

INSTALLATION GUIDE



Part#: 132006, 132407



HARDCORE LIMITED LIFETIME WARRANTY

Stock to 3" Load Leveling Box Kit
4" - 6" Load Leveling Box Kit

RAM 2500 4WD | 2014-2026

Rev. 082026

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.



Visit 560plus.com for more information.

BEFORE YOU DRIVE

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

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



CONTENTS OF YOUR KIT

Box Kit BDS132006 - Stock to 3" Load Leveling Box Kit

Part #	Qty	Description
B1716	1	Bag Kit - Air Bag Components (90deg Fittings)
	10	11.5in Nylon Cable Tie - Black
	2	1/4" PTC Schrader Valve - Air Fitting
	2	1/4" PTC - 1/4 NPT 90deg - Air Fitting
	1	1/4" Air Line - 16'
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
B1726	1	Bag Kit: Air Support Kit
05783	2	Upper Air Spring Mount Spacer
05784	1	Air Spring Nut Tab - Left
05785	1	Air Spring Nut Tab - Right
BP1117	1	Air Spring Hardware Kit
	4	3/8" x 1-1/2" Bolt
	4	3/8" SAE Washer
	4	3/8" x 3/4" Button Head Hex Drive Bolt
	4	10mm x 25mm Button Head Hex Drive Bolt
	6	3/8" x 1-1/4" Carriage Bolt
	8	3/8" NyLock Nut
	8	3/8" SAE Washer
	2	3/8" x 1" Flat Head Screw
	1	Thread Locker
05772	2	Cradle Nut Tab
05901	2	Air Spring Cradle - 7.0"
05903	2	7" Air Spring Cradle Pad
05764	2	Upper Air Spring Frame Bracket
05765	1	Upper Air Spring Bracket - Driver Side
05766	1	Upper Air Spring Bracket - Passenger Side

Box Kit BDS139002 - 7" Air Spring - Tall

Part #	Qty	Description
05702	2	2B7 Tall Air Spring

Box Kit BDS132407 - 4" to 6" Load Leveling Box Kit

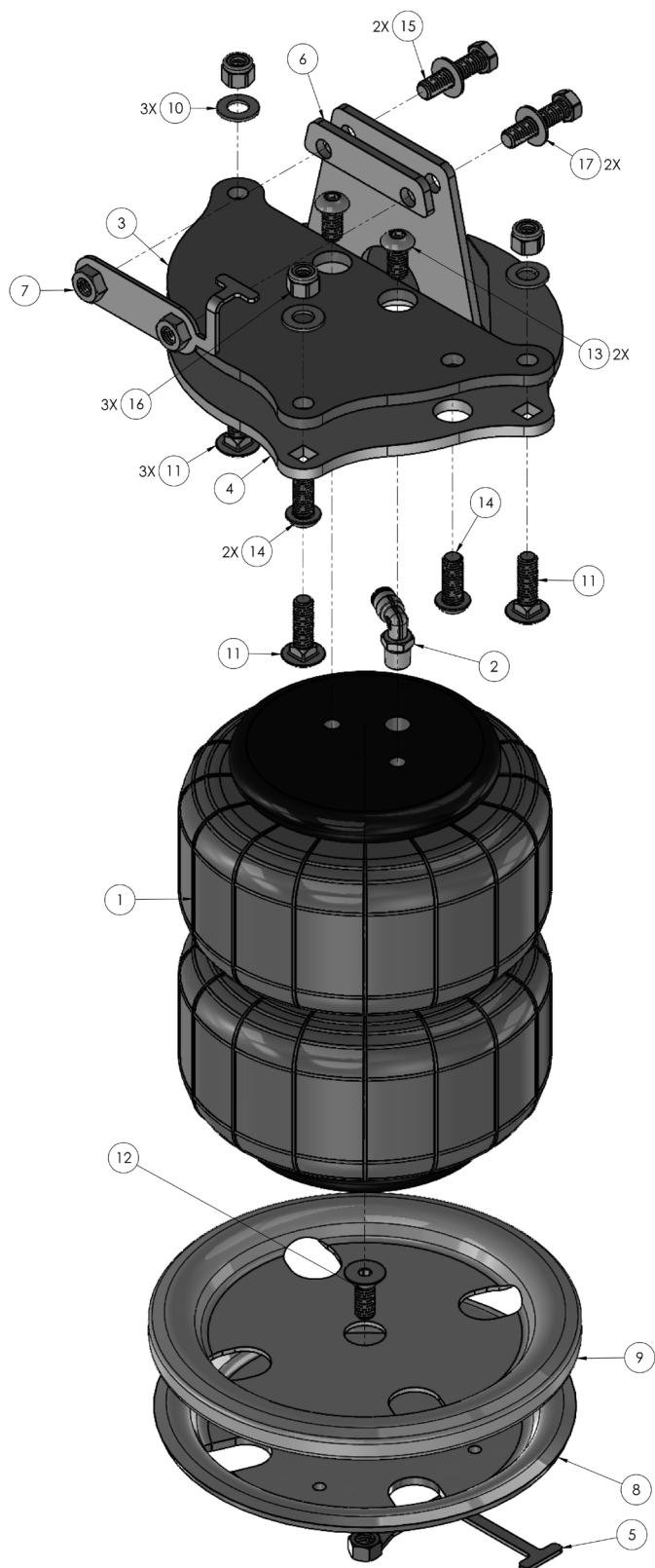
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	2	1/4" PTC Schrader Valve - Air Fitting
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BP1121	1	Schrader Valve Mounting Hardware
	4	5/16" Panel Nut
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BP1117	1	Air Spring Hardware Kit
	4	3/8" x 1-1/2" Bolt
	4	3/8" SAE Washer
	4	3/8" x 3/4" Button Head Hex Drive Bolt
	4	10mm x 25mm Button Head Hex Drive Bolt
	6	3/8" x 1-1/4" Carriage Bolt
	8	3/8" NyLock Nut
	8	3/8" SAE Washer
	2	3/8" x 1" Flat Head Screw
	1	Thread Locker
B1729	1	Bag kit: 2.5" and 4" Air Spring Add-on
	4	1.25" x 5/16" x .50" Sleeve
	1	1/2"-13 Taper Hand Tap
469	1	Bolt Pack
	4	1/2" x 1-1/2" Bolt, Grade 8, Yellow Zinc
	4	1/2" SAE Washer, Yellow Zinc
05901	2	Air Spring Cradle - 7.0"
05903	2	7" Air Spring Cradle Pad
05764	2	Upper Air Spring Frame Bracket
05765	1	Upper Air Spring Bracket - Driver Side
05766	1	Upper Air Spring Bracket - Passenger Side
05777	2	Air Spring Cradle Axle Mount

