

INSTALLATION GUIDE



Part#: 134009, 134409



HARDCORE LIMITED LIFETIME WARRANTY

Stock to 3" Load leveling Kit
4" Load Leveling Kit

Jeep Gladiator 4WD | 2022-2026

Rev. 062426

491 W. Garfield Ave., Coldwater, MI 49036 • Phone: 517-279-2135

Web: www.bds-suspension.com • E-mail: tech-bds@ridefox.com

Read And Understand All Instructions And Warnings Prior To Installation Of System And Operation Of Vehicle.



THANK YOU

Your truck is about to be fitted with the best suspension system on the market today. That means you will be driving the baddest looking truck in the neighborhood, and you'll have the warranty to ensure that it stays that way for years to come.

Thank you for choosing BDS Suspension!

BEFORE YOU START

BDS Suspension Co. recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known.

FOR YOUR SAFETY

Certain BDS Suspension products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. BDS Suspension Co. does not recommend the combined use of suspension lifts, body lifts, or other lifting devices. You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

BEFORE INSTALLATION

- Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
- Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
- Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
- Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
- Secure and properly block vehicle prior to installation of BDS Suspension components. Always wear safety glasses when using power tools.
- If installation is to be performed without a hoist, BDS Suspension Co. recommends rear alterations first.
- Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

BEFORE YOU DRIVE



Visit 560plus.com for more information.

TIRES AND WHEELS

IMPORTANT:

Minimum Backspace 4.5"



Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system. Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure. Longer replacement hoses, if needed can be purchased from a local parts supplier. Perform head light check and adjustment. Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing. BDS Performance Towing: How to Use Your New Load Leveling Kit

BDS PERFORMANCE TOWING

HOW TO USE YOUR NEW LOAD LEVELING KIT

Welcome to BDS Performance Towing. Your new air spring kit isn't a basic helper bag—it's engineered by the Sport Truck USA team in Coldwater, Michigan, to perform without limits: loaded, unloaded, on-road, and off. This guide covers how to dial it in and what every owner should know.

To keep it simple:

DAILY USE

- While driving an unloaded vehicle, feel free to release all the air pressure from the air springs. There is no minimum PSI requirement for our air springs when unloaded.
- When loaded, inflate the air springs until the vehicle sits level
- If you need more than 100 PSI to level your vehicle, no problem. We don't recommend going over 125 PSI. That is the limit of our compressor system.

OFF-ROAD USE

- Air springs act as adjustable bump stops, so up travel depends on air pressure. A lower plate design (instead of a fixed mount) preserves full droop travel. Heavy-duty bags handle the rest.

SERVICE & SAFETY

- When having your vehicle serviced, reduce the air pressure to zero if equipped with our compressor system. If not, no action is needed.
- **IMPORTANT:** Never exceed your vehicle's OEM GVWR or GAWR. This kit levels the load; it doesn't increase capacity.
- **GVWR (Gross Vehicle Weight Rating):** The maximum total weight of your truck, including passengers, cargo, fuel, and tongue weight.
- **GAWR (Gross Axle Weight Rating):** The maximum weight each axle can carry.

HAVE QUESTIONS OR NEED HELP?

Contact:

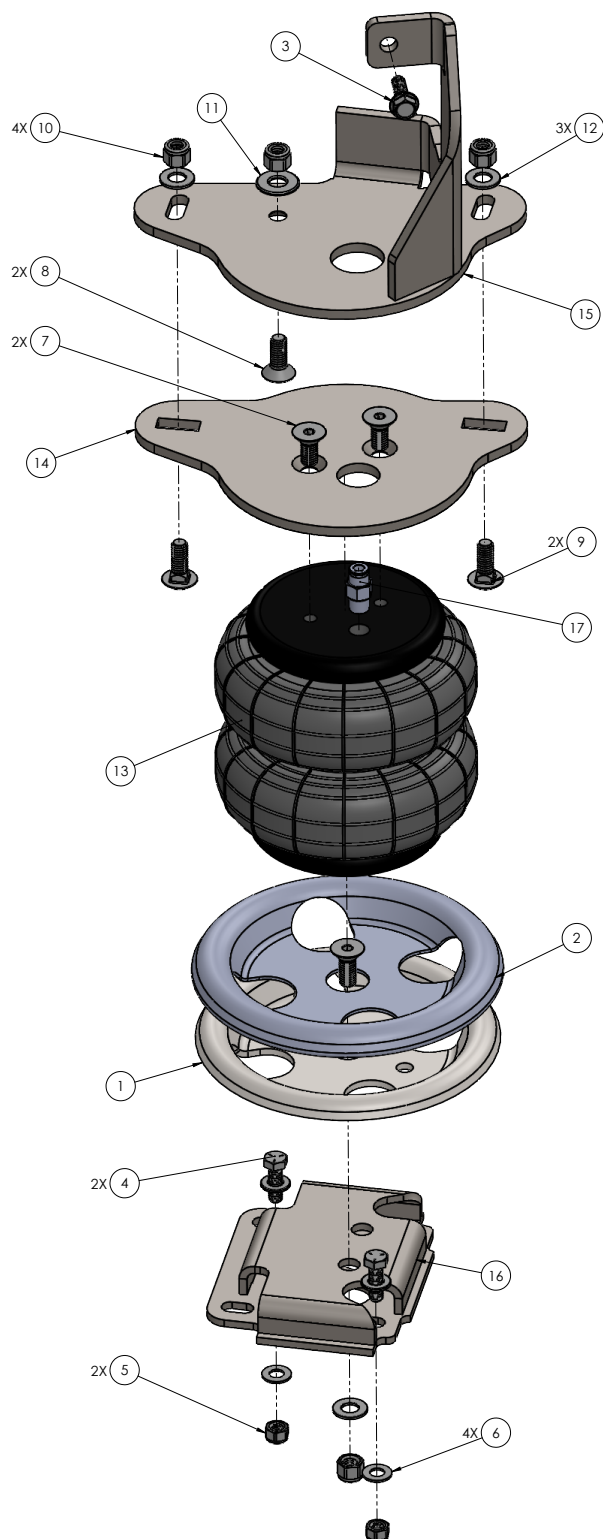
BDS Tech Department (Hours: 8am to 5pm - Mon. - Fri.)

