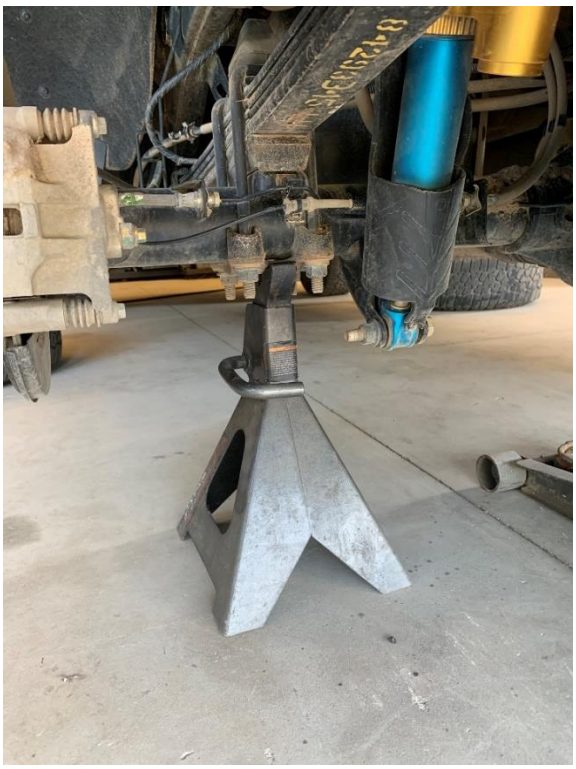
ZR2 Rear Shock Relocation Kit Installation

Tools Required:

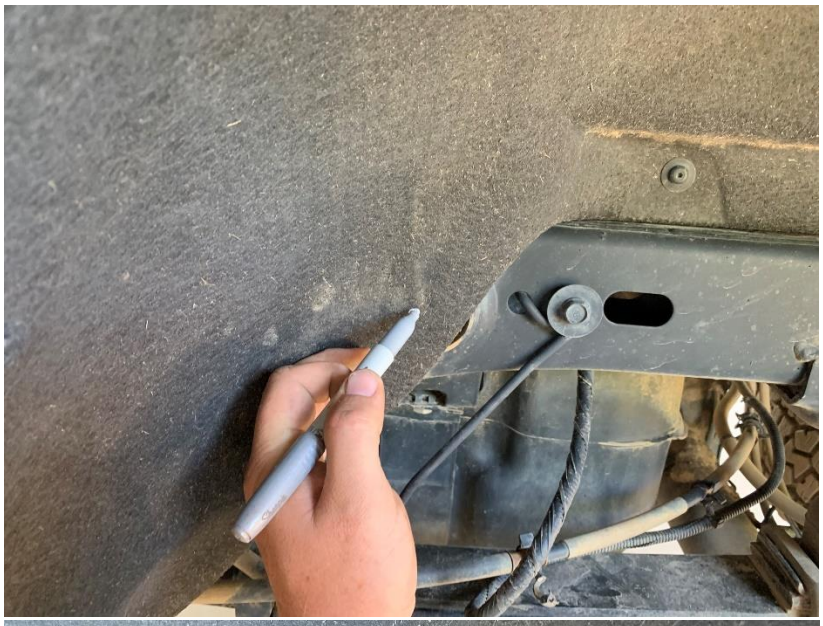
- 21mm socket and ratchet
- 13mm socket and ratchet
- Grinder with cut-off wheel and sand disc
- 2” hole saw and drill
- Tin snips
- Tape measure
- Floor jack and proper jack stands
- T15 Torx bit
- 10mm socket and ratchet
- Trim Tool
- Welder

