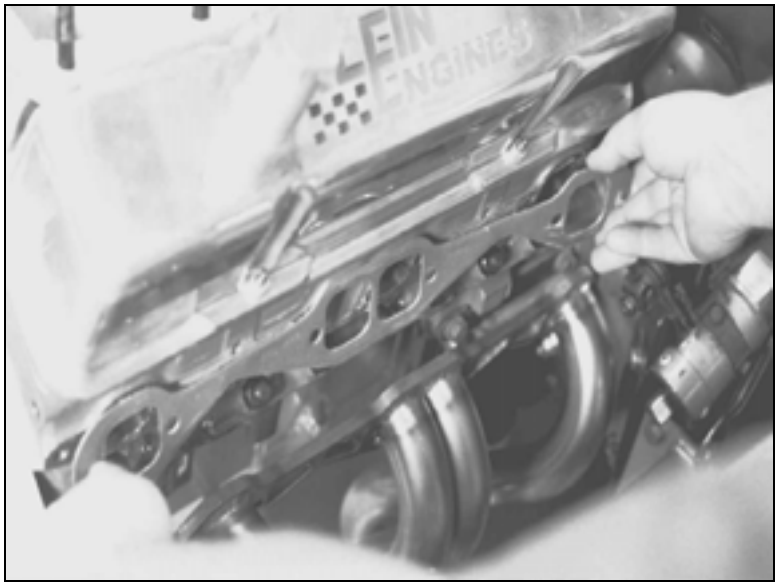
The first series of photos show the installation of the headers with the motor plate engine mounts. If you are installing headers using billet side mounts refer to Page 103.

Unbolt the motor plate and mid plate so the engine can be raised. Remove the steering linkage before moving the engine. Once the engine is raised, slide the headers in along side the engine. This works best with three people, one raising the engine, and two positioning the headers.

Slowly lower the engine into place holding the headers toward the outside of the frame. Check to make sure nothing is obstructing the engine while lowering it.



After the engine is in place, put the bolts back in the motor and mid plates, only hand tighten them for now.

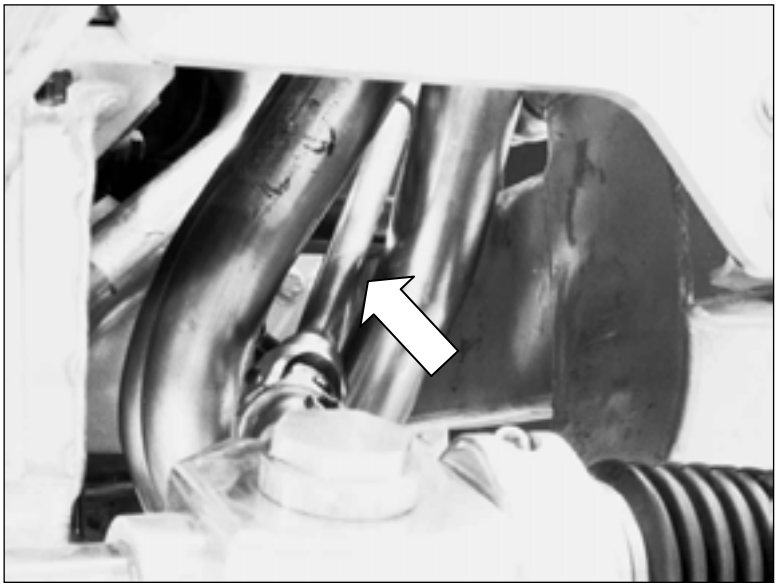
Start on the driver's side by setting the header gaskets in place. Raise the header up and thread the six 12 point 3/8-16 bolts through the header and into the cylinder head. Do not tighten any bolts until you have all of them started.

After all six bolts are started; use a 5/16-12 point wrench or a 1/4-inch drive socket to tighten them to 30 lb-ft of torque.

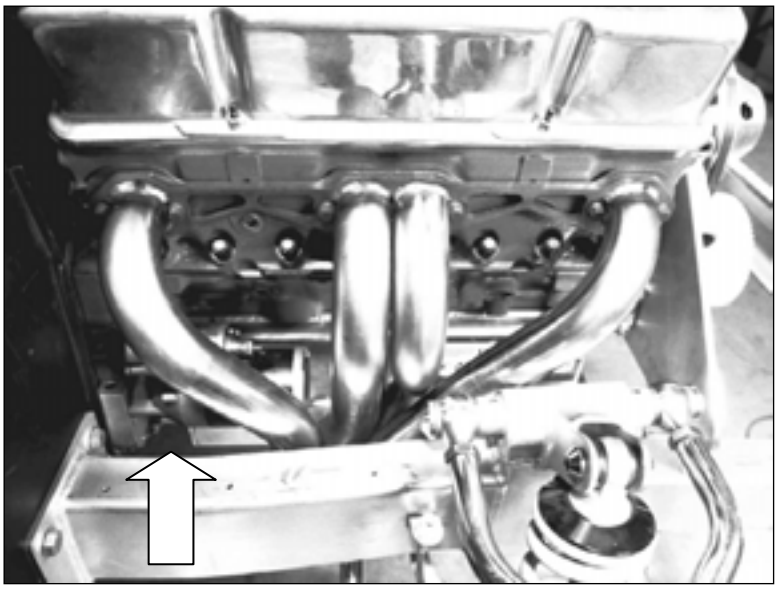
Repeat this for the passenger side of the car.

You can now tighten the bolts in the motor plate and mid plate.

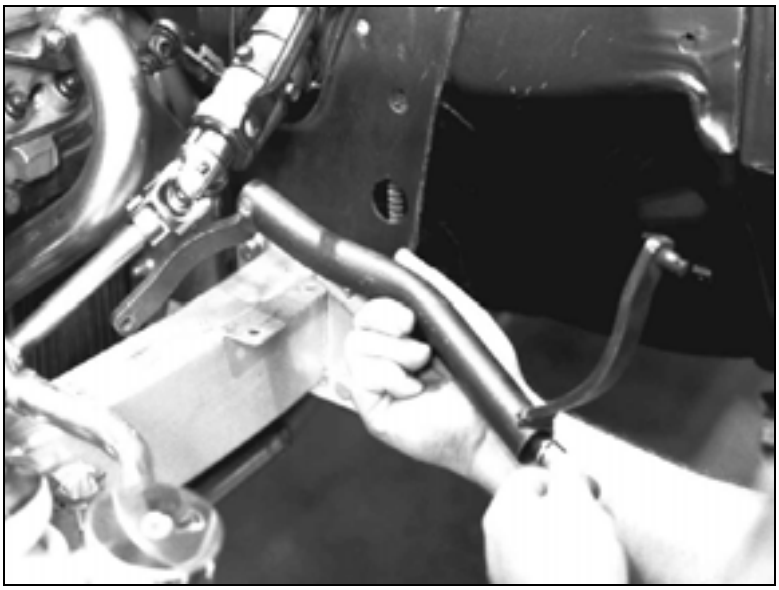
Reinstall the steering shaft from the top toward the rack & pinion. It goes between the two header tubes.



Looking from the rack & pinion, notice that there is just enough room for the shaft. You may need to rotate your rack slightly for maximum clearance between the shaft and the header tubes on the small block headers.