Tech-BDS@ridefox.com

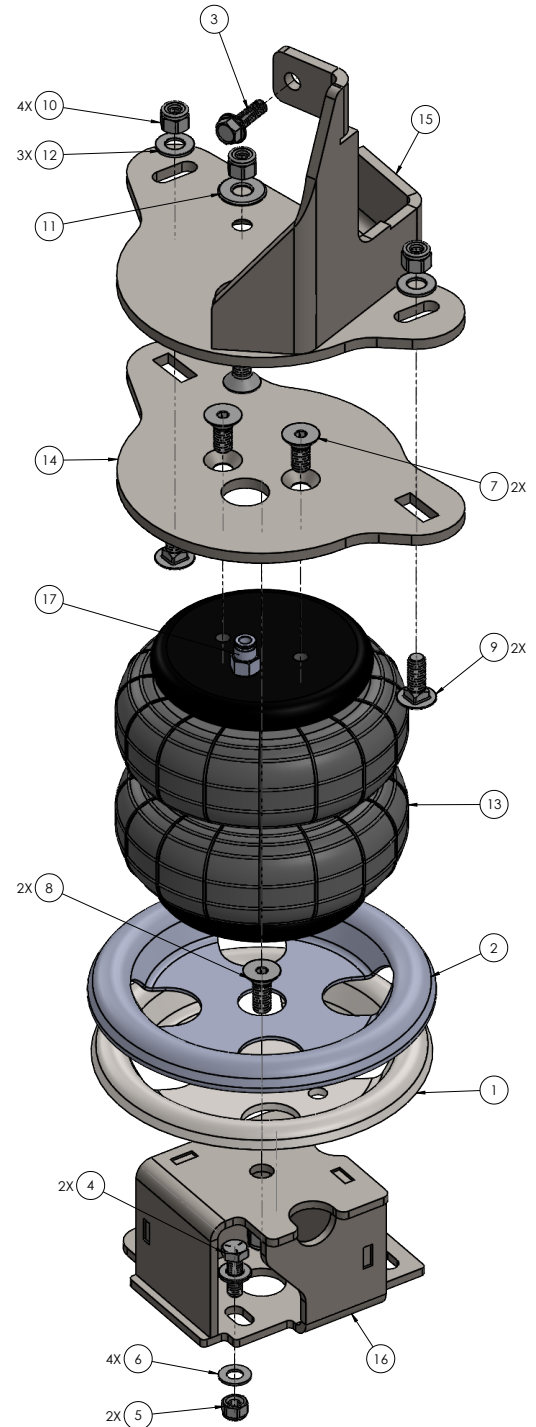
517-279-2135, Option 2



JT STOCK RIDE HEIGHT AIR BAG ASSEMBLY	
Item#	Description
1	6" STAMPED STEEL CRADLE
2	6" AIR SPRING CRADLE PAD
3	5/16" x 1" HEX HEAD, THREAD CUTTING BOLT
4	5/16" x 1" HEX HEAD BOLT
5	5/16" LOCK NUT
6	5/16" FLAT WASHER
7	3/8" x 7/8" FLAT HEAD CAP BOLT
8	3/8" x 1" FLAT HEAD CAP BOLT
9	3/8" x 1" CARRIAGE BOLT
10	3/8" NYLOCK NUT
11	3/8" FLAT WASHER - 1" DIAMETER
12	3/8" FLAT WASHER
13	SHORT AIR SPRING
14	UPPER SPRING BRACKET - DRIVER SIDE
15	UPPER FRAME BRACKET - DRIVER SIDE
16	LOWER BRACKET - STANDARD
17	1/4" PTC - 1/8 NPT STRAIGHT - AIR FITTING



JT LIFTED AIR BAG ASSEMBLY	
Item#	Description
1	6" STAMPED STEEL CRADLE
2	6" AIR SPRING CRADLE PAD
3	5/16" x 1" HEX HEAD, THREAD CUTTING BOLT
4	5/16" x 1" HEX HEAD BOLT
5	5/16" LOCK NUT
6	5/16" FLAT WASHER
7	3/8" x 7/8" FLAT HEAD CAP BOLT
8	3/8" x 1" FLAT HEAD CAP BOLT
9	3/8" x 1" CARRIAGE BOLT
10	3/8" NYLOCK NUT
11	3/8" FLAT WASHER - 1" DIAMETER
12	3/8" FLAT WASHER
13	SHORT AIR SPRING
14	UPPER SPRING BRACKET - DRIVER SIDE
15	UPPER FRAME BRACKET - DRIVER SIDE
16	LOWER BRACKET LIFTED - DRIVER SIDE
17	1/4" PTC - 1/8 NPT STRAIGHT - AIR FITTING



CONTENTS OF YOUR KIT

Box Kit - BDS134009 - Stock to 3" Load Leveling Box Kit

Part #	Qty	Description
B1717	1	Bag Kit - Air Bag Components
BP1121	1	Schrader Valve Mounting Hardware
	4	5/16" Panel Nut
	2	5/16" External Tooth Lock Washer
	2	5/16" Rubber Sealing Washer
	4	8mm Flat Washer
099000	10	11.5" Nylon Cable Tie - Black
05710	2	1/4" PTC Schrader Valve - Air Fitting
05709	1	1/4" PTC Tee - Air Fitting
05706	2	1/4" PTC - 1/8 NPT Straight - Air Fitting
05711	1	1/4" Air Line - 16'
BP1111	1	2020-2025 Jeep Gladiator Air Support Hardware
	4	3/8" x 1" Carriage Bolt, Grade 5
	8	3/8" NyLock Nut
	6	3/8" Flat Washer
	2	3/8" Washer 1" Diameter
	4	3/8" x 1" Flat Head Cap Bolt
	4	3/8" x 7/8" Flat Head Cap Bolt
	4	5/16" x 1" Hex Head Bolt, Grade 5
	6	5/16" x 1" Prevailing Torque Lock Nut
	4	5/16" Flat Washer, Clear Zinc
	2	5/16" x 1" Hex Head Flange, Thread Cutting Bolt
05900	2	6" Air Bag Perch/Seat
05902	2	6" Air Spring Cradle Pad
05738	1	Upper Frame Bracket Driver Side
05739	1	Upper Frame Bracket Passenger Side
05740	1	Upper Spring Bracket Driver Side
05741	1	Upper Spring Bracket Passenger Side
05742	2	Lower Axle Bracket