Box Kit BDS139002- 7" Air Spring - Tall

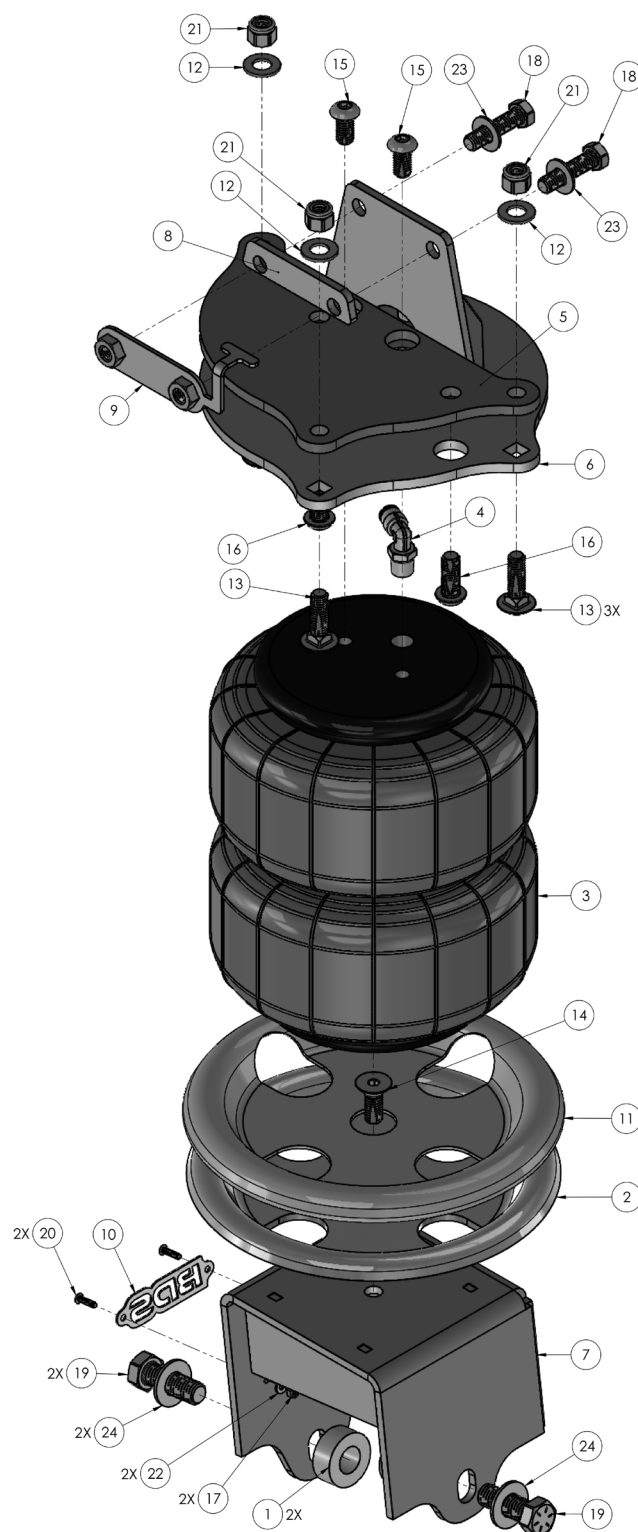
Part #	Qty	Description
05702	2	2B7 Tall Air Spring

2014+ RAM STOCK RIDE HEIGHT AIR BAG ASSEMBLY

ITEM#	DESCRIPTION
1	2B7 AIR SPRING
2	1/4" PTC - 1/4 NPT 90DEG - AIR FITTING
3	UPPER FRAME BRACKET
4	UPPER AIR SPRING BRACKET - DRIVER SIDE
5	CRADLE NUT TAB
6	UPPER AIRSPRING BRACKET SPACER
7	UPPER AIRSPRING NUT TAB - DRIVER SIDE
8	6" STAMPED STEEL CRADLE
9	7" AIR SPRING CRADLE PAD
10	3/8" SAE WASHER
11	3/8" X 1-1/4" CARRIAGE BOLT
12	3/8" X 1" FLAT HEAD ALLEN BOLT
13	3/16" X 3/4" BUTTON HEAD ALLEN BOLT
14	M10 X 25MM BUTTON HEAD ALLEN BOLT
15	3/8" X 1-1/2" HEX HEAD ALLEN BOLT
16	3/8" NYLOCK NUT
17	3/8" WASHER, YELLOW ZINC



