

GENERAL INFORMATION

General Notes

1. The minimum compressed height of the airbag is 2.7". Airbags are equipped with internal bump stops and are rated to 250 PSI
2. Always wear safety glass and any other relevant protective equipment.
3. You should be comfortable and proficient at using an automotive floor jack or vehicle lift.
4. For the leaf spring portion: Complete the installation on one side of the vehicle before starting on the other side.
5. Install time is between 2-4 hours depending upon mechanical ability and shop amenities.
6. Please read through and understand the instructions before beginning work on truck.
7. Apply the PTFE thread sealant to all NPT joints.
8. Verify that you have a minimum clearance of 7" from the inboard tire face to the main face of the chassis.
9. Always consult Full Travel Bags LLC via email at tech@fulltravelbags.com with any questions.

Before Installation (not using a vehicle lift)

1. Park truck on level ground and apply emergency brake and chock the front wheels.
2. Do not attempt installation if you are unsure about properly lifting and supporting the vehicle/axle.

After Installation

1. Verify that all fasteners have been properly torqued.
2. Pressurize the system (60 psi) and check for air leaks.
3. Re-torque u-bolts after 100 miles of driving.

Tips

1. When the Removable Spacer is NOT installed, maintain the airbags at 0 psi or vented. Some compressor manufacturers employ code which will try to maintain a minimum of 5 psi. If this is your case, we recommend that you install an in-line ON-OFF toggle/paddle switch (appropriately load rated) to kill power to the compressor.

STEP(S)

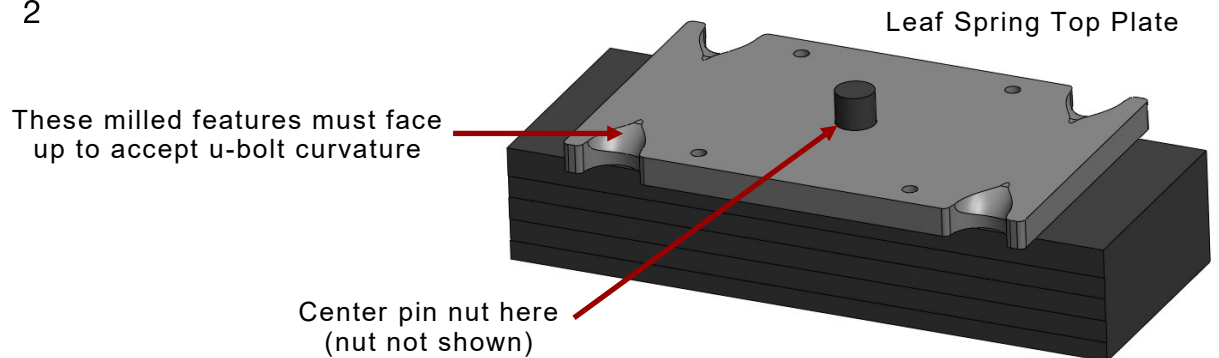
1. Park on level ground. Support the axle on the driver's side and remove the wheel. **ONLY WORK ON ONE SIDE OF THE TRUCK AT A TIME.** Spray PB Blaster (or equivalent penetrating oil) on the leaf spring center pin threads and allow time to penetrate. Remove the leaf spring center pin nut, u-bolts and u-bolt top plate. *If equipped, remove the factory upper overload spring and the spacer block just below it.*
2. Install the Leaf Spring Top Plate. Make sure it is parallel with the leaf spring. Secure it with the factory center pin nut and threadlocker. Clean the nut and use a medium to high strength thread locking compound. Torque to 40 ft-lbs. *Refer to Note A below.*
3. Re-install the factory bottom u-bolt cradle, u-bolts, washers and nuts. Finger tighten the four nuts equally such that they are all flush with the bracket (not angled at contact). Then torque the nuts incrementally in the cross pattern indicated until a torque of 130 ft-lbs is achieved. Perform with the trucks weight on the leaf springs. U-bolts must be re-torqued after driving for 100 miles.