Box Kit BDS139000 - 6" Air Spring - Short

Part #	Qty	Description
05700	2	2B6 Short Air Spring

Box Kit - BDS134409 - 4" Load Leveling Box Kit

Part #	Qty	Description
B1717	1	Bag Kit - Air Bag Components
BP1121	1	Schrader Valve Mounting Hardware
	4	5/16" Panel Nut
	2	5/16" External Tooth Lock Washer
	2	5/16" Rubber Sealing Washer
	4	8mm Flat Washer
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05900	2	6" Air Bag Perch/Seat
05902	2	6" Air Spring Cradle Pad
05738	1	Upper Frame Bracket Driver Side
05739	1	Upper Frame Bracket Passenger Side
05740	1	Upper Spring Bracket Driver Side
05741	1	Upper Spring Bracket Passenger Side
05743	1	Lower Axle Bracket Driver Side - 4" Lift
05744	1	Lower Axle Bracket Passenger Side - 4" Lift

Box Kit BDS139001 - 6" Air Spring - Tall

Part #	Qty	Description
05701	2	2B6 Tall Air Spring

TECH TIPS

TROUBLESHOOTING INFORMATION FOR YOUR VEHICLE

1. Cutting of the OE bump stop mount off is required in the rear for installation.
2. It is optional but not necessary to remove the rear coil springs to gain easier access to cut the bump stop mount and to install the upper frame bracket.
3. Measure distance between air spring mounting plate and top of the cradle pad. The ideal air spring working height for 05700 is 5.5"-6.5", for 05701 ideal working height is 5.5"-7.5"
4. If your air spring is not in contact with the cradle, it may be necessary to add ~ 10psi or until the air spring extends to contact the cradle.
5. Air Bag cradle pads are a serviceable item. New air bag cradle pads can be purchased as part # BDS139900
6. IMPORTANT: A minimum wheel backspace of 4.5" to prevent airbag damage from occurring.
7. After installation, if air spring does not self-center into bottom of cradle, a dry lubricant may need to be sprayed onto the air spring cradles to consistently allow the air spring to fall into the cradle.
8. Before adding air pressure above 5 PSI, it is recommended to check that the air spring is fully seated into the cradle.
9. Follow the Air Line Installation Guide for air line install guidelines and tips.

INSTALLATION INSTRUCTIONS

SPECIAL TOOLS

- Sawzall (Recommend 9" 14/18 TPI Blade - Part # DS0914WBF200)
- Angle Grinder with Flap/Fiber Disc
- 9/32 drill bit
- Max wrench/socket size 9/16"
- Torque Wrench

INSTALLATION INSTRUCTIONS

1. Secure front wheels.
2. Raise the rear of the vehicle. Use jack stands on the frame rails.
3. Remove wheels.
4. Remove the rubber bump stop by pulling downward or prying the edge with a flathead screwdriver. A few light strikes with a rubber mallet can help dislodge bumper if needed. (Fig. 1)

FIGURE 1



5. Using a sawzall, cut and remove the bump stop cup at the welds. *Note: Be careful not to cut into the bump stop mount.* (Fig. 2A, 2B)

FIGURE 2A



FIGURE 2B



6. Using a flapper disc or equivalent. Grind off any remaining weld bead until smooth. Coat with paint to prevent rust. Passenger side shown. (Fig. 3A, 3B)

FIGURE 3A



FIGURE 3B



7. Install the rubber isolator to the cradle by aligning the locking nibs with the holes in the cradle. (Fig. 4A) Push the nibs through the 4 holes then wrap the rubber isolators edge around the cradle, snapping it into place. (Fig. 4B)

FIGURE 4A



FIGURE 4B



8. Using pliers pull the locking nibs until they fully seat into the cradle holes, you will feel them snap into place. (FIG. 5A) DO NOT OVER STRETCH THE NIBS. With all nibs locked into place, use a sharp knife to cut them off flush to the bottom of the cradle. (FIG. 5B)

FIGURE 5A



FIGURE 5B



9. Lower brackets are not side specific, however the notches in the top of the bracket should be mounted to the rear of the vehicle. (Fig.6A, 6B) Assemble cradle using the provided 3/8"x1"- Flat Head Cap Bolt, lock nut and washer (BP1111), mount the cradle in side specific hole (see 6A). Torque to 23 ft-lbs.

