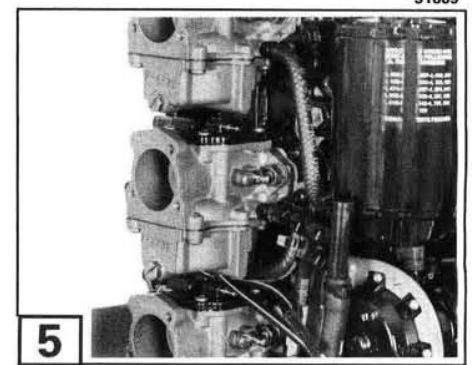
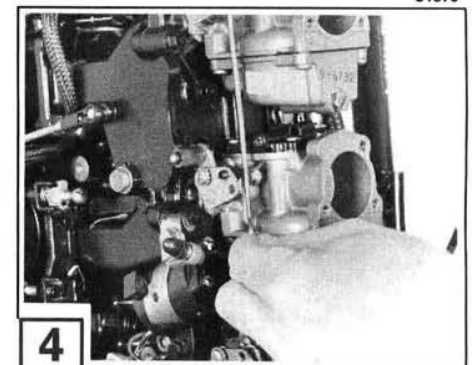
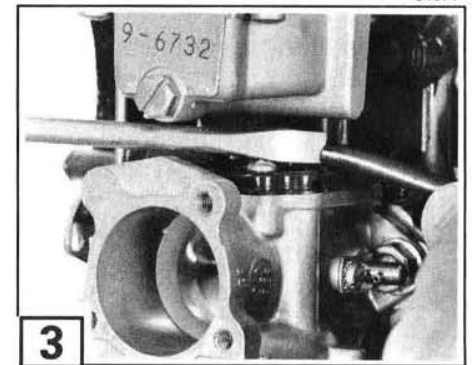
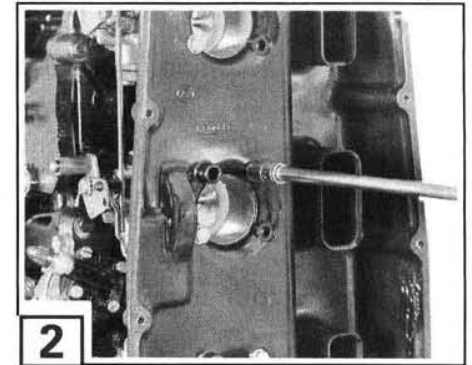
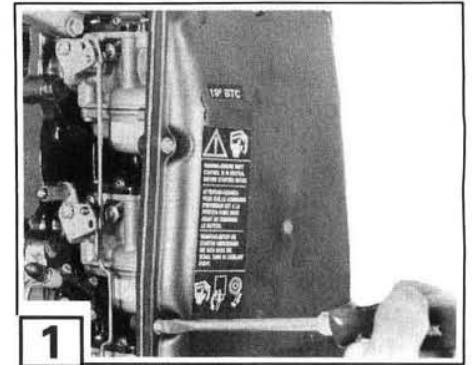


Carburetor Servicing, All Models

Removal

Note Push fuel hose off fuel fittings - **don't pull**. If pushing won't separate hose and fitting, carefully cut the hose along its side and peel it back to avoid damaging the fittings.

1. Remove air silencer cover screws. Discard air silencer cover gasket.
2. Remove and discard air silencer base screws and gasket. New screws should be used on reassembly.
3. Disconnect the drain hose and lay air silencer aside.
4. Cut fuel hose tie straps at carburetors and disconnect fuel hoses.
5. Disconnect linkage from throttle levers.
6. Remove carburetor nuts, lock washers, and carburetors.
7. Remove primer hose from carburetor nipples.
8. Remove and discard carburetor flange gaskets.



Disassembly

1. Remove drain plug from front of carburetor float chamber and drain the chamber.

6 2. Remove high-speed orifice (A) using *OMC* Orifice Driver P/N 317002.

