

HITACHI (ZENITH-STROMBERG) DCA-1A 2-BARREL

Mazda 1200 (1971-72)

exhaust gas analyzer to vehicle according to manufacturer's instructions. Turn idle mixture screw to obtain idle CO of 1.5-3.5% with air injection pump disconnected.

DESCRIPTION

Carburetor is a 2-barrel, downdraft carburetor. The primary barrel includes an idle system, a piston type accelerator pump system, an idle transfer system, main metering system, and power enrichment system. The secondary stage includes an idle transfer system, main metering system, and power enrichment system. Carburetor is equipped with a cable operated, manual, butterfly valve type choke which operates on the primary barrel of the carburetor. In addition, a throttle solenoid valve is provided to cut off fuel from the slow systems of the carburetor when ignition is shut off.

TESTING

Slow Fuel Cut Valve (Throttle Solenoid)

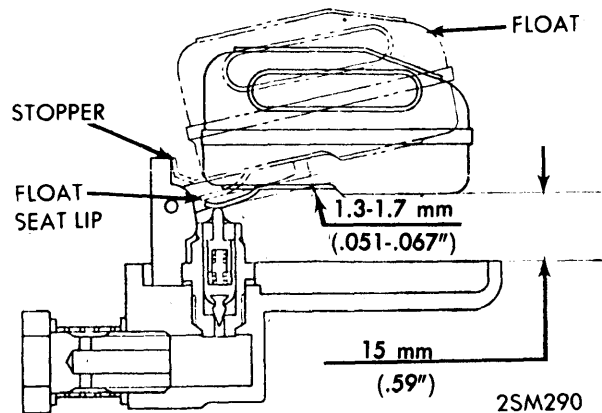
Remove the slow fuel cut valve from carburetor by unscrewing it from the main carburetor body. Connect the valve to the battery. When current is applied to the valve, the valve stem should be pulled into the valve body. If valve does not function properly, replace valve.