FIGURE 6A

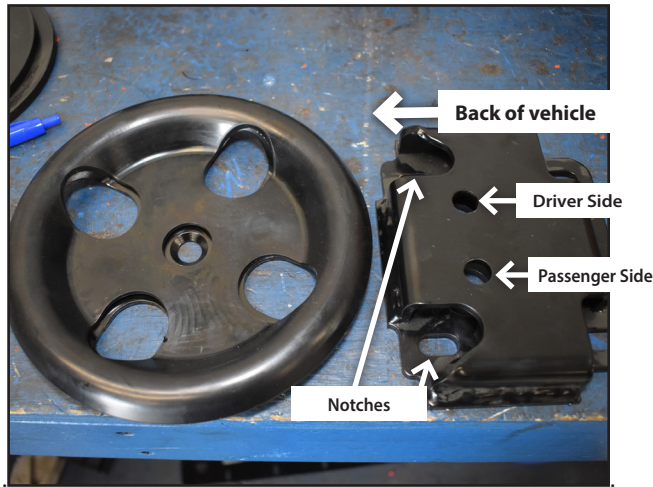
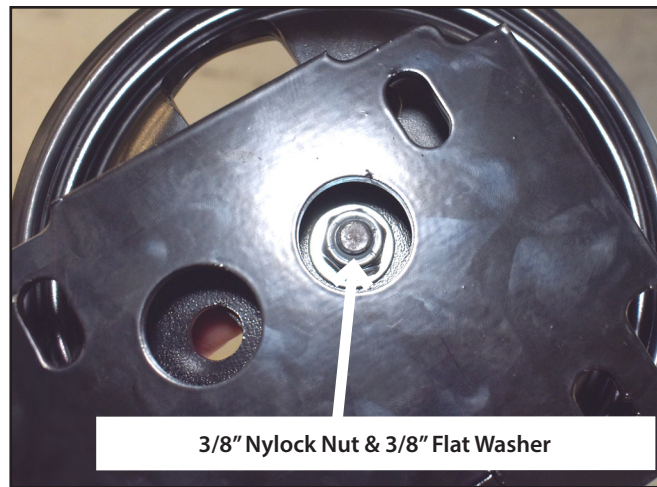


FIGURE 6B



FIGURE 6C



10. Attach the lower air bag cradle and bracket assembly to the lower bump stop strike pad on the axle. Attach the assembly at the front inside hole and the rear outside hole using the provided, 5/16" bolts, washers and locking nuts from the bottom up. BP1111. Torque to 11 ft-lbs (Fig. 7A 7B) Passenger side shown.

FIGURE 7A

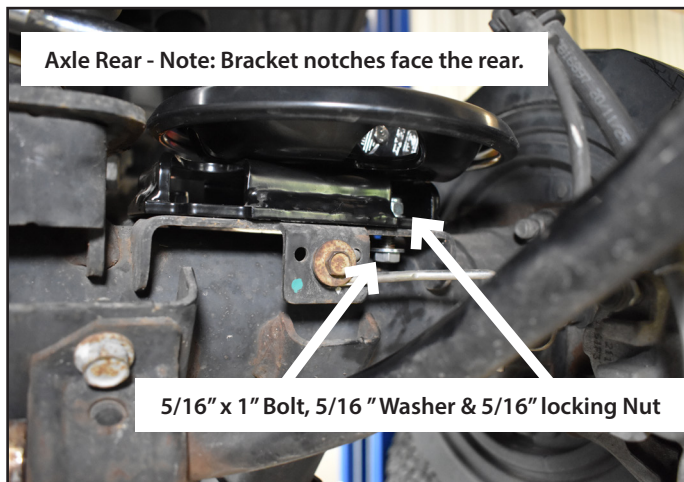
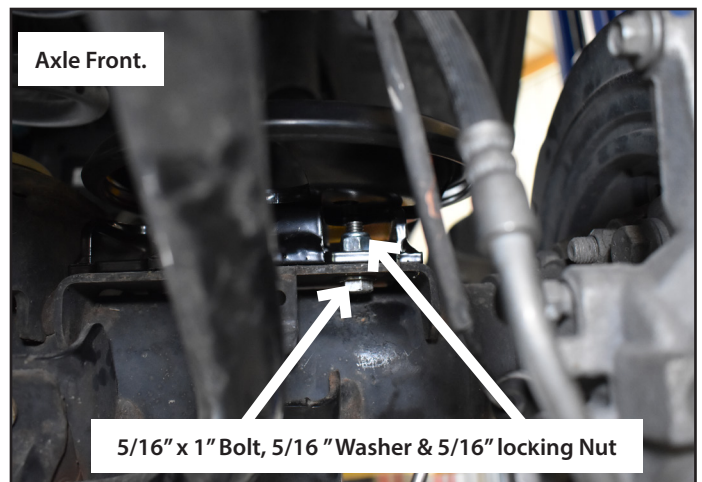


FIGURE 7B



11. Install upper bracket with the provided 3/8"x1"- Flat Head Cap Bolt, 3/8" Nylock nut & 3/8"-1" Dia. Washer to the frame bump stop mount. Found in BP1111. Torque to 23 ft-lbs (Fig. 8A, 8B)

FIGURE 8A

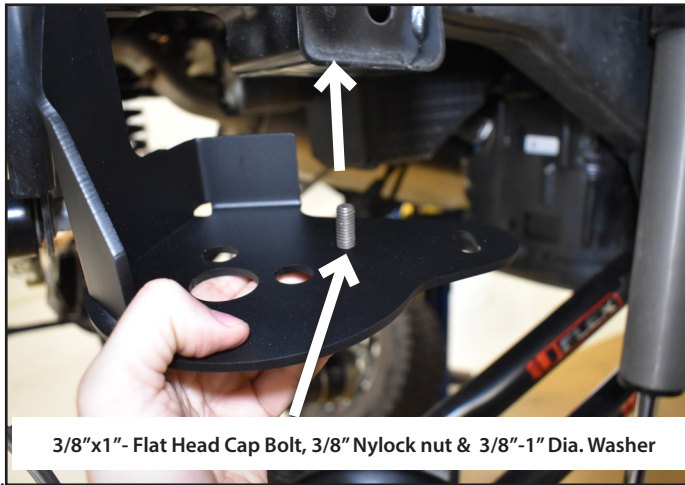
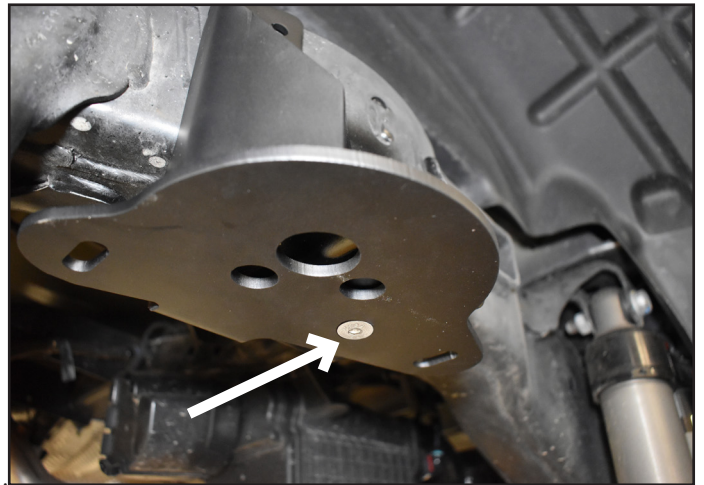


