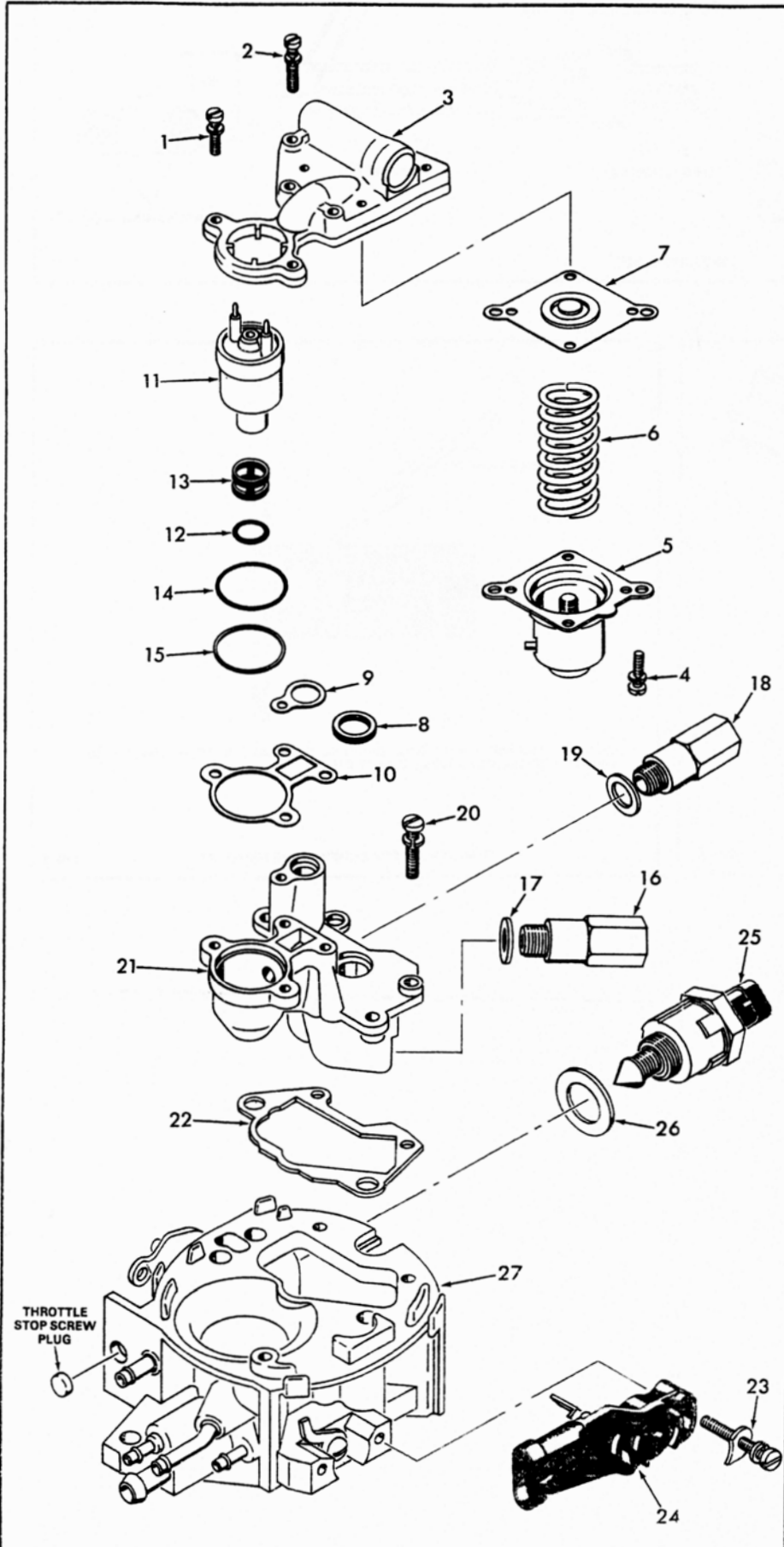


OFF VEHICLE THROTTLE BODY INJECTION SERVICE ROCHESTER-MODEL 300 AND 500

GENERAL EXPLODED VIEW



CAUTION NOTES

MODEL 300 AND 500, THE ESSENTIAL DIFFERENCE IS THAT THE TPS AND THROTTLE LEVER ARE ON OPPOSITE SIDES.

