

INSTALLATION GUIDE



Part#: 138009, 138509



HARDCORE LIMITED LIFETIME WARRANTY

**Stock to 3" Load Leveling Kit
5" to 7" Load Leveling Kit**

Toyota Tundra 4WD | 2022-2026

Rev. 092226

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 BDS138009 - Stock to 3" Load Leveling Box Kit

Part #	Qty	Description
B1716	1	Bag Kit - Air Bag Components (90° Fittings)
BP1121	1	Schrader Valve Mounting Hardware
	4	5/16" Panel Nut, Nickle-Plated Brass
	2	5/16" External Tooth Lock Washer
	2	5/16" Thick Rubber Sealing Washer
	4	8mm Flat Washer, Stainless steel
099000	10	11.5in Nylon Cable Tie - Black
05710	2	1/4" Schrader Valve - Air Fitting
05705	2	1/4" 90° - Air Fitting
05709	1	1/4" Tee - Air Fitting
B1745	1	Bag Kit: Air Support Kit
BP1140	1	Air Support Hardware
	4	3/8"x 3/4" Button Head Bolt
	6	3/8" x 1" Carriage Bolt
	2	3/8" x 3/4" Flat Head Bolt
	6	3/8" NyLock Nut
	8	3/8" Flat Washer
	2	3/8" Prevailing Torque Hex Nut
	4	1/2" Prevailing Torque Hex Nut
	4	1/2" Flat Washer
	2	Wire Clamp
05727	2	3/16" Thick Washer
124120334QB	2	1/2" x 4-1/2 x 3-3/4 Square U-Bolt
B1744	1	Bag Kit - Badge Kit
05819	2	BDS: Performance Towing Emblem
887	2	Bolt Pack
	2	1/8" Stainless Steel Rivet
	2	#5 x 1/2" Button Head Bolt
	2	#5 Nylock Nut
	2	#5 Washer
05847	1	Upper Frame Bracket - Driver Side
05848	1	Upper Frame Bracket - Passenger Side
05849	2	Upper Air Spring Bracket
05850	2	Lower Air Spring Bracket
05900	2	6" Air Bag Perch/Seat Cradle
05902	2	6" Air Spring Cradle Pad
05711	1	1/4" Air Line - 16'

Box Kit BDS139000 - Short Air Spring

Part #	Qty	Description
05700	2	2B6 Short Air Spring

Box Kit 138509 - 5" to 7" Load Leveling Box Kit

Part #	Qty	Description
B1716	1	Bag Kit - Air Bag Components (90° Fittings)
BP1121	1	Schrader Valve Mounting Hardware
	4	5/16" Panel Nut, Nickle-Plated Brass
	2	5/16" External Tooth Lock Washer
	2	5/16" Thick Rubber Sealing Washer
	4	8mm Flat Washer, Stainless steel
099000	10	11.5in Nylon Cable Tie - Black
05710	2	1/4" Schrader Valve - Air Fitting
05705	2	1/4" 90° - Air Fitting
05709	1	1/4" Tee - Air Fitting
B1745	1	Bag Kit: Air Support Kit
BP1140	1	Air Support Hardware
	4	3/8"x 3/4" Button Head Bolt
	6	3/8" x 1" Carriage Bolt
	2	3/8" x 3/4" Flat Head Bolt
	6	3/8" NyLock Nut
	8	3/8" Flat Washer
	2	3/8" Prevailing Torque Hex Nut
	4	1/2" Prevailing Torque Hex Nut
	4	1/2" Flat Washer
	2	Wire Clamp
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05819	2	BDS: Performance Towing Emblem
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	2	1/8" Stainless Steel Rivet
	2	#5 x 1/2" Button Head Bolt
	2	#5 Nylock Nut
	2	#5 Washer
05847	1	Upper Frame Bracket - Driver Side
05848	1	Upper Frame Bracket - Passenger Side
05849	2	Upper Air Spring Bracket
05860	2	5"-7" Lower Air Spring Bracket
05900	2	6" Air Bag Perch/Seat Cradle
05902	2	6" Air Spring Cradle Pad
05711	1	1/4" Air Line - 16'

