

Rusty's JL Wrangler 392 Engine Skid RA-JS440-392 INSTALLATION INSTRUCTIONS

Last Revised: 12/12/2022

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.

Parts List:

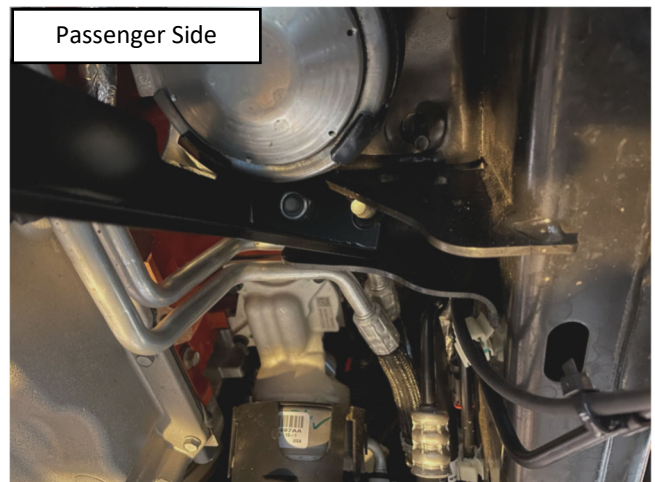
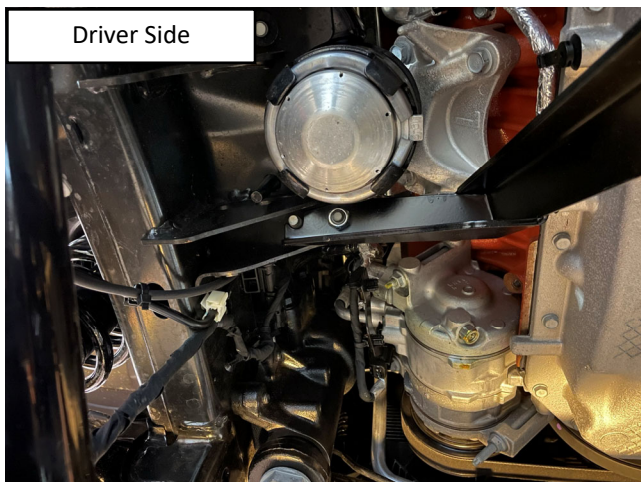
Note: Please be sure that you have all the provided parts listed below before continuing with the installation.

<u>Part #</u>	<u>DESCRIPTION:</u>	<u>Quantity</u>
RA-JS440-392	Rusty's JL Wrangler 392 Engine Skid	1
67486001	M10 x 1.50mm Grade 8 Hex Lock Nut	2
74454620	3/8"-16 x 1-1/4" Length Grade 8 Hex Head Cap Screw	4
05724620	3/8" SAE Flat Washer	8
52593589	3/8" - 16 Grade 8 Hex Lock Nut (Gold Zinc Finish)	4
70994165	M12 x 1.50mm x 40mm Length Hex Head Cap Screw	2
RA-JS-ARW	Rusty's JL Skid Aluminum Rock Washer	2

Installation Instructions

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

1. Park the vehicle on level ground or ensure the vehicle is level on a lift rack.
2. Remove the factory transmission skid plate and the factory transfer case skid plate. (Note: Retain all hardware removed as some will be reused.)
3. Locate and install the supplied Rusty's JL Wrangler 392 Engine Skid Driver Side Mount and Rusty's JL Wrangler 392 Engine Skid Passenger Side Mount. The brackets will be placed up to the forward side of motor mount frame brackets and mount to the studs facing downward. Install the supplied M10 x 1.50mm Grade 8 Hex Lock Nut (1 per side), only starting hardware at this time on the threaded studs located closer to the motor. (Note: DO NOT FULLY TIGHTEN).

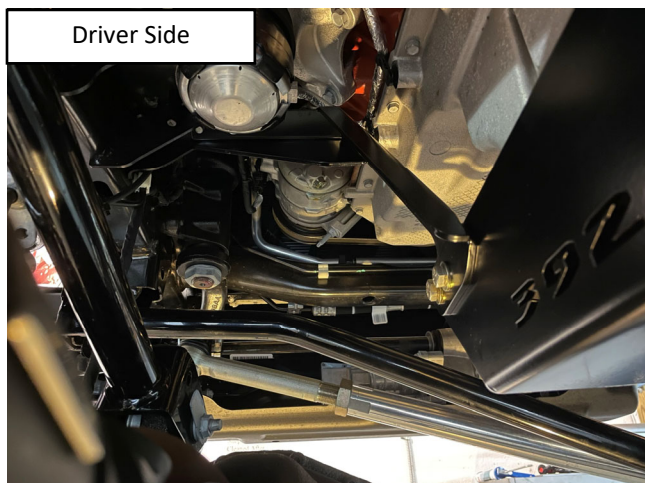


Installation Instructions

4. With the help of an assistant place the engine skid plate into its mounting location, loosely install the supplied M12 x 1.50mm x 40mm Length Hex Head Cap Screw and Rusty's JL Skid Aluminum Rock Washer at the crossmember mounting point. (Note: DO NOT FULLY TIGHTEN). Then have an assistant hold the front of the skid plate to support the weight.



5. Attach the engine skid plate to the Rusty's JL Wrangler 392 Engine Skid Driver Side Mount and Rusty's JL Wrangler 392 Engine Skid Passenger Side Mount by installing the supplied 3/8"-16 x 1-1/4" Length Grade 8 Hex Head Cap Screw (Qty:4) (2 Per Side), 3/8" SAE Flat Washer (Qty:8) (4 Per Side), and 3/8" - 16 Grade 8 Hex Lock Nut (Qty:4) (2 Per Side) at the front mounting points (2 per side), place the washers on the inside of the engine skid plate and start the nyloc nuts. Make sure to position the mounting brackets to the outside of the skid plate as shown in the images below. (Note: DO NOT FULLY TIGHTEN).



Installation Instructions

6. Locate back to the engine skid plate brackets at the frame side and fully tighten the M10 x 1.50mm Grade 8 Hex Lock Nut (1 per side).
7. Locate to the M12 x 1.50mm x 40mm Length Hex Head Cap Screw and Rusty's JL Skid Aluminum Rock Washer at the crossmember mounting points, hand tighten these 2 bolts, make sure it can still move forward or rearward slightly.
8. Tighten all hardware at this time used to install the Rusty's JL Wrangler 392 Engine Skid.
9. Installation is now completed!



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 off-road vehicles. Thank you for choosing Rusty's Off Road Products.