INSTALLATION INSTRUCTIONS
FOR ELECTRIC CHOKE KIT
P/N 45-224SA

INTRODUCTION:

Congratulations on your purchase of a new electric choke kit from Holley! This kit can be used to convert Aluminum Holley carburetors that were originally equipped with a manually operated choke to full-automatic/electric operation. Holley Performance Products has written this manual for the installation of the **electric choke kit**. This manual contains all the information needed to install this system. Please read all the **WARNINGS**, **NOTICES**, **NOTES**, and **TIPS**. They contain valuable information that can save you time and money. It is our intent to provide the best possible products for our customer; products that perform properly and satisfy your expectations. By using this number, you may obtain any information and/or parts assistance that you may require. Please have the part number on hand of the product you purchased when you call technical service.

NOTE: PLEASE READ AND FOLLOW THE INSTRUCTIONS COMPLETELY BEFORE AND DURING INSTALLATION.

This electric choke kit is designed to replace the manual choke on your Aluminum Holley carburetor. Not all parts are needed for every installation.

NOTE: This installation should be done OFF the vehicle.

1. Remove the three (3) screws securing the manual choke (see **Figure 1**). Remove the fastener clip from the choke rod and the manual choke backing plate. Retain the fastener clip for a later time.

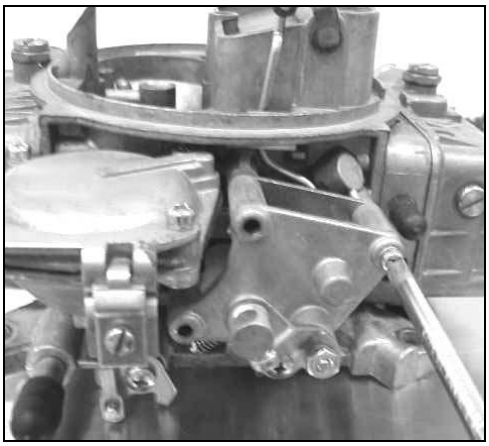

Figure 1

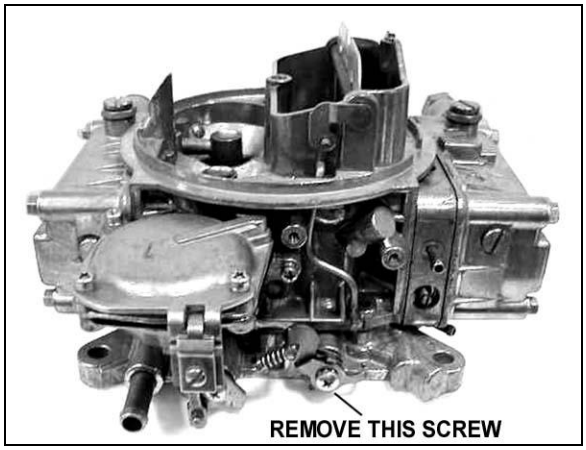

Figure 2

2. Remove the screw holding the fast idle levers (see **Figure 2**). Remove the fast idle levers and spring. Retain the screw for a later time.

3. Check the two (2) counter-bored holes to see if either one is drilled through. Blow compressed air into either of these holes. If air exits from the bottom of the carburetor, plug the hole with the lead ball provided in the kit.

4. On automotive applications, use the new fast idle lever, spring, and small lever from the kit and the screw retained in step 2 above (see **Figure 3**). Assemble the parts onto the throttle shaft. See **Figures 4**, **5**, & **6**. Assemble the lever onto the throttle shaft.

Figure 3

Figure 4

Figure 5

5. Assemble the choke housing to the main body. Make sure the choke rod is through the hole in the lever on the back of the choke housing. Make sure that the fast idle cam (red lever) is above the choke rod. Slide the housing onto the choke rod until the lever is past the hole in the rod. Using the fastener clip retained in step 1, secure the choke housing to the rod. On automotive applications, ensure that the fast idle cam is above the choke rod, and that the fastener clip secures the choke lever.

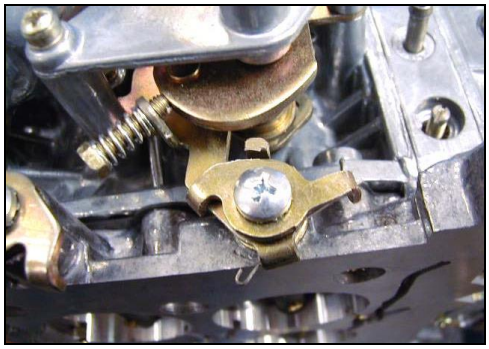

Figure 6

6. Using the three- (3) equal middle length screws from the kit, secure the choke housing to the main body (see Figure 7). Operate the choke plate by moving the bi-metal pick-up lever. The choke plate should move freely. If the choke plate does not move freely, check the choke linkage to make sure there is no binding. Check that the fast idle screw is in alignment with the red cam on the back of the choke housing.

