Installation Instructions

The following instructions are intended for professional installers and are guidelines only. Speedtech Performance assumes NO responsibility for the installation of any of its products. All products are intended for off road use only and must be installed by qualified professionals only. Please read through these instructions before you begin so we can help answer any questions you may have.

Thank you for purchasing your new Speedtech A body Frame Brace Kit. This kit requires a fair amount of fitting and welding. If you do not have welding skills and/or access to a welder, make arrangements ahead of time to have them available during installation. We highly recommend removing the body and the transmission (and engine if necessary) from the frame. You will need to reunite the frame and body several times during the installation. A two post style lift, although not required, will make the job go smoothly and easily.
Frame Brace Hardware Kit Checklist  Note: 68-72 pictured, 64-67 is similar

- Instructions -1
- A. 1 Rear crossmember
- B. 2 Frame rail boxing plates
- C. 2 Main brace tubes
- D. 2 Transmission crossmember side supports
- E. 1 Transmission crossmember
- F. 2 Rear brace to floor brackets
- G. 2 Front brace to floor brackets
- H. 4 Brace to frame plates

Bolt Kit Checklist

Transmission Mount-
- 4) 7/16x 2 Bolts
- 8) 7/16 Flat Washers
- 4) 7/16 Nylock Nuts

Lower Trailing Arm Support
- 4) 3/8x 1 ¼ Bolts
- 4) 3/8 Flat Washers
- 4) 3/8 Nylock Nuts

Brace to Floor Board Mounts
- 4) 3/8x 2 ¼ Bolts
- 4) 3/8 Flat Washers
- 4) 3/8 Nylock Nuts
Step 1. Boxing the Frame

1. You’ll need to remove the body mount braces at the center of the frame rails. Carefully cut these out so that all you have left is the contour of the frame rail.
Note - It is recommended when welding you hold the frame with some tension in a triangulated form with come-alongs or ratcheting straps, see diagram below. Your frame design may vary slightly from the diagram.

A Body triangulated strap guide.

2. The bottom of the frame rail box plate has a 90° bend to help you create a strong flat bottom edge. The small bend goes towards the inside of the frame. Fit the plate against the frame and tack weld in a few small areas to hold it in place.
3. It is likely there will be gaps and you will need to work the bottom of the frame to match the plate. This can be done easily with large C clamps and a hammer.

Clamp the surrounding area and tap bottom of the frame flat with a hammer as needed. Then proceed to tack weld. Be sure to jump around to spread out the heat and avoid warping the metal.
4. Once boxing plates are tacked in, put the body back onto the frame and check for correct body to frame alignment. Confirm that all connection points line up, drop frame back out of the car and begin to weld. *To avoid overheating and warping any portion of the frame it is imperative that you do not weld a large area all at once. Constantly move around front to back and side to side as you weld in 2-3” increments and take breaks as needed to allow the metal to cool.

![Welding Image]

When all frame box welding is done, grind and smooth the welds if desired.

![Grinding Image]
When you are done welding/finishing and the frame has cooled, bolt the frame to the body. For optimum performance we recommend using new Speedtech solid body bushings.

Having the frame bolted to the body will ensure proper body to frame alignment and help position the additional frame bracing with the proper floor pan clearance. You are now ready to start installing the frame bracing components.
Step 2. Bracing the Frame

Installing the frame bracing requires custom fitting the bars to your particular chassis. Each of the areas where the brace tubes need fitment have extra material to allow for trimming. Remember, measure twice, cut once. Plate A in the diagram on page 9 is located using the factory E brake cable mount. If you would like to reuse the factory cable system you will have to notch the frame brace mount plate and drill a new hole as necessary. (See photo below)
1. You will need to bolt the cross member in place at the lower control arm location ("A."). To do this, hold the bar up to the frame and mark location ("B.") for rough trimming which will allow you to position the bar between the frame rails. One of the four mounting plates ("C.") will be installed between the tube and the frame. This plate may need to be bent slightly to match the contour of the frame. With the frame bolted in place mark the bar for final trimming, allowing enough room to slip the plate ("C.") between the bar and the frame. You can use self tapping screws in the predrilled holes or a couple of tack welds to hold plate ("C.") in position. Tack weld the cross member tube to the plate. Repeat for other side.
2. Fit one side bar at a time. Slide a transmission cross member stand (A.) onto the bar before fitting the bar into place. **DO NOT FORGET TO DO THIS PRIOR TO WELDING.** Note at the front end of the bar will be another frame mounting plate, (B.) which may need slight bending to fit the contour of the frame. The front end of the bar will need to be trimmed for a custom fit, see location (C.). Remember to allow room for the plate between the frame and the bar. The rear of the bar (D.) is notched to aid in fitment against the rear cross member. Tack weld or self tapping screw each plate in position. Tack weld the front of the bar in place at the plate and the rear of the bar on the rear cross member. Some cars may need some slight rear floor pan massaging to tuck the rear cross member up into its coordinating pocket in the floor pan. (E.) This is most common on the earlier cars. Note also this cross member is offset slightly to the passenger side.

**DO NOT** tack weld the transmission cross member stands at this time. Bolt the center transmission cross member to the middle of the slots in the two side stands. This will help keep the stands level as you position them when you later weld them in.

*Note that for illustration purposes the frame is not bolted to the body here. Having it bolted to the body while fitting and tack welding will ensure everything will line up properly with the body after all final welding is done.*
2. Replace the (engine and) transmission. Line up the center crossmember to the transmission mount pad. Check to see that the side stands and the crossmember are all centered in line with the transmission mount pad. This will ensure enough adjustment flexibility should you change transmissions later on. Bolt the center crossmember to the transmission and support with a proper stand/ transmission jack. If done properly the transmission stands should sit near flush to the side frame rails as seen below.

