



## INSTALLATION TROUBLESHOOTING - JEEP CJ

Due to the inconsistencies in CJ frame, crossmember, and shackle/hanger placement, there are times when more than direct bolt-on is needed to obtain optimum final mounting position. Also, certain aftermarket shackle / hanger kits' (IE; shackle reversal) placement on the frame interfere with most aftermarket bumpers' mounting brackets, making modification necessary. Gas-tank skidplate placement, bolt-pattern variations and rear crossmember strength are also, at times, issues in installing rear bumpers. We recommend you have a helper to aid in ease of installation, and for safety. Body Armor bumpers are not light-weight tubular bumpers and can be dropped if position on frame-rails is not optimum for a single person to hold in place and bolt on. For the sake of safety, as well as to prevent damage to your bumper(s), have a friend help you in the removal of your OE bumper(s) and the installation of your new bumper(s).

### FRONT BUMPER

Body Armor bumpers were engineered, designed and fitted on a stock CJ chassis without suspension and/or frame-rail modification. Should you have difficulty installing your front bumper, here's a tip to make it easier.

#### All CJ

When fitting your bumper to the frame, if the mounting brackets interfere with your shackles and/or hangers, don't guess as to the area(s) that may need to be trimmed or notched. While a helper holds the bumper as close to its final mounting position as possible, mark the point(s) where the shackles and/or hangers contact the bracket(s) with chalk or a paint-pen, and notch or trim the bracket(s) with a jigsaw, hacksaw or die-grinder. If trimming or notching your bumper brackets is not desired, it may be necessary to drill-out the rivets attaching the hangers to the frame and trimming, notching, or relocating the hangers.

#### All CJ

If you purchased a Body Armor winch plate with your front bumper, it will be necessary to drill through the frame-rails to bolt the plate down at its rear corners. You can also drill and tap the frame-rails if desired for a cleaner installation, as well as easier. A bracket kit will be supplemented in the future that will prevent the need for drilling, contact us for availability.

### REAR BUMPER

As with our front bumpers, Body Armor rear bumpers were engineered, designed and fitted on a stock CJ chassis without suspension and/or frame-rail modification. We have come to find that the rear crossmembers on some models have a variant bolt pattern, making modification and/or drilling necessary. Should you have difficulty installing your rear bumper, here are a few tips to make it easier.

#### CJ8

We have come to find that the CJ8 (Scrambler) models have (1) of (2) crossmember bolt-patterns for the rear bumper. The standard crossmember in the CJ8 has the same pattern found in the CJ5 and CJ7, while the variant crossmember has the pattern punched about 5/16" lower in the crossmember face. This will necessitate modification to the holes in order to bolt-up our bumper. The easiest way to make this modification is to bolt the bumper in place with the outer tabs on top of the frame-rails, and mark the holes



from inside the crossmember where they need to be ground-out. Do not guess and remove too much material as this may compromise the strength of your crossmember. Several fit-checks may be necessary before you are ready to move on to modifying the frame support-brackets and installing the bumper. Once you have completed the crossmember modification, remove the bumper and hold the support-brackets inside the crossmember to the inside of the frame-rails. With the brackets lined up with the holes in the frame-rail, mark the brackets through the modified holes in the crossmember so you'll know where they need to be drilled. It's a good idea to mark the brackets "left" and "right" to make sure they go on the same side they were marked for. Remember that the support-brackets go on the inside of the frame-rails on the CJ8 models that require crossmember modification. Once these modifications are done, your bumper should be ready for installation.

#### All CJ

If the bumper's recovery receiver tube contacts the gas-tank skidplate, or you have an aftermarket skidplate, it may be necessary to do (1) of (2) things. If there is enough adjustment on the mounting-bolts, you can loosen the bolts and slide the skidplate forward. If this does not give you adequate clearance, it will be necessary to trim the tube on the recovery receiver. More often than not, adjusting the skidplate is enough, though there are exceptions. Aftermarket skidplates almost always necessitate trimming the recovery receiver tube. A properly equipped and set up chop-saw is the easiest way (and safest) to trim the tube, though you can use a hack-saw, sawzall, or a die-grinder with cut-off wheel if need be.

#### All CJ

If the swing-arm latching "u-bolt" contacts the body of your CJ and will not saddle-up behind the latch-tower, it may be necessary to shim the bumper out from the crossmember if you do not want to adjust the body forward on the frame. The body placement on the frame-rails has also been found to be inconsistent on CJ's; loosening and moving the body forward is the correct solution in most cases, though aftermarket body mounts can sometimes prevent any kind of adjustment. Contact us for shims if needed.

Refer to the photos on the last page of our instruction sheets for the front and rear bumpers for support-bracket placement, etc.

If after going through any of the above steps you are still having trouble installing either the front or rear bumper on your CJ, please contact us immediately with the specifics of your CJ (IE; year, CJ model, bumper model, etc.) and we will be happy to assist further.

Check out our website for the latest in Body Armor gear, tech bulletins, and our new vehicle photo gallery.