ADJUSTMENT

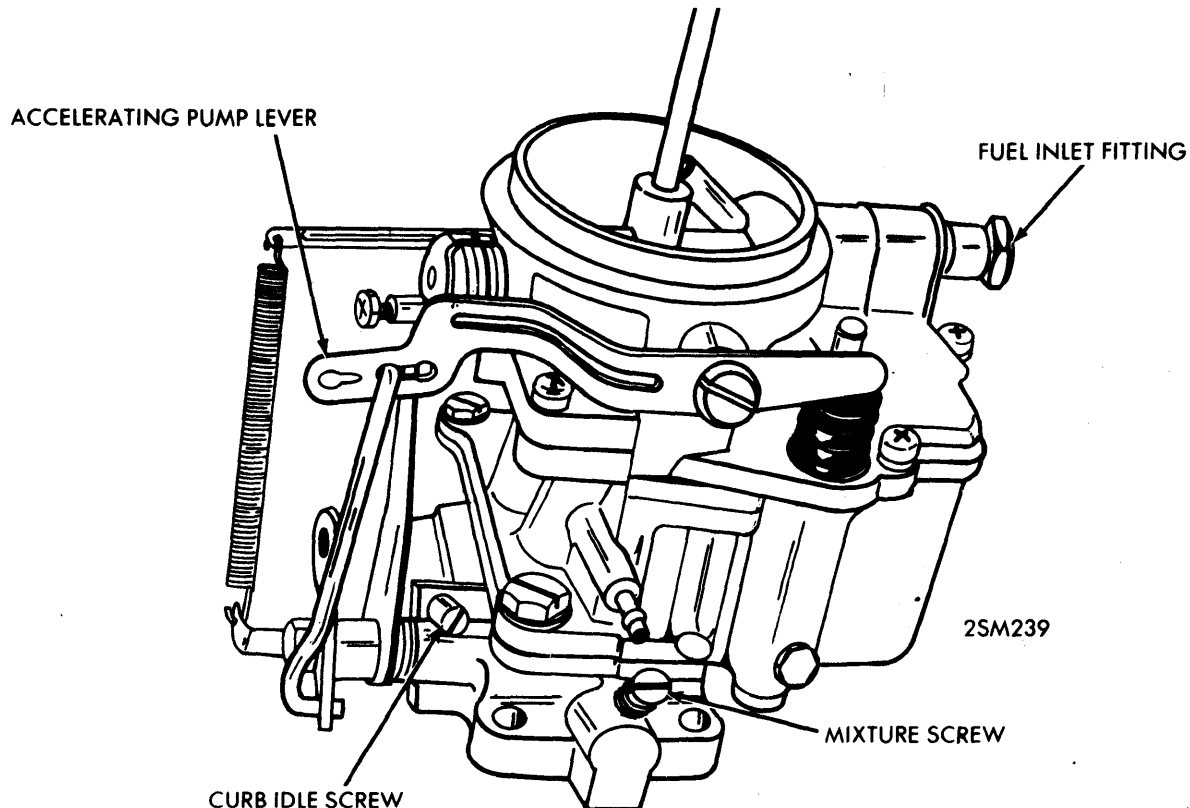
Idle Speed & Mixture

Place transmission in "N" and start engine. Allow to reach normal operating temperature. Connect tachometer to engine. Set curb idle to 750 RPM using curb idle adjusting screw. Connect

Mazda 1200 – Remove air horn and turn upside down. Bend float seat lip between upper surface of air horn and float surface. Correct dimension is 0.59 in. (15 mm). Then lift up float and adjust by bending float stopper to provide proper clearance between float seat lip and tip of needle valve. Clearance should be .051-.067 in. (1.3-1.7 mm).



FLOAT LEVEL ADJUSTMENT (MAZDA 1200)

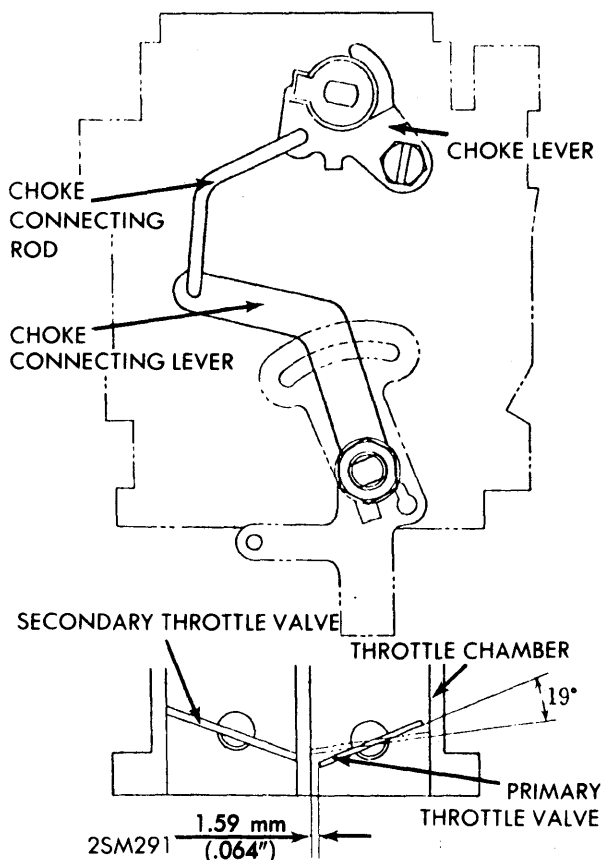


ZENITH-STROMBERG 2-BARREL

HITACHI (ZENITH-STROMBERG) DCA-1A 2-BARREL (Cont.)

