



**ALUMINUM FUEL RAIL KIT**  
**For Chevy LS3 Cross-Ram # 7141 & 71413**  
**Catalog #3654**  
**INSTALLATION INSTRUCTIONS**

**PLEASE** study these instructions carefully before beginning this installation. This installation can be accomplished with common tools and procedures. However, a familiarity with working on automotive fuel systems is highly recommended. If you do not feel comfortable performing this installation or have never worked with automotive fuel systems before, it is highly recommended to have the installation completed by a Professional Mechanic. Proper installation is the responsibility of the installer. Improper installation will void the manufacturer's warranty and may result in poor performance and engine or vehicle damage.

**WARNING!**

***Make sure to perform the installation in a well ventilated area away from any potential fire hazards. Gasoline fumes are toxic and are highly flammable. Prior to starting the installation, make sure to eliminate all potential fire hazards as fuel leakage can occur when loosening the fuel system connections.***

- **DESCRIPTION:** Aluminum Fuel Rail Kit #3654 is designed for the Chevy LS3 Cross-Ram manifold, PN 7141 and 71413. It features anodized extruded aluminum rails with -6 AN end threads for ease of installation (*Refer to Russell catalog for fittings*). It is designed to be used with stock injectors in applications up to 500 HP (37 lb/hr). For higher HP applications, we offer PN 15907 (52 lb/hr) injector with USCAR connector in a compact length, or PN 15903 (60 lb/hr) injector with Minitimer connector.
- **FUEL RAIL KIT:** Install fuel rail kit and your injectors using the included M6 X 30mm bolts. Apply an o-ring assembly lube to the injector o-rings before installing them into the manifold and fuel rails. Make sure that the o-rings of the injectors create a complete seal with the fuel rail and the intake manifold to prevent any air or fuel leaks.

*Kit includes the following:*

- 2 - Machined fuel rail extrusions (fuel rail ends tapped for -6 AN pipe)
  - 4 - M6 X 1.0 X 30mm Hex Flange Head Bolt
- 
- **FINAL CHECKS:** After finishing assembly, check the following:
    - 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.