Level 3 Chassis Stiffening Kit

1970-74 E-body: Dodge Challenger, Plymouth Barracuda and Cuda

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BEFORE YOU START

- Read each section all the way through before you cut, drill or weld anything.
- Support the car on a lift or on jack stands rated for its weight. Never work under a car held up only by a jack.
- Disconnect the battery before welding. Remove the seats, carpet and anything that can burn near the weld areas, and keep a fire extinguisher close by.
- Wear eye protection, gloves and proper welding gear. If you are not comfortable welding, have a qualified welder or shop do the welding.

Questions during your install? Call Bergman Auto Craft.

516-384-6438 | p.bergman@bergmanautocraft.com | bergmanautocraft.com

The step-by-step instructions on the following pages are supplied by the kit's manufacturer and are included unchanged. Guide compiled by Bergman Auto Craft, November 2026.

WWW.USCARTOOL.COM

USCT Motorsports Frame Connector Instructions

Short Version
1. Remove the seats (Front & Rear) and the carpet
2. Safely lift the car
3. Test fit the frame connectors to the floor
4. Modify the driver side connector for the emergency brake cable (if necessary)
5. Clean contact area of undercoating and / or paint
6. Adjust as necessary by grinding the high spots or pressing down on the floor
7. Place car weight on the suspension and check fitment
8. Hold in place with screws or tack welds
9. Weld into position, 1” at a time moving 12” away and cooling weld areas

Long Version
Thank you for purchasing the finest frame connectors available. USCT Motorsports takes great pride in producing the best tools and products possible. If you have any questions about one of our products or a suggestion for how we can make something better, please do not hesitate to call. You can also call just to say Hi, or tell us how the installation went. We’re car folks too!

Remove the Seats and Carpet

You will be welding the frame connectors to the floor, in between the front torsion bar support and the rear frame rail. Most of the floor area that you will weld to is in direct contact with the carpet, so it really does need to be removed. Taking the seats out is to provide access to the carpet for removal and it is also a great time to clean the interior! If you plan to screw or tack weld the connectors into place and then take you car to a muffler shop or welding shop to be welded in, you can skip this step until you are ready to do the welding, but it is a lot easier to take all the stuff out now, then put just the driver seat back in for the drive!

Safely lift the front of the car

If you have access to a lift, installing the frame connectors can be easily done with your car on a lift, either a frame lift or a four post drive on style. If you do not have access to a lift, it is best to raise the car in the air to provide adequate access to the floorboard and torsion crossmember area. Please use jack stands and be safe.

Visualize how you will install the connectors and look for any potential tight spots. Can you get all the parts in without dropping the exhaust system? You will need a plan to deal with the emergency brake cable. Also consider any routine maintenance that might be best performed now. Do you need to change the front U-joint or install a driveshaft loop? This is the perfect time!

Clean contact area of undercoating and / or paint

Mark the area on the floor pan where the frame rail connector will be in contact with the floor and remove any undercoating or paint. You may need to test fit the connector again after this step. Try to get the tightest fit you can get to the floor. We have had good results using a wire wheel and a scraper to remove the undercoating, but it is a messy / dirty job under the best of circumstances. Be careful, wear eye protection and be careful of fumes and open flames!!

Adjust as necessary by grinding the high spots or pressing down on the floor

You want the gap between the frame rail connector and the floor pan to be as small as possible. This may mean you will have to grind away some of the high spots on the connector. Hold the connector in place (use a floor jack from below with slight upward pressure) and measure the gap. If you have no gap along the seams (inboard and outboard) then proceed with the next step. If there are gaps, take the high points (no gap area) down a little at a time with a grinder until the connector fits tightly up against the floor pan. Use a sharpie marker to mark the high spots and then remove the connector and grind the high spots a little at a time. Remember, adding metal back is harder than grinding it off!

Place car weight on the suspension and check fitment

If you are using a frame lift or have the car on jack stands under the frame, remove the car from them and lower it onto the tires. This will “load” the suspension and with the car at its correct ride height, you can check the fitment of the frame connectors. If you are using a 4-post lift and the tires are in contact with the “runways” or have jack stands positioned under the suspension, you are already at the ride height and have the suspension loaded.

If your car is not fully assembled, no worries in the case where the engine, transmission and rear end are removed you will need to support the car with jack stands/lift in an area of the frame where no substantial weight will be “hanging/not supported”

Example: If you have your access to 4 or more jack stands, placing them under the frame rails in these positions will eliminate any flex/bow of the chassis.

Front: In front of torsion bar crossmember right behind the section of frame-rail that starts to curve upward.

Rear: Behind the rear spring hanger mount on the section of frame-rail or on the pinch weld of the rocker in the same area.
Hold in place with screws or tack welds

Once you have the connector fitted nicely to the floor pan, you can tack weld in position, or use some sheet metal screws to hold it in position. Test fit the frame connectors to the floor

Hold the connector up to the floor pan under the car. There is a left and a right connector, they are not marked, but you can only install the right connector on the car's right side. Chances are that the connector will be close but not perfect and will need some grinding on the high spots. Production tolerances, prior floor repairs or replacement make the floor pans just a little different on every car. We have found that using a floor jack under the frame connector to hold it upwards with "slight" pressure helps to evaluate the fit. It can also help to add some weight to the car to force the floor pan down slightly – CAREFUL the car is on jack stands, be safe!!

