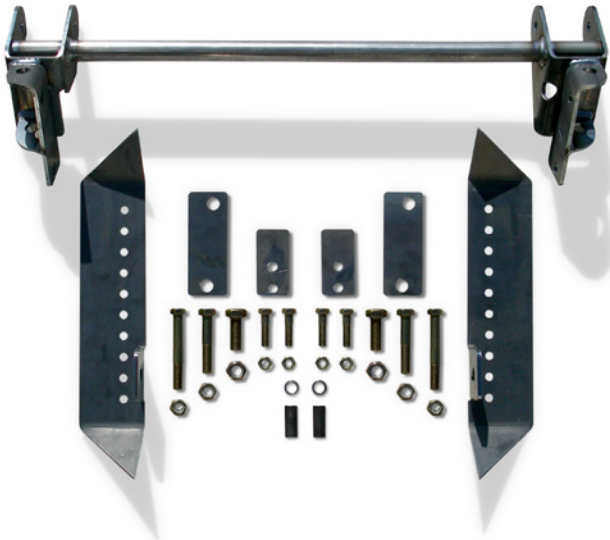


CJ FULL WIDTH CONVERSION KIT



The Poison Spyder Customs Full Width Axle Conversion Kit is designed to mount full width axle assemblies underneath '76 to '86 Jeep CJ's (CJ-5, CJ-7 & CJ-8). The kit is designed to fit axles with leaf spring perches that measure 31-1/4" center-to-center. This includes most Chevy, Ford, full-size Jeep and Scout front axles.

The bolt-on front outboard bracket locates the front spring perches outboard by the correct amount, while also providing for the shackle reversal. The kit is designed to be used with 2-1/2" wide leaf springs, but narrower springs can be used with spacers (not provided). The front bracket also moves the front axle 1" forward of the stock position to assist in tire clearance as the axle rotates rearward under compression.

The rear weld-on bracket locates the rear shackle hangers outboard and allows for 10 different shackle hanger mounting positions.

PARTS LIST

- (1) Front outboard bracket
- (1) Driver side rear outboard bracket
- (1) Passenger side rear outboard bracket
- (2) Frame spacer
- (2) Shackle hanger spacer
- (2) 1/4" X 5/8" spacer
- (2) Frame sleeve

- (4) 1/2-20 X 2" Gr. 8 hex head cap screw
- (2) 9/16-18 X 4-1/2" Gr. 8 hex head cap screw
- (2) 5/8-18 X 3-1/2" Gr. 8 hex head cap screw
- (2) 3/4-16 X 2" Gr. 8 hex head cap screw
- (4) 1/2-20 nylon insert lock-nut
- (2) 9/16-18 nylon insert lock-nut
- (2) 5/8-18 nylon insert lock-nut
- (2) 3/4-16 nylon insert lock-nut

ADDITIONAL ITEMS NEEDED

The Poison Spyder Customs Full Width Conversion Kit provides the major components needed to assist with your front full width axle conversion, however a complete installation requires several items that are not included in the kit:

- Full width axle assembly with leaf spring perches on 31-1/4" centers
- Leaf springs and bushings
- U-bolts, washers, nuts & u-bolt plates
- 2.5" wide leaf spring shackle hangers (can be found on rear of Jeep CJ's)
- 2-1/2" wide leaf spring shackles (can be found on rear of Jeep CJ's for 0" lift)
- Brake lines and any needed brake-related items
- Steering linkage and any needed steering-related items
- Shock mounts
- Paint (to paint bare steel components after installation)

It is strongly recommended that the installer be familiar with the full width front axle conversion before attempting it, do your research and make sure you have all of the parts and tools you'll need before starting the conversion.

TOOLS NEEDED

- Floor jack and jack stands
- Complete mechanic's tool set including combination box-open end wrenches,

sockets and ratchet, pry bars, hammers, etc. (specific wrench sizes are not given)

- Welder and all associated welding and safety equipment

It is strongly recommended that all welding be performed by a certified welder. If you are a beginning welder or not confident in your welding abilities, DO NOT ATTEMPT the welding portion of this procedure yourself! Suspension components are too important to trust to less than professional welds.

INSTALLATION PROCEDURE

1. **Position the Jeep** on a level surface. Lift Jeep with a floor jack and position jack stands under the frame. Remove front tires.



FIGURE 1

2. **Remove the front axle**, springs and steering linkage from the front of the Jeep. Be sure to cap the brake lines.



FIGURE 2

3. **Remove the front shackle hangers**. On the driver side, insert the 1/4" X 5/8" spacer into the gap between the frame and the steering box bracket as shown in Figure 3. This is the space that the shackle hanger used to take up. Then reinstall the bolts for the steering

box bracket and torque to 75 ft./lbs.

