

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

### **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 qualified mechanic. If you have any questions, 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**.

# **IMPORTANT NOTE:** Proper installation is the responsibility of the installer. Improper installation will void your warranty and may result in poor performance and engine or vehicle damage.

**DESCRIPTION:** Edelbrock Performer and Performer EPS intake manifolds are designed for 262-400 c.i.d. small-block Chevy engines operating in the idle to 5500 rpm range. Performer RPM and RPM Air-Gap intake manifolds are designed for 262-400 c.i.d. small-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		
2101, 3701	B, D	Performer - '86 and Earlier: For 1955-86 262-400 c.i.d. small-block Chevy. Performer manifol 2101 Includes provision to add oil fill tube. Not for Chevy Bowtie heads. Will fit 1987 and late stock aluminum heads. 3701 includes provision for EGR.		
2104, 3706	В	Performer - For 1987-95 Cast Iron Cylinder Heads: Designed for street 262-400 c.i.d. Chevy V8s equipped with factory cast iron heads with canted center bolt holes. Will not fit 1987-95 factory aluminum cylinder heads. Will not fit Chevy Bowtie or LT1 heads.		
2601, 2604	A, C, D	Performer Air-Gap: Fits 1955-86 262-400 c.i.d. small-block Chevy. Air-Gap designs separate the runners from the hot engine oil resulting in a cooler, denser charge for more power. No provisions for exhaust heated chokes or exhaust crossover. 2604 is for 1987-95 cast iron heads with canted center bolt holes		
2701, 2716	A, C, D	Performer EPS: For 1986 and earlier 262-400 c.i.d. small-block Chevys (#2701), the Performer EPS is optimized to deliver superior performance with Edelbrock square-bore Performer Series or Thunder Series AVS carburetors. Runner design is "tuned" for peak torque around 3500 rpm on a 350 c.i.d. engine. Performer EPS Vortec #2716 fits 262-400 c.i.d. Chevy V8s utilizing Vortec (L31) cast iron, or Edelbrock E-Tec aluminum cylinder heads.		
2116	A, C, D	Performer Vortec: Designed for 262-400 c.i.d. Chevy V8s using 1996-later Vortec (L31) cast iron, or Edelbrock E-Tec aluminum cylinder heads. Includes provision for external water bypass.		
7101, 7104	A, C, D	Performer RPM: Designed for 1955-86 262-400 c.i.d. small-block Chevy for high-performance street use. Will fit cast iron Chevy Bowtie heads. Includes provision to add oil fill tube. No provision for exhaust heated choke. Accepts square-bore style carburetors only. 7104 is the Performer RPM Q-Jet, which accepts Q-Jet or spread-bore style carburetors.		
7501, 75013	A, C, D	RPM Air-Gap: Designed for 1955-86 262, 400 c.i.d. small-block Chevy. Features an Air-Gap design, resulting in a cooler, denser charge for more power. Includes rear water outlets.		
7116, 7516	A, C, D	Performer RPM Vortec: Designed for 262-400 c.i.d. Chevy V8s utilizing Vortec (L31) cast iron, or Edelbrock E-Tec aluminum cylinder heads. 7516 is the RPM Air-Gap Vortec, includes rear water outlets.		

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 - May be available in additional finishes, such as polished, PermaStar, or EnduraShine. See Edelbrock 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 some 1972 and later model vehicles and only in some states. Check local laws for requirements. Manifolds not equpped with EGR are not legal for use on any emissions controlled vehicle where such equipment is required.
- ACCESSORIES & INSTALLATION ITEMS: Major recommendations are listed below. However, due to the variety of years, makes and models
  to be covered, please review each part listed in the Installation Items section of the Edelbrock catalog to decide whether more items are
  required for your specific vehicle than are mentioned in these instructions. See our catalog for details. To order a catalog, call (800) FUNTEAM, or visit <u>www.edelbrock.com</u>.

#### • CARBURETOR RECOMMENDATIONS:

#### Manifold 2101, 3701 (Emissions Controlled Applications):

CARBURETOR	СНОКЕ ТҮРЕ	PARTS REQUIRED FOR INSTALLATION
OEM 4BBL	OEM	#8036 throttle, cruise, & kickdown bracket for 1972-1979
Performer #1400 (600 cfm)	Electric	#8036 throttle, cruise, & kickdown bracket for 1972-1979

#### Manifold 2104, 3706 (Emissions Controlled Applications):

CARBURETOR	CHOKE TYPE	PARTS REQUIRED FOR INSTALLATION
OEM 4BBL	OEM	#8036 throttle, cruise, & kickdown bracket

#### Manifold 2101, 2104, 2116, 2716, 2601, 2604, 2701 (Non-Emissions):

CARBURETOR	CHOKE TYPE	PARTS REQUIRED FOR INSTALLATION
Performer #1405 (600 cfm)	Manual	#8031 or 8032 throttle, cruise, & kickdown bracket for 1972-1979
Performer #1406 (600 cfm)	Electric	#8031 or 8032 throttle, cruise, & kickdown bracket for 1972-1979
Thunder Series #1805 (650 cfm)	Manual	#8031 or 8032 throttle, cruise, & kickdown bracket for 1972-1979
Thunder Series #1806 (650 cfm)	Electric	#8031 or 8032 throttle, cruise, & kickdown bracket for 1972-1979
Thunder Series #1825 (650 cfm)	Manual	#8031 or 8032 throttle, cruise, & kickdown bracket for 1972-1979
Thunder Series #1826 (650 cfm)	Electric	#8031 or 8032 throttle, cruise, & kickdown bracket for 1972-1979

