



# TJ Rear Stinger Tire Carrier

**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 February 2016.

## APPLICATIONS

These installation instructions apply to the following Poison Spyder products:



14-13-020 TJ Rear Stinger Tire Carrier

## 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.

- (1) Rear Stinger Tire Carrier Main Assembly
- (1) Lower Mount Plate
- (1) Right Upper Corner Mount
- (1) Left Upper Corner Mount
- (1) 3-Way Spare Tire Strap
- (8) Urethane bushing
- (2) Thick wall bushing insert
- (2) Thin wall bushing insert
- (1) Rear Stinger Tire Carrier Hardware Kit  
 PN: HWKIT-14-13-020 includes:
  - (8) 3/8-16 X 3/4 SS Flat Head Cap Screw
  - (4) 3/8-16 X 1 SS Button Head Cap Screw
  - (12) 3/8-16 Gr8 Nylon Insert Lock Nut

- (12) 3/8" SAE Hardened Flat Washer
- (4) 5/8" SAE Hardened Flat Washer
- (2) 5/8-18 X 4-1/2 Gr8 Hex Head Cap Screw
- (2) 5/8-18 Gr8 Nylon Insert Lock Nut
- (4) 1/4-20 X 3/4 SS Button Head Cap Screw
- (4) 1/4" SAE Hardened Flat Washer
- (4) 1/4-20 Gr8 Nylon Insert Lock Nut
- (4) 7/16" SAE Hardened Flat Washer
- (2) 7/16-14 X 1 Gr8 Hex Head Cap Screw
- (2) 7/16-14 Gr8 Nylon Insert Lock Nut
- (2) 1/2" X 4-3/4 Hitch Pin with Clip

## TOOLS NEEDED

- Drill motor with 3/8" drill bit
- 7/32 hex key
- 9/16 wrench
- 13/16 wrench
- 7/8 wrench

## BEFORE YOU BEGIN

The bare steel components of the Rear Stinger Tire Carrier kit should be powder coated or painted prior to installation. If powder coating, be sure to not install the urethane bushings until AFTER the parts have been powder coated, but make sure the coater masks the inside of the bushing cavities as the thickness of the powder coat may make installation of the bushings difficult.

If painting the components, thoroughly wash and prep the bare metal components, then apply a quality metal-etching primer, followed by the paint color of your choice.

Remove the existing tire carrier and rear bumper prior to beginning this install. The removal procedure of any existing rear bumper is not included in these instructions. Retain the OE bolts that thread into the bottom of the Jeep's frame to hold the OE bumper on. They will be re-used.

These instructions assume that Poison Spyder Crusher Corners™ have already been installed.

**INSTALL PROCEDURE**

1. **Park vehicle on a level** surface and set the emergency brake. You will want to wear eye protection beyond this point.
2. **Install the Lower Mount Plate** to the Jeep's rear frame/cross member using the supplied stainless steel flat head cap screws, flat washers and lock nuts. Use the hole locations that correspond to existing holes in the Jeep's frame. Use the OE hardware in the two bolt locations along the bottom of the Lower mount Plate, at the underside of each frame rail.
3. **Note that several of the** hole locations do not have a corresponding hole through the Jeep's frame. Use the drill motor and 3/8" drill bit to drill through the frame at these locations, using the Lower Mount Plate as your drill guide. Before you begin to drill, check behind the frame cross member at each hole location to make sure it is clear of any wires or other components. The fuel tank is located in this area, be careful when drilling not to punch through to the fuel tank.
4. **Apply some paint to the** bare metal around the edges of the new holes just drilled, to discourage rust.
5. **Install the remaining stainless steel** flat head cap screws, washers and lock nuts into the new hole locations.
6. **Install the Upper Corner Mounts** to the upper rear corners of the Jeep. Note that the countersunk hole locations in the Upper Corner Mounts correspond with existing mounting hardware for your Crusher Corners. Remove the existing hardware from these holes, and use the supplied 3/8-16 X 1 stainless steel button head cap screws with flat washers and lock nuts to secure the Upper Corner Mounts. Leave this hardware loose until after installing the Rear Stinger.
7. **Install the urethane bushings into** each of the four bushing sleeves on the Rear Stinger assembly. Push the narrow end of the bushing into the sleeve until the wider flange is seated against the edge of the sleeve tube. Put two bushing halves into each sleeve tube, one from each side. You may need to carefully use a rubber mallet to tap the bushings into the sleeves.
8. **Note that there are two** THIN wall inner bushing sleeves and two THICK wall inner bushing sleeves. Insert the thin wall inner bushing sleeves into the lower bushings in the Rear Stinger. Insert the thick wall inner bushing sleeves into the upper bushings. You may need to carefully use a rubber mallet to tap the inner bushing sleeves into the bushings.
9. **Insert the lower bushings of** the Rear Stinger into the bushing tabs on the Lower Mount Plate. Do this with the upper end of the Rear Stinger resting on the floor. Use the 5/8-18 Grade 8 hex head cap screws, 5/8" flat washers and 5/8-18 lock nuts to attach the Rear Stinger to the Lower Mount Plate, through the tabs and bushings. Tighten the 5/8" hardware enough to secure the Rear Stinger but leave it slightly loose enough to allow the Stinger to swing up and down.
10. **Fold the Rear Stinger upward**, until the upper bushings meet the mounting tabs in the Upper Corner Mounts. You may need to slightly adjust the Upper Corner Mounts to allow the bushings to swing easily into the tabs. Test for proper fitment with the supplied hitch pins and cotter pins. Once everything is satisfactorily aligned, tighten the hardware for the Upper Corner Mounts. Remove the hitch pins and fold the Rear Stinger back down.
11. **Roll your spare tire onto** the Rear Stinger and lay it down with the outside of the wheel facing down. Push the tire against the tire stop on the Rear Stinger.
12. **Place the 3-way Spare Tire** Strap over the spare tire, with the two lower ends (with metal mounting tabs) draped over each side of the tire, and the upper end (with the ratchet mechanism) draped over the end of the tire that is farthest from the Jeep.
13. **Use the supplied 7/16-14 X 1** Gr8 Hex Head Cap Screws, flat washers and lock nuts to secure each of the metal mounting tabs of the 3-Way Spare Tire Strap to the corresponding tabs on each side of the Rear Stinger. Do not fully tighten this hardware yet.
14. **Pass the upper strap of** the 3-Way Spare Tire Strap through the small loop at the upper end of the Rear Stinger, then back through the buckle.
15. **Adjust the three straps until**, when tight, the center ring is located near the center of the tire. Once the strap is adjusted correctly, and tightened, finish by tightening the hardware that attaches the two lower straps to the tabs on the Rear Stinger.
16. **Test operation by folding the** Rear Stinger, with tire mounted, upward and installing the hitch pins into each Upper Corner Mount. Insert the hairpin cotter pins into the holes in each hitch pin to keep them in place while in use.

*Congratulations, you have completed the installation of your Poison Spyder Rear Stinger Tire Carrier!*