



# VERTICAL TIRE MOUNT

## Retrofit Kit

2002+ RAM/2500/3500

2002–2018 RAM 1500

### NEW PRODUCT

Please visit [www.aev-conversions.com](http://www.aev-conversions.com) to view the most current installation guide for this product.

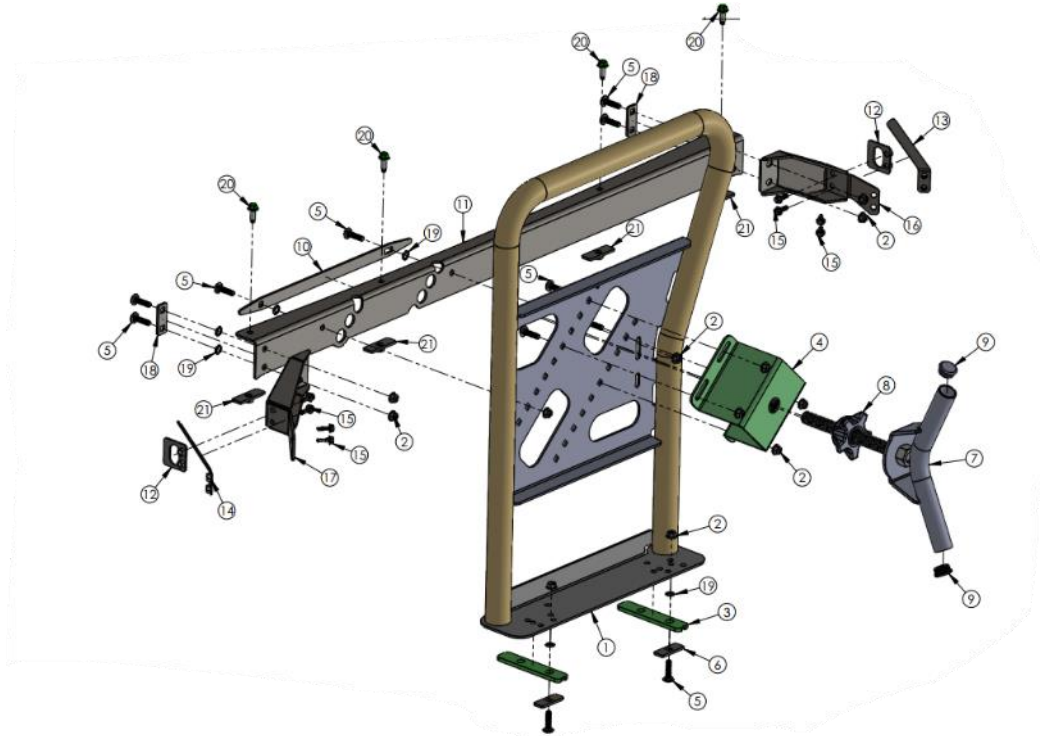
This is a new product and we want to make sure that you receive the latest and most accurate information based on customer feedback, product revisions, and/or model year updates. We value customer feedback, so we encourage you to contact our Technical Support department if you have any suggestions on how to make the installation of this product easier or if you have any questions regarding the installation of this product. AEV's Technical Support can be reached by email at [tech@aev-conversions.com](mailto:tech@aev-conversions.com) or by giving us a call at (248)-926-0256.



PLEASE READ BEFORE YOU START

To guarantee a quality installation, we recommend reading these instructions thoroughly before beginning any work. These instructions assume a certain amount of mechanical ability and are not written nor intended for someone not familiar with auto repair.

INCLUDED PARTS	QTY	REQUIRED TOOLS
Tire Mount Assembly	1	5/16" Drill Bit
Bulkhead Bracket	1	1/2" Drill Bit
Mounting Kit	1	Center Punch
		De-burring Tool
		Rust Preventative
		Common Hand Tools