TO REDUCE THE RISK OF FIRE, IT IS NECESSARY TO RELIEVE FUEL SYSTEM PRESSURE BEFORE DISCONNECTING FUEL LINES. TO DO THIS REMOVE FUSE MARKED "FUEL PUMP" FROM FUSE BLOCK. CRANK ENGINE AND RUN UNTIL FUEL SUPPLY IN FUEL LINE IS EXHAUSTED. WHEN ENGINE STOPS ENGAGE STARTER FOR 3 SECONDS MORE TO ASSURE DISSIPATION OF ANY REMAINING PRESSURE.

USE A HOLDING FIXTURE WHEN SERVICING UNIT. IT IS POSSIBLE TO DAMAGE THE THROTTLE VALVE.

DISASSEMBLY

USE THE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION.

SPECIAL DISASSEMBLY NOTES

FUEL METER COVER & REGULATOR ASSY. (3)-TO DISASSEMBLE FOLLOW THIS PROCEDURE BECAUSE OF THE LARGE SPRING UNDER HEAVY TENSION. ACCIDENTAL RELEASE COULD CAUSE INJURY. REMOVE 2 DIAPHRAGM COVER SCREWS (4) ACROSS FROM EACH OTHER, THEN REINSTALL THEM FOR 3 TURNS. CAREFULLY REMOVE THE OTHER 2 SCREWS EVENLY TO RELEASE THE SPRING TENSION. HOLDING COVER AND HOUSING REMOVE ALL SCREWS.

FUEL INJECTOR (11)-TO REMOVE (RECOMMENDED THAT PLIERS NOT BE USED). FUEL METER COVER GASKET (10) IN PLACE TO PROTECT CASTING. PLACE A 5/16" ROD TO ACT AS A FULCRUM ACROSS CASTING. USING A SCREW DRIVER LIFT THE INJECTOR UNTIL IT IS FREE FROM THE FUEL METER BODY. (SEE FIG. 2.) FUEL INJECTOR IS ONLY SERVICED AS A COMPLETE ASSY.)

FUEL FILTER (12)-TO REMOVE ROTATE BACK AND FORTH PULLING FROM BASE OF INJECTOR.

THROTTLE POSITION SENSOR (24)-AN ELECTRICAL UNIT, FACTORY ADJUSTED AND THE RETAINING SCREWS SPOT WELDED TO RETAIN THE CRITICAL SETTING. THROTTLE BODY ASSY. CAN BE CLEANED WITHOUT REMOVING TPS IF CARE IS USED. TPS MUST NOT BE IMMERSED IN ANY TYPE OF LIQUID SOLVENT OR CLEANER.

THROTTLE POSITION SENSOR REMOVAL

1. SCRIBE LOCATING MARKS ON SENSOR AND CARB BODY FOR REASSEMBLY.
2. THROTTLE BODY INVERTED PLACE ON A CLEAN FLAT SURFACE.
3. USE A 5/16" DRILL DRILL COMPLETELY THROUGH TPS SCREW ACCESS HOLES IN BASE OF THROTTLE BODY TO REMOVE SPOT WELDS HOLDING TPS SCREWS IN PLACE.
4. REMOVE SCREWS, LOCKWASHER & RETAINERS.

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW & LOCKWASHER (2)-FUEL METER COVER (SHORT)	13. FILTER-FUEL INJECTOR
2. SCREW & LOCKWASHER (3)-FUEL METER COVER (LONG)	14. O-RING-FUEL INJECTOR (LARGE)
3. FUEL METER COVER & REGULATOR ASSY.	15. WASHER-O-RING
4. SCREW & LOCKWASHER (4)-DIAPHRAGM COVER	16. FITTING-FUEL INLET
5. COVER-SPRING & DIAPHRAGM	17. GASKET-FUEL INLET FITTING
6. SPRING-DIAPHRAGM	18. FITTING-FUEL OUTLET
7. DIAPHRAGM ASSY - PRESSURE REGULATOR	19. GASKET-FUEL OUTLET FITTING
8. DUST SEAL-FUEL PRESSURE REGULATOR	20. SCREW & LOCKWASHER (3)-FUEL METER BODY
9. GASKET-FUEL OUTLET PASSAGE	21. FUEL METER BODY
10. GASKET-FUEL METER COVER	22. GASKET-FUEL METER BODY
11. FUEL INJECTOR	23. SCREW & LOCKWASHER W/RETAINER (2)-SENSOR
12. O-RING-FUEL INJECTOR (SMALL)	24. SENSOR-THROTTLE POSITION
	25. VALVE-IDLE AIR CONTROL
	26. GASKET-AIR CONTROL VALVE
	27. THROTTLE BODY ASSY.

