

Rusty's JK Wrangler Engine/Transmission Skid RA-JS2007-JK INSTALLATION INSTRUCTIONS

Last Revised: 9/6/2019

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:

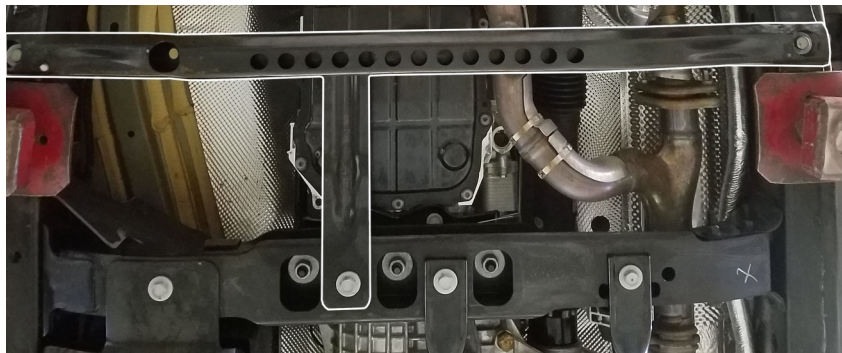
Note: Please be sure that you have all the provided parts listed below before continuing with the installation.

Part #	DESCRIPTION:	Quantity
RA-JS2007-JK	Rusty's JK Wrangler Engine/Transmission Skid	1
RA-JS2007-JK-DSM	Rusty's JK Wrangler Engine/Transmission Skid Driver Side Mount	1
RA-JS2007-JK-PSM	Rusty's JK Wrangler Engine/Transmission Skid Passenger Side Mount	1
RA-JS2007-JK-AP	Rusty's JK Wrangler Engine/Transmission Skid Access Panel	1
RA-JS-ARW	Rusty's JK Skid Aluminum Rock Washer	4
70994165	M12 x 1.50mm x 40mm Length Hex Head Cap Screw	3
67560201	1/4"-20 x 3/4" Length Flat Head Socket Cap Screw	4
87915179	3/8"-16 x 1" Length Grade 8 Hex Head Cap Screw	6
05724620	3/8" SAE Flat Washer	12
52593589	3/8" - 16 Grade 8 Hex Lock Nut	6
05728100	1/2"-13 x 1 Length Grade 8 Hex Head Cap Screw	1
87919650	1/2" x 1-3/8" O.D. Flat Washer	1
67488965	1/2"-13 Grade 8 Hex Lock Nut	2
05724646	1/2" SAE Flat Washer	1
05728308	1/2"-13 x 3" Length Grade 8 Hex Head Cap Screw	1

Installation Instructions

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

1. Remove the factory crossmember outlined in the image below from the vehicle by removing the 3 bolts that secure it to the frame and transmission/transfer case crossmember with the use of a 18mm socket.



Installation Instructions (Continued)

2. Locate the supplied Rusty's JK Wrangler Engine/Transmission Skid Passenger Side Mount and loosely install with the supplied 1/2"-13 x 1 Length Grade 8 Hex Head Cap Screw (Qty:1), 1/2" x 1-3/8" O.D. Flat Washer (Qty:1), and 1/2"-13 Grade 8 Hex Lock Nut (Qty:1) to the bottom side of the passenger side motor mounting bracket as shown below. (**Note: DO NOT FULLY TIGHTEN.**)



Passenger Side
Mounting Bracket



3. Locate the supplied Rusty's JK Wrangler Engine/Transmission Skid Driver Side Mount and loosely install with the supplied 3/8"-16 x 1" Length Grade 8 Hex Head Cap Screw (Qty:2), 3/8" SAE Flat Washer (Qty:4), and 3/8" - 16 Grade 8 Hex Lock Nut (Qty:2) to the bottom side of the driver side motor mounting bracket as shown below. (**Note: DO NOT FULLY TIGHTEN.**)

