

AISAN 2-BARREL (TOYOTA F ENGINE)

Toyota Land Cruiser (Before 1970)

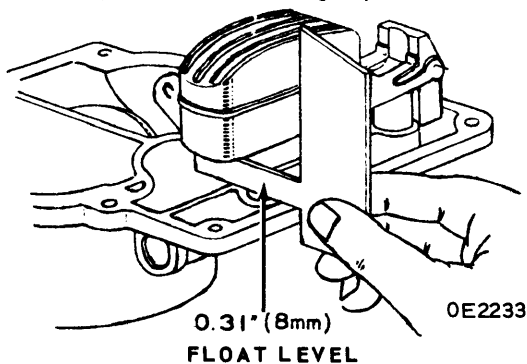
DESCRIPTION

The carburetor on the Toyota Land Cruiser is a two barrel down draft type with manually operated flapper type choke valve on primary barrel. Accelerator pump is of plunger type. Carburetor is also equipped with a magnetic fuel shut off switch that closes off economizer jet when ignition is turned off. This prevents engine from running after key is switched off. Fuel shut off also serves to keep fuel from overflowing from float bowl when engine compartment is hot.

Identification - Carburetor has no metal vacuum diaphragm for choke override, and uses a brass float.

ADJUSTMENT

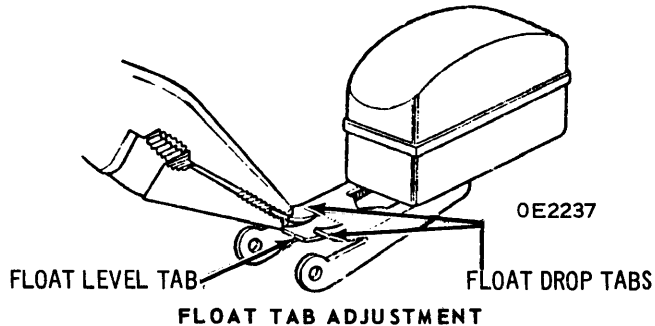
NOTE - Carburetor adjust kit 09240-60040 or equivalent is required to perform the following adjustments:



FLOAT LEVEL

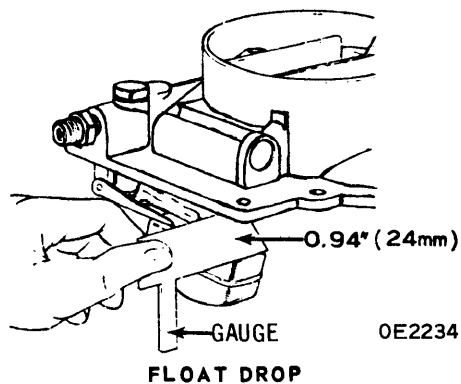
Float Level Adjustment

Turn carburetor cover top side down; clearance between top of float and cover surface should be .31" (8 mm). Adjust level by bending the middle float tab.



Float Drop Adjustment

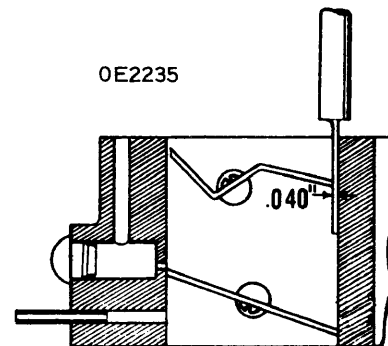
Turn carburetor cover top side up; clearance between top of float and cover surface should be .94" (24 mm). Adjust level by bending the two outside tabs.