CLEANING

CLEANING MUST BE DONE WITH UNIT DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE A COLD IMMERSION TYPE CLEANER. MAKE CERTAIN THE THROTTLE BORES ARE FREE OF ALL CARBON AND VARNISH DEPOSITS. RINSE OFF IN A SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN THE CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS.

CAUTION: DO NOT SOAK ELECTRICAL OR DIAPHRAGM UNITS SUCH AS (7), (11), (13), (24), (25) OR RUBBER PARTS IN ANY TYPE OF CLEANING SOLVENTS.

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS.

SPECIAL INSTRUCTIONS

IDLE AIR CONTROL VALVE (25)-BEFORE INSTALLING PUSH IN ON END OF CONE UNTIL IT IS IN THE RETRACTED POSITION. INSTALL AND TIGHTEN TO 13 FT. LBS.

THROTTLE POSITION SENSOR (24)-INSTALL AFTER COMPLETION OF ASSEMBLING THE THROTTLE BODY UNIT. USE THREAD LOCKING COMPOUND ON ATTACHING SCREWS.

SCREW & LOCKWASHER (20), (1), (2) INSTALLATION-SCREWS FREE FROM OIL AND GREASE. USE AN ANAEROBIC THREAD LOCKING COMPOUND (SUCH AS LOCTITE 262 OR EQUIVALENT) APPLY COMPOUND TO THE FIRST 3 THREADS OF EACH SCREW. ANAEROBICS CURE AFTER THE COMPONENTS ARE ASSEMBLED. DO NOT APPLY A HIGHER STRENGTH THREAD LOCKING COMPOUND THAN RECOMMENDED.

FUEL METER BODY SCREWS (20)-TORQUE TO 35 INCH LBS.

FUEL METER COVER SCREWS (1), (2)-TORQUE TO 28 INCH LBS.

INLET AND OUTLET FITTINGS (18), (16)-TORQUE TO 260 INCH LBS.

O-RINGS (15), (13)-LUBRICATE O-RINGS WITH LITHIUM GREASE OR EQUIVALENT BEFORE INSTALLING.

FUEL FILTER (12)-LARGE OPEN END OF FILTER FACES UP SO THAT FILTER COVERS RAISED RIB AT BASE OF INJECTOR. THEN INSTALL SMALL O-RING AGAINST FILTER.

FUEL INJECTOR (11)-INSTALL WASHER (14) AND O-RING (13) IN FUEL METER BODY (21) THEN INSTALL INJECTOR BY USING A TWISTING MOTION TO CENTER NOZZLE O-RING IN INJECTOR CAVITY AND ALIGN LUG ON BASE WITH NOTCH IN FUEL METER BODY. PUSH DOWN ON INJECTOR TO INSURE IT IS FULLY SEATED IN CAVITY. PROPERLY SEATED LUG WILL BE IN NOTCH AND THE ELECTRICAL CONNECTIONS WILL BE PARALLEL TO THE THROTTLE SHAFT.

PRESSURE REGULATOR (3)-ASSEMBLE DIAPHRAGM, SPRING, AND COVER. COMPRESS SPRING ENOUGH TO START ALL 4 SCREWS THEN TIGHTEN SCREWS DOWN EVENLY. PRESSURE REGULATOR-INSTALL GUIDE STUDS ACROSS FROM EACH OTHER. ASSEMBLE DIAPHRAGM, SPRING, AND COVER. COMPRESS SPRING AND INSTALL 2 SCREWS SNUGLY. REMOVE STUDS AND INSTALL REMAINING SCREWS, TIGHTEN SCREWS DOWN EVENLY.

