

# BODY ARMOR

BY TOLAR MFG. CO., INC.

BUMPER INSTALLATION INSTRUCTIONS - FRONT BUMPER - REAR BUMPER - REAR BUMPER WITH SWING-A-WAY

JEEP CJ5, CJ7 and CJ8 (1978-1986 models)



xtreme trailgear  
for the serious  
offroader!

[www.bodyarmor4x4.com](http://www.bodyarmor4x4.com)

**Hardware Kits - CJ5, CJ7 and CJ8**

**DO NOT INSTALL THIS PRODUCT ON ANY VEHICLE OTHER THAN 1978-1986 JEEP CJ MODELS.**

Body Armor designed this product to give you years of dependability and performance. If you encounter any problems during installation of this product, or at any later date, please contact your authorized Body Armor dealer, or call 951-808-0750 for our customer service department, or check our website for tech bulletins regarding your year and model vehicle. Our hours are Monday thru Thursday 7AM-4:30PM and Friday 8AM-12PM, Pacific Time.

**Special Note for CJ8 (Scrambler) owners.**

The rear crossmember of some CJ8 (Scrambler) models have (1) of (2) bolt-pattern variations, (1) of which does not allow direct bolt-on of bumper. See photo page for notes concerning the possible modifications needed to crossmember before beginning installation of rear bumper.

**Front Bumper - CJ**



Hex Head Bolt 1/2-13 x 1.5"  
PN=BOLTBA12-13112  
QTY 4



Flat Washer 1/2"  
PN=FWBA12  
QTY 4



Lock Washer 1/2"  
PN=LWBA12  
QTY 4



1 pair "D"-rings included with every front and rear bumper, and every rear bumper with Swing-A-Way (also available separately) Part # 3202 = (1) pair

**Rear Base Bumper - CJ**



Hex Head Bolt 7/16-14 x 1"  
PN=BOLTBA716-141  
QTY 8



Flat Washer 7/16"  
PN=FWBA716  
QTY 8



Lock Washer 7/16"  
PN=LWBA716  
QTY 8



Hex Head Bolt 3/8-13 x 3.5"  
PN=BOLTBA38-1335  
QTY 4



Hex Head Bolt 3/8-13 x 2"  
PN=BOLTBA38-132  
QTY 2



Flat Washer 3/8"  
PN=FWBA38  
QTY 12

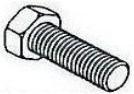


Lock Washer 3/8"  
PN=LWBA38  
QTY 6



Hex Nut 3/8" (non-lock)  
PN=HNBA38  
QTY 6

**Rear Bumper with Swing-A-Way - CJ**



Hex Head Bolt 7/16-14 x 1"  
PN=BOLTBA716-141  
QTY 8



Flat Washer 7/16"  
PN=FWBA716  
QTY 8



Lock Washer 7/16"  
PN=LWBA716  
QTY 8



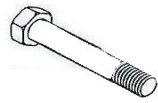
Flat Washer 3/8"  
PN=FWBA38  
QTY 12



Lock Washer 3/8"  
PN=LWBA38  
QTY 6



Hex Head Bolt 3/8-13 x 2"  
PN=BOLTBA38-132  
QTY 2



Hex Head Bolt 3/8-13 x 3.5"  
PN=BOLTBA38-1335  
QTY 4



Hex Nut 3/8" (non-lock)  
PN=HNBA38  
QTY 6



Flat Washer 1/2"  
PN=FWBA12  
QTY 4



Lock Washer 1/2"  
PN=LWBA12  
QTY 3



Hex Head Bolt 1/2-13 x 2"  
PN=BOLTBA12-132  
QTY 2



Hex Head Bolt 1/2-13 x 4"  
PN=BOLTBA12-134  
QTY 1



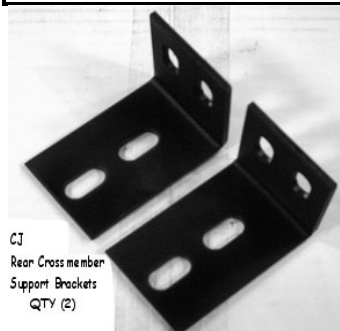
Hex nut 1/2" (non-lock)  
PN = HNBA12  
QTY 2



Hex lock nut 1/2"  
PN = HLNBA12  
QTY 3



Moon washer 1/2"  
PN = MWBA12  
QTY 2

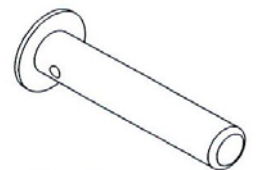


CJ  
Rear Cross member  
Support Brackets  
QTY (2)

Important: Before beginning the removal of your OE bumper(s), assure that all parts and hardware listed are included in package. Contact us immediately should you find any shortage(s).