Note: For trucks that are equipped with a top overload spring, the factory center pin may be too long to use. If so, replace it with the supplied center pin and nut. The head of the center pin MAY be too large in diameter to fit into the hole of the axle perch. If so, carefully grind the diameter down as required to fit. Do not remove more material than is necessary. Cut off the excess thread above the center pin nut after torquing.

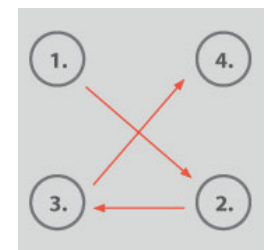
1



2



3



Torquing Pattern

Nuts are flush/parallel with u-bolt cradle.

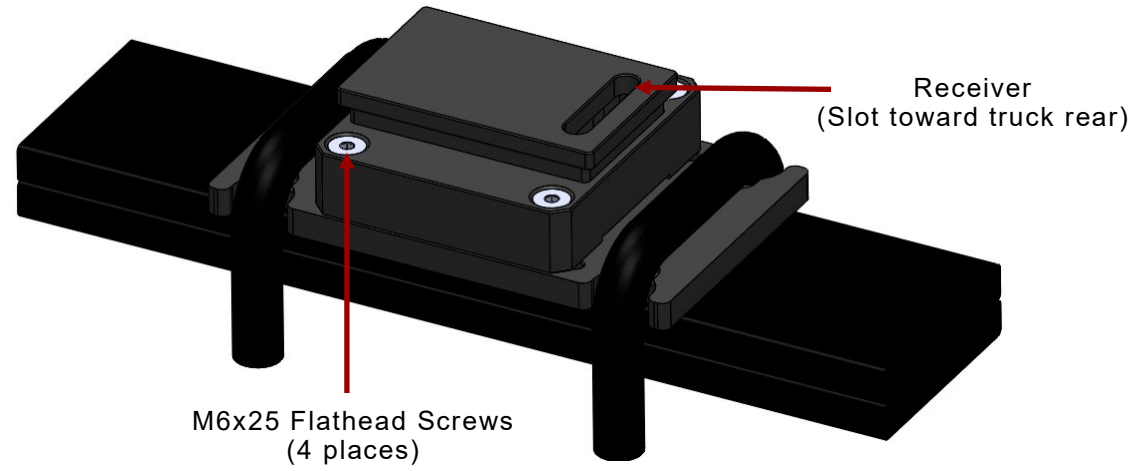
STEP(S)

1. Install the Receiver onto the Leaf Spring Top Plate using the 4x M6x25 Flat Head Screws. Orient the slot toward the rear of the vehicle. Hand tighten with an M4 hex driver.
2. (2011-2015)- Fully thread a 5/8" bolt into the Bolt Retainer Tabs as shown. The head of the bolt will lock in place between the ears of the Tab.
3. (2011-2015)- Install the Driver side airbag bracket. Pass the short Bolt Retainer Tab Assembly thru the outboard side frame hole where shown. Pass the long Bolt Retainer Tab Assembly thru the hole on the inboard side of the frame. Loosely install a 5/8" washer, then a 5/8" split lock washer, then a 5/8" nut on each bolt. Bias the bracket upward and torque the nuts to 130 ft-lbs.

Note A (2016-2019):

2016-2019 trucks will not use the Bolt Retainer Tab Assemblies of the 2011-2015 trucks. Instead, secure the frame bracket using the supplied metric M16 bolts in the indicated holes (the frame has weld nuts on the inside). Install a 5/8" split lock washer followed by a 5/8" flat washer on each M16 bolt. Torque to 130 ft-lbs.
Recommendation: Apply a medium strength Loctite threadlocker to the M16 leading threads AND/OR once the bolt is torqued draw a "witness line" across the head of the bolt and onto the frame bracket using a sharpie. This will make it easy to visually detect and address any loosening of the bolt over time.

