

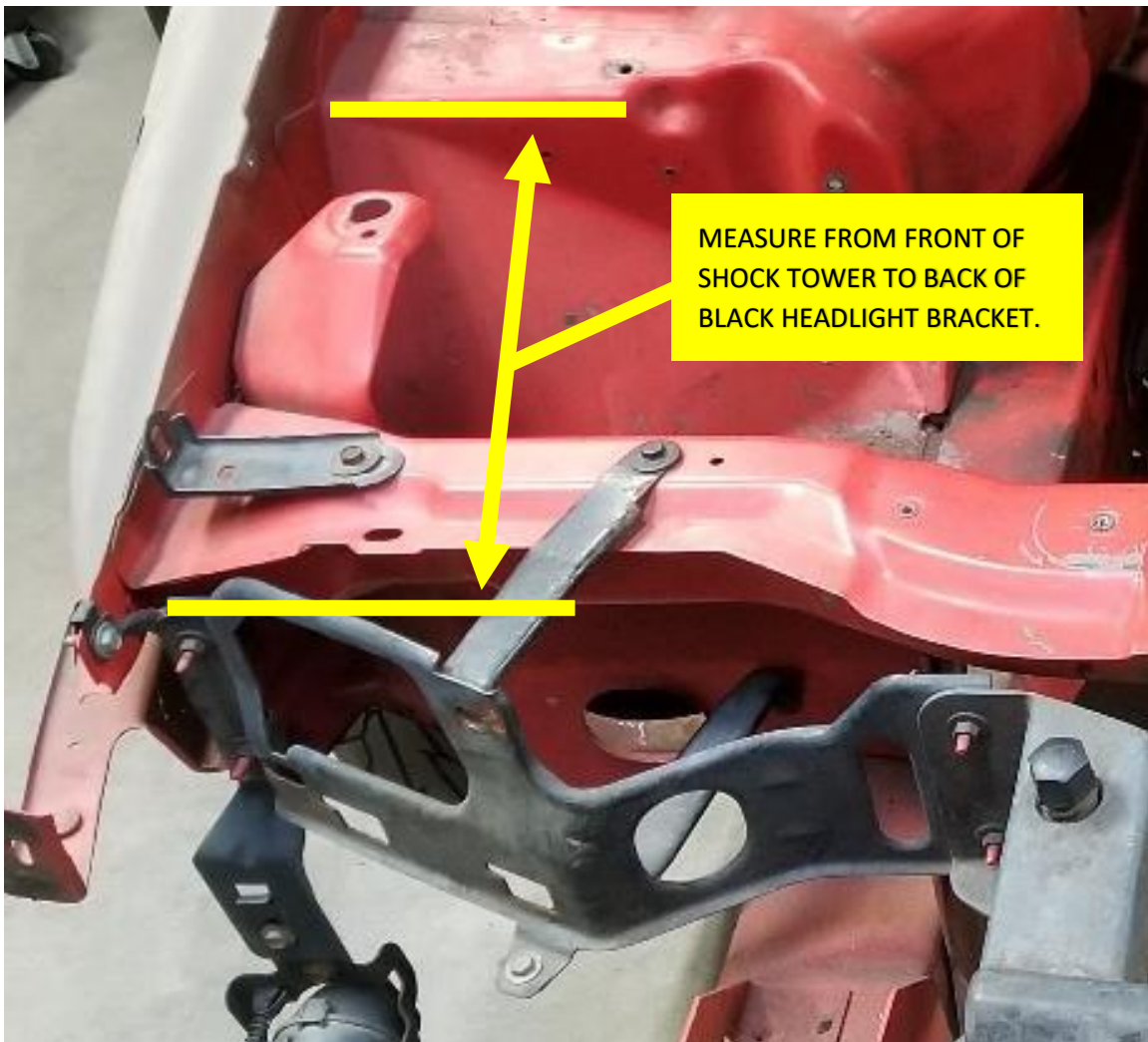
**TUBULAR FRONT END KIT
INSTALLATION INSTRUCTIONS**

