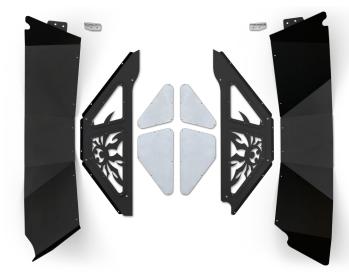


JK Rear Inner Fenders

IMPORTANT: Thank you for purchasing this Poison Spyder product. Please read through this entire document before proceeding with installation. If you are not confident in your mechanical skills, please seek the help of a professional to perform the installation. Check your packages immediately upon arrival to ensure that everything listed is included, and to check for damage during shipping. If anything is missing or damaged, or if you need technical assistance with any aspect of this installation, call Poison Spyder at (951) 849-5911 as soon as possible. This document last updated March 2017.

APPLICATIONS

These installation instructions apply to the following Poison Spyder products:



17-05-080 JK Rear Inner Fender Kit

17-05-080P1 JK Rear Inner Fender Kit - Black (shown)

PARTS LIST

Please check your packages immediately upon arrival to ensure that everything listed is included, and to check for damage during shipping. If anything is missing or damaged, call Poison Spyder at (951) 849-5911 as soon as possible. The ID numbers for each item correspond to the diagram on the following page.

- (1) JK Rear Inner Fender Panel Left PN: 17-05-080-02L
- (1) JK Rear Inner Fender Arch Left PN: 17-05-080-01L
- (1) JK Rear Inner Fender Front Lower Brace Left PN: 17-05-080-03
- (1) JK Rear Inner Fender Panel Right PN: 17-05-080-02R
- (1) JK Rear Inner Fender Arch Right PN: 17-05-080-01R
- (1) JK Rear Inner Fender Front Lower Brace Right PN: 17-05-080-03M

- (2) JK Rear Inner Fender Fill Plate Front PN: 17-05-080-04
- (2) JK Rear Inner Fender Fill Plate Rear PN: 17-05-080-05
- (2) Edge Trim 48" PN: X2013WB
- (1) JK Rear Inner Fender Hardware Kit PN: HWKIT-17-05-080 includes:
 - (17) 1/4-20 X 3/4 SS Button Head Cap Screw
 - (16) 1/4-20 Nut-Sert
 - (1) 1/4" SAE High Strength Flat Washer
 - (1) 1/4-20 Gr8 Nylon Insert Lock Nut
 - (12) #10-24 Nut-Sert
 - (12) #10-24 X 3/4 SS Button Head Cap Screw
 - (26) #6-32 X 1/2 SS Button Head Cap Screw
 - (26) #6-32 SS Nylon Insert Lock Nut
 - (26) #6 SS SAE Flat Washer
 - (1) 1/4-20 Nut-Sert Install Tool includes:
 - (1) 1/4-20 X 2 Gr5 Hex Head Cap Screw
 - (2) 1/4" SAE Hardened Flat Washer
 - (1) 5/16-18 X 1-1/8 Coupling Nut
 - (1) 1/4-20 Nut-Sert
 - (1) #10-24 Nut-Sert Install Tool includes:
 - (1) #10-24 X 1-1/2 Gr5 Hex Head Cap Screw
 - (2) #10 SAE Hardened Flat Washer
 - (1) 1/4-20 X 7/8 Coupling Nut
 - (1) #10-24 Nut-Sert

TOOLS NEEDED

- Mechanic's tool set
- Drill motor with 1/4" & 25/64" drill bits
- Professional nut-sert installation tool (optional)

BEFORE YOU BEGIN

If necessary, remove rear tires to provide adequate access to the rear wheel well area. Removing the tires may not be necessary on Jeeps with tall suspension lifts (as with our test-fit Jeep in the following photos). If you do remove the tires, make sure the Jeep's rear axle is sitting firmly on jack stands, NOT the jack that was used to lift it.

Identify each piece from the kit and lay them out together. Determine which of the Inner Fender Panels and Inner Fender Arches go on the left (driver) side and right (passenger) side.

The Inner Fender Panels are the pieces with the Spyder logo cut-out. They sit into the wheel well with the beadrolled feature and the edge flanges sticking out (away) from the back of the wheel well, and with the dip along the lower (long) edge oriented toward the front of the vehicle.

Once the left and right Inner Fender Panels have been identified, determine which of the Inner Fender Arch pieces go with them by aligning the six bolt hole locations in the Arches with the corresponding holes in the Inner Fender Panels (do not bolt them together at this time.

INSTALL PROCEDURE

- 1. Park vehicle on a level surface and set the emergency brake. Wear eye protection beyond this point.
- 2. Install #10-32 Nut-Serts into the pre-existing holes in the flanges of the Inner Fender Panels (6 holes/nut-serts per panel). The nut-serts are to be inserted through the flange in the orientation shown below, with the flush-flange of the nut-sert on the side of the panel's flange that is on the inside of the bend angle.