1

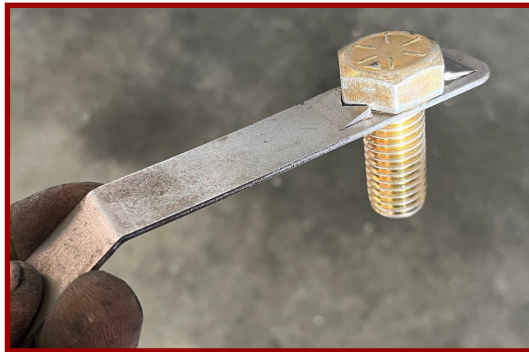


2

Bolt Retainer Tab Assembly
Short (2x)

2011-2015 Only

Bolt Retainer Tab Assembly
Long (2x)

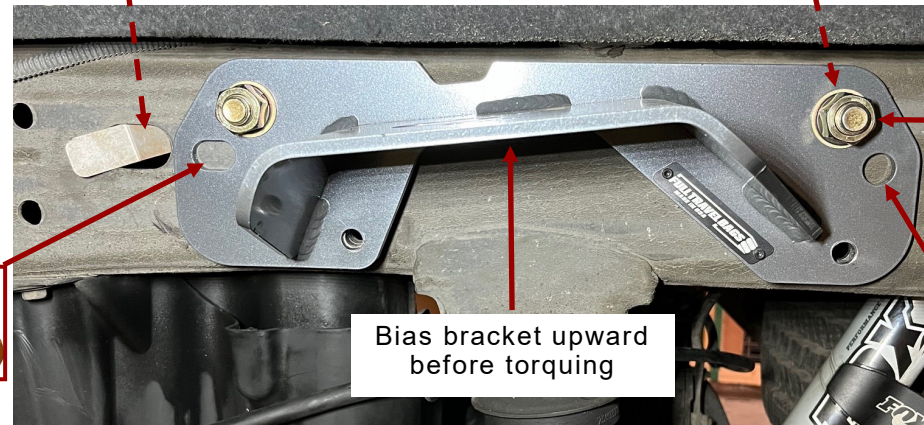


3

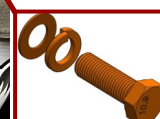
Truck front
(driver side)
←



Note A



Bias bracket upward
before torquing



Note A

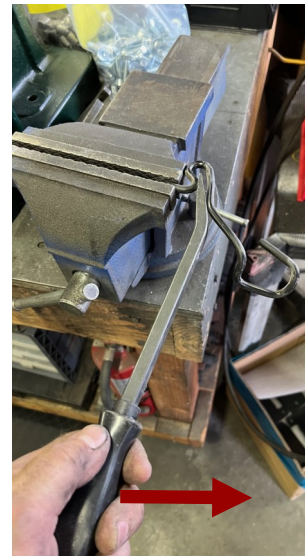
STEP(S)

1. Remove the emergency brake line hanger (driver side).
2. Place the hanger in a vise as shown and slightly spread open the wire loop using a pry bar.
3. Spread the wire loop just enough to accept a 7/16" bolt.
4. After drilling the 7/16" thru holes (refer to page 6 for drilling details), re-install the emergency brake line hanger using the 7/16" x 5" long bolt. An oversized 7/16" washer will reside on BOTH sides of the emergency brake line hanger on the inboard side of the frame. Be sure to install the aluminum shims as indicated on page 6. Then install the locknut and torque to 35 ft-lbs.

