

AISAN 2-BARREL — TOYOTA 4K-C ENGINE

Starlet

DESCRIPTION

Carburetor is a 2-barrel, downdraft design and is equipped with a manual choke and a thermostatically operated choke opener system. A piston type accelerator pump is used and a throttle positioner system which aids in cold engine acceleration. Other features include a solenoid valve which controls air/fuel mixture and high altitude compensation (Federal) devices.

CARBURETOR IDENTIFICATION

Application	Carb. No.
California	21100-13233
Federal	21100-13361

ADJUSTMENTS

NOTE: For all on-vehicle adjustments not covered in this article, see appropriate TUNE-UP SERVICE PROCEDURES article.

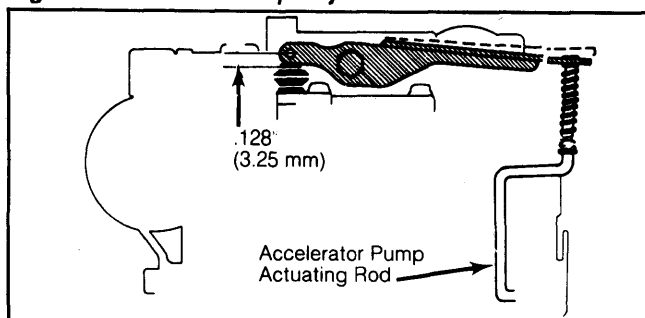
NOTE: It is recommended that Toyota carburetor adjusting kits 09240-00014 and 09240-00020 be used to make the following adjustments.

ACCELERATOR PUMP STROKE

1) Place a straightedge on top of air horn and measure full travel of pump plunger. Make measurement at boot end.

2) Adjust travel distance to .128" (3.25 mm) by bending accelerator pump actuating rod at existing bend. See Fig. 1.

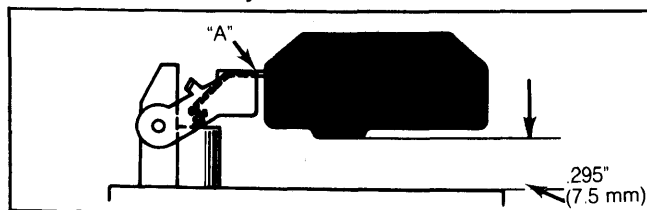
Fig. 1: Accelerator Pump Adjustment



FLOAT LEVEL

Allow float to hang down by its own weight. Adjust clearance between float top and air horn to .295" (7.5 mm) by bending float tab at "A". See Fig. 2.

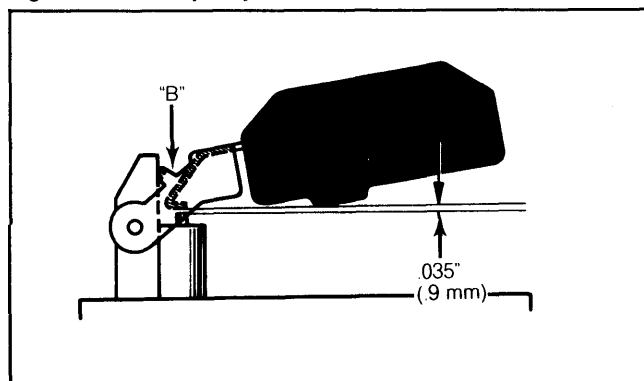
Fig. 2: Float Level Adjustment



FLOAT DROP

Lift up float and adjust clearance between needle valve plunger and float lip to .035" (.9 mm) by bending float tab at "B". See Fig. 3.

Fig. 3: Float Drop Adjustment



PRIMARY & SECONDARY THROTTLE VALVE

1) Fully open primary throttle valve. Insert angle gauge. Adjust primary throttle valve angle to 90° (fully open) by bending throttle lever stopper.

2) With primary throttle valve fully open, open secondary throttle valve. Insert angle gauge. Adjust secondary throttle valve angle to 75° (fully open) by bending throttle lever stopper.

FAST IDLE (BENCH ADJUSTMENT)

1) Fully close choke valve by turning choke shaft lever. Set throttle shaft lever to fast idle cam.