FIGURE 8B



12. Center punch the upper frame bracket hole(Fig 9A) drill with a 9/32 drill bit. (Fig. 9B)

FIGURE 9A

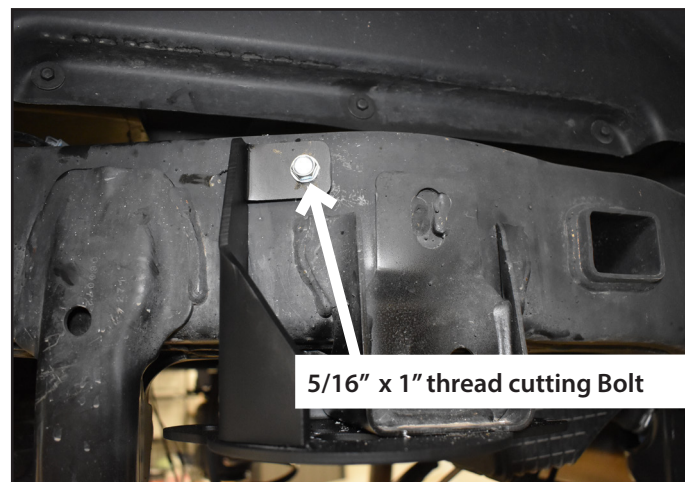


FIGURE 9B



13. Use the 5/16" x 1" thread cutting Bolt (BP1111) to fasten the upper most frame bracket mounting hole to the frame. Tighten only until the Bolt head seats firmly. (Fig. 10)

FIGURE 10



14. Install your air fitting (BP1717) into the air fitting hole on the top of the airbag assembly until hand tight, then tighten with a wrench 1 - 1/2 more turns. Do not overtighten. (Fig. 11)

FIGURE 11



15. Airbag assembly brackets are side specific. See Figure 12A for correct orientation noting the taper direction. Install the airbag assembly bracket to the top of the air using (2) 3/8" x 7/8" Flat head cap Bolts (BP1111). (Fig. 12B) Torque to 23 ft-lbs.

FIGURE 12A

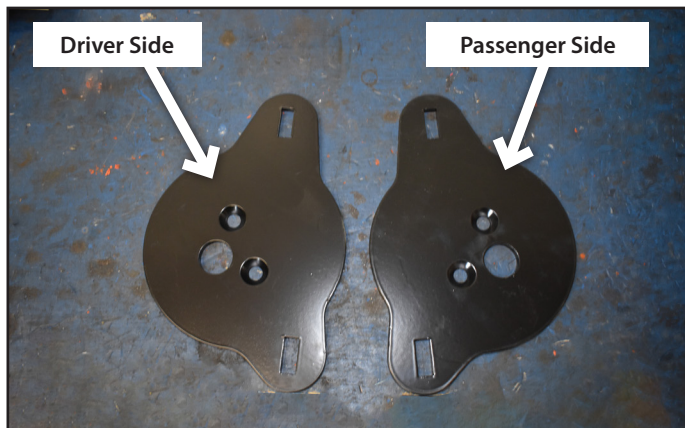
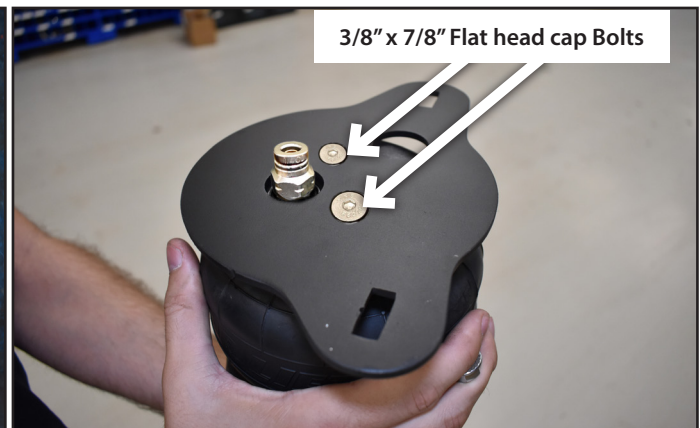


FIGURE 12B



16. Install air bag and bracket assembly to the upper frame bracket with the provided 3/8" x 1" carriage bolts, 3/8" nylock nuts and 3/8" washers running them from the bottom up (Ensure that the carriage bolts are inserted from the bottom up as this is a critical step). (BP1111) Torque to 23 ft-lbs. Passenger side shown. (Fig. 13A, 13B)