All frame connectors have slots cut into the bend lines for minor adjustment during Installation these slots need to welded fully.

The E-Body frame connectors are shipped with a front & rear lower "flap" that is not welded. This allows you to adjust for individual car fitment. After final fitment, tack weld the flaps in position and seam weld the flap to the sides using the same method described below to weld the sides to the original car floorpan.

The E-body Frame Connectors are designed to be installed following the angle of the rear frame rails, NOT parallel to the rocker sill. The front of the E-Body frame connectors will be approximately ¾" outboard of the torsion bar socket when it is installed in the design location.

B-Body frame connectors have notches at the front inner edge of the frame connectors. These notches allow the frame connector to clear the factory fuel line on one side and the factory brake line on the other side. You may want to remove those lines and add a splice connector to re-install them after the frame rail is welded in place. It will be difficult to maneuver the factory lines in or out after the frame connectors are welded in, so think about it now!

A-Body frame connectors have a rear "flap" and several areas along the frame connector that are an inch or more away from the floor. These areas are designed to clear the fuel and brake lines as run by the factory on some A-body cars (there is no lack of structural strength, even with these drop outs). Almost every year has a different routing for the brake and fuel lines, so you will most likely need to reroute yours. Plan now before you weld in the frame connectors!

65-66 Mustang frame connectors have a rear plate included to cap the back section of the frame connector.

Modify the driver side connector for the emergency brake cable (if necessary)

If you are running an emergency brake, the cable will want to pass right through one of the frame connectors. You can drill two holes to permit the cable to pass through the frame rail connector. Most of the time, you will be able to get the frame rail connector in place and the cable will run beneath it – mark the entry and exit points and drill a sizeable (3/4") hole at these points to permit the cable to pass through.
Weld into position, 1" at a time moving 12" away and cooling weld areas

Before you begin to perform the welding, be sure there are no flammable materials touching the top of the floor (like carpeting) or you will surely have a fire inside the car. You will be welding about one sixteenth of an inch away from the carpet (if it is left in the car) and it will catch on fire.

Weld small areas, no more than a 1" bead and cool the area around the weld with a damp rag. Move to the other end of the frame connector and weld no more than a 1" bead. Go around the connector and check for any warping as you are welding. Continue to move around the frame connector until you have completely welded it to the front torsion cross member, the floor pan and the rear frame rail.

Hint #1. Welding overhead can be a lot tougher than it looks. If you are not 100% positive in your ability to weld overhead, consider taking the car to a local muffler shop. They weld overhead all the time and are used to welding 12 and 14 gauge material. They almost always have a 4-post style drive on lift with runways, so the suspension will be fully loaded, plus they will probably think your car is pretty cool and give you a break on the welding $$.

Hint #2. Do not weld your car with the frame supported on jack stands and the tires hanging in mid air. Support the car on the suspension (under the rear axle tube and front lower control arms is a good spot for Mopars) so it is "loaded" and have the doors closed while you weld the frame connectors in.

If you need pictures to help on your installation, there are pictures on our website under the pictures section.

Questions or comments?

Call your dealer or call us – we'll help!

USCT Motorsports
www.uscartool.com
919-855-8200

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USCT Motorsports Torque Box Instructions

Short Version
1. Remove the seats (Front & Rear) and the carpet
2. Safely lift the car
3. Test fit the Torque Boxes to the Car
4. Clean contact area of undercoating and / or paint
5. Adjust as necessary by grinding the high spots or pressing down on the floor
7. Place car weight on the suspension and check fitment
8. Hold in place with screws or tack welds
9. Weld into position, 1" at a time moving 12" away and cooling weld areas

Long Version

Thank you for purchasing the finest Torque Boxes available. USCT Motorsports takes great pride in producing the best tools and products possible. If you have any questions about one of our products or a suggestion for how we can make something better, please do not hesitate to call. You can also call just to say Hi, or tell us how the installation went. We're car folks too!

Remove the Seats and Carpet

You will be welding the Torque Boxes to the floor. Most of the floor area that you will weld to is in direct contact with the carpet, so it really does need to be removed. Taking the seats out is to provide access to the carpet for removal and it is also a great time to clean the interior! If you plan to screw or tack weld the torque boxes into place and then take you car to a muffler shop or welding shop to be welded in, you can skip this step until you are ready to do the welding, but it is a lot easier to take all the stuff out now, then put just the driver seat back in for the drive!

Safely lift the front of the car

If you have access to a lift, installing the frame connectors can be easily done with your car on a lift, either a frame lift or a four post drive on style. If you do not have access to a lift, it is best to raise the car in the air to provide adequate access to the floorboard and torsion crossmember area. Please use jack stands and be safe.

Once the car if safely lifted and supported, place the Torque Boxes into position and mark around the exterior for a guide line to grind/clean are to be welded.

