

FIGURE 46. GASOLINE CARBURETOR AND INTAKE MANIFOLD ASSEMBLY

8.2.5 Carburetor

The carburetor (**Figure 47**) is not likely to cause problems and should be replaced only after all other problems have been eliminated (see the Troubleshooting section). The carburetor fuel mixture adjustments are sealed at the factory. See **Section 8.4.3** to connect the throttle link and to adjust the idle (throttle) stop screw.

8.2.6 Automatic Choke

The automatic choke is operated by a bi-metal/heater assembly and a vacuum breaker assembly (**Figure 47**). Conduct the following checks and adjustments before replacing a carburetor/choke assembly:

1. Apply 12 VDC across the heater terminals. The choke should open fully in 2 to 3 minutes.
2. Check the heater alignment marks and realign if out of alignment. The choke should be closed at temperatures below 70° F (21° C). It may be partly open above 70° F (21° C), but should close almost completely when vibrated (engine cranked).

3. The vacuum breaker diaphragm must not leak under a vacuum of 30 inches Hg (100 kPa). It should not take a vacuum greater than 2.4 inches Hg (8 kPa) to open the choke fully. At a vacuum of 1 inch Hg (3.2 kPa) the choke plate should be at the angle shown (**Figure 47**). If necessary, bend the link at the point shown, using two pliers.

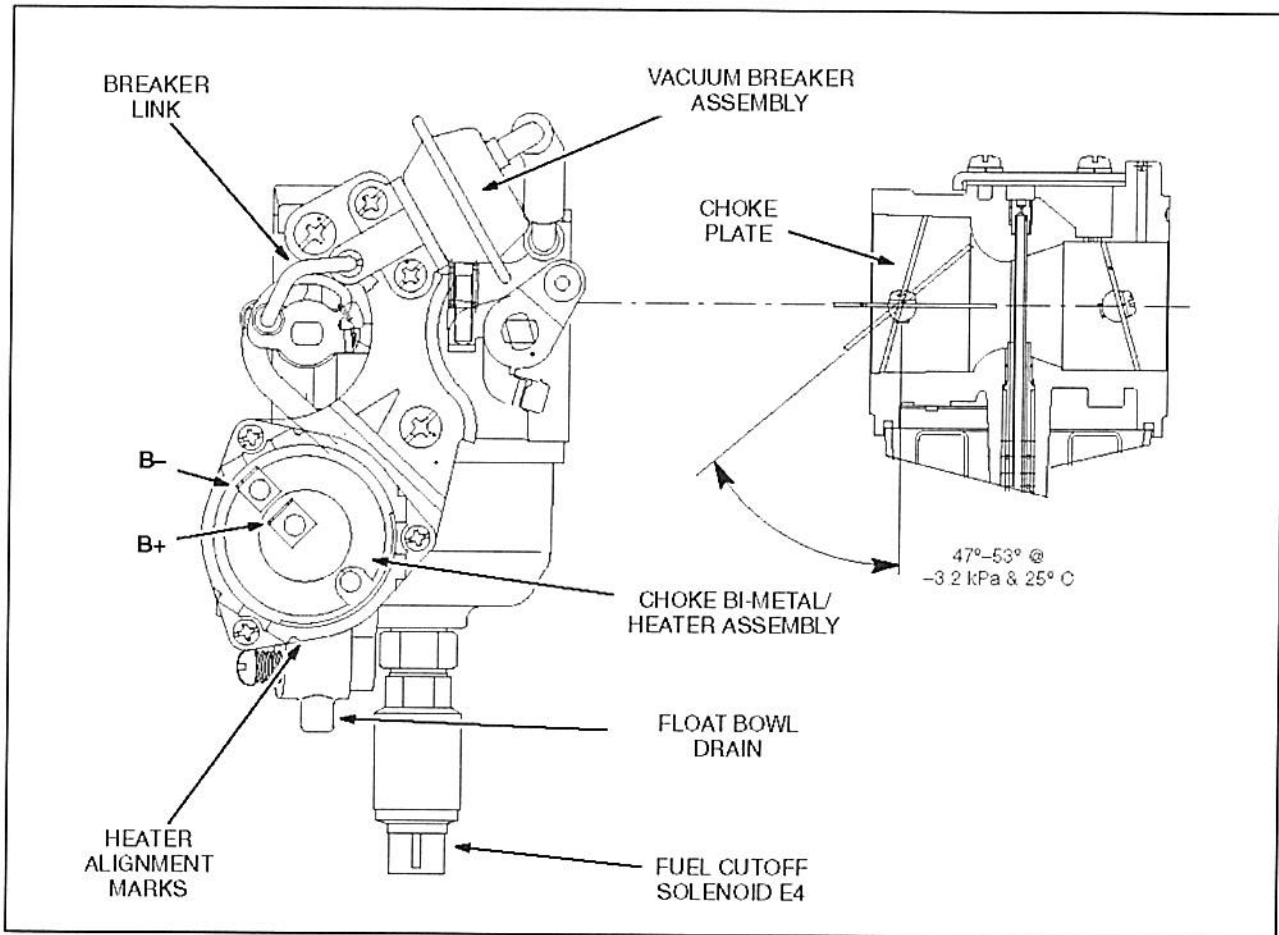


FIGURE 47. CARBURETOR / CHOKE ASSEMBLY

8.2.7 Fuel Cutoff Solenoid E4

The fuel cutoff solenoid is threaded into the bottom of the carburetor float bowl (**Figure 47**). If the engine does not start because it is not getting fuel, but fuel can be drained from the carburetor float bowl, the solenoid probably is not opening and should be replaced. To remove and replace the cutoff solenoid:

1. Remove the carburetor.
2. Using a 15 mm wrench on the float bowl adapter (brass) and a 13 mm wrench on the solenoid, remove and discard the solenoid and aluminum washer.
3. When installing the new solenoid, use a new washer and torque it to 8 lb-ft (10 Nm). Make sure the float bowl adapter does not turn.
4. Reassemble all the parts that were removed.