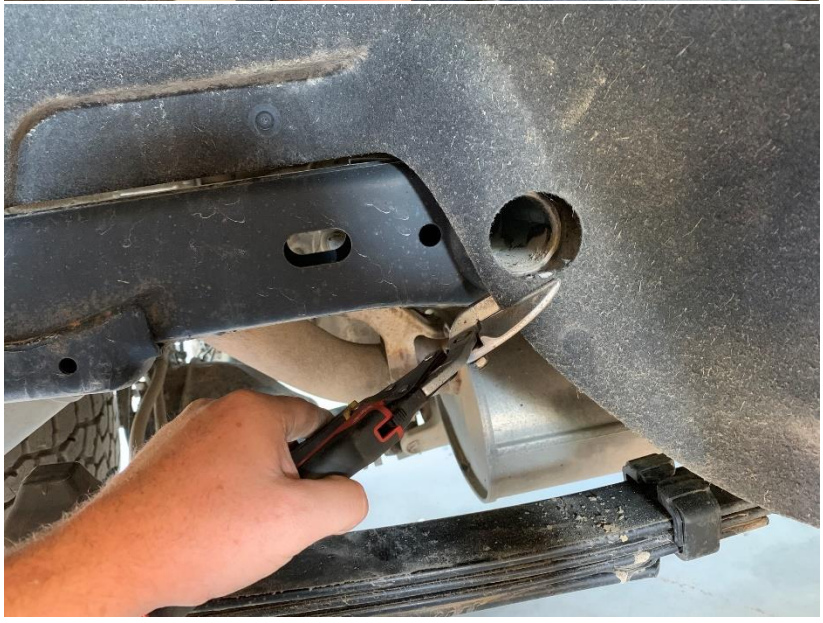
- **Always read instructions thoroughly before beginning**
- **All welding should be done by a professional who is proficient with welding on modern vehicles**
- **Use safe practices and proper Personal Protection Equipment**
- **Inspect all shocks for leaks before installation. Have damaged shocks replaced before you begin!**
- **You will be welding near the fuel tank. Take proper precautions before welding**

Step 1: Pull vehicle on a large flat concrete surface. Disconnect the negative battery terminal. Jack up the rear of the vehicle enough to place jack stands under the rear axle. You will want to place jack stands directly under the leaf spring, to insure they are not in the way later. Remove the rear tires.



Step 2: With the rear tires out of the way, locate the 2” round cross member on the frame in front of the axle. It will be behind the wheel liner. Mark the center of the hole on the wheel liner and drill the hole out with your 2” hole saw. With the tin snips you can trim the small pieces off near the edge to create a 2” slot. With the holes drilled you can now completely remove the wheel liners using the T15 torx bit and trim tool.





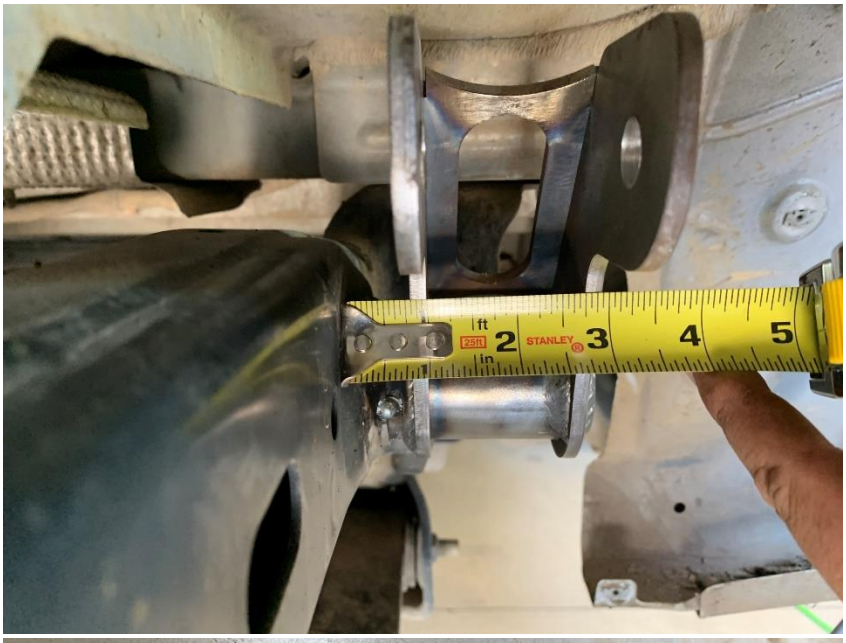
Step 3: With the rear shocks still in the factory mounts, measure the distance from center of eyelet to center of eyelet on **EACH** shock and record this number below. You will use this number later when positioning the lower mount. Your measurements may vary side to side depending on how much fuel is in the tank, how much weight is in the bed, inconsistent jack stand heights, etc. This is why it is important to measure both sides.