If you have already installed or plan to install our frame connectors along with torque boxes we suggest that you install the frame connectors first. You will achieve a better fit this way. Most of the torque boxes will have to slightly modify where they come into contact with our frame as they are manufactured to install on their own.

Once the area you have ground/cleaned is prepped we suggest using a weld able primer in the area that the torque box is going cover once installed and one the back side of the torque box to prevent rust from forming.

We suggest using clamps to hold into position as to create a better fit.

Tack weld into position.

In some situations where a clamp is not possible you might need an extra hand to push area of the torque box that is not in contact with the car into position for welding.

Once desired fit is achieved weld in small sections as to not create too much heat in one general area. Our suggestion is tack all the boxes in place and then weld one section of each box at a time.

Most of our torque boxes have a section that has been left not welded for minor adjustment, once the torque box is installed on the car this slot will need to be welded and ground smooth.

Once all torque boxes are welded fully and cooled down, at this point you can use a coating of your choice to protect them from rust.

Re-installed all previously removed parts on your car and enjoy your cars new stiffness!

If you need pictures to help on your installation, there are pictures on our website under the pictures section.

Questions or comments?

Call your dealer or call us – we'll help!

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919-855-8200

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US Car Tool Inner Fender Brace Instructions

The USCT Motorsports Inner fender braces are designed and engineered to add stiffness and strength to the front end of your car's unibody. They connect the inner fender sheet metal to the stamped steel shock tower and add a continuous gusset/brace travelling rearward to the firewall.

This system is designed to allow suspension forces to be dissipated into the unibody rather than causing a bending motion in any single component. Stated plainly, your frame rails will not bend as much after install the USCT inner fender braces!

Short Version

- Remove Fenders and any items in engine compartment that may interfere with welding like wiring or AC/Heater lines.
- Remove Firewall insulation and any items that may interfere with welding in passenger compartment.
- Fit part and clean area of any undercoat or paint.
- Install plates on shock tower and tack weld in place.
- Fit Inner fender brace before welding shock tower plates.
- Fully weld shock tower plates.
- Re-fit and tack weld inner fender brace.
- Fully weld inner fender brace.
- Repeat on other side.

Long Version

- Prepare the car for the installation. Before you jack up the car and remove the tire, consider washing the under fender area to remove road grime and dirt. Place the car on secure jack stands and remove the tire. Be safe and make sure the car is not going to tip or fall off the jack stands!

- Take off the shock absorber. You do not have to remove all the suspension components to install the kit, but you should remove the shock absorber. You will be welding around the suspension components and weld spatter will make a mess of the shock absorber shaft and damage the seal, so take out the shock!

- Remove fenders and any items in engine compartment that may interfere with welding. You are going to be welding to the inner fender so there will damage to the engine compartment side of

the inner fender. Care is needed as to not burn or catch anything on fire. Also, you will be welding to the firewall area of the car, so care is need as to not burn or catch anything on fire. You may need to remove things such as the firewall insulation and other items located in the passenger compartment.

- Do a dry fit of the inner fender brace kit components onto the car and be sure you understand where each piece fits. There are one or more parts to box in the shock tower, tie the shock tower in to the inner fender and finally the large brace that connects the shock tower, inner fender and firewall.

- Cleaning the area that you will be welding to is very important as you will not get a very good finished product if the area is not prepped well. If the car has undercoat, we usually find the easiest way to remove the undercoat is with a propane torch and a scraper. If the car is just painted removing the paint is usually either done with a grinder or a chemical. Placing the part temporally on the car will give you a good indication of where cleaning is necessary.

- At this point you want to correctly support your car for welding. If your car is completely disassembled, you will want to support on jack stands under the frame rails of the car in multiple spots. If the car is on a rotisserie you will need to lower it down and support with jack stands. You do not want to weld these in place with the car supported only by the rotisserie. If your car is completely assembled you can install these with the car sitting on all four wheels as it would be normally. These steps will ensure that the body does not flex while installing the inner fender braces.

- Install shock tower plates, the plates are contour cut to fit so there is a front and rear plate plus a plate that ties both the front and rear plate together. Install each piece separately. Install front and rear plates first. Once the plates are tack welded in place, you will want to fit the inner fender brace to make sure plates are not going to interfere with fit.

- Once you have the fit that you desire, remove the inner fender brace and fully weld shock tower plates in place. Once welded re-fit inner fender brace. Depending on your welding you might have to grind some of the weld areas for proper fitment of the inner fender brace.

- We suggest that you use a weld through primer to coat the backs of the inner fender brace and plates in order to keep the rust from forming.

- Once the plates are welded and you have fit the inner fender brace and happy with the fit. Tack weld the inner fender brace in place and double check all the areas of fitment. There should be areas where the inner fender brace does not touch; these are intended for drain holes. At this point you can fully weld the inner fender brace to the car.

- Once you are finished welding both sides now it’s up to you to decide how to coat the area that was affected paint, undercoat, there are many different options choose the best for you application.

E-Body

		
Locate, test fit and clean paint off surfaces to be welded, the brace can go over the factory brace	Shock tower plates and brace welded in.	Fully welded. Trim the splash shield as needed.

