



EDELBROCK PERFORMER SERIES CARBURETORS

CATALOG #1403 #1404, #1405, #1406, #1407, #1409,
#1410, #1411, #1412 & #1413

INSTALLATION INSTRUCTIONS

PLEASE study these instructions and the "Important Information Regarding Edelbrock Performer Series Carburetors" completely and thoroughly before installing your new carburetor. If you have any questions or problems, contact our **Technical Hotline at: 1-800-416-8628**, 7 am - 5 pm Monday-Friday, Pacific Standard Time or e-mail us at edelbrock@edelbrock.com. Please fill out and return the EPS carburetor Warranty Card.

DESCRIPTION: The Edelbrock Performer Series carburetor has been calibrated, factory flow-tested, and preset. Please read all instructions prior to installation. For "Theory of Operation" and "Tuning Procedures", see the accompanying carburetor Owner's Manual.

Edelbrock Performer Series carburetors are not for computer-controlled applications. That includes some 1981 & later GM vehicles with Q-Jet carburetor and some 1981 & later Ford vehicles with automatic overdrive (AOD) transmissions.

INSTALLATION KIT CONTENTS

1 - Installation instruction sheet	1 - 1/4" pipe plug
1 - Owner's Manual	2 - Vacuum caps
1 - Warranty card	1 - Throttle cable ball end stud (except #1409 & 1410)
1 - Carburetor accessories brochure	1 - Red choke positive wire (1403, 1406, 1409, 1410, 1411 & 1413 only)
1 - Square-bore base gasket	1 - Black choke ground wire (1403, 1406, 1409, 1410, 1411 & 1413 only)
1 - Air horn gasket	1 - Vacuum hose (1406, 1411 & 1413 only)
1 - Vacuum "T" (except #1409 & 1410)	
1 - Air cleaner stud	

Check The Following Items Before Carburetor Installation

- Replace fuel filter. Dirt found in carburetor voids warranty.
- Check and replace the air filter if necessary.
- Check PCV valve and replace if clogged.
- Check all hoses for leaks or cracks and replace if necessary.
- Check fuel pump for proper operation and replace if necessary.
- Check the intake manifold and cylinder head gaskets for leaks and replace if necessary.
- Check the ignition system: clean and gap or replace spark plugs, plug wires, and adjust ignition timing.

Additional Parts and Tools Required for Installation

Parts:

- New fuel filter (Edelbrock #8135 or equivalent).
- Chrome Steel Fuel Line Kit #8134 includes fuel filter.
- Banjo Fuel Fitting #8089 (if required for fuel line clearance using your air cleaner).
- New air cleaner (Edelbrock #1221 or #4221). If stock or other air cleaner is to be used, check fit on carburetor before installation to determine if air cleaner spacer (Edelbrock #8092; 3/4" tall) is required.
- Choke cable kit (manual choke carburetor) or electrical connectors (electric choke carburetor).
- Carburetor adapter, if carburetor is to be installed on other than square-bore intake manifold. See Steps #4 and #5 following for specific part numbers. Do not use a 4-bbl. to 2-bbl. adapter; Edelbrock carbs must be used on intake manifolds designed for 4-bbl. carburetor only!
- Throttle Linkage Kits for Ford or Chrysler applications **(see Carburetor PREPARATION, Step #1).**

- Throttle, trans. and cruise control bracket #8031, #8036 or #8030 (chrome) for 1972-78 small-block Chevrolet. Other applications may require modification to original throttle cable bracket.
- Universal throttle return spring kit #8005 if original return spring can not be used.
- Divided square-bore heat insulator gasket #9266 for dual-plane (stock or Performer-type) manifolds. May be used in place of square-bore adapter plate #2732 on some Edelbrock manifolds.

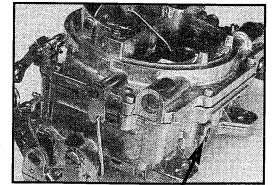
Tools:

- Sockets/wrenches/tubing wrenches
- Pliers
- Screwdrivers
- Hacksaw and/or tubing cutter
- Torx Driver (for electric choke models)
- Wire crimpers (for electric choke models)
- Test Meter or Test Light (for electric choke models)