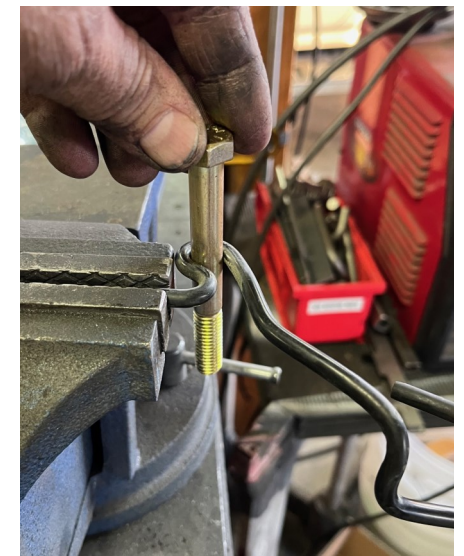
1



2



3



4



7/16" Locknut

Bolt
7/16" x 5"

7/16" Washer
Oversized

STEP(S)

1. The Frame Brackets have been designed to be compatible with B&W 5th wheel and Gooseneck bracketry. Refer to the four configurations depicted. The Frame Brackets may be compatible with other aftermarket 5th and GN manufacturers. Contact us to verify fitment.
2. Drill 7/16" holes straight thru the frame where indicated by the two green circles (if equipped, you will also drill thru the 5th Wheel or GN bracketry shown).

NOTE:

Inspect the inboard side of the frame for brake and electrical line clearances before drilling.

NOTE:

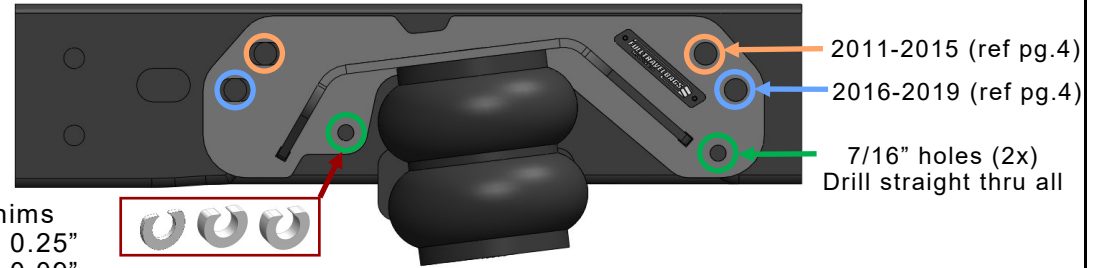
When drilling the forward green hole of the driver side, you **must** drill thru the threaded hole on the inboard side of the frame. This is the same hole where the emergency brake line fastener was. Refer to page 5 for detail.

Drilling and installation of the 7/16" hardware, where indicated, is required for all configurations.



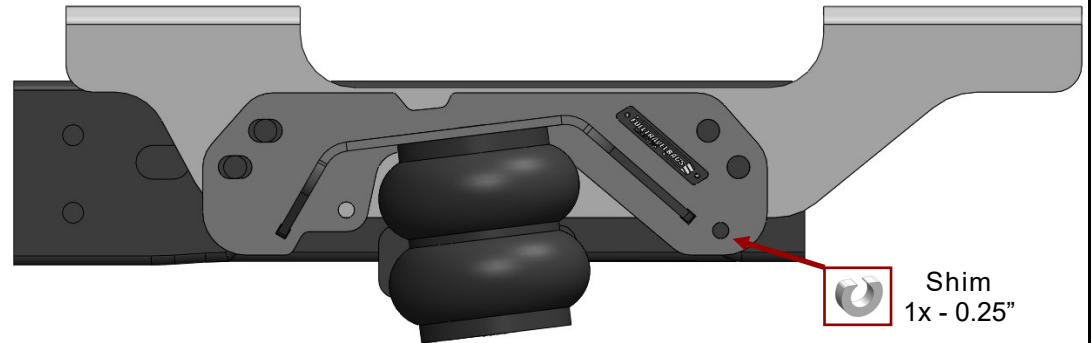
Bumper Pull
(Driver side)

Shims
2x - 0.25"
1x - 0.09"

