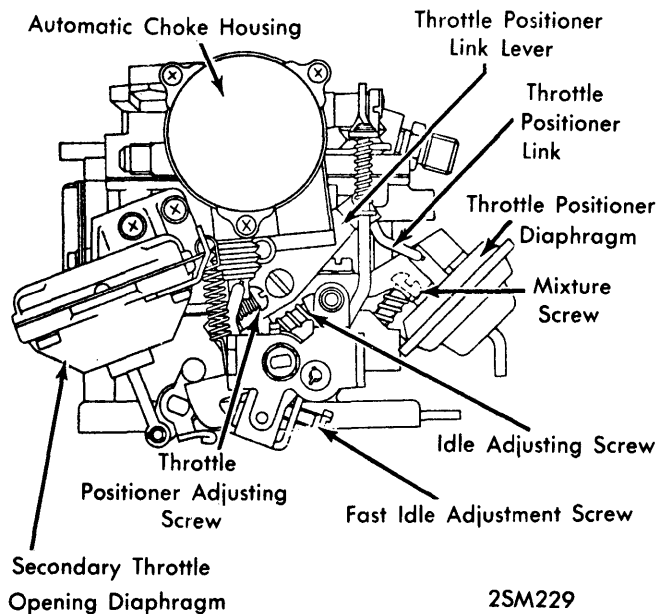


AISAN 2-BARREL - TOYOTA 2T-C ENGINE

Corolla 1600 (1971-73)
Carina (1971-73)

DESCRIPTION

Carburetor is of 2-barrel downdraft design and is equipped with an automatic choke which is heated by a stove on the exhaust manifold. A piston type accelerator pump is also incorporated into the primary barrel of the carburetor. In addition to a throttle positioner, the carburetor is equipped with a diaphragm unit which opens the secondary throttle at high speed, full throttle operation. Venturi vacuum is utilized to pull diaphragm against spring pressure and open the secondary throttle.



AISAN 2-BARREL (TOYOTA 2T-C ENGINE)

ADJUSTMENT

IDLE SPEED & MIXTURE ADJUSTMENT

1971-72 - Screw in idle adjusting screw and then back it out about three turns from fully seated position. Adjust screw until lean best idle is achieved at 650 RPM (automatic transmission in "D") or 750 RPM (manual transmission in Neutral). If using a CO meter, CO level should be 2-3%.

1973 - Adjust throttle adjusting screw and mixture adjusting screw to obtain maximum vacuum at 750 RPM (manual transmission in Neutral) or 650 RPM (automatic transmission in "D"). Race engine momentarily and check that idle returns to specification. Using CO meter, ensure CO level is 1-4%. If CO% is not within specifications, tighten mixture adjusting screw to obtain specified value. If CO level cannot be met, repeat procedures and check all other engine adjustments.

THROTTLE POSITIONER

NOTE - Throttle positioner diaphragm, spring and vacuum hose must be in good condition for proper operation. Check links and levers for freedom of movement.

Warm engine and adjust idle RPM to specification. Pull out thermo-sensor connector and disconnect vacuum hose from positioner diaphragm. Positioner linkage should now be set to hold throttle valve open. Set positioner adjusting screw to obtain 1400 RPM.

AUTOMATIC CHOKE

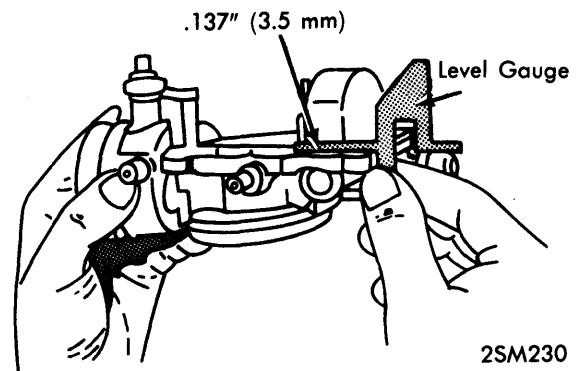
1) With choke valve fully opened, turn coil housing counterclockwise. Check if choke valve closes. Set coil housing scale to center line of thermostat case.

