AISAN 2-BARREL (TOYOTA 8RC ENGINE)

Toyota Corona (1971)
Toyota Corona Mk II (1970-71)
Toyota Celica (1971)
Toyota Hi-Lux (1971)

DESCRIPTION

The carburetor on the Corona Mark II is a two barrel downdraft type with an automatic choke. Heat for operation is supplied by an exhaust gas delivery tube. Carburetor is equipped with a thermostatic valve to eliminate various heat problems resulting from expanding fuel, such as stalling, poor idling, and hard starting. Valve starts to open at 140°F and allows fresh air to flow directly into intake manifold. A reloader has been newly installed to prevent opening of secondary throttle during automatic choke operation in cold weather.

ADJUSTMENT

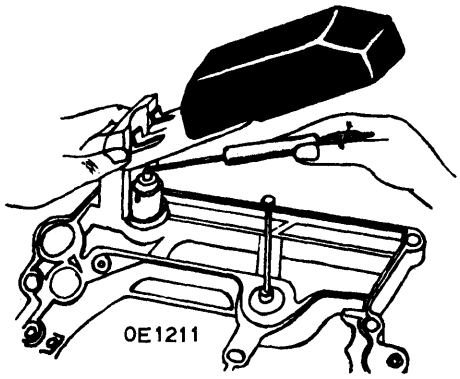
NOTE - Carburetor adjust kit 09240-34010, or equivalent, is required to perform the following adjustments.

Float Level Adjustment

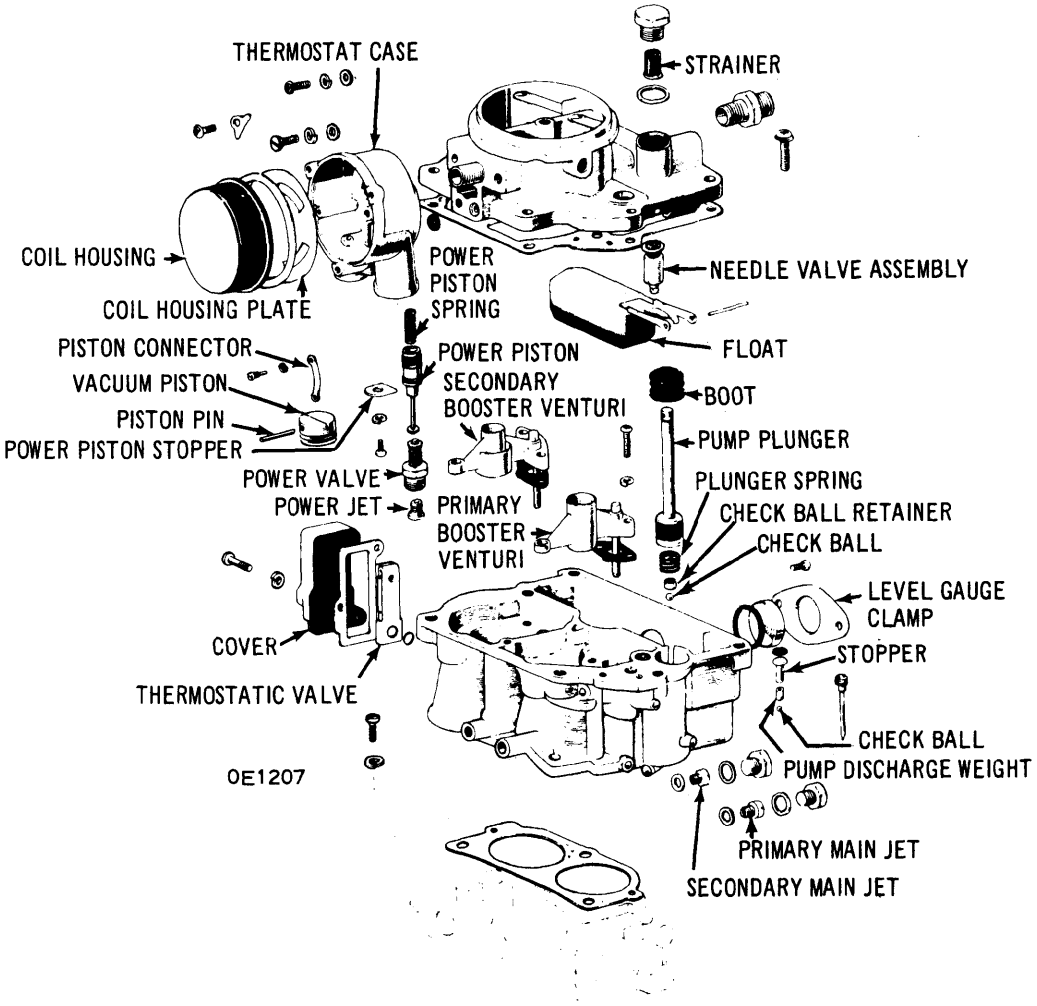
Turn carburetor cover top side down. Clearance between top of float and cover gasket surface should be .37" (9.3 mm). Adjust by bending middle float tab.

