



INSTRUCTIONS

FAST™ LSX_{RT}™ OEM Round Plastic Fuel Rail Modification Kit #146030-KIT

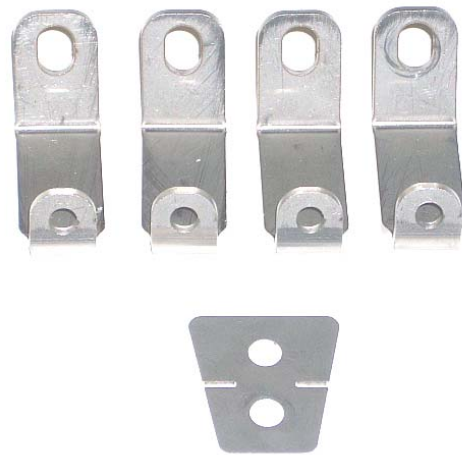
#146030-KIT Parts List

- (4) Mounting Brackets, Non Flex Fuel (Labeled "T")
- (4) Mounting Brackets, Flex Fuel
- (4) 6mm x 12mm SS Button Head Allen Screws
- (4) M6 x 16mm Hex Serrated Flange Bolt
- (4) 10-24 x 1 Nylock nut
- (1) Drill & Cut Template
- (1) M7 x 10 Hex Bolt
- (1) M7 Hex Nut
- (1) 7mm Drill Bit

Notes: This kit requires PERMANENT modification to your OEM fuel rail. You will not be able to reuse your fuel rails on your OEM intake after modifications are complete!

Take necessary safety precautions using Safety glasses and rubber gloves.

ONLY use a hacksaw to make cuts and other modifications!! Use of power tools could ignite the residual fuel vapors in the fuel rails!



Installation Instructions:

1. Once engine is cool, disconnect the battery.
2. Bleed off any fuel pressure, cleaning up and properly disposing of any fuel spillage.
3. Remove the factory fuel line with the appropriate special tool, that is available at most auto parts stores.
4. Disconnect all injector wiring and remove the four (4) retaining bolts.
5. You should now be able to remove the factory fuel rail.
6. After the fuel rail has been removed, remove the factory retaining clips holding the injectors to the factory fuel rail. Insert a screwdriver into the end of the clip and pry outwards. **Note: The clips will be re-used.**



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7. Remove all eight injectors, ensure if your reusing your OEM injectors that you have swapped the lower O-rings. These O-rings are included with your LSX_{RT}TM Intake Manifold.

8. Drain remaining fuel out of the fuel rail and blow out completely with compressed air, ensure no gas fumes or vapors remain.

9. Remove any obstructions, with a hack saw, which prevent the fuel rails from sitting down on the intake manifold. Typically a metal bracket on the drivers side of the fuel rail will need to be removed, see picture. **DO NOT modify the OEM plastic mounting tabs at this point.**

10. Use the supplied M7 bolt and nut to attach the drill and cut template to your fuel rail mounting tab. Ensure it is centered.

11. Drill the new mounting hole using the supplied 7mm drill bit.

12. Mark the cut off line with a marker or scribe to show where to trim off the excess fuel rail mounting tab.

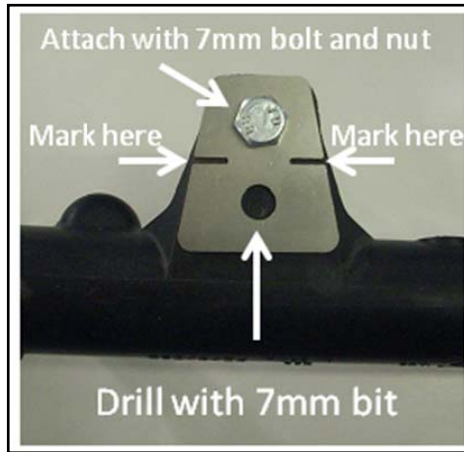
13. Repeat on all 4 mounting tabs.

14. Remove the drill and cut template. Then using a hacksaw, cut off the excess fuel rail mounting tabs using the lines previously marked.