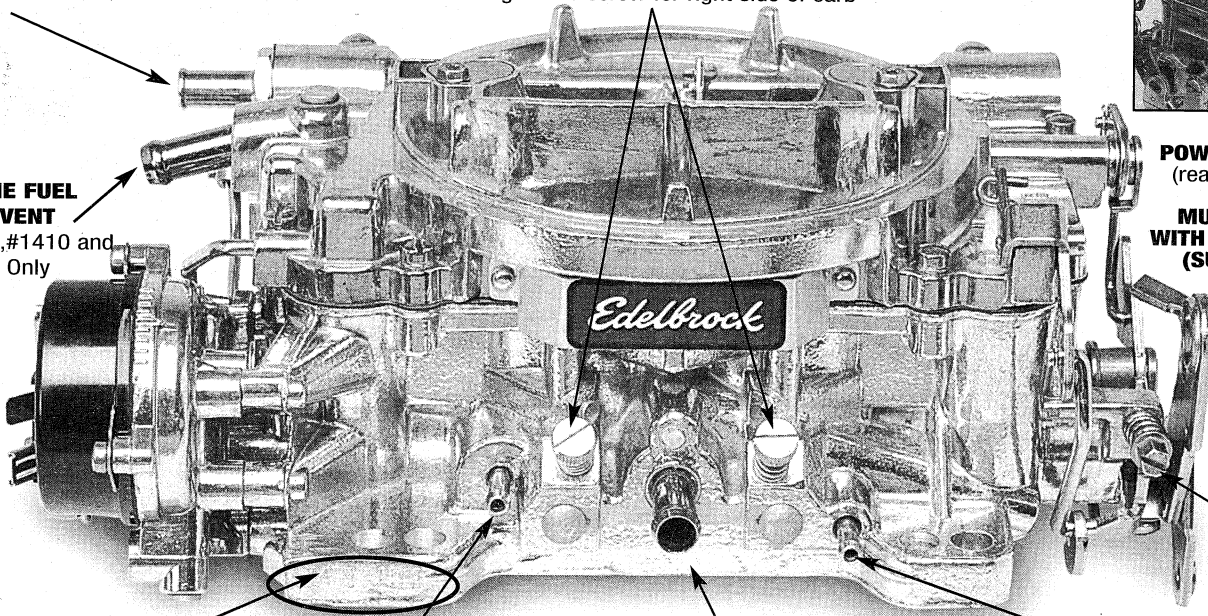
FUEL INLET for 3/8" hose (except marine models #1409 & #1410 which use a 3/8" inverted flare fitting)

MARINE FUEL PUMP VENT (#1409, #1410 and #1400) Only

IDLE MIXTURE SCREWS
Left side screw for left side of carb
Right side screw for right side of carb



POWER BRAKE PORT (rear lower side, 1/4" NPT) **MUST BE PLUGGED WITH 1/4" PIPE PLUG (SUPPLIED) IF NOT USED**



PART NUMBER is stamped on pad at front of carb

TIMED VACUUM PORT (3/16"-distributor vacuum advance port for emission-controlled engines)

PCV PORT (for 3/8" hose) **NOT FOR FUEL !**

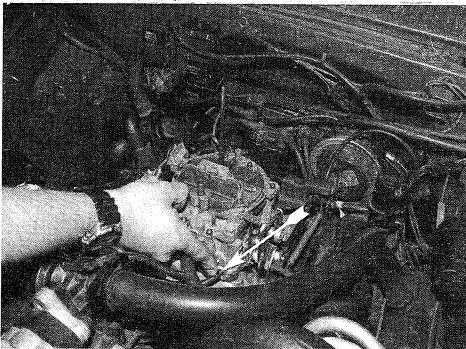
MANIFOLD VACUUM PORT (3/16"; distributor vacuum advance port for non-emission controlled engines)

IDLE SPEED SCREW

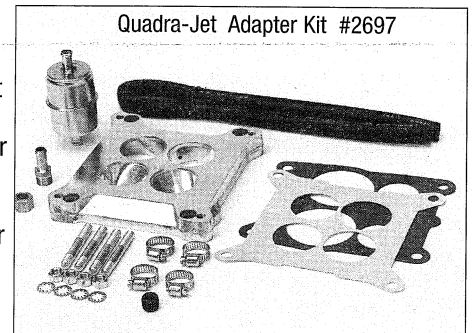
Figure 1 - Fittings and Vacuum Port Location

BEFORE REMOVING OLD CARBURETOR

- Determine if the distributor vacuum port is timed (no vacuum at idle) or full (vacuum present at idle).** With the engine fully warmed up and idling, pull the vacuum hose off of the carb and "feel" for vacuum by putting your finger on the vacuum port. If your distributor has timed vacuum advance, hook the distributor vacuum hose up to the passenger side vacuum port on the carburetor. If it has full vacuum advance, hook it up to the driver's side vacuum port.

