

www.plazmaman.com

## **INSTALL INSTRUCTIONS EVO 9 MANIFOLD**

## **REMOVAL**

- 1. Carefully remove OEM inlet manifold.
- 2. Remover OEM fuel rail and put to passengers side in an upside down position, with injectors still connected.
- 3. Remove throttle body (leave throttle body water lines connected for now, and leave T-body in engine bay).
- 4. Take care to remove inlet manifold carefully, as in most case the OEM steel shim gasket can be reused .Using a white texter or/and a note pad, sketch down the vacuum line positions and locations as a guide in case they need to be used in the future .PULL OUT DIPSTICK, AND REMEMBER EXACTLY WHERE THE CURRENT OIL LINE IS. MARK WITH TEXTER OR SIMILAR.

## **REPLACEMENT**

- 1. Pick up OEM throttle body that is in the engine bay, clamp each hose, and remove off throttle body. Join together the 2 water lines that used to run through the throttle body. Water will now just circulate through these.
- 2. Remove IDLE speed motor off throttle body and bolt into the base of the inlet manifold.
- 3. IMPORTANT must cover dome in masking tape to protect finish during instal.
- 4. Make sure new inlet manifold is clean and free from debris.
- 5. Do a dummy fit on the vehicle to make sure every thing fits and nothing hits.
- 6. Make sure steel shim inlet gasket is clean from oils and grease, and lightly coat with a silicone sealant on both sides. Fit gasket onto head.
- 7. Carefully fit inlet manifold and tighten using al OEM bolts. Make sue to reuse the OEM alternator bracket.
- 8. Pick up OEM dipstick, and cut upper bracket off (pic 1). The dip stick must now be carefully bent in a slightly larger arc than it is now. Test fitting must be done, and a few attempts of this are sometime required to get it 100%. Once position is correct, secure using the supplied rubber clamp bracket. (pic 2) THE CORRECT POSITION OF THE DIP STICK IS WHEN IT IS FULLY INSTERTED AND SITS APPROX 5mm FROM PLENUM DOME. (pic 3)
- 9. Insert Original black injector seals into the inlet manifold USE RUBBER GREASE OR SIMILAR ON THESE 10. Carefully reinstall OEM fuel rail and let it rest in an installed position. (This is a bit tricky, but if dip stick was mounted correctly, and is up near the plenum dome, it will slide in easily).
- 11. Bolt in supplied fuel rail brackets. First install base bolt, followed by fuel rail bolt. Before tightening these fully, check that all injectors and seals are in place and not pinched. IT IS CRITICAL THAT THE FUEL RAIL IS SQUARE TO THE INJECTOR HOLES ie NOT ON AN ANGLE .OTHERWISE AIR LEAKAGE WILL OCCUR , FOLLOWED BY ENGINE DAMAGE .TWIST INJECTORS FROM SIDE TO SIDE TO MAKE SURE THAT THEY ARE NOT TOO LOOSE OR TOO TIGHT .
- 12. The inlet fuel pressure side (metal pipe) of the fuel rail has to be carefully bent down and out of the way to allow the throttle body and piping to clear.
- 13. Remove the OEM TPS switch off throttle body, and install on the new PLAZMAMAN billet item.
- 14. Install throttle body; use a small smear of rubber grease on seal. USE LOCTITE OR SIMILAR ON THROTTLE BODY BOLTS.

## 16. IT IS A MUST TO CONNECT ALL ELECTRICAL PLUGS TO THEIR EXISTING MODULES. OTHERWISE THE OEM COMPUTUER WILL RECOGNISE ERRORS AND DISPLAY AN ENGINE CHECK LIGHT. THIS WILL IN TURN PUT THE CAR IN A LIMP STYLE MODE AND ONLY LOW BOOST WILL BE ACHIEVED.

- 17. Screw in the supplied fitting into the side of the IDLE solenoid block which is welded onto the underside of the inlet, near the throttle body flange .The fitting has a small hole drilled into it. This hole size can be drilled out to suit different idle requirements. A large hole is required for anti lag setups, and subsequent adjustment of idle is required through a FLASH or AFTERMARKET TUNE.
- 18. Correct a hose from the idle solenoid to a fitting somewhere in the pipe before the throttle body for idle control sequence.
- 19. Connect accelerator cable to bracket check operation is correct.
- 20. Connect all necessary vaccum lines to underside of plenum, incl brake booster.
- 21. Connect all necessary intercooler pipes and BOV hoses.
- 22. START VEHCILE AND CHECK FOR VACCUM AND FUEL RAIL LEAKS.
- 23. IDLE SPEED CAN BE PLAYED AROUND WITH BY MODIFYING THE HOLE SIZE OF THE SCREW IN FITTING ON THE IDLE VALVE.
- 24. PLAZMAMAN HIGHLY RECOMMENDS THAT THE VEHICLE BE CHECKED ON THE DYNO.

PLAZMAMAN

9 Bond Crescent, Wetherill Park
NSW 2164
P:(02) 97251728, (02) 97251729,
F:(02) 97251722
E: sales@plazmaman.com
www.plazmaman.com