

CHRYSLER (MIKUNI) 2-BARREL

CARBURETOR APPLICATION

CHRYSLER CORP. (MIKUNI)

Application	Chrysler Corp. Carb. No.	
	Man. Trans.	Auto. Trans.
2.6L (156") 4-Cylinder		
Federal		4243430/4243704
Calif.		4242432/4243706
High Altitude		4243705

CARBURETOR IDENTIFICATION

Carburetor identification is located on a metal tag attached to carburetor.

DESCRIPTION

Carburetor is a 2-stage, 2-venturi type. The main carburetor body is made of plastic resin to reduce heat transfer to the float bowl. The automatic choke is a thermo-wax pellet type controlled by engine coolant.

The carburetor consists of a fuel circuit which maintains a constant fuel level during all engine operations. The idle and primary metering circuit consists of primary main jet, primary pilot jet, idle mixture adjusting screw and primary main nozzle which supplies air/fuel mixture for idling, light load and cruising at part throttle, and full throttle operation at low speeds. The secondary metering system consists of secondary main jet, secondary pilot jet, secondary main nozzle and vacuum controlled diaphragm which supplies additional air/fuel mixture when power demand exceeds the capabilities of the primary system. Mechanical linkage between the primary and secondary throttle shafts prevents operation of the secondary system until the primary throttle has opened about half way.

Other systems in the carburetor reduce emissions and improve driveability. These include a float bowl vent, fuel cut-off solenoid, air switching valve (ASV), coasting air valve (CAV), jet air control valve (JACV), sub-EGR valve, and high altitude compensation system (Calif. only).

The carburetor meters fuel through primary and secondary jets. A vacuum actuated enrichment system provides additional enrichment during heavy load conditions. A conventional diaphragm-type accelerator pump is used.

ADJUSTMENT

HOT (SLOW) IDLE RPM

See appropriate article in TUNE-UP SERVICE PROCEDURES.

IDLE MIXTURE

See appropriate article in TUNE-UP SERVICE PROCEDURES.

COLD (FAST) IDLE RPM

See appropriate article in TUNE-UP SERVICE PROCEDURES.

FLOAT LEVEL

1) Invert air horn assembly (without gasket). Allow weight of float assembly to seat inlet valve. See Fig. 1.

2) Measure distance between bottom edge of float to surface of air horn. If distance is not correct, adjust by adding or subtracting shims under inlet needle seat.

NOTE — All other adjustments are factory made and should not be changed in service.

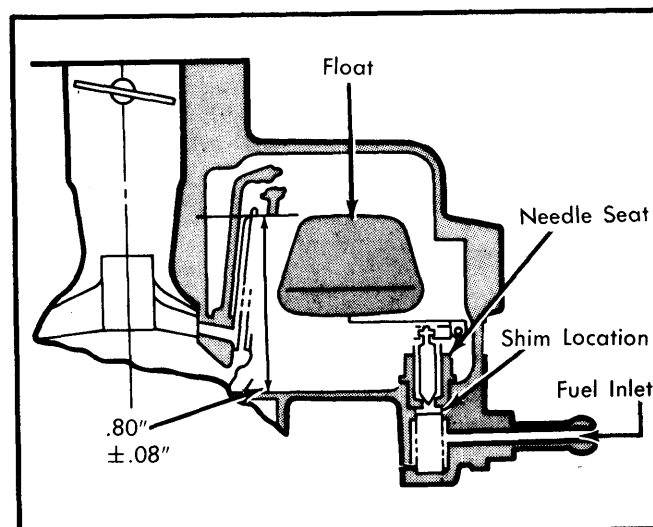


Fig. 1 Checking Float Level

OVERHAUL

DISASSEMBLY

- 1) Remove water hoses from choke and throttle valve assemblies. Grind off heads of choke cover lock screws (4) and remove cover.
- 2) Remove clip from throttle opener link, then remove 2 screws and throttle opener. Disconnect fuel solenoid ground wire and remove solenoid. Disconnect throttle return and damper springs and remove choke unloader link.
- 3) Disconnect vacuum hose and vacuum chamber link. Remove 2 screws and vacuum chamber. Disconnect throttle operating rod link. Remove 2 screws and vacuum hose bracket. Remove 6 air horn screws and lift air horn off carburetor body.
- 4) Slide pin out and remove float and inlet needle. Remove screw and retainer, then remove needle seat and screen assembly. Be sure not to lose shim from under needle seat.
- 5) Remove venturi retainers and both primary and secondary venturis. Note position for installation, then remove primary and secondary main jets from pedestals. Remove screws and pedestals.
- 6) Remove 3 screws from bowl vent solenoid, then remove solenoid and spring. Remove remaining screw and bowl vent assembly. Remove 3 screws on coasting air valve and remove valve. Remove 3 screws on enrichment valve and remove valve cover, gasket and jet.
- 7) Remove screws and air switching valve. Take out spring retainer sleeve, spring, retainer, and diaphragm seal. Remove screw and lock plate, then pull out primary pilot jet set. Repeat procedure for secondary pilot jet set.
- 8) From top of air horn, remove primary and secondary air bleed jets. Note location so jets can be reinstalled properly.