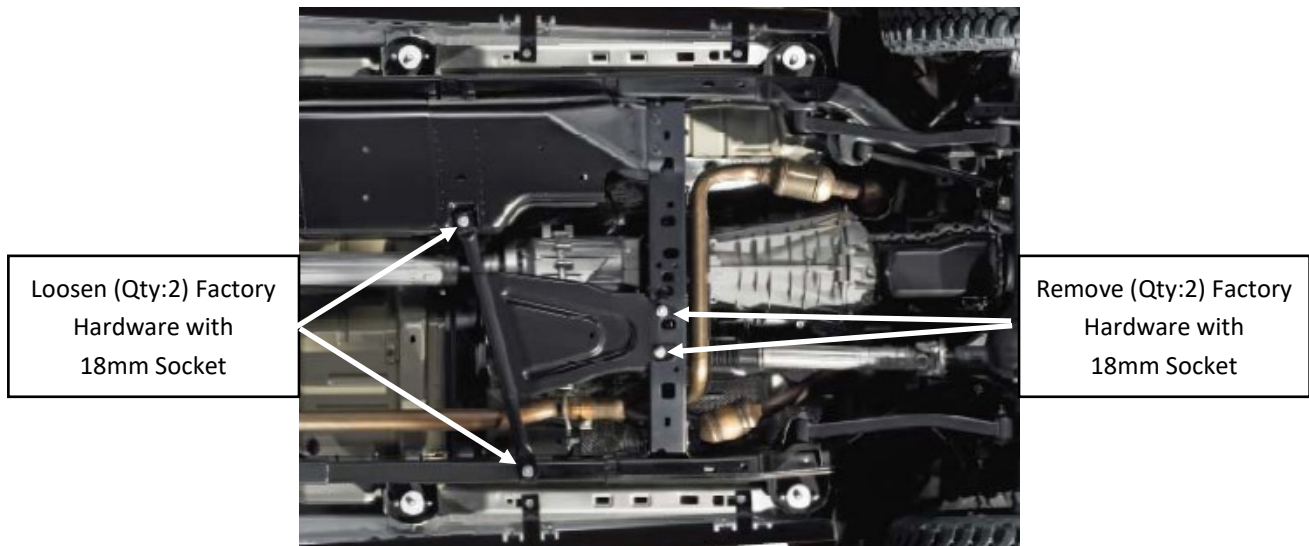


Driver Side
Mounting Bracket

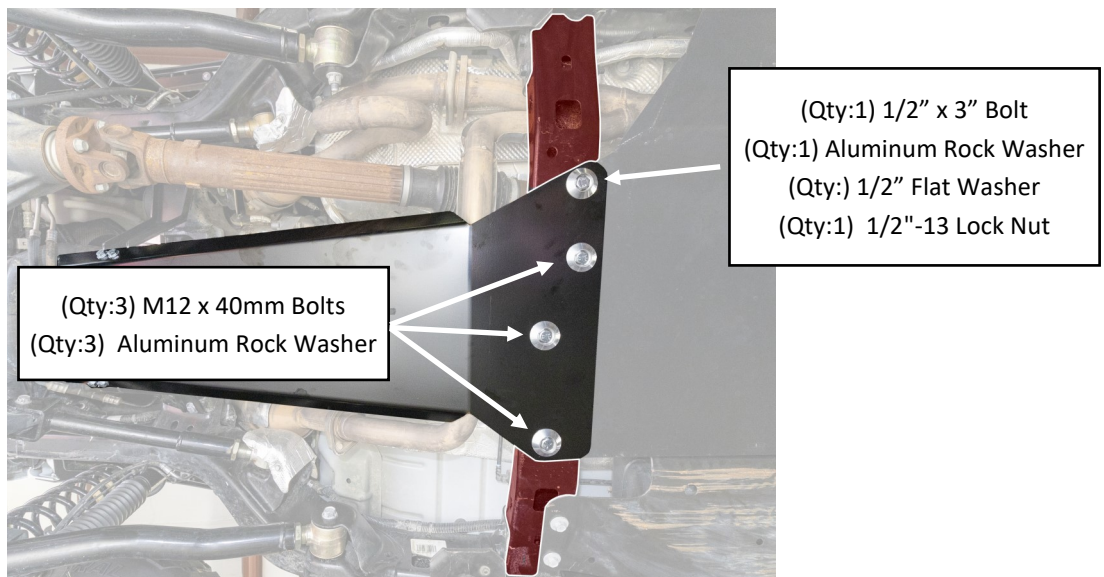


Installation Instructions (Continued)

4. Remove the two bolts that secure the factory transfer case skid plate to the transmission crossmember by removing the two bolts that secure it to the crossmember with the use a 18mm socket. Loosen the two bolts located at the frame and fuel tank just enough to allow a gap of at least 1/2" to 1" in order to be able to install the new Rusty's JK Wrangler Engine/Transmission Skid directly against the crossmember. (**Note:** If you have already installed a Rusty's JK Wrangler Transfer Case Skid Plate (Part# [RA-JS818-JK](#)) you will only need to remove the hardware that attaches the skid to the crossmember since the skids will be mounted using the same mounting points of the crossmember.)



5. With the help of any assistant place the Rusty's JK Wrangler Engine/Transmission Skid into position and loosely install the supplied hardware as marked below. (**Note:** DO NOT FULLY TIGHTEN). Then have an assistant hold the front of the skid plate to support the weight.



Installation Instructions (Continued)

6. Attach the Rusty's JK Wrangler Engine/Transmission Skid to the Rusty's JK Wrangler Engine/Transmission Skid Driver Side Mount and Rusty's JK Wrangler Engine/Transmission Skid Passenger Side Mount by installing the supplied 3/8"-16 x 1" 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. (**Note: DO NOT FULLY TIGHTEN**).
7. Tighten the hardware to the recommended torque specification according to the chart below. It is suggested to tighten the hardware at the crossmember first and then tighten the hardware at the motor mounts.

Hardware Size	Torque Value
3/8"	30 ft.lb.
12mm	70 ft.lb
1/2"	75 ft.lb.

8. Installation is now complete.

WARNING

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