ITEM NO.	SW SERIAL #	PART #	DESCRIPTION	QTY.
1	D025467	ACPR1032AD	WELDMENT, TRUCK BED TIRE CARRIER, TUBE, FULL SIZE	1
2	95003A103	AEV93036AA	Nut, Flng, M10-1.5 - 10.9 - PS-Black	12
3	D025188	ACPR1025AB	SPACER, TRUCK BED TIRE CARRIER, BOTTOM RAM	2
4	D026239	ACPR1033AB	WELDMENT, TRUCK BED TIRE CARRIER, CENTER BRACKET	1
5	98930A219	B-98930A219	Bolt, Carriage, M10-1.5x40 - 8.8	12
6	D026680	ACPR1037AA	PLATE, TRUCK BED TIRE CARRIER, BACK	2
7	D025656	ACPR1035AA	WELDMENT, TRUCK BED TIRE CARRIER, RETAINER HANDLE	1
8	D025658	ACPR1029AA	BUSHING, TRUCK BED TIRE CARRIER, CENTER	1
9	D026979	CCF-1 1/2-8-12	PLUG, TUBING ROUND, CCF 1-1.5-8-12	2
10	D039102	ACPR1047AA	BACKING PLATE, UNIVERSAL ONE PIECE, TRUCK BED TIRE CARRIER	1
11	D073618	ACPR1060AA	C/C BULKHEAD BRKT, RAM VTM	1
12	D073671	ACPR0115AA	WELDMENT STAKE POCKET NUT PLATE, RAM VTM	2
13	D073677	ACPR0116AA	WELDMENT STAKE POCKET FLAG NUT BRKT RH, RAM VTM	1
14	D073681	ACPR0117AA	WELDMENT STAKE POCKET FLAG NUT BRKT LH, RAM VTM	1
15	DEFAULT	AEV91153AA	Bolt, HFing, M8-1.25x25 - PS11036-Black	8
16	D083068	ACPR0122AB	GUSSET WELDMENT RH, RAM VTM	1
17	D083071	ACPR0123AB	GUSSET WELDMENT LH, RAM VTM	1
18	D083083	ACPR1084AA	BACKING PLATE, RAM VTM	2
19	94813A600	94813A600	M10 ROUND PUSH NUT	8
20	D006578	11588738	M10 X 1.5 X 25 HEX FLANGE BOLT	4
21	D095445	ACPR0124AA	WELDMENT BULKHEAD NUT PLATE, RAM VTM	4



## I. TIRE CARRIER REMOVAL

1. Remove the Spare Tire from the current Tire Carrier in the bed of the vehicle. Set the retaining handle and tire to the side for later use.
2. Remove the current Tire Carrier main mount from the bed of the vehicle. Remove any nuts and bolts securing this down and place aside for later use if needed.
3. Remove the bulkhead bracket from the vehicle bed as well as any bracketry securing this to the vehicle.

## II. INSTALLATION

1. Place the new Bulkhead Cross Bracket on the truck bed bulkhead (Fig. 1). Center the bracket on the bulkhead by aligning the previously drilled holes in the face of the bulkhead to the new cross bracket holes.



*Figure 1*

2. When centered to the bulkhead, mark all remaining holes on the bulkhead. Figure 2 below shows each hole location that needs a drilled hole. Remove bracket and center punch and drill the 8 remaining holes to 1/2".

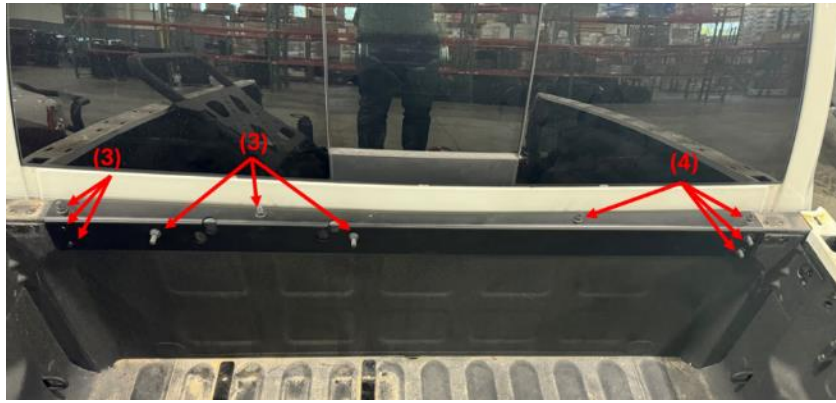


Figure 2

3. Deburr and prep bare metal with rust preventative.
4. Reach behind the bulkhead and align the one-piece backing plate to the two center face holes. Hold in place and insert two M10x40 bolts through the holes behind the bulkhead (Fig. 4). Loosely secure with M10 nuts to hold bracket in place for now. Note: M10 Retaining washers can be used to hold the bracket and carriage bolts in place during installation (Fig. 3).



Figure 3



*Figure 4*

5. Install two M10 x 40 carriage bolts and a two-hole backing plate through the drilled corner holes from behind the bulkhead. Retaining washers can be used to keep the bracket and carriage bolts together to ease installation (Fig. 5). Do this on each end of the bulkhead bracket. Secure loosely with M10 nut.



*Figure 5*

6. Install 4 M10 x 25mm hex flange bolts into the top side of the bulkhead bracket using the provided bulkhead nut plates to secure the bolts (Fig. 6). Torque bolts to required spec.



*Figure 6*



7. Place the Corner Gusset Brackets through the two bolts coming out of the bulkhead bracket ends (Fig. 7). Secure this down with two M10 nuts, but do not torque down completely. Make sure the gusset bracket is sitting flush to the bed sidewall and mark the 4 hole locations on the opposite end of the bracket to the bed sidewall. Remove the corner gusset bracket and center punch and drill to ½" hole. Deburr and treat with rust preventative. Do this for both RH and LH sides of the bed. (Note that the corner gussets are handed RH & LH)



Figure 7

8. Remove the Bedside Top Cap on both sides of the vehicle. Be careful removing this plastic side rail cap as the retaining clips can break if not done properly. Access to the front stake pocket is necessary for installation. Another option is to trim out the scribed stake pocket rectangular hole in the side rail cap to gain access to the stake pocket in the bed.
9. Place the corner gusset bracket back onto the cross-car bulkhead bracket and loose install with M10 nuts. Use the stake pocket access in the bedside wall to align the stake pocket nut plate to the two corner gusset holes that were drilled in the bed (Fig. 8). Secure with two M8 x 25 flanged hex cap screws through the gusset bracket. Next, insert the flag nut bracket into the stake pocket hole and align this with the two drilled holes further rearward in the bed (Fig. 9). Secure with two M8 x 25mm flanged hex cap screws through the gusset bracket (Fig. 10). Proceed to the other side of the vehicle and follow these same steps. Torque bolts and nuts down to spec. Reinstall bedside top caps.





