NIKKI (STROMBERG) 215282-231 2-BARREL

Mazda 616 (1971-72)
Mazda 618 (1972-73)
Mazda 808 (1972-73)
Mazda B-1600 Pickup (1972-73)

DESCRIPTION

Carburetor is a two barrel downdraft design utilizing a primary and secondary stage. Primary stage includes idle, accelerator pump, idle transfer, main metering and power enrichment systems. Secondary stage includes idle transfer, main metering and power enrichment systems. Choke system is manually operated, cable type. An electrically actuated solenoid valve is used to shut off fuel to idle system when ignition switch is off.

ADJUSTMENT

IDLE RPM & MIXTURE

1971-72 616, 618 & 808 – With engine at operating temperature, proceed as follows:

1) Adjust throttle adjusting screw to set idle speed to 600 RPM (700 RPM for model 618).

2) Adjust idle adjusting screw to obtain highest tachometer reading. After highest reading is obtained, readjust throttle adjusting screw to obtain 650 RPM (750 RPM for model 618).

3) Turn idle adjusting screw in (lean) until idle speed is reduced to 600 RPM (700 RPM for model 618).

1971-72 B 1600 – Adjust idle with engine at normal operating temperature and choke valve fully open. Set idle RPM to specification with idle mixture screw and throttle adjusting screw.

1973 Models 1) Engine must be at normal temperature and ignition timing adjusted to correct specifications. Ensure choke valve is in fully open position.

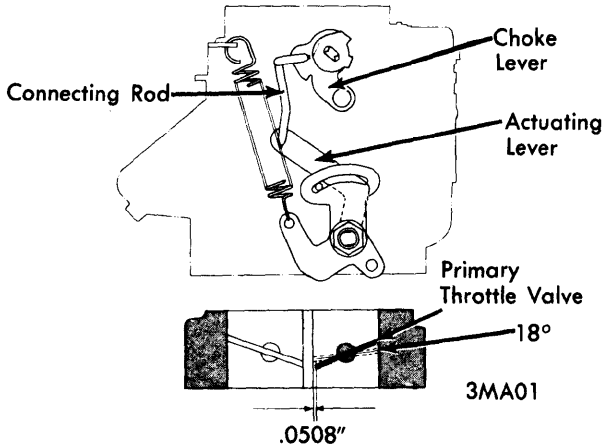
2) Check engine idle and if necessary adjust to 800 RPM by adjusting idle adjusting screw. Using a suitable exhaust gas analyzer, adjust idle mixture screw until CO level is at specified percentage. Recheck idle RPM and if necessary adjust to specifications.

CO Level Specifications

Application	CO Percentage
Mazda 808	1.5-2.5%
Mazda B-1600 Pickup	1.5-3.5%

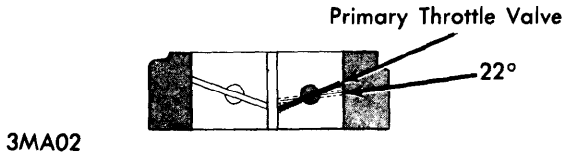
FAST IDLE ADJUSTMENT

Mazda 808 – When choke valve is fully closed, primary throttle valve should be open approximately 18°. Correct opening is checked by measuring clearance between primary throttle valve and side of throttle bore (see illustration). Correct clearance should be .0508". If clearance is not as specified, bend connecting rod between choke and throttle linkage until correct clearance is obtained.



FAST IDLE ADJUSTMENT (808)

B-1600 Pickup – When choke valve is fully closed, primary throttle valve should be open approximately 22° (see illustration). If throttle valve is not opened correct amount, turn fast idle screw in or out until correct opening is obtained.



FAST IDLE ADJUSTMENT (B-1600)

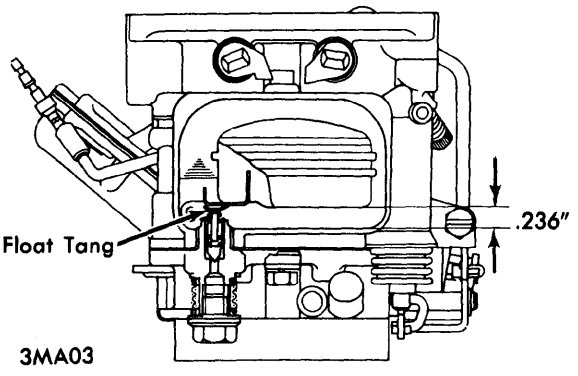
FLOAT LEVEL ADJUSTMENT

1) Check float level through sight glass on end of carburetor. Float level is correct if fuel level is even with mark on glass while engine is running. If float level is incorrect, remove carburetor and float bowl carburetor.

