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SR 180-6 SYSTEM JEEP CJ7 FOR 3" YJ SPRINGS INSTALLATION INSTRUCTIONS

*** READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION***

To install your WARRIOR SR 180 SYSTEM, be sure your jeep is on a level surface before removal of front wheels and tires. You will need jack stands or a way to support your axle and your chassis before you begin installing your new kit. We no you are using springs that were not designed to work with your factory hardware. The original location of your housing is very important, measure your wheel base before beginning any work. Measure the wheel base when the full weight of the Jeep is on the tires. Your new kit is designed to be welded on to the frame front and rear. Because of the different springs from which you haven chosen you will have to trial test fit the kit to be absolutely sure your wheel base does not become shorter after you have completed the installation. After market springs or any spring may alter this wheelbase and your new kit may have to be adjusted accordingly. The key is to have the wheelbase the same or up to ½" longer. Please read the instructions completely and understand all the provisions before you begin. If you have any questions about your installation, call our factory direct technical department and ask for assistance at 1-888-220-6861. We will be glad to assist you.

ALL WELDING MUST BE DONE BY A CERTIFIED WELDER

- 1. Start by taking measurements to ensure that you can maintain your existing wheelbase.
 - Locate the front leaf spring mounting hole while Jeep still has all the weight on the tires. This hole is where the leaf bolts to the shackle; not at the frame.

- Measure the distance front to back starting from the bottom bumper hole and going to the leaf spring mounting hole. You will use this as a reference in step 9 to ensure that your new SR cross member mounting hole ends up in the same place

- 2. Raise the vehicle and suspend on jack stands by the frame so that the axle may droop freely. Be sure that the vehicle is stable on the stands before continuing your work.
- 3. Remove front wheels for ease of installation.
- 4. Remove front u-bolts and raise front axle up and out of your way with a floor jack. Support axle housing with additional jack stands.
- 5. You should now be able to remove both front leaf springs completely from the jeep. Remove the stock spring bushings on both ends of both front leaf springs and replace with the polyurethane bushings supplied in your kit. If you're using an aftermarket spring, there is a chance that our replacement bushings may not work for you. In this case you will need to re-use the leaf spring bushings you already have.
- 6. Remove both front shackle brackets from the frame. In this same area you will find a rivet in the frame that will also need to be drilled and removed. This rivet will be found on both sides and will need to be removed
- 7. NOTE: The frame width on CJ7's vary slightly, most are 27 9/16" which our kit is designed for. If your frame is slightly wider, you will need to modify the cross member to match the width of your frame. As you test fit, you will notice that on some models the cross member and inner leaf spring mounting plate may interfere with parts of the steering box and brace. On these models you will need to notch the cross member and inner mounting plate to clear.
- 8. Slide the new front cross member into place. It should be oriented so that the U shaped channel of the cross member is open on the back side and the flat portion is to the front. Also the leaf spring mount plates on the cross member resemble a J shape and the J should point forward.
- 9. Using the measurement you took in step 1, locate the leaf spring mounting holes the same distance front to back so that when bolted back into place, the wheelbase will not have changed.
- 10. Tack weld cross member or clamp to hold into place. The small 'ears' on the top of the cross member is for additional welding up the side of the frame. If there is a clearance problem with your steering box remove the inner 'ear' on the driver's side.

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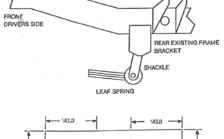
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Protecting Your Adventure Lifestyle

- 11. Remove front leaf spring rear hanger brackets from the frame and clean frame thoroughly for welding purposes.
- 12. In this next step, you will need to locate your new rear shackle hanger. To do this, there is no set measurement. Because every brand of spring is going to vary in length, you will need to fine tune your hanger location to get your most ideal shackle angle.
- 13. As a basic quick start reference, clamp the new shackle hangers to the frame somewhere between 44"-45" from the front cross member mounting holes to the center hole in the shackle hanger. This measurement is completely arbitrary and is simply to get you started in locating the hanger.
- 14. Tack weld the frame bracket to the frame, or ensure that it is very tightly clamped into place.
- 15. Install the leaf springs into the front cross member and bolt the new H shackles to the rear of the leaf spring.
- 16. Push the bushings into the shackle hanger, and bolt the other end of the H shackle into the shackle hanger.
- 17. Lower the axle onto the leaf springs and measure your wheelbase. If needed, move the front cross member until your wheelbase is once again correct.
- 18. Once the cross member is properly located for wheelbase and tacked into place, install your u-bolts and re-install wheels & tires. Lower the vehicle back onto the floor so that the full weight of the Jeep is now on the springs.
- 19. With a load now on the springs we can check your shackle angle. Using an angle finder, measure the angle of the shackle. Your ideal angle will be pointing forward 8-10 degrees. You will need to raise the vehicle and adjust as needed to gain that shackle angle. The image shown here displays what the proper shackle angle should look like.
- 20. Once you've got your shackle angle set, raise and support the vehicle once again, remove the tires, unbolt and raise the axle, and remove the leaf springs. With everything cleared and out of the way, the brackets and cross member can now be welded into place and any bare metal painted to prevent rust. Weld the rear hanger brackets in the pattern shown in this diagram. If not properly welded as shown, no warranty on the bracket will be honored.
- 21. With all brackets welded into place and painted, re-assemble the leaf springs into the brackets, and fully re-assemble the axle, u-bolts and wheels/tires. Be sure to grease all polyurethane bushings during assembly.
- 22. Go over all nuts and bolts a second time to be sure everything is tight and torqued. You can now test drive your Jeep. Be sure to periodically re-check all bolts. Also frequently inspect welded areas for any failures or fractures.

WHEN WEIGHT IS PUT ON THE VEHICLE, THE SCHAKLE SHOULD HAVE AN ANGLE OF APPROXIMATELY TEN DEGREES (10) TOWARDS FRONT OF VEHICLE



FRAME

