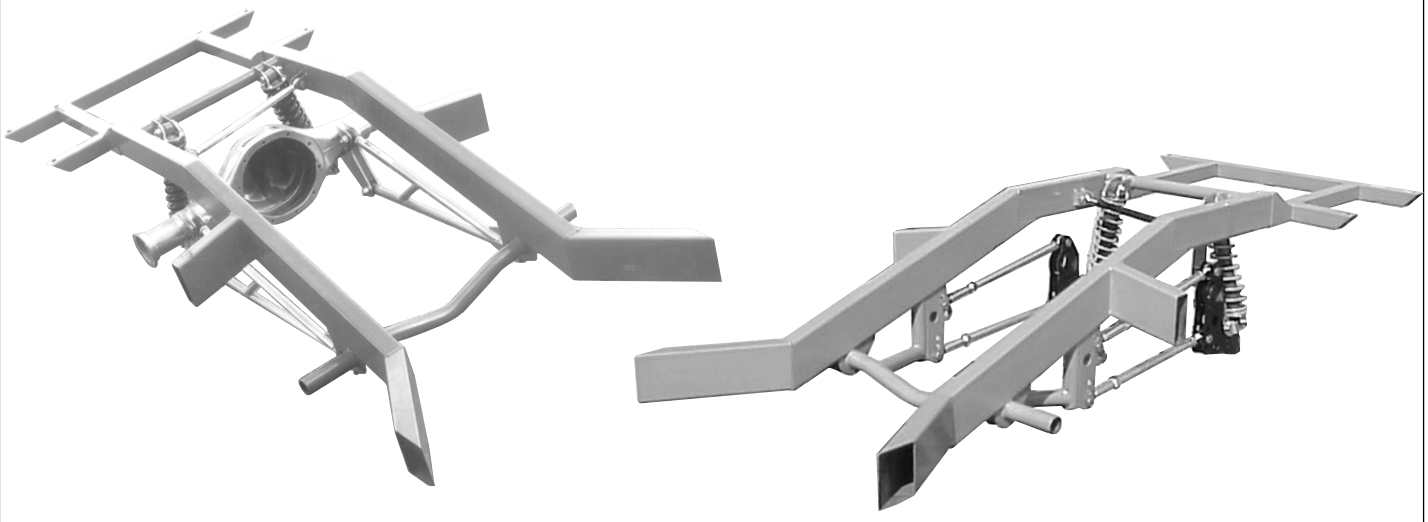
INSTALLATION INSTRUCTIONS FOR
10-503 & 10-509 S-10 PICK UP WELDED REAR FRAME

CAUTION!!! - The most important requirement for a successful installation of this, or any, S&W chassis component is that you take your time and use good common sense. Check & recheck all measurements before cutting or welding. If at any time before or during the installation, you have any questions - STOP - and call our tech line at 610-948-7303 and we will gladly explain in more detail any step in the installation.

<u>Read all instructions carefully before beginning installation</u>



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S & W Race Cars would like to thank you for choosing our S-10 rear frame kit. During the installation process, please remember that the quality of your workmanship will also reflect on the ultimate strength of the entire structure. It is important that all the areas to be welded are clean, free of oil, slag, undercoating and of course rust.

In all phases of construction, remain patient and intent on each step of construction.

1. Disconnect battery
2. Block front tires and jack up rear of truck placing your jackstands under the frame at the rear of the cab body. Level the truck from side to side. Do not place any jackstands under bed.
3. Remove bed from frame. The gas tank filler neck must be unbolted from the bed side. The tail-light wiring harness must be unplugged at the rear of the bed. Remove the eight (8) bolts that attach the bed to the frame and carefully remove the bed and set it aside in a safe place.
4. With the bed removed, you may now begin removing the stock rear suspension and gas tank. To remove the gas tank, disconnect the wires from the top of the tank, then remove the fuel line connections. *Make sure you plug all gas lines.* Next, carefully unbolt and remove the stock gas tank and set it aside. *Use extreme caution when handling the gas tank especially if you were not able to completely empty the tank before removal*. With the gas tank removed disconnect the emergency brake cables and the brake hose connected to the rear. Disconnect the stock driveshaft and set it carefully aside until later. Now disconnect the rear shock absorbers and remove the bolts which hold the stock leaf springs to the frame. The rear and springs may now be removed. At this time remove the stock tail pipe by unbolting it at the catalytic convertor.
5. Now, measure and record the mounts *as shown in figure 1.* At this time check the truck for level, side to side, by placing your level across the bed mounts directly behind the cab. Re-level if necessary.
6. Locate the steel frame reinforcing plates provided with the frame and tack weld them in place on the inside of the stock frame rails. Once both frame reinforcing plates are tacked in place, finish welding them in along the top and bottom edges, making sure to weld around all corners and edges. *See photo #1a & 1b* Please note in photo 1b that the reinforcing plate is NOT designed to fit inside the frame rail or fit over the rail! It is designed to sit in such a manner as to allow complete welding down both edges of the rail and the reinforcing plate. At this time we recommend that you weld the outside edges of the cab/bed mount to help stiffen the frame rail in this area.
7. Locate the second bed mount from the back of the cab and measure 3-1/2" from the center of the bed mounting hole back to the top of the frame rail.

