Marine RPM Intake Manifolds
For Small-Block Chevrolet Engines
Part #2504, 2506, 2516
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 vessel. 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.

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 vessel damage.

DESCRIPTION: Marine RPM 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 marine water necks, alternator and H.E.I. ignition systems. Any exceptions are listed in the APPLICATIONS section below. It is recommended to match the Marine RPM intake manifolds with recommended carburetors and additional equipment for even greater performance increases.

APPLICATIONS:

INTAKE MANIFOLD	DESCRIPTION
P/N 2504	**Marine RPM** - Designed for 1955-86 262-400 c.i.d. small-block Chevy for high-performance marine use. Will fit cast iron Chevy Bowtie heads. Includes provision to add oil fill tube. Has provision for exhaust heated choke. Accepts square-bore or Q-Jet style carburetors only.
P/N 2506	For 1987-95 Cast Iron Cylinder Heads: Designed for marine 305-350 c.i.d. Chevy V8s equipped with factory cast iron heads with canted center bolt holes. Has provision for exhaust heated choke. Will not fit 1987-95 factory aluminum cylinder heads. Will not fit Chevy Bowtie or LT1 heads.
P/N 2516	**Marine RPM Vortec**: Designed for 262-400 c.i.d. Chevy V8s utilizing Vortec (L31) cast iron heads. Vortec heads were used on 1996 and later small blocks and can be identified by having only four vertical bolts holding the manifold to the head on each side.

EGR SYSTEMS:

Marine RPM manifolds are intended solely for use on non-emission controlled marine applications and therefore have no provisions for EGR components.

CARBURETOR RECOMMENDATIONS:

These manifolds will work with the original equipment 4V carburetor (square bore or spread bore). However, marine specific Edelbrock carburetors are highly recommended.

Part Number - 1409 - 600 CFM, Square-Flange, Electronic Choke, Marine (Non-EGR)
Part Number - 1410 - 750 CFM, Square-Flange, Electronic Choke, Marine (Non-EGR)

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).*

THROTTLE BRACKETS:

In general, stock throttle brackets which mount to the carb base will fit with no issues. Throttle brackets which mount to the manifold to head bolts holes, may require modification to fit (see figure 1). Additionally, you may want to consult the Edelbrock catalog to see if PN 8031, 8030, or 8036 (pre-1995) will be required for your application. For 1996 and later applications, Edelbrock offers a #8032 bracket.

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. ***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.***

INTAKE MANIFOLD	RECOMMENDED GASKETS
2504	Edelbrock #7201 Port: 1.28" x 2.09", .060" Thickness
2506	GM #10159409 (Stock GM for 1987-1995 Cylinder Heads)
2516	Edelbrock #7235 Port: 1.08" x 2.11", .120" Thickness - Does not have Embossed Silicone Bead

PREP AND TUNING FOR POWER:

Marine RPM Series Intake Manifolds

1. Due to design, the fuel / air mixture and cylinder charging are very efficient with these marine RPM manifolds. Generally speaking, the stock jetting for a Performer Series carburetor #1409/1410 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 marine RPM series manifolds.
3. The compression ratio should be at least 9.5 to 1 if using a Performer RPM camshafts.
4. Installation of an aftermarket camshaft, exhaust system or both with an Edelbrock Marine RPM series manifold may lean the carburetor calibration. Should this condition occur, re-calibrate 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.
3. 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 seepage, 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 cylinder heads, torque all of the manifold bolts in two steps by the sequence shown in ***Figure 3*** to 11 ft/lbs

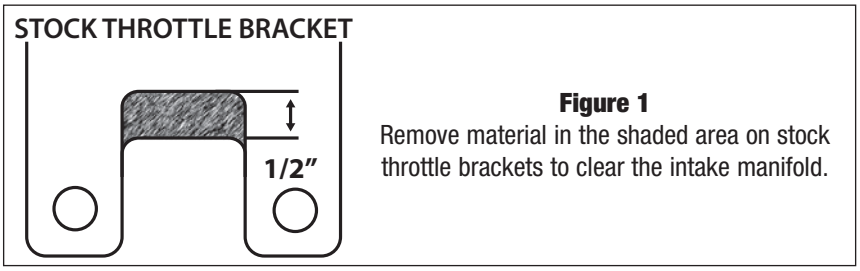

Figure 1
Remove material in the shaded area on stock throttle brackets to clear the intake manifold.

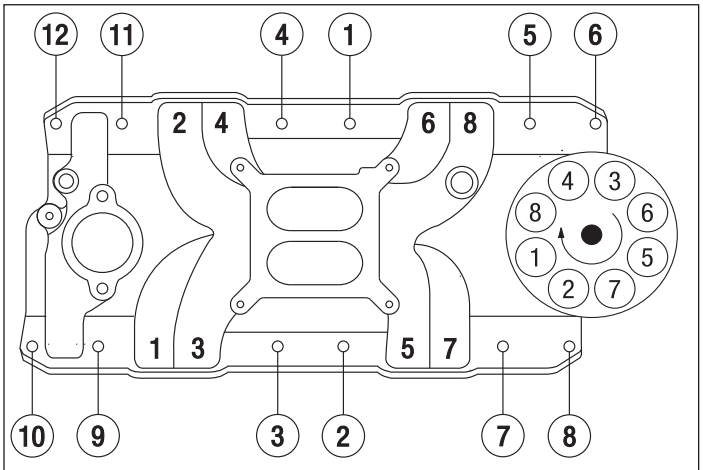

Figure 2 - Pre-1995 Manifold Bolt Torque Sequence
Torque Bolts to 25 ft/lbs.
Firing Order: 1-8-4-3-6-5-7-2
Turn Distributor Counter-Clockwise
to Advance Ignition Timing

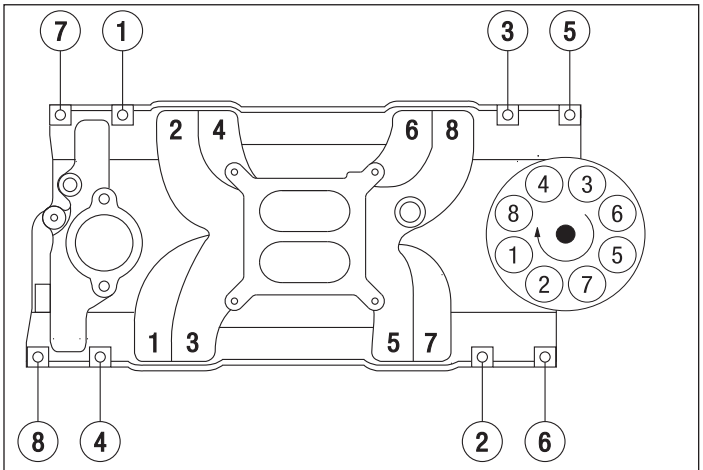

Figure 3 - Vortec/E-Tec Manifold Bolt Torque Sequence
Torque Bolts to 11 ft/lbs.
Firing Order: 1-8-4-3-6-5-7-2
Turn Distributor Counter-Clockwise
to Advance Ignition Timing

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