NOTE - Choke valve closes fully at atmospheric temperature of 77°F (25°C).

2) Turn coil housing and adjust engine starting mixture to conform with vehicle operating conditions. When mixture for starting is too rich, turn clockwise, when too lean, turn counterclockwise. One graduation of scale on thermostat case is equal to 9°F (5°C) change.

FLOAT LEVEL

Adjust float level by bending float lips. When top and bottom level positions are adjusted properly, the float will maintain the specified fuel level (glass level mark) when engine is running.

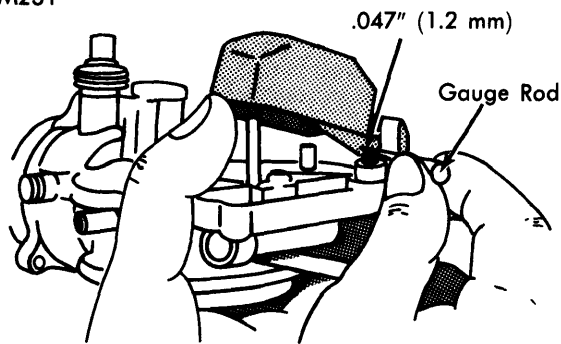


FLOAT LEVEL ADJUSTMENT

Top Level Position - Hold air horn upside down and allow float to hang down by its own weight. Check gap between float tip and air horn. The standard gap is .138" (3.5 mm). Adjust by bending float lip top lever.

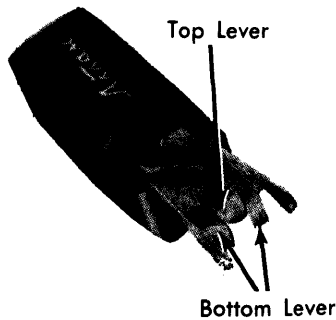
AISAN 2-BARREL - TOYOTA 2T-C ENGINE (Cont.)

2SM231



FLOAT DROP ADJUSTMENT

Bottom Level Position — Lift up float and check gap between needle valve bushing pin and float lip. The standard gap is .047" (1.2 mm). Adjust by bending float lip bottom lever.

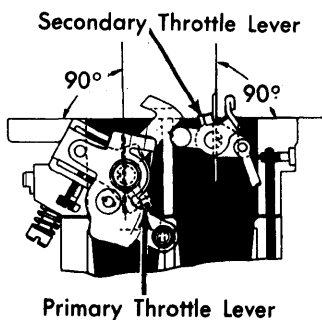


FLOAT LEVEL ADJUSTMENT POINTS

THROTTLE VALVE OPENING

Fully open first and second throttle valves separately and check each throttle valve with gauge (Toyota Carburetor Adjust Gauge 09240-33020) to see if it is perpendicular to the flange face. Adjust throttle valves by bending throttle levers.

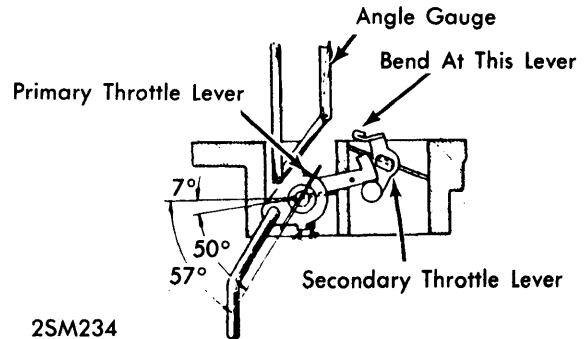
CAUTION — After Adjusting, check links to see that they move lightly and do not bind.



