Installation Manual

AIR SUSPENSION KIT

Chevrolet Silverado/GMC Sierra 2500/3500 (2WD/4WD)
SRW & DRW*

** **Will not fit** vehicles equipped with Curt 5th wheel packages or OEM 5th wheel prep packages*
** **Will not fit** Cab & Chassis models*

HEAVY DUTY KITS ** **Requires an additional 2" Air Spring Spacer** (HP10152, sold separately) on vehicles where the distance from the bottom of the metal jounce cup to the top of the strike plate is greater than 7.5"*

XTREME DUTY KITS ** **Will not fit** on vehicles where the distance from the bottom of the metal jounce cup to the top of the strike plate is greater than 7.5"*

Use the most advanced air springs on the market to eliminate your vehicle's sag, sway and bottoming out. This heavy duty air suspension kit levels your truck's stance while providing added support for an overall smooth and safe ride.

* *See application guide for proper fitment.*

L6575_REV9_12.04.2025 ECN 1-3127

Please read the entire manual prior to starting the installation to ensure you can complete it once started. If you are unsure whether you are qualified to install the Air Suspension kit, consult a qualified service professional before beginning the installation.

SAFETY WARNINGS!

You must read and abide by the instructions found in this manual, paying close attention to the helpful (⊕), cautionary (!) or dangerous (!) warning icons highlighting important safety recommendations and maintenance suggestions throughout this manual. **Failure to abide by all instructions in this manual will void the warranty**

HELPFUL INSTALL TIP
Additional information that could potentially make the job a little easier.

PLEASE USE CAUTION
Unsafe practices could result in damage to you or your vehicle, or others.

DANGER WARNING
Hazards which could result in severe personal injury or death.

Serious personal injury or death may result from an air spring failure or accident due to improper installation or air spring pressure operation or maintenance.

Inflating an unsecured air spring is dangerous. If it bursts, it could be hurled into the air with an explosive force resulting in serious personal injury or death. Never inflate an air spring unless it is secured to the vehicle.

Removing and replacing air springs can be dangerous. This is only a job for a qualified service professional. Never perform air spring service procedures without proper training, tools, and equipment.

An air suspension kit will not increase the GVWR (Gross Vehicle Weight Rating), as the GVWR is determined by the vehicle manufacturer. **Do not exceed the maximum capacity listed by the vehicle manufacturer.**

For safe and proper operation of the vehicle, never operate the vehicle under the minimum or over the maximum listed PSI in the air spring(s), (see: *MIN/MAX PSI* chart on the final page of this manual). Staying within the pressure limits will ensure a reasonable duration of the air springs. **Failure in doing so may result in damage to your vehicle and will void the warranty.**

BEFORE STARTING THE INSTALLATION

Ensure the application information is correct for the make, model and year of the vehicle you are installing the kit on.

PLEASE BE AWARE:
5000lb HD kits *being installed on vehicles where the distance from the bottom of the metal jounce cup to the top of the strike plate is greater than 7.5" require an additional 2" Air Spring Spacer (HP10152, sold separately). [See Page 4 for details].*

7500lb XD kits will not fit *on vehicles where the distance from the bottom of the metal jounce cup to the top of the strike plate is greater than 7.5". [See Page 4 for details].*

It is recommended to always jack the vehicle on the axle. If lifting the vehicle with a floor jack or hoist on the frame, never allow the air spring to limit the travel of the axle. Suspending the axle with the air spring limiting the axle travel **will damage the air spring and void the warranty**.

The air spring must have clearance between itself and the surrounding components to prevent any contact when the air spring is inflated or compressed. Trimming off excess bolt length may also be required to ensure no contact with the spring or other suspension components can be made once installed. **Failure to do so will void the warranty.**

Some vehicles are equipped with a rear wheel brake proportioning valve. Check with the manufacturer before installing the air spring kit, as it may affect braking performance.

Vehicle's equipped with an advanced driver assistance program (ADAS) require recalibration.

This kit contains push-to-connect fittings; using scissors or wire cutters to cut the nylon air line will distort the line and cause the connection to leak. The air line must be cut off squarely with the hose cutter provided in this kit, or a sharp utility knife. **Failure to do so will void the warranty.**

It is recommended to use additional thread sealant or Teflon tape on fittings during the installation for a proper seal.

Always ensure the bolts are not over-torqued; especially when a torque value is provided, failing to use the provided torque value(s) can lead to **premature failure and will void the warranty.**

It is recommended to use a good quality anti-seize on all fasteners to reduce the chance of corrosion and help facilitate removal, if required at a later date.

WARNING: This product can expose you to the chemical Hexavalent Chromate, which is known to the State of California to cause cancer and birth defects or other reproductive harm. ***For more information go to*** ***www.P65Warnings.ca.gov***

KIT CONTENTS

Please confirm the items below are provided in your kit before starting the installation. Reference the kit explosion diagram on the following page for part assembly.