- The factory inner fender brace lip may have to be trimmed to fit our inner fender brace correctly.
- The front and rear shock tower plates are installed first, then the inner fender brace is fitted. Once in place then fit the large shock tower brace, this plate fits and welds against the bottom of the inner fender brace.
- The e-body inner fender braces are designed to install over top of the factory cowl to shock tower brace.
- The e-body shock tower plates are extremely important to fit first before fitting and welding the inner fender brace in.
- The e-body factory splash shield will need to be trimmed to fit after installing our inner fender braces.

B-Body

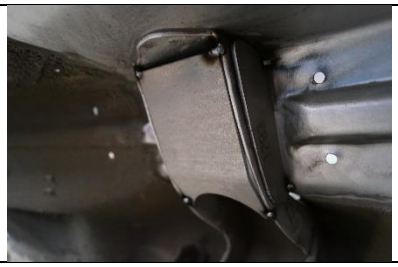

Clean and prep the car


Locate, adjust and weld the brace


Weld fully and prime

- The B-body inner fender braces are designed to use shock tower braces that are integral to the inner fender brace itself. There are no separate shock tower braces for the B-Body.
- Adjustments, grinding and trimming are usually required to fit the Brace to your unique car.
- The B-body braces have extra slots to allow for welding the brace to the factory shock tower brace.
- You will likely need to trim the “Wing” gusset of the inner fender brace a bit for the original splash shields to fit. Trim now before you remount the fender.

A-Body

		
Remove Fender, locate, adjust and clean surfaces to be welded	Install shock tower brace	Fully weld

- The a-body braces weld directly to the firewall and will need extra caution in the interior of the car as not damage or burn anything.

Thanks for purchasing USCT's Inner Fender Braces!

If you have any questions or concerns please feel free to contact us at (919) 855-8200

(919) 855-8200
www.uscartool.com

Install Instructions for Core Support Stiffener

The USCT Motorsports Core Support Stiffener is designed and engineered to add stiffness and strength to the front end of your car's unibody. This system is designed to allow suspension forces to be dissipated into the unibody rather than causing a bending motion in any single component. Stated plainly, your frame rails will not bend as much after install the USCT core support stiffener!

Basic install procedure

1. Dry fit all the components, adjust as necessary for close, weld able fit.
2. Tack Weld In Position
3. Weld core support stiffener fully in position.

Detailed install instructions

1. Prepare the car for the installation. Before you jack up the car and remove the tire, consider washing the under fender area to remove road grime and dirt. Place the car on secure jack stands and remove the tire. Be safe and make sure the car is not going to tip or fall off the jack stands!
2. Remove Radiator, front fenders, front valence, and any other items that might be subject to damage during installation.
3. Do a dry fit of the core support stiffener onto the car and be sure you understand where it fits. Clean the area where you will be welding. Remove undercoating etc. You need bare metal for the welds to penetrate and hold.
4. Look at the other side of the areas you will be welding. Be sure there is nothing flammable or plastic touching the core support in the engine compartment! The welds will penetrate all the way through the core support sheet metal. If you have your wiring harness held in place while you are welding on the core support, you will melt the wires together and probably the plastic clips that hold it in place. Check the engine compartment side of the core support and move things out of the way.
5. The order of installation is as follows:
    a. Clamp core support in position, the piece is meant to fit tightly so you may have to use a rubber mallet to work the piece in place.
    b. Tack weld core support stiffener in place.
    c. Weld core support fully including inside the flanged holes.
6. Let cool, undercoat or prime/paint the weld areas, re-install all parts removed for installation and go for a test ride with your new stiffer and stronger car!

B-Body

The factory bracket that mounts the k-frame to core support bracket and grill support has to be removed. To do this you will need to drill the spot welds. It can be re-installed in the same location after the new core support is installed.

E-Body

The core support has slots and a hole for the existing holes used for mounting front grill support and k-frame to core support bracket.

We have seen some E-Bodies have a 45 degree chamfer on the factory lower core support bracket. This chamfer does not allow the USCT Motorsports core support brace to sit flush and does not provide a surface to weld through the dimple die holes. We include a flat "backer" that is welded between the factory core support bracket and the USCT Motorsports core support brace to provide the support needed to weld fully.

A-Body

The core support has slots and a hole for the existing holes used for mounting front grill support and k-frame to core support bracket.

We have installation pictures available on our website under the pictures section.

Any questions or concerns feel free to give us call at (919) 855-8200



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Install Instructions for Rear Spring Re-Location Kits

Leaf Spring Relocation Kit USCT Motorsports does it again. Well known for their chassis stiffening products, USCT has now created a kit to help Mopar car owners get even better performance by providing up to 8" more room for rear tires. Anyone who has ever looked underneath the rear end of a Mopar notices the leaf springs are in the way of really wide tires / wheels. Racers and chassis fabrication shops have been moving these in for years, and believe me, it is not as easy as it sounds. Why do you think all the race cars ads say "Hooks hard and goes straight", unless going straight was not the norm? The USCT leaf spring relocating kit is self aligning off the factory leaf spring mounting holes and includes instruction on how to cut the factory frame rails, locate and weld in the new front and rear mounts and measure to be sure you are straight and square. This kit won't make you a chassis shop, but it will help an advanced hot rodder gain up to 8"of tire tread space in the back of that Mopar!