See photo #2

Draw a line from this mark across the top of the frame rail, from this line measure forward 2" and draw another line across the top of the frame rail. Then use a level to tranfer these lines to the bottom of the rail. *See photo #2*

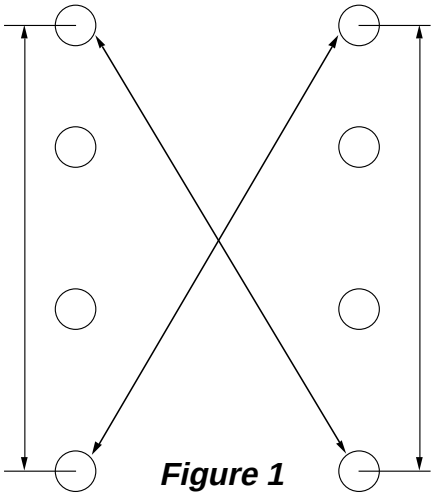

Figure 1

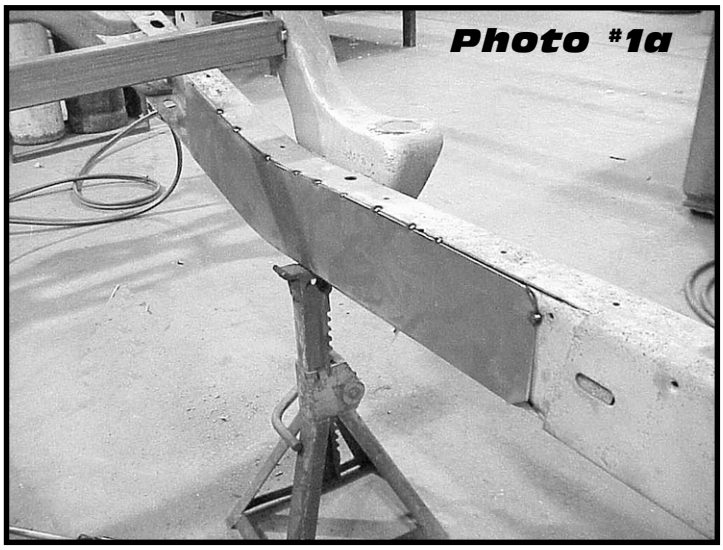

Photo #1a

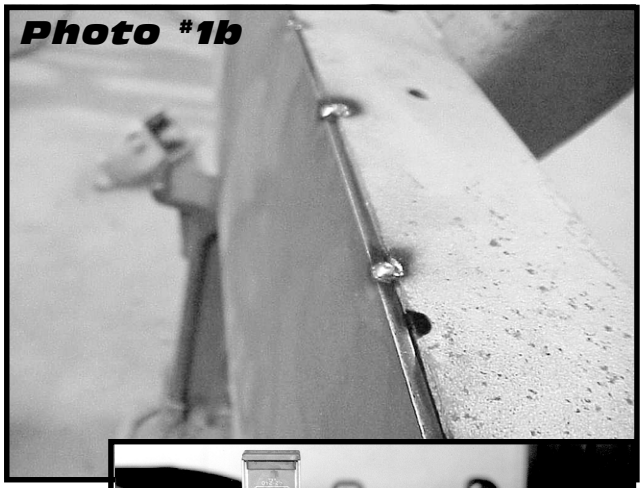

Photo #1b

Photo #2

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The area between these lines must now be removed to create a notch in the top and bottom of the rail which the outrigger on your new frame will fit into. *See photo #3a & 3b* Do this on both sides of stock frame.

8. Remove all stock crossmembers and install the new frame unit between the stock frame rails, sliding the outrigger into the notches you made in step 7. (Before installing the frame, grind away the small tacks keeping the sleeves from sliding out and contacting the new reinforcing plates.) The stock bed mounting holes at the rear of the original frame will line up with the rear bed mounting holes on your new welded frame. Bolt the new frame unit to these original bed mounting holes. This will help line up the new frame and keep everything in place during the final welding process. On long bed trucks, use the third set of bed mounts from behind the cab to bolt the S & W frame unit with the stock frame.. Align the holes in the bed mount outriggers on the S & W frame with the bed mount holes in the stock frame.*See photo #4,*