You will need to use a high torque mini-starter for maximum clearance on the small and big block headers. This is available from most high-performance parts suppliers.



If you are using a manual transmission, you can install the clutch cross-shaft now. Move the clutch linkage through its travel making sure it does not contact the header at any point.

The next series of photos show the headers being installed with the billet side engine mounts.

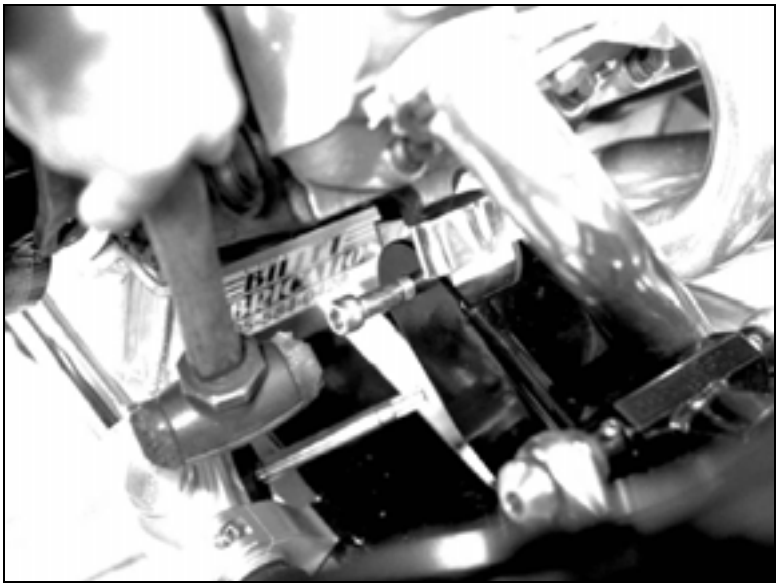
Start by removing the steering shaft and U-joints from the steering column to the rack & pinion. It works best to install the headers and the engine at the same time. This is a three person job, two aligning the headers and the third operating the engine hoist. First, set both headers in place and as far to the outside of the frame as possible.

Slowly lower the engine into position. Watch both sides for clearance until you have the engine sitting down with the billet side mounts in the frame brackets.

When you have the engine in position, use the engine hoist to hold it while you get the headers in place to be bolted on.

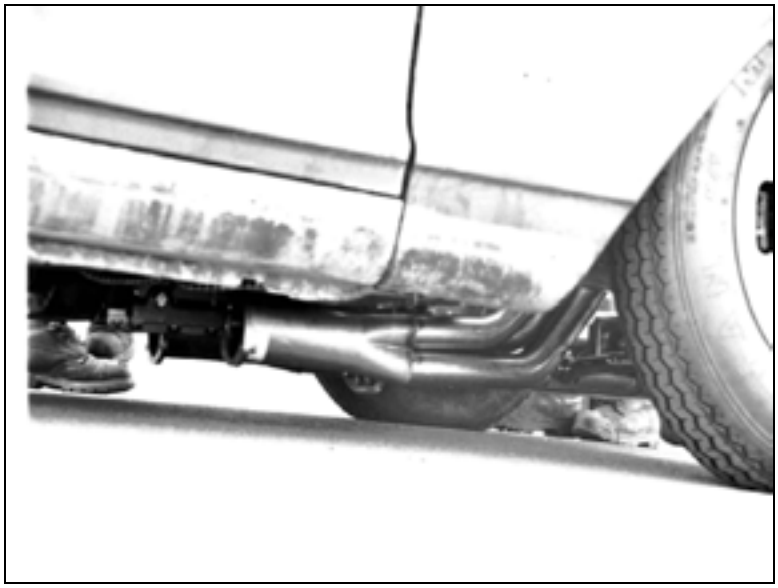
Do not put the engine mount bolt in place until after you have the header bolts started into the heads. Raise the header up and start the front and rear 12 point 3/8-16 bolts first this will hold the header gaskets in place.

Set the header gasket in place over the front and rear bolts. Next, thread the rest of the bolts while holding the header to the cylinder head. Do not tighten until you have all of them started.

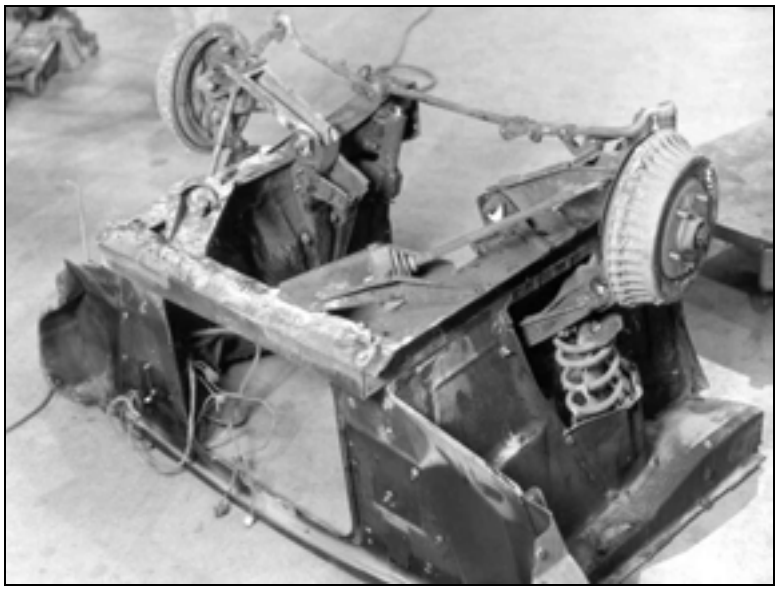


Once all the bolts are started, install the engine mount bolts through the frame brackets and the billet mounts. After both bolts are in place, tighten them to 45 lb-ft of torque. Now you can final tighten all of the header bolts.

Reinstall the steering shaft from the top toward the rack & pinion. It goes between the two header tubes. You may need to rotate the rack & pinion to get clearance for the steering shaft. Turn the steering wheel lock to lock and check for any clearance problems, adjust as needed.

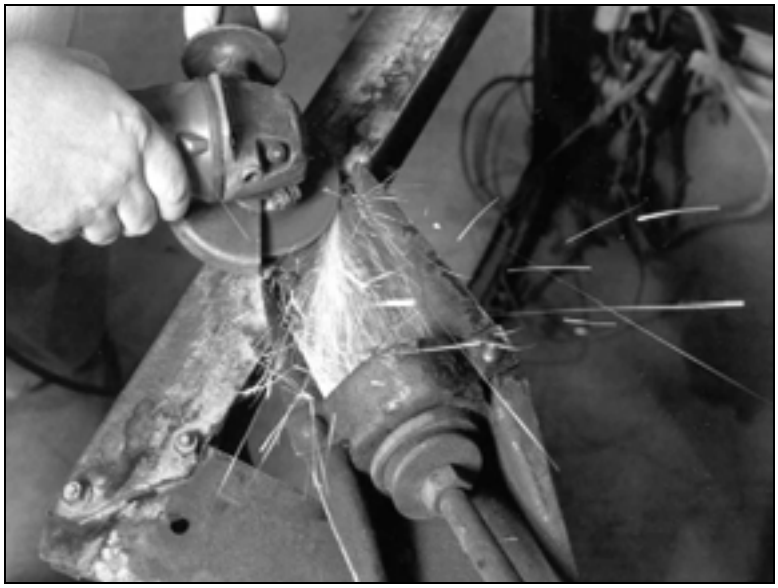


With the headers installed there is plenty of ground clearance and room for the exhaust system.



