

www.rustysoffroad.com

Rusty's XJ Front Steel Fender Flares RA-MF501-XJ INSTALLATION INSTRUCTIONS

Last Revised: 3/17/2019

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 an any other heavy components.





www.rustysoffroad.com

Parts List:

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

Part #	DESCRIPTION:	Quantity
RA-MF501-XJ-DS	Rusty's XJ Front Driver Side Steel Fender Flare	1
RA-MF501-XJ-PS	Rusty's XJ Front Passenger Side Steel Fender Flare	1
RA-MF501-XJ-DS-FFB	Rusty's XJ Front Driver Side Front Fender Bracket	1
RA-MF501-XJ-PS-FFB	Rusty's XJ Front Passenger Side Front Fender Bracket	1
RA-MF501-XJ-DS-RFB	Rusty's XJ Front Driver Side Rear Fender Bracket	1
RA-MF501-XJ-DS-RFB	Rusty's XJ Front Passenger Side Rear Fender Bracket	1
67563122	1/4"-20 x 1" Length Button Head Cap Screw	8
67563080	1/4"-20 x 3/4 Length Button Head Cap Screw	22
67483768	1/4"-20 Serrated Flange Nut	30
67317800	1/4" x 1-1/4" O.D. Fender Washer	30
67379362	3/8"-16 x 1" Thread Cutting Screw	4
74454620	3/8"-16 x 1-1/4" Length Grade 8 Hex Head Cap Screw	2
52593589	3/8" - 16 Grade 8 Hex Lock Nut	2
05724620	3/8" SAE Flat Washer	4

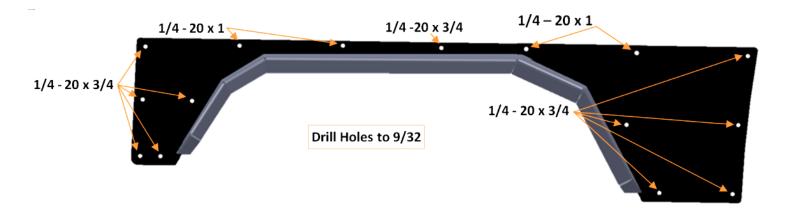


www.rustysoffroad.com

Front Installation Instructions

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

- 1. Remove the factory fender flares. The hardware is accessible from the inside of the fender. Remove the plastic inner fender liner by pulling the plastic push in retainers. The inner fender liner will not be reused.
- 2. Position the HD fender flares on their respective driver and passenger sides. They will be labeled on the back side. Have an assistant place the HD fender flares against the front fender. Ensure the HD fender flare is lined up properly with all body lines.
- 3. Once positioned properly, have an assistant to press the HD fender flares against the body and mark all holes to be drilled. Use a marker to trace the bottom of the flare wheel well opening on the body. A fine point Sharpie works the best for this step.
- 4. Remove the HD fender flares from the fender. Use a center punch to center the drilling points on all holes. Drill all points to 9/32". Deburr the outside and inside of all drilled holes.
- 5. The marked cut lines made on the step 3 will now be cut. The front should be cut horizontally 0 degrees inline with the front clip/headlight bezel. Next cut right above the marked cut lines. The rear portion of the front fender can be cut to cosmetic preference. Be sure to leave atleast one mounting point at the rear bottom portion of the front fender. We recommend the use of a body saw, but the cuts can be made with the tool you are most comfortable with, such as a cutoff wheel, plasma cutter, sawzall, etc.



- 6. Paint all exposed material with a quality enamel, and apply wax to the fender before moving on.
- 7. Place the HD fender flares back in place, and using the bolt placement guide install all 1/4-20 x 3/4" stainless allen head bolts. The fender washers and flange nuts should be installed from the inside. Start bolts only. Do not fully tighten at this time.



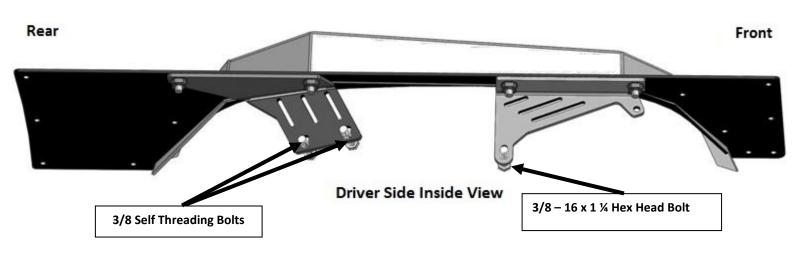


www.rustysoffroad.com

Front Installation Instructions (Continued)

8. Locate the inner fender gussets and position them as shown in Drawing 2. Install the 1/4-20 x 1" bolts, this will hold the gussets in place, and install the fender washer and flange nuts. Do not fully tighten at this time.

Drawing #2



9. With the inner fender gussets installed and all fender mounting points slightly tightened, refer to picture below. The front gusset will line up with an existing hole. Inside the to the engine compartment, it may be necessary to remove the windshield washer fluid reservoir to gain access to this mounting point. Drill the pre-existing hole to 3/8" and install the 3/8" x 1 ¼" bolt, washer, and nut. Torque to 45 lb-ft. Reinstall any underhood components removed to access this mounting point.