Figure 8



Figure 9



*Figure 10*

10. Place the bed floor spacers back into position if previously removed (fig. 11). Place the tire carrier main mount back onto the vehicle and re-install the carriage bolts and backing plate up through the bed floor to the tire carrier base plate (fig. 12). Secure the tire carrier to the bed and bulkhead bracket with M10 nuts and torque to spec.

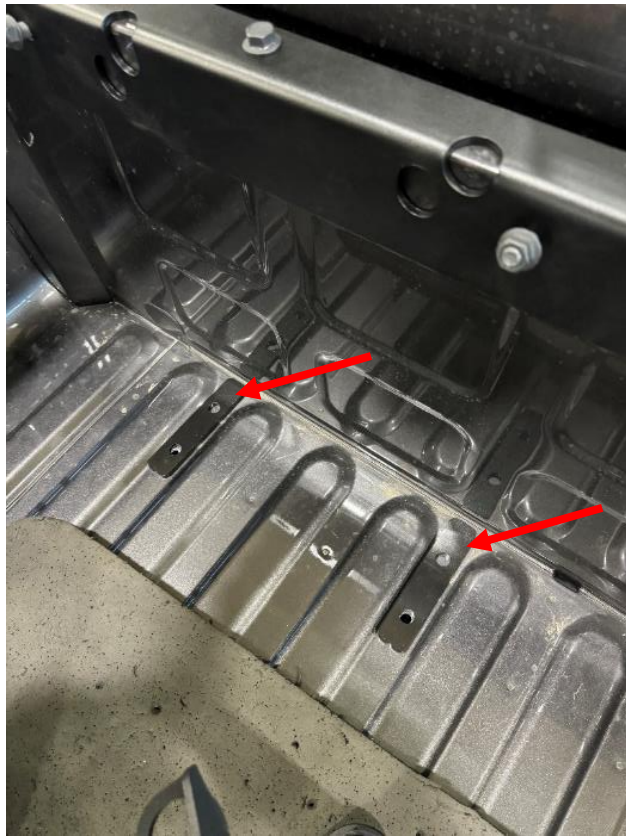


Figure 11

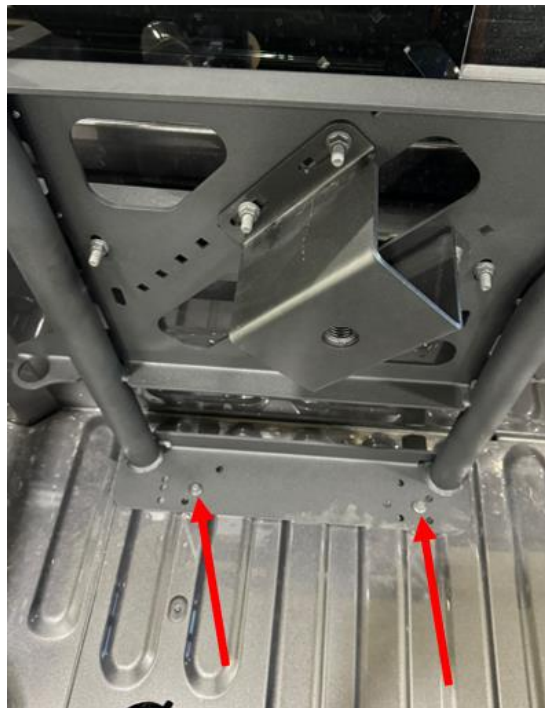


Figure 12



11. Make sure all bolts are torqued to spec and then re-install the tire onto the tire mount.

Bolt Size	Torque Specification
M4.2	2.5 NM / 1.8 lb-ft
M6	10.5 NM / 7.7 lb-ft
M8	25 NM / 18.4 lb-ft
M10	67 NM / 50 lb-ft
M12	115 NM / 85 lb-ft
M14	185 NM / 136 lb-ft

**\*NOTE:** If you have an AEV Bed Rack installed on your vehicle, you will need to remove the bed rack prior to installation of the tire carrier. You will proceed with installing the Tire Carrier per the instructions, however, when installing the corner gusset brackets, leave the bracket loose installed until the bed rack is back assembled onto the vehicle. To have tool access to the Bed Rack button head bolts in the front corner of the bed, the corner gussets will need to be loose. Once the bed rack is secured, proceed to torque down the corner gusset bolts.