Hex Head Bolt 1/2-13 x 1"  
PN=BOLTBA12-131  
QTY 1



Hinge Pin  
PN=00171  
QTY 1

Support brackets shown at left included in both "Base Rear Bumper" and "Swing-A-Way Bumper"

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

## 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.

## Front Bumper Installation - Jeep CJ

### Step 1

- Unpack bumper using staple puller to remove staples. Save all packing materials and take care not to tear cartons.
- Remove hardware and misc. parts. Check parts / hardware list & confirm all parts and necessary hardware are included.
- It's a good idea to spray all OE attaching hardware with penetrating oil before beginning removal of OE bumper. This will ease removal as well as help assure that none of the bolts' / nuts' threads are damaged or cross-thread during removal.

### Step 2

Using appropriate tools, remove the OE front bumper, as well as lights, tow-hooks, etc. Our installation kit includes all new grade 5 bolts with necessary attaching hardware. These should be used in place of OE bolts / hardware.

### Step 3

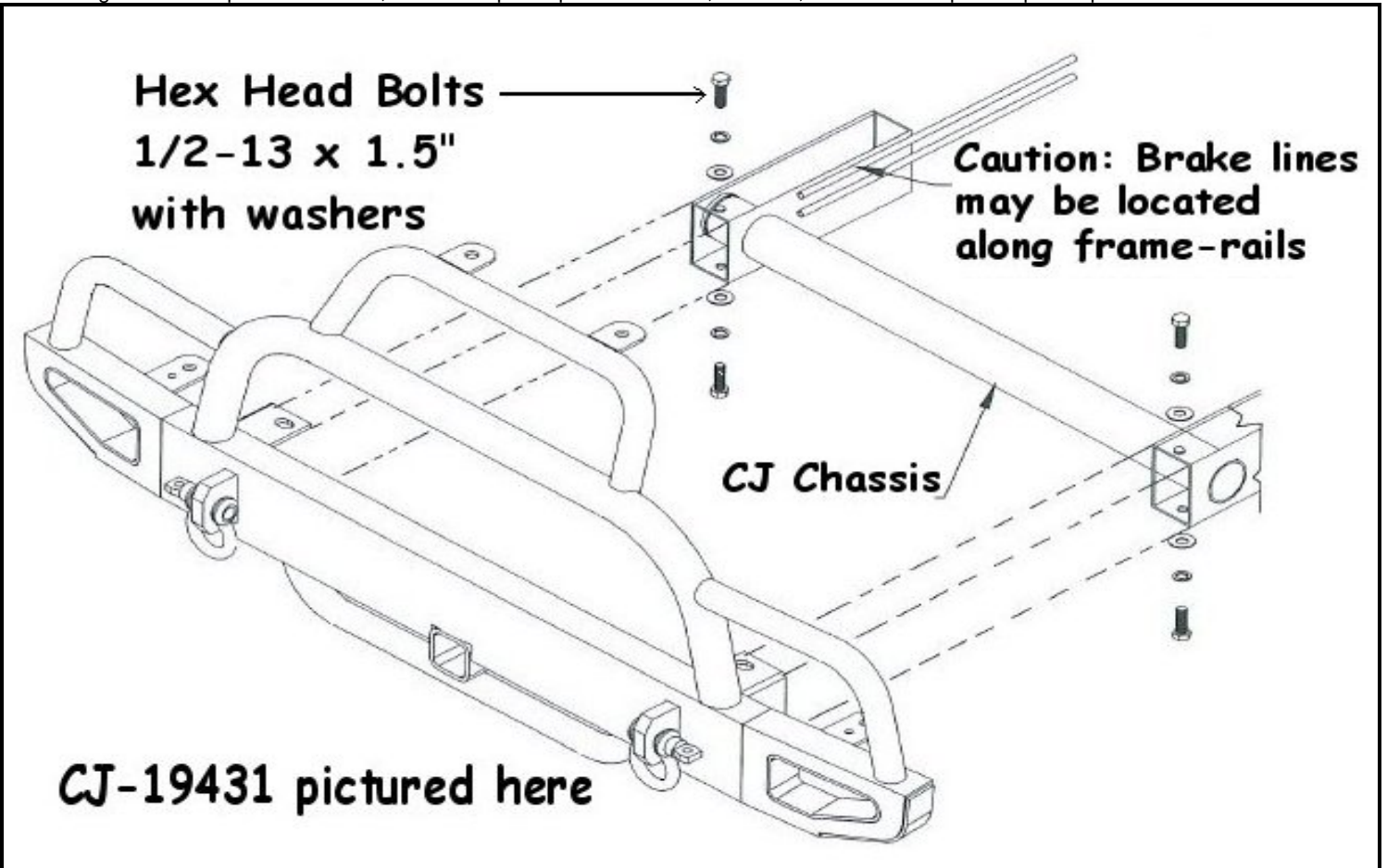
Slide your new Body Armor bumper in place of the OE bumper onto the frame at the OE mounting location. If you purchased a Body Armor winch plate, check fitment at this time before installing the supplied grade 5 bolts. Hand tighten all bolts before torquing with ratchet, air-impact, etc. Your new Body Armor bumper was designed as a no-drill, bolt-on application and should be installed as such, though inconsistencies in shackle hanger placement on the frame of the CJ's has proven to be an issue. If your hangers and / or shackles contact the bumper mounting brackets, notching the brackets is the only solution.

