

1974-79 FUEL SYSTEMS

Nikki 2-Barrel Carburetors

1979 Ford Courier (2000 cc), Mazda B2000

NOTE: Also see appropriate **HITACHI** or **Nikki (Stromberg)** Carburetor articles for 1974-78 Ford Courier and Mazda models.

DESCRIPTION

Carburetor is a 2-barrel, 2-stage, downdraft design. It is equipped with an electric automatic choke and a slow fuel cut valve (throttle solenoid). The primary stage includes a curb idle system, accelerator pump system, idle transfer system, main metering system and power enrichment system.

The secondary stage includes an idle transfer system and main metering system. For deceleration control, Federal vehicles make use of an anti-afterburn valve and throttle positioner system; California vehicles, an air by-pass valve and throttle positioner system.

ADJUSTMENTS

IDLE SPEED & MIXTURE

See appropriate TUNE-UP PROCEDURES article.

COLD (FAST) IDLE RPM

See appropriate TUNE-UP PROCEDURES article.

AUTOMATIC CHOKE SETTING

Align index mark on thermostat cover with center of choke housing index mark. See Fig. 1. Tighten attaching screws.

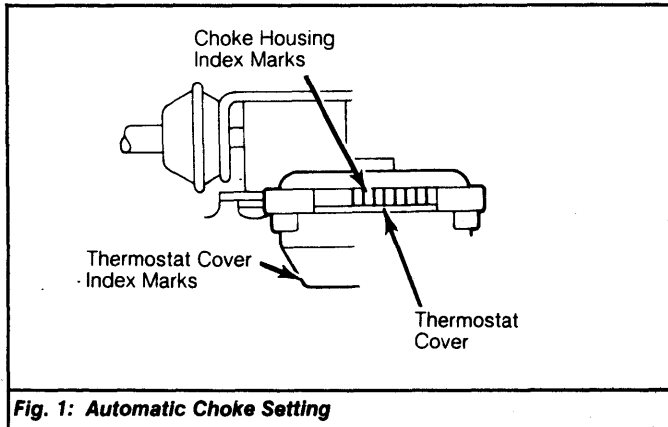


Fig. 1: Automatic Choke Setting

THROTTLE VALVE OPENING ANGLE

1) Close choke valve fully. Place fast idle screw on high (1st) step of fast idle cam. See Fig. 2. Adjust throttle valve opening clearance by turning the adjusting screw clockwise to increase or counterclockwise to decrease the opening clearance.

2) Measure throttle valve opening clearance between throttle bore wall and lower edge of throttle plate. Clearance should be .051-.059" (1.3-1.5 mm). Opening angle should be 18-20 degrees.

CHOKE VALVE OPENING ANGLE

1) Place fast idle screw on 2nd step of fast idle cam. See Fig. 3. Adjust choke valve opening clearance by bending starting arm. If a large adjustment is necessary, bend choke rod.

2) Choke valve opening clearance, measured between choke valve bore and upper edge of valve, should be .061-.028" (.40-.70 mm). Opening angle should be 6-10 degrees.

FLOAT LEVEL

1) With engine running, check fuel level in fuel bowl sight glass. If fuel level is not to mark on sight glass, remove carburetor from vehicle. Remove fuel bowl cover and sight glass.

2) Invert carburetor on stand and allow float to lower by its own weight. Measure clearance between float and carburetor body. See Fig. 4. Clearance should be .335" (8 mm). To adjust clearance, bend float tang until proper clearance is obtained.