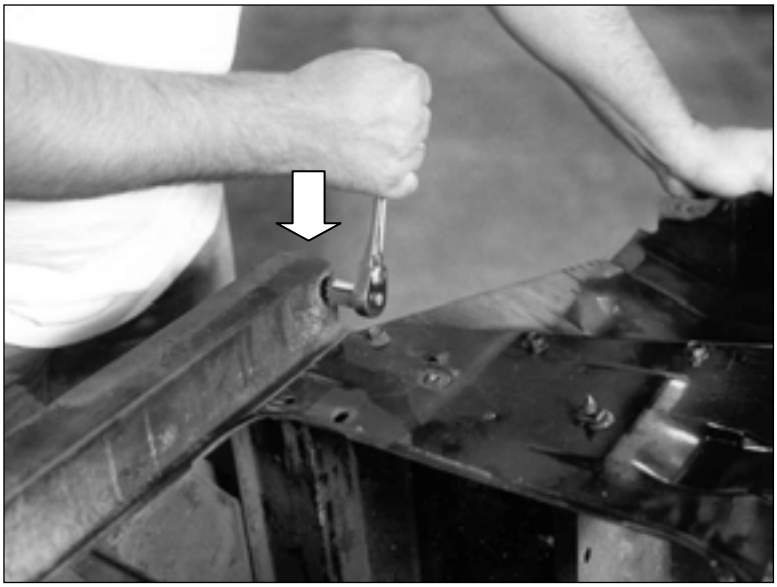
Installing Front Sheet Metal

Next, you will need to remove the radiator core support mounted to the original front end. Set the factory nose you removed upside down on the shop floor.

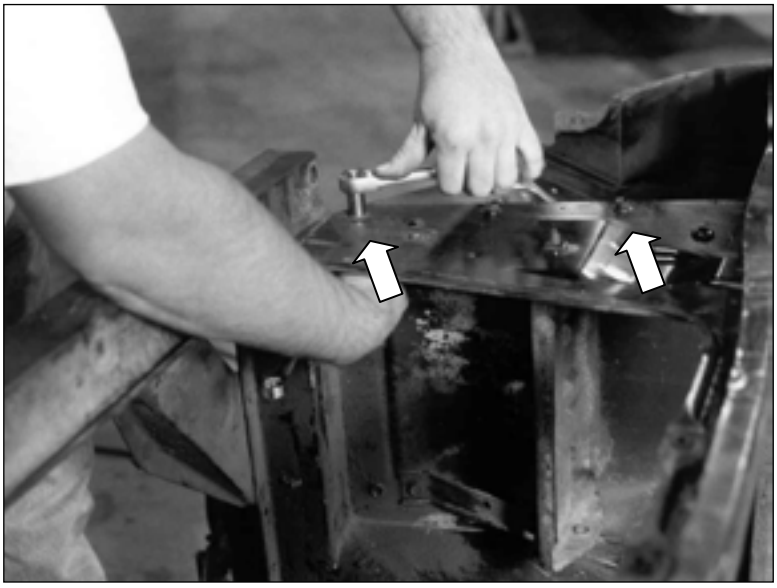


If no work has previously taken place on the front end, chances are the factory rivets are still in place where the lower A-arm strut mounting pad attaches to the core support. Use a grinder to remove the rivet heads.

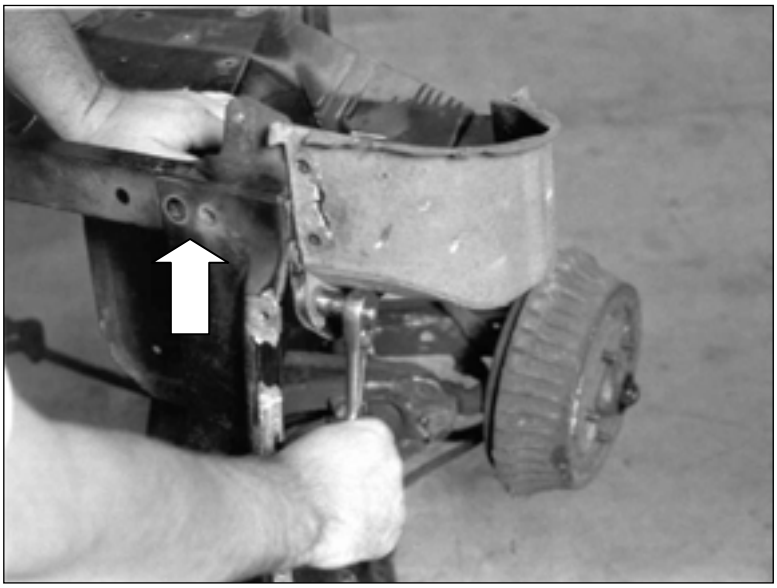
Use a large punch and hammer to drive the rivets out once the heads are removed. Repeat this on the other side.



With all the rivets removed, start unbolting the radiator core support. There are three bolts on each side connecting it to the end of the stock frame rail.



There are four bolts on each side of the front attaching the radiator core support to the inner fender panels.



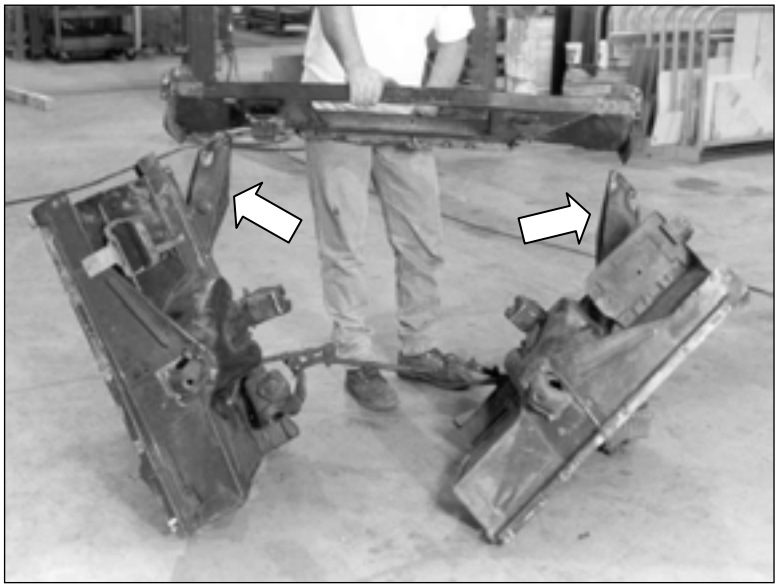
The last two bolts are on the top of the radiator core support. On each one of those, there is a hood adjuster.

This is also a good time to unbolt the inner headlight buckets from the radiator core support. They will also be reused.

On the 62-65's the headlight buckets are made of stamped steel, the 66-67's are plastic.

Once all the bolts are removed, you can pry the radiator core support away from the inner fenders.

A large screwdriver or pry bar works well for this.



Safety tip: Don't stand next to the front end when you remove the core support, it's all that keeps the two sides from flopping over, as seen here.