Float Drop Adjustment

Turn carburetor cover top side down, raise float by hand. Clearance between needle valve push pin and float tab should be .039" (1 mm). Adjust by bending the two outside float tabs.



FLOAT DROP ADJUSTMENT



CARBURETOR COMPONENTS

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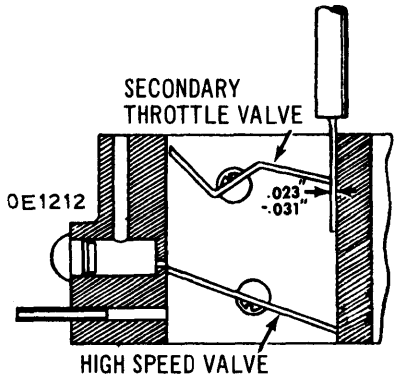
Secondary Throttle Valve Adjustment

When primary throttle valve is fully opened, secondary throttle valve should also be fully opened. To adjust, bend throttle shaft link.

High Speed Valve Adjustment

With high speed valve fully closed, clearance between lower valve edge and bore should be .023"-.031" (.6-.8 mm). Adjust by loosening retaining screws and sliding valve.



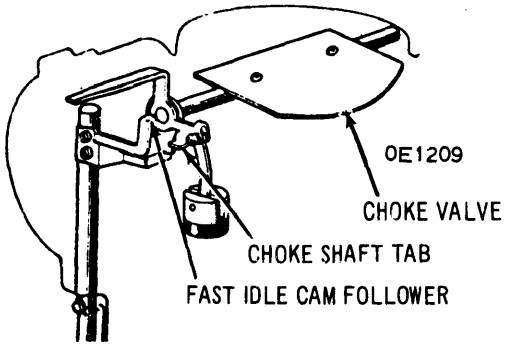
HIGH SPEED VALVE ADJUSTMENT

Fast Idle Adjustment

With choke valve fully closed, clearance between lower edge of primary throttle valve and bore should be .029" (.73 mm). This would be 11° from a fully closed position.

Unloader Adjustment

With throttle valve at fully opened position, utilize the 51° angle gauge and check the choke valve opening angle. Adjust opening angle so that it will open at 19° from the closed position which is 51°, partial open angle will be 70°. Adjust by bending fast idle cam follower or choke shaft tab.



UNLOADER ADJUSTMENT

Automatic Choke Adjustment

To adjust air/fuel mixture, turn coil housing counterclockwise to richen and clockwise to lean. With center groove on coil housing aligned with center groove of case choke, valve should close fully at 77°F.

Idle Mixture Adjustment (Bench)

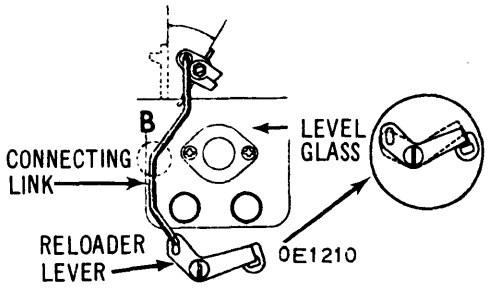
Idle mixture screw should be screwed out two turns from a fully closed position.

Secondary Air Valve Stop Lever Adjustment

Lever should disengage when secondary throttle valve just starts to open. Clearance between stop lever and secondary air valve weight lever is .020" (.5 mm). To adjust bend tab of primary throttle shaft arm.

Reloader Adjustment

Reloader should disengage from stopper when choke valve is opened 50° from the fully closed position of 70°. To adjust bend the link at the "B" position (see illustration). When primary throttle valve is fully open the reloader is in operated position, clearance between secondary throttle valve edge and bore should be .014"-.030" (.35-75 mm). To adjust, bend reloader lever tab. When choke valve is fully opened manually, reloader lever should disengage smoothly.



RELOADER ADJUSTMENT

Idle Speed & Mixture

Adjust idle speed and mixture screws alternately to obtain a smooth idle mixture with steady maximum vacuum reading. Idle speed should be 650 RPM with synchro-mesh in neutral and auto. trans. in "Drive".

OVERHAUL

Disassembly

1) Remove reloader connecting link cover, link, pump arm screw and lever, pump connecting link, and fast idle connecting link.

2) Remove air horn from body. Take care not to damage pump plunger and float. Lift air horn straight up. Remove pump damper spring and stopper seal washer.

3) Invert carburetor body and remove stopper, discharge weight, and check ball. Remove 3 securing screws and separate body from flange.

4) To disassemble body, remove high speed valve stop lever and spring. Remove primary and secondary booster venturis. Remove slow jet, remove check ball retainer and remove check ball by inverting carburetor.

5) Remove power valve, then remove jet from power valve. Remove level gauge clamp, glass and "O" ring. Remove thermostatic valve assembly. *CAUTION - Never disassemble thermostatic valve.*

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6) Remove primary and secondary main passage to gain access primary and secondary main jets, remove jets.