2014+ RAM LIFTED AIR BAG ASSEMBLY	
ITEM#	DESCRIPTION
1	1.25 x 5/16 x .50 DOM SLEEVE
2	7" STAMPED STEEL CRADLE
3	2B7 AIR SPRING
4	1/4" PTC - 1/4" NPT 90DEG - AIR FITTING
5	UPPER FRAME BRACKET
6	UPPER AIR SPRING BRACKET - LEFT
7	LOWER CRADLE MOUNT
8	UPPER AIRSPRING BRACKET SPACER
9	UPPER AIRSPRING NUT TAB - LEFT
10	BADGE: BDS PERFORMANCE TOWING EMBLEM
11	7" AIR SPRING CRADLE PAD
12	3/8" SAE WASHER
13	3/8" X 1-1/4" CARRIAGE BOLT
14	3/8" X 1" FLAT HEAD ALLEN BOLT
15	3/8" X 3/4" BUTTON HEAD ALLEN BOLT
16	M10 X 25MM BUTTON HEAD ALLEN BOLT
17	#5- 40 NYLOCK NUT
18	3/8" X 1-1/2" HEX HEAD BOLT
19	1/2" X 1-1/2" HEX HEAD BOLT
20	#5 X 1/2" BUTTON HEAD BOLT or 1/8" SS RIVET
21	3/8" LOCKNUT
22	#5 SAE WASHER
23	3/8" WASHER, YELLOW ZINC
24	1/2" WASHER, YELLOW ZINC



IMPORTANT INFORMATION FOR YOUR VEHICLE

1. Cutting off the OE bump stop mount is required in the rear for installation.
2. Measure distance between air spring mounting plate and top of the cradle pad. The ideal air spring working height for 05702 ideal working height is 6.0"-9.0"
3. If your air spring is not in contact with the cradle, it may be necessary to add ~ 10 PSI or until the air spring extends to contact the cradle.
4. BDS Performance Towing Air Bag kits utilize serviceable parts and can be purchased accordingly.
 - Air Bag (**Qty 1**): BDS139909
 - Air bag cradle pads (**Qty 2**): BDS139901
 - Replacement air line (**16 feet**): BDS139906
 - Schrader valves (**Qty 2**) and mounting hardware: BDS139902
 - 90 Degree air bag fittings (**Qty 2**): BDS139903
 - Air line Tee fitting (**Qty 1**): BDS139905
5. 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.
6. Before adding air pressure above 5 PSI, it is recommended to check that the air spring is fully seated into the cradle.
7. Any residue on the badge can be cleaned up using alcohol or brake cleaner before install
8. Follow the Air Line Installation Guide for air line install guidelines and tips.

INSTALLATION INSTRUCTIONS

SPECIAL TOOLS

- Torque Wrench
- 13/32" and 29/64" (15/32 Substitute)" Drill Bit or Step bit
- Center Punch
- Max Wrench/Socket sizes up to 3/4"

INSTALLATION INSTRUCTIONS

1. Secure the front wheels.
2. Lift the rear of the vehicle and support with jack stands.
3. Remove the rear wheels.
4. Install the rubber isolator to the cradle by aligning the locking nibs with the holes in the cradle. (**Fig. 1A**) Push the nibs through the 4 holes then wrap the rubber isolators edge around the cradle, snapping it into place. (**Fig. 1B**)

FIGURE 1A



FIGURE 1B



5. Using pliers pull the locking nibs until they fully seat into the cradle holes, you will feel them snap into place. **(FIG. 2A)** 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. 2B)**

FIGURE 2A



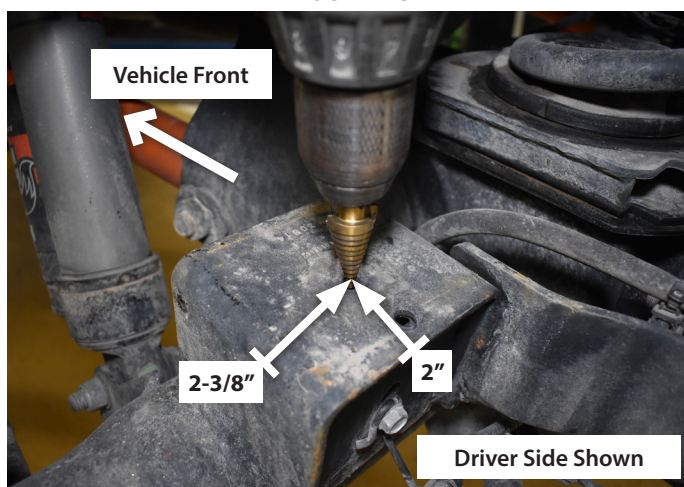
FIGURE 2B



BDS132006: FOR STOCK - 3" KITS

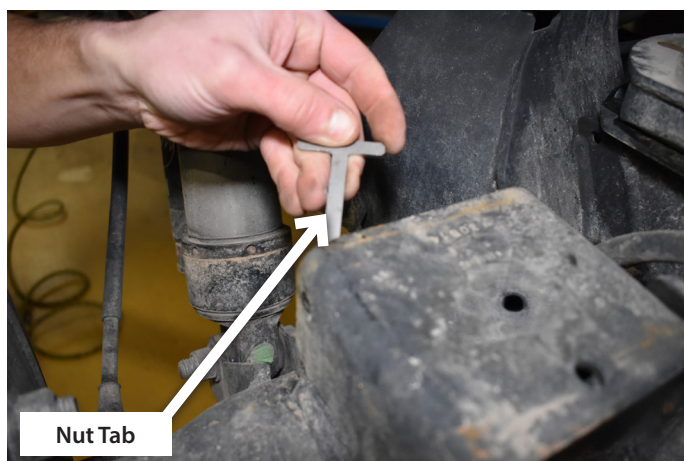
6. Measure and mark the top hole on the lower bump pad. Measure 2" from rear of bump stop pad and 2-3/8" from the edge of the bump stop pad in towards the center of the truck; drill with 13/32" drill bit. **(Fig. 3)**