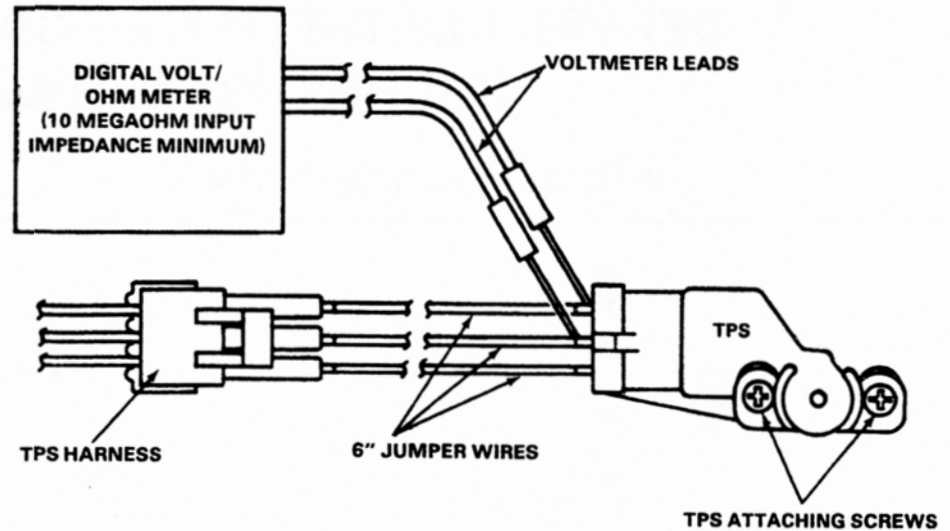
USE VEHICLE MANUFACTURER'S SERVICE MANUALS FOR "ON VEHICLE SERVICE AND ADJUSTMENTS."

THROTTLE POSITION SENSOR ADJUSTMENT

1. AFTER INSTALLING TPS TO THROTTLE BODY, INSTALL THROTTLE BODY UNIT TO ENGINE.
2. REMOVE EGR VALVE AND HEAT SHIELD FROM ENGINE.
3. USING THREE SIX INCH JUMPERS, CONNECT TPS HARNESS TO TPS.
4. IGNITION "ON" ENGINE STOPPED, USE A DIGITAL VOLTMETER TO MEASURE VOLTAGE BETWEEN TPS TERMINALS B AND C.
5. LOOSEN TPS ATTACHING SCREWS AND ROTATE THROTTLE POSITION SENSOR TO OBTAIN A VOLTAGE READING OF $.525 \pm .075$ VOLTS. TIGHTEN SCREWS AND RECHECK VOLTAGE READING.
6. WITH IGNITION "OFF" REMOVE JUMPERS AND RECONNECT TPS HARNESS TO TPS.
7. INSTALL EGR VALVE AND HEAT SHIELD TO ENGINE, USING NEW GASKET AS NECESSARY.
8. INSTALL AIR CLEANER GASKET AND AIR CLEANER TO THROTTLE BODY UNIT.

1982 SKYHAWK THROTTLE POSITION SENSOR ADJUSTMENT

1. REMOVE "FUEL PUMP" FUSE FROM FUSE BLOCK.
2. PLACE THROTTLE BODY ASSY. ON INTAKE MANIFOLD AND LEAVE UNBOLTED.
3. USING 3 SIX INCH JUMPER WIRES, CONNECT TPS HARNESS TO TPS.
4. WITH IGNITION "ON" ENGINE STOPPED USE A DIGITAL VOLTMETER TO MEASURE VOLTAGE BETWEEN TPS TERMINAL B AND C.
5. LOOSEN 2 TPS ATTACHING SCREWS AND ROTATE THROTTLE POSITION SENSOR TO OBTAIN A VOLTAGE READING OF $.820 \pm .250$ VOLTS. TIGHTEN SCREWS AND RECHECK VOLTAGE READING.
6. WITH IGNITION "OFF" REMOVE JUMPERS AND RECONNECT TPS HARNESS TO TPS.
7. INSTALL THROTTLE BODY UNIT TO ENGINE. THEN INSTALL "FUEL PUMP" FUSE IN FUSE BLOCK.



