

HELL BENT STEEL, INC - INSTALLATION INSTRUCTIONS

11" AND 11.5" FRONT LEVELING SYSTEM FOR DODGE RAM-PN:110-200-001 &110-250-001

YOU CAN ALSO VIEW THE INSTRUCTIONS ON LINE AT www.hellbentsteel.com

IMPORTANT NOTES:

Please read before beginning installation. OEM Manual should be used as a reference.

It is highly recommended that a certified mechanic perform this installation.

Read and understand all the instructions before beginning installation.

Use Loctite® on all bolts associated with this installation.

Torque Settings:

5/16"	15-18 ft-lbs	9/16"	75-90 ft-lbs
10mm	28-35 ft-lbs	5/8"	85-110 ft-lbs
7/16"	30-35 ft-lbs	3/4"	105-125 ft-lbs
1/2"	65-85 ft-lbs		

If you desire to return the vehicle to stock, make sure to save all the stock components.

WARNING: IT IS HIGHLY RECOMMENDED THAT A CERTIFIED MECHANIC PERFORM THIS INSTALLATION.

IMPORTANT CUSTOMER INFORMATION:

This vehicle's reaction and handling characteristics may differ from that of standard cars and/or trucks. Modifications to improve off road performance may raise the vehicle's intended center of gravity. Extreme caution must be utilized when encountering driving conditions that may cause vehicle imbalance or loss of control. **DRIVE SAFELY!** Avoid abrupt maneuvers, such as sharp turns, which could cause a roll over, resulting in serious injury or death.

It is the customer's responsibility to make sure a re-torque is performed on all hardware associated with this suspension system after the first 100 miles. It is also the customer's responsibility to do a complete re-torque after every 1000 miles or after every off road use.

After the original installation, it is recommended to have the alignment checked every 6 months to ensure proper tracking, proper wear on tires and front-end components. The responsibility for abuse, improper installation, or improper suspension maintenance is solely that of the customer.

NOTICE:

It is the responsibility of the customer or the mechanic to wear safety glasses at all times when working with air tools.

Please follow all the instructions carefully.

Before installation begins, drive the vehicle and inspect it to make sure that there are not any uncommon sounds or frame damage.

Front End Installation:

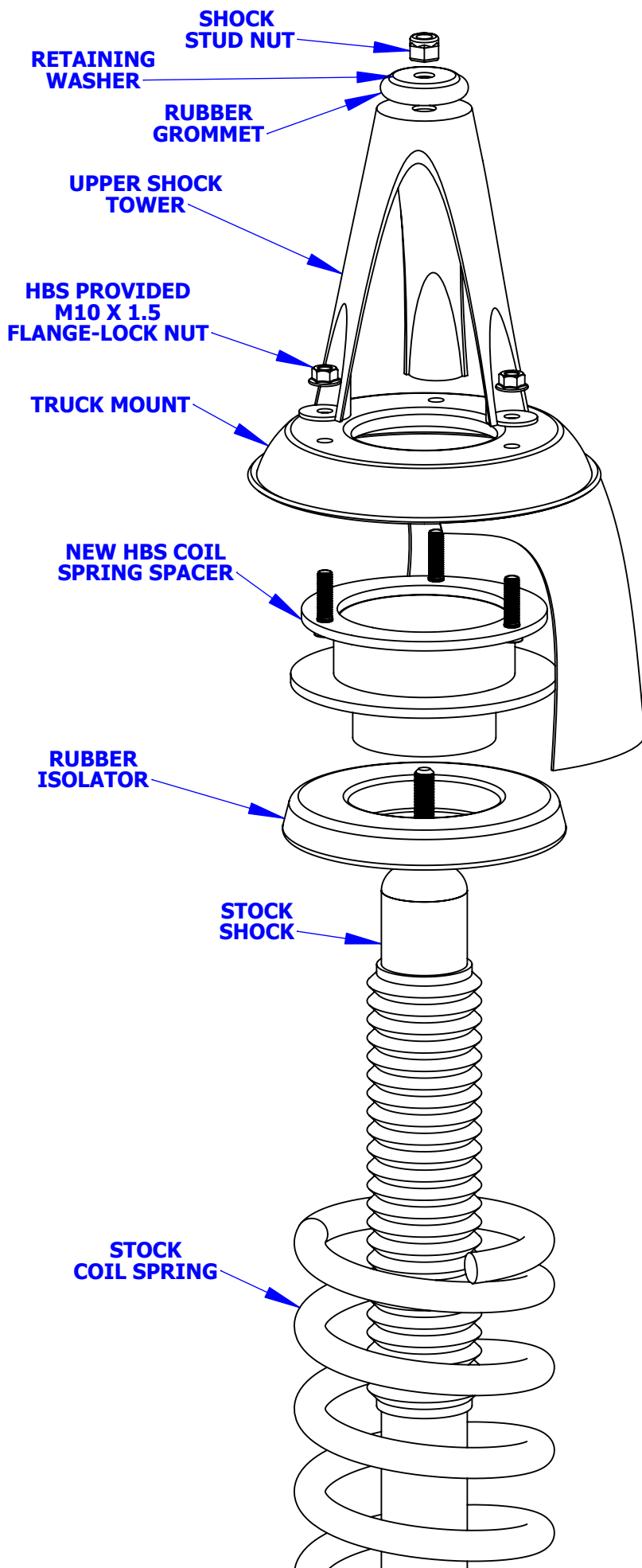
1. To begin installation, block the rear tires of the vehicle so that the vehicle is stable and can't roll backwards. Safely lift the front of the vehicle and support the frame with jack stands. Place jack stands on both the driver and the passenger sides of the vehicle. Next remove the wheels from both sides.
2. Position a hydraulic floor jack under the front axle and raise the jack until it makes contact with the front axle.
3. On the driver side, place an index mark on the stock coil spring and another directly across on the stock spring socket. This will allow you to reinstall the coil spring in the same position. Repeat procedure on passenger side.
4. On the driver side, locate the top of the shock absorber stud that is located in the engine compartment. Remove the **shock stud nut, retaining washer and rubber grommet**. NOTE: Save grommets; they will be reinstalled. Repeat procedure on passenger side.