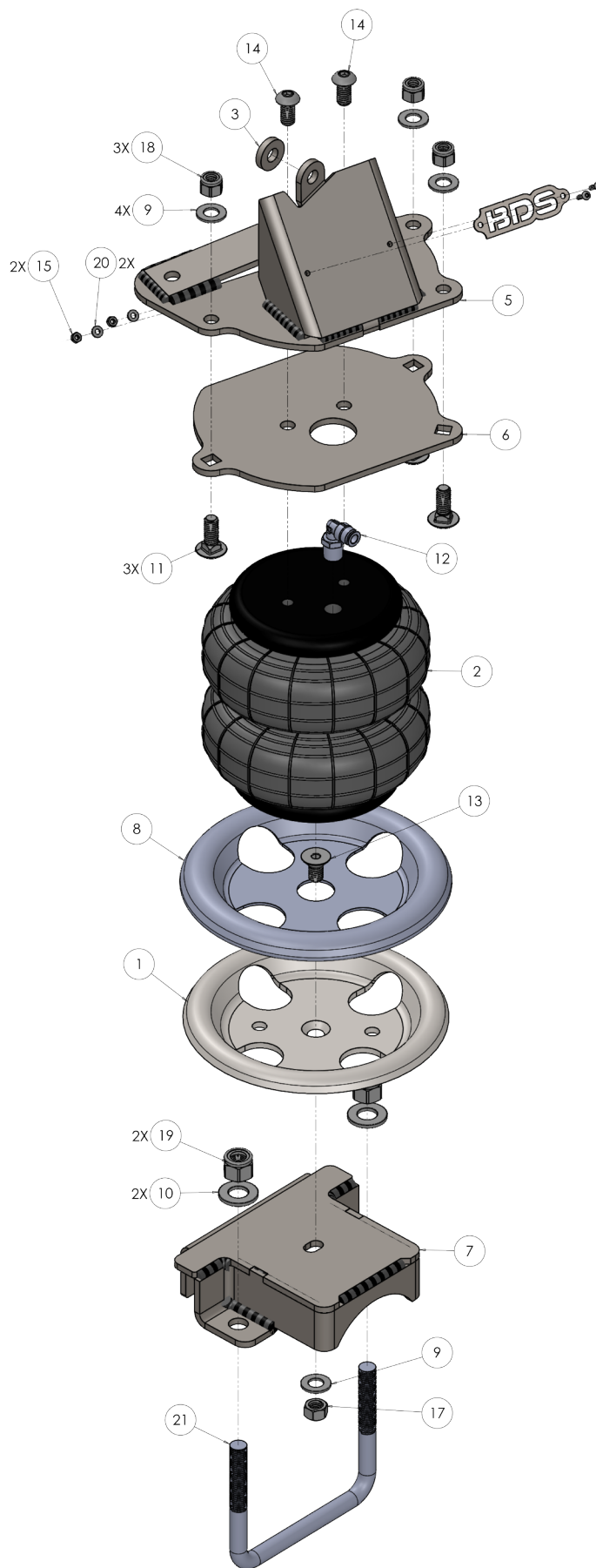
Box Kit BDS139001- Tall Air Spring

Part #	Qty	Description
05701	2	2B6 Tall Air Spring

TUNDRA STOCK TO 3" RIDE HEIGHT AIR BAG ASSEMBLY

ITEM#	DESCRIPTION
1	6" STAMPED STEEL CRADLE
2	2B6 SHORT AIR SPRING
3	.900 X .252 X .120 WASHER
4	BADGE: BDS PERFORMANCE TOWING EMBLEM
5	UPPER FRAME BRACKET - DS
6	UPPER AIR SPRING BRACKET
7	LOWER AIR SPRING BRACKET
8	6" AIR SPRING CRADLE PAD
9	3/8" SAE WASHER
10	1/2" SAE WASHER
11	3/8"-16 X 1" CARRIAGE BOLT
12	90° AIR FITTING
13	3/8"-16 X 3/4" FLAT HEAD BOLT
14	3/8"-16 X 3/4" BUTTON HEAD BOLT
15	#5-40 18-8 SS STEEL NYLON-INSERT LOCKNUT
16	#5-40 X 1/2" BHCS 18-8 STAINLESS STEEL
17	3/8"-16 PREVAILING TORQUE LOCKNUT
18	3/8"-16 NYLON-INSERT LOCKNUT
19	1/2"-20 PREVAILING TORQUE LOCKNUT,
20	#5 SAE WASHER
21	SQUARE U-BOLT

