

# PERFORMER RPM Q-JET CARBURETOR for non-emission controlled Chevrolet/GMC V8s CATALOG #1910, 850 cfm

# **GENERAL INSTRUCTIONS**

• PLEASE study these instructions carefully before installing your new carburetor. If you have any questions or problems, do not hesitate to contact our **Technical Hotline at: 1-800-416-8628.** 

# DESCRIPTION

The Edelbrock Performer RPM Q-Jet Carburetor is an all-new enhanced high performance version of the GM Quadrajet calibrated for use with the Performer RPM manifold and other high performance, non-emissions applications. It has an 850 cfm air flow capacity, and the .149" diameter needle and seat assembly provides sufficient fuel flow to support 500+ horsepower. The unique secondary air valve has special mixture distribution tabs for improved A/F distribution, and it has slotted idle mixture screws and large idle discharge ports for sufficient idle control with long duration, high lift camshafts. A unique feature is the adjustable cruise A/F ratio for part throttle calibration. It comes with an early Chevy style throttle arm (1966-73), integral electric choke, and Chevy style side feed fuel inlet. For best performance, it should be used with the matching Performer RPM Q-Jet intake manifold #7104 for small-block Chevrolet or #7164 for big-block Chevrolet.

Please read these instructions completely and thoroughly before beginning removal of old carburetor. The Edelbrock Performer RPM Q-Jet Carburetor is only one part of a complete system. The items on the following list should be checked and the instructions followed in their entirety prior to carburetor removal.

- 1. Replace fuel filter. Dirt found in carburetor voids warranty.
- 2. Check and replace the air filter if necessary.
- 3. Check PCV valve and replace if clogged.
- 4. Check all hoses for leaks or cracks and replace if necessary.
- 5. Check fuel pump for proper operation and replace if necessary.

# • 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. Compare throttle arm of your new carburetor with the old one to be sure that all required linkages will hook up. Ball stud is usually removable and must be installed in the proper location (see Figure 1).
- 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 Q-Jet carburetors will not function correctly on computer controlled applications.
- 6. Carefully remove fuel line from carburetor or fuel filter. TAKE EXTREME CARE NOT TO SPILL ANY EXCESS FUEL. Place a rag underneath the fuel line to absorb any spillage that

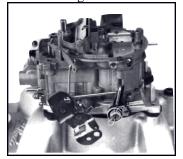


Figure 1- Throttle arm of typical Q-Jet carburetor

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.

7. Remove mounting nuts or bolts and or washers. Be sure to put them where they won't fall into the intake manifold upon carburetor removal.

- 6. Check the intake manifold and cylinder head gaskets for leaks and replace if necessary.
- 7. Check the ignition system: clean and gap or replace spark plugs, plug wires, and adjust ignition timing.
- 8. 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.
- 9. Thoroughly remove old mounting gasket and clean mounting surface. Note gasket and match to gasket included with new carburetor.
- CARBURETORINSTALLATION
- 1. Remove rag from intake manifold and install new mounting gasket. **NOTE:** Do not use any cement, glue or liquid gasket.
- 2. Carefully place new carburetor on gasket.
- 3. Replace all mounting bolts, nuts and washers. Hand tighten with a short box end wrench, using even increments alternating between diagonally opposed bolts. Use stock mounting bolts or Edelbrock Q-Jet Bolt Kit #1925. **CAUTION:** Overtightening may break carb base.
- 4. For models with externally mounted fuel filters, install new fuel filter, starting threads by hand to avoid crossing or stripping threads. Replace any old or cracked hoses with new hoses designed for use with fuel.
- 5. Hook up fuel line to fuel filter. Start threads by hand. **NOTE:** Be sure threads are properly aligned before tightening to avoid crossing or stripping threads. When tightening fuel line use two wrenches; one to hold the fitting on the carburetor and the second to turn the fuel line fitting. Use a tubing wrench to avoid rounding the tube fitting nut.
- 6. Re-connect throttle linkage, wires, hoses, etc. Your Edelbrock carburetor may have more vacuum outlets than the original. Leave the caps on those outlets which won't be used.
- 7. Re-connect the air cleaner being careful not to over-tighten the mounting nut which could damage the carburetor. Install a new air filter (if needed) and re-connect all hoses.
- 8. **IMPORTANT NOTE:** With engine off make sure that there is no interference when opening and closing the throttle. Be sure that there is no binding or hanging up between idle and wide

open throttle as this could cause the throttle to stick, resulting in loss of engine speed control.

9. Re-connect the negative battery cable to the battery.

# • CARBURETOR TESTING

1. **NOTE:** Be wary of fuel leaks! If a fuel leak occurs, stop immediately and repair the leak. Failure to do so could result in engine fire and serious injury.

**NOTE:** The following adjustments can affect vehicle emissions. Laws in your area may govern these emissions.

2. The choke system is pre-set at the factory, however, minor adjustments may be required. Adjust using factory specifications for your vehicle.

# • IDLE MIXTURE ADJUSTMENT

The Edelbrock Performer RPM Q-Jet carburetor has conventional Idle Mixture Screws (IMS) that provide a leaner Air/Fuel (A/F) ratio when turned clockwise and richer A/F ratio when turned counterclockwise. The idle air flow is controlled by a conventional screw that opens the primary throttles. The following procedure should be used to set the idle mixture and speed.