1993 – 2002

CAMARO & FIREBIRD

Pre-Installation Notes & Recommendations:

- Before disassembly, remove anything within the engine bay that can be removed; this will give the most room to perform the installation.
- Disconnect the wiring harness from each component starting from the passenger side and remove it from the chassis, working toward the driver side.
- Lay the free portion of the harness back away from work area. (On this installation we removed the harness from the firewall connection, however it is not required.)
- Spray penetrating lubricant on any suspect fasteners.
- Position the car so that the front uni-body frame rails are level front to rear, and side to side. This will help with installing the tube components.
- **MEASURE THE HEADLIGHT BRACKET POSITION!**
 - Since there are different variations of headlight arrangements through the 93-02 year range, **measure the distance from the front face of the shock tower to the back of the headlight mounting bracket surface. (See picture below)**
 - Use this measurement to locate the RSM supplied headlight brackets fore and aft in the car.



1.) Remove Front Bumper & Fenders:

- Remove the (2) bolts at the bottom rear of each fender at the body, and the bolt at the top rear just ahead of the side mirrors. The top bolts can be reached with the door open.
- Remove the bolts attaching the top of the fenders along the interior of the engine bay.
- There will be (3) or (4) fasteners on either side that connect the bumper cover to each of the fenders – remove them.
- Remove the remaining fasteners attaching the bumper cover to the car.
- Separate the bumper cover from the fender and sub frame brackets and remove it.
- Remove fenders.