6 3. Remove intermediate air bleed orifice (B).

6 4. Remove four screws and remove float chamber (C). Discard float chamber gasket.

6 5. Remove float and inlet valve assembly (D).

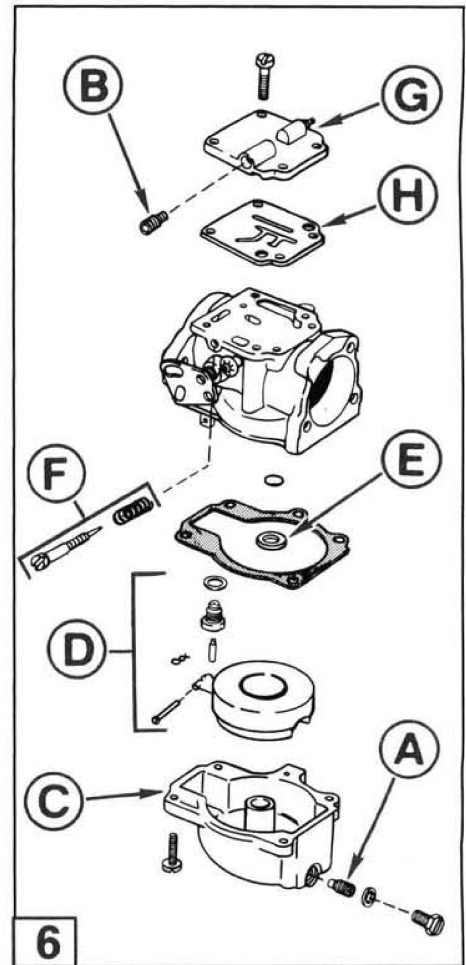
6 6. Remove nozzle well gasket (E).

6 7. Remove slow speed needle components (F).

6 8. Remove four screws and carburetor body cover (G).

6 9. Remove carburetor body cover gasket (H).

When installing new parts from a carburetor rebuild kit, inspect gaskets and compare to original gaskets to ensure all holes are correctly punched. Also, inspect new gaskets for loose fibers or particles of gasket material. Remove any you find.



DR4598

Inspection

Note Never clean a carburetor by submerging or soaking in a hot tank or carburetor cleaner. Do not expose plastic or rubber parts to any carburetor cleaner.

1. Before inspection, all carburetor components must be perfectly clean.

- Carburetor must be completely disassembled.
- Clean parts with *OMC Carburetor and Choke Cleaner*.

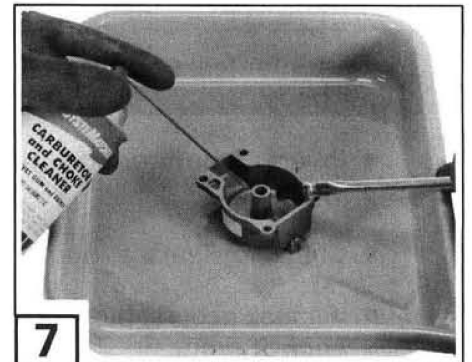
- 7**
- Use a clean bristle brush to remove gum or varnish deposits.
 - Blow dry with shop air of not more than 25 PSI (172 kPa). When drying passages, direct the flow of shop air opposite to the direction of fuel flow.

Float Valve Assembly

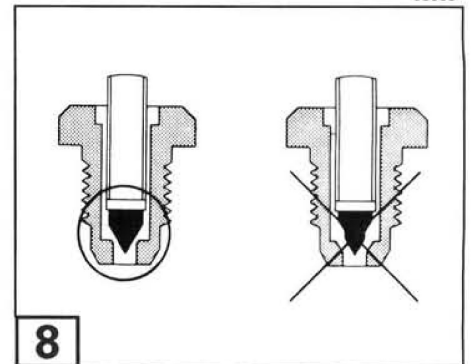
1. Inspect the inlet needle and float valve seat.

