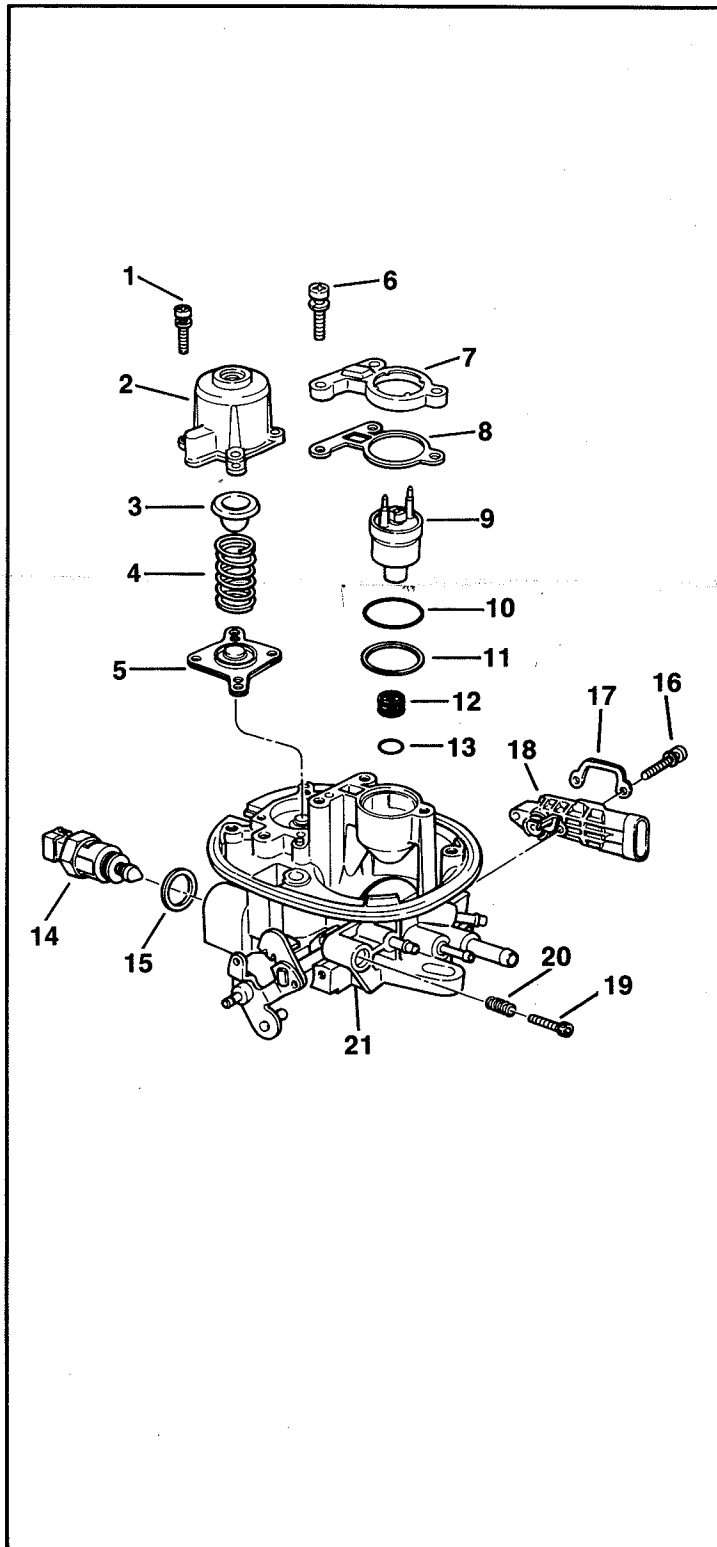


instruction sheet

HOLLEY THROTTLE BODY INJECTION MODEL 3739

TYPICAL VIEW — 3739

The exploded view shown is typical of the model T.B.I. this kit will service, the view may differ slightly from the actual T.B.I. being renewed.



