



Rusty's Off-Road Products
7161 Steele Station Road
Rainbow City, AL 35906
1-256-442-0607
www.rustysoffroad.com

Rusty's FSJ 6" Full Size Spring Pack Lift Kit RK-605SP-FS INSTALLATION INSTRUCTIONS

Last Revised: 11/29/2016

Introduction:

Rusty's recommends that this installation be performed by a certified automotive technician or a person with professional mechanical knowledge. Installing this kit without this expertise may jeopardize the handling and safety of the vehicle.

Read instructions several times before starting. Be sure you have all the needed parts and know where they install. Read each step completely as you go. Exhaust modifications may be necessary. Prior to drilling or cutting, check behind the surface being worked on for any wires, lines, or hoses that could be damaged. After any drilling or cutting, remove burrs and grind smooth any surfaces. An inclinometer or similar tool may be needed to measure driveshaft angles before and after the installation.

Warning:

It is the owners' responsibility to inspect all Rusty's products for proper torque specs to prevent loosening of components. Seat belts and shoulder harnesses should be worn at all times. Re-check all bolts and nuts after the first 100 miles and after any off-road usage during the first 300 miles. Although all of our products are made from the highest quality materials possible, they are not a substitute for Safe and Careful driving. In other words, have good safe on-road / off-road sense. Know the terrain, the speed limitations, and any obstacles that may lie ahead. Please remember to preserve our right to enjoy public land through the proper use of off-road vehicles.

Before Starting Installation:

1. Carefully Read all warnings and instructions completely before beginning.
2. Verify all parts have been received in this kit by checking the parts list on page#2 of this document.
3. Only install this kit on the vehicle for which it is specified.
4. Park the vehicle on a clean, dry, flat, level surface and block the tires so the vehicle cannot roll in either direction.
5. Be certain the vehicle is safely secured on jack stands or a vehicle lift prior to working around or under a vehicle. Never rely on a jack alone to support a vehicle's weight; use appropriately rated stands to support the vehicle's frame and any other heavy components.



For Questions or Suggestions, contact our Tech Department (256-442-0607)

Parts List:

Note: Please be sure that you have all the provided parts listed below before continuing with the installation.

Part #	DESCRIPTION:	Quantity
RC-LS600F-FS	6" Front Leaf Springs	2
RC-LS400R-FS	4" Rear Leaf Springs	2
BU-76114-BK	Spring Bushing kit	1
RX-11	Rusty's RX100 Performance Shock: RX-11	4
(PO1532)	EB1 Hourglass Shock Bushing w/ 1/2" Sleeves Pack (Contents Below)	4
EB1	Hourglass Shock Bushing (Qty:1 Per Pack)	
ES-25	1/2" Shock Bushing Sleeve (Qty:2 Per Pack)	
EB1-BP1 (PO1313)	Rusty's Hourglass Shock Bushing w/ Open Bar Pin Pack (Contents Below)	4
EB1	Hourglass Shock Bushing (Qty:1 Per Pack)	
BP18	Open Bar Pin (Qty:1 Per Pack)	
RC-CB1-38	3/8" Tie Bolt	2
RC-CN1-38	3/8" Nut	2
67472167	5/16"-24 Grade 8 Nut	2
RC-UB-4	Rusty's Dana 44 FSJ – U-Bolts - HD Grade 8	2
RC-UB-5	Rusty's Dana 44 Diff. FSJ – U-Bolts - HD Grade 8	4
RC-UB-7	Rusty's Dana 44 - FSJ 10" – U-Bolts - HD Grade 8	2
HN08	1/2" Grade 8 U-Bolt High Nuts	16
	Rusty's Warning Label	1
	Rusty's Decal Pack	1



For Questions or Suggestions, contact our Tech Department (256-442-0607)

Front Installation

Note: Save all factory components and hardware for reuse, unless noted.

