

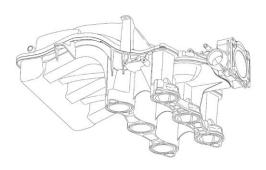
## INSTALL/REMOVAL INSTRUCTIONS: INTAKE MANIFOLD

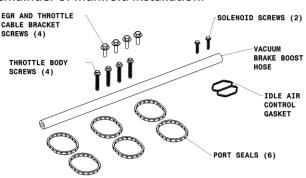
**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully. Failure to do so will result in severe damage to the intake manifold and to the engine.

## REMOVAL/INSTALL OF INTAKE MANIFOLD - FORD 4.0L SOHC ENGINE

## **GENERAL TECH TIPS:**

- Air intake manifold assembly torque is 11 Nm
- Eight (8) rubber isolated mounting bolts must be inspected to ensure that rubber is not deteriorated –
  replace isolated bushing if significant wear or tearing is witnessed which is necessary to ensure proper
  air intake manifold clamping, retention and sealing.
- 1. Carefully remove intake manifold per the service procedure outlined in shop manual and remove all mating components from manifold.
- 2. Clean mounting surfaces of debris that may affect sealing.
- 3. Install port seals (6) from provided kit into gasket seats on bottom of manifold
- 4. Install twist-lock purge nipple sub-assembly shown below into manifold, port seals and idle air bypass gasket. Reinstall idle air bypass valve and reuse 2 original fasteners tightening each to 10 Nm.
- 5. Install EGR valve and throttle cable bracket with two M6 thread-forming screws each (21 mm long) w/large washers. Tighten fasteners evenly to 5-7 Nm. DO NOT OVERTIGHTEN!
- 6. Install throttle body with four M6 thread-forming screws (45 mm long). Tighten fasteners evenly until throttle body is bottomed on the flange. DO NOT OVERTIGHTEN!
- 7. Install solenoid at rear of manifold with two M5 thread-forming screws (25 mm long). Tighten fasteners until solenoid is seated to approximately 3 Nm. DO NOT OVERTIGHTEN!
- 8. Install and re-use eight (8) isolated mounting bolts (see tip above) into manifold.
- 9. Install air intake manifold to engine and carefully tighten to 11 Nm.
- 10. Install provided vacuum brake hose between brake booster and connector/port at front of manifold reusing clamps from original hose. Original short brake boost vacuum hose can be discarded.
- 11. Connect provided vacuum hose between brake booster and port labled "BRAKE" on intake manifold. This is required due to unique hose lengths on 2002-2003 Ford engines.
- 12. Follow service procedure in shop manual for the remainder of manifold installation.





Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to our motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.