NOMENCLATURE

| REF. NO. | REF. NO. |
|--|---|
| 1. Pressure Regulator Cover Screw & L.W. | 13. O-Ring |
| 2. Pressure Regulator Cover | 14. Idle Air Control Valve |
| 3. Pressure Regulator Spring Retainer | 15. Idle Air Control Valve Gasket |
| 4. Pressure Regulator Spring | 16. Throttle Position Sensor Screw & L.W. |
| 5. Pressure Regulator Diaphragm Assembly | 17. Throttle Position Sensor Retainer |
| 6. Fuel Meter Cover Screw | 18. Throttle Position Sensor |
| 7. Fuel Meter Cover | 19. Idle Adjusting Screw |
| 8. Fuel Meter Cover Gasket | 20. Idle Adjusting Screw Spring |
| 9. Injector Assembly | 21. Throttle Body & Shaft Assembly |
| 10. O-Ring | |
| 11. Back Up Washer | |
| 12. Filter | |

REMOVAL

Remove fuse marked "fuel pump" from fuse block in passenger compartment. Start engine and allow to run until fuel supply remaining in lines is consumed. When engine stalls, engage starter for three seconds to assure all pressure is relieved. With the ignition in the OFF position, replace the fuel pump fuse. Do not turn the key to the run position until the installation is complete. Follow normal service procedures to remove the T.B.I. assembly from the intake manifold.

DISASSEMBLY

Rest the T.B.I. assembly on a repair stand to avoid damage to the throttle plate and injector electrical connection during renew procedures. Use exploded view as a guide, and follow the numerical sequence in general to disassemble unit far enough to permit cleaning and inspection.

CAUTION: The pressure regulator contains a large spring under heavy compression which, if accidentally released, could cause personal injury. To disassemble remove two pressure regulator cover screws opposite each other. Reinstall them three turns, then slowly remove the other two screws evenly to relieve spring tension. While holding regulator cover, remove the remaining screws.

FUEL INJECTOR — Use care in removing injector, as the electrical connectors, injector fuel filter and nozzle are easily damaged.

CLEANING

Cleaning must be done with throttle body disassembled. Soak parts long enough to soften and remove all foreign material. Use a carburetor solvent, lacquer thinner or denatured alcohol. Make certain the throttle body is free of all hard carbon deposits. Wash off in suitable solvent. Blow out all passages in castings with compressed air and check carefully to insure thorough cleaning of obscure areas.

CAUTION: Do not soak parts containing rubber or plastic material. Injectors should never be immersed in cleaner, as damage may result.

REASSEMBLY

Reassemble in reverse order of disassembly. Note special instructions and follow outline in making adjustments.

Manually operate throttle lever, checking for binding or other malfunction. Any binding or interference could cause throttle to stick during operation and could result in loss of throttle control (or uncontrolled engine speed).

Check fuel component connections for leaks, and correct immediately.