THROTTLE VALVE OPENING ADJUSTMENT

SECOND THROTTLE VALVE OPENING (TOUCH) ANGLE

Primary throttle lever must contact the secondary throttle lever when primary throttle valve opens 57° from fully closed position. Adjust if necessary by bending valve lever at position shown in illustration.



2SM234

SECONDARY THROTTLE VALVE OPENING ANGLE

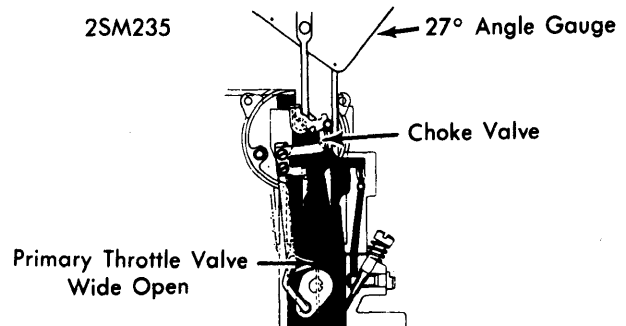
KICK-UP

Adjust by bending secondary throttle lever to obtain .008" (.2 mm) clearance between secondary throttle valve and body when primary throttle valve opening is over 62° from fully closed position.

CHOKE UNLOADER

Using a suitable angle gauge, adjust choke valve angle to specification when primary throttle valve is fully open. Make adjustment by bending fast idle cam follower or choke shaft lever.

2SM235



CHOKE UNLOADER ADJUSTMENT

AISAN 2-BARREL – TOYOTA 2T-C ENGINE (Cont.)

OVERHAUL

DISASSEMBLY

Air Horn – 1) Loosen horn arm set screw, and remove pump lever together with connecting rod. Remove link and loosen six bolts. Remove air horn from body of carburetor.

2) Remove float lever pin and float. Remove needle valve, spring, push pin, and seat. Remove power piston, spring, and pump plunger. Remove plug, gasket and strainer.

Automatic Choke – 1) Remove coil housing, gasket, and housing plate. Remove cam float and sliding rod.

NOTE – Perform step 2 only if required.

2) File off peened part of valve set screw and remove choke valve. Remove connector set screw and take out choke shaft and vacuum piston.

3) Remove thermostat case.

Body Parts – 1) Remove gasket, stopper, discharge weight, and ball. Remove back spring and diaphragm from diaphragm lever.

2) Remove 4 flange set screws and separate flange from body. Remove check ball retainer and steel ball.

3) Remove slow jet, loosen 4 screws and remove second small venturi and then first small venturi. Remove power valve with

wrench. Remove plugs and take out secondary main jet and primary main jet.

NOTE – Perform step 4 only if required.

4) Remove cover, gasket, and thermostatic valve. Remove level gauge clamp, level gauge glass, and gasket.

5) Remove diaphragm housing and take out housing, diaphragm, spring, and gasket.

NOTE – It is important to mark the relative positions of housing, and spring bracket and diaphragm.

Flange Parts – 1) Remove idle adjustment screw.