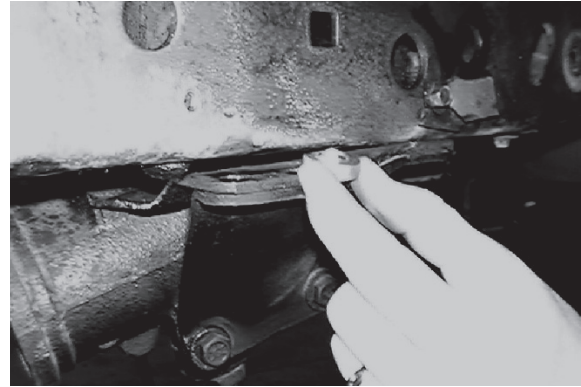


FIGURE 3

4. **Remove the rearward spring hangers** from the frame. This step will require either a torch or a grinder. Remove the welds from the sides of the frame. Remove the rivets on the inside of the spring hanger. Clean the frame of all excess weld material and slag.



FIGURE 4

5. **Install the rear outboard brackets**. Each bracket has a "D" or "P" laser-cut into it, as shown in Figure 5, it to identify it as being for either the driver or passenger side of the Jeep.

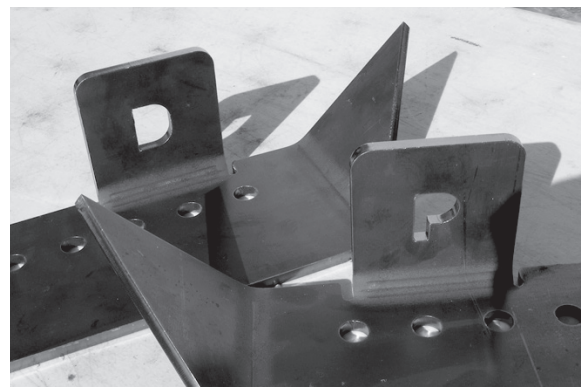


FIGURE 5

Be sure to use the correct one, as it is

specially designed to index correctly on the indicated side of the Jeep. The tab with the "D" or "P" cut into it will slide up between the vertical gussets of the front body mount to correctly locate the bracket. Align the bottom of the bracket with the bottom of the frame and tack-weld into place. Re-check after tack-welding for proper fit and alignment, then finish weld into place, using 1" beads alternating with 1" gaps.

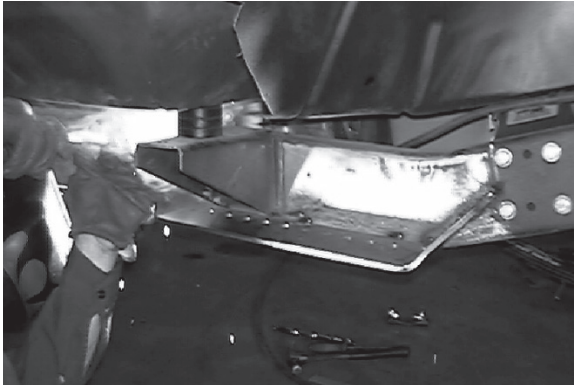


FIGURE 6

6. Insert the frame sleeves into the second hole back from the forward end of the frame..

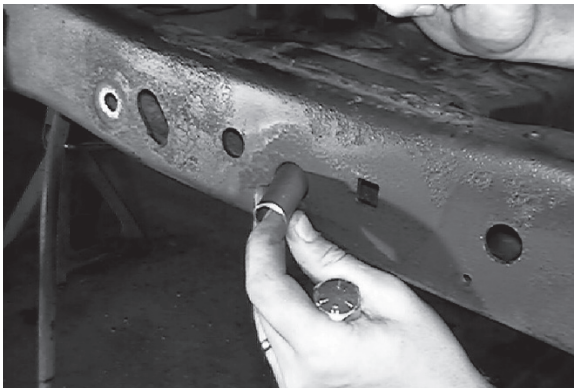


FIGURE 7

7. Install the front outboard bracket. Insert spacer plates between the frame and the mounting flange of the bracket, on either side, as you place the bracket onto the frame. If you have either a winch plate or frame plates, you will not use the spacer plates. If you have both frame plates and a winch plate you will need to either re-position the winch plate or notch the frame plates. Be careful to insert the spacers correctly, which results in the top edge of the spacer being flush with the edge of the flange on the bracket (if improperly installed, the two edges will be misaligned). Once the outboard bracket is

in place, insert a 5/8-18 X 3-1/2" Gr. 8 hex head cap screw with 5/8 flat washer through the rearward hole in the mounting flange, spacer, and frame rail, on either side. Then insert a 3/4-16 X 2" Gr. 8 hex head cap screw with 3/4 flat washer through the forward hole in the mounting flange, spacer and frame rail. In both of these cases the flat washer should be directly under the head of the bolt.



