



## PERFORMER RPM E-BOSS INTAKE MANIFOLDS

### For 302 & 351 c.i.d. Ford Windsor Engines

### Catalog #7129 & #7183

### 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](mailto: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:** The Edelbrock Performer RPM E-Boss intake manifolds are designed to allow the use of our high performance Cleveland-style cylinder heads on Windsor blocks with a deck height of 8.2" (302 only) or 9.5" (351W). Port exits are matched to our #61689 cylinder heads. These manifolds will optimize power from 1,500 to 6,500 rpm and should be matched with other engine components designed for the same operating range.

**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).

- **EGR SYSTEMS:** Intake manifold 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.
- **CARBURETOR RECOMMENDATIONS:** Engine displacement, vehicle weight, and intended driving style will significantly impact your carburetor selection. For a typical muscle car that will be driven aggressively (but not competitively) a 650 cfm carburetor such as our Thunder AVS #1805 or #1806 will be sufficient. Engines that have been stroked larger than 360 c.i.d. and/or will be driven on the track regularly may want to use an 800 cfm carburetor such as our Thunder AVS #1812 or #1813 for peak performance.
- **THROTTLE BRACKETS:** The throttle and kickdown bracket on some vehicles may require modification to fit. C4 and C6 transmissions will require the use of kickdown adapter #1481, while an AOD transmission will require an SRK-4000 adapter from Lokar. When using Edelbrock carburetors on a 302, use #1490 or #1845 throttle plate kit to line up the stock throttle bracket to the Edelbrock carburetor throttle lever. 351W engines will use throttle bracket relocation plate #1491 or #1846.
- **GASKETS:** We recommend Fel-Pro intake gasket #1021 be used with the #7129 and #7183 manifolds. Do not use competition-style intake gaskets for these street manifolds. Due to material deterioration over time, internal leakage of vacuum, oil, and coolant may occur.

**CLEVOR/BOSS 302 CLONE COMPONENTS:** Several components will be needed to adapt a Windsor engine block to Cleveland cylinder heads.

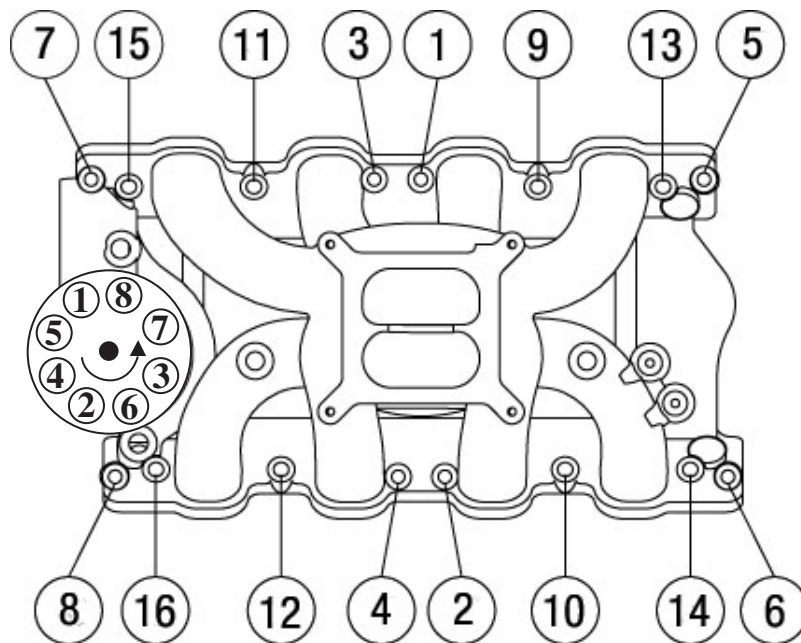
- **PISTONS:** Aftermarket pistons that have been notched for the valve angle of a Cleveland head will be necessary. These can be purchased from companies such as JE, Ross, CP, and Probe.
- **VALVETRAIN:** Most street applications will want to use a rocker ratio of 1.73:1. A full set of rocker arms can be purchased from Crane as part #27750-16. These will use 8.550" pushrods if matched with OE Ford hydraulic roller lifters. If you are using a cylinder head equipped with guide plates, such as Edelbrock heads #61689, be sure to only purchase hardened steel or chromoly pushrods.
- **MOUNTING HARDWARE:** These manifolds require a total of sixteen (16) intake manifold bolts to be properly secured. You will need eight (8) bolts that are 3/8"-16 and 1-3/4" long, and eight (8) bolts that are 5/16"-16 and 2" long. All sixteen (16) bolts will require chamfered hardened steel washers between the manifold and the head of the bolt. The longer bolts will thread through the vertical bosses, while the shorter bolts will mount perpendicular to the flange. See **Figure 1** for the proper torque sequence.
- **CAMSHAFT AND HEADERS:** Performer RPM Series manifolds are compatible with aftermarket camshafts and headers designed to work in the 1500-6500 rpm range. Header primary tube diameter should be 1-3/4".

## PREP AND TUNING FOR POWER:

1. The stock calibration of most Edelbrock carburetors have been optimized for performance with Performer RPM intake manifolds.
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.
4. The compression ratio should be at least 9.5 to 1 to work properly with most camshafts designed for use in the 1500-6500 rpm range.
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 PROCEDURE

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 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. The eight (8) 5/16" bolts will be installed in the vertical bosses (1-8 of the torque sequence) and should only be torqued to 10 ft/lbs at this time. The eight (8) 3/8" bolts will now be installed in the flange holes (9-16 of the torque sequence) and tightened to 15 ft/lbs. Now tighten the vertical 5/16" bolts to 20 ft/lbs in sequence, and then the 3/8" flange bolts to 30 ft/lbs, once again following the torque sequence shown in Figure 1.



**Figure 1 - 351C Ford Torque Sequence**

**Bolts 1-8 will be tightened to 10 ft/lbs initially, and a final value of 20 ft/lbs.  
Bolts 9-16 will be tightened to 15 ft/lbs initially, and a final value of 30 ft/lbs.**

**Firing Order: 1-5-4-2-6-3-7-8**

**Turn Distributor Clockwise to Advance Ignition Timing**



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