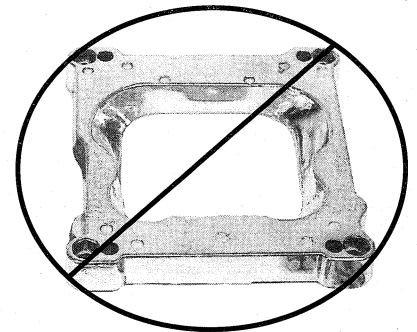
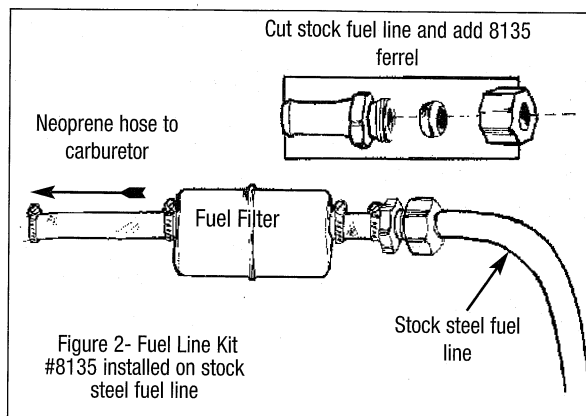


- You must use an Edelbrock Adapter #2696 or Adapter/Fuel Line Kit #2697 when installing a Performer Series Carburetor on a General Motors Quadrajet or Chrysler Thermoquad manifold. #2697 includes Adapter #2696 and Fuel Line Kit #8135.



Do not use an open adapter!

- The stock steel fuel line must be converted** to fuel resistant rubber hose. The stock steel line will not connect to the Performer Series Carburetor. Use Edelbrock Universal Fuel Line Kit #8135. This kit contains a filter, neoprene hose and fittings to adapt 5/16" and 3/8" stock fuel lines. **Note:** after cutting fuel line remove sharp edges and clean out chips.
- Always use a new fuel filter.** Failure to do so will void the warranty.



5. You must use an Edelbrock Adapter #2732 when installing a Performer Series Carb on Edelbrock manifolds #3706, #2161, #3761, #2156, #2151 & #2730.

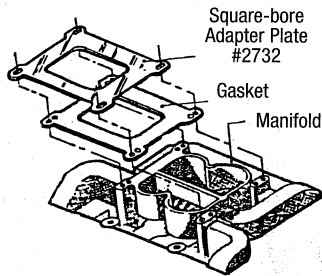
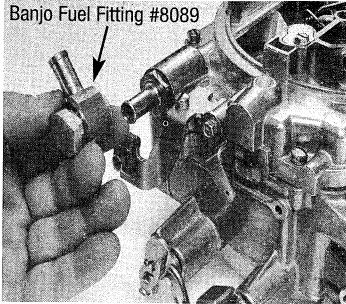


Fig. 3- Installing square-bore adapter #2732 on Performer manifold

6. **Do not use more than 6.5 psi fuel pressure.** Excessive fuel pressure may cause flooding. If your fuel pressure is too high, install an adjustable pressure regulator such as Edelbrock #8190.



7. It may be necessary to re-route the fuel line to prevent interference with the air cleaner. Test fit your air cleaner on your new carburetor before you begin installation. Look for areas of interference such as the choke housing, fuel inlet fitting and fuel line.

PERFORMER SERIES CARBURETOR INSPECTION

1. Check for possible damage to carburetor
2. Make sure all throttle linkages operate freely.
3. Ensure that all fuel inlet and vacuum ports are free from packing material.

CARBURETOR REMOVAL

1. Prior to removal make sure that the engine is cool.
2. Disconnect negative battery cable from battery.
3. Remove air cleaner. Be sure to carefully disconnect any hoses from the air cleaner and note their location for re-installation. You may want to mark them with masking tape for easy reference.
4. Disconnect throttle linkage, kickdown linkage (certain automatic transmission applications only), cruise control (if equipped) and any return springs if present.

NOTE: Check carefully for the precise location of all these linkages and return springs. You may want to mark them with masking tape for easy reference.

5. Disconnect all wires, tubes and hoses from carburetor and note their location.

NOTE: There should be a maximum of one wire to the electric choke and one to the idle compensator solenoid. Any other electrical wiring attached to your carburetor indicates a computer controlled engine, and Edelbrock carburetor will not function correctly on computer controlled applications.