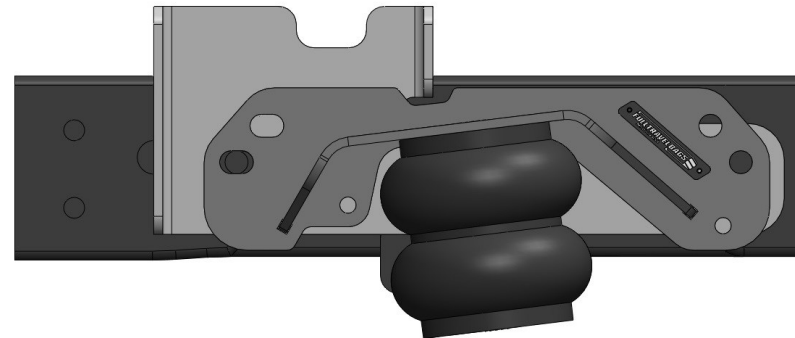


B&W #2506
2011-19
5th Wheel

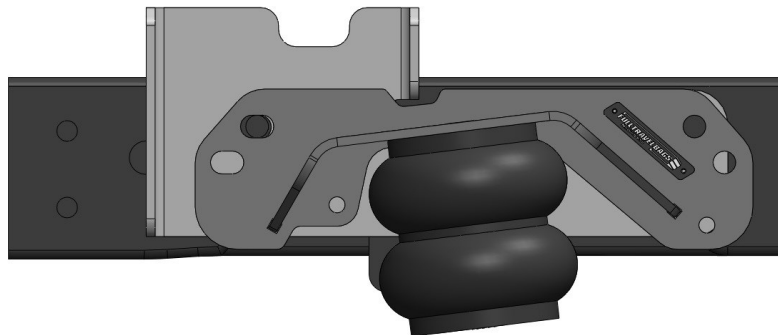
Shim
1x - 0.25"



B&W #1016
2016-19 GN



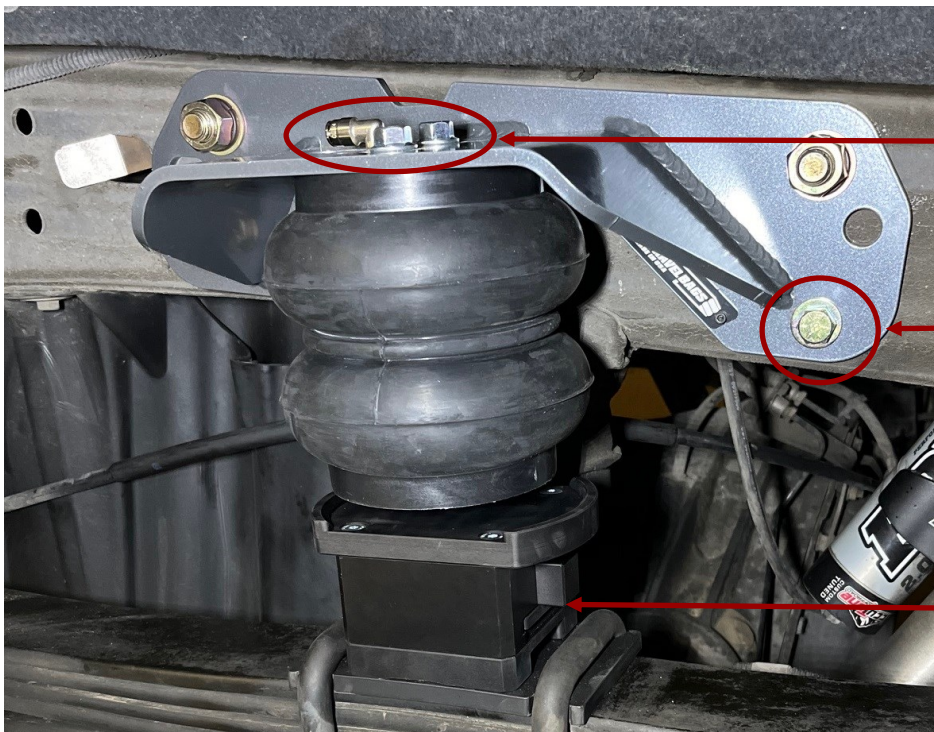
B&W #1012
2011-15 GN



STEP(S)