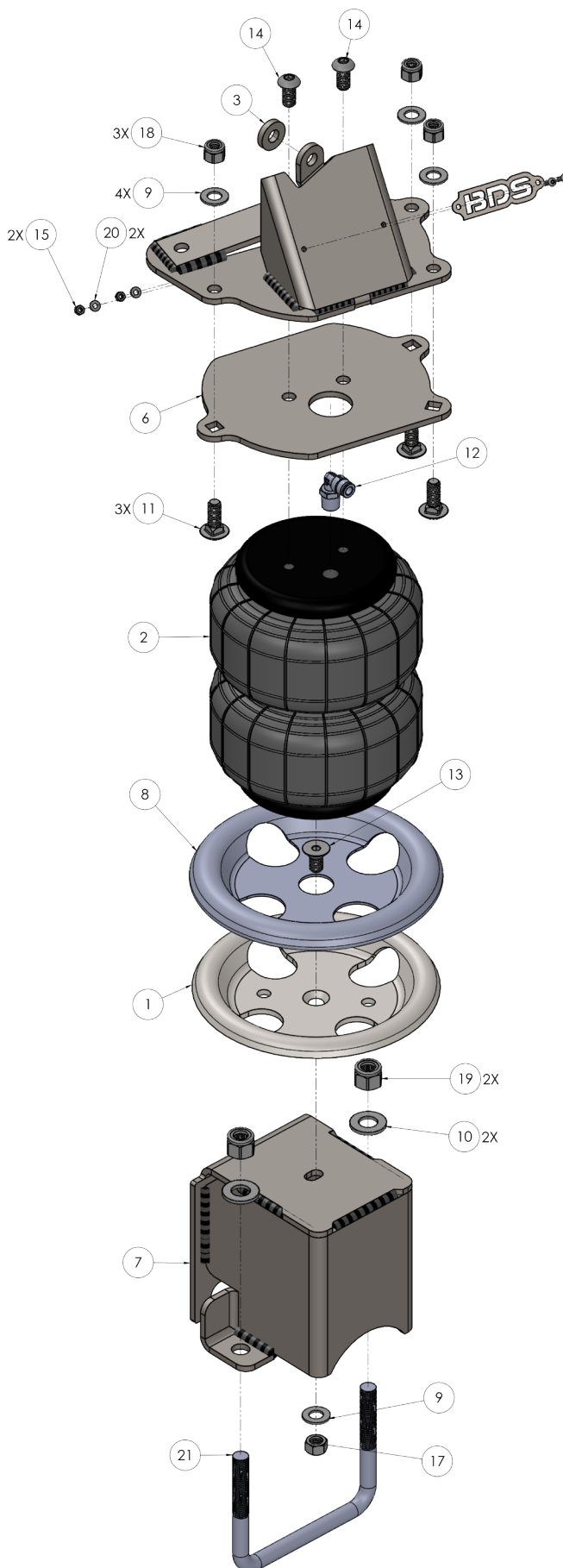
2022-26 TOYOTA TUNDRA STOCK TO 3" RIDE HEIGHT AIR BAG



2022-26 TOYOTA TUNDRA LIFTED AIR BAG ASSEMBLY

ITEM#	DESCRIPTION
1	6" STAMPED STEEL CRADLE
2	2B6 SHORT OR TALL AIR SPRING
3	.900 X .252 X .120 WASHER
4	BADGE: BDS PERFORMANCE TOWING EMBLEM
5	UPPER FRAME BRACKET - DS
6	UPPER AIR SPRING BRACKET
7	5-7" LOWER AIR SPRING BRACKET
8	6" AIR SPRING CRADLE PAD
9	3/8" SAE WASHER
10	1/2" SAE WASHER
11	3/8"-16 X 1" CARRIAGE BOLT
12	90° AIR FITTING
13	3/8"-16 X 3/4" FLAT HEAD BOLT
14	3/16"-16 X 3/4" BUTTON HEAD BOLT
15	#5-40 18-8 SS STEEL NYLON-INSERT LOCKNUT
16	#5-40 X 1/2" BHCS 18-8 STAINLESS STEEL
17	3/8"-16 PREVAILING TORQUE LOCKNUT
18	3/8"-16 NYLON-INSERT LOCKNUT
19	1/2"-20 PREVAILING TORQUE LOCKNUT,
20	#5 SAE WASHER
21	SQUARE U-BOLT

2022-26 TOYOTA TUNDRA LIFTED AIR BAG -



IMPORTANT INFORMATION FOR YOUR VEHICLE

TECH TIPS

1. 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"
2. 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.
3. BDS Performance Towing Air Bag Kits utilize serviceable parts and can be purchased accordingly.
 - Air Bag (**Qty 1**): BDS139907 for short 6" bag (**6" tall nominal**); BDS139908 for tall 6" bag (**7-5/8" tall nominal**)
 - Air bag cradle pads (**Qty 2**): BDS139900
 - 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
4. 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.
5. Before adding air pressure above 5 PSI, it is recommended to check that the air spring is fully seated into the cradle.
6. Follow the Air Line Installation Guide for air line install guidelines and tips.

INSTALLATION INSTRUCTIONS

SPECIAL TOOLS

- Torque Wrench
- Max Wrench/Socket sizes up to 3/4"

1. Park the vehicle on clean, flat and level surface. Block the front wheels for safety.
2. Raise the rear of the vehicle and support the frame rails with jack stands.
3. Remove rear wheels.
4. Remove the factory bump stop by removing the (3) M8 OE bolts with a 12mm socket. (**Fig 1**)



FIGURE 1

5. Install upper bracket using the (3) M8 bump stop bolts previously removed, place the 1/8" spacer behind the outer mount.. Torque to 14 ft-lbs. (**Fig. 2A, 2B**)