Basic install procedure

1. Dry fit all the components, adjust as necessary for close, weld able fit.
2. Tack Weld In Position
3. Measure for Square
4. Weld brackets fully in position.

Detailed install instructions

1. Prepare the car for the installation. Before you jack up the car and remove the tire, consider washing the area to remove road grime and dirt. Place the car on secure jack stands and remove the tire. Be safe and make sure the car is not going to tip or fall off the jack stands!
2. Remove rear axle and rear leaf springs and hanger assemblies.
3. Do a dry fit of the brackets onto the car and be sure you understand where it fits. Clean the area where you will be welding. Remove undercoating etc. You need bare metal for the welds to penetrate and hold.
4. Use the front brackets to mark the area to be cut in the rear frame rail for the new spring hangers.
5. The order of installation is as follows:
    a. Mark and cut out section of frame rail for new bracket.
    b. Tack brackets in place.
    c. Measure for square.
    d. Place rear brackets and mark hole location.
    e. Remove rear brackets and cut hole in frame rail for sleeve to pass through.

f. Place rear bracket and insert sleeve into bracket and tack weld in place.
g. Install leaf springs to check for correct location.
h. Fully weld front and rear brackets once square has been achieved.

6. Since we can guarantee the placement and square of the factory leaf spring mounting locations, care is need when placing the brackets. It is very important that cross measurements be made to check the location of the front brackets.
7. Let cool, undercoat or prime/paint the weld areas, re-install all parts removed for installation and go for a test ride!

We have installation pictures available on our website under the pictures section.

Any questions or concerns feel free to give us call at (919) 855-8200

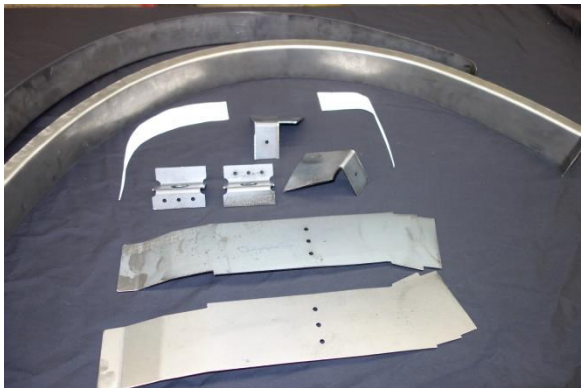
Install Instructions for USCT Motorsports E-Body Mini Tub kit

USCT Motorsports does it again! Well known for their chassis stiffening products, USCT has now created a kit to help Mopar E-Body car owners run even bigger tires by providing 2” more room per side for rear tires in the wheelhouse. You will have 15+” of room for a tire between the frame rail and the quarter panel lip after doing the mini-tub. (Use a spring relocation kit to take full advantage of the new wider wheelhouse.) You can even roll the lip for larger tires (wow!).

Anyone who has ever looked underneath the rear end of an E-Body Mopar notices the wheel tubs and frame rails are in the way of really wide tires / wheels. Racers and chassis fabrication shops have been moving these in for years, and believe me; it is not as easy as it sounds. Why do you think all the race car ads say "Hooks hard and goes straight", unless going straight was not the norm? The USCT mini-tub kits make it easy giving you all the essential pieces to move your factory wheel tubs over and notch the rear frame rail for amazing clearance with wide tires.

Kits Include:

1. Fabricated Wheel Tub Fillers
2. Frame Rail Notch Template (metal)
3. Frame Rail Notch Panel
4. Frame Rail Notch Inner Brace
5. Wheelhouse Cutting Templates (paper)
6. Instructions

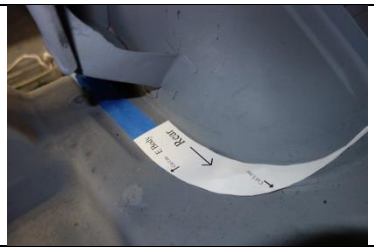


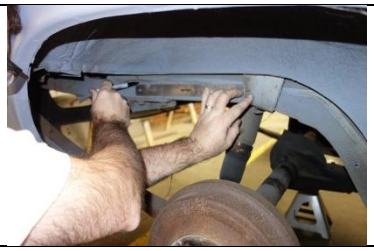
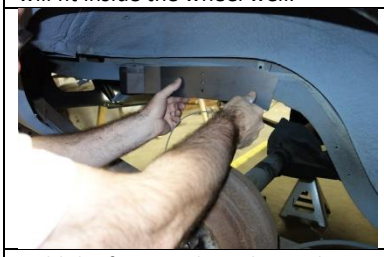
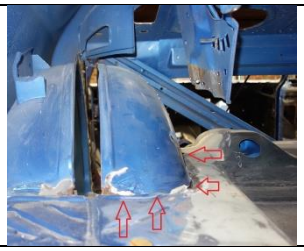
Basic install procedure (full pictured install instructions on next pages)