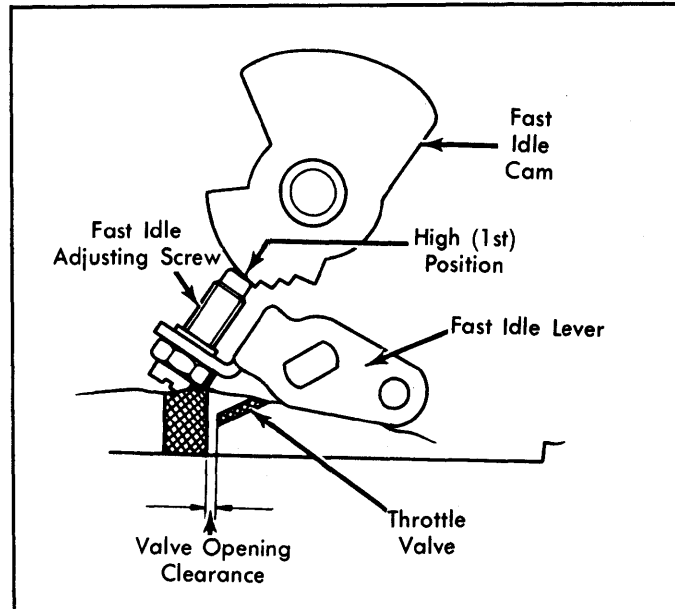


Fig. 2: Throttle Valve Opening Angle Adjustment

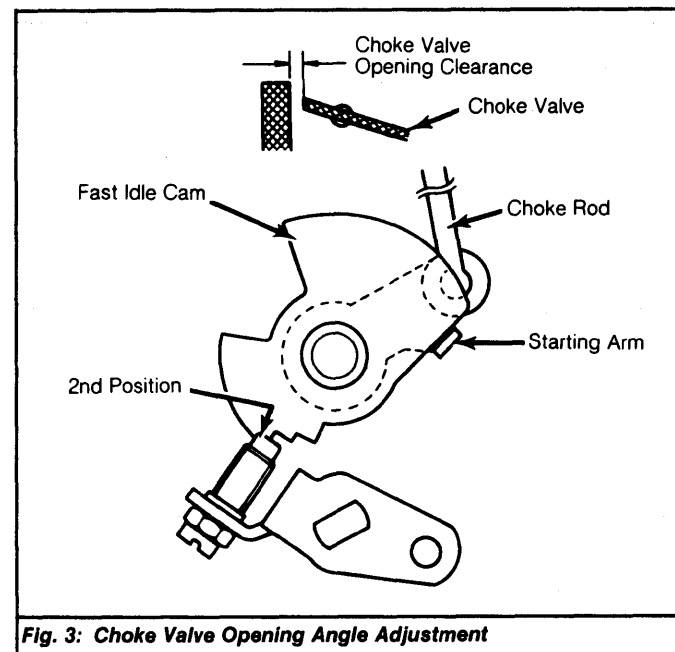


Fig. 3: Choke Valve Opening Angle Adjustment

FLOAT DROP

1) Remove carburetor from engine. Turn carburetor to its normal upright position. Allow float to lower by its own weight and measure clearance between bottom of bowl and float. See Fig. 5.

2) Clearance should be .079" (2 mm). If not, bend float stopper until proper clearance is obtained. Install fuel bowl sight glass and install carburetor on engine. Operate engine and make sure fuel level is to specified mark in sight glass.

1974-79 FUEL SYSTEMS

Nikki 2-Barrel Carburetors (Cont.)

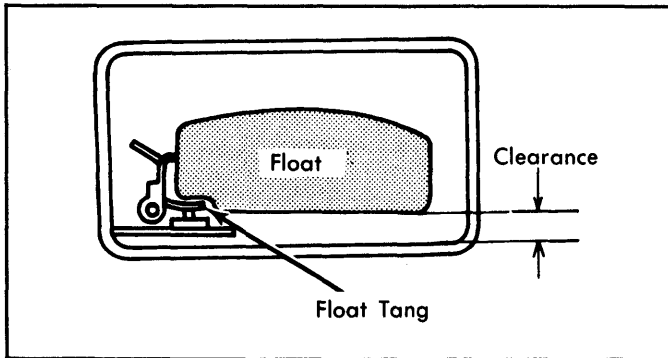


Fig. 4: Float Level Adjustment

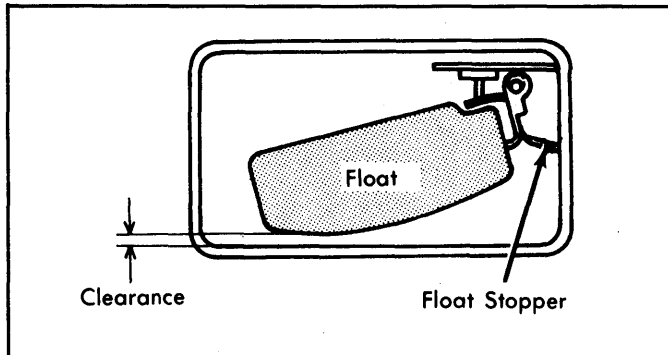


Fig. 5: Float Drop Adjustment

CHOKE UNLOADER

Close choke valve fully and fully open primary valve. Measure choke valve clearance between air horn and choke valve. See Fig. 6. Clearance should be .079-.099" (2.0-2.5 mm). Choke valve opening should be 23-27 degrees. To adjust clearance, bend throttle adjusting arm.