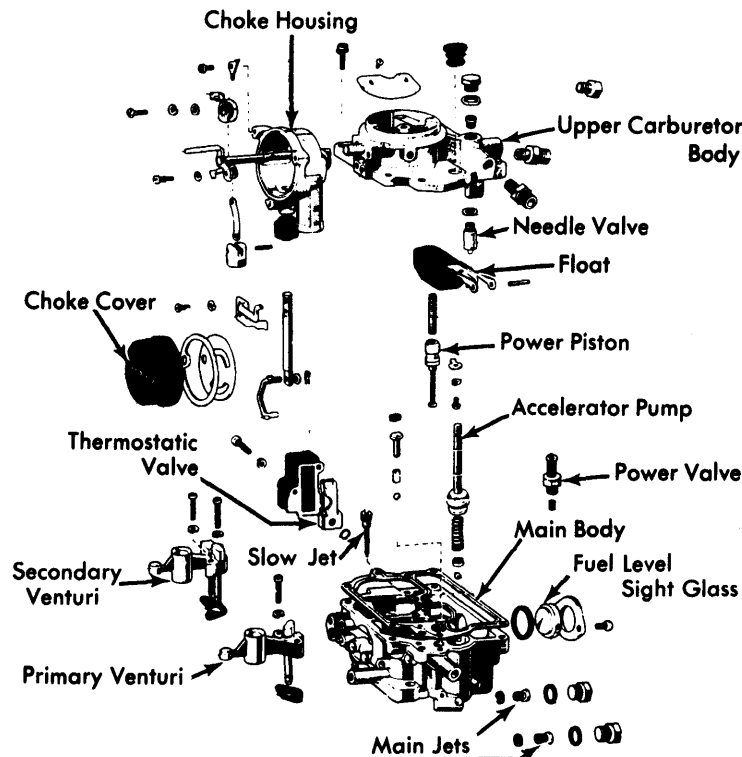
NOTE – Perform steps 2 and 3 only when required.

2) File off peened part of valve set screws and take off the throttle valves. Remove secondary throttle shaft and remove throttle lever.

3) Remove idle adjusting lever with throttle shaft arm attached. Remove retainer ring and take out primary throttle shaft.

REASSEMBLY

Clean all parts in gasoline and blow out jets and other passages with compressed air. Do not attempt to clean jets and other orifices with wire or metal objects. If any part is found to be defective, replace. Use new set screws when necessary and peen the ends properly.

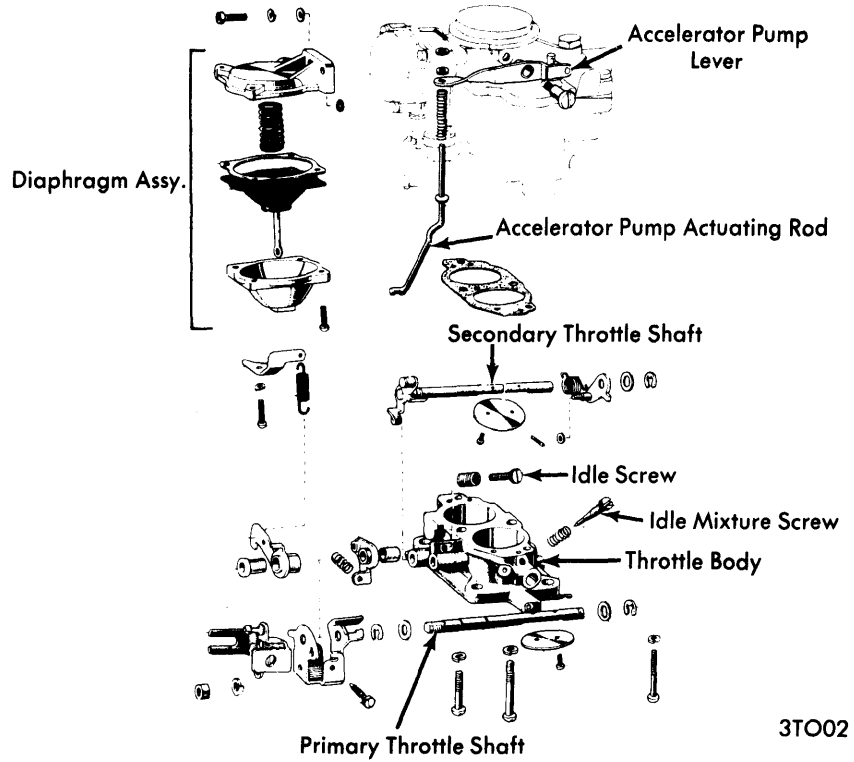


3T001

2T-C CARBURETOR COMPONENTS (UPPER PART)

Aisan Carburetors

AISAN 2-BARREL - TOYOTA 2T-C ENGINE (Cont.)



2T-C CARBURETOR COMPONENTS (LOWER PART)