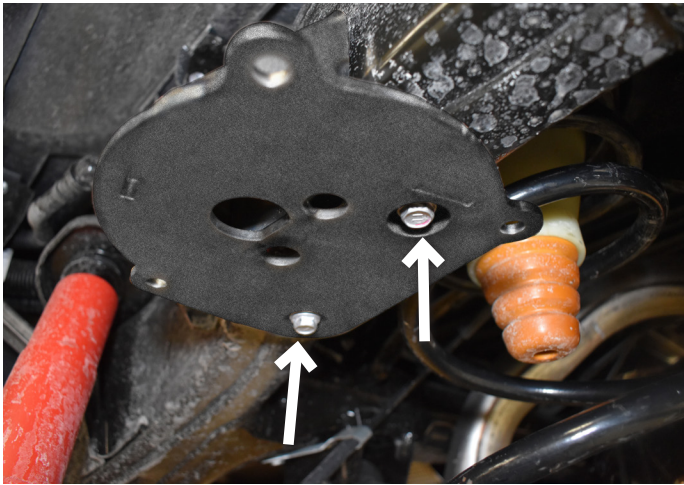


FIGURE 2A

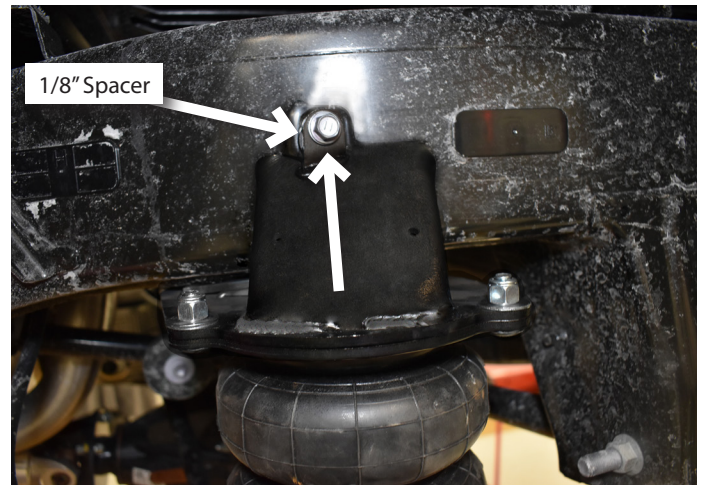


FIGURE 2B

6. Install the rubber isolator to the cradle by aligning the locking nibs with the holes in the cradle. (**Fig. 3A**) Push the nibs through the 4 holes then wrap the rubber isolators edge around the cradle, snapping it into place. (**Fig. 3B**)



FIGURE 3A



FIGURE 3B

7. Using pliers pull the locking nibs until they fully seat into the cradle holes, you will feel them snap into place. (**FIG. 4A**) 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. 4B**)



FIGURE 4A



FIGURE 4B

8. Assemble the lower bracket using the provided 3/8" flat head bolt, 3/8" nut and washer found in BP1140. Torque to 23 ft-lbs (**Fig. 5A, 5B**)



FIGURE 5A

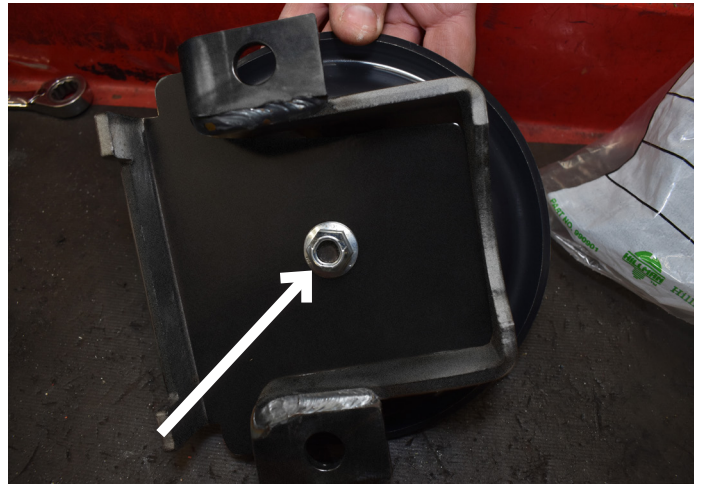


FIGURE 5B

9. Remove and flip the brake line loop clamp so that the brake line will be offset inward toward the axle giving additional clearance to the lower cradle bracket. (**Fig. 6A, 6B**)

