



EVO Manufacturing  
Jeep Wrangler JL and Gladiator JT  
JL JT Sector Shaft Brace  
EVO-3183B





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

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**CAREFULLY READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL AND KEEP FOR FUTURE REFERENCE. IF YOU HAVE ANY QUESTIONS ABOUT THE PRODUCT CALL EVO MANUFACTURING. 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**

**Cutting and grinding will be necessary for this installation.**

**May need to use a second person to ease install.**

**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.

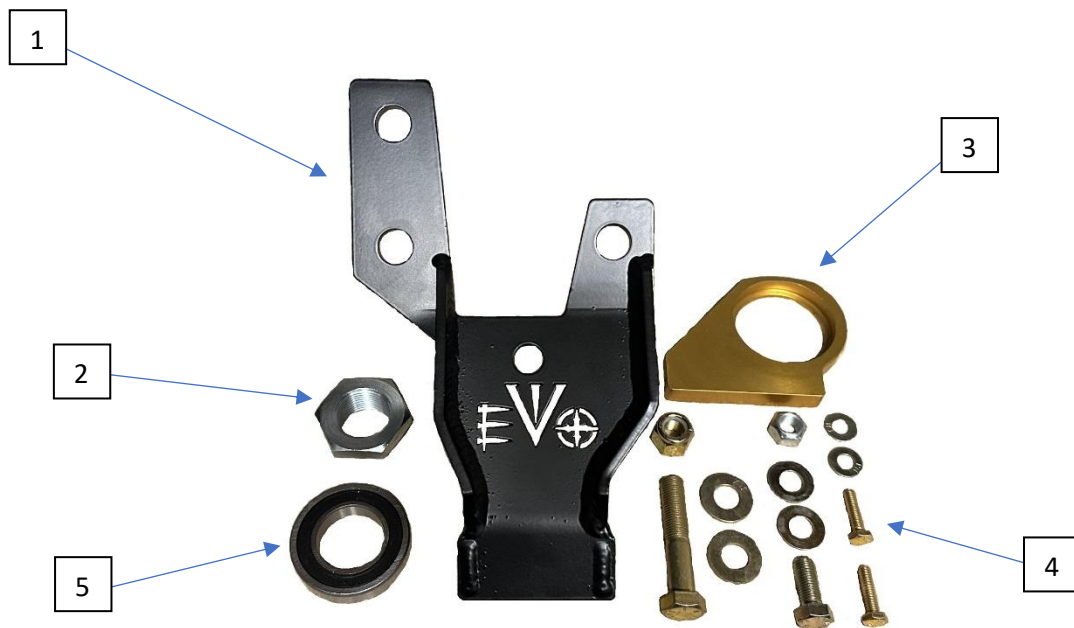
It is recommended all installation be performed by a trained professional. Some modification may have to be done.

Paint all unfinished surfaces after install is complete.

On aluminum bumpers, heat should not be applied due to aluminum properties

Parts included: Table below shows EVO Sector Shaft Brace.

Description	#	Part #	Quantity
Sector Shaft Brace	1	EVO-12589B	1
Pitman Arm Nut	2	EVO-600231CZ	1
Bearing Housing	3	EVO-600232GANO	1
Hardware Pack	4	EVO-770114	1
Bearing	5	EVO-900500	1



**Recommended Tools:**

- Allen set / Driver Sockets
  - Impact with sockets
  - Hammer
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**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.
  - 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 worn 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.
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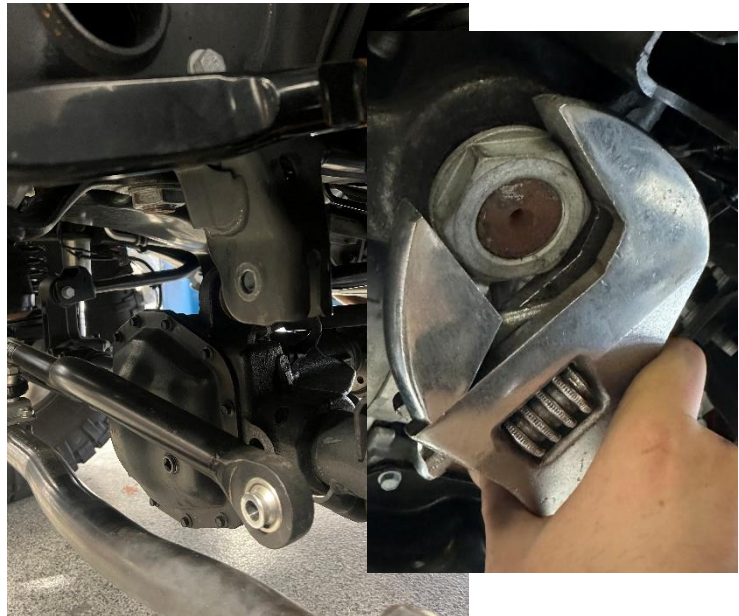


## **INSTALL:**

Safely park car on flat ground, put in park and chock wheels.

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1. Press the bearing into the bearing housing. This can be done carefully with a hammer and a block of wood. Ensure the bearing seats evenly and can freely move when pressed in.
  2. Remove frame side track bar bolt and drop the track bar down.
  3. Jack vehicle up and support frame so axle can droop.
  4. Remove factory pitman arm nut with an 1-11/16" socket or large crescent wrench. You may have to use heat to loosen the factory applied thread locker on the nut.
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5. Install the new pitman arm nut. It is recommended to use Red Loctite or equivalent on the sector shaft threads. Torque to 180 ft-lbs.

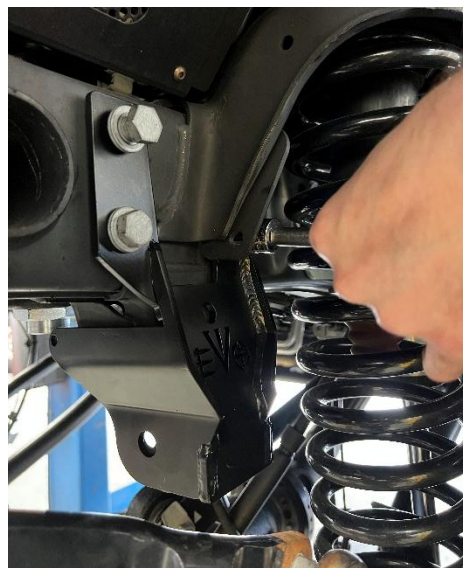


6. Remove the 3 steering box bolts with an 18mm socket that will hold the bracket (2 front and lower rear).

For Double Throwdown ONLY, cut off tack welds of single hole tab and remove sheet metal spacer.



7. Loosely install the bracket in place with the factory steering box bolts and new supplied track bar bolt (with track bar still removed).





8. Apply a small amount of anti-seize or grease to the outside of the pitman arm nut where the bearing will ride.
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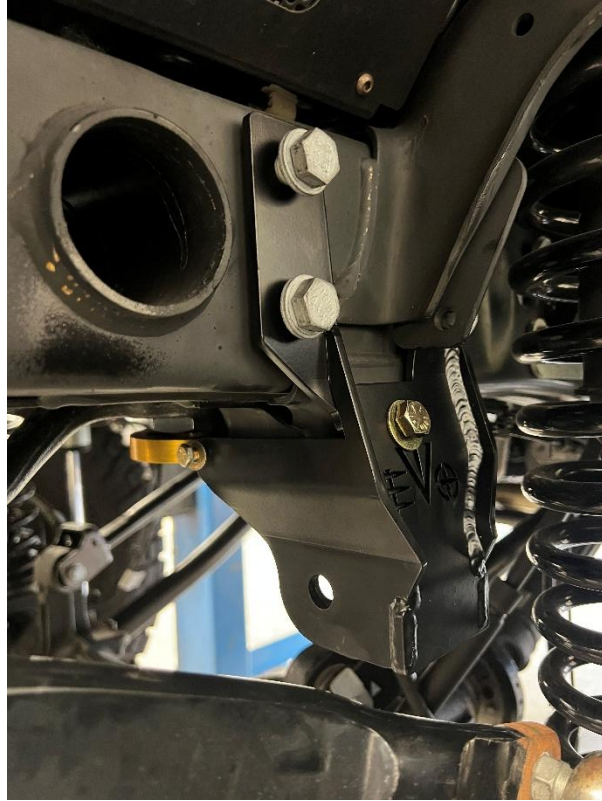


9. Install the bearing housing with the slashed end facing the ground with the 1/4" bolts. It is recommended that you apply a small amount of Loctite to the fasteners. Keep the bolts loose for now.
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10. Loosely install the 7/16" bolt and nut with a 5/8" socket through the hole above the EVO logo.



11. Remove the track bar bolt and reinstall the track bar and track bar bolt and tighten. Then tighten the 7/16" bolt followed by the steering box bolts. Lastly, tighten the bearing housing bolts.



12. Carefully lower vehicle onto ground.
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13. Variances in clearance between the pitman arm nut and the bearing are expected, as long as the nut engages the bearing. This gap in this picture is acceptable.
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#### After Install:

- 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.
- Check turn signals, headlights, fog lights (if applicable), taillights, blinkers and windshield wipers.
- 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.
- Inspect and Retorque all Bolts after 500 miles of completed installation and regularly thereafter.
- Some modification may be required.

#### Recommended Torque:

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