



Performer and Performer RPM Intake Manifolds  
 For 429-460 C.I.D. Ford Engines  
 Catalog #2166, #3766, #7166, #7566  
**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. Please fill out and mail your warranty card. THANK YOU.

• **DESCRIPTION:**

Edelbrock Performer series intake manifolds are designed for engines operating in the idle to 5500 rpm range. Performer RPM series intake manifolds are designed for engines operating in the 1500-6500 rpm range. Match Performer or Performer RPM intake manifolds with recommended carburetors and additional equipment for even greater performance increases.

**APPLICATIONS:**

| INTAKE MANIFOLD | REFERENCE | APPLICATION   |
|-----------------|-----------|---|
| 2166, 3766      | B, C,     | Performer 460: Designed for street 429/460 c.i.d. Ford V8s. Will not accept factory spread-bore carburetor. Will not fit 429 Cobra-Jet or 1988-later engines. #3766 accepts OEM EGR plate and EGR valve. For replacement EGR plate gasket, use Edelbrock #3898.               |
| 7166            | A, C,     | Performer RPM 460: Designed for 429/460 c.i.d. Ford V8s for high-performance use. Fits standard or Cobra-Jet cylinder heads. Will accept square-bore or spread-bore carburetors. No provision for exhaust heated choke. Will not fit 1988-later engines.                      |
| 7566            | A, C,     | RPM Air-Gap 460: Designed for 429/460 c.i.d. Ford V8s for high-performance use. Fits standard or Cobra-Jet cylinder heads. Features an Air-Gap design, resulting in a cooler, denser charge for more power. No provisions for exhaust heated chokes and no exhaust crossover. |

- 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 - 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 model vehicles. Check local laws for requirements.

• **AIR CLEANER:** On some applications when using a Performer or Thunder Series carburetor, there may be interference with the stock air cleaner. If this occurs, use Edelbrock adapter #8092, or Pro-Flo Air Cleaner #1221 (or equivalent). **CAUTION:** Check for clearance before closing the hood when using this spacer or air cleaner. See "*General Intake Manifold Installation Instructions*" for instructions on how to check the hood clearance.

• **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 2166, 3766 (Emissions-Controlled Applications):

| CARBURETOR                | REFERENCE | PARTS REQUIRED FOR INSTALLATION |
|---------------------------|-----------|---------------------------------|
| OEM 4bbl (Electric Choke) | B, H, N   |                                 |

Manifold 2166 (Non-Emissions):

| CARBURETOR                     | REFERENCE     | PARTS REQUIRED FOR INSTALLATION  |
|--------------------------------|---------------|--|
| Performer #1405 (600 cfm)      | A, I, K, N, O | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Performer #1406 (600 cfm)      | A, I, K, N    | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Thunder Series #1805 (650 cfm) | A, I, K, N    | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Thunder Series #1806 (650 cfm) | A, I, K, N    | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Thunder Series #1825 (650 cfm) | A, I, K, N    | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Thunder Series #1826 (650 cfm) | A, I, K, N    | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Performer #1407 (750 cfm)      | A, I, K, N, O | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Performer #1411 (750 cfm)      | A, I, K, N    | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Performer #1412 (800 cfm)      | A, I, K, N, O | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Performer #1413 (800 cfm)      | A, I, K, N    | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Thunder Series #1812 (800 cfm) | A, I, K, N    | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Thunder Series #1813 (800 cfm) | A, I, K, N    | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |

Manifold 7166, 7566 (Non-Emissions):

| CARBURETOR                     | REFERENCE     | PARTS REQUIRED FOR INSTALLATION  |
|--------------------------------|---------------|--|
| Performer #1407 (750 cfm)      | A, I, K, N, O | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Performer #1411 (750 cfm)      | A, I, K, N    | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Performer #1412 (800 cfm)      | A, I, K, N, O | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Performer #1413 (800 cfm)      | A, I, K, N    | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Thunder Series #1812 (800 cfm) | A, I, K, N    | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |
| Thunder Series #1813 (800 cfm) | A, I, K, N    | #1495 or 1848 throttle plate kit, #1483 or 1844 throttle lever adapter |

- 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. When using Edelbrock carburetors, use #1495 or #1848 throttle plate kit. Manifolds #3766, #7166, and #7566 are supplied with two throttle bracket spacers which may be required on some installations to align the throttle bracket with the OEM carburetor linkage.
- **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                                   |
|------------------------|-----------|--|
| 2166, 3766, 7166, 7566 |           | Edelbrock #7223 Port: 1.98" x 2.26", .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 Series 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 a dyno-matched, street proven camshaft (#2167 for 429/460 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 a dyno-matched, street proven camshaft (#7167 for 429/460 c.i.d. engines) for use with Performer RPM series manifolds (see catalog for details). Header primary tube diameter should be 1-7/8"-2".