### Step 4

Confirm that bumper is even side-to-side, as well as front-to-back (take measurements from outside of frame-rail to ends of bumper, and from an equal point on frame or body to the back of bumper on each side). Assured bumper is straight, now torque bolts evenly starting with the bottom bolts. Recheck that bumper is even and re-torque accordingly.

We recommend you check the torque of all bolts after about two weeks, and after every off-road / trail run thereafter to assure tightness.

Below diagram reflects part # CJ-19431, "Quad Hoop Bumper" - all "Base", "Center", "Twin" and "Triple Hoop" bumpers mount the same.



Towbar Adaptor Brackets  
Sold Separately  
Part # 3200 - vertical pin



License Plate Bracket  
Sold Separately  
Part # 5121



Towbar Adaptor Brackets  
Sold Separately  
Part # 3210 - horizontal pin

## Rear Bumper Installation - Jeep CJ

### Step 1

- a. Unpack bumper using staple puller to remove staples. Save all packing materials and take care not to tear cartons.
- b. Remove hardware and misc. parts. Check parts / hardware list & confirm all parts and necessary hardware are included.
- c. It's a good idea to spray all OE attaching hardware with penetrating oil before beginning removal of OE bumper(s). This will ease removal as well as help assure that none of the bolts/'nuts' threads are damaged during removal.

Note: CJ8 owners (Scrambler), see special notes below and photo page for alternative bolt-pattern modification in rear crossmember.

### Step 2

Using appropriate tools, remove the OE rear bumper and lower body mount bushings & sleeves, as well as lights, tow-hooks, etc. Our installation kit contains all new grade 5 bolts with necessary attaching hardware. These will be used in place of OE bolts.

### Step 3

- a. Using a floor jack or a helper, hold the bumper in place while inserting the 3/8" x 1.5" bolts with washers through the outer tabs into the existing holes in the top of the frame-rails. Hand tighten only at this time.
- b. Now thread the (8) 7/16" x 1" bolts with lock-washers and flat-washers through the support-brackets and frame-rail into the threaded backing plates (blocks) in bumper. Hand tighten only at this time.

Note: Support brackets to be placed outside of frame-rails against inside of crossmember on CJ5, CJ7 and standard bolt-pattern CJ8.

Note: If your CJ8 has a measurement of 1" from crossmember top to center of mounting hole, modification will be necessary to the crossmember as well as support-brackets to bolt on bumper. No alternate bumpers or brackets are available. Go on to Step C.