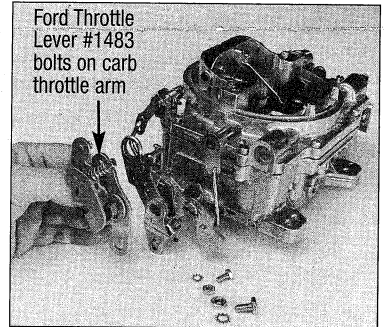
6. Disconnect the heater tube from the choke housing (if so equipped). Edelbrock carburetors do not use the hot air style choke, so this tube may be left disconnected with no problems. If you want to cover this opening on a stock intake manifold, you may be able to use the appropriate Edelbrock choke adapter plate: #8901 for small-block Chevrolets; #8961 for big-block Chevrolets; #8951 for Oldsmobile V8s; #8971 for 351-M/400 Fords; #8981 for 351-W Fords.

7. Carefully remove fuel line from carburetor. **TAKE EXTREME CARE NOT TO SPILL ANY EXCESS FUEL.** Place a rag underneath the fuel line to absorb any spillage that may occur. Certain models require two wrenches to remove the fuel line; one to hold the fitting on the carburetor and the second to turn the fitting on the fuel line. Use a tubing wrench to avoid rounding the tube fitting nut.
8. Remove mounting nuts or bolts and washers. Be sure to put them where they won't fall into the intake manifold upon carburetor removal.
9. Remove carburetor, being careful not to spill any dirt into the intake manifold. Immediately place a clean rag into the manifold to keep foreign objects out.
10. Remove old mounting gasket and thoroughly clean mounting surface. Compare old carb gasket to gasket included with new carburetor. If there is a difference in bolt pattern or bore spacing, an adapter will be required (see "Before Removing Old Carburetor", steps #4 & #5).

CARBURETOR PREPARATION

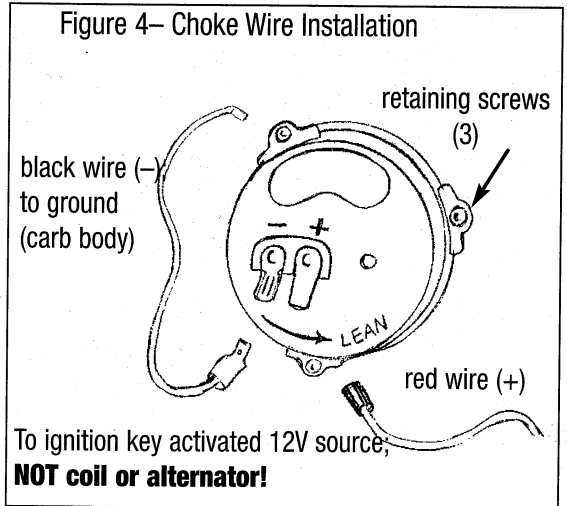
1. Compare throttle arm of your new carburetor with the old one to be sure that all required linkages will hook up. Install proper throttle and transmission linkage for your particular application. Throttle stud is removable and must be installed in the proper location. Chrysler vehicles with automatic transmission will require Throttle Lever Kit #1481. Ford vehicles with automatic transmission and cable linkage will require Throttle Lever Kit #1483 and Throttle Cable Plate Kit #1490 (for 289-302), #1491 (for 351-W), #1493 (for 351-C & 351-M/400), or #1495 (for 429/460).

2. Check and prepare carburetor for proper vacuum fitting installation (EGR, power brakes, PCV, distributor, transmission, etc.) using supplied vacuum caps, "T", and hose when applicable. **If vacuum port at rear of carb is not used, plug with the 1/4" pipe plug supplied.**



3. On electric choke models (see figure 4), remove one choke housing retaining screw and install eyelet end of choke ground wire (black) to choke housing and reinstall screw. Connect clip end of choke ground wire to negative (-) spade terminal on choke housing.

Figure 4- Choke Wire Installation



CARBURETOR INSTALLATION

1. Remove rag from intake manifold and install new studs, mounting gasket and adapters (where applicable). **NOTE:** Do not use any cement, glue or RTV sealant on gasket.
2. Carefully place new carburetor on gasket.
3. Replace all mounting nuts and washers. Hand tighten with a short box end wrench, alternating between diagonally opposed nuts. **CAUTION: Overtightening may break carb base and void warranty.**

4. Connect all throttle and transmission linkages and throttle return springs. You may have to cut, bend or modify your stock throttle cable brackets to fit the new carburetor, or use GM #352279 (see Fig 5). 1972-78 small-block Chevs may use Edelbrock Throttle, Transmission, and Cruise Control bracket #8031 #8036 or #8030 (chrome).

IMPORTANT NOTE: With engine off make sure that there is no interference when opening and closing the throttle. Be sure there is no binding or hanging up between idle and wide open throttle as this could cause the throttle to stick open, resulting in loss of engine speed control.

