



# Performer and Performer RPM Intake Manifolds For Big Block Chevrolet Engines

## Catalog #s 2161, 3761, 7161, 7163, 7164, 7561, 7562, 75613

### INSTALLATION INSTRUCTIONS

**PLEASE** study these instructions carefully before beginning this installation. Most installations can be accomplished with common tools and procedures. However, you should be familiar with and comfortable working on your vehicle. If you do not feel comfortable performing this installation, it is recommended to have the installation completed by a mechanic. If you have any questions or problems, please call our **Technical Hotline at: 1-800-416-8628**, 7:00 am - 5:00 pm, Pacific Standard Time, Monday through Friday or e-mail us at [edelbrock@edelbrock.com](mailto:edelbrock@edelbrock.com).

- **DESCRIPTION:**

Edelbrock Performer intake manifolds are designed for 396-502 c.i.d. big-block Chevy engines operating in the idle to 5500 rpm range. Performer RPM and RPM Air-Gap intake manifolds are designed for 396-502 c.i.d. big-block Chevy engines operating in the 1500-6500 rpm range. In most cases, these manifolds accept late model water necks, air conditioning, alternator and H.E.I. ignition systems. Any exceptions are listed in the "Applications" section below. Match Performer or Performer RPM intake manifolds with recommended carburetors and additional equipment for even greater performance increases.

**APPLICATIONS:**

INTAKE MANIFOLD	REFERENCE	APPLICATION
<b>2161, 3761</b>	B, C, E	Performer 2-O: Designed for street 396-502 c.i.d. big-block Chevy V8s using general duty oval-port cylinder heads. Will fit 1965-1990 oval-port heads. Not for "tall block" V8s. Use #8028 waterneck adapter for 1986 and later. Choke plate #8961 included.
<b>7161, 7163</b>	A, C, D, E	Performer RPM 2-O and 2-R: 7161 is designed for 396-502 c.i.d. Chevy V8s with large oval-port cylinder heads (1975 and earlier). No provisions for exhaust heated chokes. Not for "tall block" V8s. 7163 is similar to 7161, but is designed to fit high performance rectangular-port cylinder heads. Will not fit oval port heads.
<b>7164</b>	A, C, D, E	Performer RPM Q-Jet: Designed for street 396-502 c.i.d. Chevy V8s with large oval-port cylinder heads (1975 and earlier) using spread-bore carburetors. Also accepts Edelbrock square-bore carburetors without requiring an adapter. Will accept divorced choke. Not for "tall block" V8s.
<b>7561, 7562, 75613</b>	A, C, D, E	RPM Air-Gap 2-O and 2-R: 7561 is designed for 396-502 c.i.d. Chevy V8s with large oval-port cylinder heads (1975 and earlier). Air-Gap designs separate the runners from the hot engine oil resulting in a cooler, denser charge for more power. Features rear water outlets, two distributor clamp locations, and nitrous bosses. No provisions for exhaust heated chokes or exhaust crossover. 7562 is similar to 7561, but is designed to fit high performance rectangular-port cylinder heads. Will not fit oval port heads.

- A** - Not legal for sale or use on pollution controlled motor vehicles.
- B** - Stock replacement/street legal in some applications. See "Stock Replacement Parts List for Intake Manifolds" insert, or Catalog for details.
- C** - Will not fit under stock Corvette hood.
- D** - Will not fit under stock 1965-1967 Chevelle or 1967-1981 Camaro hood.
- E** - Available in additional finishes, such as polished, PermaStar, or EnduraShine. See Catalog for details.

- **EGR SYSTEMS:** Edelbrock EGR-equipped *Performer* manifolds are intended as a direct functionally identical replacement for their O.E.M. counterparts. All exhaust emissions or emissions related stock components are intended to be retained and functional. Non-EGR equipped manifolds will not accept stock EGR (Exhaust Gas Recirculation) equipment. EGR systems are used on most 1972 and later. Check local laws for requirements.
- **ACCESSORIES & INSTALLATION ITEMS:** Major recommendations are listed below. See our catalog for details. **To order a catalog, call (800) FUN-TEAM**, or visit [www.edelbrock.com](http://www.edelbrock.com).

