

EVO Manufacturing
2014+ RAM 2500 RADIUS ARM DROP



Before starting installation procedure please read <a href="http://evomfg.com/Returns-Warranties-Shipping">http://evomfg.com/Returns-Warranties-Shipping</a>



CAREFULLY READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL AND KEEP FOR FUTURE REFERENCE. IF YOU HAVE ANY QUESTIONS ABOUT THE PRODUCT CALL EVO MANUFACTURURING. FAILURE TO FOLLOW GUIDELINES COULD RESULT IN MALFUNCTION OF PARTS OR INJURY. PLEASE HAVE A TRAINED PROFESSIONAL ASSIST WITH OR INSTALL ALL PRODUCTS. INSTALLING EVO MFG PRODUCTS OR KITS DEMANDS SPECIFIC KNOWLEDGE, TOOLS AND EXPERIENCE. GENERAL KNOWLEDGE OF HOW TO USE LATER SPECIFIED TOOLS AND/OR LIMITED EXPERIENCE WITH EVO MFG PRODUCTS MAY NOT BE ENOUGH TO PROPERLY COMPLETE THESE TASKS. SOME OF EVO MFG PRODUCTS MAY REQUIRE TWO OR MORE PEOPLE TO INSTALL SAFELY AND CORRECTLY. DO NOT ATTEMPT ALONE, ALWAYS ENLIST THE HELP OF TRAINED PROFESSIONAL WHEN NEEDED.

**Notes:** Set Up Before installation

These instructions involve how to install Radius Arm Drop Brackets.

This installation process may vary.

Some adjustments may be needed to secure liner properly per individual vehicle setup.

Keep all mounting bolts loose (installed but not torqued) we will torque later at the end of complete installation

#### **READ BEFORE INSTALL:**

It is generally a good idea to apply Loctite to all threaded bolts.

ALWAYS wear safety glasses and other approved safety gear when working on a vehicle.

All supplied bolts torqued according to chart at end of instruction.

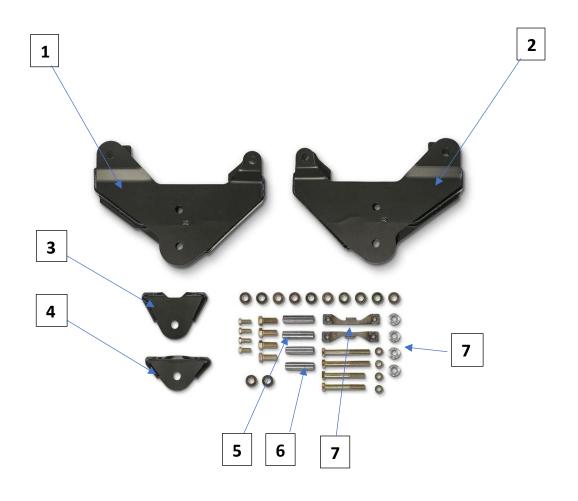
It is recommended all installation be performed by a trained professional. Some modification may have to be done.

Paint all unfinished surfaces after install is complete if preferred.

#### Parts included:



Product Prt. #	Description		Part #	Quantity
EVO-901B	2014+ RAM 2500 Radius Arm Drop	1	EVO-12600B	1
	Brackets, Driver BLACK			
	2014+ RAM 2500 Radius Arm Drop	2	EVO-12601B	1
	Brackets, Pass BLACK			
	14+ Ram Radius Arm Drop	3	EVO-12602B	1
	Secondary Gusset Driver BLACK			
	14+ Ram Radius Arm Drop	4	EVO-12603B	1
	Secondary Gusset Pass BLACK			
	14+ Ram Drop Brackets Long Crush	5	EVO-20048CZ	2
	Tube Zinc			
	14+ Ram Drop Brackets Short	6	EVO-20049CZ	2
	Crush Tube Zinc			
	2014+ Ram 2500 Radius Drop	7	EVO-12604CZ	2
	Gusset Nut Plate With Nuts ZINC			
	2014+ RAM 2500 Radius Arm Drop	8	EVO-770107	1
	Hardware Pack			





THIS IS A COMPONENT INSTALLATION. THIS MAY BE A PART OF A MORE COMPLETE INSTALLTON WITH OTHER COMPONENTS. SOME VARIANCES IN PROCESS MAY BE NEEDED TO ACCOMMODATE OTHER COMPONENTS DURING INSTALL. SKILLED/TALENTED INSTALLERS SHOULD BE USED.