2) Using an angle gauge, check that primary throttle valve opening angle is 26°. If necessary, adjust by turning fast idle adjustment screw.

SECONDARY THROTTLE KICK-UP

Fully open secondary throttle valve. Insert wire gauge between high speed valve and bore. Adjust clearance to .0087" (.22 mm) by bending valve set screws and shifting high speed valve.

CHOKE OPENER

Fully close choke valve. Connect hose to opener diaphragm and apply vacuum. With vacuum applied, adjust choke angle to 72° by bending relief lever tang.

OVERHAUL

DISASSEMBLY

NOTE: It is recommended that Toyota carburetor driver kit 09860-11011 be used during carburetor overhaul.

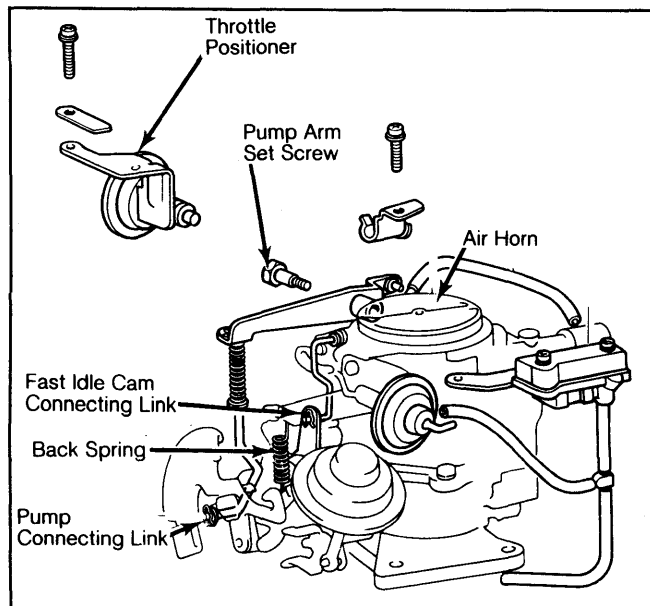
Air Horn

Remove pump arm set screw, pump lever and connecting link. Remove throttle positioner, back spring and fast idle cam connecting link. Remove air horn screws and air horn. See Fig. 4.

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Fig. 4: Exploded View of Carburetor Air Horn

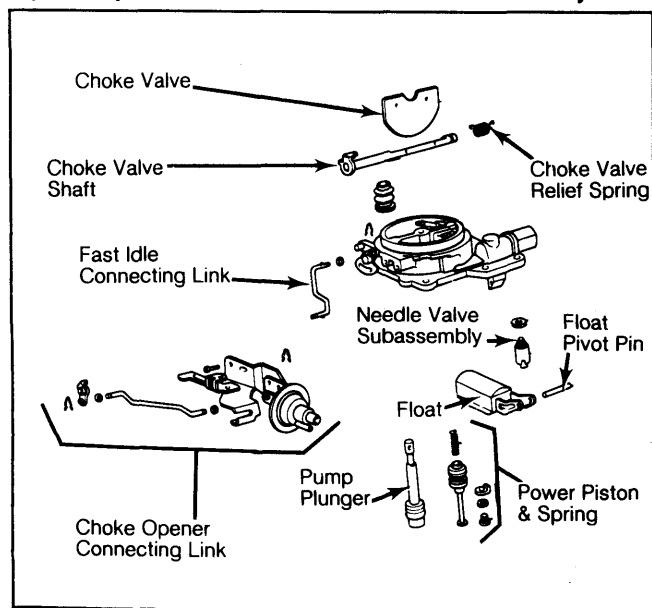


Float Assembly

1) Remove float pivot pin, float and needle valve subassembly. Remove pump plunger, power piston and spring. Remove fast idle cam connecting link.

2) Remove choke opener and connecting link. If necessary to replace choke valve or shaft, file off ends of choke valve set screws. Remove choke valve, shaft and relief spring. See Fig. 5.