Choke Rod Adjustment

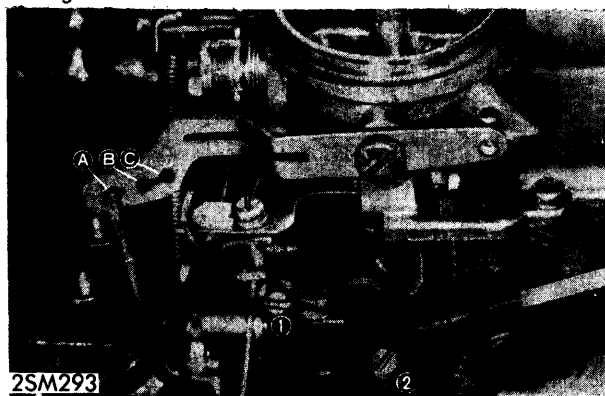
Mazda 1200 - When choke valve is completely closed, primary throttle valve automatically opens 19° by action of choke connecting rod. Clearance between valve and carburetor throat is .064 in. (1.59 mm). To adjust, bend choke connecting rod until correct clearance is obtained.



CHOKE ROD ADJUSTMENT (MAZDA 1200)

Accelerator Pump Lever Adjustment

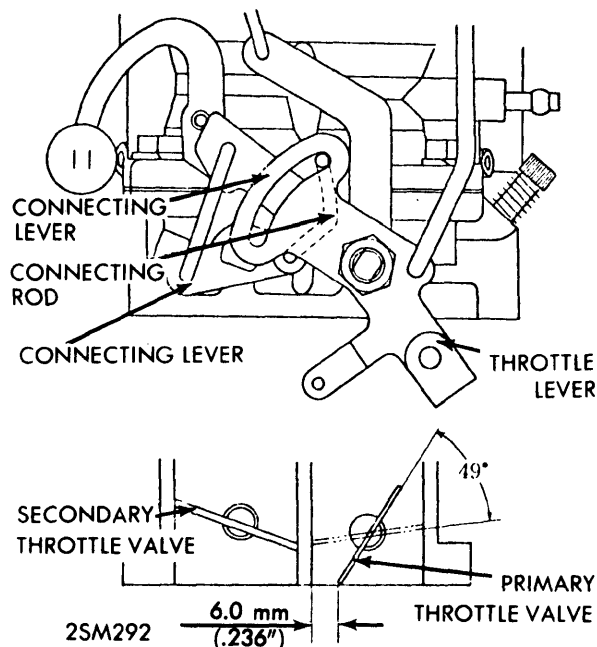
Mazda 1200 - The accelerator pump lever has three holes for adjustment of amount of fuel injected on acceleration. They are labeled; "A" lean, "B" medium, and "C" rich, (See Illustration). Select proper setting according to temperature and engine condition.



ACCELERATOR PUMP LEVER ADJUSTMENT (MAZDA 1200)

Secondary Connecting Rod Adjustment

Mazda 1200 - The secondary throttle valve begins to open when primary throttle valve opens 49° and completely opens at same time as primary throttle is fully open. Open throttle valve until end of groove of connecting lever comes in contact with connecting rod. Check distance between throttle valve and carburetor throat. Adjust distance by bending connecting rod to obtain a measurement of .236 in. (6.0 mm).