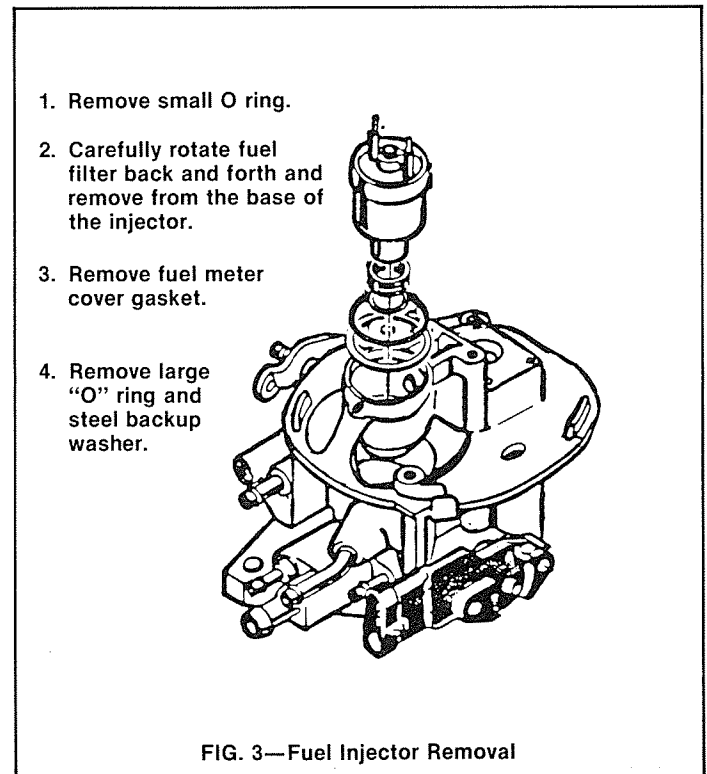
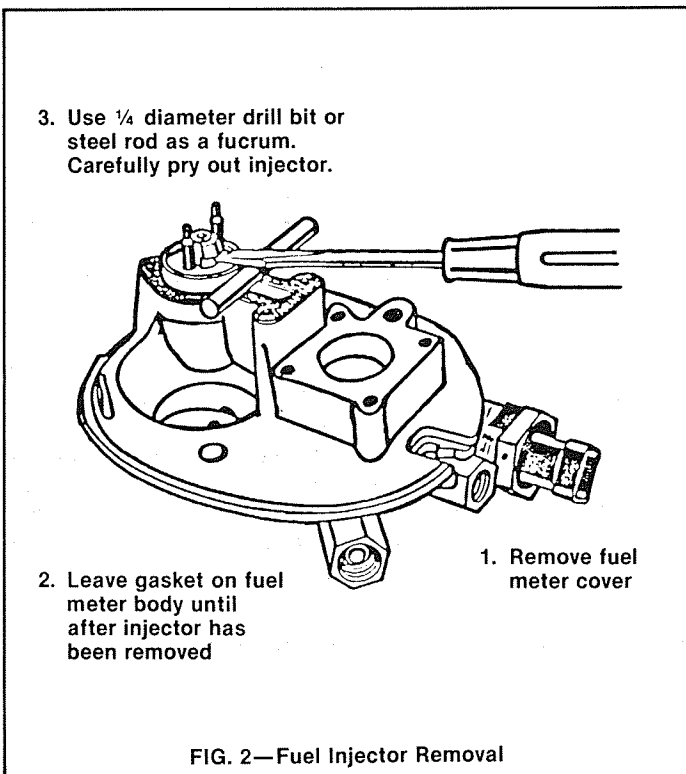
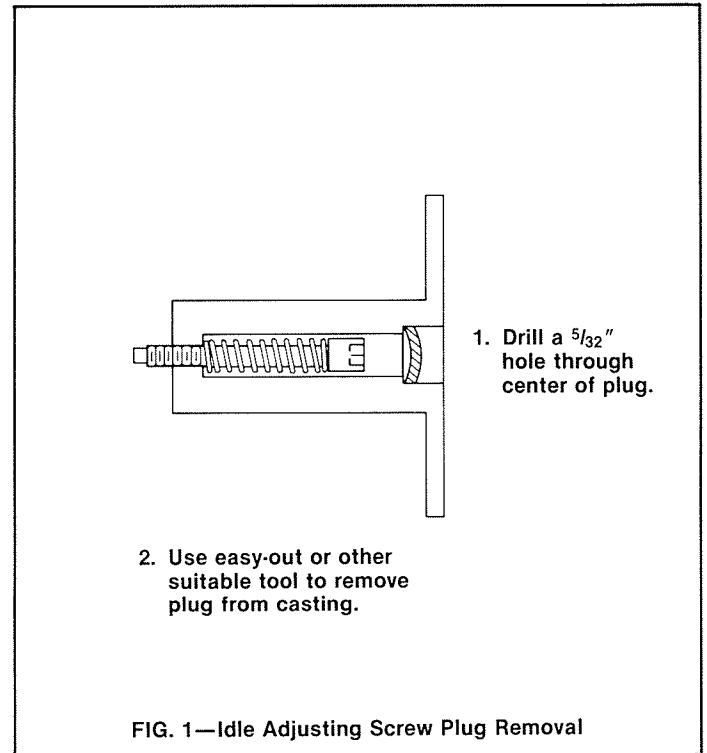
SPECIAL INSTRUCTIONS

Fuel Meter Cover—Apply thread locking compound to three threads of fuel meter cover attaching screws. Use Loctite 262 or equivalent. Tighten screws to 3.0 Nm (28 in. lbs.).

Pressure Regulator Diaphragm — when installing diaphragm, hold diaphragm in place by inserting the two installation pins through two bolt holes opposite each other. After pressure regulator cover is on with two screws started, remove the installation pins.

Fuel Injector—Install fuel injector nozzle filter on nozzle end of fuel injector, with larger end of filter facing injector, so that filter covers raised rib at base of injector. Use a twisting motion to position against base of injector. Lubricate “O” rings with automatic transmission fluid.

Back-up washer and large “O” ring must be installed before the injector, or improper seating of the large “O” ring could cause fuel to leak. Be sure “O” ring is seated properly in cavity and is flush with top of fuel meter body casting surface.