- 1. Fully warm engine and ensure choke is fully open.
- 2. Install air cleaner.
- 3. Set desired speed with the air screw.
- 4. Adjust the IMS on one side to get the maximum possible rpm or highest vacuum if you are using a manifold vacuum gauge. Do not go rich beyond the maximum speed point.
- 5. If the procedure above changed the idle speed more than 40 rpm, then re-adjust the idle speed.
- 6. Adjust the opposite side of that is Step 4 to get maximum rpm or vacuum.
- 7. Reset the speed.
- 8. Carefully trim each IMS to again get the maximum idle rpm or manifold vacuum.
- 9. Go leaner just enough to get a 20 rpm drop in speed.
- 10. Reset the speed to the desired rpm.
- 11. This is a Lean-Best Idle Set. Setting richer than this will not improve idle quality or performance, but could cause higher hydrocarbon emissions and tend to foul spark plugs.

# • WINTER FUEL IDLE SETS

During the winter months (in most parts of the country) the local fuel will be a "winter" blend that is very volatile, as an assist to cold-engine starting and driveability during warm-up. However, the high volatility has the disadvantage of allowing excessive vaporization of the fuel if the vehicle is operated in a heated area such as a garage. This can result in problems in the idle-set procedures since the carburetor's internal vents will allow this excess vapor to be drawn into the throats and enrichen the mixture. The idle will be erratic and not seem to be able to hold a set. To resolve this problem, it is advisable to perform the final settings outdoors after the vehicle has been stabilized with a drive of several miles.

# • CHOKE CONNECTION

The Edelbrock Performer RPM Q-Jet carburetor comes with an electric choke which requires a 12 volt lead that is hot only when the ignition is on.

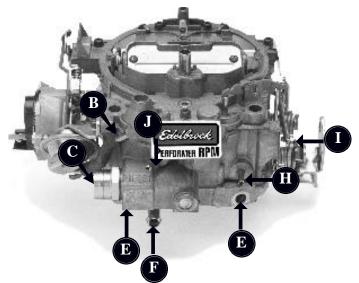
• Edelbrock Q-Jet Rebuild Kits The Edelbrock Performer RPM Q-Jet can be rebuilt with Rebuild Kit #1990.

# • Replacement Fuel Filters

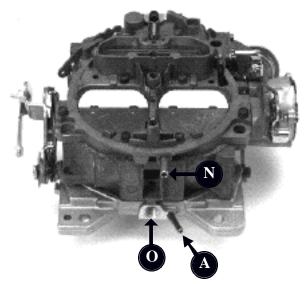
The Edelbrock Performer RPM Q-Jet has a replaceable fuel filter element behind the Fuel Inlet Nut. **Replacement filter #1927** is available from your Edelbrock dealer.

# LEGEND

- A Diverter Port
- B Choke Pull-down
- C Fuel Inlet
- D Exhaust Gas Recirculation (EGR) Port
- E Idle Mixture Screws
- F Positive Crankcase Ventilation (PC V) Port
- G Canister Purge
- H Distributor Port
- I Idle Speed Screw
- J Accessory Port
- K Bowl Vent
- L Hot Air (#1903 only)
- M Fast Idle Screw
- N Clean Air (#1903 only)
- O 1/4" N.P.T. (Power Brake Port)



Front View of #1910

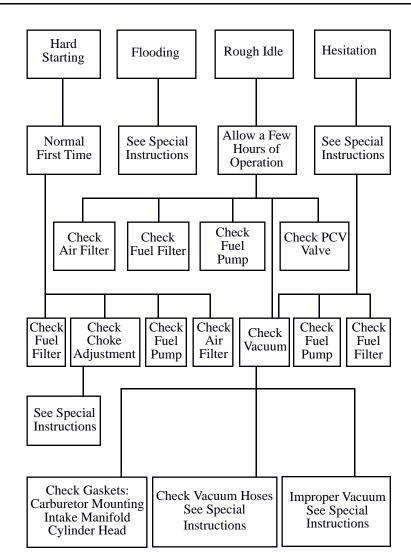


Typical Rear View, all models

- **FLOODING:** Carburetor flooding immediately after installation is usually due to dirt or foreign matter lodged under the float needle. Gently tap on the air horn over the fuel inlet area with the head of a screwdriver. If flooding does not stop, pinch the fuel line (if possible), start engine and run until it stalls. Then release the pinched line. If flooding still persists, drain the fuel and re-start.
- **HESITATION:** It is not unusual for hesitation upon acceleration to be caused by the carburetor's storage time. Allow a few hours of operation for the internal gaskets to become wet, and the problem will usually cure itself.
- ROUGH IDLE: Rough idle is often caused by an air leak in

the vacuum lines, or by dirt in the air bleeds. Disconnect the vacuum lines one at a time and plug the hose end and the fitting at the carburetor. If the idle roughness disappears, it indicates a leak.

- **IMPROPER VACUUM:** If rough idle cannot be cured by any of the vacuum leak checks, connect a vacuum gauge to a suitable source of full manifold vacuum. If the gauge needle fluctuates, it indicates internal engine problems.
- **CHOKE ADJUSTMENT:** With the engine off and completely cold, open and release the throttle. The choke valve should close to specified choke setting.



# THE FOLLOWING TROUBLESHOOTING CHART COVERS ONLY THE MOST COMMON PROBLEMS

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