

Victor Jr. & Super Victor LS1 EFI Intake Manifold for GM 5.7L LS1 & LS6 V8 Engines Catalog #29085 & #28095 INSTALLATION INSTRUCTIONS

PLEASE study these instructions carefully before installing your new intake manifold. If you have any questions or problems, do not hesitate to contact our **Technical Hotline at: 1-800-416-8628,** from 7am-5pm PST, Mon-Fri, or via e-mail at: **Edelbrock@Edelbrock.com**

CAUTION: Make sure the vehicle's battery has been disconnected and that the vehicle is supported on a level surface to prevent any possibility of the vehicle moving during the installation procedure.

MANIFOLD: The single plane Victor Jr. and Super Victor LS1 intake manifolds are intended for racing and engine swap applications. A fuel rail kit designed to work with these manifolds may be purchased as part #3638.

EGR SYSTEM: These manifolds have no provision for EGR (exhaust gas recirculation) equipment. EGR systems are used on most 1972 and later model vehicles, up to certain GVWs. Check local laws for requirements. This manifold is not considered to be a direct replacement part.

ACCESSORIES & INSTALLATION ITEMS: Major recommendations are listed below. However, because this manifold system is intended for engine swaps into a variety of vehicles, some customization may be required.

| ITEM | NOTES | PART NUMBER AND DESCRIPTION |
|---------------|-------------------------------------|--|
| Throttle Body | Standard Square-Bore Style Base | P/N 3878 - With standard GM/Delphi IAC P/N 38783 - With Mototron/Hitachi Linear Style IAC |
| Fuel Rail Kit | Stock Injector Angles | P/N 3638 - Includes Hold Down Brackets |
| Headers | 1-3/4" - 1-7/8" Step, Victor Series | Various. See Catalog For Details |
| Camshaft | Requires valve spring kit #5768 | P/N 2218 - 207° Int./220° Exh. @ .050", .580" Valve Lift |

KIT CONTENTS: 29085 and 28095

| QTY. | <u>Description</u> |
|-------------|---|
| 1 | Intake Manifold |
| □ 1 | MAP Sensor Bracket (For LS1 Style Sensor) |
| □ 1 | 1/8"NPT to 1/4" Hose Fitting (For MAP) |
| ☐ .75 ft | 1/4" I.D. Vacuum Hose (For MAP) |
| 2 | Cable Bracket (Large Opening) |
| 2 | Cable Bracket (Small Opening) |
| 1 | GEN III EFI Throttle Bracket Base |
| 4 | 6mm x 1.0 x 12mm Serrated Flange Hex Bolt |
| 4 | 6mm x 1.0 Serrated Flange Hex Nut |
| □ 10 | 6mm x 50mm Hex Head Capscrew |
| □ 10 | 1/4" AN Washer |

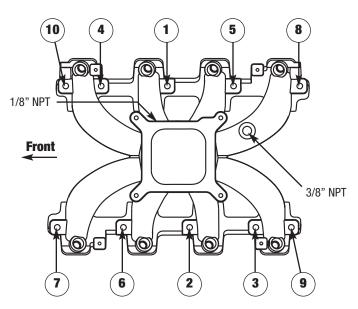


Figure 1 - Intake Manifold Tightening Sequence

INSTALLATION PROCEDURE:

- (Note: Manifold #29085 must use O-Ring type gaskets (GM P/N 12533587) when installing this intake manifold. Manifold #28095 uses a conventional style gasket, Fel-Pro #1312-3). Gasket sealer is not required when using OEM type gaskets. Using the supplied 6mm x 50mm hex head bolts and 1/4" AN washers, mount the manifold to the engine. The Gen III throttle bracket mounts under the two left side rear intake manifold bolts. Following the torque sequence in Figure 1, torque all manifold bolts to 11 ft/lbs.
- 2. Select the appropriate cable brackets for your application (large or small opening brackets) and attach them to the GEN III throttle bracket base with the appropriate number of 6mm x 1.0 x 12mm serrated flange hex bolts. (**Note:** In our retrofit of the LS1 into a 1974 Camaro, using a TH400R automatic transmission, we only needed one of the small opening cable brackets for the throttle cable, since a kickdown cable is not used. See **Figure 2** for example.)

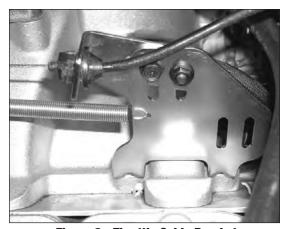


Figure 2 - Throttle Cable Bracket

INJECTOR SELECTION AND INSTALLATION: It is important to select the appropriate electronic injectors for optimum performance. The injectors must not only match the fuel demands of an engine, but they must also match the electronic capability of the engine control unit (ECU). When installing the injectors onto the manifold, make sure that the 0-rings of the injectors create a complete seal to prevent any air or fuel leaks. The same precaution should be applied when assembling the injectors to the fuel rails. Use assembly lube on 0-rings when installing injectors. Brake assembly lube works well.

FINAL CHECKS: After assembling the injectors, fuel rails, support brackets, throttle body, spacer (if needed), gaskets, and air cleaner, check the following:

- Have an assistant depress and release the gas pedal. Check for full open throttle at the throttle body. Check for any possible interference of the throttle with other components. Make sure the throttle can return without binding.
- Check the fit of each injector. They should be able to rotate freely. The O-rings should be fully inside their respective bores.
- Activate the fuel pump and fully check the system for any leaks prior to starting the engine.



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