2) Invert carburetor body and measure distance A (see appropriate illustration). If distance measured is not to specification, bend float tang contacting needle valve until correct specification is obtained.

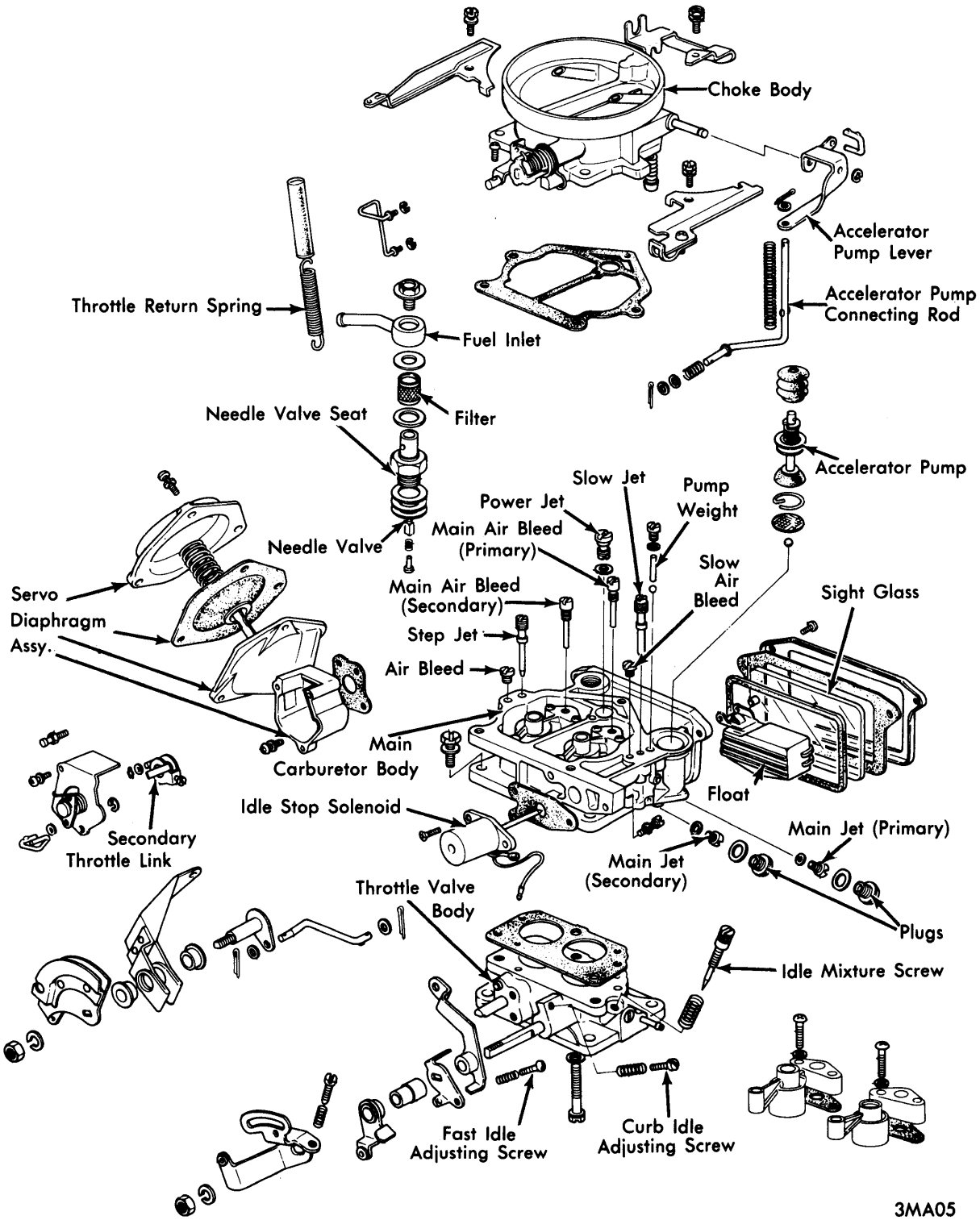
Float Level Adjustment Specifications

Application	Dimension A
Mazda 808	.236"
Mazda B-1600 Pickup	.256"