1982 MODEL 300

FIG. 1

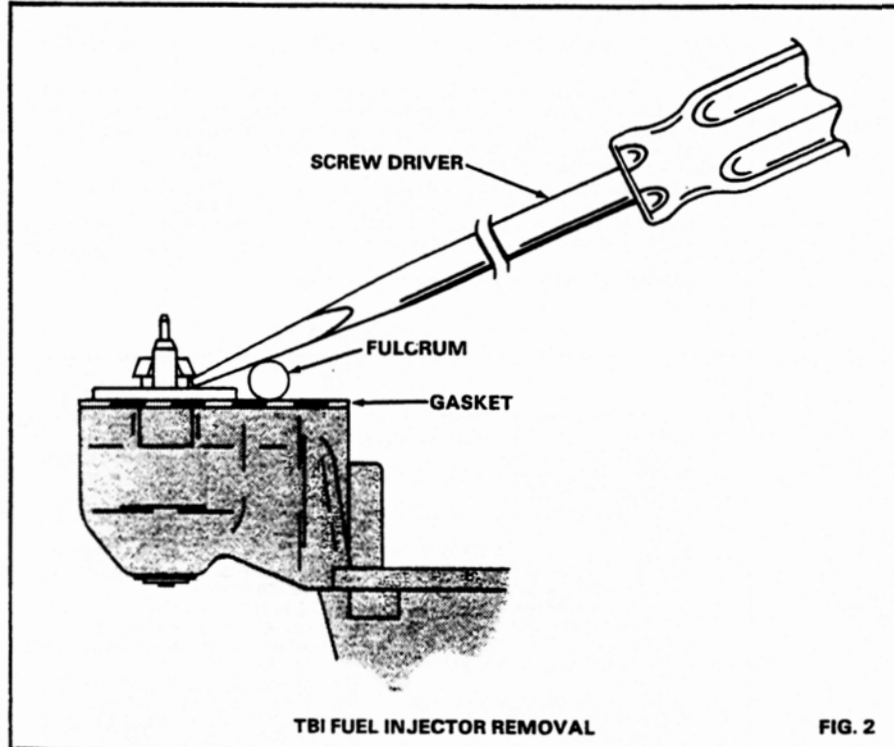


FIG. 2

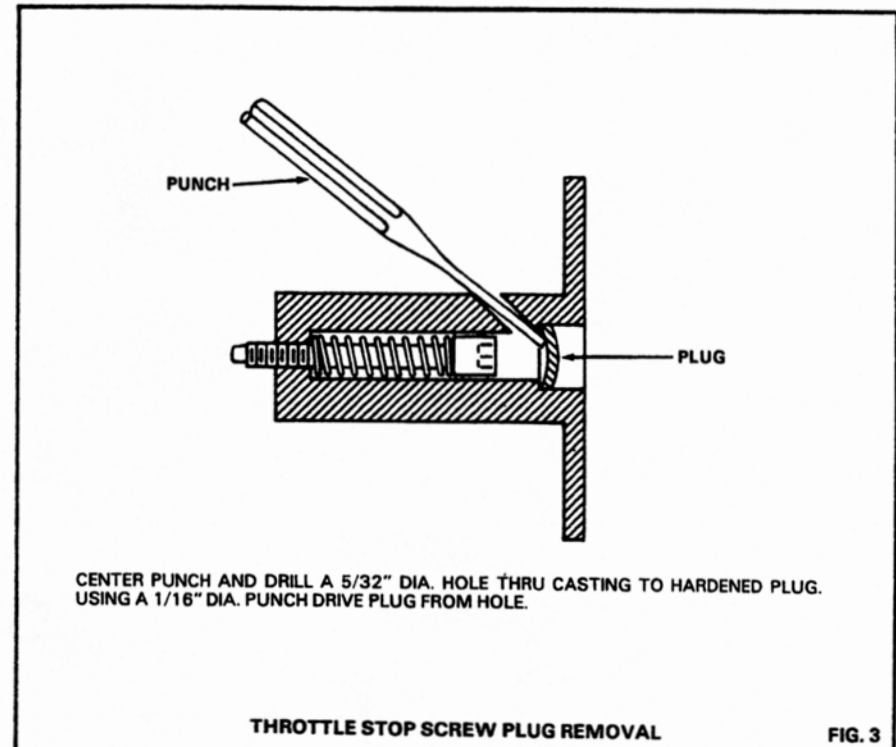


FIG. 3