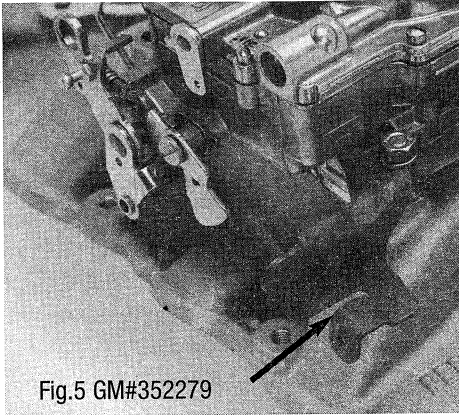
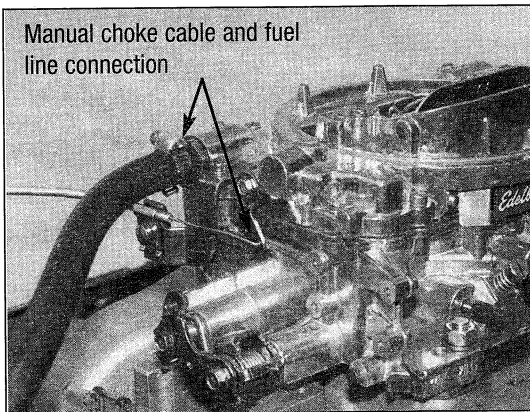


Fig.5 GM#352279

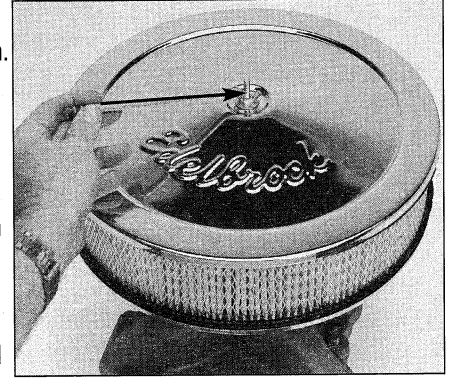
5. Connect manual choke cable to the provided lever attachment point and cable mounting bracket (manual choke models). Electric choke models connect red choke wire to 12 volt + source that is activated by ignition switch (**Not coil or alternator, see Figure 4**). **Note:** If manual choke is not connected (secondary carb of dual carb set-up, for example) then choke blade must be fixed open. To lock open, use a stiff piece of wire between the choke lever and the mounting bracket. Fold the wire to double it's thickness about one inch from one end. Insert the wire in the choke lever, hold choke blade in the wide open position, and tighten cable clamp on folded end of wire.
6. Connect all vacuum hoses to their proper location on carburetor (**See Figure 1**). Replace hoses that appear brittle or cracked to prevent vacuum leaks.
7. Connect fuel line to carburetor. Avoid contact with any sharp edges or areas of extreme heat.

NOTE: Some late model Ford 460 engines are equipped with hot fuel bypass units. It is necessary to replace the stock unit with Ford #E3TZ9N176B (with blue dot) which has a 0.040" orifice.



Manual choke cable and fuel line connection

8. Edelbrock idle compensator #8059 may be installed to raise idle speed during air conditioning compressor operation.
9. Install new air horn gasket and air cleaner stud (supplied). Install air cleaner making sure it does not contact linkage or fuel line and has proper hood clearance. We recommend Edelbrock Pro-Flo chrome air cleaner #1221, which is a 14" diameter open element air cleaner that is designed to fit all Edelbrock Performer Series carburetor. Extremely low profile air cleaners will not fit electric choke carburetor without air cleaner spacer #8092 (due to choke and fuel line interference) but will fit manual choke carburetor when used with 90° banjo fuel inlet fitting #8089.
10. Mark air cleaner stud for proper length, remove from carburetor and cut with hack saw. Deburr stud and re-install in carburetor.
11. Recheck all linkage for smooth throttle operation.
12. Re-connect the negative battery cable to the battery.
13. Start the engine and check for fuel or vacuum leaks. With engine at normal operating temperature and choke fully open, set idle speed and mixture screws (see carburetor Owner's Manual).



CAUTION: Be alert to carburetor flooding. Flooding can be caused by dirt, small particles of hose cuttings, floats and inlet needles which have settled during shipping. When the fuel pump is turned on or when the engine is first started, watch closely for signs of flooding. If flooding occurs turn engine off immediately and lightly tap on the side of the carburetor that is flooding, in the rear needle and seat area with a rawhide mallet or wooden handle of a hammer. Start engine and see if flooding continues, if so refer to owners manual.

Edelbrock Corporation
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PLEASE complete and mail your warranty card. Be sure to write the model number of this product in the "Part # ____" space. **THANK YOU.**