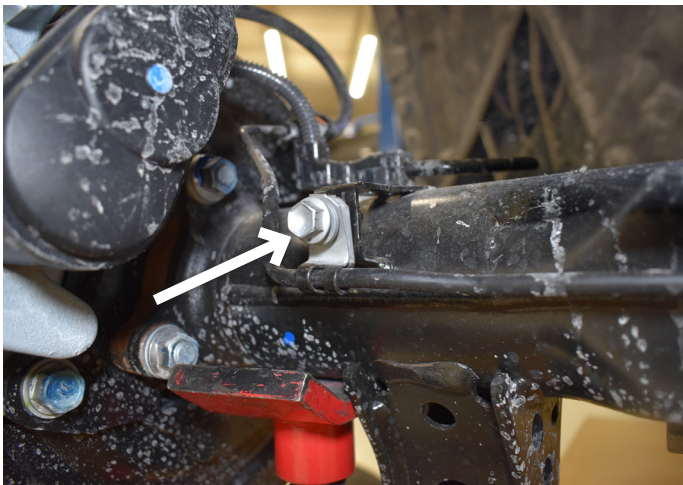


FIGURE 6A

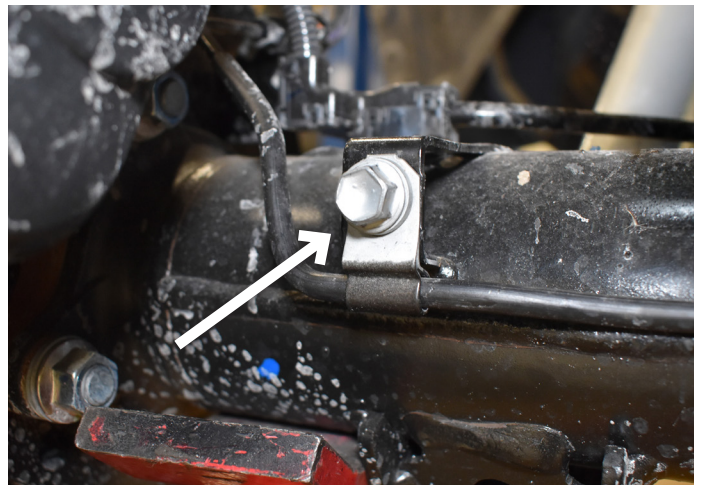


FIGURE 6B

10. Place lower mount on the axle, the u-bolt flange will point outward of the axle to the tire. Secure the lower mount to the axle using the provided 1/2" u-bolts, slide the lower mount inward until the u-bolt contacts lower control arm mount. Tighten 1/2" nuts until flanges begin to bow downward, do NOT overtighten u-bolts. (**Fig. 7A, 7B, 7C**)

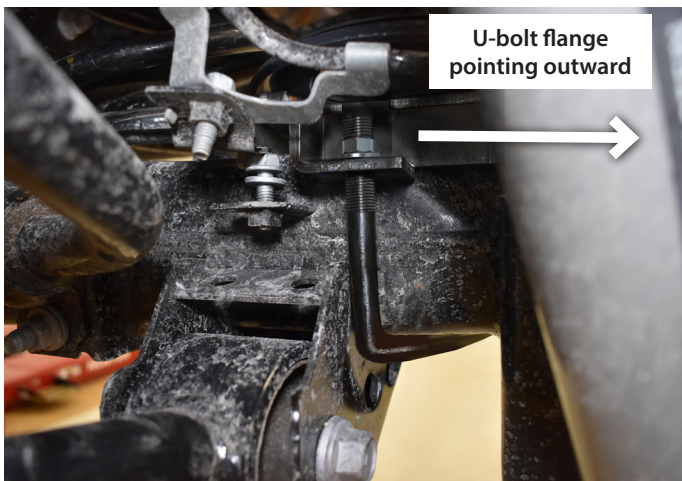


FIGURE 7A

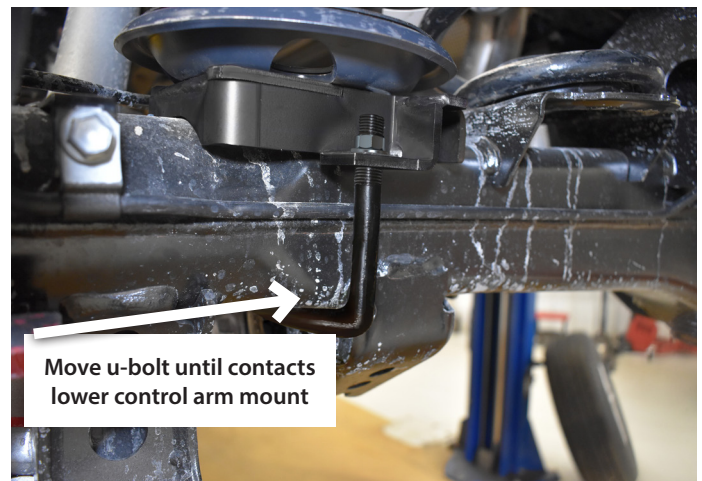


FIGURE 7B



FIGURE 7C (LIFTED BRACKET)

11. Install the provided 90° air fitting found in B1716 into the air bag assembly. Hand tighten then turn 1 and a 1/2 more turns. **(Fig. 8)**



FIGURE 8

12. Install air bag bracket to the bag assembly using the (2) 3/8" x 3/4" button head bolts found in BP1140. Torque to 23 ft-lbs. **(Fig. 9)**



FIGURE 9

13. Attach the bag assembly to the frame bracket with the **(3)** 3/8" x 1" carriage bolts, **(3)** nylock nuts and **(3)** washers found in BP1140. Torque to 23 ft-lbs. **(Fig. 10A, 10B)**