FIGURE 3



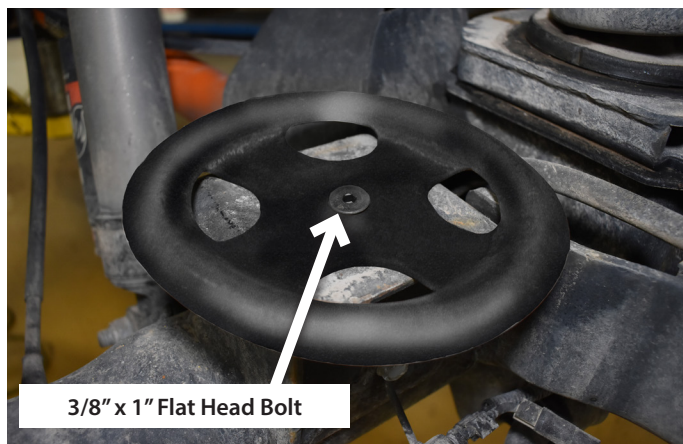
7. Insert cradle nut tab through front corner relief of bump stop. **(Fig. 4)**

FIGURE 4



8. Center nut tab with drilled hole, attach cradle to the bump stop pad with provided 3/8" x 1" Flat Head Bolt found in BP1117. Apply supplied thread locker (**B1726**) and torque to 23 ft-lbs (**Fig. 5**)

FIGURE 5



FOR KITS UNDER 4", SKIP AHEAD TO STEP 13.

BDS132407: FOR 4" TO 6.5" KITS

9. Attach cradle to lower mount with 3/8" x 1" Flat Head bolt, washer and nylock nut. Found in (**BP1117**). Torque to 23 ft-lbs (**Fig. 6**)

FIGURE 6



10. Remove brake line retaining bolt from rear of axle bump stop pad. (**Fig. 7**)

FIGURE 7



11. Flatten brake line bracket barb with pliers, the bolt opening of the wire bracket needs to be bent open to fit around the 1/2" Bolt.
12. Drill the existing top brake line bolt hole and the front bump stop mount hole with a 29/64" drill bit. It is critical to drill to this diameter due to this hole will be tapped. Tap each hole with provided 1/2" tap found in B1729. (Fig. 8,9)

FIGURE 8

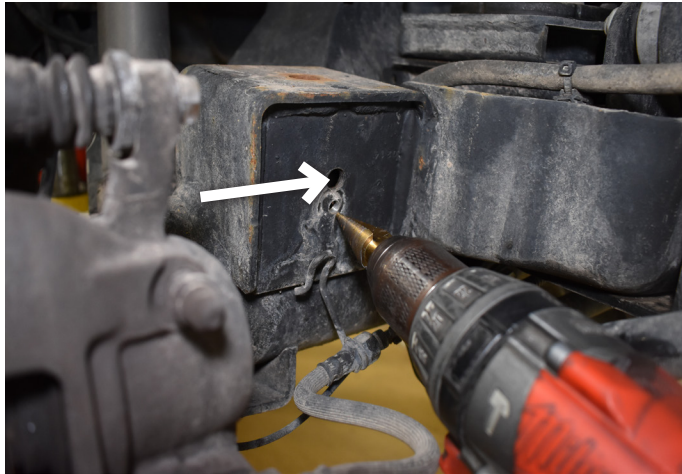
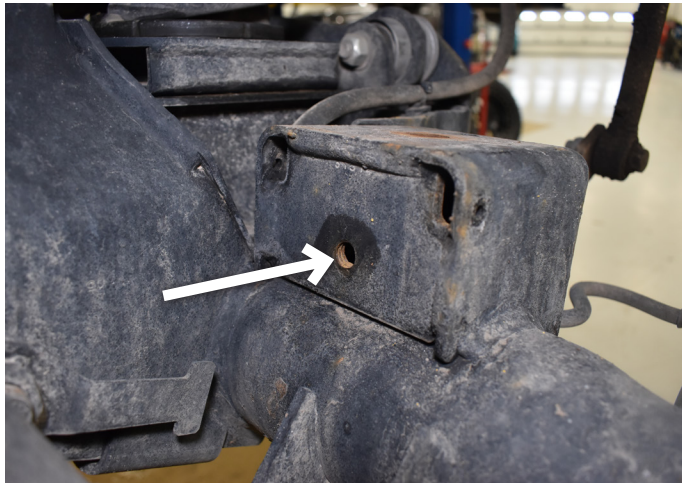


FIGURE 9



13. Place lower mount with the top angled towards the front of the truck. Attach lower mount to axle with 1/2" x 1-1/2" bolt and 1/2" washer, (Found in bolt pack 469), .50" spacer (used on the front and rear) and thread locker (Found in B1729) Torque to 24 ft-lbs. (Fig. 10A, 10B, 10C)