#### **Recommended Tools:**

- o Complete Wrench with Socket set
- o Drill and metal cutting bits 3/8", ½" and ¾"
- Grinder
- Paint
- o Torque Wrench
- o Talent





#### Safety Steps for installation

- For installing EVO MFG products always use wheel chokes to block rear tires from rolling.
- Always make sure you have everything necessary ready before install.
- If you have to, carefully lift front of vehicle by front frame rails extending suspension until tires leave the ground, place frame on approved jack stands for vehicle. Verify all lines/wires are not over extended.
- o Remove tires if needed for easier install.
- Make sure to wear safety equipment (eye protection, hand protection, foot protection etc.) at all times during installation.
- Make sure all safety precautions have been taken.
- Always check and replace any part of vehicle that is warn or broken before starting install.
- Do not mix anything EVO with weaker alternatives.
- It is generally a good idea to apply liquid threadlock to all bolts.
- Tighten included hardware to torque specifications in bottom table unless it is otherwise specified, factory bolts should be torqued to factory Jeep specifications.



### **INSTALL**

\*Pictures are for reference only, product may vary. \*

#### **INSTALLATIONS SHOULD BE PERFORMED BY TRAINED PROFESSIONALS**

#### SAFELY PARK VEHCILE ON LEVEL GROUND AND CHALK WHEELS

- 1. Jack/Lift vehicle at frame to and support front and rear with weight approved Jack Stands.
- 2. Support Front Axle on Jack or Jack Stands
- 3. Remove Wheel and Tires



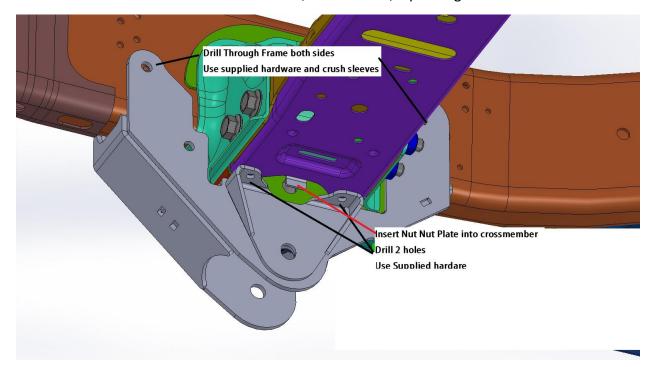
- 4. With Front Axle properly supported on axle jack. Remove Radius arm bolts a Frame. Both Drive and Passenger side. <u>Careful to make sure axle is properly supported. This will disconnect axle connection from vehicle.</u>
- 5. Install Driver/Passenger side radius arm drops to frame, using installed bracket mark front and rear holes to be drilled. Mark both inside holes and outside hole on frame.



6. Using a ½" and ¾" Drill. Drill Smaller Inside frame holes with ½" and drill larger outside frame hole side with ¾". Depending on equipment, may require you to remove brackets and drill at marked locations.



7. Add Support Brackets to Inside, both driver and passenger brackets. Align with crossmember and factory lower control arm bolt. Mark 3/8" holes to be drill and drill lower crossmember. Both sides. 4 holes, 2 driver side, 2 passenger side.



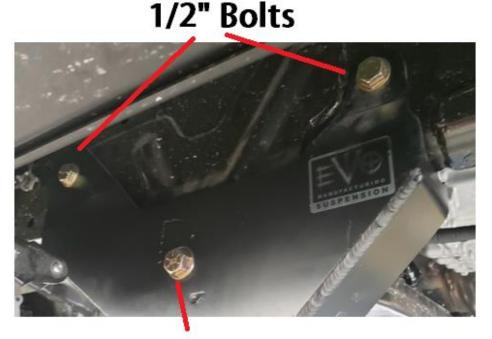
8. Insert #7 Nut Plate into slot in crossmember. Tab down. Both driver and passenger side.



