

Installation Instructions

Exhaust Block-Off Plates Toyota 4.6L (1UR-FE) Engines

Tools Needed:

10 mm combination wrench, ratchet with 10 mm standard and or deep-well socket, large flat head screwdriver or pry tool, PB Blaster or equivalent

Installation:

The exhaust block-off plates are **only** to be installed with the SAIS Bypass Module. On the 4.6L engine the block off plates install between the Air Switching Valves (ASV) and the Stainless Air Tubes that run down to the exhaust manifold. The ASVs are located on the top of valve covers as shown in Figure 1. There is one ASV located on each side of the intake manifold.

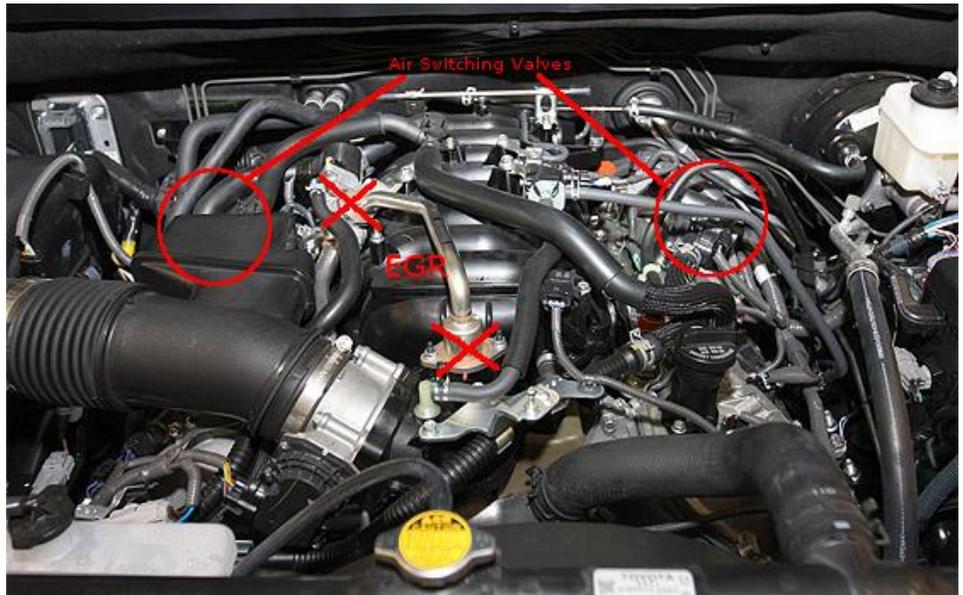


Figure 1 - Air Switching Valve Locations



Figure 2 - Driver Side ASV
(mirrored on passenger side)

- 1) With the engine cool, locate the Secondary Air Injection Air Switching Valves on the top of sides of the engine.
- 2) Remove the bolts connecting the Air tube flanges to the ASVs. If the bolts will not break free, liberally apply penetrating fluid (PB Blaster or equivalent) to the threads and let soak before trying again.
- 3) Remove and bolts holding the air tube to the top of the valve cover. With a pry tool, open a gap between the flanges and the valve body by prying the air tube away from the back of the engine. The stainless-steel tubes are very rigid and it may take considerable force to get the flange open enough to insert the plates.
- 4) While holding the air tube connection open, insert the plates so the metal gasket remains on the exhaust manifold side of the plate as shown in Figure-2 (the gap is exaggerated to show how the plates insert).
- 5) Make sure the plates are inserted all the way up against the bolts. Reinstall any removed bolts or nuts. Ensure the connection from the ASV and air tube is tightened all the way.
- 6) Start the engine and check for exhaust leaks at the ASV. Retighten the flange bolts if needed.