- CARBURETOR RECOMMENDATIONS:**

**Manifold 2161, 3761 (Emissions Controlled Applications):**

CARBURETOR	REFERENCE	PARTS REQUIRED FOR INSTALLATION
OEM 4BBL	B, H, N	#8036 throttle, cruise, & kickdown bracket for 1972-1978

**Manifold 2161 (Non-Emissions):**

CARBURETOR	REFERENCE	PARTS REQUIRED FOR INSTALLATION
<b>Thunder Series #1805 (650 cfm)</b>	A, I, K, N	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Thunder Series #1806 (650 cfm)</b>	A, I, K, N	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Thunder Series #1825 (650 cfm)</b>	A, I, K, N	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Thunder Series #1826 (650 cfm)</b>	A, I, K, N	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Performer #1407 (750 cfm)</b>	A, I, K, N, O	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Performer #1411 (750 cfm)</b>	A, I, K, N	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Performer #1412 (800 cfm)</b>	A, I, K, N, O	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Performer #1413 (800 cfm)</b>	A, I, K, N	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Thunder Series #1812 (800 cfm)</b>	A, I, K, N	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Thunder Series #1813 (800 cfm)</b>	A, I, K, N	#8031 throttle, cruise, & kickdown bracket for 1972-1979

**Manifold 7161, 7163, 7561, 7562, 75613 (Non-Emissions):**

CARBURETOR	REFERENCE	PARTS REQUIRED FOR INSTALLATION
<b>Performer #1407 (750 cfm)</b>	A, I, K, N, O	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Performer #1411 (750 cfm)</b>	A, I, K, N	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Performer #1412 (800 cfm)</b>	A, I, K, N, O	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Performer #1413 (800 cfm)</b>	A, I, K, N	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Thunder Series #1812 (800 cfm)</b>	A, I, K, N	#8031 throttle, cruise, & kickdown bracket for 1972-1979
<b>Thunder Series #1813 (800 cfm)</b>	A, I, K, N	#8031 throttle, cruise, & kickdown bracket for 1972-1979

- A** - Carburetor will work with non-EGR or pre-emission control systems.
- B** - Carburetor will work with EGR system.
- H** - Carburetor has provision for evaporative canister.
- I** - Carburetor has no provisions for evaporative canister.
- K** - Carburetor requires #8008 or #8024 stud, washer and nut kit. Determine proper length based on gasket thickness and your accessory mounting requirements.
- N** - Carburetor accepts factory cruise control
- O** - Carburetor comes with manual choke. It can be converted to electric choke using kit #1478.
- P** - Carburetor is not a stock replacement part

- THROTTLE BRACKETS:** Due to the design of Performer manifolds, the throttle and kickdown bracket on some vehicles may require modification to fit. See figure 1 for guidelines or purchase our #8031, 8030 or 8036 throttle, cruise, and kickdown linkage brackets
- GASKETS:** Do not use competition style intake gaskets for this street manifold. Due to material deterioration over time, internal leakage of vacuum, oil, and coolant may occur.

INTAKE MANIFOLD	RECOMMENDED GASKET
<b>2161, 3761, 7161, 7163, 7164, 7561, 75613</b>	Edelbrock #7203 Port: 1.82" x 2.05", .060" Thickness
<b>7163, 7562</b>	Edelbrock #7202 Port: 1.82" x 2.54", .060" Thickness

**NOTE: To ensure maximum performance and a proper seal, Edelbrock gaskets which are specifically designed and manufactured for use with Edelbrock parts must be used.**

- **PREP AND TUNING FOR POWER:**

**NOTE:** Local emission laws must be checked for legality of any carburetor or ignition changes.

**Performer Series Intake Manifolds**

1. The long equal length runners in the Performer manifold create a very strong signal to the carburetor. In some applications, the stock rods or jets may need changing for best overall performance. Refer to your carburetor owner's manual for details.
- 2) Performer manifolds deliver excellent drivability and power utilizing stock distributor settings. Some applications may benefit from resetting the initial advance  $\pm 2^\circ$  from the factory specification.
- 3) Aftermarket ignitions and more aggressive advance curves may be used with Performer packages.
- 4) Installation of aftermarket headers or camshafts may lean the carburetor calibration. Should this occur recalibrate with a richer jet.

