

PROFORM™

Part No.
67100C **Hi-Performance Carburetor Main Body**

Component For Use on Holley® 650 CFM (#4777) & 750 CFM (#4779) Double Pumpers® with Mechanical Secondary.

Part No.
67101C **Hi-Performance Carburetor Main Body**

Component For Use on Holley® 750 CFM (#3310) Vacuum Secondary Carburetors.

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Other applications:

0-4777, 0-4777C, 0-4777S, 0-804777 650 CFM
0-4778, 0-4778C, 0-4778S, 0-804778 700 CFM
0-4779, 0-4779C, 0-4779S, 0-804779 750 CFM
0-4780, 0-4780C, 0-4780S, 0-804780 800 CFM

Carburetor Main Body Installation Instructions

To properly install your new carburetor main body please follow these simple step-by-step instructions. Please use proper safety precautions when handling gasoline.

1. After removing the carburetor from the engine, drain all gasoline from the fuel bowls. This can be accomplished by removing one of the lower fuel bowl screws and allowing the fuel to drain into an approved container. With a funnel, turn the carburetor **upside down**, activate the throttle several times to drain the fuel out of the accelerator pump cavities.
2. Before proceeding any further, you should check to be certain that your new carburetor main body will fit your carburetor. With your carburetor upside down, the throttle plates will have a number stamped in them. These numbers should be either 172 or 173. If they are not, measure the throttle bore diameter to be certain your carburetor has 1 11/16" throttle bore. If it does not, the new carburetor main body will not work properly with the remaining components from your original carburetor.
3. Once the fuel bowl have been emptied, you can now remove the remaining three fuel bowl screws.
4. With the fuel bowl screws removed attempt to separate the fuel bowls and metering block(s) from the main body. If these components cannot be removed by hand, it is likely your carburetor has been assembled with "sticky" adhesive coated gaskets. **NOTE:** vacuum secondary carburetor will have a secondary metering plate. The six retaining screws can be removed with a #3 Clutch Head screwdriver.
5. Separating these components can be somewhat difficult but not impossible. With a soft-faced hammer, tap repeatedly on the sides of the fuel bowl and metering block in an effort to break the gasket seal. If this method proves unsuccessful, it will then become necessary to pry the components apart. This is a last resort, when all other methods fail. Wedge a large-blade, common-tip screwdriver between the air cleaner ring and center the metering block away from the main body. Once the fuel bowl and metering block separate from the main body, turn over the assembly and attempt to pry the metering block away from the fuel bowl, using the accelerator pump housing as an anchor and press outward on the accelerator pump boss on the bottom of the metering block (where the aluminum plug is located).
6. Now remove the throttle body from the main body, using a number 2 phillips head or larger screw driver. **NOTE:** vacuum secondary carburetors, remove the e-clip that retains the vacuum secondary diaphragm stem to the secondary throttle shaft lever. Save this clip as you will reuse it during reassembly.

7. Prepare the metering block and fuel bowl for reassembly by removing all gasket material. Although with "sticky" type sealant this is a difficult and time consuming process, optimum performance can only be achieved with clean sealing surfaces. Softening the gasket material with a quality carburetor cleaner is an effective way to dislodge the gasket and sealant.
8. For best performance it will likely be necessary to change the jetting. A good starting point for 67100C mechanical secondary applications will be #72 jets on the primary side (front), and #84 jets on the secondary (rear). For 67101C vacuum secondary applications, #72 jets on the primary side, and no change to the secondary plate. This calibration is based on using a power valve in the primary metering block and a power valve block off plug in the secondary metering block. **These are merely baseline recommendations and it will be necessary to monitor spark plug coloration to achieve a sandy brown color in the porcelain section indicating best performance and to prevent any potential engine damage due to improper air/fuel mixture. Jets are included per the above applications.**
9. **Reassembly** begins with reinstalling the throttle body. If your throttle body has two locator dowel pins, install the provided gasket on the throttle body. If your throttle body does not have locator pins, with the carburetor upside down, position the gasket to line up with the bolt holes.
10. Insert the six retaining screws (yes, there are only six not eight, the two center screws are not used) and tighten in a criss-cross pattern. Target torque specification is 30 inch pounds (2.5 ft. pounds) with a minimum torque value of 20 inch pounds (1.7 ft. pounds).
11. Install the new metering block and fuel bowl gaskets on the metering block(s). These gaskets should align with the cast-in-pins. **NOTE:** for vacuum secondary carburetors, install the metering block gasket provided (the one **without** the large cut out in the center) insert the small paper gasket between your old metering plate and the new steel reinforcement plate provided. Position this assembly on the new carburetor main body so the alignment pins enable the metering plate assembly to fit flush to the main body gasket. Insert the six clutch head screws and tighten in a criss-cross pattern to the target torque value of 18 inch pounds (1.5 ft. lbs.).
12. On the primary side, position the metering block on the new main body so the alignment pins allow it to sit flush. With the accelerator pump arm in the upright position, install the fuel bowl. Note: be sure the accelerator pump arm is positioned on top of the fuel bowl accelerator pump operating lever. It may be necessary to slightly rotate the fuel bowl clockwise to put the fuel bowl on. Once in position, install the new nylon fuel bowl gaskets provided (be sure to remove all of the old gasket) and insert the fuel bowl screws. Tighten in a criss-cross pattern to a target torque value of 30 inch pounds (2.5 ft. lbs.). It is important these screw be tight as poor idle and off-idle performance will result.
13. Secondary installation is the same as the primary side.
14. **Vacuum secondary applications**, it will be necessary for you to remove the secondary vacuum diaphragm assembly from your old main body. If your carburetor had a choke assembly, you will have to remove the choke assembly first. The vacuum diaphragm housing is held in place with three screws. After removing the housing from the old main body, check to be sure the small cork sealing gasket is still positioned in the recess provided in the housing. If this gasket will not stay in position, use a small amount of glue or grease to hold it in position for re-assembly. (Be sure none of the glue or grease protrudes into the vacuum passage) Install the vacuum housing on your new main body using the old screws. Tighten the front screw until it contacts the housing. Then tighten the lower rear screw, the center screw and finally tighten the front screw completely. Do not overtighten these screws. You are simply tightening the screws enough to seal the housing to the main body. Maximum torque is 18 inch pounds. Re-attach the e-clip to secure the diaphragm stem to the throttle shaft lever.
15. **You are now ready to reinstall your upgraded carburetor!** There are numerous outstanding books available to help you tune your new carburetor. We highly recommend you purchase one of these books as they will walk you through the fine tuning process step-by-step. Recalibration will enable you to achieve the maximum performance potential available from your new state-of-the-art main body.

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