FIGURE 13A

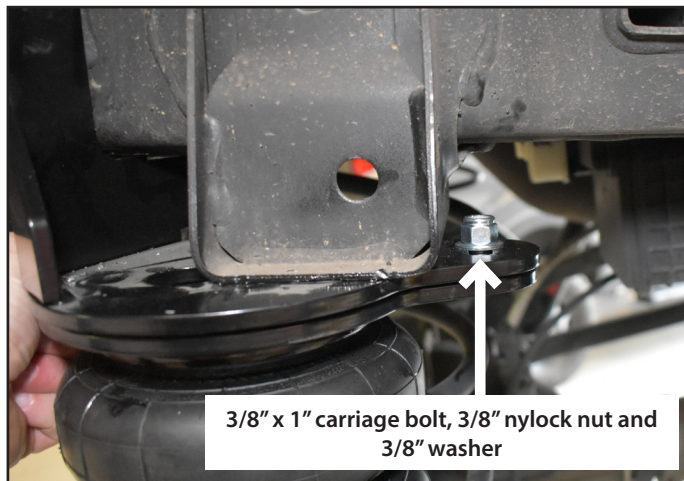
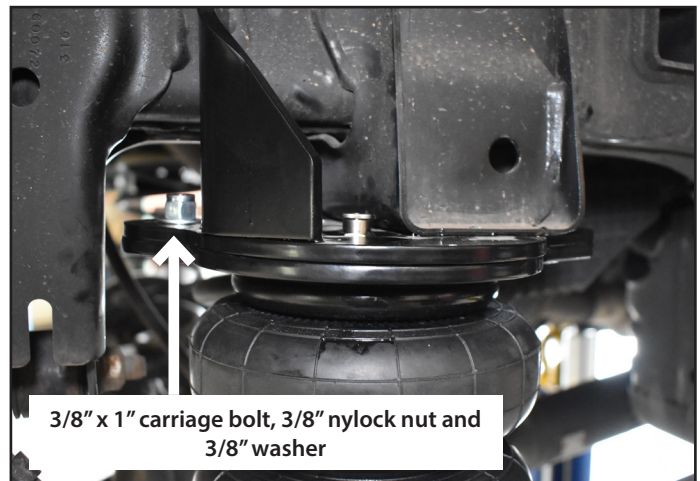


FIGURE 13B



BRAKE LINE ADJUSTMENT

17. Disconnect the brake line bracket at the frame. (Fig. 14A). Using pliers bend the bracket so that it is flat and will allow the bracket to be rotated. (Fig. 14B)

FIGURE 14A

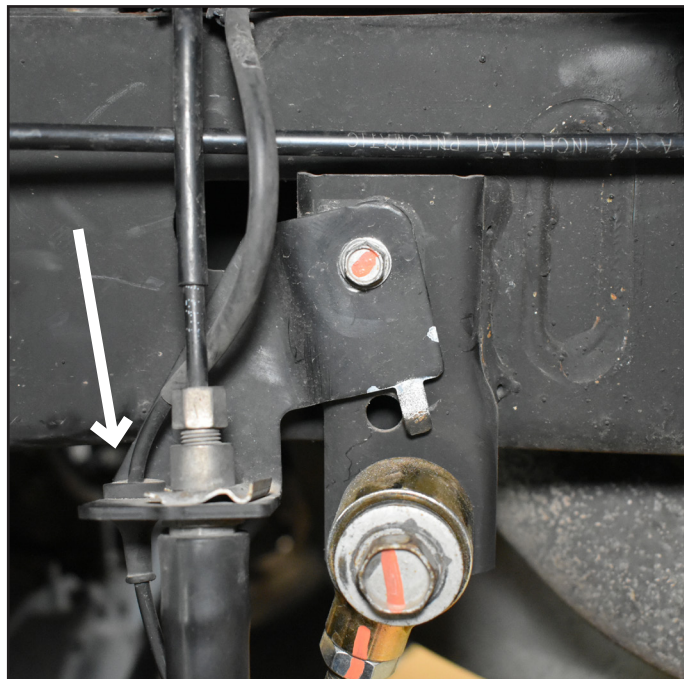


FIGURE 14B



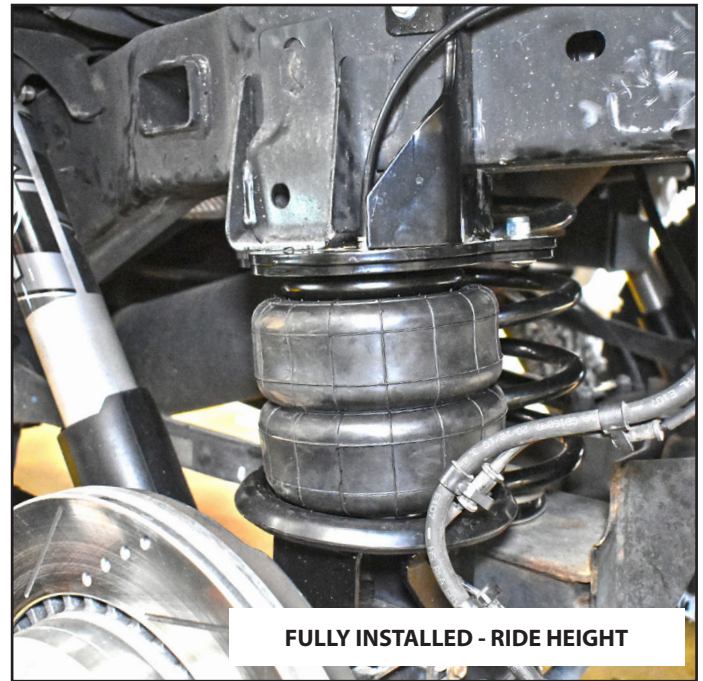
18. Rotate the bracket so that the brake line moves downward, reinstall the bolt and torque to 8 ft-lbs. (Fig 15)

FIGURE 15



19. An adjustment also needs to be made to the brake line where it connects to the caliper. Slightly bend the hard line outward as shown in 9 (Fig. 16).

FIGURE 16



20. Repeat the installation on the other side.

SEE AIRLINE INSTALLATION GUIDELINES (PAGE 12)

21. When installation is completed, replace rear wheels.
22. Check all lines and hardware after 500 miles and at every maintenance interval.

AIRLINE INSTALLATION GUIDELINES

STEP 1: PICK YOUR SETUP

- Dual-path: Separate valve for each air bag.
- Single-path: One valve for both. (Use the provided T-air fitting).