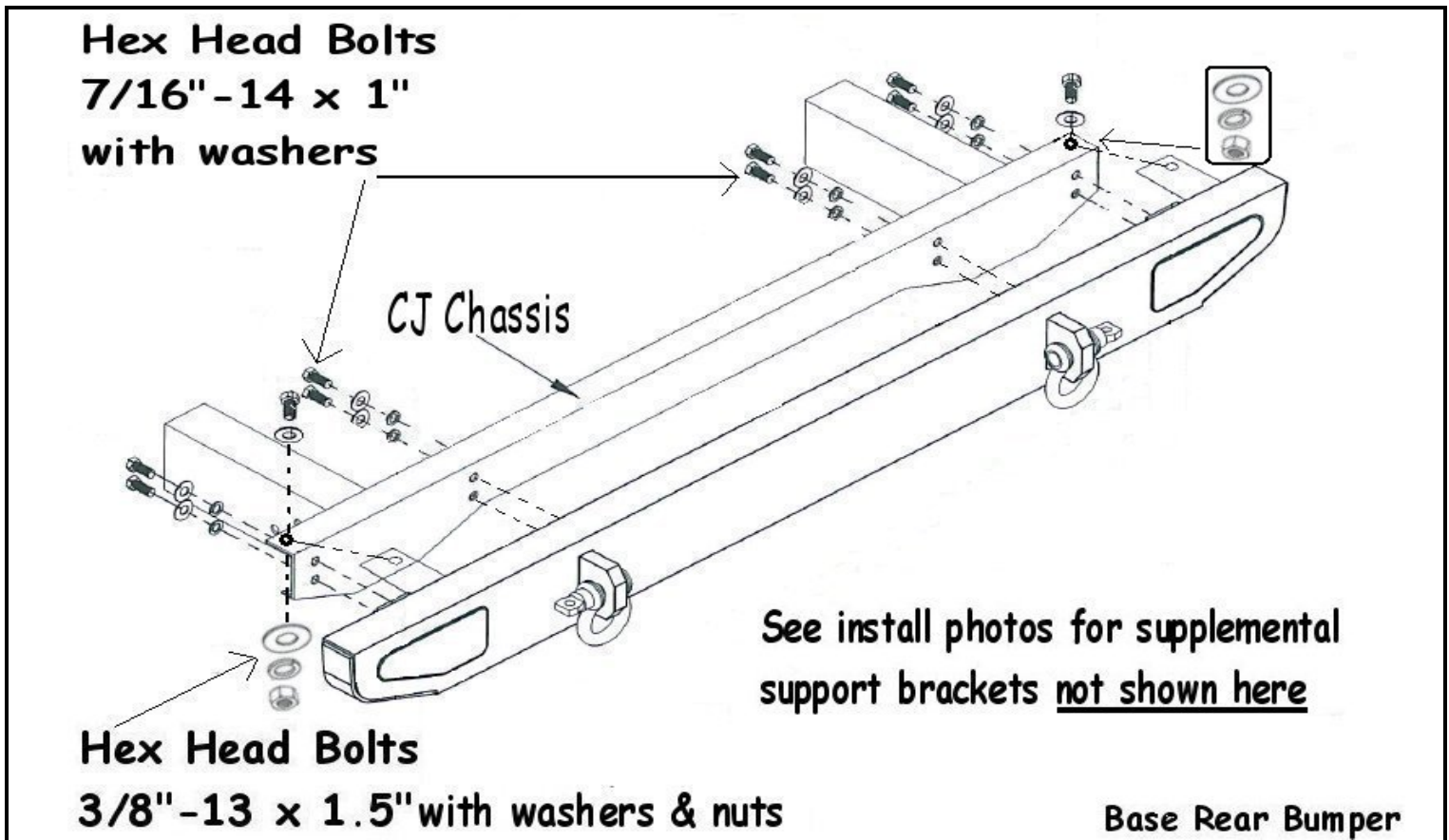
- CJ8 c. With the bumper in place and the 3/8" bolts holding outer tabs to frame-rails, mark the location of threaded holes in bumper mounting blocks from inside of crossmember to gauge where to grind out holes and estimate how far (will vary frame to frame).
- CJ8 d. Remove bumper and grind out mounting holes in crossmember. Do not grind out too much, fit-check bumper after initial markings are reached and each time you grind out to prevent excessive material removal. Place support-brackets inside crossmember to the inside of frame-rails to mark location of holes to be drilled. Drill brackets and re-install bumper. Hand tighten only at this time.

Note: Support brackets to be placed inside of frame-rails after modification for alternate bolt-patterned CJ8. See photos on last page for reference.

### Step 4

Assured bumper is straight, torque bolts evenly starting with the top bolts through the crossmember into threaded blocks in the back-side bumper, finishing with the 3/8" bolts through the outer tabs into the top of the frame-rails.