Photo #3a - Top View

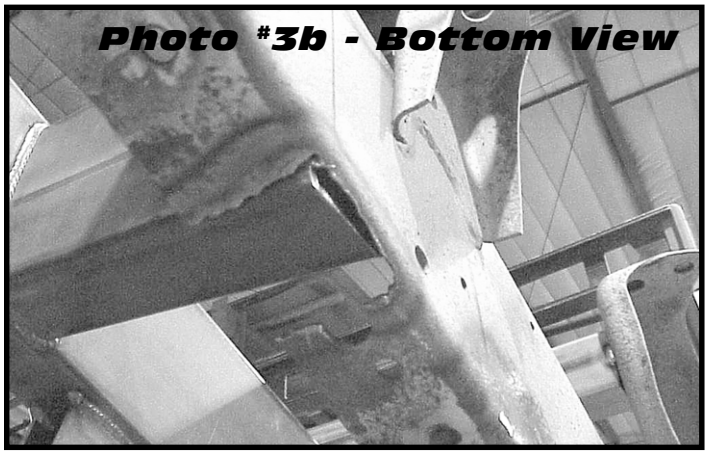

Photo #3b - Bottom View

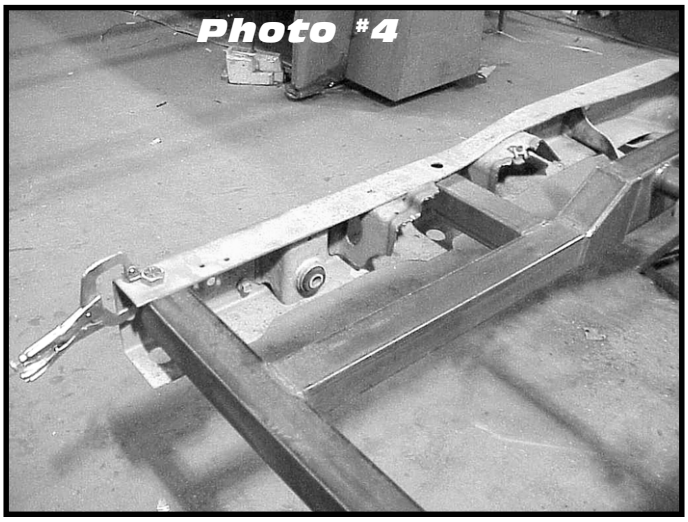

Photo #4

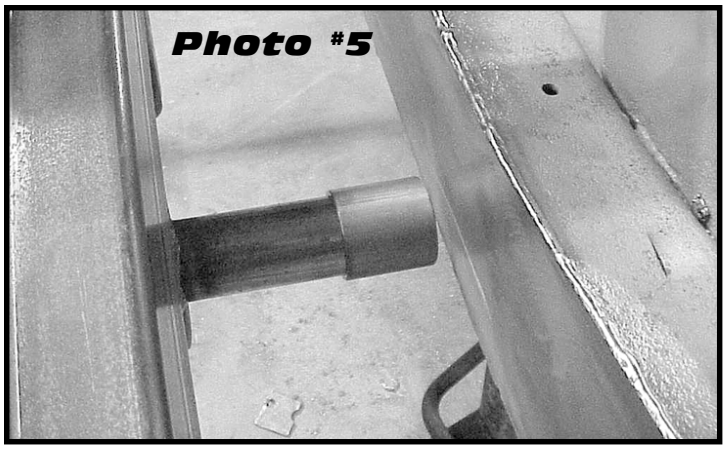

Photo #5

9. Slide the sleeves on the round tube crossmember out until they contact the new reinforcing plates on both sides of the frame and tack in place. *See photos 5 & 6*

10. Now recheck all measurements taken in step 5. If all measurements are correct and the bed mounts are level with each other, the frame is ready for welding. The bed mounts can be checked side to side by placing your level across the bed mounts. Also check the mounts for alignment front to back, werecommend you do this by stretching a string from the front to the rear mount. All four mounts should be level. Tack weld the frame in several locations, then recheck all measurements and level. If everything is still OK, finish welding the frame unit in place.

11. **Short Bed:** After final welding is complete, cut off the stock rail flush with the rear edge of the outrigger at the second bed mount from the rear of the cab. Now unbolt the rear bed mounting bolts and remove stock frame rail. Repeat on other side.

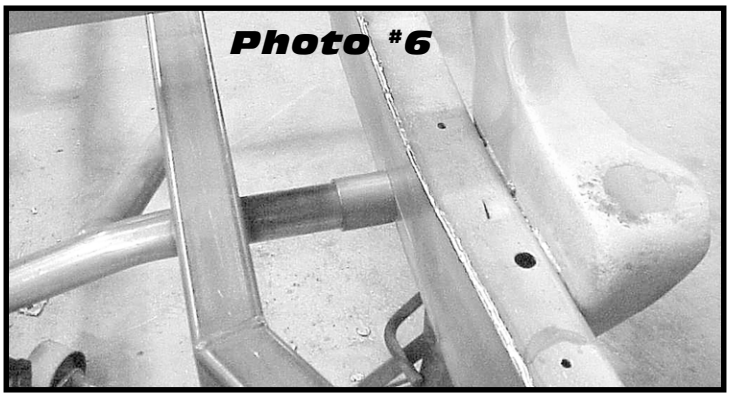

Photo #6

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