FIGURE 10A

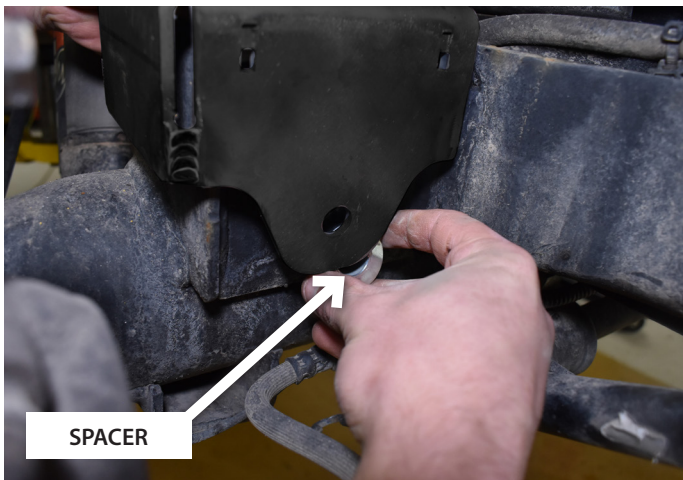


FIGURE 10B



FIGURE 10C



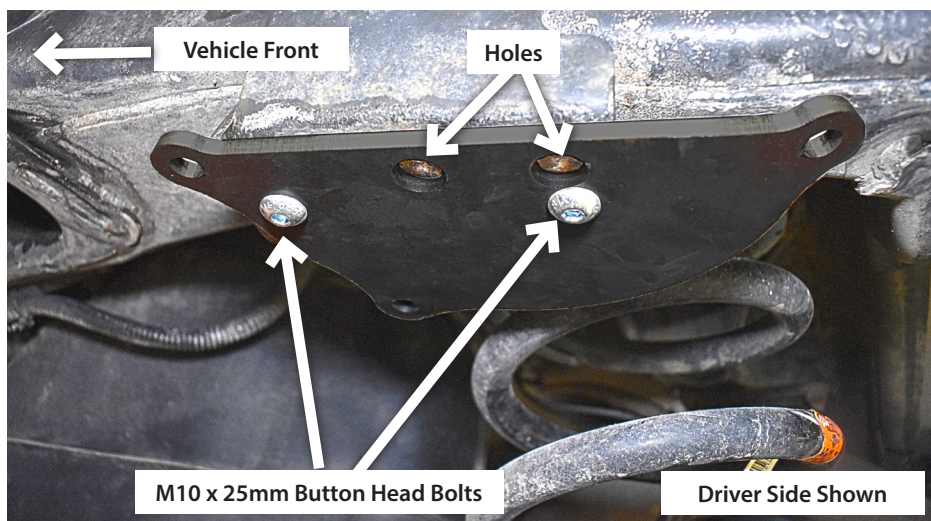
14. Remove factory bump stop from the frame bracket by removing from the 2 mounting bolts. (**Fig. 11**)

FIGURE 11



15. Install Air Spring Frame Bracket to bump stop perch using provided M10 x 25mm Button Head Bolts (**BP1117**) Ensure the bracket is installed with the two holes to the front on both sides. (**Fig. 12**) Torque to 21 ft-lbs.

FIGURE 12

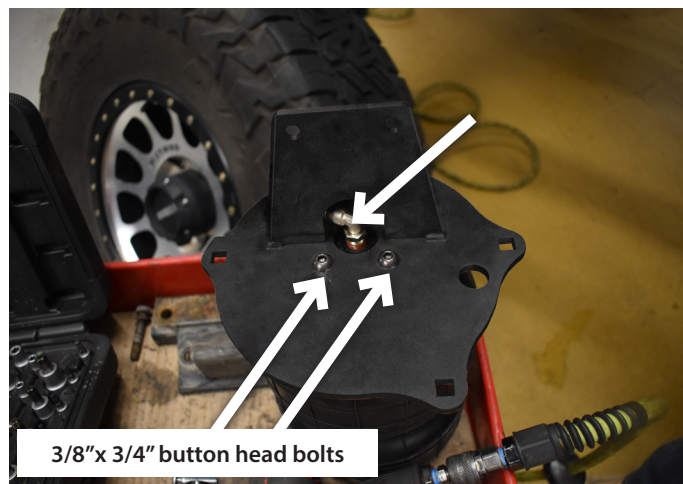


16. Install the 90 degree air fitting to the air bag. Hand tighten, then using a wrench turn 1 - 1/2 turns.



17. Ensure 90 degree air fitting is facing the direction of the opening on the air spring bracket when installed. Attach the air spring to the air spring bracket with 3/8"x 3/4" button head bolts (BP1117). Torque to 23 ft-lbs (Fig. 13)

FIGURE 13

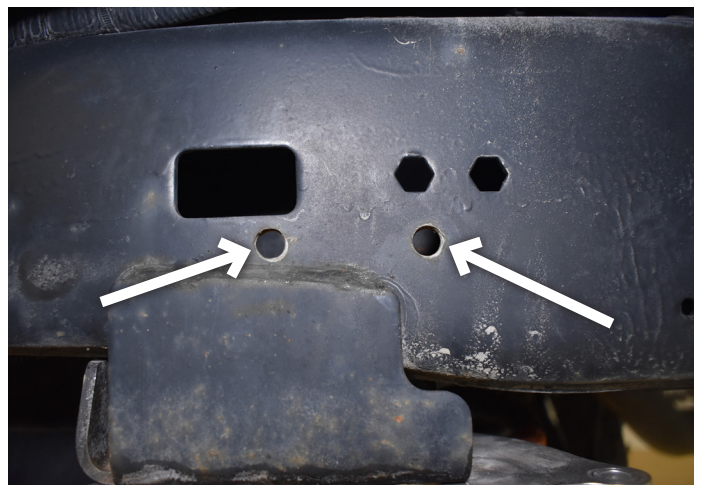


18. Mark and center punch the 2 top bracket hole positions on the frame. (Fig. 14A) With 2 holes marked and center punched, remove the bracket and drill the 2 holes using a 13/32" drill bit. Paint any exposed metal to prevent rust. (Fig. 14B)