We recommend you check the torque of all bolts after about two weeks, and after every off-road / trail run thereafter to assure tightness.



## Rear Bumper with Swing-A-Way Installation - Jeep CJ

### Step 1

- Unpack bumper using staple puller to remove staples. Save all packing materials and take care not to tear cartons.
- Remove hardware and misc. parts. Check parts/hardware list to confirm all parts and necessary hardware are included.
- It's a good idea to spray all OE attaching hardware with penetrating oil before beginning removal of OE bumper(s). This will ease removal as well as help assure that none of the bolts / nuts' threads are damaged or cross-thread during removal.

Note: CJ8 owners (Scrambler), see special notes below and photo page for alternative bolt-pattern modification in rear crossmember.

### Step 2

Repeat Steps 2 through 4 for "Base Bumper", then proceed to Step 3 here.

### Step 3

- Remove OE spare-tire mount (and attaching brackets if OE swing-a-way equipped). See photos on last page for reference on pre-install of Body Armor bumper & Swing-A-Way.

### Step 4

Next attach the Swing-A-Way. Place the Swing-A-Way arm into position and drop in the hinge-pin. Rotate the pin so the notch aligns to the set-screw, and tighten the set-screw into the collar of the hinge-tower. The notch and set-screw must be aligned properly to prohibit hinge-pin movement, keeping hinge-pin from spinning up and out of tower.