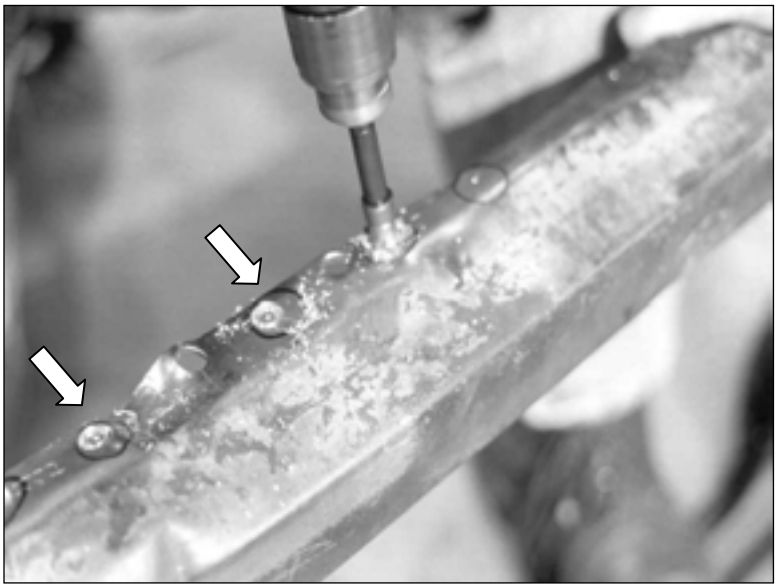
The lower crossmember of the radiator core support is spot-welded in place, and the welds must be drilled out. A new lower cross-member is welded to your frame. You will use only the outer part of the radiator core support.

Start by using a wire brush to whisk away all the grime and paint.

Carefully inspect the rail to locate the spot welds. Use a marker to indicate their locations.

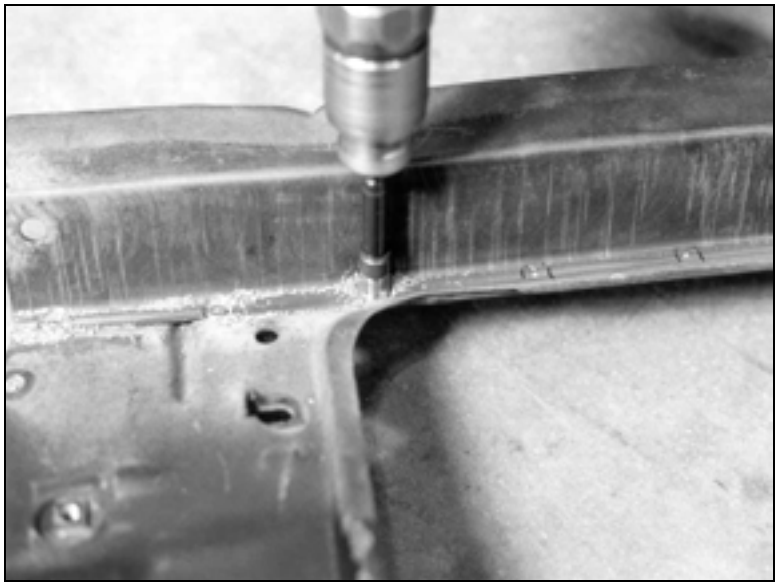
Then, use a center punch to provide a pilot point for the spot weld remover.

This spot weld remover is designed specifically for this job. It has a spring-loaded pilot pin and is available in various diameters. The 7/16-inch size works the best. This tool can be purchased at most auto parts and welding supply stores.

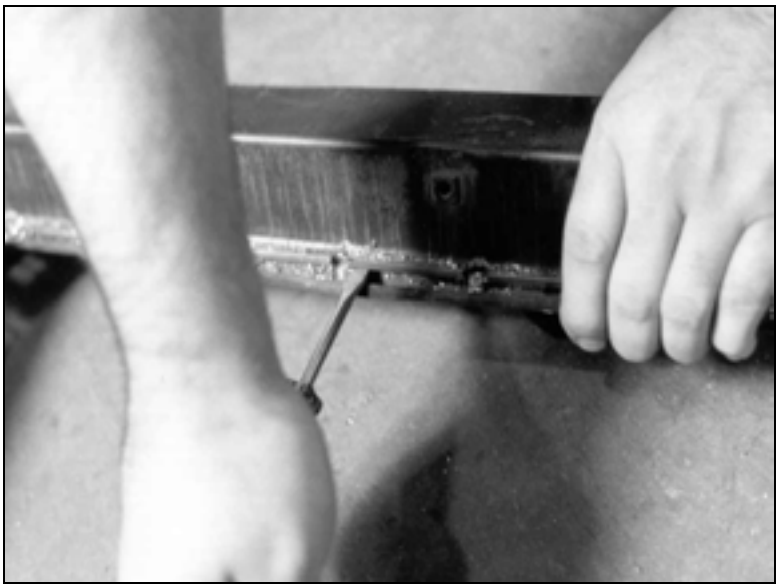


Locate the pilot pin on the point marked by the center punch and begin drilling. Check the cut often to make sure you don't drill through both layers of material. You only want to remove the outer layer of the lower crossmember.

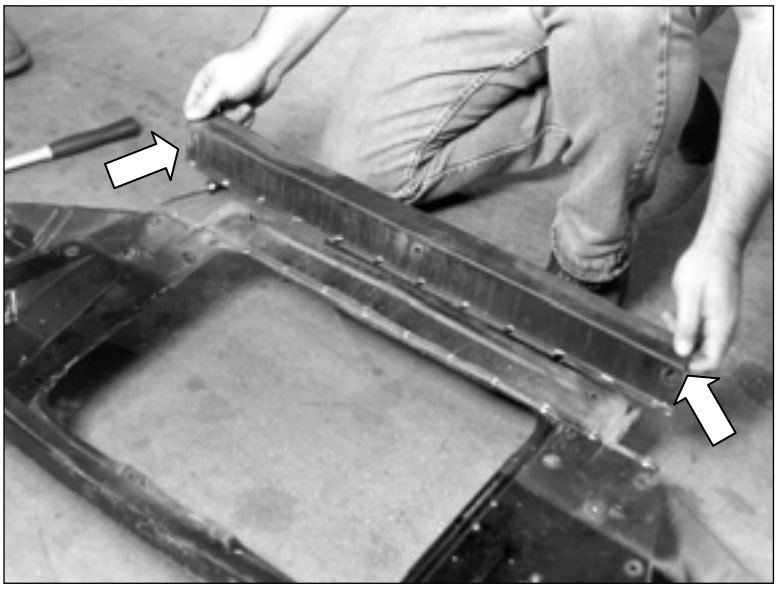
Once you have all the spot welds on the bottom drilled, flip the radiator core support over and find the other set of spot welds. A narrow wire brush was mounted to a cordless drill to clean out this channel.