Fig. 5: Exploded View of Carburetor Float Assembly

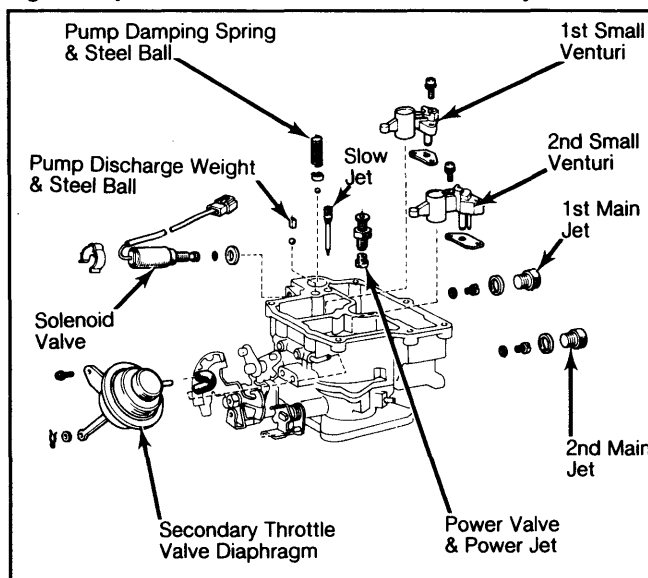


Main Body

1) Remove pump discharge weight, damping spring and steel balls. Remove slow jet, power valve and power jet.

2) Remove 1st and 2nd main jets. Remove 1st and 2nd small venturis, secondary throttle valve diaphragm and solenoid valve. See Fig. 6.

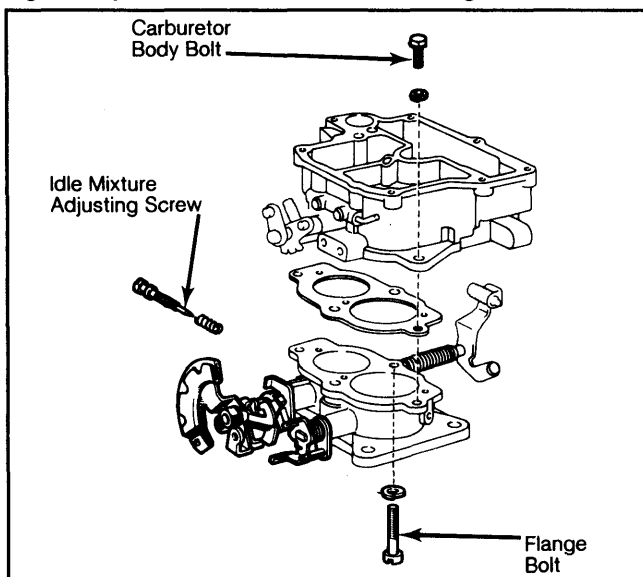
Fig. 6: Exploded View of Carburetor Main Body



Flange Parts

Remove idle mixture adjusting screw. Remove bolts from body and flange. Remove flange from body. See Fig. 7.

Fig. 7: Exploded View of Carburetor Flange Parts



CLEANING & INSPECTION

Clean all parts in carburetor cleaner and blow dry. Do not attempt to clean jets or other passages with wire or other metal objects. Inspect all parts for wear or damage and replace necessary parts.

REASSEMBLY

Use all new gaskets, reverse disassembly procedure and note the following:

1) When installing main jets, primary jet is "brass" colored and secondary jet is "chrome" colored. When assembling accelerator pump components, ensure check balls are positioned correctly.

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2) Close off discharge weight with your finger. Put small amount of fuel into float. Push accelerator pump checking to see that fuel spurts from nozzle.

3) If necessary to replace choke valve, peen ends of screws. Install valve seat, needle valve, spring and push pin in that order.

CARBURETOR ADJUSTMENT SPECIFICATIONS

Application	Float Level In. (mm)	Float Drop In. (mm)	Fast Idle Opening Angle	Choke Opener Angle	Accel. Pump Stroke In. (mm)	Throttle Positioner Angle
Starlet	.295 (7.5)	.035 (.9)	26°	72°	.128 (3.25)	8.5°