9. If removed reinstall radius arm drop brackets to frame



10. Insert large crush tube #5 though bracket/frame from the outside at forward location. Same with shorter crush tube #6 at rearward location. Use supplied ½" bolt washer and nuts at these locations. Install bolts loosely at this time.



# 5/8" Bolts

## One on each side of bracket

11. Install 5/8" bolts/washers/nut, 2 per bracket. One from inside and one from outside at the factory radius arm location.

On inside of radius arm drop, have #3 and #4 Secondary Gussets installed at 5/8" bolt location.

Driver is the larger secondary bracket; passenger is the smaller secondary support bracket.

- 12. Install supplied 3/8" hardware with washer up through secondary support bracket and into the nuts on the #7 nut tab, both driver and passenger side.
- 13. Torque all radius arm drop hardware to spec at end of instructions.

3/8" 37 Ft/Lbs

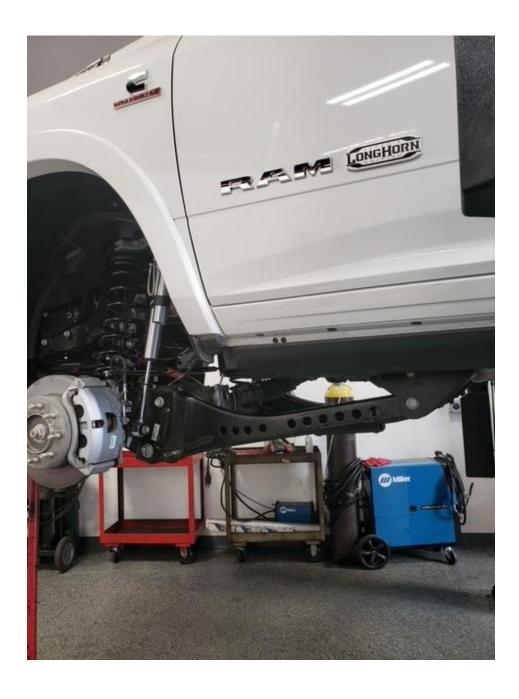
½" 90 Ft/Lbs

5/8" 180 Ft/Lbs



- 14. Install Radius Arm to new lower radius arm location in EVO Drop Bracket. Use factory Bolt. Torque to factory recommended torque spec. ~180-200 Ft/Lbs
- 15. Carefully lift the vehicle and remove all jacks.

Complete further components of total install as needed.





#### After Install:

- o Tighten all bolts securing purchased parts to specified locations.
- After completing installation using provided instructions, go through all steps again to make sure nothing was missed, not tightened or improperly assembled.
- Some components may need to be purchased separately.
- o Check turn signals, headlights, fog lights (if applicable), taillights, blinkers and windshield wipers.
- o Adjust mirrors, speedometer and headlights if needed.
- Make sure all gauges are fully operational.
- Drive the vehicle slowly for a couple minutes, looking and listening for abnormal noises while driving. After modification of a vehicle there will be differences in driving experiences and capabilities, be mindful of that.
- o <u>Inspect and Retorque all Bolts after 500 miles of competed installation and regularly thereafter.</u>
- Some modification may be required.

#### Standard Torque Specs:

Size	Grade 2		Grade 5		Grade 8		18-8 S/S	
	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine
#4*	-	-	-	-	-	-	5.2	-
#6*	-	-	-	-	-	-	9.6	-
#8*	-	-	-	-	-	-	19.8	-
#10*	-	-	-	_	-	_	22.8	31.7
1/4	4	4.7	6.3	7.3	9	10	6.3	7.8
5/16	8	9	13	14	18	20	11	11.8
3/8	15	17	23	26	33	37	20	22
7/16	24	27	37	41	52	58	31	33
1/2	37	41	57	64	80	90	43	45
9/16	53	59	82	91	115	129	57	63
5/8	73	83	112	128	159	180	93	104
3/4	125	138	200	223	282	315	128	124
7/8	129	144	322	355	454	501	194	193
<b>1</b> †	188	210	483	541	682	764	287	289