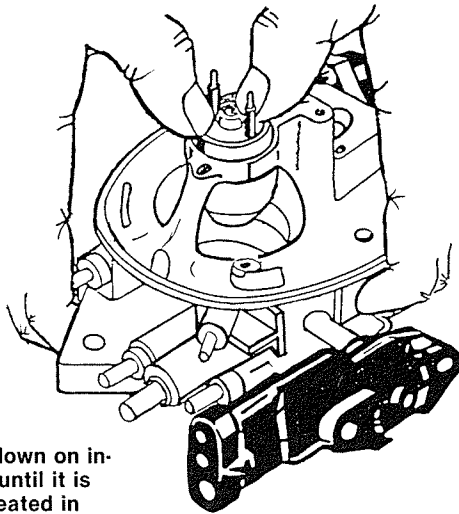
1. Install steel backup

2. Install large "O"-ring in cavity so that it is flush with top of fuel meter body casting surface.

3. Install new fuel filter with large end facing injector.

4. Push small "O" ring on nozzle end of injector until it presses against filter.

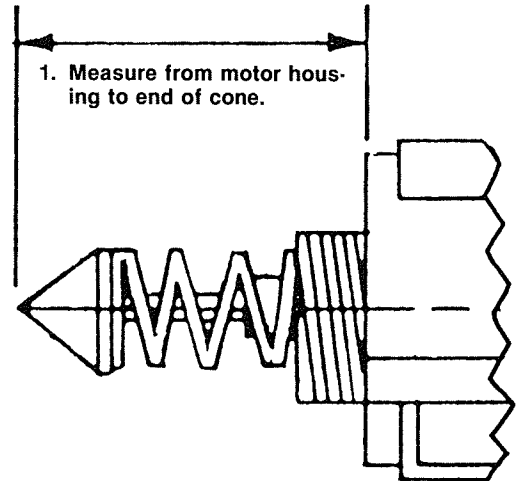
5. Push down on injector until it is fully seated in cavity.



NOTE: LUBRICATE O RINGS BEFORE INSTALLING.

FIG. 4—Fuel Injector Installation

3. Install I.A.C. in throttle body. Tighten to 18 Nm (13 ft. lbs.)



1. Measure from motor housing to end of cone.

2. If measurement is greater than 32 mm (1 1/4") push on end of cone until it is in retracted position.

FIG. 5—Idle Air Control Valve Installation

NOTE: Only 2.0L throttle position sensor requires adjustment

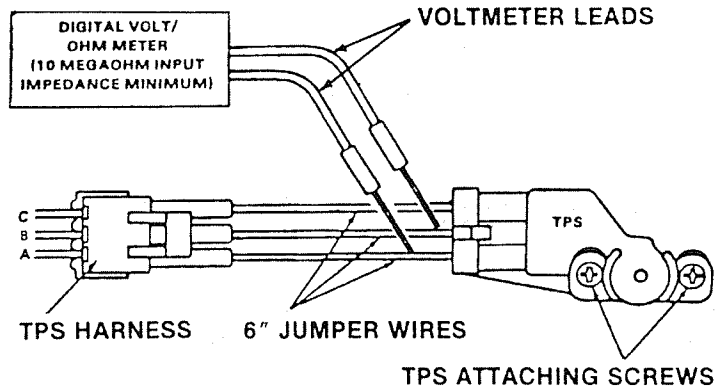
1. Make sure throttle valve is in normal closed idle position.



2. Install throttle position sensor making sure pick-up lever is located above tang on throttle actuator lever.

4. Connect digital voltmeter from TPS connector center terminal (B) to bottom terminal (A).

3. Make jumper wires with #16 #18 #20 wire. Use to connect TPS harness to TPS.



5. With ignition on engine not running, position TPS so voltmeter reads 0.5 to 0.8 volts.

6. Tighten TPS mounting screws. Recheck voltmeter reading.

7. Turn ignition off. Disconnect voltmeter and reconnect all connectors

FIG. 6—Throttle Position Sensor Installation and Adjustment

SERVICE PROCEDURE FUEL SYSTEM PRESSURE TEST AND ADJUSTMENT

This test must be performed when checking and adjusting the fuel system.

Tools required:

Fuel Pressure Gauge Kits

| | | |
|------------|-------------|--------|
| Kent Moore | 1.8 and 2.5 | J29658 |
| | 2.0 | J34020 |

or

| | |
|---------|--------|
| Snap On | MT321C |
| or | |

| | |
|------------|----------|
| Borrough's | BT-8205B |
|------------|----------|

CAUTION: It is necessary to relieve the fuel system pressure before servicing fuel system components. Fuel spray will occur if the following procedure is not followed.