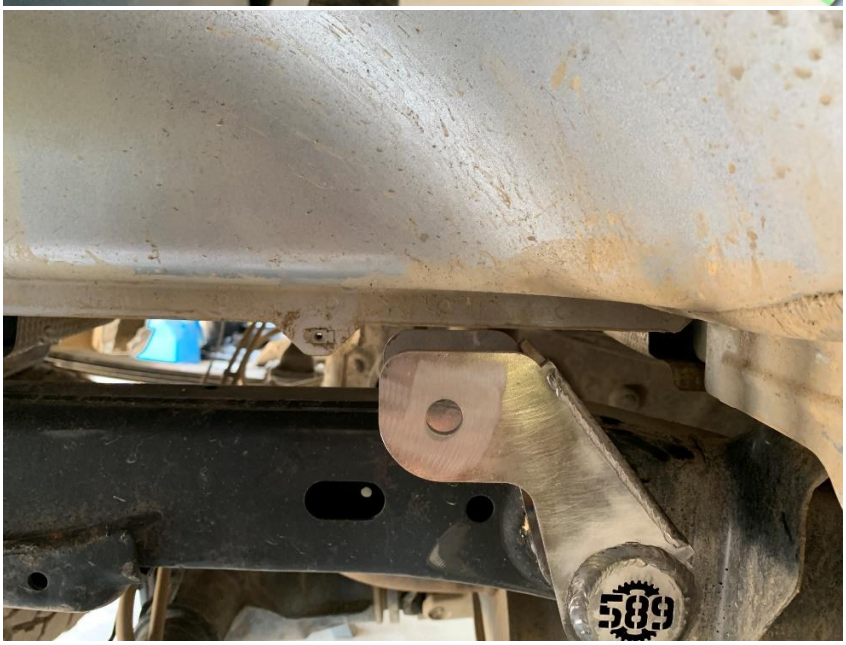
You can remove the shocks from the factory mounts now. Note: if you have a diesel, you will need to remove the DEF tank to get one of the shocks out. This will add a bit of time to the job.

Driver Side: _____.

Passenger Side: _____.