#### Manifold 7101, 7104, 7116, 7501, 7516, 75013 (Non-Emissions):

CARBURETOR	CHOKE TYPE	PARTS REQUIRED FOR INSTALLATION
Performer #1407 (750 cfm)	Manual	#8031 or 8032 throttle, cruise, & kickdown bracket for 1972-1979
Performer #1412 (800 cfm)	Manual	#8031 or 8032 throttle, cruise, & kickdown bracket for 1972-1979
Performer #1413 (800 cfm)	Electric	#8031 or 8032 throttle, cruise, & kickdown bracket for 1972-1979
Thunder Series #1812 (800 cfm)	Manual	#8031 or 8032 throttle, cruise, & kickdown bracket for 1972-1979
Thunder Series #1813 (800 cfm)	Electric	#8031 or 8032 throttle, cruise, & kickdown bracket for 1972-1979

**NOTES:** Carburetor size (CFM) should be selected based on your specific engine combination. Consult your engine builder or contact our Technical Hotline at: 1-800-416-8628 Monday - Friday, 7:00am to 5:00pm PST for assistance. Carburetors require a #8008 or #8024 stud, washer and nut kit; determine proper length based on gasket thickness and your accessory mounting requirements (See catalog for details). If a manual choke Performer Series Carburetor is used and electric choke is desired later on, Performer Series carburetors can be converted to electric choke using Electric Choke Kit #1478. Manual choke Thunder Series carburetors CAN NOT be converted to electric choke.

- 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 for pre1995 cylinder heads. On Vortec or E-Tec cylinder head applications, purchase throttle bracket #8032
- 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	REFERENCE	RECOMMENDED GASKET
2101, 3701, 2601, 2701, 7101, 7104, 7501, 75013		Edelbrock #7201 Port: 1.28" x 2.09", .060" Thickness
2116, 2716, 7116, 7516	С	Edelbrock #7235 Port: 1.08" x 2.11", .120" Thickness
2104, 3706, 2604		GM #10159409 (Stock GM for 1987-1995 Cylinder Heads)

**C** - Does Not Have Embossed Silicone Bead

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 EPS 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 Series carburetor #1407 will not need changing. Specific applications may show an increase in power by enrichening the secondary jetting .003" from the stock setting (i.e.: From 0.107" to 0.110").
- 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 or E-Tec, 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.

#### **INSTALLATION INSTRUCTIONS**

- 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.
- Apply Edelbrock Gasgacinch sealant PN 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 ¼" high bead across each block end seal surface, overlapping the intake gasket at the four corners. This method will eliminate end seal slippage.
- 5a. Install the intake manifold and hold-down bolts. On applications with pre-1995 cylinder heads, apply a small amount of silicone to the threads of the eight inner bolts (1,2,3,4,5,7,9 & 11 in Figure 2) to prevent oil weepage, as generally these are not blind holes in the cylinder head. Torque all of the manifold bolts in two steps by the sequence shown in Figure 2 to 25 ft/lbs.
- 5b. Install the intake manifold and hold-down bolts. On applications with Vortec or E-Tec cylinder heads, torque all of the manifold bolts in two steps by the sequence shown in *Figure 3* to 11 ft/lbs

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 (#2102 for 262-350 cid and #2103 for 400 cid engines) for use with Performer Series intake manifolds. Header primary tube diameter should be 1-5/8". Performer RPM Series manifolds are compatible with aftermarket camshafts and headers designed to work in the 1500-6500 rpm range. Edelbrock has developed dynomatched, street proven camshafts (#7102, 2201, or 2204 for for 262-400 c.i.d. engines) for use with Performer RPM series manifolds (see catalog for details). Header primary tube diameter should be 1-3/4".

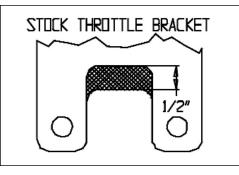


Figure 1 Remove material in the shaded area on stock throttle brackets to clear the intake manifold.

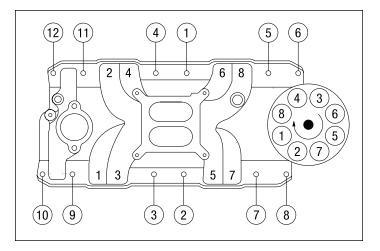


Figure 2 - Pre-1995 Manifold Bolt Torque Sequence Torque Bolts to 25 ft/lbs. Firing Order: 1-8-4-3-6-5-7-2 Turn Distributor Counter-Clockwise to Advance Ignition Timing

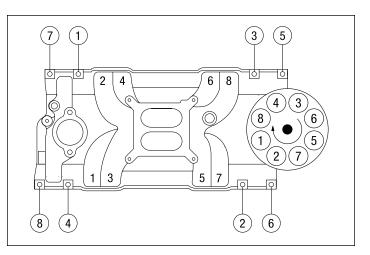


Figure 3 - Vortec/E-Tec Manifold Bolt Torque Sequence Torque Bolts to 11 ft/lbs. Firing Order: 1-8-4-3-6-5-7-2 Turn Distributor Counter-Clockwise to Advance Ignition Timing



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