To do this:

1. Remove fuse marked "fuel pump" from fuse block in passenger compartment.
2. Start engine and allow to run until fuel supply remaining in lines is consumed. When engine stalls, engage starter for three seconds to assure all pressure is relieved.
3. With the ignition in the off position, replace the fuel pump fuse. Do not turn the key to the RUN position until the servicing is complete.

4. Remove air cleaner and plug THERMAC vacuum port.
5. On 1.8L and 2.5L engines remove steel fuel line between throttle body unit and fuel filter. On 2.0L engines remove the fuel line between the flex hose and fuel filter. See Fig. #1.
6. Install a fuel pressure gauge between the throttle body and fuel filter.
7. Start the car and observe the fuel pressure reading. It should read between 10 to 15 P.S.I. Place a $\frac{5}{16}$ allen wrench into adjusting screw which is located on top of the fuel pressure regulator cover and turn screw when you obtain a reading of 12 P.S.I. ± 1 P.S.I. on 1.8L and 2.5L engines. On 2.0L engines the reading is 15 P.S.I. ± 1 P.S.I.
8. Depressurize fuel system, then remove fuel pressure gauge.
9. Reinstall fuel line.
10. Start car and look for any fuel leaks.
11. Remove the plug covering THERMAC vacuum port and install the air cleaner.

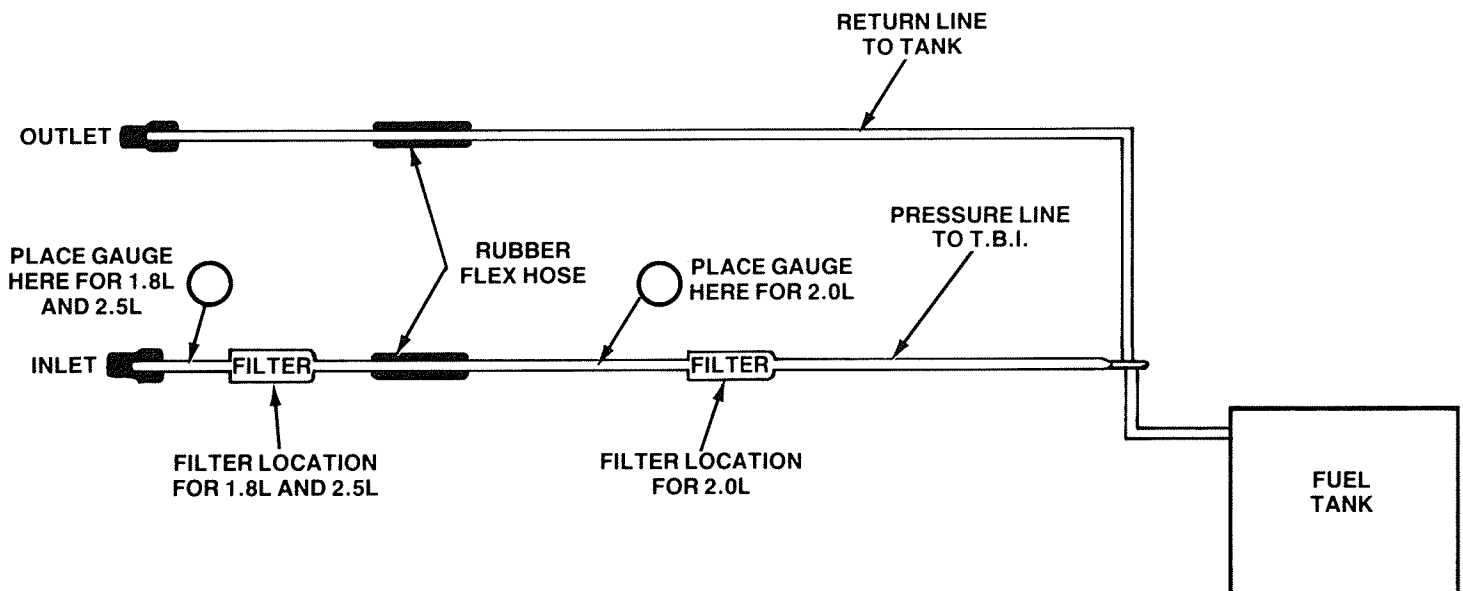


FIGURE 1