

HELL BENT STEEL - INSTALLATION INSTRUCTIONS

PN: 140-003-001 FOR 2003-2008 DODGE RAM: DUAL SHOCK STEERING STABILIZER

Pre-Installation Warnings:

Before installing this product on your vehicle, thoroughly read and understand these instructions and the associated warnings

Failure to properly follow all instructions and heed all warnings may result in major property damage and/or serious bodily injury or death.

Test drive the vehicle to verify that it does not exhibit any uncommon sounds or vibrations.

Before beginning installation, inspect this product and all of its associated parts. Compare the parts to those listed in these instructions. If any parts are missing or damaged, promptly call and notify us at 877.731.7911. Do not substitute any part or fastener from any other source. If you desire to return the vehicle to stock, make sure to save all the original components.

Installation and Maintenance Warnings:

WARNING: ONLY A CERTIFIED MECHANIC SHOULD INSTALL THIS PRODUCT.

The OEM manual should be used at all times as a reference guide. The person installing this product should wear safety glasses and any other personal protection items needed at all times. Failure to properly install this product may result in serious bodily injury or death.

It is your responsibility to re-torque and/or inspect the integrity of the thread lock (where applicable) of all mounting fasteners after the first 100 miles, and every 3000 miles thereafter or after heavy use.

Failure to follow these steps could allow fasteners to come loose and cause serious damage, bodily injury, or death.

Have your vehicle's alignment checked every 6 months.

Use Warnings:

DRIVE SAFELY! Avoid abrupt maneuvers such as sudden sharp turns which could cause a roll over, resulting in serious injury or death.

You are solely responsible for any and all misuse, abuse, improper installation, and/or improper maintenance of this product and your vehicle.

After installing this product, drive with extreme caution, particularly until you become familiar with how the vehicle handles. Slower speeds may be required to maintain control. Do not engage in any conduct that would void your vehicle's factory warranty, such as jumping the vehicle, driving the vehicle in excess of payload towing restrictions, off-road racing, rock crawling, etc. Always wear a seat belt.

Required Tools:

9/16" socket/wrench	3/4" socket/wrench
19mm socket/wrench	Torque wrench
Drill with 25/64 drill bit	Tape measure
Clamp or Vise Grips	

Torque Settings:

3/8-16 nut/bolt: 26 ft-lb
12mm nut/bolt: 72 ft/lb

Kit Includes:

Unpack parts to ensure you have all components

ProComp ES 224000 Steering Stabilizer Shock (2)

Included hardware:

12mm Carriage Bolt (1 with each shock)
12mm Nut (1 with each shock)
12mm Lock-Washer (1 with each shock)
12mm ID X 10mm Thick Spacer (1 with each shock)
12mm X 38mm Sleeve (2 with each shock)

The remaining shock hardware will not be used.

HBS Center Mount Steel Bracket (1)

HBS Driver-Side Mount Steel Bracket (1)

HBS Passenger-Side Mount Steel Bracket (1)

Hardware Pack:

3/8-16 X 1-1/4" U-Bolt (2) 12mm X 65mm Bolt (2)
3/8-16 X 1" Bolt (4) 12mm Nut (2)
3/8 Nuts (8) 12mm Washer (2)
3/8 Washer (8)



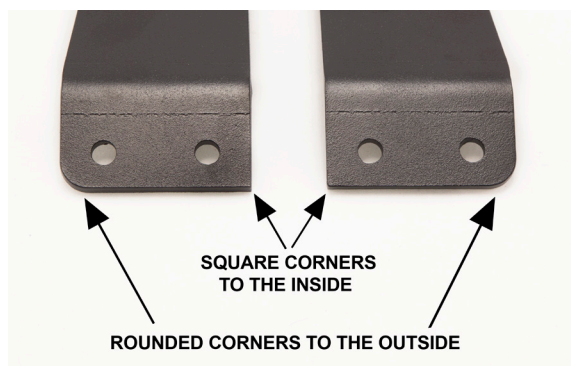
NOTE: Depending on the year and model of your truck, the items may not appear the exact same as is pictured.