CHRYSLER (MIKUNI) 2-BARREL (Cont.)

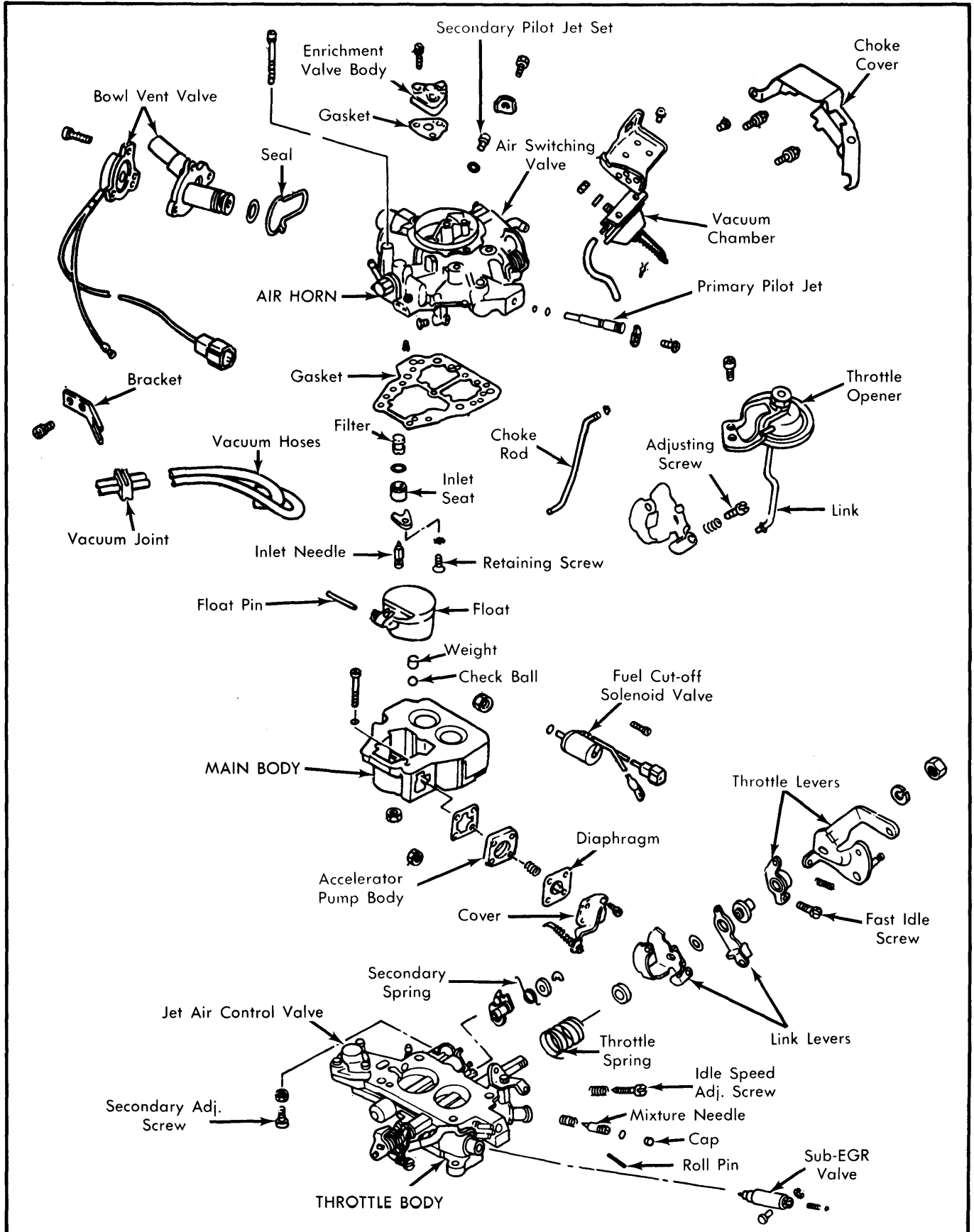


Fig. 2 Exploded View of Chrysler Corp. (Mikuni) 2-Barrel Carburetor

CHRYSLER (MIKUNI) 2-BARREL (Cont.)

9) Invert body and remove pump weight, check ball and hex nut. Remove 4 screws from accelerator pump cover and remove cover, diaphragm, spring, pump body with check ball and gasket.