STEP 2: VALVE LOCATION

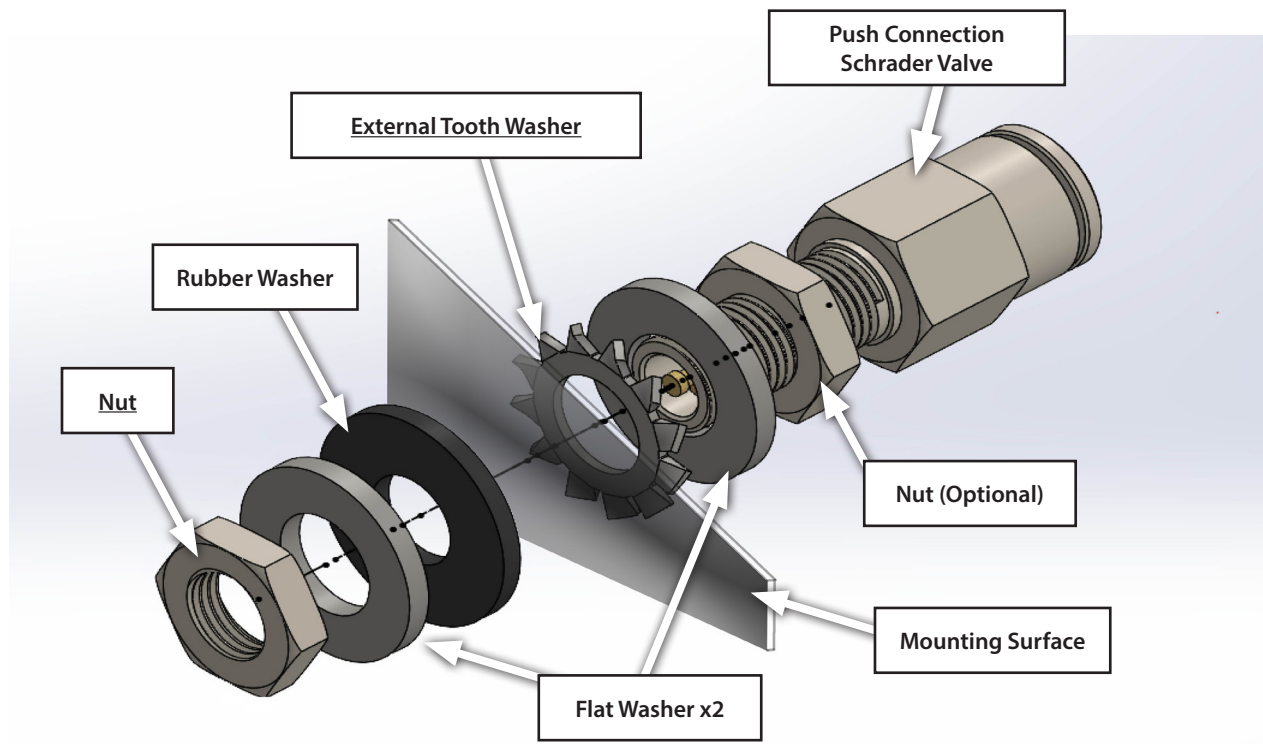
- Choose an accessible location for the air inflation schrader valves.

LOCATION SUGGESTIONS:

- Bumper, near the license plate.
- Tow hitch
- Inside fuel door

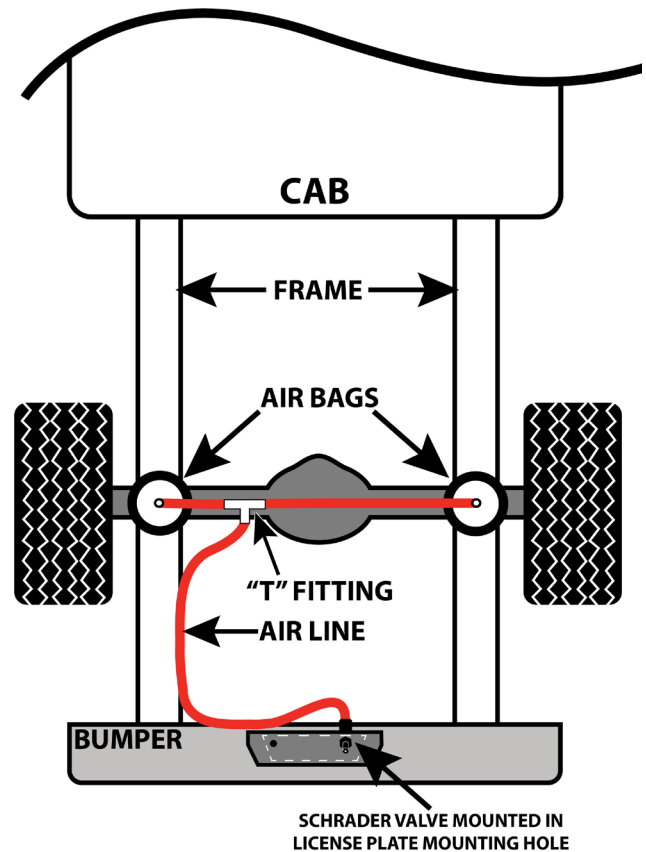
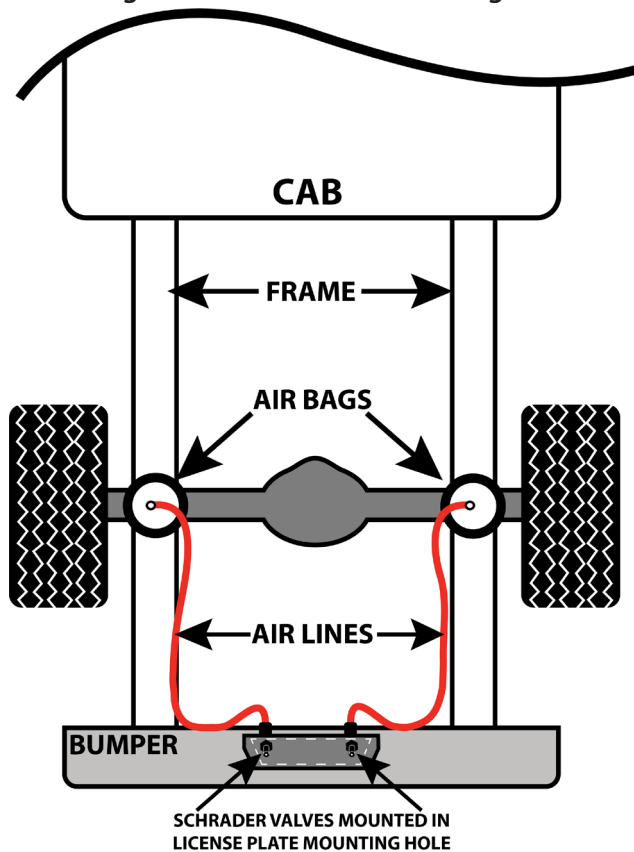
STEP 3: INSTALL SCHRADER VALVES