- 8**
- Check inlet needle tip for grooves, nicks, scratches, or distortion.
- 8**
- Check float valve seat for nicks, scratches, or distortion.
 - Check float for signs of oil or gasoline saturation.

Note Inlet needle and float valve seat must be replaced as a set.



33955



63324

Carburetor Body

1. Check all drillings and passages with a syringe filled with isopropyl alcohol.

2. Visually inspect all gasket surfaces for nicks or irregularities.

3. Check for excessive throttle shaft play. Check for throttle valve misalignment.

9 4. Remove the vent well core plug to inspect the pocket for damage or restrictions. Drive a small punch not more than $\frac{1}{8}$ in. (3 mm) through plug and pry out.

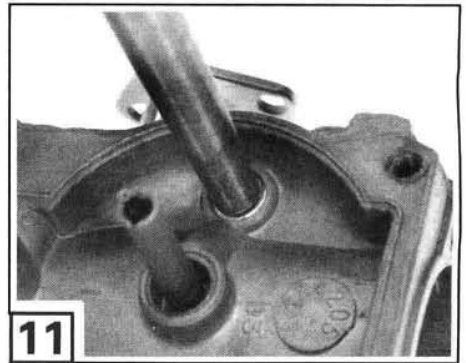
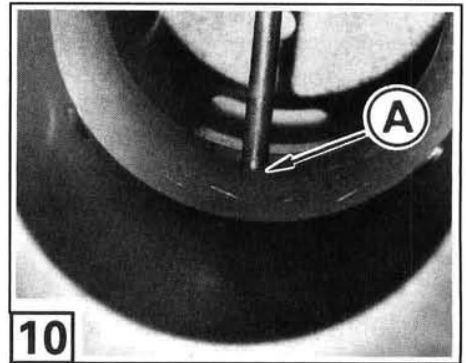
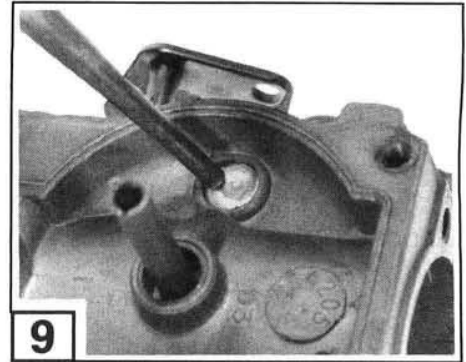
10 5. Check for leaks between emulsion pickup tube and carburetor body:

- Invert carburetor body and fill idle circuit with isopropyl alcohol.
- Check for leaks at point **A**.
- If a leak occurs, blow dry and apply a drop of *OMC Ultra Lock* at point **A**.

Assembly

Note Before proceeding, be sure that all parts are perfectly clean. Be sure that all replacement parts match original ones in size and shape. Replace all gaskets, O-rings, and sealing washers each time you assemble a carburetor.

11 1. Install a new core plug with the convex side up. Seat the plug using a flat end punch and plastic mallet. Apply *Gasoila* sealer, *OMC* P/N 200763, to the rim of the core plug after it is seated.



12 2. Install float valve seat and gasket (B).

12 3. Install inlet needle, clip, float, and hinge pin (C).

13 4. Adjust float level. Invert the carburetor body. With the float valve closed, the float's top edge should be between, but not touching the notches (D) of OMC Gauge P/N 324891, as shown.

Note If adjustment is necessary, do not put pressure on the inlet needle.

14 5. Adjust float drop. With carburetor body in normal position, the float drop dimension (E) should be 1 1/8 to 1 5/8 in. (28-41 mm).

12 6. Install nozzle well gasket (F).

12 7. Install float chamber gasket (G).

8. Apply OMC Locquic Primer and OMC Screw Lock to the float chamber screws.

9. Install float chamber and four screws. Torque screws in an "X" pattern to 25-35 in. lbs. (2,8-4,0 N·m).

10. Install the carburetor body cover and gasket. Tighten the screws in an "X" pattern to a torque of 15-22 in. lbs. (1,6-2,4 N·m).