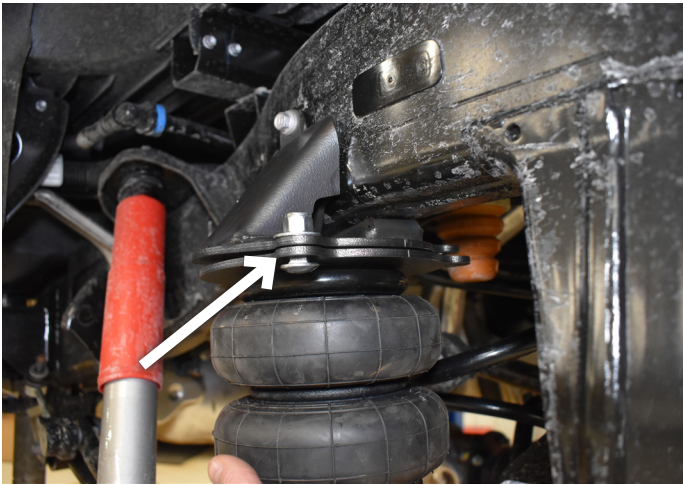


FIGURE 10A

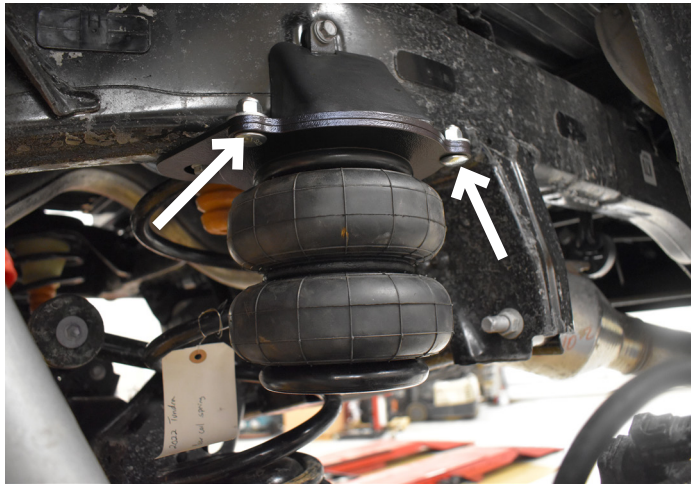
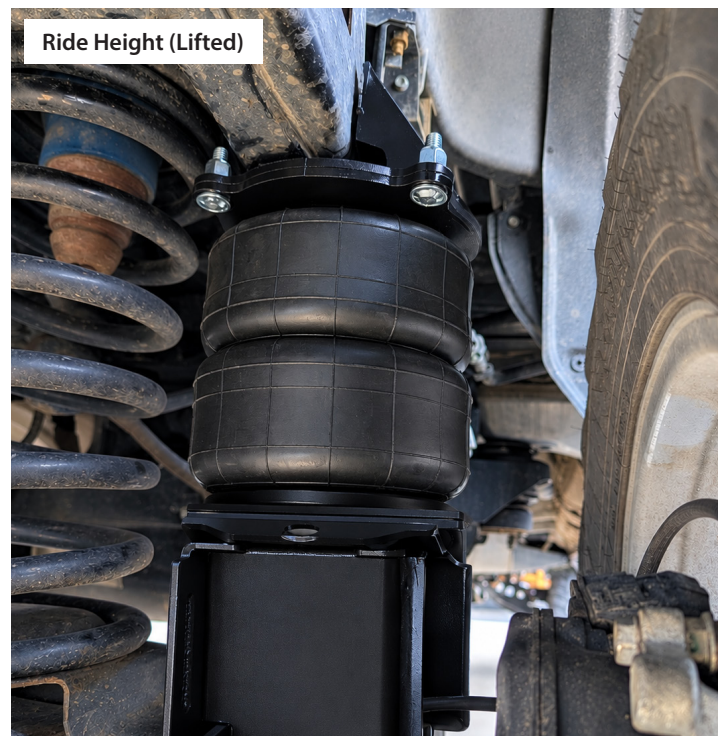


FIGURE 10B

Completed Installation



14. Repeat installation on the other side of the vehicle..

SEE AIRLINE INSTALLATION GUIDELINES (PAGE 14)

15. When installation is completed, replace rear wheels, lower vehicle to the ground and torque lug nuts to 130 ft-lbs.
16. 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