1. Install a 7/16" x 4-1/2" long bolt with a SAE washer at the outboard rear location. (This location also needs a 1/4" aluminum shim if B&W 5th wheel bracket #2506 is present). Refer to page 6.
2. On the inboard side, install an oversized 7/16" washer, then a 7/16" SAE washer, then a locknut. Torque to 35 ft-lbs. Repeat for the Passenger side front and rear locations.
3. Verify that the Bolt Retainer Tab is **NOT** touching any brake lines (inboard driver side). The brake lines or the Tab can be carefully bent to provide relief.
4. Install the Removable Spacer assembly onto the Receiver. Install the pneumatic elbow fitting onto an airbag as shown on page 8. Then install the airbag with the 3/8" flange head hardware. Choose the mounting holes such that the location of the bag is axially concentric with the Removable Spacer (in most cases this should be the rear mounting holes).

Repeat the previous pages for the passenger side.



Refer to page 8 for
install of air fitting

1

4

2



3



STEP(S)

1.
Use zip ties and the split loom sheathing to protect and secure all plumbing lines from abrasion and heat sources. The 1/4" dot tubing must be flushly square cut and not bent or kinked for a proper seal. Use the supplied PTFE pipe dope on all NPT threads. Fully insert the 1/4 tubing into the push to connect fittings. The Schrader valve is for manual air fill but can also be used to fully vent the airbags in order to remove the Removable Spacer Assembly. Mount the bulkhead style Schrader fitting in any desirable location.

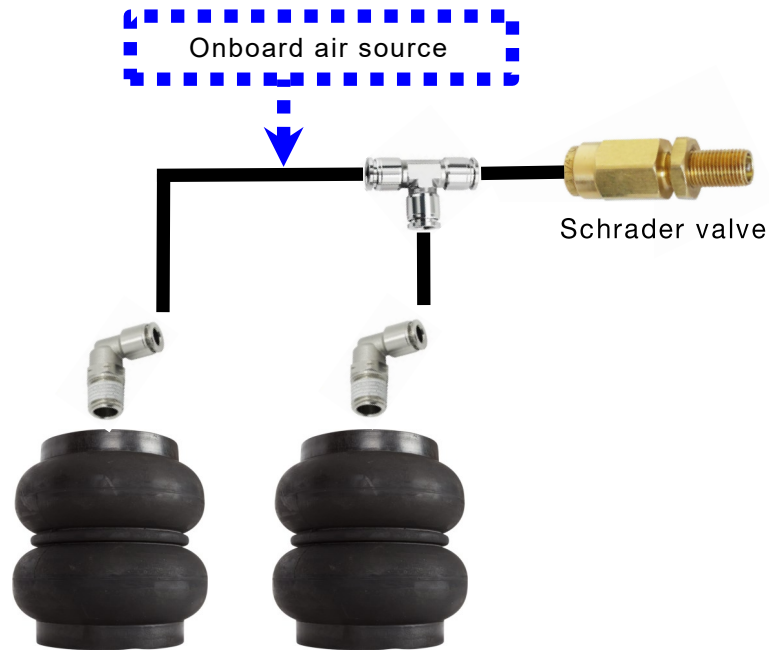
2.
Leaf springs settle uniquely and frequently have unpredictable heights. It may be necessary to shim the Removable Spacer so that it can be easily installed/removed without interference from the airbag. The clearance under the airbag should be 1/4" - 1" under the following criteria:

- i. Truck is on level ground.
- ii. Airbags are at zero PSI.
- iii. All permanent accessory weight is in truck bed (ie: tool box, spare tires, tonneau cover, etc)

If necessary remove the indicated shim to achieve the proper clearance. If additional shims are desired please contact Full Travel Bags.

DO NOT USE ANY THREADLOCKING COMPOUNDS. THEY WILL DETERIORATE THE PLASTIC AND COMPROMISE ITS STRENGTH.

1



2