(See figure on back)

5. On the driver side, remove the (3) stock nuts from the **upper shock tower** and set upper shock tower aside for reinstallation later. Repeat procedure on passenger side.

(See figure on back)

6. On the driver side, remove the bolt from the lower shock mount on the axle. Save hardware for later reinstallation. Remove the stock shock absorber from the engine compartment. Repeat procedure on passenger side.
7. Carefully lower the hydraulic jack enough so that the **stock coil spring** can be removed. On the driver side, remove the stock coil spring and the **rubber isolator pad** and set aside for later reinstallation. Remove the stock ring that has the bolts connected to it and discard. Repeat procedure on passenger side.
8. Lower the hydraulic jack so that the stock coil spring and the new upper coil spacer can be installed. (See note on back.)
9. On the driver side, install the stock coil spring into the stock location. **NOTE: Refer to the mark made in step #3.** Place the **rubber isolator pad** at the top of the coil spring and then insert the **new coil spring spacer** on top of the **stock coil spring**. Raise the hydraulic jack until new coil spring spacer seats into the upper stock location. Repeat procedure on passenger side. (Continued on back)



- 10.** Install the shock down through the engine compartment, and secure the bottom of the shock into the stock location using stock hardware.
- 11.** Reinstall stock **upper shock tower** into stock location. Secure new coil spring spacer to upper shock mount using the provided **10mm nuts**. Torque to 35 ft-lbs. Repeat procedure on passenger side. **(See figure on left)**
- 12.** On the driver side, install the stock **rubber grommet** and **retaining washer** and secure the top of the shock to the **upper shock mount**. Repeat procedure on passenger side.
- 13.** Remove the hydraulic jack from under the differential. Reinstall the wheels and remove the jack stands from under the vehicle and take directly to an alignment shop.

NOTE:

In the case that your truck is new or has stiff springs it may be necessary to gain additional clearance in order to remove or reinstall the coil spring and spacer. Follow the steps below in order to gain an inch or two of additional clearance with each step.

CAUTION: It is very important that you adequately support the axle and differential as they are heavy and could roll backwards as you disconnect them from the frame. Also, pay close attention to the vacuum lines and brake lines to avoid over-extending or breaking them.

1. Unbolt the lower track bar connection from the axle on the passenger side.
2. Disconnect the upper bolt on the anti-sway bar link on the axle side.
3. Unbolt the upper trailing arm on the axle side.

Reassemble in reverse order and torque all bolts to OEM specifications.