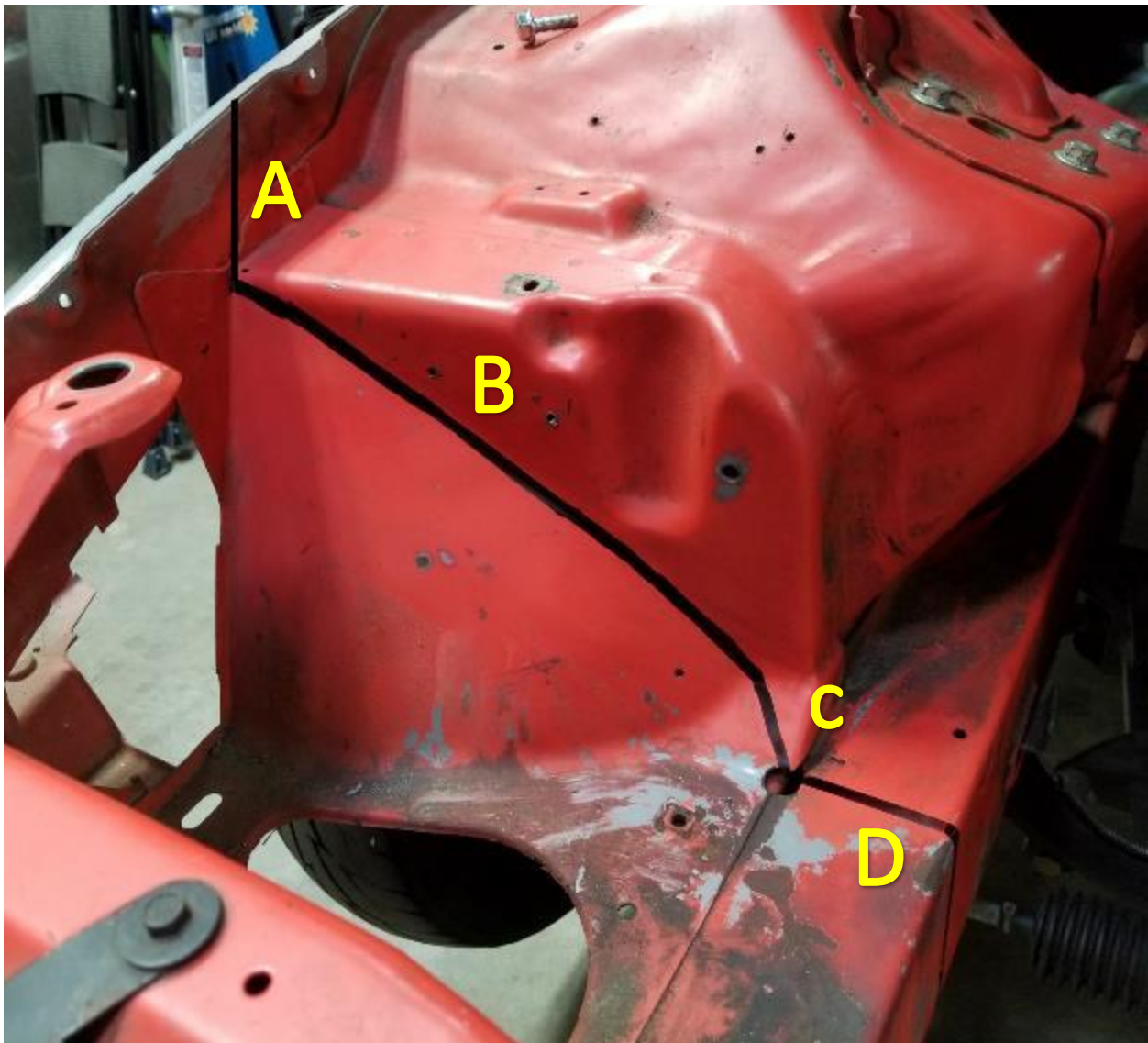


