Step	1.
	т.



- Block the car up off the frame 6".
- We recommend 6" in order to have enough clearance to install the body mounts and the main beams.

Ste	n	2
Sic	Ρ	4.



- Install the 4 body mounts along with the body mount blocks.
- Make sure to use body mount locations on your car that are in good enough shape to support the car when it is on it's side or it's top. If your car's body mounts are rusted out you will need to repair them first or find different ones.
- Also make sure that the car will not be front or back heavy when you find a good mounting location.
- The body mounts as well as the blocks are made to face any direction in order to work around objects such as the frame.
- The body mounts and blocks must hang straight down. A series of washers or wedges may be needed for some cars in order to achieve this.
- Use a 3/8" x 3" bolt, nut, and lock washer to set and secure the height of the body mounts.
- Do <u>not</u> tighten any bolts at this time.



- When installing the main beams, slide one half beam through the body mount block. Then install the main beam insert from the other side of the car. Then you can go ahead and put the second half beam through the other body mount block. (See step 3 continued for more details).
- Remember that if you are going to be using the hoops, the total width of the main beam should be 7' from the outside to the outside, in order to hook up the hoops correctly.
- It is best if the hoop hook up pegs stick away from the car as shown.
- Be sure to have the main beam insert centered between the two main beam halves, in other words, you want the same amount of steel inside each half for the greatest strength.
- Make sure to have the entire main beam centered side to side, inside the body mount blocks as well.
- As a reminder, everything should be hanging straight down from the body mounts, so when the legs are attached they will be perpendicular to the floor and won't put undo stress on the car's body mounts.

Step 3. Continued



- The circled bolt is showing 1 of the 2 holes per half, that you can use to bolt the main beam through the insert.
- The reason there are 2 holes to choose from is, in case the body mount block is forced to cover one of them, like in this picture.
- Even though there are 2 holes per half to choose from, you only need to use 1 of them.
- Use a $\frac{1}{2}$ " x 3" bolt on each half of the main beam to go through the insert.
- Once everything is centered go ahead and tighten all the bolts, including all the body mount bolts.

Step 4.



- Install the casters using 3/8" x 1" bolts, nuts, lock washers, and flat washers (on the slotted holes).
- In the case like this picture, the car is already high enough off the ground to install the legs (using the top peg of the legs) into the main beams.
- Make sure the legs are facing the right direction in order to receive the stabilizer bars into the couplers on the outside of the legs. (2 of the legs are made opposite in order to make that happen).
- Use a $\frac{1}{2}$ " x 3" bolt and nut to install the legs.
- Tighten all bolts, especially the pinch bolts.

Step 4. Continued



- In this case the car body is too low to the ground to install the leg with the top peg. This is when you would want to use the bottom peg.
- Use a $\frac{1}{2}$ " x 3" bolt and nut as well as the pinch bolts, and tighten them.

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- Once the leg is installed, you will telescope the leg all the way up.
- Make sure the other end of the car is still resting on the blocks and not on the legs.
- As a reminder, make sure the car's body mounts are in good shape and that all the bolts are tight.
- Alternate from side to side, lifting only a few inches at a time in order to keep the car as straight as possible.
- Keep 2 jack stands under the main beam at all times just in case the leg would tip from side to side. It would also be a good idea to either block the casters or remove them for this process.
- Now you will want to put the jack stands under the main beam and retract the leg all the way.

Step	6.
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- Now you have the car body high enough to put the top peg of the leg into the main beam.
- Don't forget to tighten all the bolts.

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- Now before you raise the legs, you will want to install the stabilizer bars into the couplers of the legs.
- It is important that this be done before you raise or move the car body so it won't rely only on the body mounts to keep the legs from tipping forward or backward.
- Secure each end of the stabilizer bars with a ¹/₂" x 1" bolt, nut, and lock washer.
- Tighten all bolts including the pinch bolts in the middle of the bars.

Step	8.
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- Now the legs can be telescoped up and the body moved around.
- Try to raise the car as evenly as possible, by raising each leg only a few inches at a time.
- The legs were built to sustain the force of an impact wrench, so if you have one go ahead and use it.
- I'm sure you've figured it out, but in order to raise the leg you must turn the nut counter clockwise.

Ste	р	9.	



- Now the body is completely accessible for any work that needs to be done at this stage.
- This is the end of the body lift assembly. The next steps are to install the roller.

Step	10.
p	



- Install the 4 hoops as shown, onto the pegs of the main beams. Use $\frac{1}{2}$ " x 3" bolts and nuts. •
- •
- Do <u>not</u> tighten bolts. •

Step	11.	