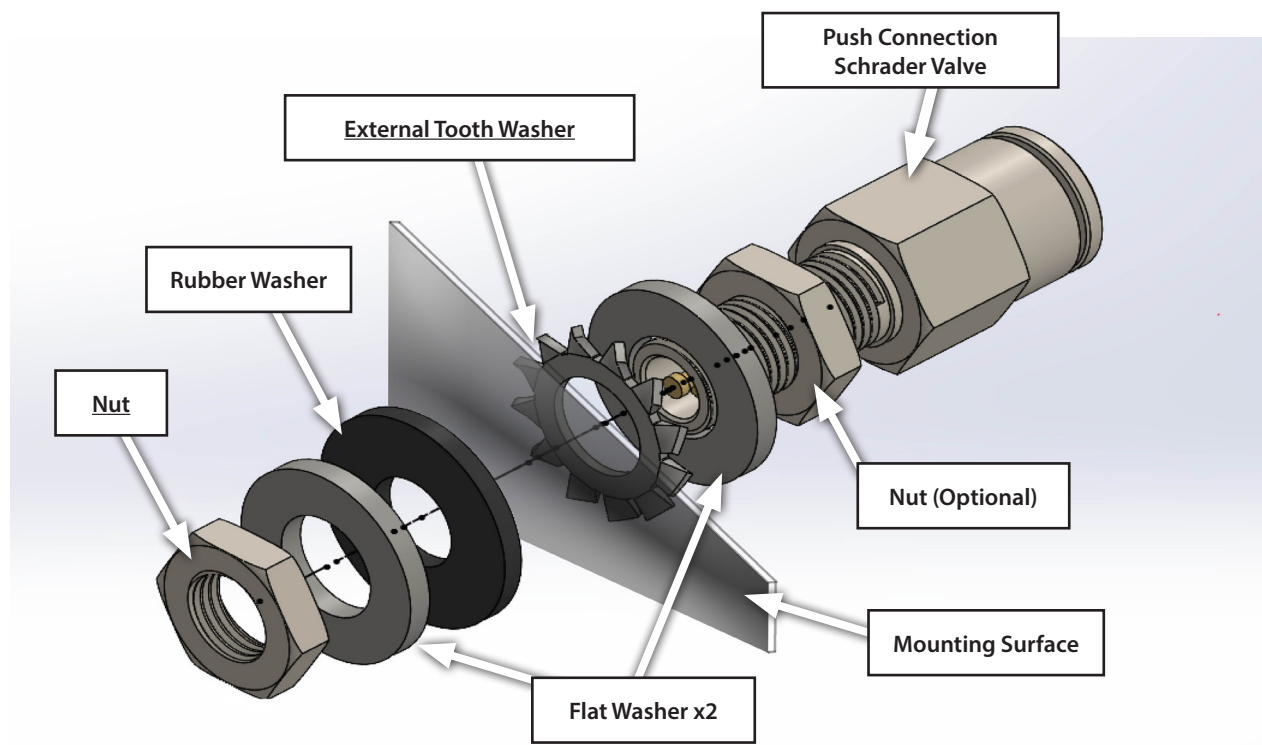
- Choose an accessible location for the air inflation schrader valves.

LOCATION SUGGESTIONS:

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

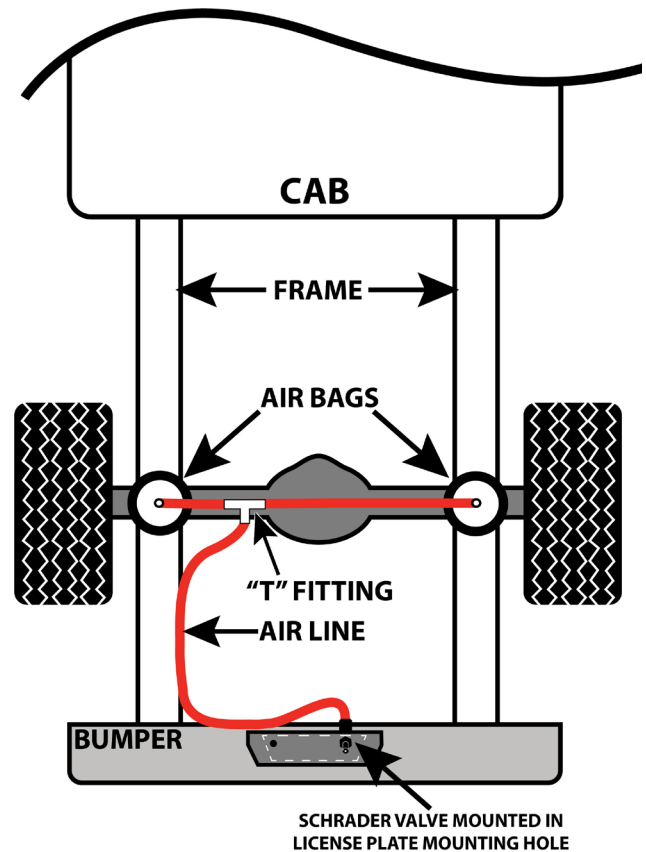
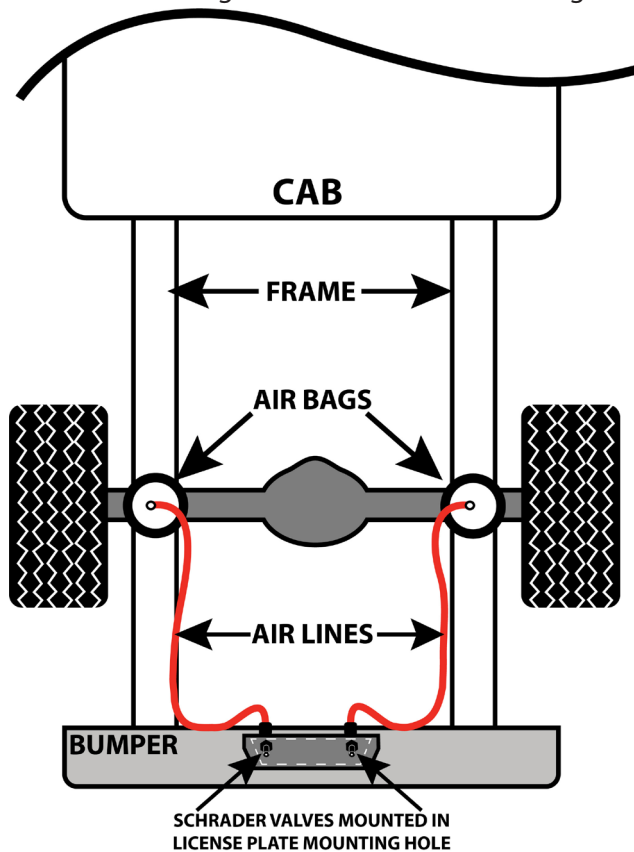
STEP 3: INSTALL SCHRADER VALVES