Drill factory hole to 3/8" (Pre-existing hole) 3/8" – 16 x 1 ¼" Hex Head Bolt Create a 5/16" hole 3/8" Self Threading Bolts





www.rustysoffroad.com

Front Installation Instructions (Continued)

- 10. The rear fender gusset will bolt to the outermost inner fender stamped material. Press upward on the fender gusset and mark/center punch the two mounting points. Drill the two holes to 5/16". Install the 3/8" self tapping bolts at both points and fully tighten. Use caution to not overtighten the bolts, as they will strip easily.
- 11. Ensure the HD fender flare is aligned correctly forward and back, and up and down Fully tighten all 11 mounting points. Torque to 14 lb-ft.
- 12. The front fender gusset has a tab present in it. This is a rock light mounting point. This light mounting point will require a light less than 3" in diameter.
- 13. Repeat these steps on the other side.
- 14. Installation is now completed!

Final Notes

At this point there should be no parts left but installing the stickers. The vehicle will need to have an alignment as soon as possible, if you don't you may get the "death wobble", poor tire wear or just a bad handling vehicle.

Alignment Recommended Specifications

• Toe: Should be set at 0 to 1/32" Toe Out

Castor: 7.5 Degrees Positive

Camber: 0

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.





www.rustysoffroad.com

Rusty's XJ Cherokee Rear Steel Fender Flares RA-MF502-XJ INSTALLATION INSTRUCTIONS

Last Revised: 12/21/2016

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 an any other heavy components.





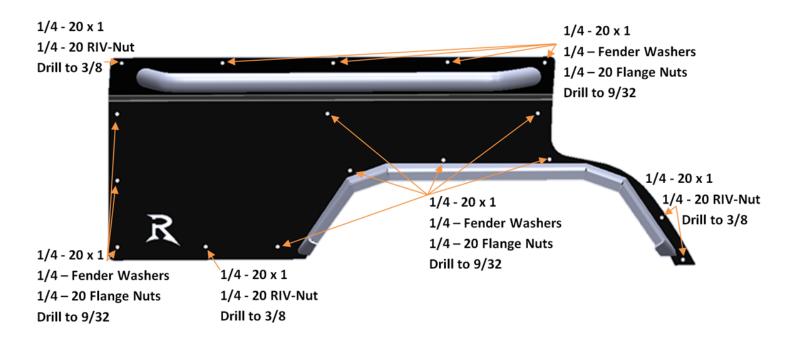
www.rustysoffroad.com

Parts List

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

Part #	DESCRIPTION:	Quantity
RA-MF502-XJ-DS	Driver Side Rear HD Fender	1
RA-MF502-XJ-PS	Passenger Side Rear HD Fender	1
RA-MF502-XJ-GC	Gas Cap Cover	1
67563122	1/4" -20 x 1" Button Head Socket Cap Screw (Stainless Steel)	34
08411266	1/4"-20 UNC Thread Insert	8
67483362	1/4"-20 UNC Serrated Flange Nut	26
87920112	1/4" x 1" O.D. Fender Washer	26
09331745	1/4"-20 UNC Manual Threaded Insert Installation Tool	1
n/a	1/8" Black Blind Rivets	4

Installation Diagram





www.rustysoffroad.com

Installation Instructions

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

- 1. Locate the HD fender flares on the respective driver and passenger side of the XJ.
- 2. Remove the factory fender flares.
- 3. Position the HD fender flares on the XJ. Determine if there are emblems or molding that will need to be removed. Remove any interfering items at this time.
- 4. Remove the rear taillights to gain entry to the inner rear quarter panel.
- 5. Remove the interior rear cargo panel to also gain entry to the inner rear quarter panel.
- Using an assistant, position the HD fender flares on the XJ. Align the bend lines in the flares to the body lines and align the front and back edges with the body as well. Double-check the positioning of the flares to ensure correct placement.
- 7. Have an assistant apply pressure to the HD fender flares against the body. Mark and center punch the body in all mounting points. Use a marker to trace the inner wheel opening of the HD fender flares on the body.
- 8. Remove the HD fender flares. The trace line will serve as a guide where the body needs to be trimmed. We strongly recommend not cutting beyond the pinch weld point. The body should be cut in a linear fashion from pinch weld to pinch weld in one cut, or in numerous vertical cuts up to the pinch weld, with the material then folded under the inner fender well. The method used is a matter of personal preference, along with the tool of choice to make the cut. We recommend the use of a body saw for best results, but a cutting wheel, sawzall, or similar tools can be used.
- 9. Smooth any sharp edges, then prep and paint the cut exposed material.
- 10. Refer to the drawing at the beginning of these instructions, which notes the drill size needed for the mounting points. Be sure all points are drilled to the size noted in the diagram. Do not drill any deeper than ¾". Once drilled, deburr the holes to ensure a smooth mounting surface.
- 11. Install the riv nuts in the 3/8" drilled holes (4 on each side). A riv nut installation tool is provided. Refer to the instructions included with the tool for proper use.
- 12. Using an assistant, position the HD fender flare back in place. Locate the supplied hardware and install all bolts. Note that the drawing will state the bolt, nut, washer placement. Do not fully tighten at this time.
- 13. Note that there is a slight bow in the body. To ensure correct fitment, tighten the bolts in an alternating circular pattern to draw the flare against the body.
- 14. The four mounting points using the riv nuts should be tightened by feel, roughly 14 lb-ft. Once tightened, move to all other points and torque to 14 lb-ft.
- 15. *Driver Side Only* Locate the supplied gas cap cover on the gas cap door. Align and mark/center punch the 4 hole pattern. These 4 holes will be drilled to 1/8", do not drill any deeper than ½". Rivet the gas cap cover to the door.





www.rustysoffroad.com

Installation Instructions (Continued)

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

- 16. Reinstall the inner cargo panel and tail light.
- 17. Repeat steps on the opposite side of the vehicle.
- 18. Installation Completed!

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.

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.