- Next you will want to install the hoop connectors as shown.
- Make sure the coupler on top is facing the right direction in order to receive the stabilizer bars.
- Use $\frac{1}{2}$ " x 1" bolts, flat washers, and lock washers.
- Do <u>not</u> tighten bolts.

Step	12.
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- Now install the top 4 hoops along with the last hoop connectors.
- Tighten all bolts including the pinch bolts on the hoop pegs.

Step	13.
Step	13.



- Take only the top 2 stabilizer bars off the legs and install them into the hoop connectors on the side of the car.
- Then tighten the bolts for the stabilizer bars you just installed.

Step	14.



- Now you can take the other 2 stabilizer bars off the legs and install them into the hoop connectors.
- You can now lower the legs and remove them. Do not roll the legs without any stabilizer bars connected to them.
- Now go ahead and tighten all the bolts.

Step	15.
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- The hoop connectors act as a natural stop to keep the car from rolling. If you want the car at a different angle it might be a good idea to block the roller with a 2x4 or something else. As you can see in the picture that works pretty good.
- Now you're finished with the installation. To take it apart, obviously do all the steps in reverse.

Notes & Tips

- First things first, please ignore the lack of creativity in the names we gave to all of our parts. I'm not claiming to be a best selling author.
- We won't insult your intelligence by going into great detail about safety unless it pertains to the body lift or roller. We also aren't going to get into how moving the body around affects the door clearances etc. We will assume that you are knowledgeable in such areas.
- Please remember that this unit is rated for 1500 lbs. (So take the sand bags out of the trunk and the engine, transmission, and suspension out of the uni-body).
- Every nut that is welded to the parts requires a ¹/₂" x 1" bolt. They are what we refer to as pinch bolts. They are necessary to make the unit rigid.
- When I built the parts, I ran a tap through every nut that is welded before we shipped the parts. However, due to the amount of heat from welding the nuts, some of them you won't be able to screw the bolt in very far by hand, but rest assured they will work just fine with the careful help of a wrench. Be careful not to cross thread the nuts.
- When I build the legs I telescope each one about 10 times to make sure that they work like they should. I also grease up the threaded rod on the inside with never seize. But just in case, I wouldn't store them in a place where water could get inside them.
- We did the best we could to sand all the edges of the parts, but I would keep my fingers out of the holes.
- Along with this owner's manual is a few pages of pictures with a different view for some of the steps, it might make a handy reference. Most of the pictures are also on our website. (www.redwingsteelworks.com)
- It is a must to use lock washers for the casters. I tried rolling our car around outside and the vibration caused the nuts to loosen and one of the casters just about came off. Needless to say that would've been a tragedy if the car was painted.
- If you plan to use the body lift as just a body cart and have the body sitting on it loosely, you will not be able to lift the body off the frame like the instructions show. You will have to have the cart fully assembled (without the body mounts) in order for it to be strong enough to take the weight of the body. Not to mention if it's not bolted to the car the legs won't even stand by themselves, let alone lift the car. At the risk of insulting you, we won't even discus using the body roller without bolting the car down.
- When installing the hoops for the first time, make sure not to tighten any

bolts until all the hoop pieces are connected. This is because everything fits fairly tight and you will need the pieces to give in order to fit them together. It's like anything else, once you do it, it gets easier.

- When you are working on your car and there is a stabilizer bar in the way, you can remove it. Just be sure to put it back before you roll or move the car. I would also recommend that you only remove 1 bar.
- When extending the body lift to make it as long as possible, make sure that there is at least 1" of tube inside the stabilizer bars for the pinch bolts to tighten against.
- Please feel free to call, email, or write if you have any questions about the assembly or anything else. I hope I made everything as clear as possible, but I may have overlooked something. So feel free to comment if that is the case. We are not a big company, but we will do our best to answer any questions as soon as we possibly can. (Leave a message if you have to. You will not be ignored).



• The complete set of parts.



- Clear picture of the assembled body lift. •
- The smallest dimensions are: 6' long x 5' wide.
 The largest dimensions are: 12' long x 8' wide.



- This is a good example of what may be needed in order to make the body mounts hang straight up and down.
- In the circle you will notice we used a piece of flat iron to act as a washer to make the rusty body mount flat.



• This is a prime example of a <u>bad</u> mounting location.



• Just another view of the main beam assembly.



• Different view of the completed lift.



- Close up of the hoop connector.
- Notice the flat washers. They are used to make a flat surface for the lock washers to press against.
- Don't mind the 2 holes on the side of the hoops. This is a prototype that we modified.



• This is a good picture to show why good body mounts are needed and that they get tightened.