FLOAT DROP

Secondary Air Valve Adjustment

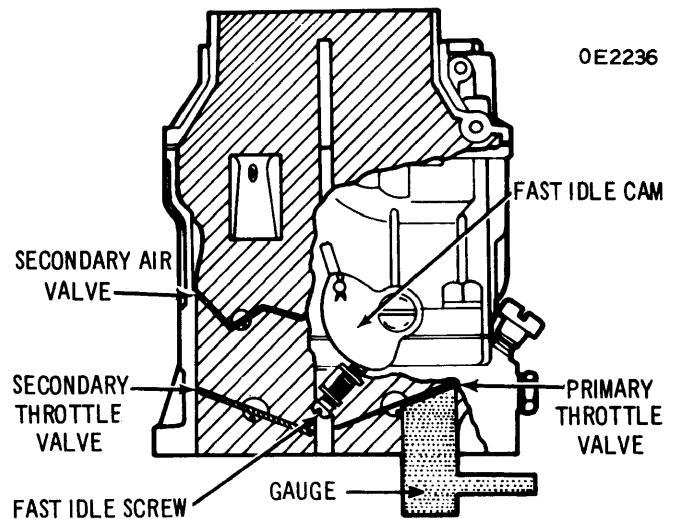
A high speed valve is located just above the main throttle butterfly in the secondary throttle bore. A clearance of .040" (1 mm) is required between butterfly and throttle bore; to adjust, loosen screws and slide valve for clearance.



SECONDARY AIR VALVE ADJUSTMENT

Fast Idle Adjustment (Bench)

Close choke valve completely and check primary throttle valve opening angle with suitable tool (see illustration). If necessary adjust angle by turning fast idle screw.



FAST IDLE ADJUSTMENT

Idle Speed & Mixture

Turn throttle valve adjusting screw and idle mixture screw alternately to obtain a steady and highest vacuum reading with smooth operation. Idle speed should be 600 RPM, and vacuum should be at least 18".

OVERHAUL

Disassembly

1) Remove magnetic valve and choke wire clamp from carburetor cover. Remove snap ring, and remove fast idle rod from fast idle cam. Remove carburetor cover screws and separate carburetor cover from main body being careful to avoid damaging float.

Aisan Carburetors

AISAN 2-BARREL (TOYOTA F ENGINE) (Cont.)

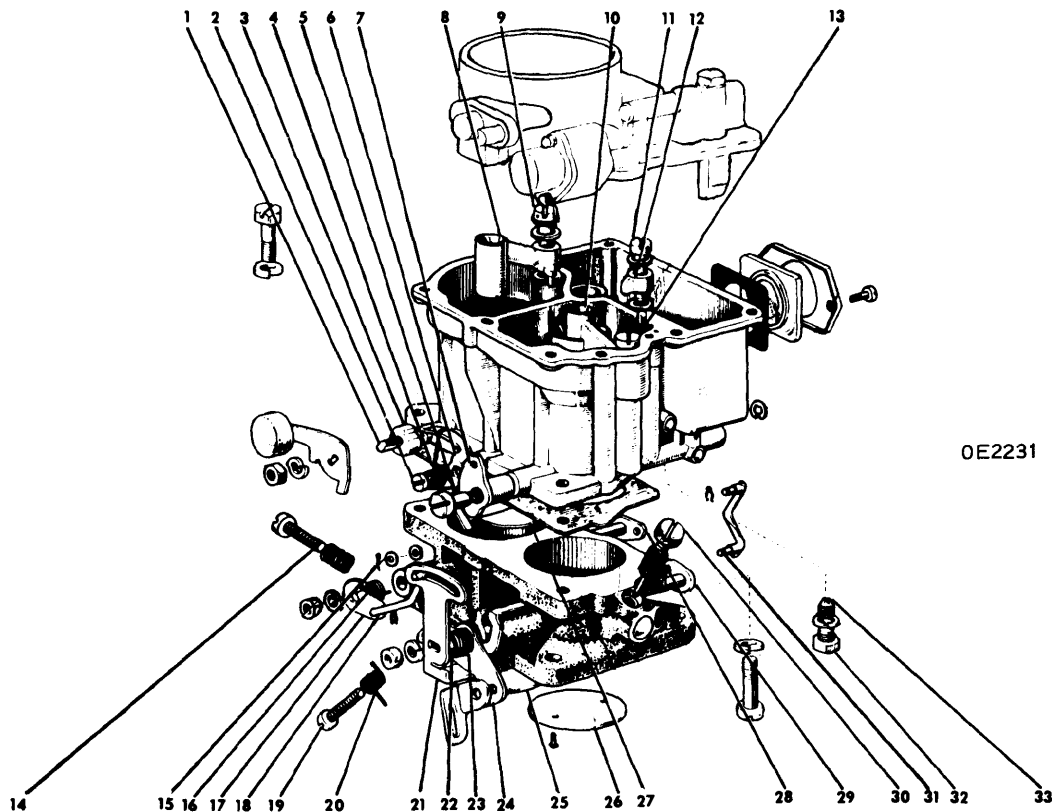
2) Remove accelerator pump connecting link. Remove lifter rod, pump plunger and pump spring. Remove pump jet screw, jet, and gaskets. Invert main body and remove pump discharge weight.