15. Lightly lubricate the o-rings on the injectors, upper and lower.

16. Reinstall all eight injectors with injector clips. Make sure new lower O-rings installed, if necessary.

17. There are two sets of mounting brackets included with your kit, one short set and one tall set. Depending on your application you will need to select the appropriate height mounting bracket that is compatible with you fuel injectors. Before continuing, please mock-up both brackets and choose the one that allows for correct fuel injector installation. In a correct installation both injector o-rings will be completely covered and the bracket will sit flush to the fuel rail.



18. Loosely install all four (4) mounting brackets on the OEM fuel rails before installing the rails with the supplied M6 x 12mm Button head bolt and M6 Nylock nut by a few threads on the underside of the modified mounting tabs. **Note: Do not fully tighten the Nylock nuts at this point. This will assist you in aligning the bolts in the next few steps.**

19. With gentle but firm pressure, seat the injectors into the intake manifold.

20. Using the M6 x 16mm Hex serrated Flange bolts, attach the fuel rail mounts to the intake manifold, using medium strength thread locker. Torque to 70-89lb/in. See picture.

21. Using a 10mm wrench and 6mm x 16mm and a 4mm Allen, tighten fuel rail mounting bracket to the fuel rail using the previously partially installed Nylock nut and M6 x 12mm Button head bolts.

22. Reinstall all injector wiring correlating the injector connectors to the proper cylinder. Make sure all fuel fittings are tight.

23. Reconnect the battery and turn on the fuel pump, check for leaks.



Related FAST™ Products

Part #	Description	Part #	Description
146102	LSXR™ LS3 Intake Manifold (102mm)	54092	Big Mouth™ 92mm Billet Throttle Body
146202	LSXR™ LS7 Intake Manifold (102mm)	54093	Big Mouth™ 92mm Billet Throttle Body with TPS
146000	LSXR™ Upper Shell – 102mm Throttle Body (LS3 and LS7)	54102	Big Mouth™ 102mm Billet Throttle Body
146001	LSXR™ Lower Shell - Manifold Base for LS3	54103	Big Mouth™ 102mm Billet Throttle Body with TPS
146201	LSXR™ Lower Shell - Manifold Base for LS7	146004	LSXR™ Throttle Body Seal 102mm (LS3 and LS7)
146006-8	(8) LSXR™ LS7 and LS3 Runner to lower shell o-ring seals	146016	LSXR™ LS3 Hardware kit
146005	LSXR™ upper to lower seal LS3 and LS7 (main seal)	146017	LSXR™ LS7 Hardware kit



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146003-8	(8) LSXR™ LS3 Replacement Intake Port Seal	146253	LSXR™ LS7 Runners
146203-8	(8) LSXR™ LS7 Replacement Cylinder Head Intake Port Seals	146053	LSXR™ LS3 runners
30332-8	8 Pack of 33-lb. FAST™ LS2 Fuel Injectors	30397-8	8 Pack of 39-lb. FAST™ LS3/LS7 Fuel Injectors
30462-8	8 Pack of 46-lb. FAST™ LS2 Fuel Injectors	30507-8	8 Pack of 50-lb. FAST™ LS3/LS7 Fuel Injectors
30572-8	8 Pack of 57-lb. FAST™ LS2 Fuel Injectors	30657-8	8 Pack of 65-lb. FAST™ LS3/LS7 Fuel Injectors

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FAST's obligation under this warranty is limited to the repair or replacement of its product. To make a warranty claim, the part must be returned directly to FAST™ at the address listed below with a valid Return Merchant Authorization Number (RMA), freight prepaid. Items covered under warranty will be returned to you freight collect. To obtain an RMA, call 877-334-8355 to report the issue you are experiencing. At that time, FAST™ will attempt to trouble shoot your issue.

It is the responsibility of the installer to ensure that all of the components are correct before installation. We assume no liability for any errors made in tolerances, component selection or installation.

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- B. Any product used in marine applications, unless that product is listed by FAST™ as a specific marine product;**
- C. Any product that has been physically altered improperly installed or maintained;**
- D. Any product used in improper applications, abused, or not used in conjunction with the proper parts.**

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