between the ignition was switched off, the coolant temperature must be less than 40 °C when starting again.</p> <p>- With the start of the function chain, all functions for automatic mixture adaption are blocked, the purge control valve is closed and the current lambda control factor is determined. This is followed by secondary air injection. The mixture must lean out. The lambda control factor reacts correspondingly with an increase of more than +23 %.</p>