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



STEP 4: ROUTE AIR LINES

- Run air lines along the frame rail toward air bags

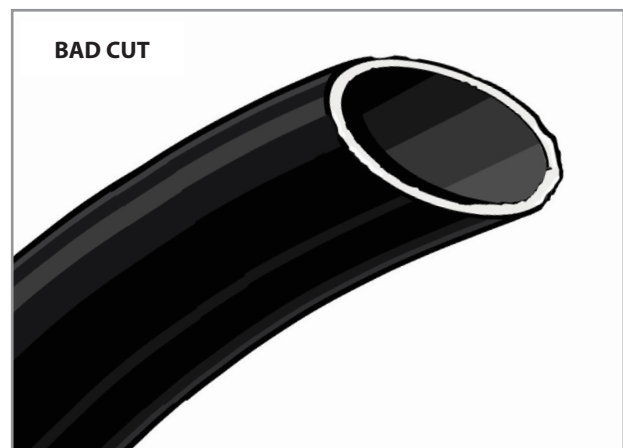
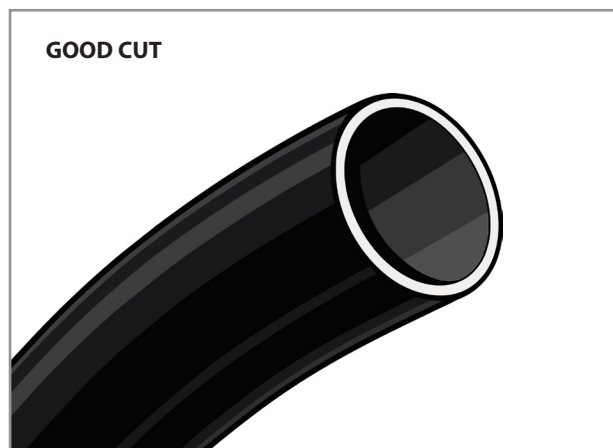


AVOID:

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

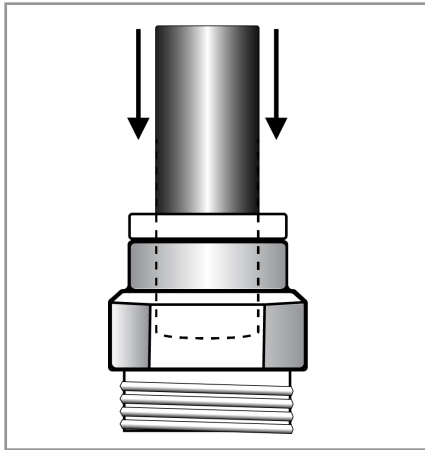
STEP 5: CUT THE LINE RIGHT

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

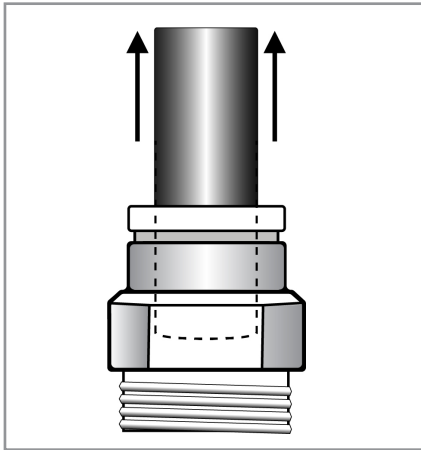


STEP 6: CONNECT LINES TO AIR BAGS AND SCHRADER VALVES

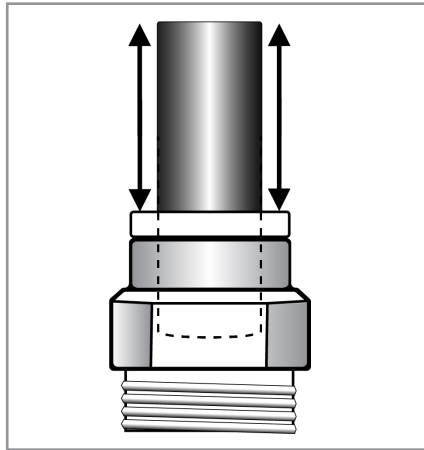
Push line fully into fitting



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.