CHOKE DIAPHRAGM

1) Place fast idle screw on high (1st) step of fast idle cam. Apply approximately 15.7 in. Hg vacuum to choke diaphragm. Press choke valve slightly to closed position and measure clearance between choke valve and air horn.

2) Clearance should be .047-.067" (1.2-1.7 mm). Choke valve opening angle should then be 16-20 degrees. If incorrect, bend choke lever until proper clearance is obtained. See Fig. 7.

ACCELERATOR PEDAL HEIGHT

1) Loosen lock nuts on linkage rod "A". See Fig. 8. Rotate rods in sockets until proper accelerator travel from idle to wide open throttle is obtained. Tighten lock nuts.

2) Accelerator pedal height should be 1.57-1.97" (40-50 mm) lower than brake pedal height. Throttle valves should be wide open when accelerator pedal is against the floor.

OVERHAUL

DISASSEMBLY

1) Remove carburetor and cover intake manifold port with clean shop towel to prevent dust and dirt from entering. Disconnect accelerator pump rod from lever and remove lever from main body. See Fig. 9.

2) Unhook throttle return spring and remove bracket. Disconnect fast idle rod from fast idle lever. Remove vacuum hose from choke diaphragm to main body. Remove slow fuel cut valve and automatic choke heater leads. Remove thermostat cover and gasket.

3) Remove choke housing. Remove cotter pin and washer from rod selector and unhook unloader return spring. Disconnect secondary throttle rod from shaft. Remove secondary throttle actuator from main body. Unscrew slow fuel cut valve from main body and remove it. Remove fuel inlet assembly bolt lock and spacer, and detach air horn from main body.