NOTE: It is HIGHLY RECOMMENDED to invest in a professional nut-sert installation tool, such as the Marson Giant Threadsetter, available from online tool sellers. The professional tool will make the installation of nut-serts MUCH easier than using the free tool included in this kit, and it will come in handy with future product installations as well. If using a professional nut-sert installation tool, follow the directions that came with the tool and skip the next three steps of these instructions.



The simple "tool" included with this product is admittedly frustrating to use, however it will work for those with patience who would like to save the cost of purchasing the professional tool. If using the simple tool included with this product, continue through the following steps (ignore that the photos show a different product—the procedure is the same).



3. The provided nut-sert install tool consists of a bolt, two washers and a coupler (long) nut. Assemble these items as shown (bolt—washer—coupler nut—washer—nut-sert). Insert the nut-sert end into the hole you drilled.



4. Use an open end wrench to hold the coupler nut stationary while turning the head of the bolt clockwise with a ratchet (or small impact wrench) and socket. As you turn the ratchet, the bolt will draw the far end of the nut-sert toward the inside of the sheet metal, gripping it with the knurled outside edge of the nut-sert as it deforms. Continue to turn the ratchet until the nut-sert is fully seated. DO NOT OVER-TIGHTEN as you can damage the nut-sert, or cause it to lose its grip.



5. Once the nut-sert has seated correctly, loosen the bolt then remove it and the rest of the tool from the nut-sert. Install a new nut-sert onto the tool, oriented the same as the last, and set it aside until your next nut-sert installation. Inspect the nut-sert to make sure it is properly seated and that the surrounding sheet metal isn't excessively deformed. Note that some deformation of the sheet metal is normal, and that it will be covered by the part after installation.



After the nut-serts have been installed into the Inner Fender Panels, it is recommended to work on one side of the Jeep at a time. We suggest starting with the left (driver's) side first, as the following photos correspond to that side. When the left side is completely installed, then move to the right (passenger) side and repeat the process.

6. There are three existing holes (on each side) in the Jeep's wheel well that will need to be drilled out to a larger size. The first of these is at the back of the wheel well, as shown:



On the driver side, this hole is very close to the fuel filler hose. When drilling, be very careful to not contact or puncture the fuel filler hose, especially when the drill bit "breaks through", and the pressure you are applying to the drill motor may cause the bit to slip suddenly forward. To prevent this, decrease pressure before the bit finally breaks through.



7. The next existing hole to be drilled out is located at the opposite end of the wheel well, above where the frame rail bends downward, as shown below. Drill this hole out to 25/64"



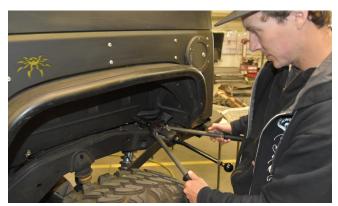
8. The third existing hole to be drilled out is located along the lower edge of the forward wall of the wheel well, as shown:



9. Drill this hole out to 25/64"



10. Install a 1/4-20 nut-sert into each of the three holes just drilled out to 25/64". Again, we recommend the use of a professional nut-sert installation tool.



If you would rather use the more rudimentary "tool" we have supplied in the kit, refer back to the nut-sert installation procedure explained earlier in these instructions.

11. Pre-install the Inner Fender Panel into the wheel well as shown. The two holes along the lower (long) edge of the panel will line up with two of the nut-serts installed in the previous step.



Use the supplied 1/4-20 SS Button Head Cap Screws at these two locations to hold the panel firmly in place.



12. Use the installed Panel as a drill guide to drill 5/16" holes into Jeep's wheel tub sheet metal, at locations denoted by the two holes at the top of the Panel.

NOTE: Be very careful when drilling into the Jeep's wheel tub, that you don't damage or drill through any interior fascia, cover, or carpeting. Remember to let up pressure on the drill motor before the bit breaks through.



13. Remove the two SS Button Head Cap Screws that had temporarily held the Inner Fender Panel in place, and remove the Inner Fender Panel.



14. Drill the two new holes (that were pilot-drilled in the previous steps) out to 25/64". Again, be careful to reduce pressure before the bit breaks through, to avoid damage to interior coverings.



15. Install a 1/4-20 nut-sert into each of the two new holes just drilled out to 25/64". Again, we recommend the use of a professional nut-sert installation tool.



If you would rather use the more rudimentary "tool" we have supplied in the kit, refer back to the nut-sert installation procedure explained earlier in these instructions.

16. Locate the JK Rear Inner Fender Front Lower Brace - Left and -Right, and install 1/4-20 nut-serts into the two larger holes in each of the braces. Each brace has four holes, two on each flange. The nut-serts are inserted into the two larger holes (on the same flange), with the flush side of the installed nut-sert oriented toward the outside of the 90-degree bend in the Brace (see the photo below). Again, we recommend the use of a professional nut-sert installation tool.



