Installation Instructions Exhaust Block-Off Plates Toyota 2.7L (2TR-FE) Engine

Installation:

The exhaust block-off plates are <u>only</u> to be installed with the SAIS Bypass Module. The exhaust block off plates on the 2.7L install at the exhaust valve air tube located at the exhaust manifold on the passenger side of the engine. Only one block off plate is needed to prevent the exhaust gas from reaching the air switching valve. However, a second is included in to act as a spacer to prevent extra stress that would otherwise be placed on the air valve and cylinder head studs that would be needed to create a proper seal if only one block off plate were used.

- 1) With the engine cool, disconnect the MAF/IAT sensor. Loosen the air tube clamp on the intake side of the air intake tube. Unclamp the top of the air filter housing and remove it with the air tube connected.
- 2) Remove the exhaust manifold heat shield. If the nuts will not break free, liberally apply penetrating fluid (PB Blaster or equivalent) to the threads and let soak overnight before trying again to avoid breaking any of the bolts.
- 3) Remove the air injection tube by removing the four stud nuts shown in Figure 3. Remove the two metal gaskets and clean them and the mating surfaces of the valve and cylinder head. Replace the metal gaskets on the studs so they match the flanges. Flip them over if they do not.
- 4) Now install the block off plates on the studs. The block off plates are not symmetrical either so install them so they also match the flanges. There should now be a gasket between one block of plate and the air switching valve and one between the other block off plate and the cylinder head.
- 5) Reinstall the air tube and torque the stud nuts to the recommended value. (20Nm or 15ft.lb).
- 6) Wipe any excess penetrating fluid off of the exhaust manifold heat shield and reinstall. Reinstall the air box top and air intake tube. Tighten down the air intake tube clamp and reconnect the MAF/IAT sensor.
- 7) Crank the engine and check for exhaust leaks.

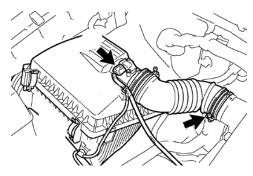


Figure 1 -Air Box Removal

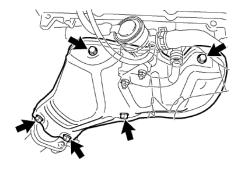


Figure 2 - Exhaust Manifold Heat Shield Removal

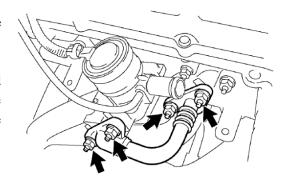


Figure 3 - Air Tube Removal