3. Tack weld the two side transmission mount stands to the frame and support tubes. The final assembly should look similar to the photo on the following page.
4. Locate each of the four brace to floor pan mounts into position on the floor pan support braces and tack weld to the brace tubes. DO NOT WELD THESE BRACKETS TO THE FLOOR PAN. Note that the larger mount plates are located towards the front of the side brace tubes just behind the transmission cross member, and the smaller mount plates are located at the peak of the rear cross member. Refer to photos below for positioning suggestions.
5. With all components now tack welded into position you can begin final welding. You may find it easier to again remove the frame from the body to do some of this. If the body is removed we recommend reattaching the straps to triangulate the frame as a precaution to avoid any frame movement/warpage. Remember to weld in smaller increments and move around front to back and side to side to allow cooling time for each area welded. Shown is a '68-72 kit, the '64-67 cross bar will install in a similar fashion. Some earlier cars may require some slight floor pan massaging in this area to fit the brace kit rear crossmember up between the rear floor pan and the floor pan crossmember.
6. The final step is to remove the carpet and insulation. Using the predrilled holes in the brace to floor pan brackets as a guide, drill holes for the mounting bolts up through the floor pan with a 3/8” drill bit. See Photos on the following pages of the final installation.
With all the welding completed, protect your newly installed box and brace kit by cleaning, prepping and painting, or now would be a good time to have the entire frame blasted and powder coated.
Terms and Conditions of Sale

1. Effective January, 2008, supersedes all previous policy statements. Policies are subject to change without notice. Speed tech performance Ltd. is not responsible for printing errors.

2. Speed Tech Performance Ltd. does not endorse, nor recommend modification of vehicles for use on public highways, since warranty or government regulations may be violated. As an express condition of sale of any performance part, the buyer acknowledges and agrees to use the performance parts for the modification of vehicles in sanctioned OFF-ROAD competitive events and show purposes only. Customers should exercise discretion on matters with regards to the purchase and installation of these products.

3. Speed Tech Performance Ltd. does not ensure the legal use of these products. We do not guarantee the fitment of these products for anything other than their intended application nor do we assume any responsibilities what so ever for the misuse or losses incurred by the use of any of these components. While every effort is made to provide technical information and assistance, we have no control over owner installation, modification, and unusual stress that performance parts are subject to.

4. The customer acknowledges that Speed Tech Performance Ltd. and its employees are not responsible for any mechanical failures due to the use of parts sold, supplied or installed not for their intended application. Speed Tech Performance Ltd will not be held liable for any damages which are incurred directly or indirectly on the vehicles or operators or passengers of the vehicle

5. Please consult your sales agent and/or technician prior to purchase of any of Speed Tech Performance Ltd. Products to ensure proper fit. The buyer assumes all responsibilities for determining the suitability of the product. All aftermarket products should always be installed by professionals only.

Warranty Claim:

1. Speed tech Performance Ltd. Warrants its products against materials and workmanship failure for the term of 12 months (1 year) from the date of purchase and only up to the amount paid with proof of purchase.

2. Seller’s liability shall as limited to repairing or replacing, at its option, any defective product which is returned, freight prepaid to Seller, according to the Merchandise Return Procedure set forth in Section 3 below. Buyer shall bear all responsibility for shipping charges and risk of loss or damage during transit to Seller. Products which have been subjected to abuse, misuse, alteration, neglect or unauthorized repair or installation, as determined solely by Seller, are not covered by this warranty. Any alterations, addition, improvements or attachments to the product(s) not authorized in writing by the Seller shall be deemed to be a waiver of this warranty by Buyer and shall render this warranty null and void. Seller shall return repaired or replaced product(s) to Buyer, at its expense via regular ground service in Canada. Shipping charges by all other methods and to all other destinations shall be borne by Buyer.

3. Merchandise return procedure
   A. If you purchased your Speed tech performance ltd product from us or from an authorized dealer, you are covered by the terms of this policy. All claims however, must be submitted directly to Speed tech performance Ltd.
   B. Call the customer service representative at 1-888-467-1625.
   C. Provide the invoice number, date of purchase and reason for return
   D. You will be assigned a Returned Goods Authorization Number (RGA). The package you return must show the RGA on the outside of the package, include the original invoice and be shipped prepaid to our facility. The part has to be in its original packaging materials and be in a sellable condition. For parts presenting signs of use, only warranty claims will be accepted.
   E. Ship to seller, freight pre-paid and insured for replacement cost in original packaging.
   F. Replacement or repair decision will be made when merchandise is received by seller. No advance replacement is available.

How to File a Warranty Claim:

The answer to ALL the following questions should be YES before contacting our Customer Service Department.

Is the part appropriate to your application?
Did you carefully and thoroughly read the instructions provided along with the part?
Do you have the proof of purchase?
Are you the original purchaser?
Is the part unmodified and clean?
Is the return date within 3 months from the purchase date?
Is the reason for return a legitimate product defect?

If the answer to all these questions is YES, please contact our Customer Service Department at 1-888-467-1625. You will be given a Returned Goods Authorization Number (RGA) valid for 30 days. You will also be asked to ship the part prepaid to our facility. All shipments MUST be prepaid, include the original invoice and show the RGA on the outside of the package, otherwise it will be refused. Please include a brief explanation letter in order to expedite the warranty analysis process.

What doesn’t this Warranty Cover?

The costs not covered by this warranty include but are not limited to:
- Removal, installation, shipment and insurance costs.
- Improper installation or maintenance
- Misuse or abuse, negligence
- Damage to related components
- Normal wear and tear.
- Costs incurred due to down time of vehicle
- Alterations on the original design or unauthorized repairs.

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