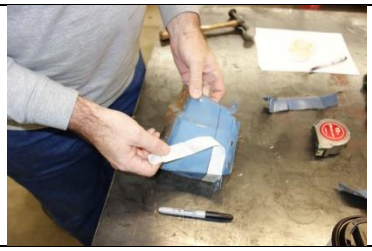
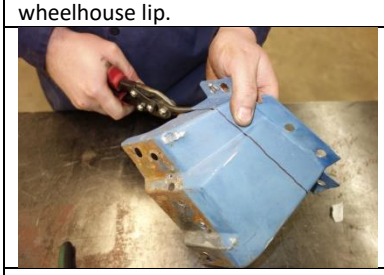
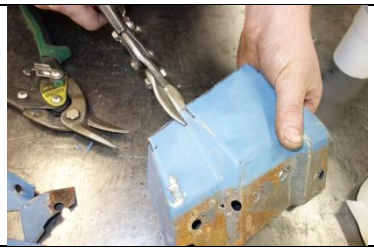
1. Remove Inner Wheelhouse, clearance rear seat brackets
2. Place Frame Rail Notch Template, mark, measure and cut out Frame rail side
3. Place Cut Templates, mark, cut out and remove section of floor
4. Install Frame Rail Notch Bracket and Frame Rail Notch Panel
5. Mock up Wheel Tub Filler Panel in position
6. Tack Weld in position
7. Confirm placement and fitments, then Fully Weld in position

Preparation

1. Prepare the car for the installation. Before you jack up the car and remove the tire, consider washing the area to remove road grime and dirt. Place the car on secure jack stands and remove the tire. Be safe and make sure the car is not going to tip or fall off the jack stands!
2. Remove Interior
3. Remove rear axle and rear leaf springs and hanger assemblies

		
Drill spot welds on trunk hinge bracket to wheelhouse and remove lower bracket.	Drill spot welds on package tray to inner wheelhouse brace and separate brace from wheelhouse. The brace will need to be cut to permit room for the Wheelhouse to move inboard. Cut the brace and save, you will re-install after the inner wheelhouse is moved inboard.	Drill spot welds on rear seat brace to inner wheelhouse. Bend this brace up and out of the way. The rear X brace behind the rear seat will need to be modified to allow for the inner wheelhouse to move inboard. Cut away material or bend the brace to permit the wheelhouse to move inboard approximately 2 inches.
		
Using our provided cutting templates, place into position and mark the cut line. Using paint is an easy method to mark the cut line, but a marker or tape is also effective.	The cut templates are marked front and back, once the floor is marked for cutting, you will need to mark a line from the front to the back to connect the cut lines and show the section of the floor to be cut and removed.	We suggest that you drill out the factory spot welds at the inner wheelhouse to trunk floor seam before you make the floor cut. This will give you some nice holes to weld through onto the side of the frame rail once moved over.
		
We don't provide a template for cutting the inner wheel house away from the outer wheel house. This cut is done on the trunk floor side of the factory flange where the inner and outer wheelhouses come together. Use a chisel to start a cut …	… then complete the cut to separate the inner from the outer with a Sawzall or cutoff wheel or saber saw. Be sure to cut on the inside so as to leave the lip on the outer wheelhouse.	Remove the wheelhouse

