

THROTTLE BODY GASKET PACK

SERVICE INSTRUCTION WORKSHEET

TO REPAIR

GF5187-1

GM Multi Port
Fuel Injection Systems
MODEL T2A

2001 — 2009

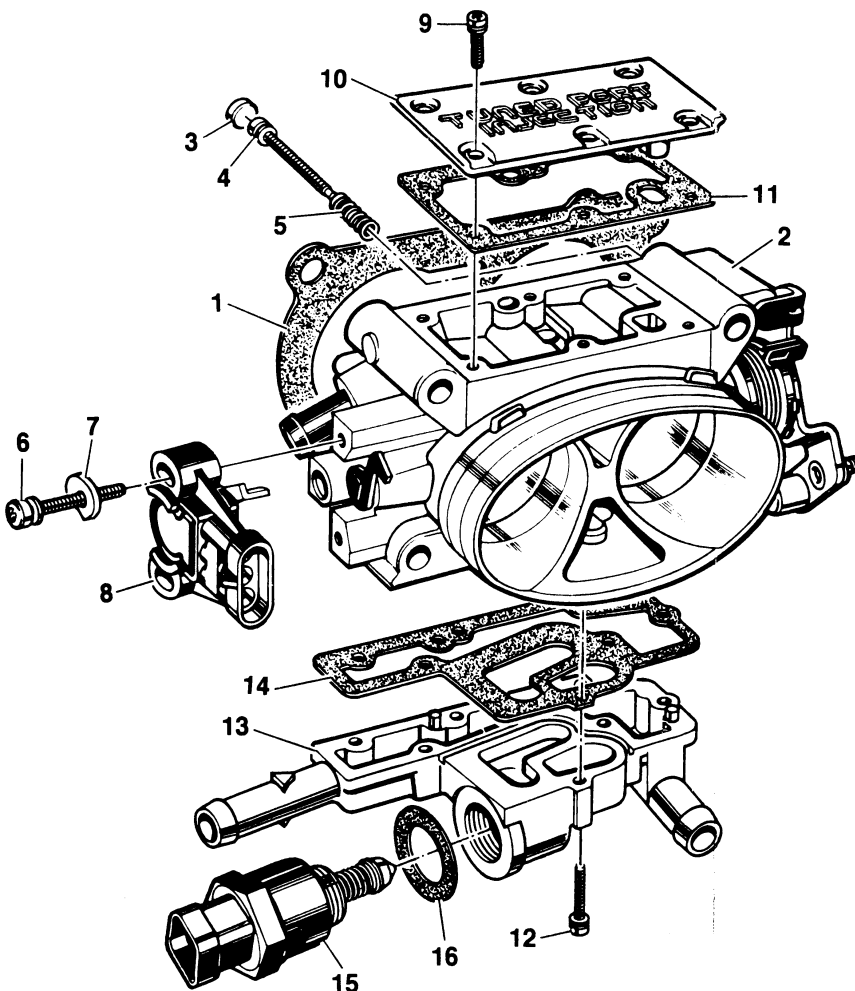
1. Carefully read the text in the following pages to become familiar with the contents of this worksheet before performing throttle body overhaul.
2. The exploded view is typical of the GM throttle body multi-port fuel injection this kit will service. The illustration may differ slightly from the actual throttle body being overhauled.
3. Use the exploded view as a guide. The numerical sequence may generally be followed to disassemble the throttle body far enough to permit cleaning and inspection.
4. Parts list shown does not reflect the contents of the kit. Reusable parts are not supplied in kit. Substitute identical replacement parts for original worn parts.

CLEANING

Cleaning must be done with throttle body disassembled. Use spray cleaner and a stiff bristle brush to remove dirt and carbon deposits. Do not use abrasives and wires to clean parts and passageways. Wash off in suitable solvent, and clear all passageways with compressed air.

Caution: When cleaning with solvent do not soak or spray parts containing rubber, leather, plastic and electrical components.

TYPICAL ILLUSTRATION



PARTS LIST

1. Flange gasket
2. Throttle body assembly
3. Idle stop screw plug
4. Idle stop screw assembly
5. Idle stop screw spring
6. Throttle position sensor (TPS) sensor
7. Throttle position sensor (TPS) retainer
8. Throttle position sensor (TPS)
9. Clean air cover screw assembly
10. Clean air cover
11. Clean air cover gasket
12. Coolant cover screw assembly (IAC)
13. Coolant cover (IAC)
14. Coolant cover gasket (IAC)
15. Idle air control valve assembly (IAC)
16. Idle air control valve gasket (IAC)

 PARTS LIST SHOWN DOES NOT REFLECT THE CONTENTS OF THE KIT.

REMOVAL & INSTALLATION NOTES

1. Before servicing fuel system components, it is necessary to relieve the fuel system pressure.
Fuel pressure relief procedure:
 - a. Disconnect fuel tank harness connector.
 - b. Start engine and let it run until it stops.
 Engage starter for 2 to 3 seconds to assure relief of pressure.
 - c. With ignition in "OFF" position, connect harness connector.
2. Cover opening on intake manifold after throttle body is removed.
3. Before removing TPS, score two lines on TPS and throttle body for proper installation and initial setting. (See Fig. 2).
4. Install parts and components in reverse order of removal.
5. Before installing gaskets, make sure surfaces on intake manifold and throttle body are clean, to ensure a good seal. Screws and clamps must be properly tightened. Refer to the torque table on this page.

TORQUE TABLE

APPLICATION	N.m	IN. LBS.	FT. LBS.
Throttle body to intake	24.0	—	18
Throttle position sensor (6)	2.0	18	—
Clean air cover screw (9).....	3.4	30	—
Coolant cover screw (12).....	3.0	27	—
Idle air control valve (15).....	18.0	—	13

NOTICE—

No adjustment of Idle Air Control Valve is required after installation. This is controlled by the ECM when the vehicle is in operation.

FIG. 1
MINIUM IDLE SPEED ADJUSTMENT (If Required)

1. Remove idle stop screw plug by piercing plug with awl.
2. Adjust idle stop screw as required.
3. Ground diagnostic lead with idle air control motor connected.
4. Turn on ignition without starting engine.
5. Wait 30 seconds.
6. Disconnect IAC electrical connector on 5.0L and 5.7L disconnect the distributor setting connector.
7. Start engine. Engine should be at normal operating temperature (closed loop).
8. Remove ground from diagnostic terminal.
9. Adjust idle stop screw to 400 RPM 5.0L, 450 RPM 5.7L in neutral on both manual and automatic transmission vehicles.
10. Turn off ignition and reconnect electrical connector.

FIG. 2
THROTTLE POSITION SENSOR (TPS) ADJUSTMENT

NOTE: With throttle valve closed, install TPS making sure its lever is above tang on throttle actuator lever. Install screws and apply a thread locking compound (Loctite 262 or equivalent). Do not tighten screws.

1. Connect 3 jumper wires between TPS and harness connector.
2. Attach an accurate voltmeter to terminals 'B' and 'C'.
3. With ignition "ON" (engine NOT running), move TPS to obtain proper voltage reading.

TPS TYPICAL