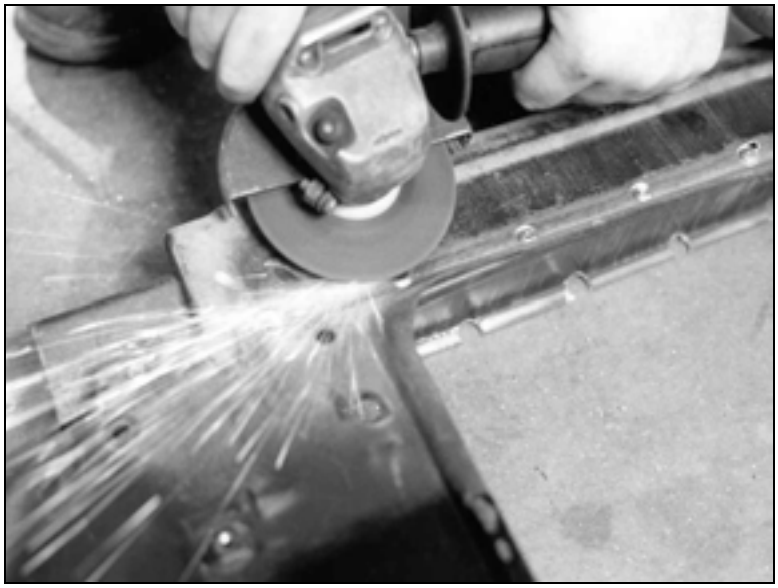
Again, mark the spot welds, center punch, and drill only through the outer panel to remove them.



Next, carefully pry the lower cross-member from the radiator core support with the use of a screwdriver. Be careful because there are a lot of sharp edges created when drilling out the spot welds.



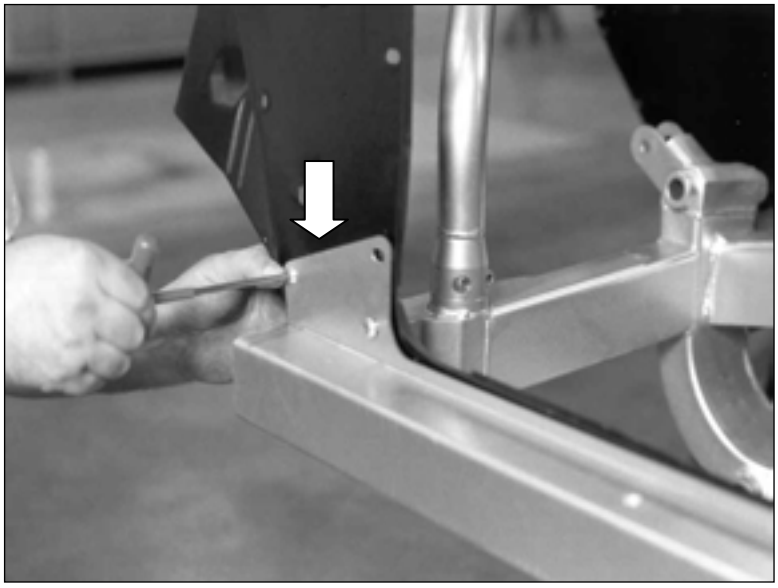
After you have two separate parts, the radiator core support cross-member (highlighted with arrows in photo) can then be discarded.



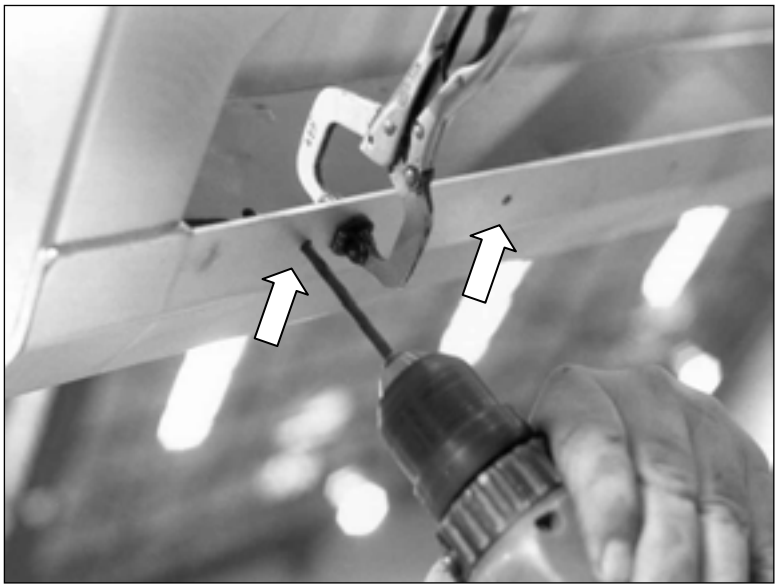
Use a grinding wheel to clean up the remains of the spot welds.

Now is a good time to improve the final appearance of the radiator core support by thoroughly cleaning and then painting it.

Once the paint is dry, the radiator core support can be installed on the new front frame. Simply set it in place behind the mount tabs on each side of the front frame crossmember.

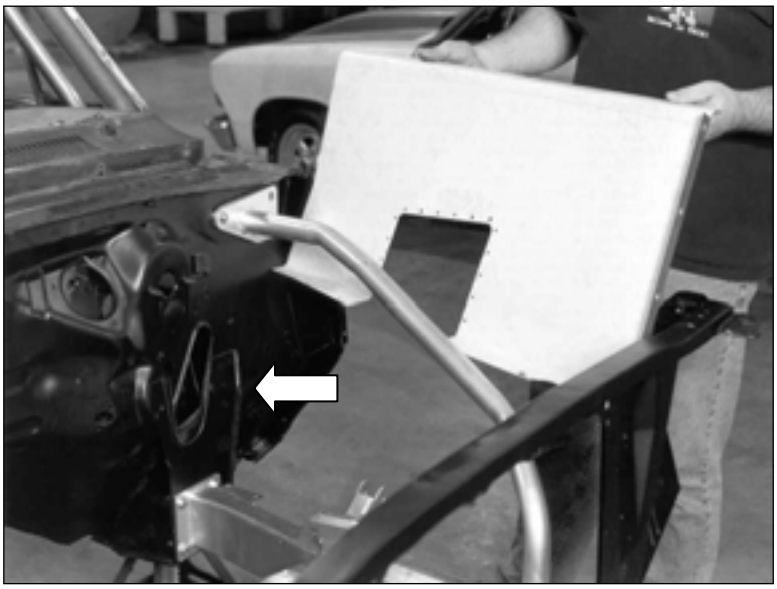


Using the 5/16-18 x 3/4” stainless steel button head allens, washers and locknuts provided, bolt the radiator core support to the front crossmember welded to your frame. The flat washer goes under the locknut when installed.



Clamp the bottom lip of the radiator core support to the frame cross-member. Drill 3/16” holes through the radiator core support using the holes in the frame’s front cross-member as a guide.

Use the 10/32 x 5/8 button head allens, washers and locknuts provided to attach the radiator core support to the inner lip of the frame’s crossmember. The flat washer goes under the nut when installed.