12 11. Install intermediate air bleed orifice (H) to a torque of 8-10 in. lbs (0,8-1,2 N·m).

12 12. Install high-speed orifice (I) to a torque of 8-10 in. lbs (0,8-1,2 N·m).

12 13. Install slow speed needle and spring (J). Turn in carefully until it lightly contacts seat.

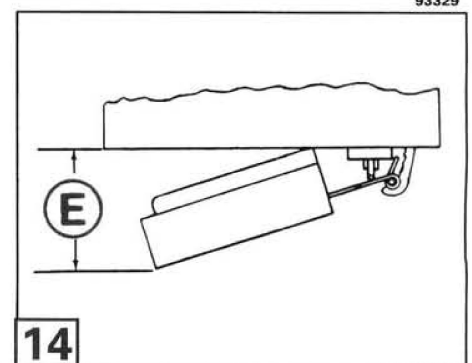
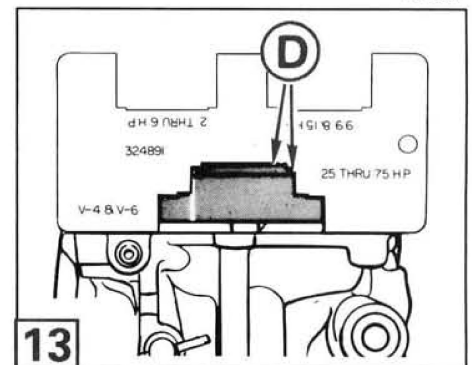
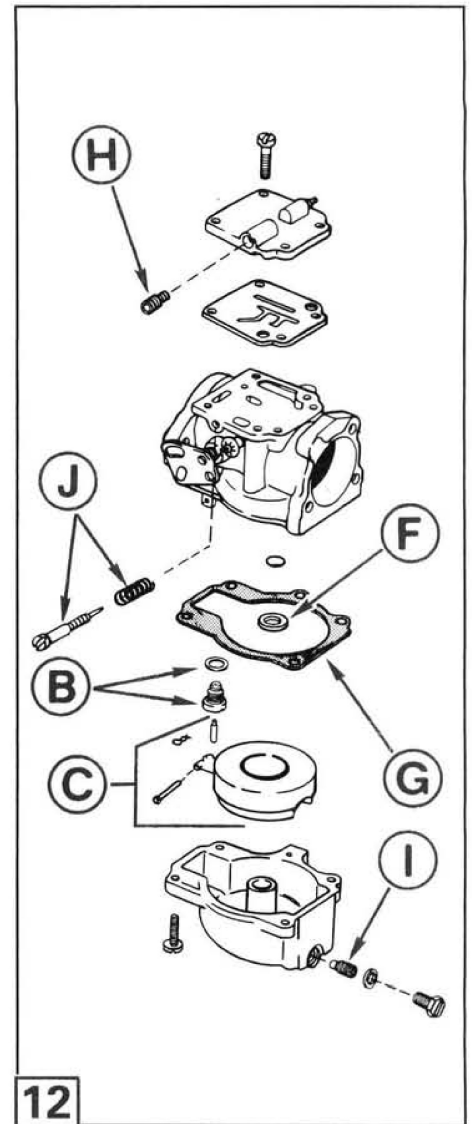
• Back needle out for initial setting:

60 - 1 1/2 Turns

60TTL - 1 1/2 Turns

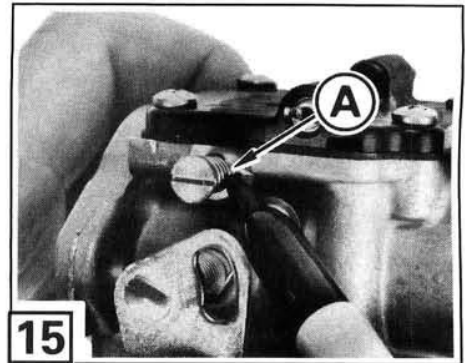
65, 70 - 1 1/2 Turns

14. Install float chamber drain plug and gasket.

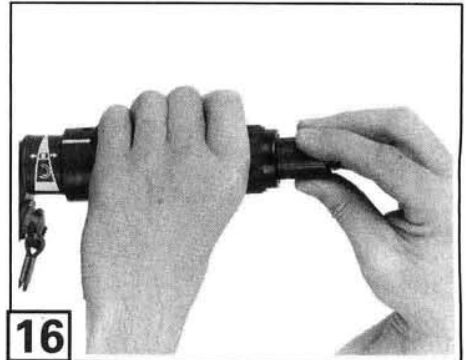


Installation

1. Install new carburetor flange gaskets dry, use no sealer.
2. Attach primer hoses to carburetor fittings.
3. Install carburetors, lock washers, and nuts. Tighten nuts securely.
4. Install fuel supply hoses using new tie straps.
5. Install carburetor linkage. Refer to **Synchronization and Linkage Adjustments, Section 1**, for adjustment information.
6. Connect drain hose to air silencer base fitting.
7. Install base gasket and air silencer base using new screws. Torque the screws to 24-36 in. lbs. (3-4 N·m).
8. Momentarily pressurize fuel system and check for leaks.
9. Install the gasket, air silencer cover, and retaining screws. Torque the screws to 24-36 in. lbs. (3-4 N·m).
10. If the slow speed needle adjustment has been disturbed, refer to **Carburetor Mixture Adjustment**.



31856



24333

Carburetor Mixture Adjustment

The slow speed mixture in this carburetor is controlled by an adjustable needle.

- 15** 1. Make a reference mark **A** on the carburetor body before you disturb the needle adjustment.
- 16** 2. **Tiller models** - as you face the steering handle, turn the idle speed adjustment knob counterclockwise to complete SLOW speed position.
3. Start the engine and allow it to reach normal operating temperature. Run the engine in gear at idle speed for three minutes.
 - If the adjustment is too lean, the engine will sneeze and backfire, go to Step 4.
 - If the adjustment is too rich, the engine will be rough and unsteady, go to Step 5.
- 15** 4. If the adjustment is too lean, notice your reference mark **A** and turn the needle $\frac{1}{8}$ revolution counterclockwise. Waiting 15 seconds after each adjustment, repeat this procedure until you reach the highest consistent RPM.

15 5. If the adjustment is too rich, notice your reference mark **(A)** and turn the needle $\frac{1}{8}$ revolution clockwise. Waiting 15 seconds after each adjustment, repeat this procedure until you reach the highest consistent RPM.

6. Repeat Steps 3 thru 5 for each carburetor.

7. To test your adjustment, run engine near full throttle for three minutes. Return the engine to idle in gear. The engine should maintain a smooth idle RPM.

- If your test results vary, repeat Steps 3 thru 5.

Important If the engine does not respond properly to these adjustments, check the following:

- Engine temperature
- Linkage adjustment
- External recirculation system
- Sufficient exhaust back pressure

Intake Manifold Servicing, All Models

Removal

1. Follow steps listed in **Carburetor Removal**, this Section.
2. Remove manifold screws and remove manifold.

Disassembly

1. Remove two screws per leaf plate assembly and remove the leaf plate assemblies as required.

Note Do not disassemble leaf plate assemblies unless leaf plate seats, leaf valves, or leaf stops are damaged or corroded.

Note Check parts availability before servicing leaf plate assemblies. Some assemblies on some models are not serviced in detail.

2. When disassembling leaf plate assemblies, do not lift or bend leaf valves. Remove the leaf stop screws and remove the stops, shims, and leaf valves.

3. When disassembled, keep the stops, shims, and leaf valves separated by assembly.