Stabilizer Installation:

1. Park your vehicle on level ground. Park your truck with the front wheels straight.

2. Remove OEM steering stabilizer shock. NOTE: On some trucks, the OEM stabilizer will have a tapered bolt that mounts into the steering linkage bar. This bolt can often be difficult to remove. Please see tips for removing seized hardware at the end of the instructions.

3. Drill holes in frame for side mount brackets installation: You will use the HBS Side Brackets as a template to determine position of the drilled holes. Use the figure below to ensure you install the side brackets correctly:



Passenger-Side Bracket Installation. Use a clamp or vise grip to secure the Passenger-Side Bracket to the mounting strap on the lower control arm bracket.

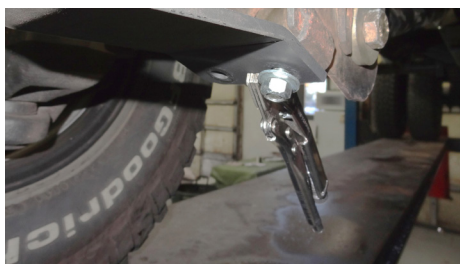
Ensure the HBS Bracket is centered and the flat, rear facing edge of the HBS Bracket is aligned with the rear side of the lower control arm bracket.



Using the drill and 25/64 bit, drill through the inside mounting hole, using the HBS Bracket as a guide.



Leaving the clamp in place, insert one of the 3/8" X 1" bolts through the top. Secure with flat washer and nut.



Drill the outside mounting hole and install the bolt, washer, and nut.



Make sure that the rear-facing edges of the HBS Bracket and the lower control arm bracket are aligned and tighten both nuts.



Torque the nuts to 26 ft/lbs. Repeat on driver's-side.

4. Install HBS Center Mount Bracket.

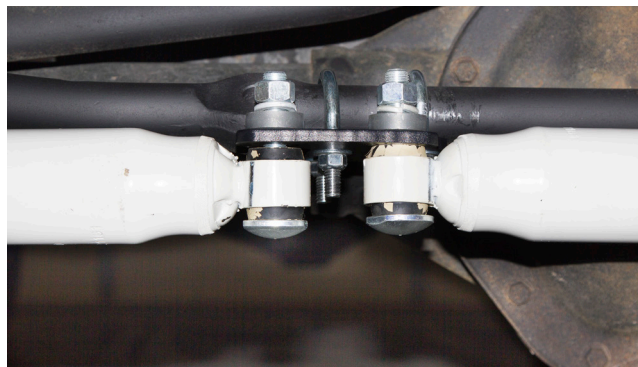
Place Center Bracket under the steering linkage bar with the U-bolts over the steering linkage as shown. Only finger tighten the nuts as you will adjust the position later.



5. Assemble/Install Steering Stabilizers. Load the sleeve into the rod end of stabilizer shock.



6. Attach the cylinder end of the stabilizer shock to the Center Bracket. Install the 12mm carriage bolt through the cylinder end of the stabilizer shock. Continue to install through HBS Center Mount Bracket, the 10mm-thick spacer, lock-washer and nut, as shown in the figure below. Torque 12mm bolt to 72 ft/lbs.



7. Attach the rod end of the shock to the HBS Side Bracket. Place the 12mm hex bolt and flat washer through the shock and side bracket, as shown in the figure below.



Tighten the bolt/nut and torque to 72 ft-lbs. Repeat on opposite side.

8. Position the HBS Center Mount Bracket. With your wheels straight, measure the length of exposed rod of each of the stabilizer shocks. Adjust the HBS Center Mount Bracket until there is equal extension of both shocks. Once the bracket is centered, tighten U-bolts and torque to 26 ft-lbs.

NOTE: Verify positioning of Center Bracket by turning the wheels to their full extents in both directions. The shock should never be fully extended or retracted throughout your full-range of steering.