FIGURE 14A



FIGURE 14B



19. Reattach upper air spring bracket assembly to upper frame spring bracket with (3) 3/8"x 1-1/4" carriage bolts, (3) 3/8" nuts and (3) 3/8" washers. (BP1117) Torque nylock nuts to 23 ft-lbs. (Fig. 15A, 15B)

FIGURE 15A

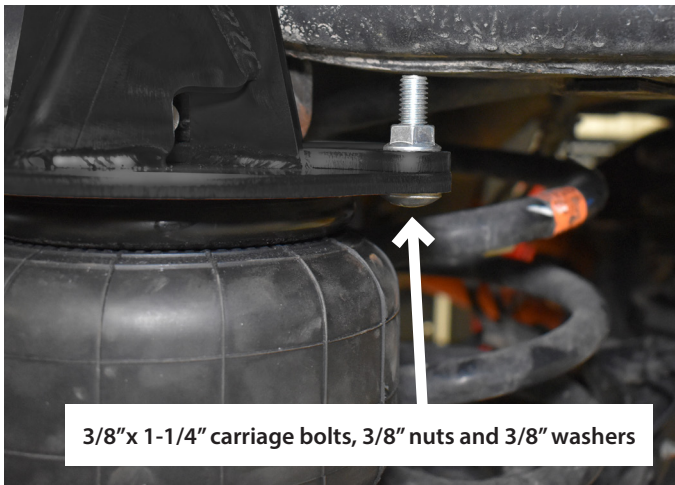
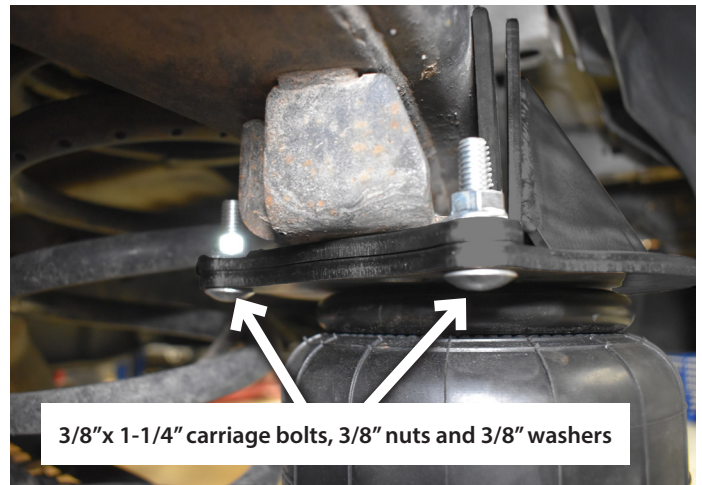


FIGURE 15B



20. Place Nut Tab (**05785 - Pass. Side / 05784 - Driver Side**) through frame rail opening, secure with 3/8" x 1-1/2 bolts and 3/8" washers (**BP1117**). Ensure the Upper Air Spring Spacer(**05783**) is installed between the frame and air spring mount. Torque bolts to 33 ft-lbs. (**Fig. 16, 17**)

FIGURE 16

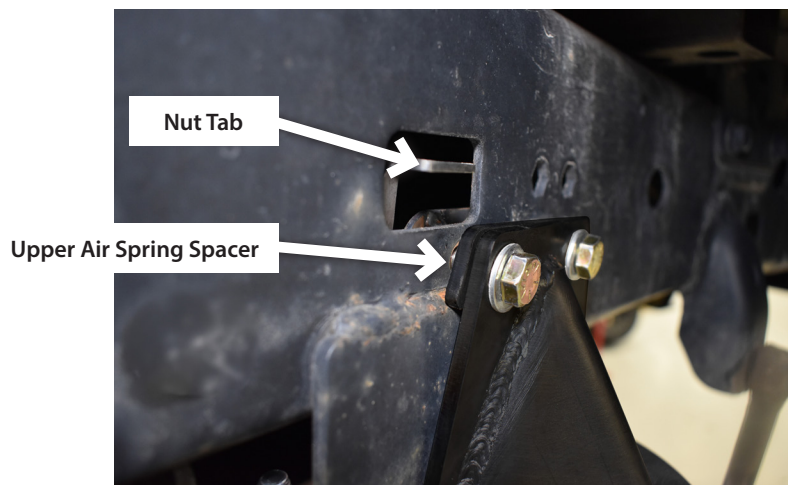
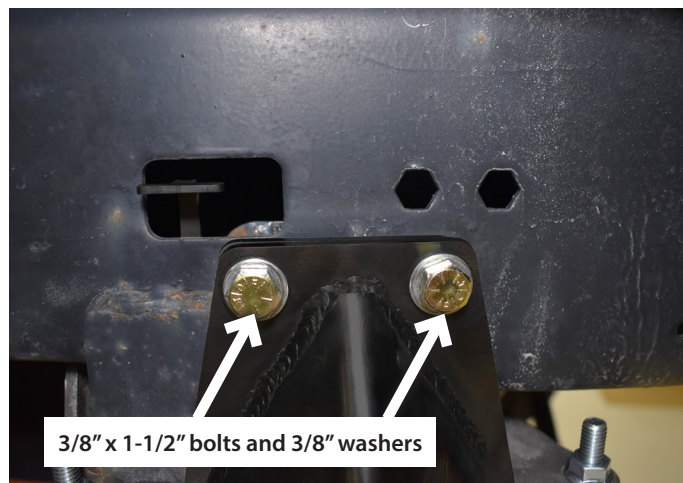


FIGURE 17



21. Repeat installation on the opposite side of the vehicle.

See the air line guidelines sheet for air line installation on page 14.