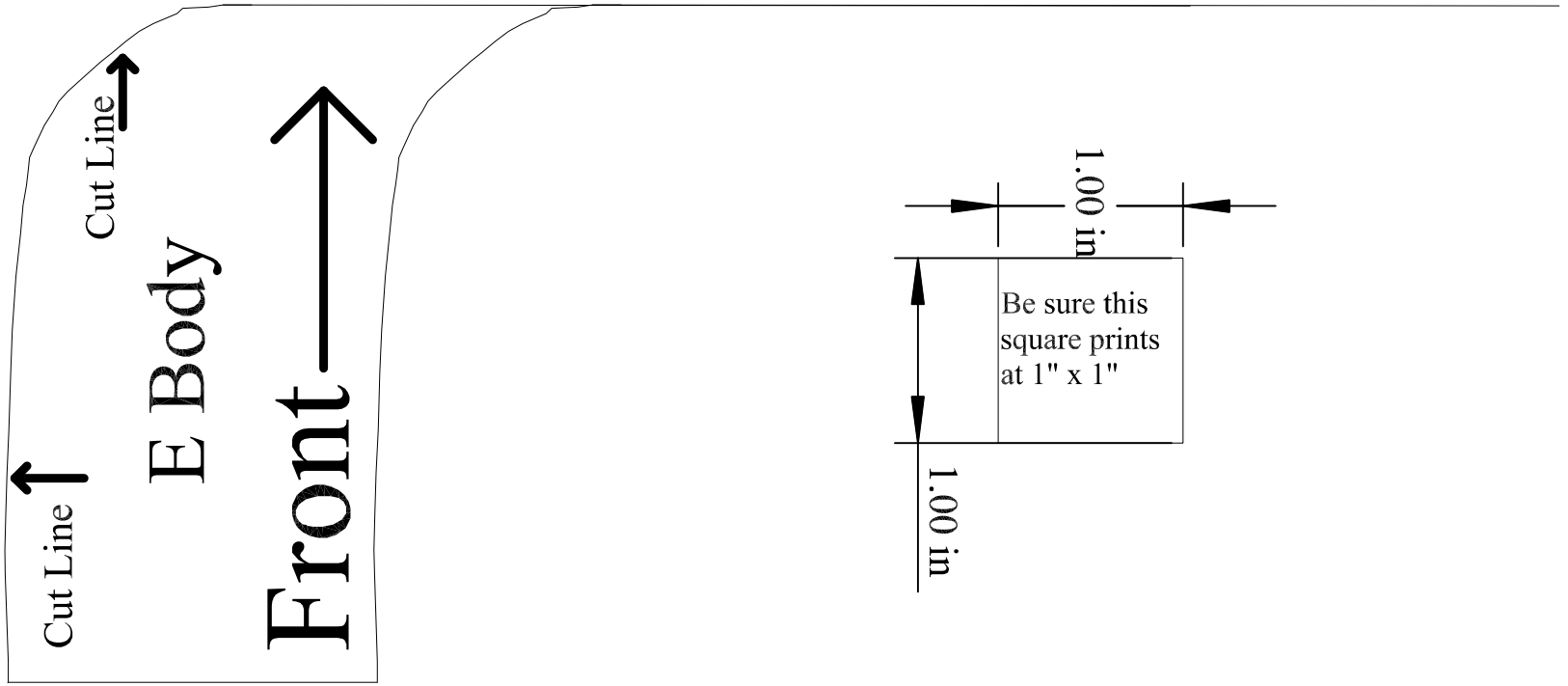
		
Here is a picture showing why the rear frame rail needs to be notched for wheelhouse clearance on an E-Body. The frame rails spread outward and will touch the tire without notching. This tire is a massive 355/30-19 and it will fit inside the wheel well.	Place the frame rail notch template (made of metal) in location, using the rearward hole in the frame bump stop to line-up with the hole on the template. There are left and right templates, be sure to use the correct one and be sure Front is towards the front of the car.	Mark a line on the Frame Rail at the front edge of the frame rail notch template. This will be the front of the frame rail cut. Measure 12 inches back from the back side of the frame rail notch template and make a line on the frame rail. This will be the rear of the frame rail cut.
		
Hold the frame rail notch panel up to the frame rail and confirm proper fitment. The frame rail notch panel should be longer than the area you marked on the frame rail side. (The patch overlaps on the inside of the frame rail.)	Cut the side of the frame rail between the marks and remove. (You will trim the top and bottom later, just remove the side for now.)	Now cut the floor along the marked line to allow the inner wheelhouse to be moved inboard 2 inches. Be careful to cut away (outside) from the line not on it. This is to ensure that you do not over cut.
		
With the floor cut, insert the Frame Rail Notch Panel inside the frame rail (the ends go behind the original frame rail sides) adjust fitment and then mark the location of the Frame Rail Notch Bracket.	Install the Frame Rail Notch Bracket inside the frame rail and confirm fitment to support the Frame Rail Notch Panel, weld into position against the opposite side frame rail through the provided holes in the bracket.	Install the Frame Rail Notch Panel (the ends go behind the original frame rail) and confirm final fitment. Weld into position and then grind the top and bottom of the frame rail to match the Notch provided by the panel.

		
With the floor cut made and the frame rail notch installed, test fit your inner wheel house and verify fit. The inner wheelhouse should be 2 inches inboard. As you mockup the inner wheelhouse, you will need to grind the floor (and top of the frame rail lip) back to the marked line. Always being careful to not over cut. It is easier to remove a little metal than to have to add it back!	When the wheel house fits correctly, you will need to either tack weld or sheet metal screw our filler panel in place for a test fit. Our piece will go under the inner factory wheel house step. This will also give you some adjustment on width from front to back.	Once you have the filler panel to the desired fit you can weld it to the factory inner wheel house.
		
Install the inner wheelhouse back in the car, clamp and adjust as necessary for correct fitment. When the wheelhouse is in position, fully weld to the floor and outer wheelhouse lip.	Reinstall the package tray to inner wheelhouse brace (removed and cut in a prior step) into a new position and weld.	Modify the original trunk hinge bracket to fit the moved inner wheelhouse by measuring up 1” from the original flange and cutting. We used 1” wide tape for easy marking.
		
Cut on the marked line.	Now add a new flange by marking up ½ inch at the bend lines, and cutting up ½ inch.	And then turning up a ½ wide flange, using a panel tipping tool or a pair of pliers.
		
Test Fit the modified trunk hinge bracket. Make any adjustments and weld into position.	On the interior, form the rear seat bracket to fit the new inner wheelhouse position and weld.	

A set of Mini Tubs installed in a 1971 Plymouth Cuda, ready for seam seal and primer/paint.