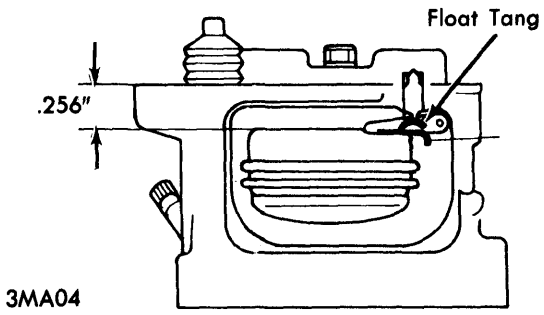
FUEL LEVEL ADJUSTMENT (808)

NIKKI (STROMBERG) 215282-231 2-BARREL (Cont.)



NIKKI (STROMBERG)
(TYPICAL)

NIKKI (STROMBERG) 215282-231 2-BARREL (Cont.)



FUEL LEVEL ADJUSTMENT (B-1600)

ACCELERATOR PUMP ADJUSTMENT

Accelerator pump pressure output is determined by which hole actuating rod is in pump lever. Outer hole position will pump .6 cc per stroke and inner hole will pump .8 cc per stroke. Selection of hole should be determined by atmospheric temperature and condition of engine.

PRIMARY/SECONDARY THROTTLE LINKAGE

Secondary throttle valve should start to open as primary throttle valve reaches an angle of 50°. Open primary throttle to a 50° angle, secondary throttle link should just be contacting end of throttle level slot. If link is opening secondary throttle to quick or not quick enough, bend link until secondary valve opens when primary valve is at a 50° angle.

OVERHAUL

DISASSEMBLY

1) With carburetor removed from engine, remove throttle return spring. Remove split pin and washer from accelerator pump actuating rod at end of lever and separate rod from lever.

2) Remove clip securing pump lever to carburetor body and remove pump lever. Disconnect choke rod from lever by removing clip. Remove choke housing retaining screws and remove choke housing.

3) Pull accelerator pump piston from carburetor body. Remove solenoid, rotate carburetor body and remove throttle valve body from main carburetor body. Remove sight glass housing and sight glass.

4) Remove spacer and float from float pin and remove needle valve assembly. Remove fuel inlet fitting with gaskets. Remove main air bleed, slow air bleed and slow jets.

5) Remove power valve, plugs and main jets from carburetor body. Remove connecting link from primary throttle shaft. Remove diaphragm cover and return spring. Disconnect diaphragm rod from throttle linkage and remove diaphragm and rod assembly.

6) If necessary because of damage, remove primary and secondary throttle valves and shafts. Remove venturi by tapping from bottom.

CLEANING & INSPECTION

1) Wash all carburetor components in a suitable cleaner and blow dry with compressed air. Blow out all passages in carburetor with compressed air. Inspect all components for cracks or nicks on gasket surfaces.

2) Check needle valve for proper seating and replace as necessary. Check idle adjusting screw for damaged threads and seating surface. Check all throttle shafts for wear and for smooth operation.

ASSEMBLY

To assemble carburetor, reverse disassembly procedure. Replace all gaskets and ensure linkage operates smoothly after assembly.

1971-72 CARBURETOR SPECIFICATIONS

Application	Specification
Idle RPM	
Models 616 & 808	600
Models, 618	700-750
Model B 1600	800
Fast Idle (Bench)	
Primary Throttle Opening	
Model B 1600	22°
Model 616, 618 & 808	20°
Float Level	
Models 616, 618 & 808	.236" (6 mm)
Models B 1600	.256±.020" (6.5±.5 mm)
Float Drop	
Model B 1600 (Measure Between Bottom of Float & Bowl)	.047" (1.2 mm)