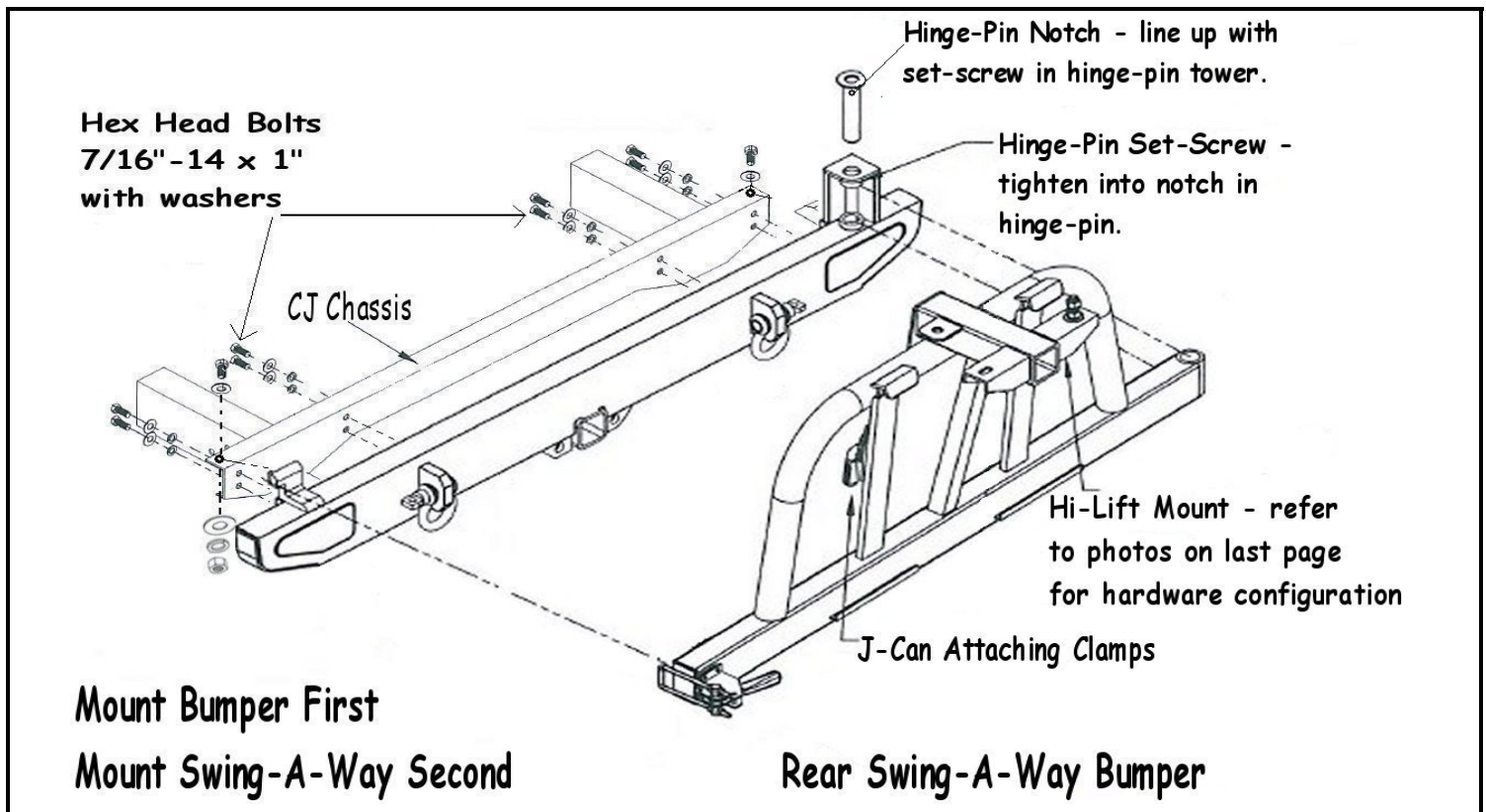
### Step 5

- Adjust Swing-A-Way latch (as needed) for minimal amount of torq needed for latching. Do not over adjust as too much tension will not allow latch to close properly without damaging "u-bolt" and / or latch-plate attaching bolts in bumper face.
- Next, if you purchased one, install Hi-Lift Jack with 1/2" x 2" bolts, flat washers, non-lock hex nuts, and ny-lok nuts, with the foot of the jack to the passenger side.
- Install spare mount into upper receiver tube on Swing-A-Way with 1/2" x 4" bolt with (2) moon washers and ny-lok nut. Adjust to depth desired / needed for spare tire / wheel clearance.
- Install set-bolt (1/2" x 1") into bottom of tire / wheel receiver tube to prevent rattling / movement of spare tire mount assembly. Refer to photos on last page for reference to all above steps.

### Step 6

Confirm that all bolts are tight and latching torque is sufficient to keep Swing-A-Way arm closed.

We recommend you check the torque of all bolts after about two weeks, and after every off-road / trail run thereafter to assure tightness.



Not affiliated with Daimler-Chrysler

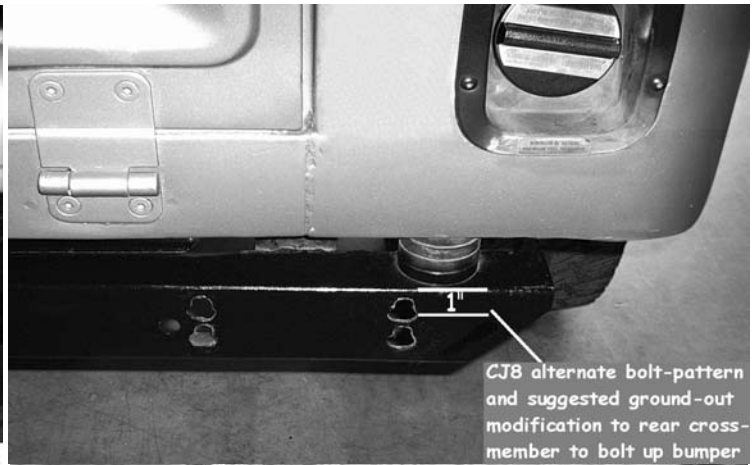
Jeep, Wrangler, Rubicon, Renegade, CJ, Quadra-Trac, Unlimited, and the Jeep grill design are all registered trademarks of Daimler-Chrysler.

Tolar Mfg. Inc., Body Armor has no affiliation with Daimler-Chrysler. Throughout any of our printed literature, including catalog(s), these trademark terms are used for identification purposes only. No affiliations are implied or expressed.

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



Front bumper installed with winch-plate - front holes in plate use bumper mounting bolts, rear holes for plate need to be drilled. Brackets will be available in the future to bolt into the side of the frame-rail - contact us for availability.



