

## INSTALLATION INSTRUCTIONS FOR ELECTRIC CHOKE KITS PART NUMBERS 45-223, 45-223S, & 745-223

### INTRODUCTION

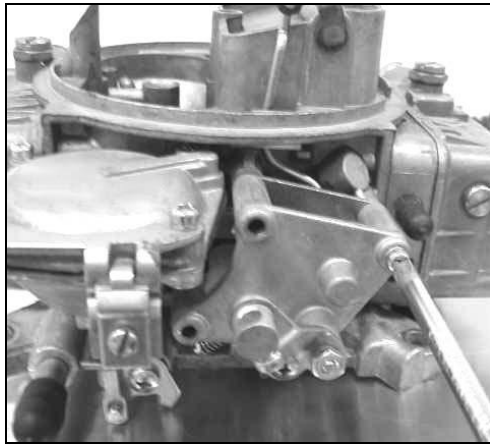
Congratulations on your purchase of a new electric choke kit from Holley! These kits can be used to convert Holley carburetors that were originally equipped with a hot air or manually operated choke to full-automatic/electric operation. Holley Performance Products has written this manual for the installation 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. Should you need information or parts assistance, please do not return the unit to the store without first contacting technical service at 1-270-781-9741, Monday through Friday, 7:00 a.m. to 5:00 p.m. Central Time. By using this number, you may obtain any information and/or parts assistance that you may require. Please have the part number of the product you purchased ready when you call technical service.

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

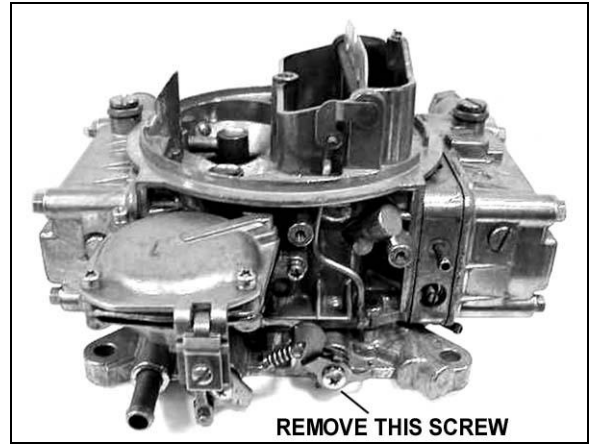
This electric choke kit is designed to replace the manual choke on your Holley carburetor. Not all parts are needed for every installation.



**NOTE: This installation should be done OFF the vehicle.**



**Figure 1**



**REMOVE THIS SCREW**  
**Figure 2**

1. Remove the three (3) screws securing the manual choke. Remove the fastener clip from the choke rod and the manual choke backing plate. Retain the fastener clip for use at a later time.
2. Remove the screw holding the fast idle levers. Remove the fast idle levers and spring. Retain the screw, spring, and small lever. Pull the choke vacuum gasket off and discard it. Thoroughly clean the mounting surface of the gasket. Blow compressed air through the passage to make sure the passage is free of blockages. Air should exit from the bottom of the carburetor.
3. For automotive applications, use the new fast idle lever from the kit and the screw, spring, and small lever retained in step 2 above, as shown in Figure 3. Assemble the parts onto the throttle shaft. See Figures 4, 5, & 6. For marine application, use the new lever provided in the kit. Assemble the lever onto the throttle shaft.



**SPRING FITS  
INSIDE LEVER**

**Figure 3**



**SHOULD LOOK  
LIKE THIS WITH  
SPRING INSIDE  
LEVER**

**Figure 4**



**SPRING WILL  
FIT INTO  
GROOVE HERE**

**Figure 5**

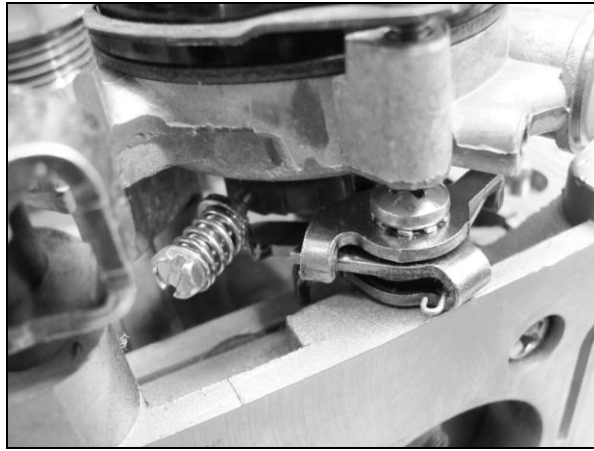


Figure 6

- Moisten the cork gasket provided in the kit. Attach it to the vacuum passage hole on the choke housing assembly. Insert the choke rod through the hole in the lever on the back of the choke housing. Make sure the fast idle cam is above the choke rod. Use the fastener clip from step 1 to secure the rod to the lever. Position the choke housing assembly to the carburetor main body. It will help to open the throttle slightly to clear the fast idle lever away from the fast idle cam assembly.