22. Re-install the rear wheels.

23. Lower to the ground and torque lug nuts to factory specifications.

POST INSTALLATION

24. Check all hardware.

25. Re-Check all hardware after 500 miles.



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

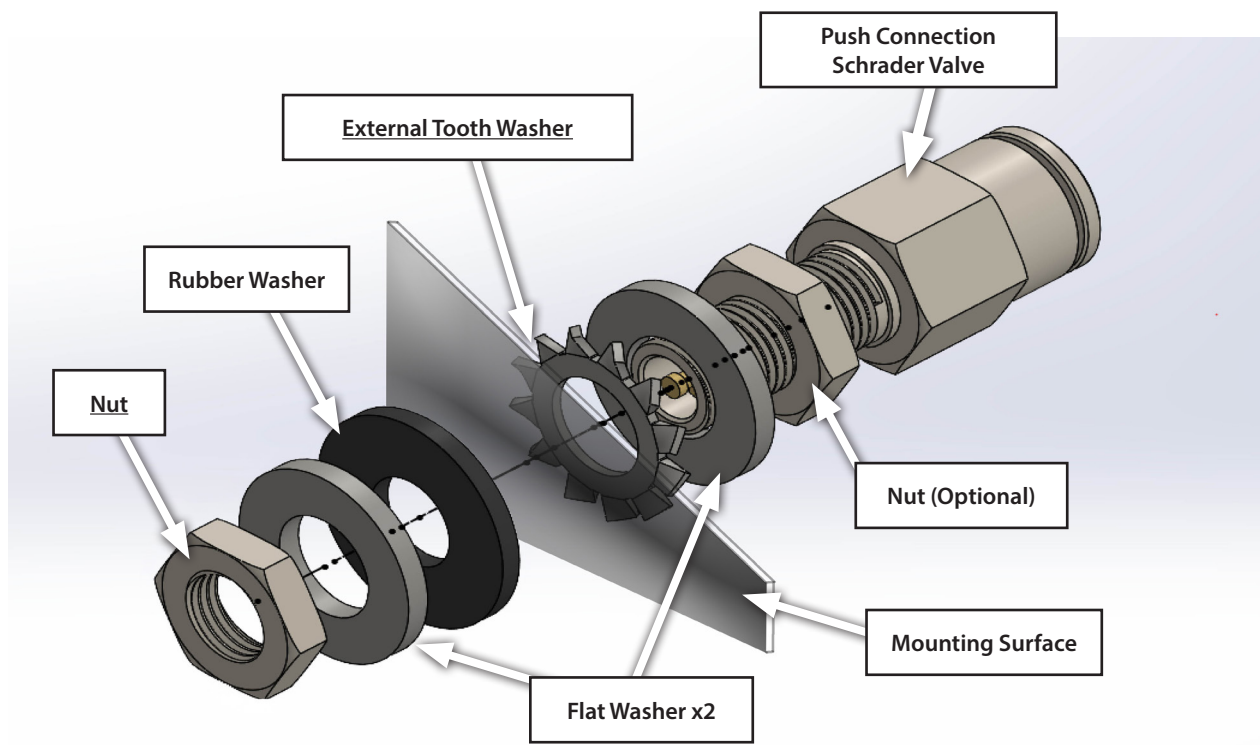
- Choose an accessible location for the air inflation schrader valves.

LOCATION SUGGESTIONS:

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

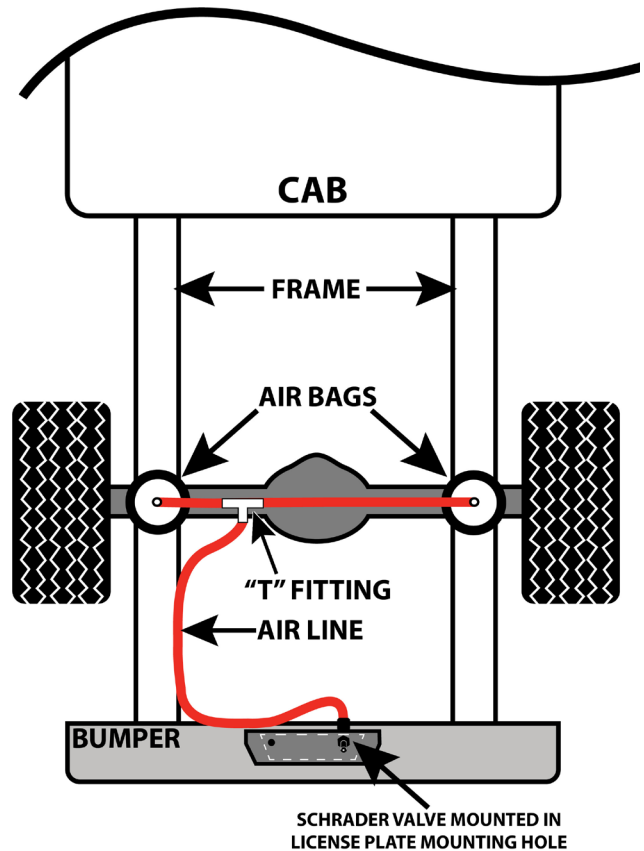
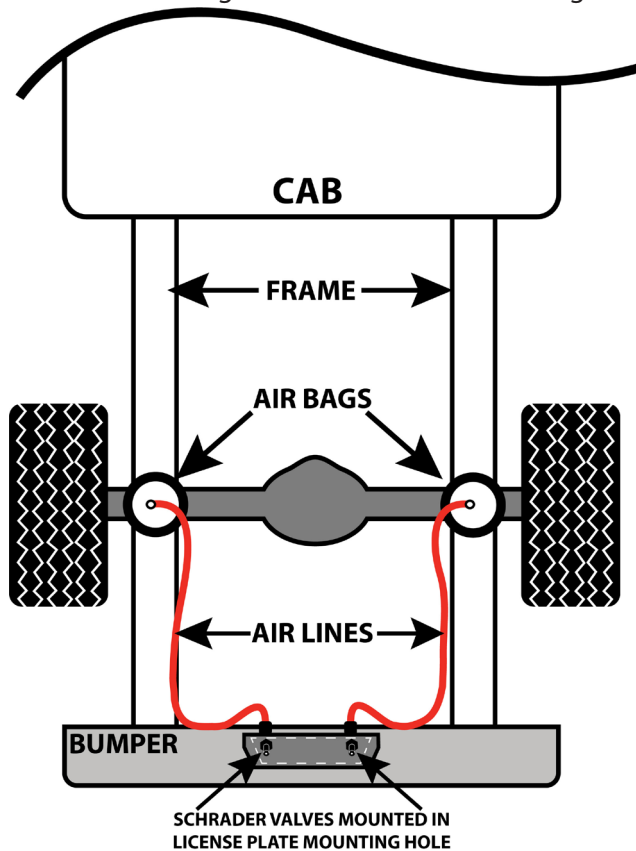
STEP 3: INSTALL SCHRADER VALVES