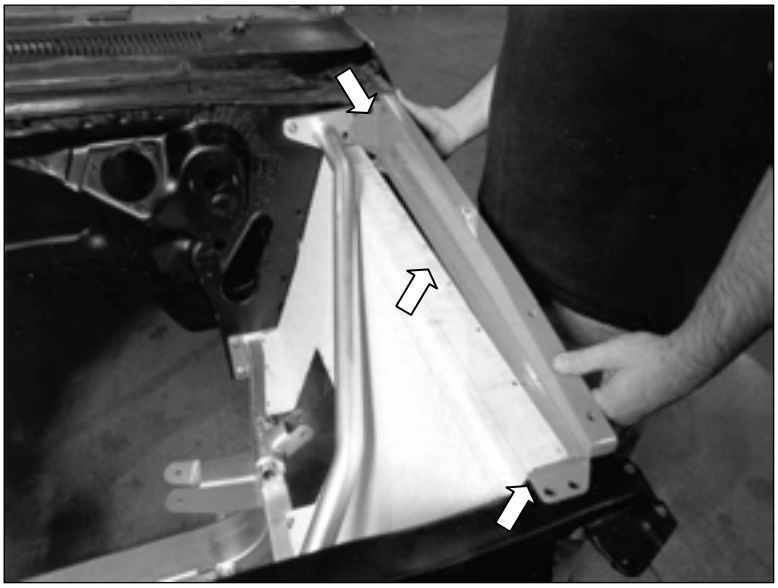


It’s time to install the inner splash panels and hinge mount plates.

Before installing the inner splash panel, the outer lip on the firewall (see arrow) must be ground for clearance. Grind away 2/3rds of the lip 3 1/2 inches down from the top on the driver and passenger sides.

Slide the panel in between the firewall and the core support resting the lower lip on the frame rail.

If you are not installing the inner fender panels, skip to the next photo.

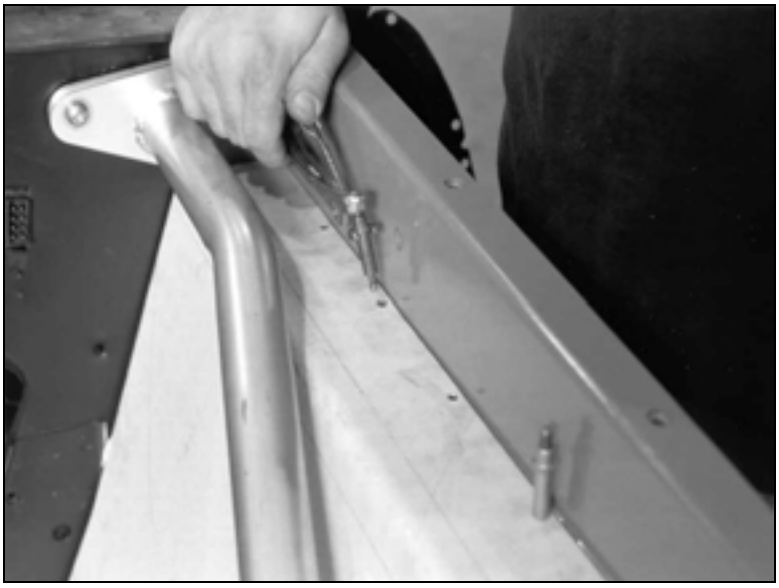


Remove the two outer bolts through the strut mounting plate.

The fender/hood-hinge mount slides under the top lip of the inner splash panel, in front of the strut mount and over the top of the core support at the front.

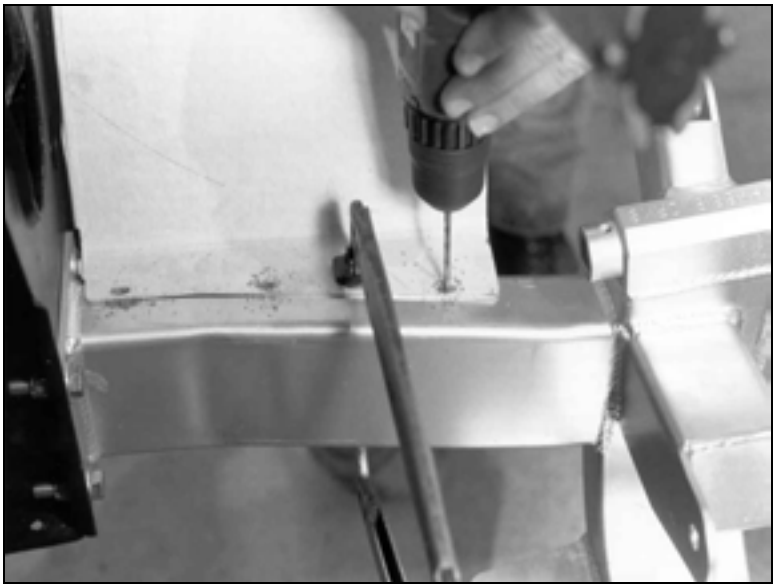
Install the bolts supplied at the strut and the 5/16-18 x 3/4” button head allens and flat washers at the core support. After tightening the button head allen at the front of the radiator core support, tighten the ones at the strut mount plate.

Do not final tighten the two outer bolts on the strut mount until after the fender is aligned.



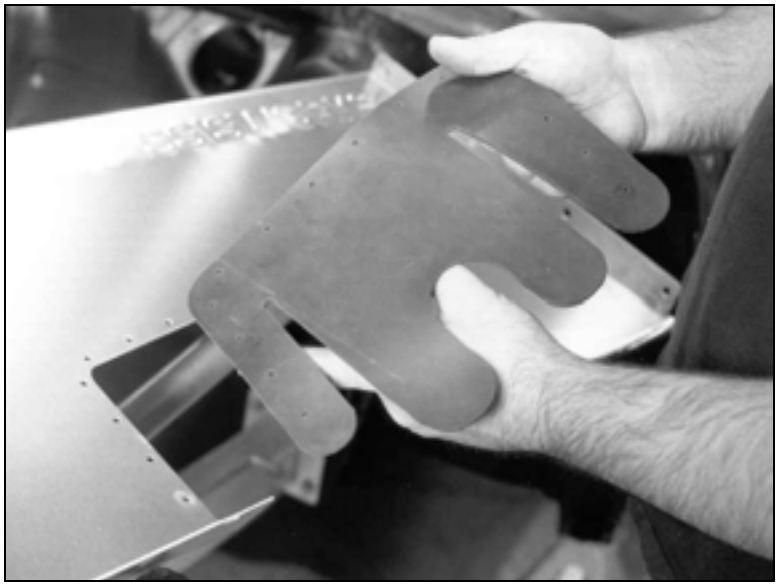
Both the fender mounts and the aluminum inner splash panels are predrilled, and the stainless steel hardware to attach them is in the kit. But for now, removable cleco clips should be used to hold things in place.

The bottom of the inner splash panel is clamped to the frame rail. Use a center punch to mark the holes you will be drilling to attach the inner panel to the frame rail.