CJ8 alternate bolt-pattern and suggested ground-out modification to rear cross-member to bolt up bumper



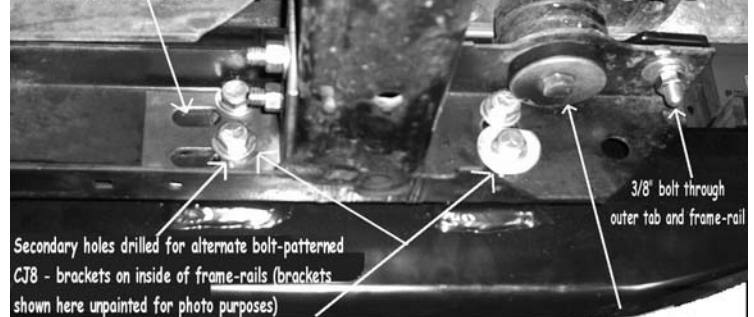
Note custom spring hangers and necessary notching in bumper mounting brackets. Although this is an extreme case, there are instances where stock hangers/shackles contact the bumper mounting brackets.

Rear winch-plate mounting holes drilled through top of frame-rail. Brackets will be available in the future which will bolt into the side of the frame-rails. Contact us for availability.



Passenger side frame-rail - CJ8 shown with alternate bolt-pattern. Frame support-brackets shown unpainted for photo purposes.

Slotted holes for CJ5, CJ7 and standard bolt-patterned CJ8, brackets would be installed on outside of frame-rails.



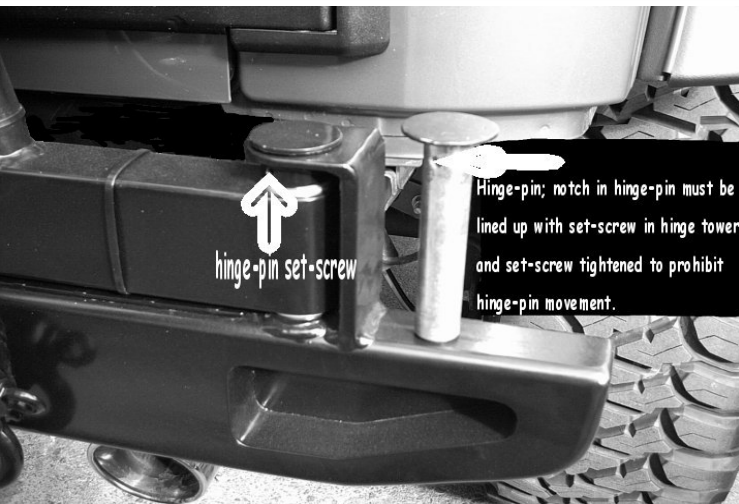
Secondary holes drilled for alternate bolt-patterned CJ8 - brackets on inside of frame-rails (brackets shown here unpainted for photo purposes)

3/8" bolt through outer tab and frame-rail

7/16" bumper mounting bolts through crossmember and support-brackets.

Lower body mount bushings and sleeves may need to be removed to access upper bolts.

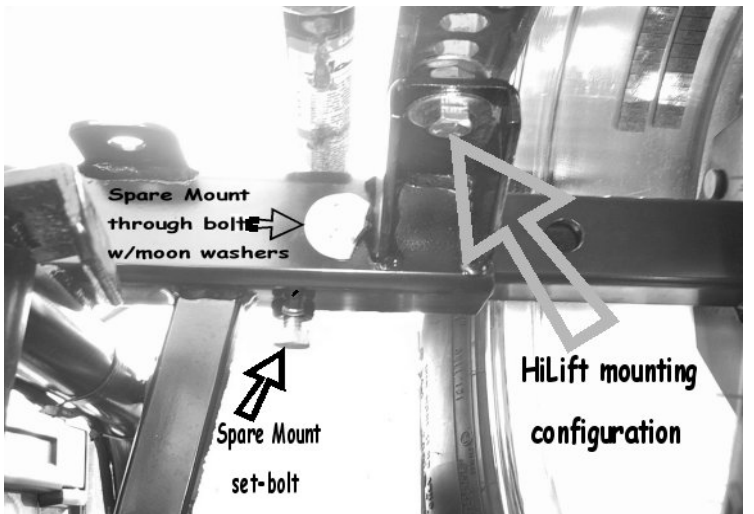
Driver side CJ8 shown above.



hinge-pin set-screw

Hinge-pin; notch in hinge-pin must be lined up with set-screw in hinge tower and set-screw tightened to prohibit hinge-pin movement.

Latch and latch-plate >>> Adjust latching "U-bolt" so it takes no more than 25lbs to latch handle and remain closed. More than this amount of torque to latch could result in damage to the "U-bolt" and / or latch-plate and bolts over time.



Spare Mount through bolts w/moon washers

Spare Mount set-bolt

HiLift mounting configuration