



**THREE-DEUCE INTAKE MANIFOLD**  
**For 283-400 c.i.d. Chevy V8 With**  
**Vortec-Style Cylinder Heads**  
**Catalog #5414, 5417**  
**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.

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

**DESCRIPTION:** Because of the current high demand for multiple carburetion, Edelbrock has introduced two new Three-Deuce intake manifolds (#5414 and #5417) for small-block Chevrolets equipped with Vortec style cylinder heads. These manifolds are primarily designed for street rod and nostalgia applications. Please review the sections below for installation tips and recommendations. (**NOTE: HEI distributors will not fit. Stock point-type distributors may require re-phasing to provide adequate clearance for ignition timing adjustment.**)

- **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.
- **OIL FILL TUBE:** This manifold requires a 1 1/4" OD Oil fill tube such as Edelbrock P/N 4803 or comparable.
- **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:**  
**CAUTION:** #5417 manifolds are for small 4-bolt 2 GC Rochester style carburetors. #5414 manifolds are for 3-bolt carburetors such as Edelbrock 94 carburetors, PN 1151 and PN 1152. For 4-bolt carburetors, linkage and fuel lines, we recommend that you contact Automotion Rochester Carburetor Service, 837- 36th Avenue Northeast, Great Falls, MT, 59404- (406) 453-5395 (phone and fax) for more information.

MANIFOLD	CARBURETOR	REFERENCE	QTY	PARTS REQUIRED FOR INSTALLATION
PN 5417	Rochester 2GC Type (2bbl)	A, B, F	3	Custom throttle linkage required, refer to <i>CAUTION</i> above for details.
PN 5414	Edelbrock PN 1152 (2)	A, B, C, T	2	Progressive Linkage PN 1033, Fuel Log Kit PN 1288 See Edelbrock catalog or visit <a href="http://www.edelbrock.com">www.edelbrock.com</a> for more details
	Edelbrock PN 1151 (1)	A, B, D, T	1	

**A** - Carburetor will work with non-EGR or pre-emission control systems.  
**B** - Carburetor has no provisions for evaporative canister.  
**C** - Carburetor has no choke provisions.  
**D** - Carburetor has provision for manual choke.  
**T** - Three bolt pattern carb pad.  
**F** - Four bolt pattern carb pad.

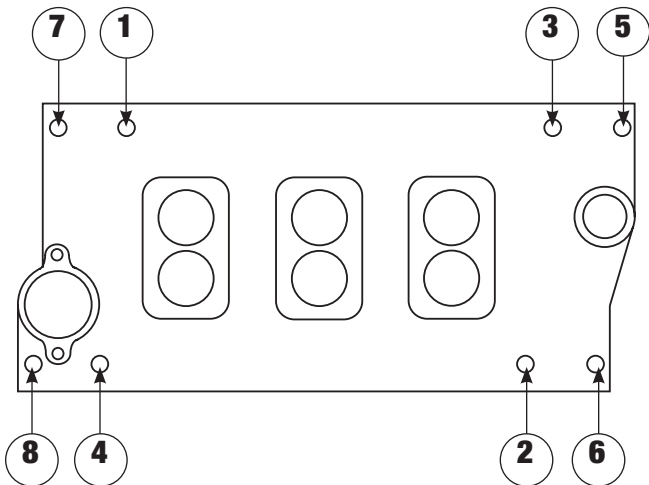
- **THROTTLE & ACCESSORY BRACKETS:** The throttle and kickdown bracket on some vehicles may require modification to fit. This manifold will not accept any alternator bracket assembly which mounted to the OEM manifold (check with aftermarket suppliers of alternator brackets such as B&M, Mr. Gasket, TD Performance Products, etc.). It has no provision for ignition coil, and will accept front (early style) oil filler tube. Valve covers with adequate ventilation provisions are required (PCV valve and breather recommended).
- **GASKETS:** Edelbrock intake gasket set #7235 is recommended for both #5414 and #5417. Do not use competition style intake gaskets for this street manifold as material deterioration can occur over time causing internal leakage of vacuum, oil, and coolant.
- **BOLT KIT:** For the cleanest appearance and best fit, use Edelbrock's Intake Manifold Bolt Kits (PN 8516). These silver-cadmium type coated, reduced hex head bolts with hardened washers are the ultimate way to top off your engine.

**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.**

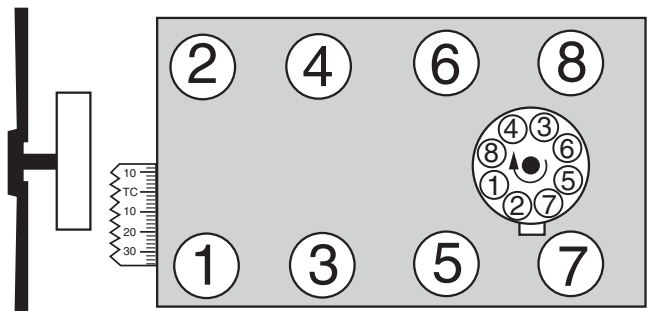
- **SPECIAL NOTE:** This intake manifold is primarily intended for use with Vortec-style heads on pre-Vortec blocks. Standard engine blocks route the thermostat bypass water from the block directly to the water pump through the passenger side water pump mounting flange. If the manifold is used on a 1996 or later Vortec engine that does not have the in-block bypass passage, you must route a thermostat bypass hose from one of the 3/8" NPT bosses on the top of the intake manifold water crossover to the 5/8" hose nipple on the passenger side of the Vortec water pump. Use the 90° elbow, 3/8" NPT (pipe thread) to 5/8" hose nipple fitting, and 5/8" hose to accomplish this. If you wish to shorten your engine warm-up cycle, you can restrict the bypass water with an Ø11/32" restrictor. If your engine block has the thermostat bypass passage, you may plug the boss on the intake manifold.
- **PREP AND TUNING FOR POWER:**
  1. Specific applications may show an increase in power by tuning the fuel mixture.
  2. Aftermarket distributor curve kits may be used with this intake manifold. HEI distributors WILL NOT fit.
  3. Use modified or high performance cylinder heads such as our E-Tec 170.
  4. Installation of aftermarket headers, camshafts or both may lean carburetor calibration. Should this condition occur, re-calibrating with a richer jet is recommended.
- **CAMSHAFT AND HEADERS:** *Three-Deuce* intake manifolds are compatible with aftermarket camshafts and headers. Header primary tube diameter should be 1-5/8" to 1-3/4" depending on the specific engine combination. Edelbrock has developed two camshafts for use with this intake manifold. Performer-Plus #2102 or Rollin' Thunder #2208 are recommend depending on whether standard hydraulic or roller hydraulic lifters are being used. Please check the catalog or website for rpm and application guidelines.

## 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 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) Apply removable thread lock, such as blue Loctite, to the intake bolt threads. Install the intake manifold bolts. Carefully tighten the intake manifold bolts evenly until the intake manifold has lightly compressed the gasket.
- 6) Torque all of the manifold bolts in two steps by the sequence shown in Figure 1 to 11 ft/lbs.
- 7) Install the oil fill tube by placing it into the machined provision. Place a block of wood on the top of the tube then use a mallet to drive the tube in, until the 1.25" step of the tube is fully seated.



**Figure 1 - Small Block Chevy Vortec Torque Sequence**  
Torque Bolts to 11 ft/lbs.



**Figure 2 - 262-400 c.i.d. Small Block Chevy Firing Order**  
Firing Order: 1-8-4-3-6-5-7-2  
Turn Distributor Counter-Clockwise to Advance Timing

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