7. Install the new choke cap gasket onto the housing.

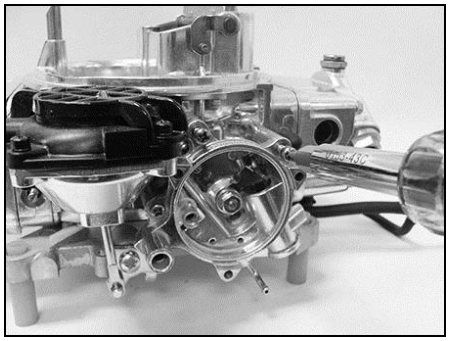

Figure 7

Figure 8

8. Install the electric choke cap and retaining ring. Install the ring so it bows outward from the choke cap (**Figure 8**).

IMPORTANT: When installing the choke cap, be sure the bi-metal pick-up lever (in the housing) fits into the loop on the bi-metal spring. Check this by turning the choke cap in both directions. The choke plate should open when rotated clockwise and should close when rotated counter clockwise.

9. Using the three (3) equal-length short screws from the kit, fasten the retaining ring and choke cap to the choke housing just enough to hold the cap in place, but will allow the choke cap to be rotated.

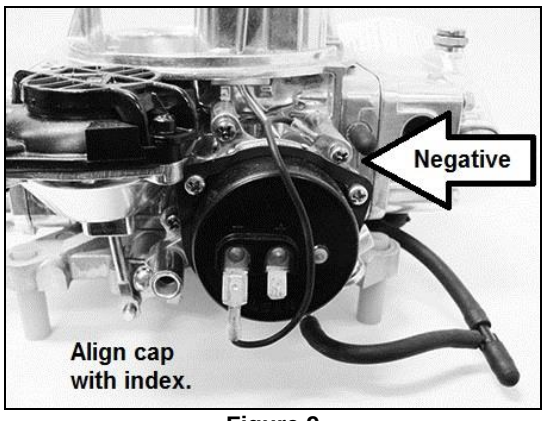

Figure 9

10. Rotate the choke cap until the mark on the cap aligns with the index on the choke housing. Tighten the retaining screws so the cap cannot rotate.

11. Use the shortest wire from the kit and connect the bayonet end to the negative choke cap terminal marked (-). Ground the eyelet end to the carburetor. Do this either under a screw on the vacuum secondary diaphragm cover or under a screw securing the choke housing to the main body as shown in **Figure 9**.

WARNING: Correct polarity must be observed when connecting the electric choke wires. Connecting the (+) lead to ground and the (-) lead to a 12V source will result in a direct short and could cause a fire. The 12V source selected should be fused. If not, an inline fuse rated at 10 amps should be installed.

12. On marine engines, the de-choke must be set. With the choke fully closed, open the throttle completely. The choke plate should open about 1/4" (.0250"). This allows air into the engine, if the engine should flood. This will allow the engine to start. If the choke plate does not open in the specified amount, carefully bend the lever installed on the throttle shaft in Step 4, until the required opening is obtained. De-choke is preset on automotive applications.

13. Remount the carburetor on the vehicle.

14. Connect the long wire from the kit to the positive choke cap terminal marked (+). Connect the other end of the wire to a fused ignition activated 12V source. The choke cap should only get voltage when the engine is running. Check your voltage source with a voltmeter.

WARNING: The distributor side of the coil is not a 12V source. Connecting the choke cap to the ignition coil will result in unacceptable choke operation and possible engine misfiring resulting to possible engine damage. Do not connect the choke wire to the coil!

15. Connect the vacuum hose supplied in the kit to the fitting on the bottom of the choke housing. Using the plastic vacuum tee from the kit, splice into any full manifold vacuum line such as the vacuum line to the air cleaner. Connect the vacuum hose from the choke housing to the plastic tee, or connect the vacuum hose from the choke housing to an unused vacuum port on the intake manifold.

16. Start the engine and allow the engine to reach operating temperature. On automotive applications, manually advance the throttle to just off idle. Push the fast idle cam up so that the fast idle screw is on the top step of the cam. This speed should be set to manufacturer's specifications (usually 1600 rpm). This screw should be adjusted with the engine off. Hold the throttle in the wide-open position to expose the fast idle screw below the choke housing. Use a small open-end wrench for adjustment. Start the engine and recheck idle speed.

17. Rotating the choke cap can control the choke operation. If the choke comes off too soon, rotate the cap counter-clockwise one notch at a time until the choke operation is satisfactory. Reverse the procedure if the choke comes off too late. After adjustment, start the engine and watch to be sure the choke plate opens fully. Poor fuel economy, a fast idle speed (automotive applications), and possible engine damage may result from this.