3) Remove primary main air bleeder, and remove the primary booster venturi and gaskets. Remove secondary main air bleeder, and booster venturi and gaskets. Remove slow running jet. Remove power valve.

4) Remove primary and secondary main jet and gaskets. Invert assembly and remove two bolts and one screw that attach main body and cast flange. Remove flange. Remove nut plug and gasket at lower part of float chamber, remove

discharge check valve. Remove nut and take out high speed valve shaft lever and stopper. Remove high speed valve stop lever and spring. To remove high speed shaft, remove two screws securing valve to shaft and remove valve. Next remove retaining ring and slide shaft from carburetor housing. Remove fast idle set screw and cam.

5) To disassemble flange assembly remove snap ring and disconnect throttle shaft link from secondary throttle lever. Remove secondary throttle valve retaining screws and remove valve. Remove throttle lever retaining nuts and spring. Slide throttle shaft from flange. Same procedure for primary throttle shaft. Lastly remove idle mixture screw assembly.



OE2231

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|--|-------------------------------|
| 1 - HIGH SPEED SHAFT | 18 - THROTTLE SHAFT LINK |
| 2 - STOP LEVER SET SCREW | 19 - FAST IDLE SCREW |
| 3 - HIGH SPEED VALVE STOPPER | 20 - SPRING |
| 4 - HIGH SPEED VALVE STOP LEVER SPRING | 21 - THROTTLE SHAFT ARM |
| 5 - FAST IDLE SET SCREW | 22 - THROTTLE LEVER COLLAR |
| 6 - HIGH SPEED VALVE STOP LEVER | 23 - THROTTLE RETURN SPRING |
| 7 - FAST IDLE CAM | 24 - THROTTLE LEVER |
| 8 - SECONDARY BOOSTER VENTURI | 25 - SECONDARY THROTTLE VALVE |
| 9 - PRIMARY MAIN AIR BLEEDER | 26 - PRIMARY THROTTLE VALVE |
| 10 - PRIMARY BOOSTER VENTURI | 27 - HIGH SPEED VALVE |
| 11 - PUMP JET SCREW | 28 - SECONDARY THROTTLE SHAFT |
| 12 - PUMP JET | 29 - PRIMARY THROTTLE SHAFT |
| 13 - PUMP DISCHARGE WEIGHT | 30 - IDLE MIXTURE SCREW |
| 14 - THROTTLE ADJUSTING SCREW | 31 - ACCELERATOR PUMP LINK |
| 15 - THROTTLE SHAFT WASHER | 32 - NUT PLUG |
| 16 - SECONDARY THROTTLE RETURN SPRING | 33 - DISCHARGE CHECK VALVE |
| 17 - SECONDARY THROTTLE LEVER | |

CARBURETOR COMPONENTS

AISAN 2- BARREL (TOYOTA F ENGINE) (Cont.)