7) To disassemble flange, remove high speed valve (it may be necessary to file off staked portion of valve screws). Remove snap ring and slide high speed valve shaft from flange. Remove idle speed and mixture screws.

8) Remove throttle shaft link, throttle shaft arm and secondary throttle lever together with return spring. Remove primary throttle valve, retaining rings and adjusting shims. Remove secondary throttle valve and shaft, (again it may be necessary to file off staked portion of screws). Remove reloader lever.

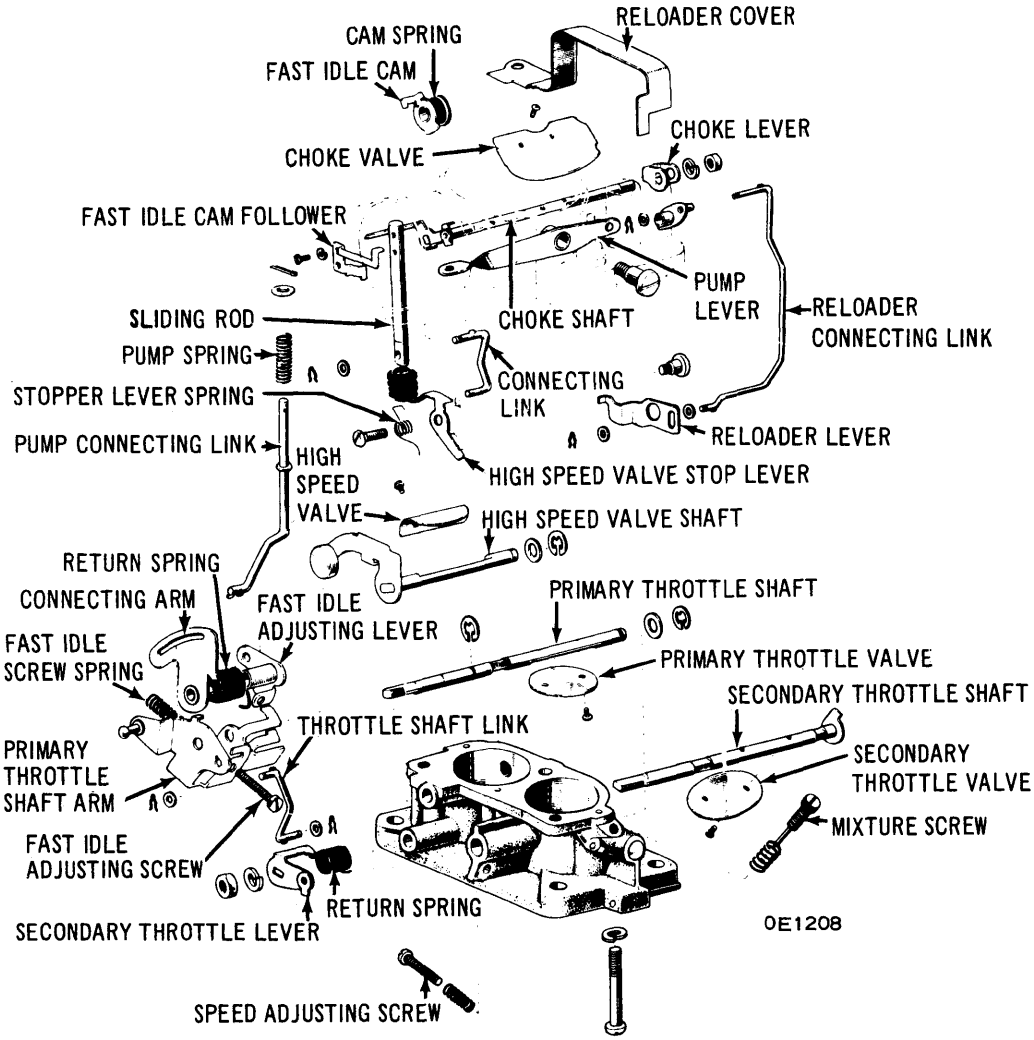
9) To disassemble air horn, remove pump plunger and boot. Remove float pin and float. Remove needle valve and seat assembly. Remove power piston stopper, power piston, and piston spring. Remove main passage plug and strainer.

10) To disassemble automatic choke, remove coil housing, gasket, plate, and sliding rod boot. Take care not to defrom the bi-metal. Remove fast idle cam follower and sliding rod. Remove piston connector securing screw, choke valve, choke lever and choke shaft.

11) Remove fast idle cam together with spring from choke shaft. Remove vacuum piston with connector, then remove piston pin to separate piston from connector. Remove thermostat case from air horn.

Reassembly

Assembly is the reverse order of disassembly, making sure to use all new gaskets. When installing throttle valves, thicker one goes on secondary side, thinner one on primary side, They must be installed from bottom. When installing shims on throttle shafts, install thicker shim on throttle shaft arm side.



CARBURETOR COMPONENTS