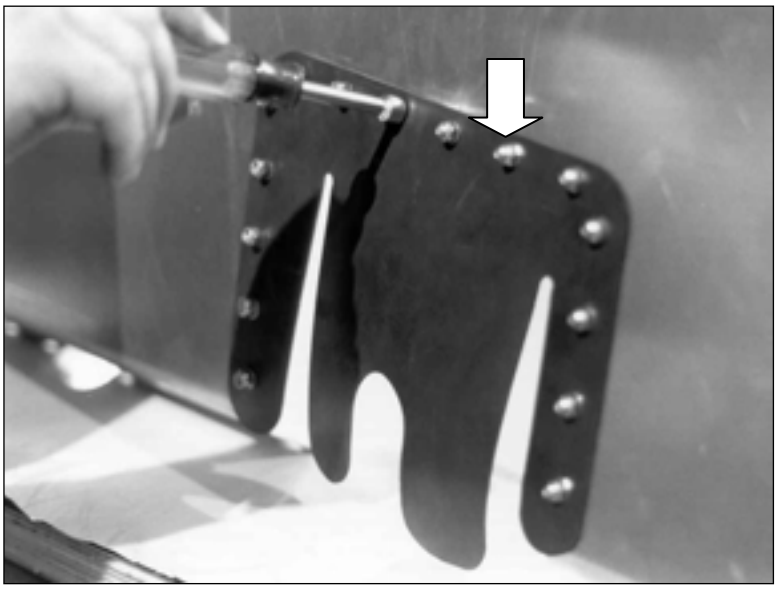


Drill the holes into the frame and tap them for the stainless 10-32 x 1/2 button head allens that are supplied. You will need a No. 21 drill bit (.159 diameter) and a 10-32 tap; both are easy to find at most hardware stores.

Remove the inner splash panels from the car, and peal off the protective PVC coating before the installation of the rubber splash panel boots.

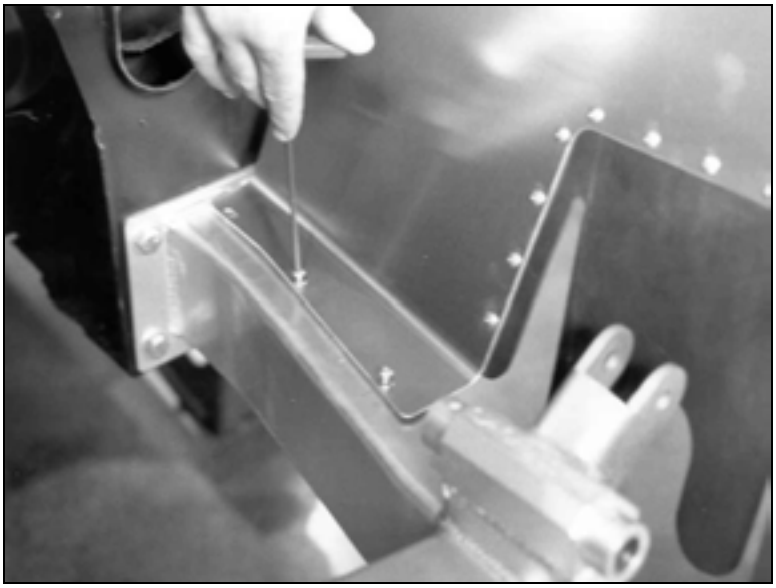


Pre-cut rubber splash panel boots are custom formed to fit around the suspension pieces. They will be installed on the wheel side of the panel.



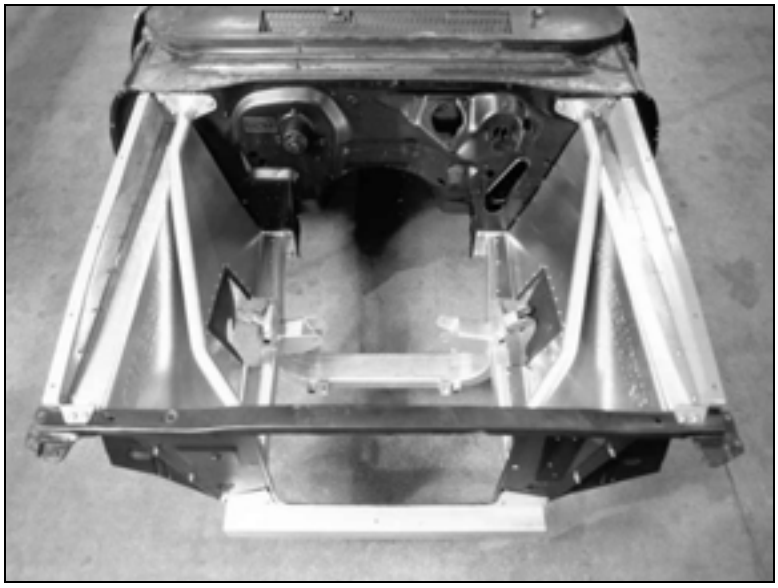
Use the fifteen 10-32 x 5/8” button head allens, washers, and locknuts to attach the splash panel boots to the inner fender panels. Put a washer under each locknut. Hold the panel evenly and securely during this installation.

Set the panels back in place and attach them with the 10-32 x 1/2” stainless steel button head allens and locknuts provided.



The holes on the lower edge of the inner panel are slotted if minor adjustments are required. Complete the installation of the panel by tightening all of the fasteners. Put a washer on each button head allen.

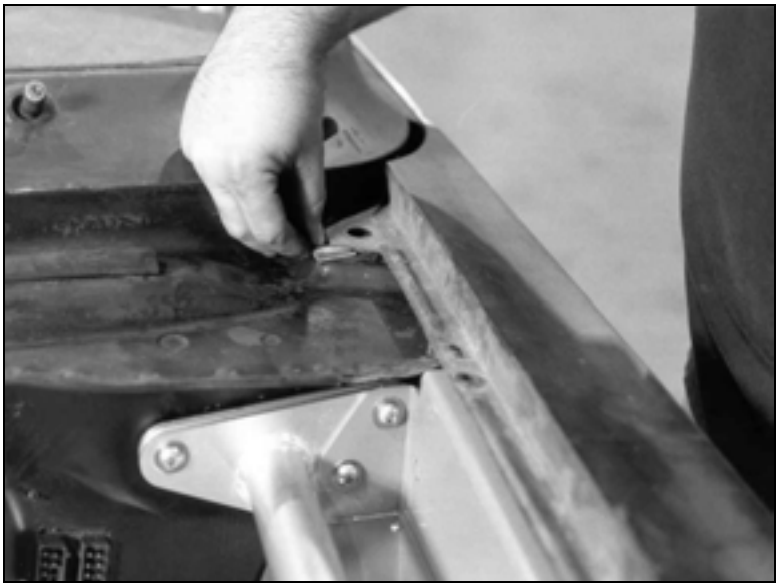
The row of bolt holes at the front of the panel match the OEM locations and spacing. Attach with the 5/16-18 x 3/4 button head allens. Put a washer under the button head and secure with locknuts.



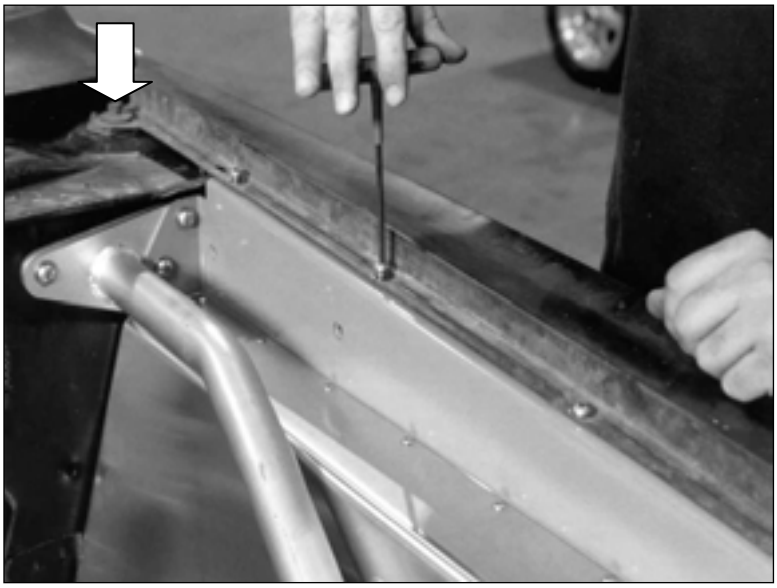
Your project should now look like this.