FIGURE 8

8. Thread a 5/8-18 lock nut on to each of 5/8 cap screws inserted in step 7. On the driver's side it may be difficult to access this area. One method to solve this problem is to tape the lock nut to your wrench as shown in Figure 9.

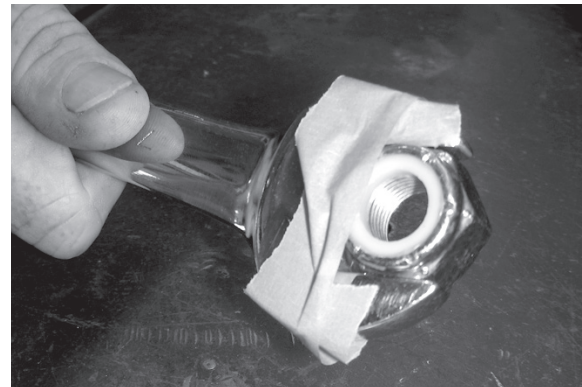


FIGURE 9

Then slide the wrench (with the lock nut taped into it) between the frame and the steering gear, carefully feel for alignment with the cap screw threads, then turn the head of the cap screw to engage it with the lock nut.

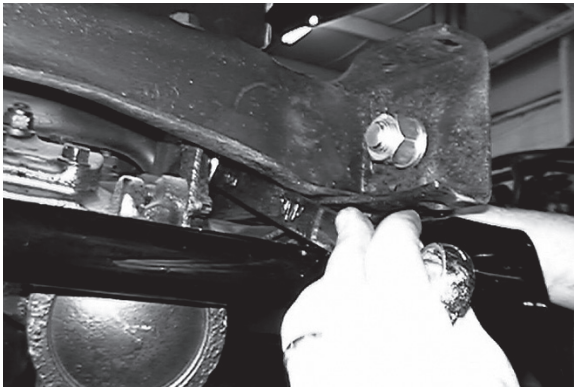


FIGURE 10

Tighten all four cap screws/lock nuts, and torque them to 80 ft./lbs.

9. **Paint the rear outboard brackets** in your color of choice. It is a good idea thoroughly clean and primer it first before applying paint. Allow sufficient time to dry before continuing to step 10.

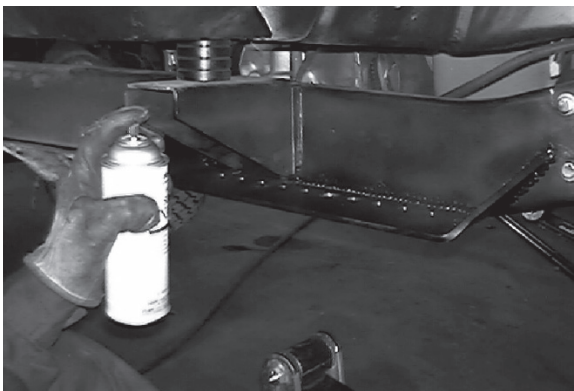


FIGURE 11

10. **Install 2-1/2" shackle hangers and spacers** on to the rear outboard brackets.



FIGURE 12

For each side, insert a shackle hanger spacer between the shackle hanger and the outboard bracket, and secure using the supplied 1/2-20 hex head cap screws and

nylon insert lock nuts.

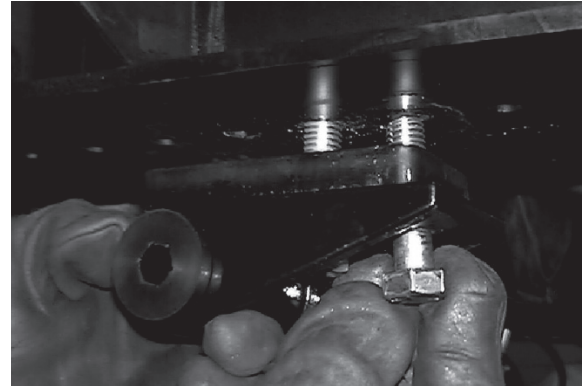


FIGURE 13

Note that the outboard brackets have a series of mounting holes in them, to provide the option of ten different mounting locations. This is to accommodate many different combinations of shackle lengths and/or spring lengths.

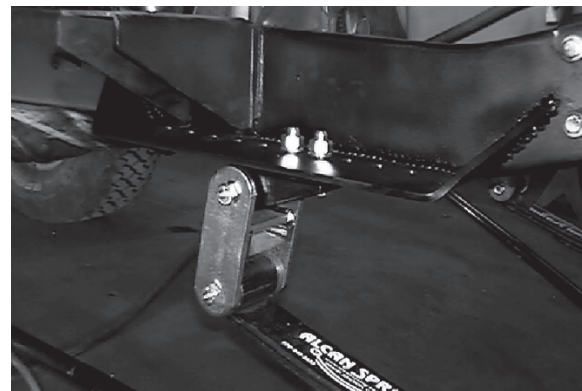


FIGURE 14

11. **Install leaf spring packs.** If the springs have a military (double) wrap, this end of the spring should go toward the front, and the other end toward the shackle (rear) end. Use the adjustment holes in the rear outboard bracket to adjust the shackle angle. When the Jeep is on its weight at ride height, the shackle angle should be set at about 10 degrees leaning forward.



FIGURE 15

This kit is designed to accept a 2-1/2" wide spring, but a stock CJ 2" spring can be used. If using a 2" spring, you will need to use washers or spacers totalling 1/4" thick on either side of the spring eye, between the spring and the bracket. You would also need to use a stock CJ front shackle hanger.

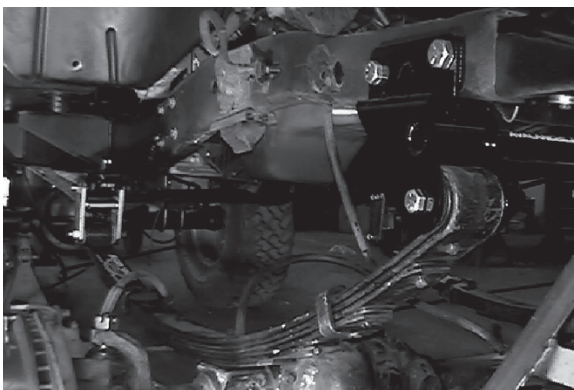


FIGURE 16

WARRANTY

Poison Spyder Customs™ warranties all of the products we sell and distribute for one (1) year from the date of sale. These products will be free from defects in material and workmanship under normal installation, and use. Due to the intended use the powder coat finish is warranted for ninety (90) days. The finish warranty will not cover a product if it has been damaged in any way. Warranty is limited to repair or replacement. Poison Spyder Customs™ does not offer any type of labor or shipping allowance and all warranty claims are subject to inspection by Poison Spyder Customs™.

At the discretion of Poison Spyder Customs™, the products in question can be repaired or replaced when found defective. Prior to any replacement or repair, written authorization must

be obtained from Poison Spyder Customs™. Failure to contact us prior to having warranty work preformed will immediately void all applicable warranties; and it is then the sole responsibility of the customer to remit any payment incurred.

The warranty expressed above is the sole warranty of Poison Spyder Customs™, and any other expressed or implied warranties are hereby specifically excluded and disclaimed.

HOLD HARMLESS AGREEMENT

1. In purchasing a Poison Spyder Customs Product™ I release, waive, discharge and covenant not to sue Poison Spyder Customs officers, servants, agents, or employees (hereinafter referred to as Releasees) from any and all liability, claims, demands, actions and causes of action whatsoever arising out of or related to any loss, damage, or injury, including death, that may be sustained by me (or anyone else), any property belonging to me (or anyone else), whether caused by the negligence of the releasees or otherwise, while working on, using or any activity related to this product.
2. I am fully aware of risks and hazards connected with the use of a this product and I elect to voluntarily engage in such use of this product knowing that the use may be hazardous to me and my property. I voluntarily assume full responsibility for any risks of loss, property damage or personal injury, including death, that may be sustained by me (or anyone else), or any loss or damage to property owned by me (or anyone else), as a result of using this product, whether caused by the negligence of releasees or otherwise.
3. I further agree to indemnify and hold harmless the releasees from any loss, liability, damage or costs, including court cost and attorney fees, that they may incur due to my use of a this product, whether caused by negligence of releasees or otherwise.
4. It is my express intent that this Release and Hold Harmless Agreement shall bind the members of my family and spouse, if I am alive, and my heirs assigns and personal representative, if I am deceased, and shall be deemed as a release, waiver, discharge, and covenant not to sue the above named

releasees. I further agree that this Waiver of Liability and Hold Harmless Agreement shall be construed in accordance with the laws of the State of California.

By accepting this product, I acknowledge and represent that I have read the above Waiver and Liability and Hold Harmless Agreement, understand it and accept it voluntarily as my own free act and deed; no oral presentations, statements, or inducements, apart from the foregoing written agreement, have been made; I am at least eighteen (18) years of age and fully competent; and I execute this Release for full, adequate and complete consideration fully intending to be bound by same.

If you do not agree with the preceding Hold Harmless Agreement, you may return the product and receive a full refund. Please, contact a Poison Spyder Customs™ sales representative and they will issue a call tag for the product in question. Once the product has been received by Poison Spyder Customs™ a full refund will be issued.

INSTALLATION INSTRUCTIONS