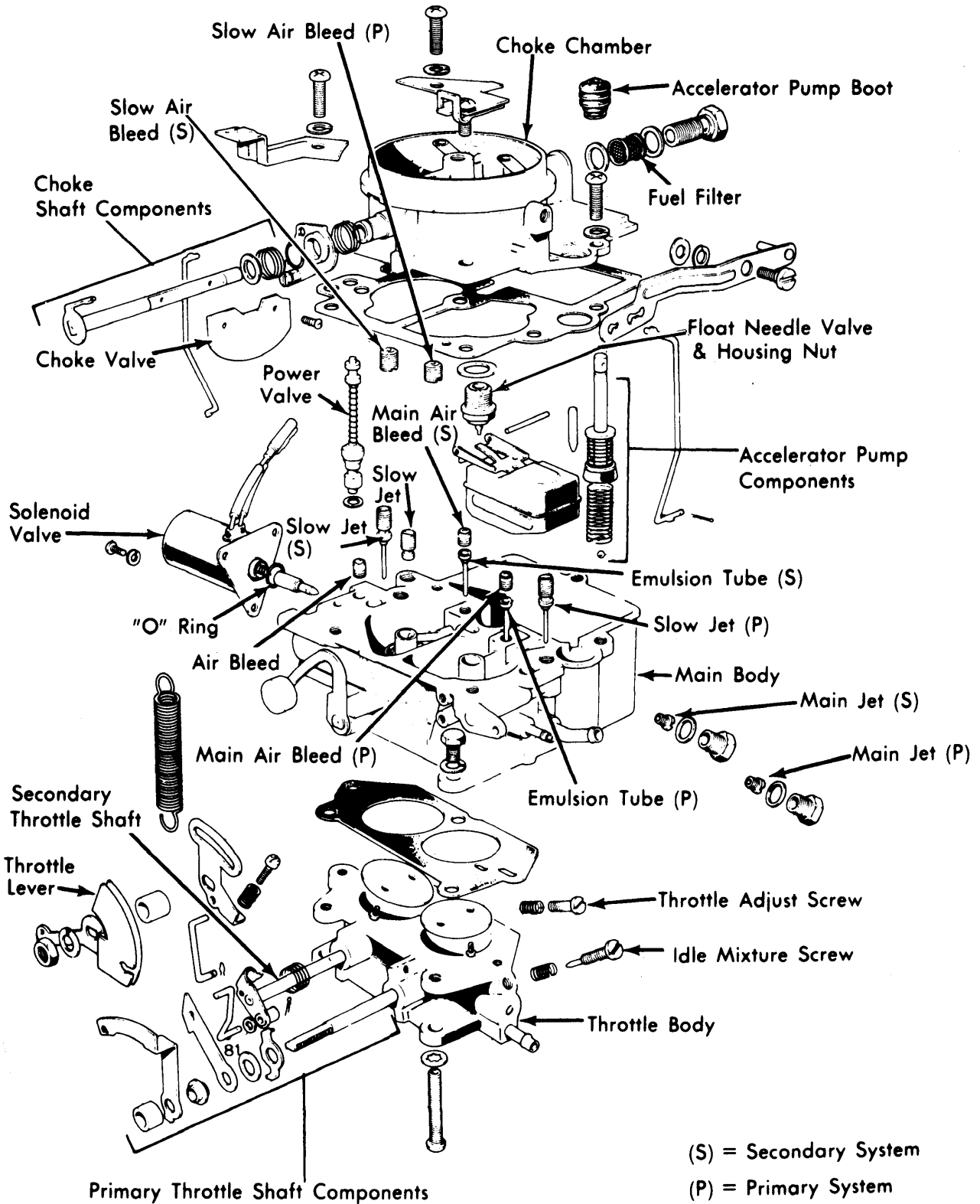
SECONDARY THROTTLE CONNECTING ROD ADJUSTMENT (MAZDA 1200)

OVERHAUL

- 1) Remove throttle valve return spring, loosen pump lever screw and remove pump lever with connecting rod.
- 2) Loosen five screws which attach air horn, and lift air horn. Disconnect choke connecting rod from connecting lever. Remove air horn from body. Remove float, pump piston, and vacuum piston along with air horn.
- 3) Remove slow air bleeds from air horn. Take out pin and remove float. Remove clip wire and take out needle valve, spring, and spring retainer. Remove gasket from body.
- 4) Take out inlet check valve (steel ball) and coil spring from inside of accelerating pump. Take outlet valve out of outlet hole. Remove slow jets and main air bleeds.
- 5) Using special tool (49 0118 870A) Power Valve Lock Driver, remove power valve. Loosen bolts which attach throttle chamber to body. One of them is inside throttle chamber. Separate throttle chamber and body.
- 5) Remove throttle valves and auxiliary valve shaft only if necessary due to wear or damage.
- 6) Clean and inspect all carburetor parts thoroughly and reassemble by reversing disassembly procedure.

Hitachi Carburetors

HITACHI (ZENITH-STROMBERG) DCA-1A 2-BARREL (Cont.)



MAZDA CARBURETOR EXPLODED VIEW