10) Remove 3 screws from jet air control valve on throttle body. Remove cover, spring, spring retainer and diaphragm/seal. Remove circlip from sub-EGR valve lever. Carefully slide pin from sub-EGR valve, catching ball and spring which are inside valve and retained by pin. Remove valve and boot seal.

11) Drill small hole in mixture screw concealment plug and insert screw extractor to remove plug. Use a narrow pin punch to drive out roll pin from bottom of throttle body. Remove mixture needle and spring.

CLEANING & INSPECTION

- Do not immerse plastic or rubber parts in solvent. Do not soak solenoids or choke assembly in any liquid.
- Blow out all passages with compressed air. Do not use wire or drill bit to clean calibrated orifices or jets.

- Do not use compressed air to blow out any diaphragm fittings if diaphragm is installed.
- Inspect all parts for cracks, burrs, or pitting. Replace any damaged parts and all "O" rings, seals, and gaskets.
- After cleaning parts in solvent, be sure to rinse well with hot water and blow dry with compressed air.

REASSEMBLY

To reassemble, reverse disassembly procedures. Use all new gaskets and seals, ensuring that gaskets are properly positioned and all holes are punched. Note the following:

- 1) Primary and secondary jets and air bleeds can be identified by number stamped on them. Secondary bleed and jet will have higher number than the primary.
- 2) Install new roll pin and concealment plug over mixture screw after adjustment. Install choke cover and tighten screws until break-off heads snap off.

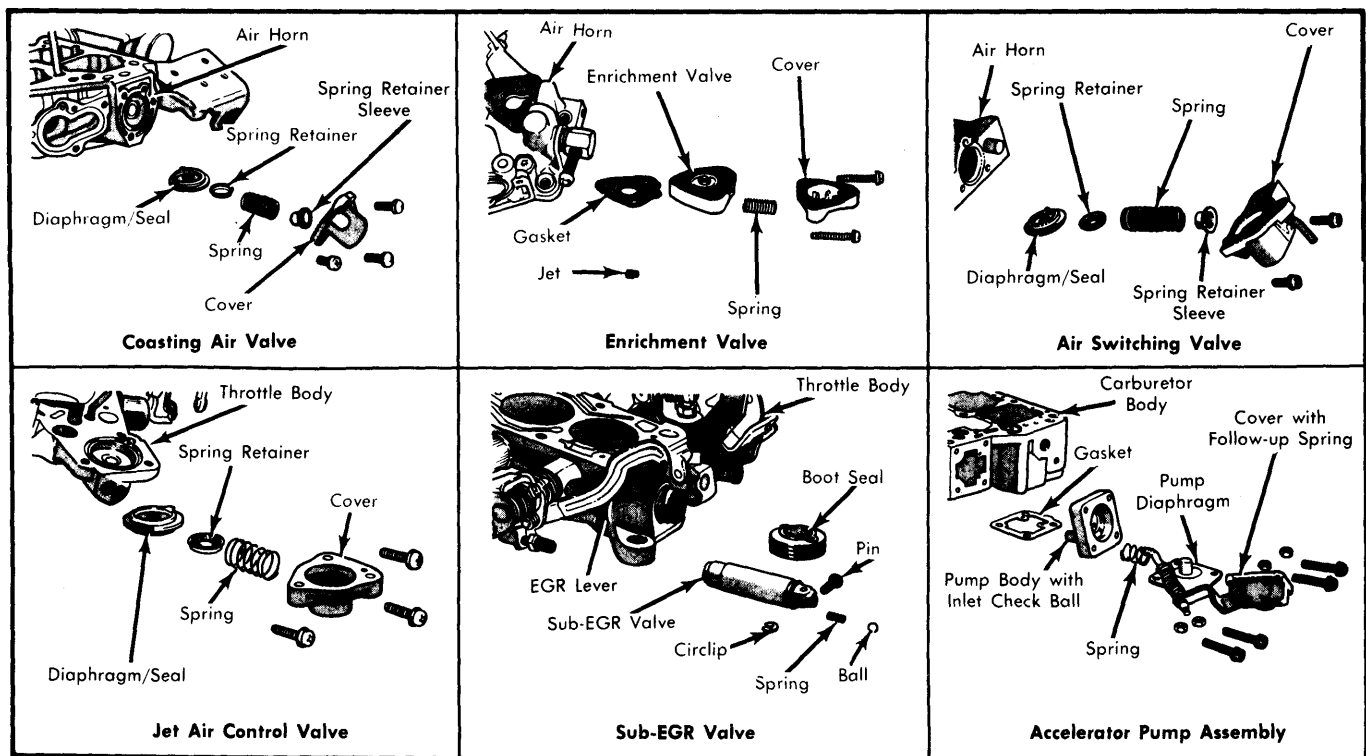


Fig. 3 Exploded View of Valve & Pump Assemblies for Chrysler (Mikuni) Carburetor