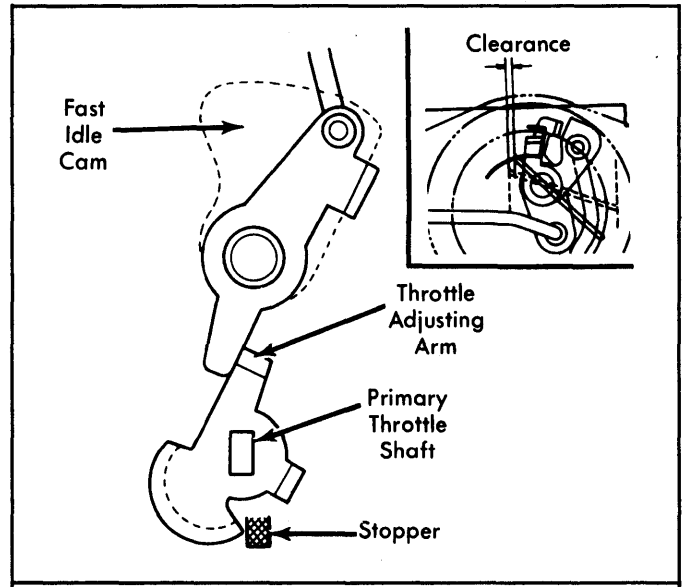


Fig. 6: Choke Unloader Adjustment

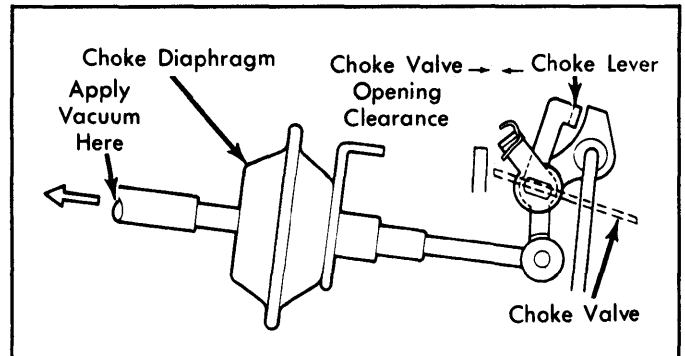


Fig. 7: Choke Diaphragm Adjustment

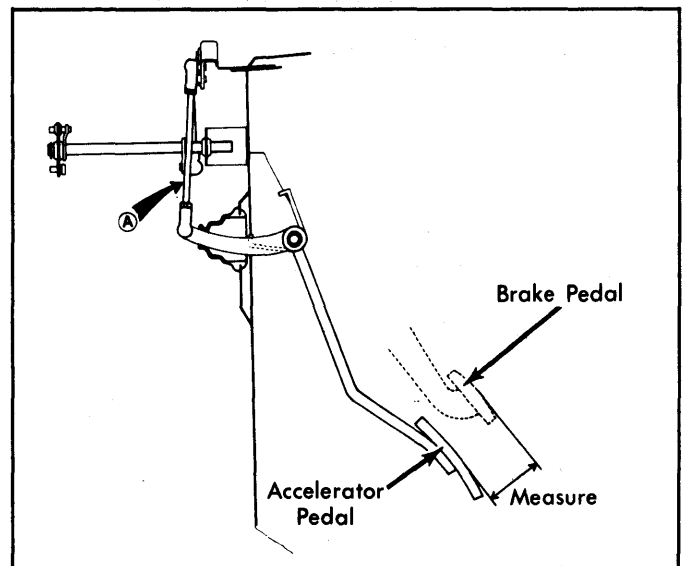


Fig. 8: Accelerator Pedal Height Adjustment

1974-79 FUEL SYSTEMS

Nikki 2-Barrel Carburetors (Cont.)