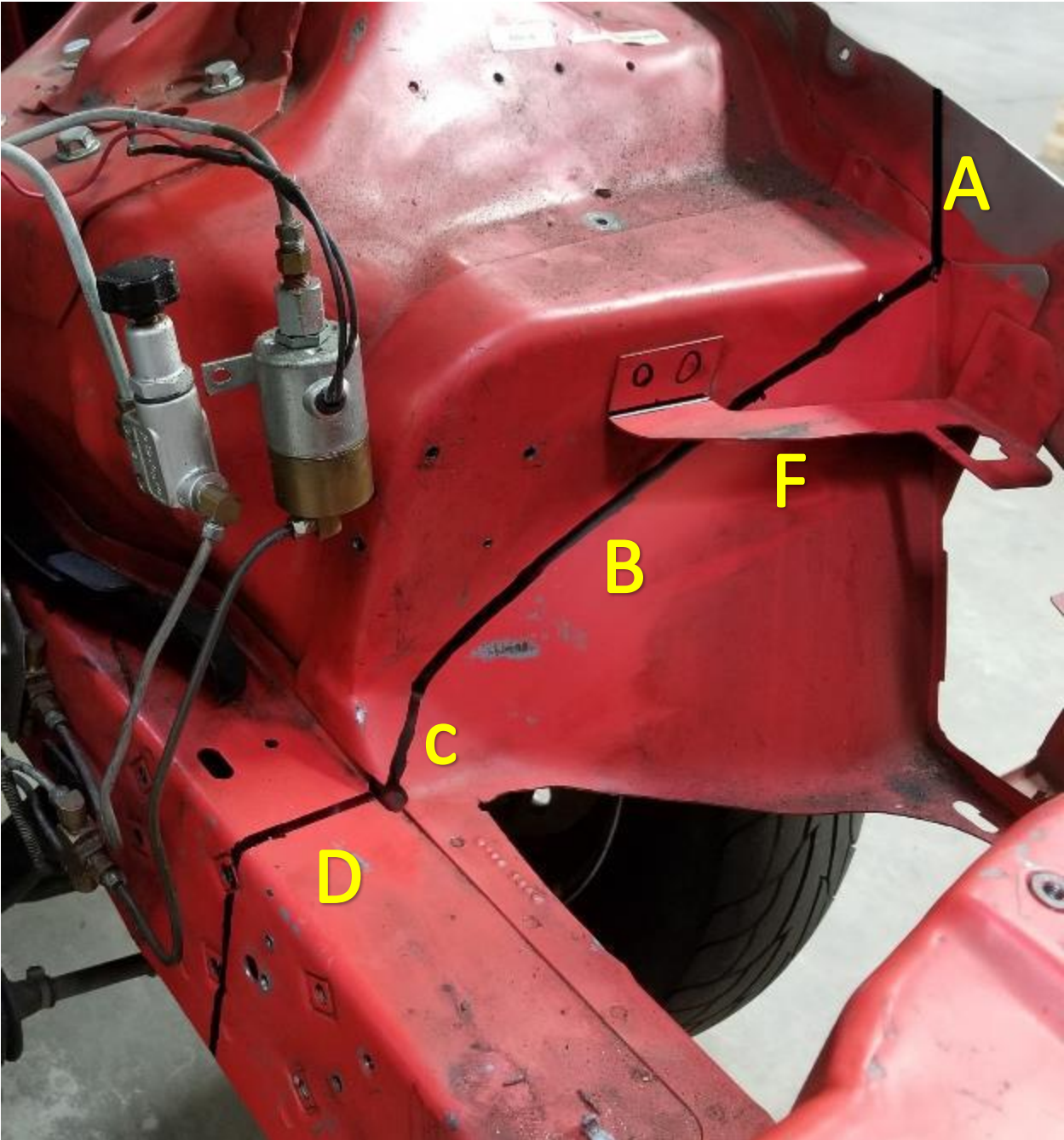
2.) Remove Headlights:

- You may find it easier to remove the headlights separately from their individual mounting brackets. The Camaro (as shown) has the headlights removed but the brackets left in place – those will be removed and reinstalled on the supplied RSM brackets later.

3.) Mark the Cutting Lines:

- A.) Following the forward most top corner of the shock tower, mark a vertical line on the inside of the fender structure/box.
- B.) Mark from that corner, following the formed curve down toward the frame-rail.
- C.) Just over an inch from the frame rail, that curve will meet a separate indentation; follow it diagonally to the corner it makes right at the frame rail junction – there will be a hole at the end. Stop the mark at that corner.
- D.) At that corner junction, mark a line straight across the frame rail using a square; then mark a vertical line down the inside of the rail as a guide.
- E.) Repeat these steps for the opposite side.
- F.) Remove Bracket from driver side shock tower before cutting (see picture on next page.)

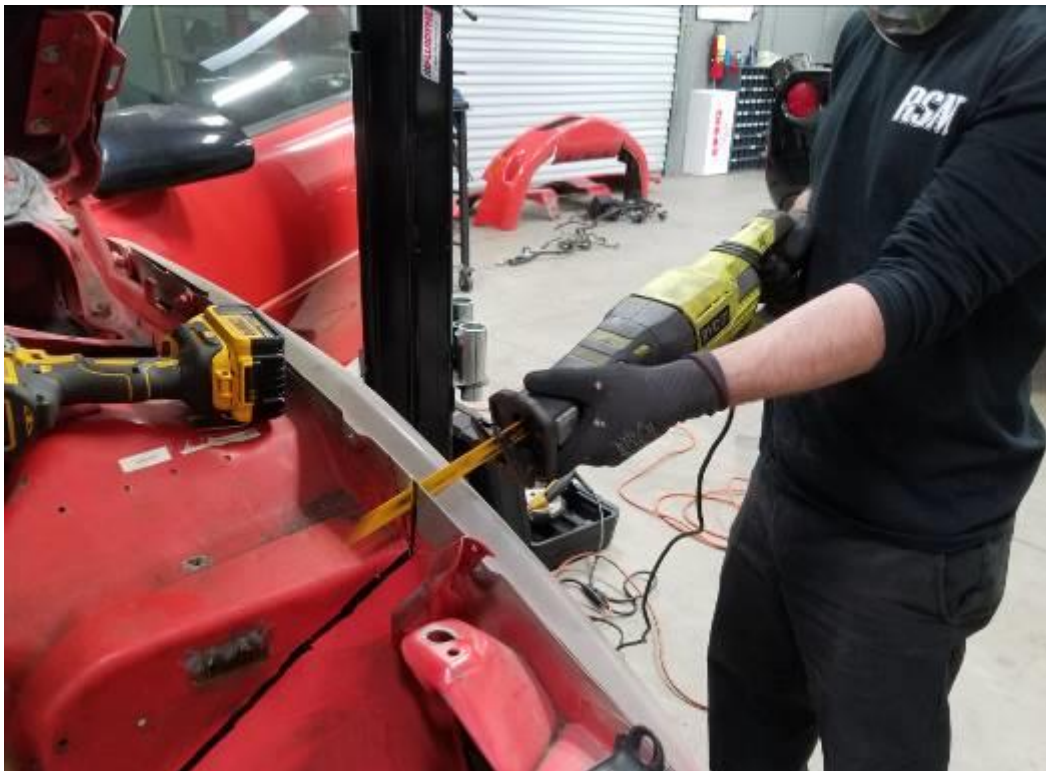




4.) Cut the Front Sub-Frame:

At this point it's pertinent to note that the frame can be cut by a variety of methods – abrasive wheel, reciprocating saw, plasma-cutter, etc. - all of which will net the desired result. The example shown in these instructions is done with a reciprocating saw and a pneumatic body saw, which many DIY-er's will most probably use.

- Support the front sub frame with a jack or jack stands during the cutting process.
- If you are not certain that you can maintain a square cut through the fender structure/box, transfer a square line to the outside as a guide.
- Begin the cut at the top of the sub-frame with the reciprocating saw, being careful to cut straight down and square with the mark.



- Once through the fender box, follow the line down the front face of the shock tower.
- Note: a body saw was used for this installation, however any of the other tools listed above could be used.



- Begin the frame rail cuts, taking care to stay forward of the threaded bosses on the driver side (see “D” on mark instruction pictures.)
- Below is the removed chunk (minus the crash bar which was previously removed):



- The front end removed:







5.) Position, Tack & Weld Tubes:

- Begin the assembly process by removing all of the paint from the attachment areas on the front end. We recommend a disc sander or abrasive flap-wheel. **Be sure to sand through the manufacturer's rust prohibitive coating, and ensure that the base metal is clean before welding.**
- Once sanded, use a wire brush to hit the hard to reach places where the sander could not reach.



- With the use of jack-stands, locate each tube frame rail; **the mounting plates are different side to side, so note the installed position of the corners - up and to the outside.**
- Tack one top corner of each frame plate, matching the other side (outside-outside or inside-inside). This will allow for some movement to rotate & square the assembly.
- Position the straight-notched tube between the tube rails, approximately **23-3/8"** on center from the face of the frame rail cut. Square it with both frame rails and tack in position.
- Level the frame rail tubes, front to back and side to side, ensuring that they remain square with the cross-tube. Tack the rest of the corners on the frame plates to solidly locate in place.

- Place each fender bar in position, and tack into place – the notch will align closely with the position of the cross tube.



- At this point, you can fully weld the assembly.

- If you have purchased the additional tube hoop, position it as needed forward of the fender tube junction, square it and weld in place.



6.) Headlight bracket installation:

Mounting the headlight brackets for this kit is the most difficult step, and care must be taken with their positioning to locate the headlights appropriately. The RSM brackets are provided with slots to allow some vertical movement of the headlight mounts, however the front-to-rear positioning is left up to the customer due to variations between the models/years. It is also possible to retain the OEM plastic bracket that connects between the headlights and ties back to the bumper cover; for those who wish to omit that part RSM offers a laser cut plate for custom mounting.

- Utilizing the measurement obtained in the pre-installation notes section, locate each headlight bracket.
- **Note: The dimension for this particular installation is based on the use of an aftermarket headlight fitting with the bracket. Your measured dimension may vary.**



- You will need to find a means to hold the brackets in place during this step; it is recommended to use a straight edge or other material to tie the brackets together from side to side.
- The top of the brackets should be positioned 12" above the top of the tube frame rail:



- Once each headlight bracket is located, use the supplied 3/4" tubes to mount the brackets. For this installation, we trimmed the tube and welded it as shown.
- **Note: we have supplied the 3/4" bars with extra length to allow for a variety of installation positions – chose what best fits your needs.**



- Below are pictures showing the OEM headlight brackets attached to the RSM brackets:





Finished Installation:



