

596 Crane Street | Lake Elsinore | CA | 92530
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PN: CS-FRAD-LVL-23

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INSTALLATION NOTES

Please review the product instructions prior to attempting installation to ensure installer is equipped with all tools and capabilities necessary to complete the product installation. We recommend thoroughly reading the instructions at least twice prior to attempting installation.

We recommend all fasteners that do not utilize a locking nut (Crimp-Lock or Nyloc), or reuse a lock nut (as these are technically one-time use), use a medium-strength thread-locker to ensure a good, mechanical connection. We use Loctite 243 in-shop. Further, all torqued bolts should be torque-striped/paint-marked for future inspections confirming hardware has not loosened.

Recheck all torque after the first 500 miles.

LIFETIME WARRANTY

Carli Suspension provides a limited lifetime product warranty against defects in workmanship and materials from date of purchase to the original purchaser for all products produced by Carli Suspension.

For full Warranty details, see: <https://www.carlisuspension.com/warranty/>

PARTS CHECKLIST

Before beginning disassembly of the vehicle, check to ensure you've received all parts necessary to complete installation to avoid potential down-time in correcting discrepancies. Any discrepancies will be handled by Carli Suspension and the correcting products will be shipped UPS Ground.

(Qty. 1) - Carli Radius Arm Drop Bracket, Driver

- (Qty. 1) - 1/2" Thick OUTER Bracket Spacer
- (Qty. 1) - 3/8" Thick INNER Bracket Spacer

(Qty. 1) - Carli Radius Arm Drop Bracket, Passenger

- (Qty. 1) - 1/2" Thick OUTER Bracket Spacer
- (Qty. 1) - 3/8" Thick INNER Bracket Spacer

Hardware — Front Upper Brace-Point

- (Qty. 2) - 5/8"-11 x 5-3/4" Grade 8 Bolt
- (Qty. 2) - 5/8" Grade 8 Flat Washer
- (Qty. 1) - 11/16" Drill Bit

Hardware — Factory Pivot Location

- (Qty. 2) - 3/4" x 6" Grade 8 Bolt
- (Qty. 2) - 3/4" Grade 8 Flat Washer
- (Qty. 2) - 3/4" SLIDE NUT

Hardware — Rear Crossmember Mount

- (Qty. 2) - 3/4" x 1.75" Grade 8 Bolt
- (Qty. 4) - 3/4" x 2" Grade 8 Flat Washer
- (Qty. 2) - 3/4" Crimp-Lock Nut

Hardware — Arm Pivot Bolt

- (Qty. 2) - 18mm x 170mm Grade 10.9 Bolt
- (Qty. 4) - M18 Flat Washer
- (Qty. 2) - 18mm

NOTE

If equipped with factory, or aftermarket, power steps — the boards/front armature assemblies will likely need to be removed to install these drop brackets.



1. Set emergency brake and block rear wheels, in front and behind the tires. Front tires should stay on the ground.
2. Lift truck to extend suspension 3 to 4 inches. Do not lift truck all the way; you're just trying to unload the radius Arms.
3. Place a ratchet strap "safety" around the pinion/driveshaft and a jack stand next to each radius arm.
4. Use a 24MM socket and 27MM wrench remove the nuts from the radius arm pivot bolts.
5. With the help of an assistant, ensure the front arms are unloaded and remove the pivot bolts to drop the radius arms from the factory bracket and rest the radius arms onto jack stands to support them while the radius drops are installed. As these drops go over the outside of the frame, the arms do not need to be totally clear from the bracket to be installed.



6. Use the provided 11/16" Drill Bit to bore the UPPER factory hole. You will drill from the outside through to the inside to bore the hole on both sides. The hole isn't a perfect circle; ensure to keep the drill bit centered when drilling.

The Driveshaft on the driver's side and exhaust on the passenger prevent you drilling from the inside. When Drilling, use cutting oil and low drill speed to ensure you don't damage the bit! We recommend a high power clutched setting on the drill.



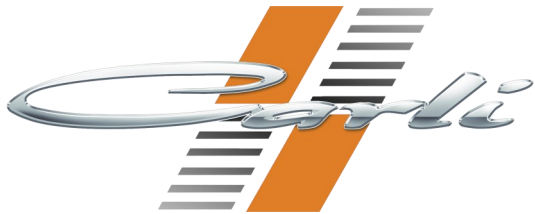


- Slide the drop bracket over the factory pivot and up to the rear support. Loosely install the 3/4" x 1.75" bolt & nut with a washer on each side of the bracket. Hand tight to allow the front of the bracket to hang.

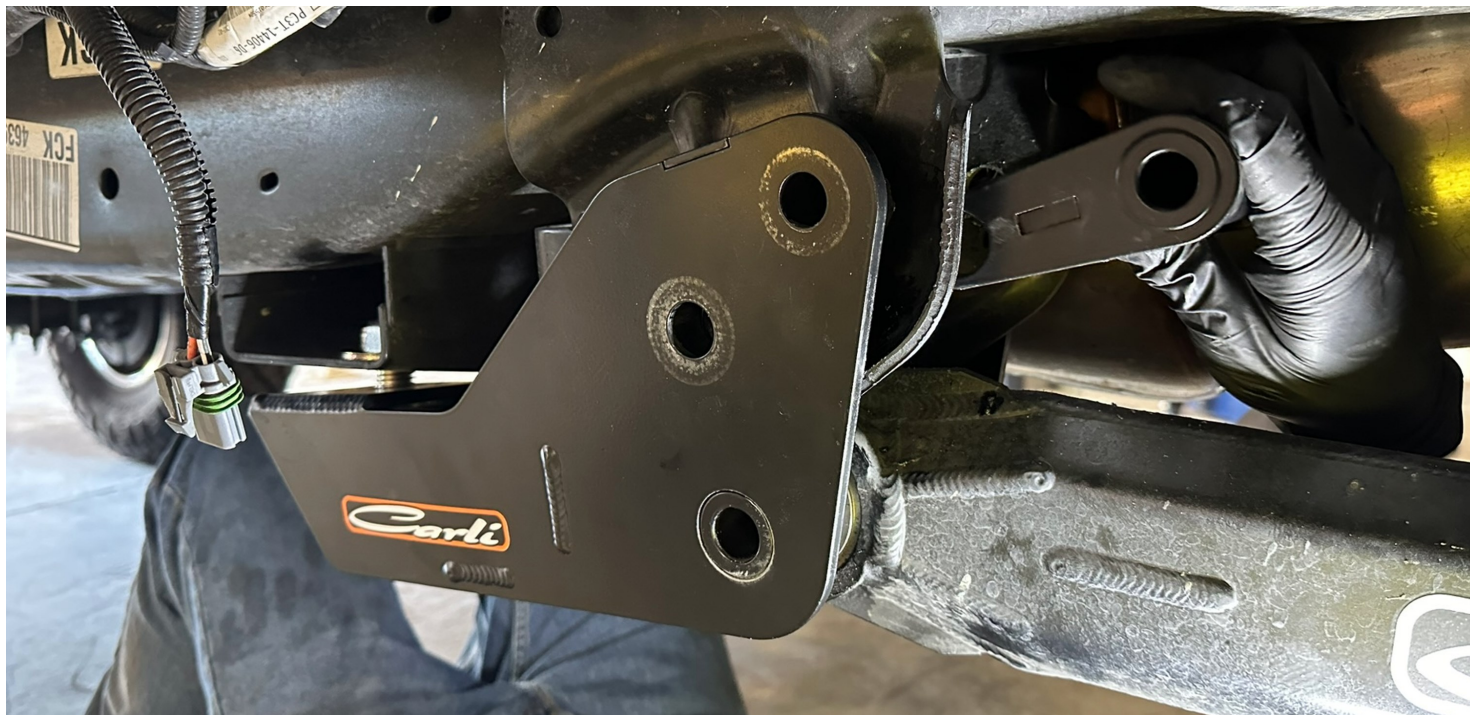


- Note the two bracket spacers provided; **there are 2 different thicknesses**. Each bracket has a thin and thick spacer. The thick spacer will be between the Carli Drop and the outside of the factory bracket; the thin one will be on the inside of the factory bracket.
- Put the thick outside spacer between the outside of the factory bracket and the Carli bracket, then the thinner inside spacer between the inside of factory bracket and Carli Bracket. The passenger side will be tight getting the inside spacer in thanks to the exhaust proximity.
- With the spacers loosely in place, and the Carli drop bracket lined up to and the factory holes and the spacers — **you'll know as the top of the spacers have a tab that key into place in the Carli Drop** — support the bottom of the drop bracket to hold it's position.





11. Insert the crush sleeve into the center void of the factory bracket. The 5/8" hole will be on top (hole that was drilled earlier), 3/4" will be on the bottom in the factory pivot hole. **Ensure gusset of the crush sleeve faces UP (exposing shank of 3/4" bolt when installed).**



12. This part requires some finagling as you're aligning the drop bracket, inside and outside spacers and the center crush sleeves while inserting the bolts. We find it's best to start with the upper 5/8" Bolt and Washer— get it threaded, hand tight, into the welded nut of the Carli bracket first, then confirmed the factory pivot hole is still aligned and install the 3/4" Bolt, Washer, and Slide-Nut on the INSIDE of the Carli bracket (into the machined recess). *More pictures on the following page...*

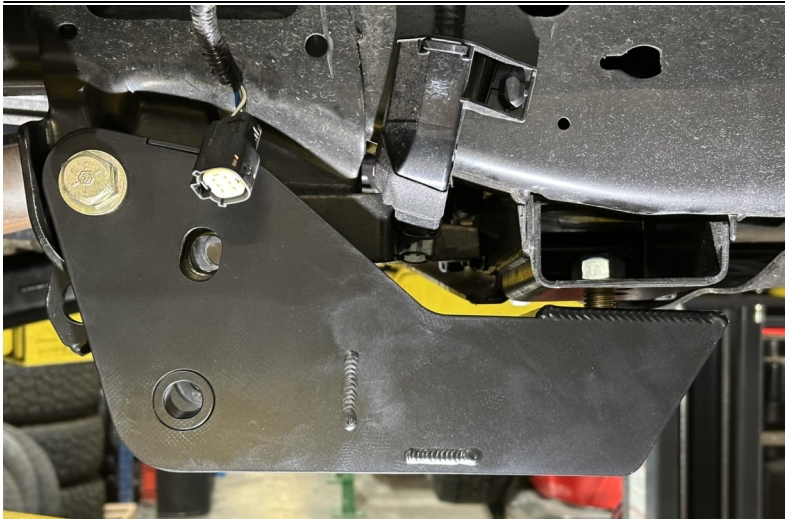
NOTE:

It's mentioned above but again, the crush sleeve that goes into the factory bracket should install **GUSSET facing up** (the 3/4" bolt shank will be visible with the crush sleeve installed).

NOTE:

3/4" Slide-nuts do NOT have a locking mechanism. We recommend **Loctite 263** (Red Loctite, 360°F tolerance) as the passenger side is close to the exhaust.





13. With everything aligned and all bolts hand-tight, Tighten the rear, vertical 3/4" bolt to the crossmember to close the gap.
14. Raise the Radius arm into position in the drop bracket and secure hand tight with the provided 18mm x 170mm bolt, washers, and Nuts.
Tightening the bracket bolts before installing the arms will close the gap and make it VERY difficult to install the arm; it's best to do it now before torquing.
15. **1-1/8" Socket** — Torque the Rear Crossmember support bolt to: **320lb/ft.**
16. **15/16" Socket** — Torque the 5/8" Upper Support bolt to **180lb/ft.**
17. **1-1/8" Socket** — Torque the 3/4" factory pivot location to **250lb/ft.** We recommend **Loctite 263** (Red Loctite, 360°F tolerance)
18. **27MM Socket** — If installing a Carli Radius Arm, the pivot bolt can be torqued in the air. If installing a factory arm (or any radius arm with a vulcanized, OEM style bushing), the truck must be at ride height with the weight on the suspension before torquing. Torque M18 Pivot Bolt to **270lb/ft.**
19. Retorque all fasteners after the first 500 miles.



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