**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:** The Street Tunnel Ram manifold is designed for use on 305-400 c.i.d. small-block Chevrolet V8 engines. It is intended for small-block Chevrolets operating below 7500 rpm where low-end torque is not a prime factor. Especially suited to engines using slightly modified cylinder heads (9.5:1 or more compression is advised). Use the recommended carburetors only. Top has vacuum outlet for power brakes. Manifold will accept forward or sideways mounted carburetors. Distance from carburetor center to center is 8.875”. GM H.E.I. ignition will not clear manifold. Will not fit 1987 and later cast iron cylinder heads. Original alternator bracket may not fit; use aftermarket universal brackets as required.

**KIT CONTENTS:**
- 1 Manifold Base
- 1 Manifold Top
- 2 Base to Top Gaskets
- 4 5/16-18 x 1” Bolts

**Emissions 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.

**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.

**CARBURETOR RECOMMENDATIONS:**

<table>
<thead>
<tr>
<th>CARBURETOR (Qty. 2)</th>
<th>CHOKE TYPE</th>
<th>PARTS REQUIRED FOR INSTALLATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performer Series #1403 (500 cfm)</td>
<td>Electric</td>
<td>#7097 Throttle Linkage (Forward Mount)</td>
</tr>
<tr>
<td>Performer Series #1404 (500 cfm)</td>
<td>Manual</td>
<td>#7097 Throttle Linkage (Forward Mount)</td>
</tr>
<tr>
<td>Thunder Series #1803 (500 cfm)</td>
<td>Electric</td>
<td>#7097 Throttle Linkage (Forward Mount)</td>
</tr>
<tr>
<td>Thunder Series #1804 (500 cfm)</td>
<td>Manual</td>
<td>#7097 Throttle Linkage (Forward Mount)</td>
</tr>
<tr>
<td>4150 Series (600 cfm)</td>
<td>Manual</td>
<td>#7071 Throttle Linkage (Sideways Mount)</td>
</tr>
</tbody>
</table>

**NOTES:** Carburetors each require #8008 or #8024 stud, washer and nut kit. Determine proper length based on gasket thickness and your accessory mounting requirements. If two manual choke Performer Series Carburetors are used and electric choke is desired later on, they can be converted to electric choke using Electric Choke Kit #1478. Use electric choke on the rear carburetor ONLY. Manual choke Thunder Series carburetors CAN NOT be converted to electric choke. If electric choke is desired with Thunder Series carburetors, a manual choke carburetor should be used in the front and an electric choke carburetor should be used at the rear. The Street Tunnel Ram intake manifold will accept sideways mounted 4150-style carburetors. For sideways mounted carburetors, remove the lower linkage on carburetors to clear intake manifold.

**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. Replacement manifold top to manifold base gaskets available as Edelbrock #6999.

<table>
<thead>
<tr>
<th>INTAKE MANIFOLD</th>
<th>REFERENCE</th>
<th>RECOMMENDED GASKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>7110</td>
<td>(None)</td>
<td>Edelbrock #7201 Port: 1.28” x 2.09”, .060” Thickness</td>
</tr>
</tbody>
</table>

**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.
**CAMSHAFT AND HEADERS:** The Street Tunnel Ram manifold is compatible with aftermarket camshafts and headers. Use Edelbrock Torker-Plus camshaft #5002 for more low RPM torque, or the Edelbrock Performer RPM camshaft #7102 for more high RPM power. Header primary tube diameter should be 1-3/4". This may vary depending upon your particular engine specifications.

**PREP AND TUNING FOR POWER:**
1. Specific applications may show an increase in performance through additional carburetor tuning.
2. Aftermarket distributor curve kits and aftermarket ignitions may be used with the Street Tunnel Ram intake manifold.
3. Use modified or high performance cylinder heads such as our Performer RPM, and port match the intake manifold to the heads.
4. The engine’s compression ratio should be at least 9.5:1 to work properly with Torker-Plus or Performer RPM camshafts.

**INSTALLATION PROCEDURE**

**INTAKE MANIFOLD BASE**
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 ⅛” 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 hold-down bolts (We offer an Intake Manifold Bolt Kit #8504 that includes small-head silver Cadmium-plated bolts and matching hardened washers). Apply a small amount of RTV silicone to the threads of the eight inner bolts (1, 2, 3, 4, 5, 7, 9, & 11) (See Figure 1). This will prevent oil weepage, as generally these are not blind holes in the cylinder head.
6. Torque all of the manifold bolts in two steps by the sequence shown in Figure 1 to 25 ft/lbs.

**INTAKE MANIFOLD TOP**
1. Apply Edelbrock Gasgacinch sealant P/N 9300 to the gasket mating surface and install the gasket and manifold top.
2. Install and tighten the supplied hold down bolts using a liquid thread-locking compound on the bolt threads. As an extra safety precaution, we suggest you drill a small safety wire hole in the head of each bolt and safety wire them together. Edelbrock Corporation expressly disclaims any liability for any and all consequential damages.

**Figure 1 - Intake Manifold Bolt Tightening Sequence**
**Firing Order: 1-8-4-3-6-5-7-2**
**Turn Distributor Counter-Clockwise to Advance Timing**

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