If you would rather use the more rudimentary "tool" we have supplied in the kit, refer back to the nut-sert installation procedure explained earlier in these instructions.

17. Identify which of the two brackets is the "- Left" (driver side) one. It is shown in the photo below. The "-Right" (passenger side) one is similar but mirrored.



18. Install the JK Rear Inner Fender Front Bracket - Left into the front wall of the driver side wheel well. Start by using one of the supplied 1/4-20 X 3/4 SS Button Head Cap Screws, through the right-side hole (see the photo below) into the 1/4-20 nut-sert that was installed in a previous step.



19. Tighten the Button Head Cap Screw while making sure that the bottom edge of the bracket stays parallel with the bottom edge of the wheel well sheet metal. Make sure the fastener is tight and the bracket is snug.



20. Use the remaining hole in the bracket as your drill guide to drill a 5/16" hole through the wheel well sheet metal. While drilling, be mindful that the bracket doesn't move and allow the bit to "walk". Be careful as the drill bit breaks through, that it doesn't catch and deform the hole.



21. Loosen the single Button Head Cap Screw, and swing the bracket down and out of the way, allowing access to the hole that was just drilled through the wheel

well sheet metal. Re-drill this hole out to 25/64", being careful as the bit makes its final break-through, that it doesn't catch and deform the metal.



22. Install a 1/4-20 nut-sert into the hole that was just drilled out in the previous step. Again, we recommend the use of a professional nut-sert installation tool.



If you would rather use the more rudimentary "tool" we have supplied in the kit, refer back to the nut-sert installation procedure explained earlier in these instructions.

23. Swing the bracket back into place and secure it with a second 1/4-20 X 3/4 SS Button Head Cap Screw, through the remaining hole, into the 1/4-20 nut-sert that was installed in the previous step. Make sure both cap screws are tight.



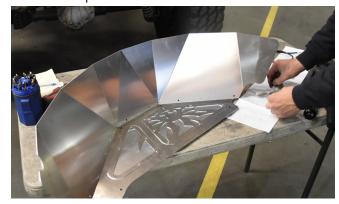
24. Install the JK Rear Inner Fender Fill Plates (-Front and -Rear) into the JK Rear Inner Fender Panel. They will fit into the slight depressions formed by the bead-rolled feature, on the back-side of the Inner Fender Panel.



25. Use the supplied #6/32 X 1/2 SS Button Head Cap Screws to attach the Fill Plates. Orient the fasteners with the screw heads to the outside of the Inner Fender Panel (as shown in the photo below) with a supplied #6 SS Flat Washer and #6-32 Nylon Insert Lock Nut on the back side. Leave each fastener loose until they are all installed, then tighten them in an alternating crossing pattern.



26. Attach the JK Inner Fender Arch - Left to the JK Inner Fender Panel - Left. Note that the - Left (driver's side) pieces have corresponding cut-outs where they meet toward the rear of the assembly (see photo below), to clear the fuel filler hose on the Jeep. The Arch piece should be set to the inside of the bolt flanges on the Inner Fender Panel, as shown in the photo below.



27. Use the supplied #10-24 X 3/4 SS Button Head Cap Screws and #10-24 Nylon Insert Lock Nuts to attach the Arch to the Panel. Orient them so that the screw heads are toward the outside, as shown in the photo below. There are 6 screws used for each Arch/Panel assembly. Leave

them all loose until all 6 are installed. Then tighten the center two first, followed by the next two to either side, until all are tight.



28. Install the supplied Edge Trim along the edge of the Inner Fender Arch. There is a pre-applied adhesive inside the crease of the edge trim.



Press the edge trim firmly onto the edge of the sheet metal in order to properly seat it as well as activate the adhesive. Trim the Edge Trim as needed.



29. Place the Inner Fender assembly into the Jeep's rear wheel well. It may require some finesse--and a firm push are two--to get the assembly into position. It may work bast to tilt the assembly so that the Arch portion is tilted upward as the assembly is slid up into the wheel well, behind the outer sheet metal of the Jeep's body. Then the assembly can be rotated into place by tilting the Inner Fender Panel side upward.



30. Install the supplied 1/4-20 X 3/4 SS Button Head Cap Screws at each of the four hole locations in the Inner Fender Panel. There are two along the top and two along the bottom. Leave them slightly loose.



31. Install the supplied 1/4-20 X 3/4 SS Button Head Cap Screws into the two locations at the bottom of the forward panel of the Inner Fender Arch.



- **32. Tighten all of the fasteners** that were installed in the previous two steps.
- **33. Repeat the procedures to install** the JK Rear Inner Fender Right on the passenger side of the Jeep.

Congratulations, you have completed the installation of your Poison Spyder JK Rear Inner Fenders!