- **KIT CONTENTS:**

#### MANIFOLD 2166 INCLUDES:

- 1 - Ford Water Pump Bypass Tube (Install into manifold by tapping lightly with a hammer. Use a block of wood to protect the tube.)

#### MANIFOLD 3766 INCLUDES:

- 1 - Ford Water Pump Bypass Tube (Install into manifold by tapping lightly with a hammer. Use a block of wood to protect the tube.)
- 1 - Steel EGR Spacer Adapter Plate (See Figure 2)
- 1 - EGR Adapter Plate Gasket (See Figure 2)
- 2 - 5/16" - 18 x 2" Hex Capscrews
- 4 - 5/16" - 18 x 3-1/4" Carburetor Studs
- 1 - 3/8" - 18 NPT Pipe Plug
- 2 - Throttle Bracket Spacers

#### MANIFOLD 7166 INCLUDES:

- 1 - Ford Water Pump Bypass Tube (Install into manifold by tapping lightly with a hammer. Use a block of wood to protect the tube.)
- 2 - Throttle Bracket Spacers

#### MANIFOLD 7566 INCLUDES:

- 1 - Ford Water Pump Bypass Fitting, Threaded (3/8" - 18 NPT x 5/8" Hose)
- 2 - Throttle Bracket Spacers

## INSTALLATION INSTRUCTIONS

- 1) Use only recommended intake gaskets set when installing this intake manifold. For ease of installation, we recommend Edelbrock Intake Manifold Bolt & Washer Kit #8569.
- 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 ¼" 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. Torque all of the manifold bolts in two steps by the sequence shown in Figure 1 to 25 ft/lbs.

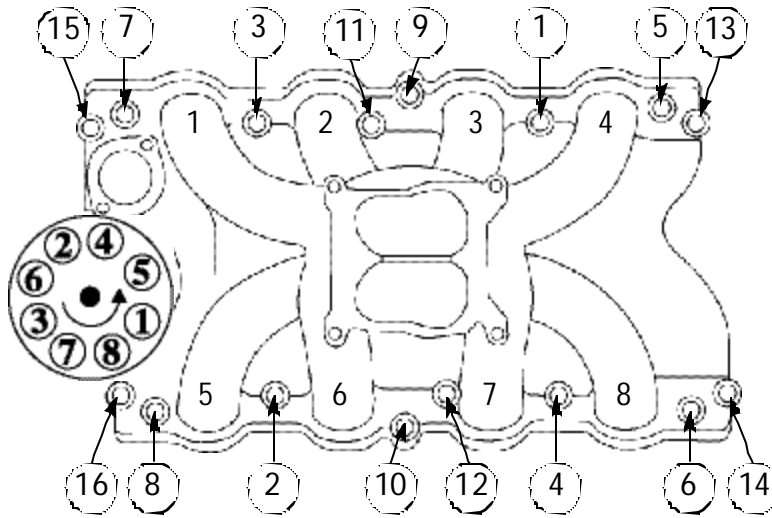


Figure 1 - 429/460 Ford Torque Sequence  
Torque Bolts to 25 ft/lbs.  
Firing Order: 1-5-4-2-6-3-7-8  
Turn Distributor Clockwise to Advance Ignition Timing

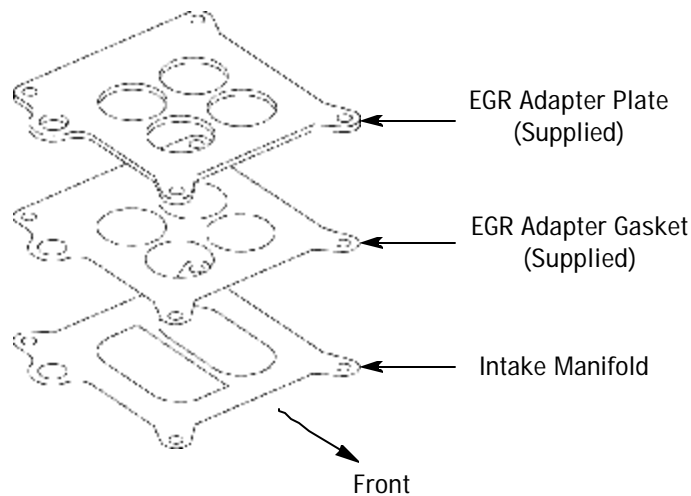


Figure 2 - EGR Adapter Plate Installation (3766 Intake Manifold)  
Install OEM EGR Spacer and Gasket on Top of Edelbrock Adapter Plate

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