You are now ready to reinstall the front fenders and hood to complete your bolt on frame clip.

Start by installing the inner headlight buckets to the radiator core support. Then, slide the front fender into place over the hinge mount plate.



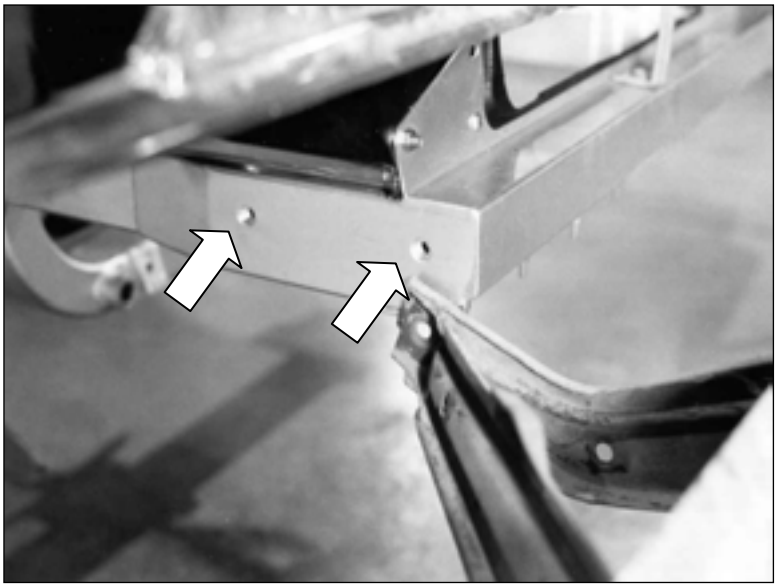
Retrieve the original fender shims from the plastic bag and put them back in position.



Use the original bolts to mount the fender at the top.

New 5/16-18 x 3/4” stainless steel button head allens and washers are used to secure the fender along the hood-hinge/fender mount panel. Tighten the firewall strut’s outer button head allens after the fender is installed and aligned.

The grille is the next thing that goes back on. A threaded boss is provided for the grille's center mounting bolt. Use the 5/16-18 x 3/4” button head allen and washer provided at the center support. Use the fasteners in the bag marked “grille bolts” to complete the installation of the grille.



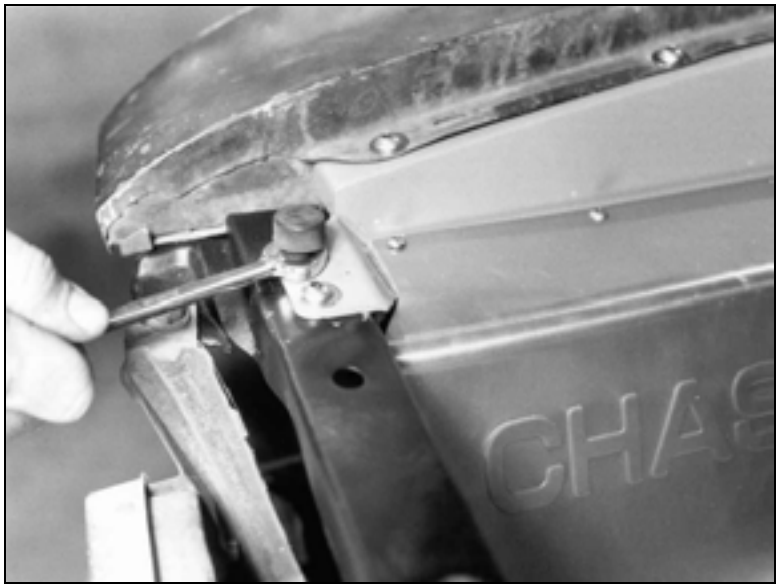
Bolt the bumper back on using the factory bolts. Threaded bosses are on the frame for this purpose. Chase the threads with a 7/16-14 tap before installing the bolts.

Next, bolt the hood hinges to the hinge mount plate. Use your original bolts in the “hood hinge bolts” bag. You will need a U-joint socket adapter to install the bolts closest to the firewall.

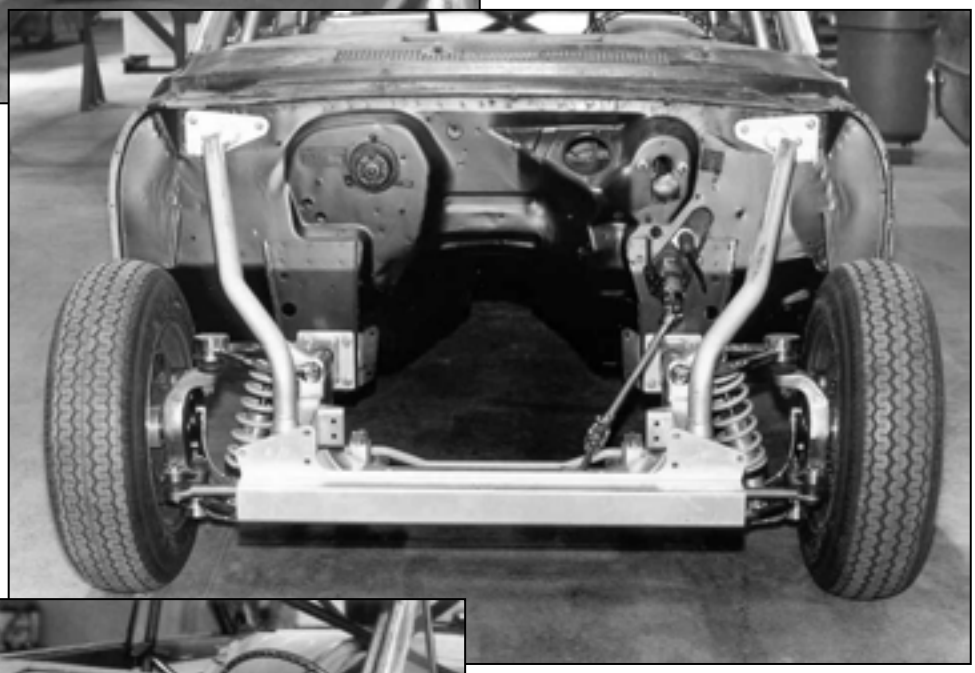
Putting the hood back onto the hinges is definitely a two-person operation. After you have the hood bolted on, carefully close it to check alignment with the front fenders.

With the hood closed, make sure the gap between the fenders and the hood are even on both sides. If they are not, move the fenders to change the gap. The fenders are slotted for this purpose.

You may also need to move the hood up or down at the cowl. Loosen the bolts holding the hinge to the hinge-mount-panels to make any corrections needed. The fenders should be 1/16 of an inch wider than the door to minimize wind noise.



Finally, adjust the front hood stops, making sure the hood latch works easily.



Congratulations, you have now completed your installation.

Your project should look like this.