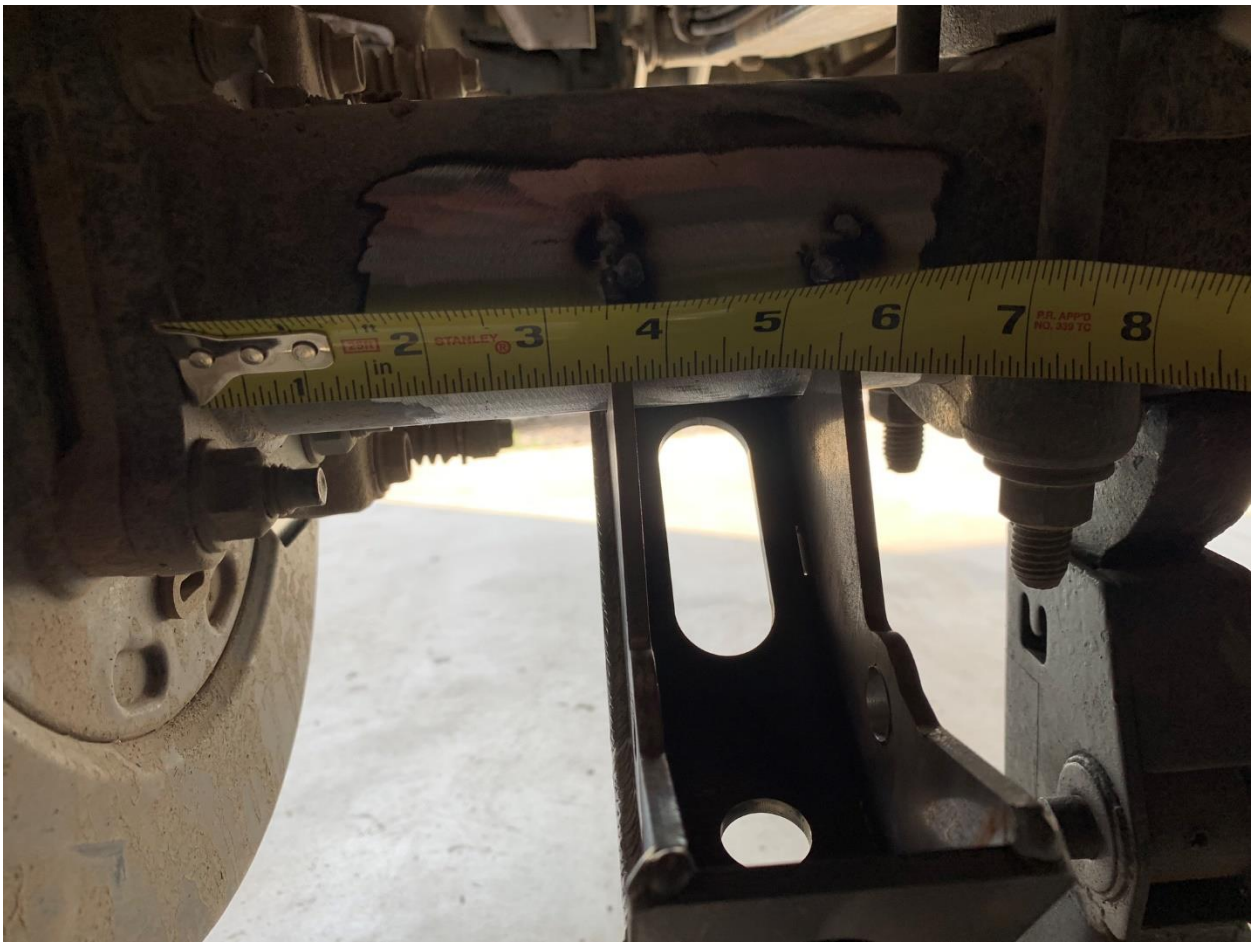
Step 4: With the liner removed, you can remove all paint and debris from the face, and around, of the 2” crossmember hole. Slide the upper mount into the crossmember (you should be able to read the 589 logo properly and it will be level with the vehicle). The upper mount will slide all the way into the crossmember and the inner weld will but up against it. You can pull it out no more than 3/8” if you need extra room for welding. Looking straight at the upper mount, the top edge should be perfectly parallel with the bottom pinch seam on the bed. Tack the mount into place.





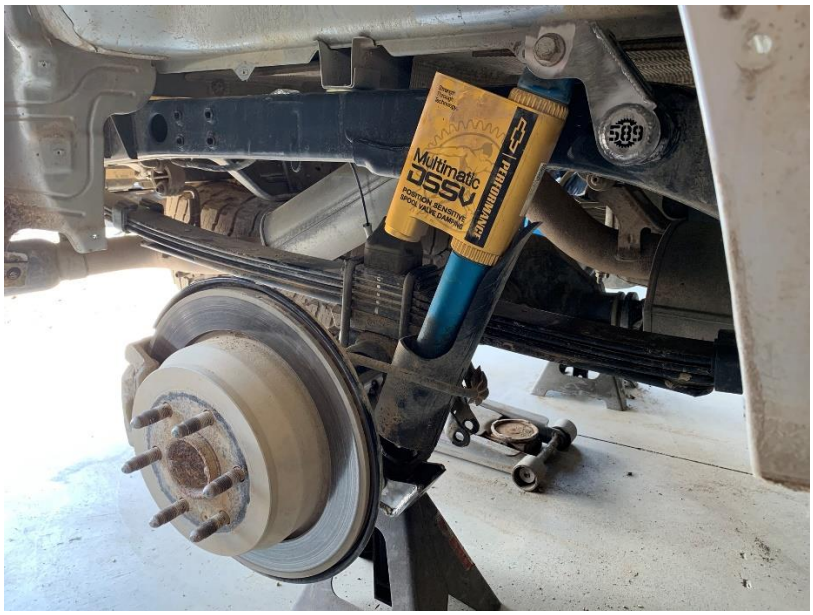
Step 5: **(A second set of hands is useful here)** Prep the axle tube for the lower mount by removing all paint and debris. Both lower mounts are identical and can be used on either side. With the axle tube prepped, hold the lower mount into position. Using the measurements from Step 3, measure from the center of the hole on the top mount and bring the center of the lower mount hole to meet your measurement. (Make sure you are using the measurement from the correct side of the vehicle)

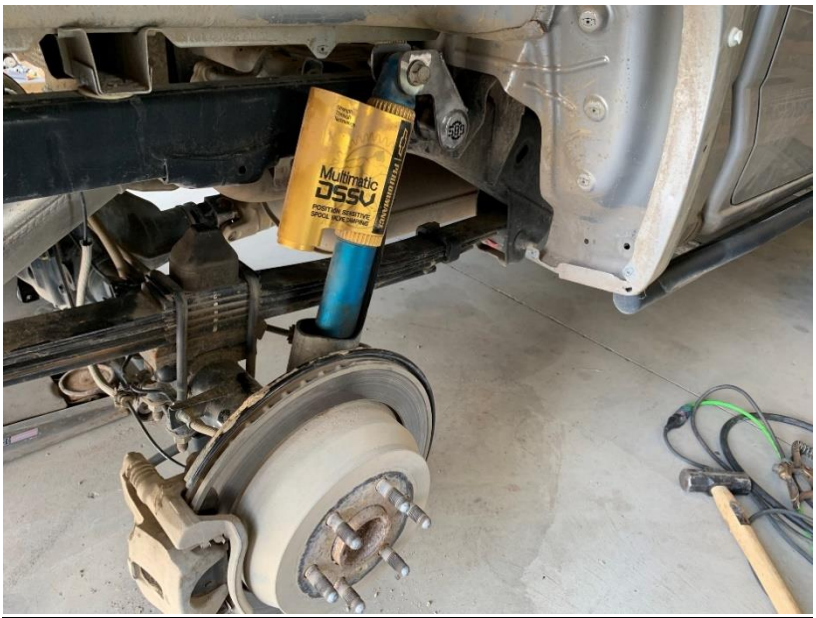
With the distance between the mounts set, measure from the face of the axle flange to the outer face of the lower mount. Set this distance to 3.5”. Tack mount in place.



Step 6: With all of the mounts tacked into place, install both shocks with factory hardware and supplied flange nuts. Double check all of your measurements. Now is the time to adjust any bracket that may need it.

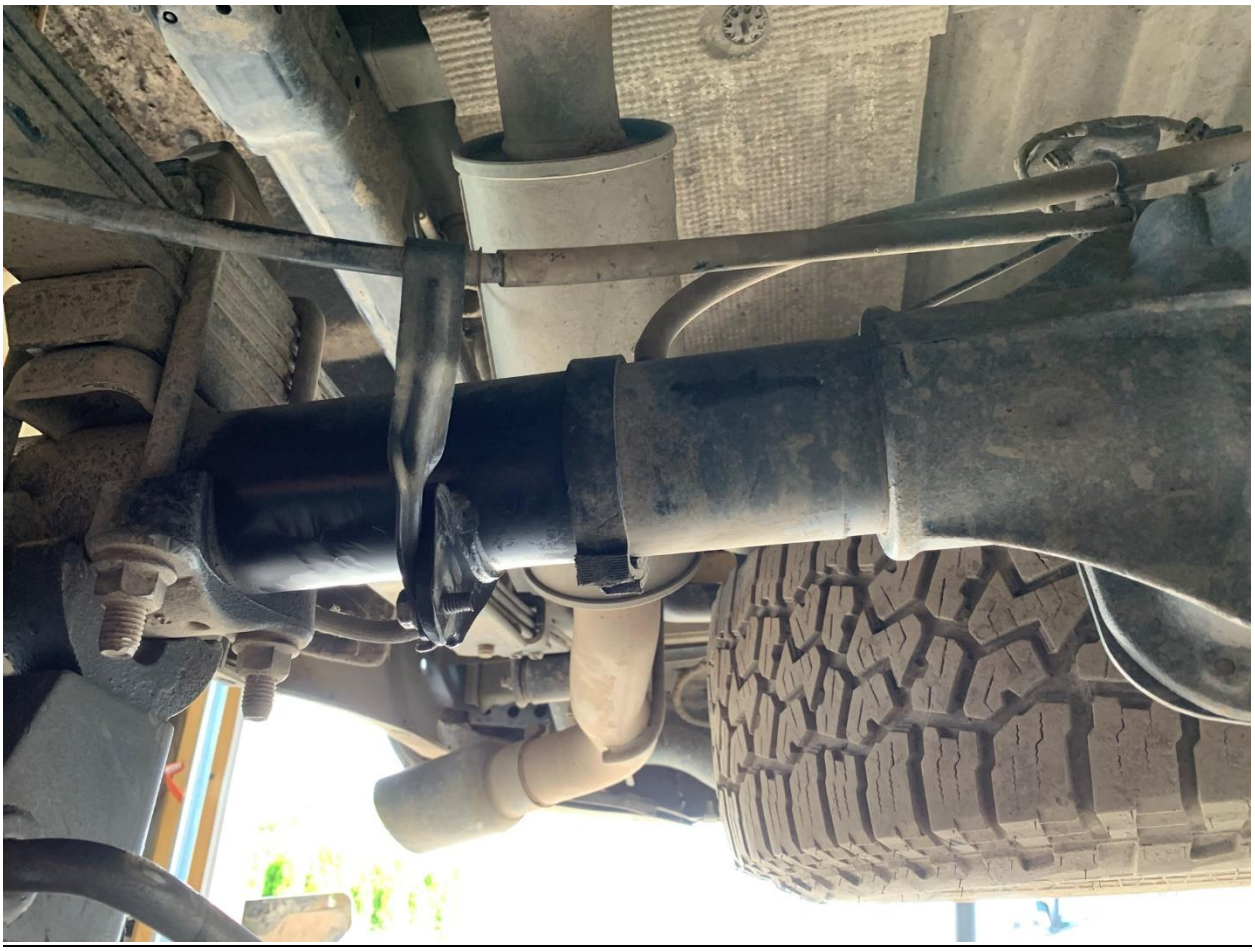
Once you have confirmed all measurements, you can remove the shocks and weld all of the mounts into place. Take your time here and get good welds on all the mounts. Be sure to follow proper procedures for welding on modern vehicles with electronics. **You will be welding near the fuel tank. Take proper precautions before welding.**





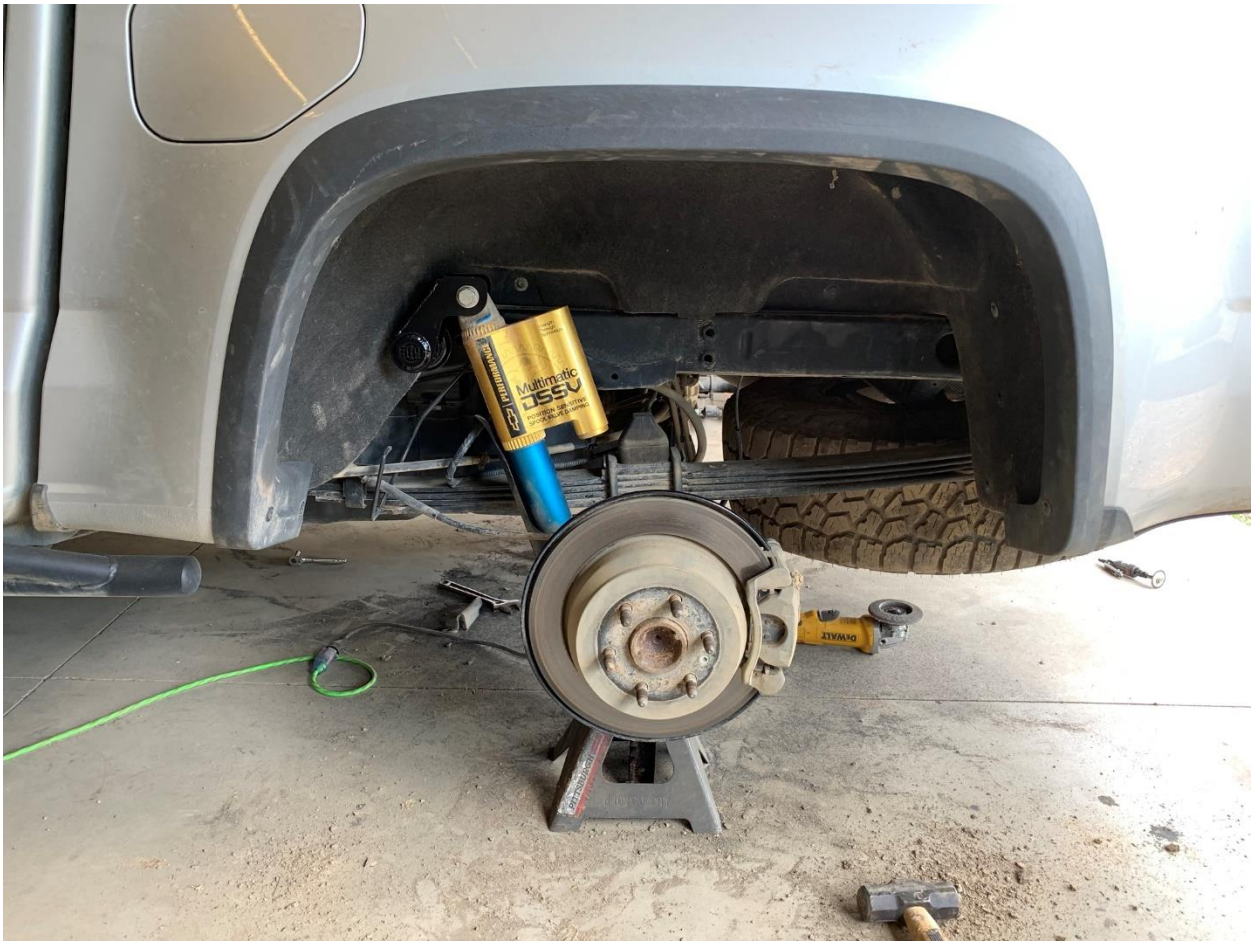
Step 7: Now that the welding is finished, you can start removing the factory shock mounts off of the axle. We found the easiest way is to cut the brackets down the middle vertically, splitting them into two halves. Then score the weld with a cut off wheel, use caution not to cut into the axle tube. With the weld scored you can start working the bracket, with a hammer, back and forth to get the weld to crack and release the bracket. This leaves a small bit of weld that is easy to clean up.

On the passenger side bracket do not remove the whole bracket. You will want to leave a small tab that holds the threaded hole for the e-brake cable bracket to bolt too! Mount and bend the E-brake cable bracket so the cable doesn't interfere with the shock. With the lower brackets removed and cleaned up, you can now paint any bare metal. We've used a quart of Rustoleum Satin Black and brushed on a couple coats. This seems to hold up well.



Step 8: Once the paint has dried, you can reinstall the inner wheel liner and associated fasteners. Take your time and slowly work the liner back in, they are fairly easy to rip.

Step 9: Reinstall both rear shocks using the factory bolts and supplied flange nuts. Torque the bolts to 118 ft-lbs.



Step 10: Reinstall the rear tires. Lower the vehicle off of the jack stands and torque lug nuts to factory specifications.

Clean up and hit the trails!