We have installation pictures available on our website under the pictures section.
Any questions feel free to give us call at (919) 855-8200



USCT MOTORSPORTS

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES DEBURR ALL EDGES AND HOLES TOLERANCES FRACTIONAL ± 1/16 ANGULAR: MACH ± .5 BEND ±0.5 TWO PLACE DECIMAL ±.010 THREE PLACE DECIMAL ±.005	DRAWN	J Peterson	2/2022
	CHECKED		
	ENG APPR.		
	MFG APPR.		
INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5-2009	Q.A.		
	COMMENTS:		

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MATERIAL

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US Car Tool

TITLE: 70-74 E-Body Mini-Tub Cut Template Front

SIZE	DWG. NO.	REV

SCALE: 1:1	WEIGHT:	SHEET 1 OF 1

US Car Tool

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES DEBURR ALL EDGES AND HOLES TOLERANCES: FRACTIONAL ± 1/16 ANGULAR: MACH ± 1 BEND ±05 TWO PLACE DECIMAL ±.010 THREE PLACE DECIMAL ±.005	DRAWN	Dmorrison	2/2022
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	ENG APPR.		
	MFG APPR.		
INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5-2009	Q.A.		
	COMMENTS:		

TITLE: 70-74 E-Body Mini-Tub
Cut Template Rear

SIZE | DWG. NO. | REV

SCALE: 1:1 | WEIGHT: | SHEET 1 OF 1

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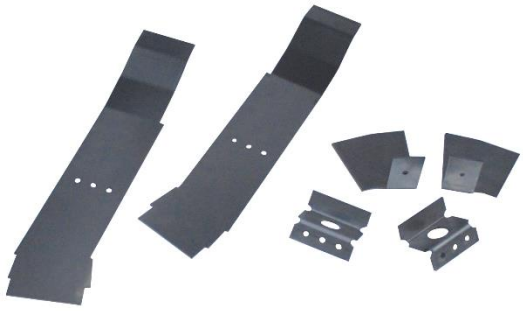
Install Instructions for USCT Motorsports E-Body Frame Notch (for wide tubs) USCTAM2070

USCT Motorsports does it again! Well known for their chassis stiffening products, USCT has now created a kit to help Mopar E-Body car owners run even bigger tires by providing a rear frame notch allowing an extra .75" of tire clearance in the wheelhouse. You will have 15+" of room for a tire between the frame rail and the quarter panel lip after installing wide inner wheelhouses .

Anyone who has ever looked underneath the rear end of an E-Body Mopar notices the wheel tubs and frame rails are in the way of really wide tires / wheels. Racers and chassis fabrication shops have been moving these in for years, and believe me; it is not as easy as it sounds. The USCT frame notch kits make it easy giving you all the essential pieces to notch the rear frame rail for amazing clearance with wide tires.

Kits Include:

1. Frame Rail Notch Template (metal)
2. Frame Rail Notch Panel
3. Frame Rail Notch Inner Brace
4. Instructions

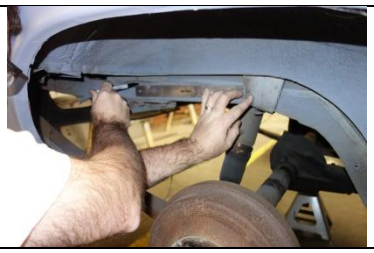


Basic install procedure (full pictured install instructions on next pages)

1. Place Frame Rail Notch Template, mark, measure and cut out Frame rail side
2. Install Frame Rail Notch Bracket and Frame Rail Notch Panel
3. Mock up Wheel Tub Filler Panel in position
4. Tack Weld in position
5. Confirm placement and fitments, then Fully Weld in position

Preparation

1. Prepare the car for the installation. Before you jack up the car and remove the tire, consider washing the area to remove road grime and dirt. Place the car on secure jack stands and remove the tire. Be safe and make sure the car is not going to tip or fall off the jack stands!
2. Remove rear axle and rear leaf springs and hanger assemblies.

		
Here is a picture showing why the rear frame rail needs to be notched for wheelhouse clearance on an E-Body. The frame rails spread outward and will touch the tire without notching. This tire is a massive 355/30-19 and it will fit inside the wheel well.	Place the frame rail notch template (made of metal) in location, using the rearward hole in the frame bump stop to line-up with the hole on the template. There are left and right templates, be sure to use the correct one and be sure Front is towards the front of the car.	Mark a line on the Frame Rail at the front edge of the frame rail notch template. This will be the front of the frame rail cut. Measure 12 inches back from the back side of the frame rail notch template and make a line on the frame rail. This will be the rear of the frame rail cut.
		
Hold the frame rail notch panel up to the frame rail and confirm proper fitment. The frame rail notch panel should be longer than the area you marked on the frame rail side. (The patch overlaps on the inside of the frame rail.)	Cut the side of the frame rail between the marks and remove. (You will trim the top and bottom later, just remove the side for now.)	Place the Frame Rail Notch Panel inside the frame rail (the ends go behind the original frame rail sides) adjust fitment and then mark the location of the Frame Rail Notch Bracket.
		
Install the Frame Rail Notch Bracket inside the frame rail and confirm fitment to support the Frame Rail Notch Panel, weld into position against the opposite side frame rail through the provided holes in the bracket.	Install the Frame Rail Notch Panel (the ends go behind the original frame rail) and confirm final fitment. Weld into position and then grind the top and bottom of the frame rail to match the Notch provided by the panel.	