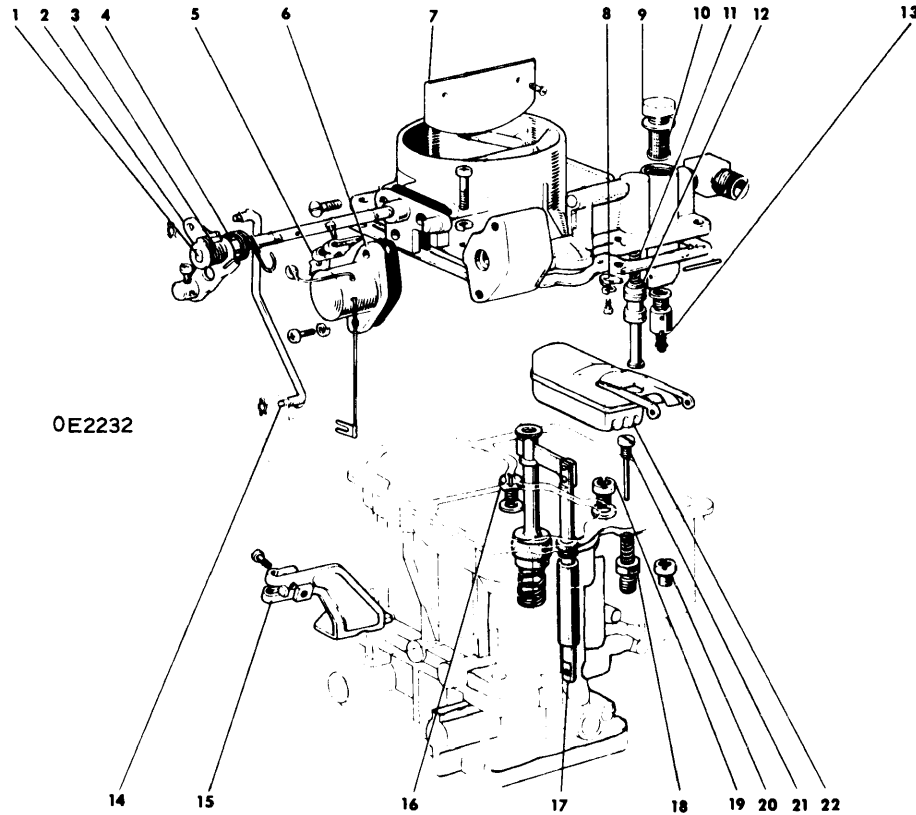
6) To disassemble carburetor cover assembly remove float lever pin and float. Remove needle and seat assembly. Remove power piston and spring. Remove filter trap, gasket and filter.

7) To remove choke valve, remove two retaining screws and pull out valve. Slide choke shaft from carburetor with spring, lever and retractor spring.

8) Clean all parts thoroughly, blow out all passages with compressed air. Inspect float and throttle shafts for damage. Check needle and seat for wear or ridge.

Reassembly

Be sure to make all adjustments called for in adjustment section and use all new gaskets. Reassembly is reverse of disassembly.



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|-----------------------------|-------------------------------|
| 1 - CHOKE SHAFT | 12 - POWER PISTON |
| 2 - CHOKE LEVER | 13 - NEEDLE VALVE |
| 3 - CHOKE RELIEF SPRING | 14 - FAST IDLE CONNECTOR |
| 4 - CHOKE RETRACTING SPRING | 15 - THROTTLE WIRE CLAMP |
| 5 - CHOKE WIRE CLAMP | 16 - LIFTER ROD |
| 6 - FUEL SHUT OFF SWITCH | 17 - SECONDARY MAIN JET |
| 7 - CHOKE VALVE | 18 - POWER VALVE |
| 8 - POWER PISTON STOPPER | 19 - PRIMARY MAIN JET |
| 9 - MAIN PASSAGE PLUG | 20 - PRIMARY MAIN JET (SPARE) |
| 10 - STRAINER | 21 - SLOW JET |
| 11 - POWER PISTON SPRING | 22 - FLOAT |

CARBURETOR COMPONENTS