- Drill a 5/16" hole in your chosen spot
- Mount the valve with washers and nuts found in Bolt Pack BP1121.



STEP 4: ROUTE AIR LINES

- Run air lines along the frame rail toward air bags

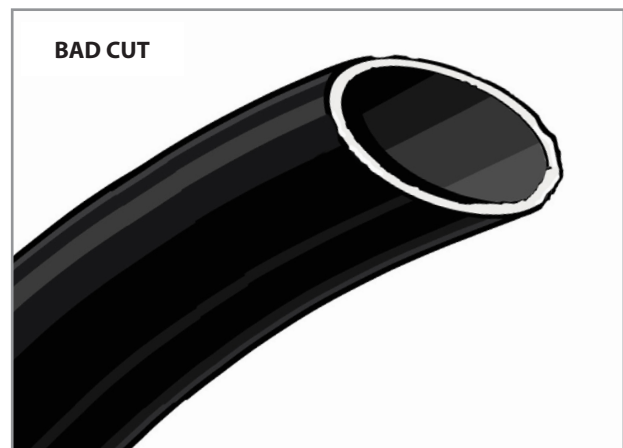
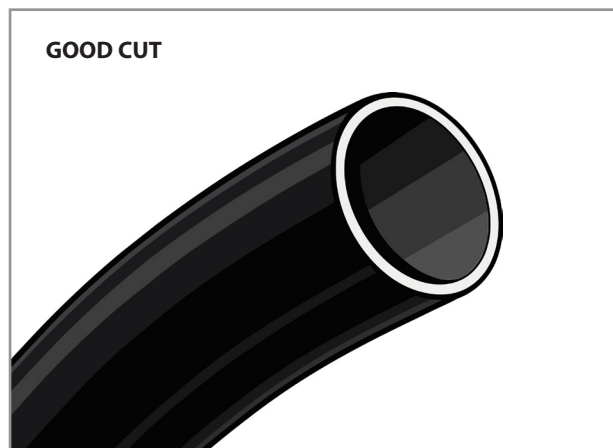


AVOID:

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

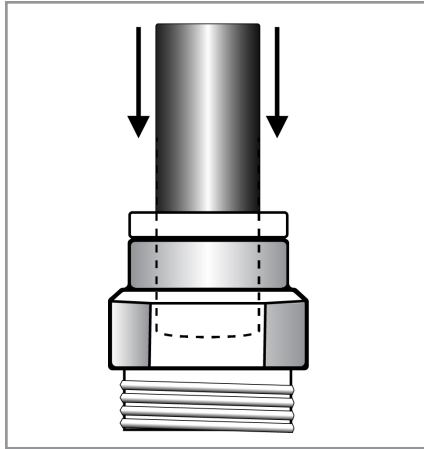
STEP 5: CUT THE LINE RIGHT

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

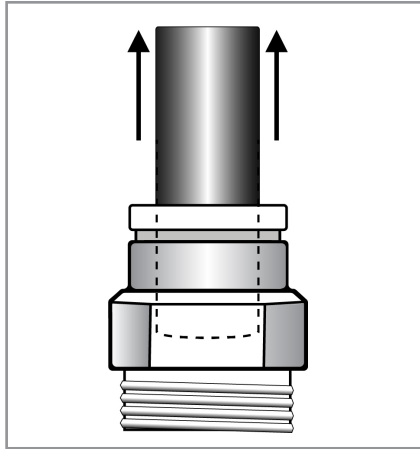


STEP 6: CONNECT LINES TO AIR BAGS AND SCHRADER VALVES

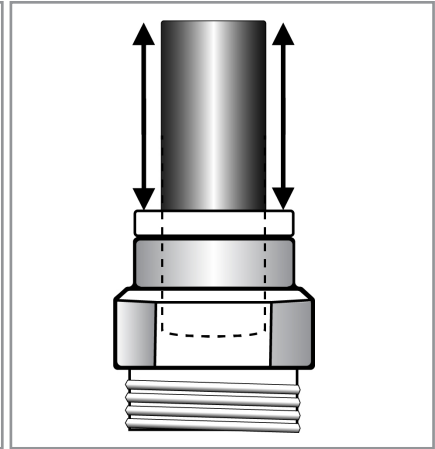
Push line fully into fitting



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 Suspension.

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