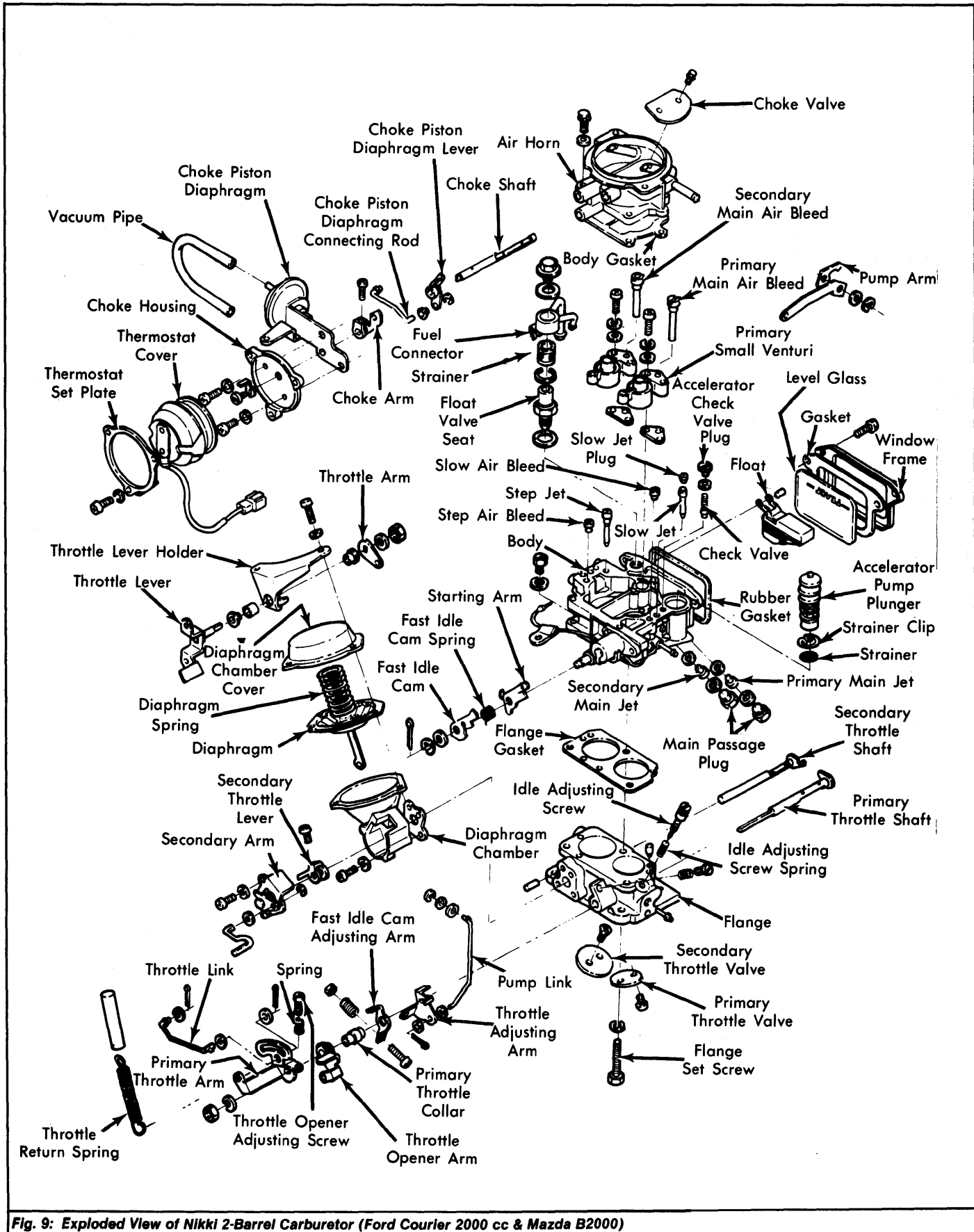


Fig. 9: Exploded View of Nikki 2-Barrel Carburetor (Ford Courier 2000 cc & Mazda B2000)

1974-79 FUEL SYSTEMS

Nikki 2-Barrel Carburetors (Cont.)

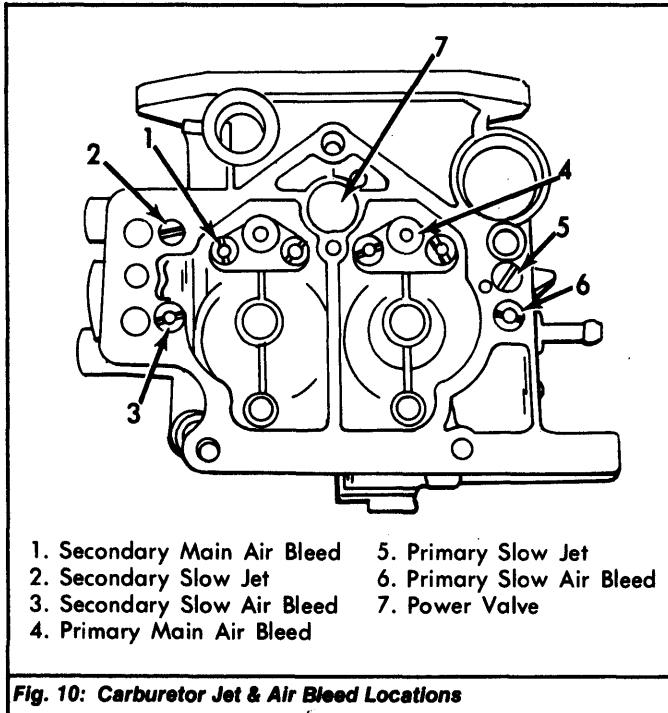


Fig. 10: Carburetor Jet & Air Bleed Locations

4) Remove fuel inlet fitting from main body. Remove fuel strainer, inlet bolt and needle valve assembly. Remove fuel bowl sight glass cover, gasket, glass and gasket. Remove float lever pin collar and float.

5) Remove accelerator pump plunger cover and gasket and plunger spring. Turn carburetor over and remove inlet check ball. Remove screw and washer holding pump discharge weight and ball, turn carburetor over and remove weight and ball.

6) Remove idle jets, main jets, and all air bleeds from main body. See Fig. 10. Remove power valve. Remove curb idle adjusting screw and spring from lower body. Remove primary and secondary discharge nozzles, retaining screws and washers. Remove nozzles and gaskets.

7) Remove air bleed screws from discharge nozzles and remove emulsion tubes. Remove lower body from main body. Remove accelerating pump actuating lever, choke actuating lever, throttle return lever and idle adjusting lever.

8) Mark throttle valve in relationship to bore and shaft. Remove throttle valve and slide shaft out of lower body.

CLEANING & INSPECTION

Wash parts in carburetor cleaner (solvent). DO NOT soak any components containing rubber, leather, or plastic. Soak components long enough to thoroughly clean all surfaces and passages of foreign matter. Remove any residue after cleaning components in solvent. Blow out all fuel passages dry with compressed air. Inspect all parts for wear or damage and replace as necessary.

REASSEMBLY

To reassemble, reverse disassembly procedure. Be careful not to mistake primary and secondary parts. When installing thermostat cover an automatic choke housing, hook choke arm to bimetallic spring. Check correct operation of choke valve by turning thermostat cover, then align index mark on cover with center mark on choke housing.