**Performer RPM Series Intake Manifolds**

1. Due to design, the fuel / air mixture and cylinder charging are very efficient with Performer RPM or RPM Air-Gap manifolds. Generally speaking, the stock jetting for a Performer or Thunder Series carburetor will not need changing. Specific applications may show an increase in power by tuning the fuel mixture.
2. Aftermarket distributor curve kits may be used with Performer RPM series manifolds.
3. Use modified or high performance cylinder heads such as our Performer RPM, and port-match the manifold to the heads.
4. The compression ratio should be at least 9.5 to 1 to work properly with Performer RPM camshafts.
5. Installation of aftermarket headers, camshafts or both with an Edelbrock Performer RPM series manifold may lean carburetor calibration. Should this condition occur, recalibrate with a richer jet.

- **CAMSHAFT AND HEADERS:** The Performer Series manifolds are compatible with aftermarket camshafts and headers designed to work in the idle-5500 rpm range. Edelbrock has developed dyno-matched, street proven camshafts (#2162 for 396-502 c.i.d. engines) for use with Performer Series intake manifolds. Header primary tube diameter should be 1-3/4". Performer RPM Series manifolds are compatible with aftermarket camshafts and headers designed to work in the 1500-6500 rpm range. Edelbrock has developed dyno-matched, street proven camshafts (#7162 or 2261 for for 396-502 c.i.d. engines) for use with Performer RPM series manifolds (see catalog for details). Header primary tube diameter should be 1-7/8" or larger.

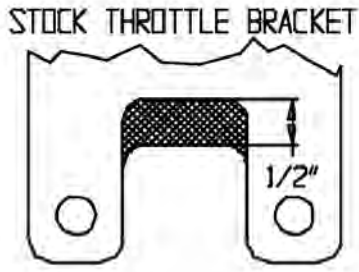
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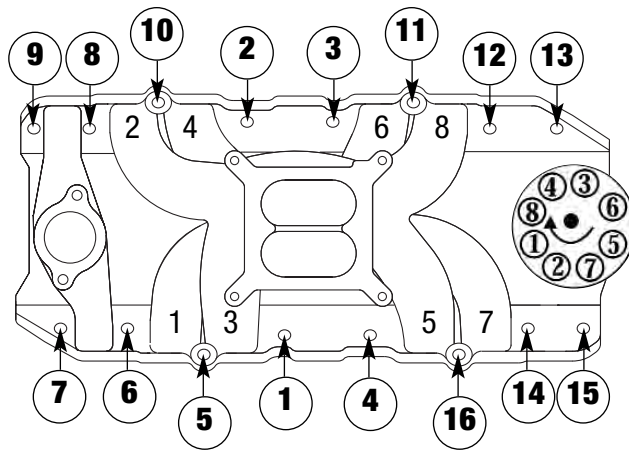
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- 1) Use only recommended intake gaskets set when installing this intake manifold.
- 2) Fully clean the cylinder head intake flanges and the engine block end seal surfaces.
- 3) Apply Edelbrock Gasgacinch sealant P/N 9300 to both cylinder head flanges and to the cylinder head side of the gaskets, allow to air dry, and attach the intake gaskets.
- 4) Do not use cork or rubber end seals. Use RTV silicone sealer instead. Apply a 1/4" high bead across each block end seal surface, overlapping the intake gasket at the four corners. This method will eliminate end seal slippage.
- 5) Install the intake manifold and hold-down bolts.

**WARNING:** There is no gasket support for the manifold under the four bolt holes which are numbered #5, #10, #11, and #16 in Figure 2. Damage to the manifold will occur if these four bolts are over-tightened. Hand tighten these bolts with a 6" box-end wrench. DO NOT use a torque wrench. Torque all remaining manifold bolts in two steps by the sequence shown in Figure 2 to 25 ft/lbs.



**Figure 1 - Throttle Bracket Modification**  
 Remove material in the shaded area on stock throttle brackets to clear the intake manifold.



**Figure 2 - 396-502 C.I.D. Chevrolet Bolt Torque Sequence**  
**WARNING: DO NOT USE TORQUE WRENCH ON BOLTS 5, 10, 11, and 16. HAND TIGHTEN ONLY**  
 Torque Remaining Bolts To 25 ft./lbs.  
 Firing Order: 1-8-4-3-6-5-7-2  
 Turn Distributor Counter-Clockwise to Advance Ignition Timing



**Edelbrock Corporation • 2700 California St. • Torrance, CA 90503**  
**Tech Line: 800-416-8628 • E-Mail: Edelbrock@Edelbrock.com**