- Drill a 5/16" hole in your chosen spot
- Mount the valve with washers and nuts found in **Bolt Pack BP1121**. (Snug, do not over tighten)



STEP 4: ROUTE AIR LINES

- Run along the frame rail toward air bags

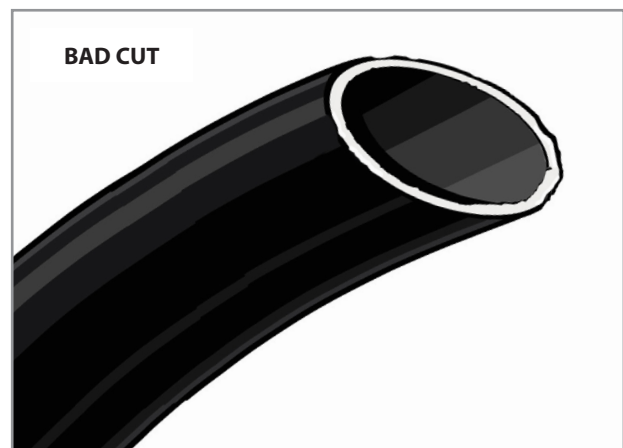
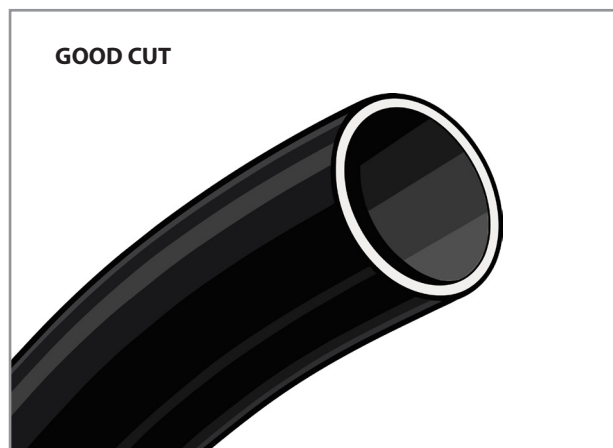


AVOID:

- Exhaust (keep 6+ inches away)
- Sharp edges
- Tight gaps that could pinch the line.
- Bend Radius ~ 2" or smaller

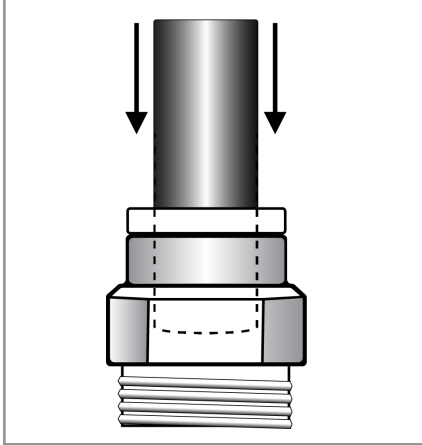
STEP 5: CUT THE LINE RIGHT

- Cut straight (90° only)
- Use a razor or hose cutter
- **No scissors or wire cutters**

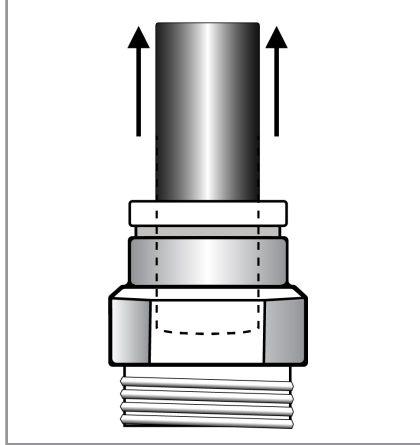


STEP 6: CONNECT LINES TO AIR BAGS

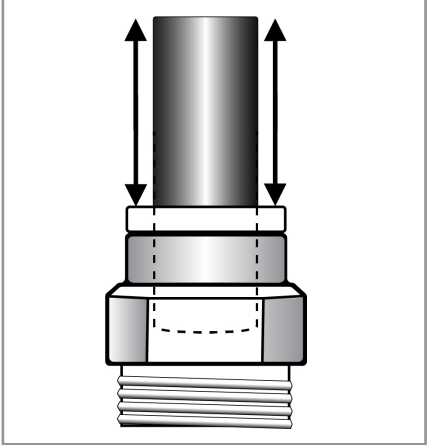
Push line fully into fitting



Tug lightly to confirm it's locked



To remove line, press down on the locking sleeve and pull out the line



STEP 7: SECURE & TEST

- Zip tie every 12–15 inches (not too tight)
Inflate to 50–70 PSI
- Spray soapy water on fittings:
- Bubbles = leak = re-cut + reconnect
- Let sit overnight (~30 PSI) to confirm no leaks



WE WANT TO SEE YOUR RIDE!

Grab photos of your BDS-equipped truck in action and send them in for a chance to be featured. Send it in to our Bad Ass Rides customer gallery at bds-suspension.com/bar and post them on the BDS Fan Page on Facebook at facebook.com/BDSSuspensions. Don't forget about your BDS swag! BDS offers t-shirts, hoodies, decals and more available on the BDS website or through your local BDS distributor.

TIME TO HAVE SOME FUN

Thank you for choosing BDS Performance Towing.

For questions, technical support and warranty issues relating to this BDS Suspension product, please contact your distributor/installer before contacting BDS Suspension directly.