1. Properly block and secure the vehicle prior to installation.
2. Raise the vehicle and place jack stands under frame.
3. Remove the tires and wheels.
4. Remove the shocks. Discard the shocks but retain the hardware as it will be re-used.
5. Support the axle with a jack. Remove and discard the front U-bolts. They may be seized, in which case they will need to be cut using a cutoff wheel or similar tool. Retain the U-bolt plates as they will be re-used.
6. Lift up the front axle with a jack to separate it from the springs.
7. Support the spring and remove the bolts from the shackle and frame mount, and remove the spring from the vehicle.
8. With both springs removed, inspect all hardware and replace it with quality Grade 8 fasteners if the original hardware shows signs of wear or rust damage.
9. To install the new Rusty's springs, lube the bolts and position the spring into the frame mount first, then install the spring into the shackle plates. Do not tighten at this time.
10. Lower the axle onto the springs. Be sure that the spring centering pins are lined up properly in the holes of the axle spring pads.
11. Install the U-bolts, spring plates, and nuts.
12. Torque U-bolts to 75 lb.-ft.
13. Torque the 7/16" hardware to 50lb-ft.
14. Torque the 1/2" hardware to 65lb-ft.
15. Torque the 9/16" hardware to 85lb-ft.
16. Install the new Rusty's shocks using the factory hardware. Note that the rod end of the shocks must be at the top.
17. Install the tires and wheels. Remove jack stands and lower vehicle



Rear Installation

18. Jack up the rear at the axle and place jack stands under the frame.
19. Remove the tires and wheels.
20. Remove the shocks. Discard the shocks but retain the hardware as it will be re-used.
21. Remove the "E" clip securing the brake line to the frame mount.
22. Bolt the " Z " bracket to the frame brake line mount using the supplied hardware. Re-form the metal brake hard line as necessary to align it with the lower portion of the "Z" bracket. Secure the brake line to the "Z" bracket using the original "E" clip.
23. If using Rusty's stainless steel brake lines, most FSJ's will have 3/16 lines, if yours has the option of HD towing it may have a ¼ line, in the case it may be required to get a 3/16 to ¼ brass adaptor.
24. Support the axle with a jack and remove the U-bolts. If they are seized, they will need to be cut. Retain the U-bolt plates for re-use. Lower the axle to separate it from the springs.
25. Unbolt the springs from the front frame mounts, then remove the lower shackle bolts.
26. Remove the spring packs from the vehicle.
27. Install the new Rusty's spring pack. Mount the frame end first and then the shackle. Do not tighten at this time.
28. Raise the axle into position. Be sure the spring centering pins are properly aligned with the holes of the axle spring pads.
29. Torque U-bolts to 75 lb.-ft.
30. Torque 7/16 bolts to 50 lb.-ft.
31. Torque 1/2 bolts to 65 lb.-ft.
32. Torque 9/16 bolts to 85 lb.-ft.
33. Install the new Rusty's shocks using the factory hardware. Note that the shocks must be installed with the rod end at the top.
34. Install the tires and wheels, remove the jack stands, and lower the vehicle to the ground.
35. Double-check all hardware involved in the installation for proper torque.
36. Torque the lug nuts to the factory specifications.
37. Cycle the steering lock-to-lock and verify all components have proper clearances and torque.



Final Notes:

Note: Save all factory components and hardware for reuse, unless noted.

At this point there should be no remaining new parts left to be installed except for the stickers.

The vehicle must be professionally aligned to the factory specifications. If necessary the vehicle can be driven a short distance to have the alignment performed. Failure to align the vehicle following installation will cause poor handling and lead to excessive tire wear.

WARNING

It is the owners' responsibility to inspect all Rusty's products for proper torque specs to prevent loosening of components. Seat belts and shoulder harnesses should be worn at all times. Re-check all bolts and nuts after the first 300 miles and after any off-road usage during the first 300 miles. Although all of our products are made from the highest quality materials possible, they are not a substitute for Safe and Careful driving. In other words, have good safe on-road / off-road sense. Know the terrain, the speed limitations, and any obstacles that may lie ahead. Please remember to preserve our right to enjoy public land through the proper use of