**NOTE: On most applications, your original choke rod will be used. However, on certain carburetors the new choke rod supplied with the kit may have to be used.**

- Using the three (3) equal length long screws from the kit, secure the choke housing to the main body. Manually operate the choke plate by moving the bi-metal pick-up lever on the front of the choke housing. The choke plate should move freely. If not, check the choke linkage to make sure there is no binding. On automotive applications, make sure the fast idle screw is in alignment with the cam on the back of the choke housing.

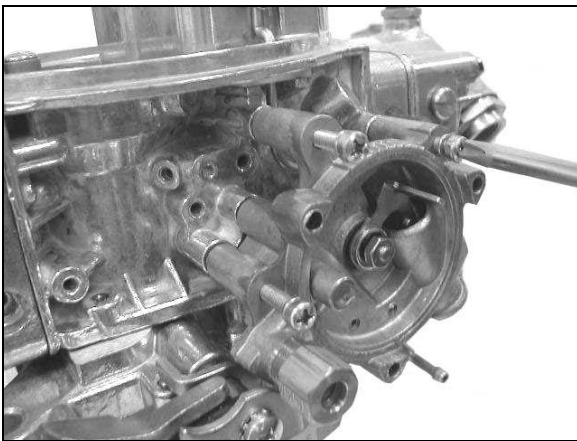


Figure 7



Figure 8

- Install the new choke cap gasket onto the housing.
- 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 it should close when rotated counter-clockwise.**

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

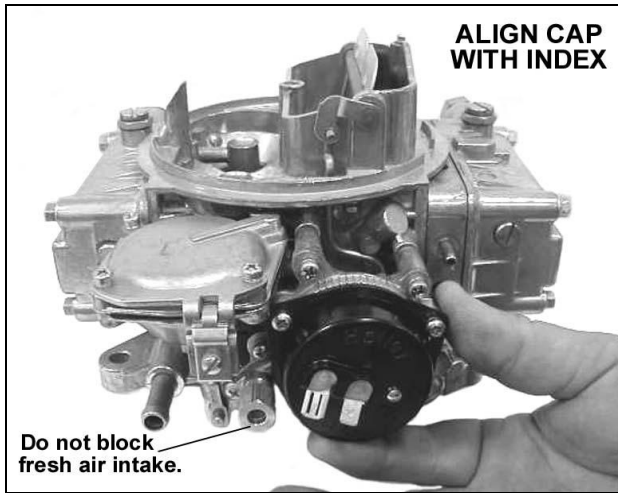


Figure 9

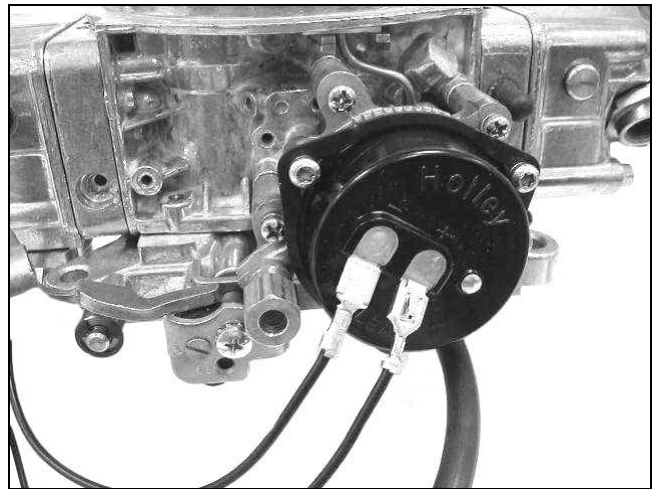


Figure 10

**NOTE:** Do not block the fresh air intake, as shown in the photo above.

10. Use the shortest wire from the kit to connect the bayonet end to the negative choke cap terminal marked (-). Ground the eyelet end to the carburetor. Do this 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 10.

**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.

11. 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" (.0.250"). This allows air into the engine if the engine should flood, and will allow the engine to start. If the choke plate does not open the specified amount, carefully bend the lever installed on the throttle shaft in Step 3, until the required opening is obtained. De-choke is preset on automotive applications.
12. Remount the carburetor on the vehicle.
13. Connect the long wire from the kit to the positive choke cap to the terminal marked (+). Connect the other end of the wire to an ignition activated 12V source. The choke cap should only get voltage when the engine is running. Check your voltage source with a voltmeter.

**NOTE:** Holley does not recommend using the 12V side of the coil for your power source.

**WARNING:** Connecting the choke cap to the ignition coil will result in unacceptable choke operation and could cause engine misfiring (resulting in possible engine damage). Do not connect the choke wire to the coil!

14. Start the engine, allowing it to reach operating temperature. On automotive applications, manually advance the throttle to just off idle. Push the fast idle cam up, so 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.
15. You can control the choke operation by rotating the choke cap. If the choke comes off too soon, rotate the cap counter-clockwise a notch at a time, until the choke operation is satisfactory. Reverse the procedure if the choke comes off too late. After making final adjustments, start the engine and make sure the choke plate opens completely.

**WARNING:** If the choke is not fully open after the engine is warm, poor gas mileage, fast idle speed, and/or engine damage could result.

**Technical Support: 1-270-781-9741**

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