HEAVY DUTY KITS		QTY	PART #
A*	**Double Convoluted Spring**	2	**HP10000**
C△	Roll Plate	4	HP10054
D▾	90° Swivel Fitting, 1/4" Hose to 1/4" NPT	2	HP1100

HEAVY DUTY JOUNCE BUMPER KITS		QTY	PART #
B*	**Double Convoluted Spring** w/ Jounce Bumper	2	**HP10000J**
C△	Roll Plate	4	HP10054
D▾	90° Swivel Fitting, 1/4" Hose to 1/4" NPT	2	HP1100

XTREME DUTY KITS		QTY	PART #
A*	**Double Convoluted Spring**	2	**HP10438**
C△	Roll Plate	4	HP10069
D▾	90° Swivel Fitting, 1/4" Hose to 3/8" NPT	2	HP1245

XTREME DUTY JOUNCE BUMPER KITS		QTY	PART #
B**	**Double Convoluted Spring** w/ Jounce Bumper	2	**HP10438J**
C△	Roll Plate	4	HP10069
D▾	90° Swivel Fitting, 1/4" Hose to 3/8" NPT	2	HP1245

KIT CONTENTS		QTY	PART #
E	Bracket, Upper Driver	1	HP1884
F	Bracket, Upper Passenger	1	HP1885
G	Bracket, Lower	2	HP1886
H	Axle Strap	2	HP0128
I	Round Strap	2	HP0016
J	U-Bolt, 4.25" x 6.5" Square	2	HP1331
K	Bolt, 3/8"-16 x ¾" Countersunk	8	HP1008
L	Bolt, 3/8"-16 x 2.5" Carriage	4	HP1005
M	Bolt, 3/8"-16 x 3.5" Carriage	4	HP1332
N	Bolt, M8x1.25 x 25 mm Flange	2	HP1430
O	Nut, 3/8"-16 Nylon Lock Flange	12	HP1975
P	Heat Shield	1	HP0012
Q	Worm Gear Ring Clamp	2	HP1001

HP10000

HP10000J

HP10438

HP10438J

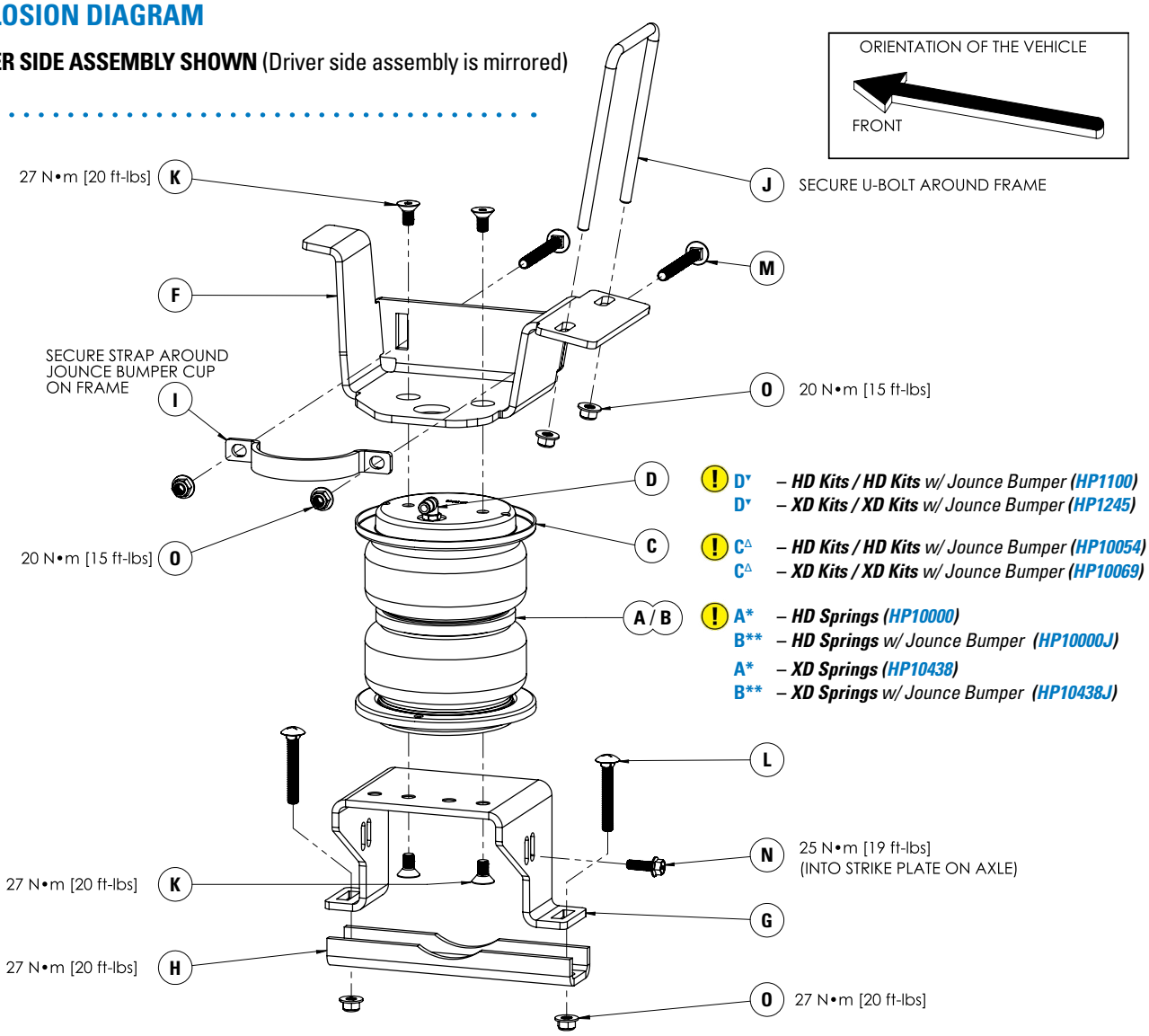
HD KIT LAYOUT

REQUIRED TOOLS

- Hoist or Floor Jack
- Safety Glasses
- Pipe Thread Sealant
- Safety Stands
- Torque Wrench
- Ratchet
- Standard Combination Wrenches
- 7/32" Hex Allen Wrench
- Metric & Standard Sockets
- Hose Cutter (included) or Sharp Utility Knife
- Spray Bottle with Dish Soap/Water
- Air Compressor/Compressed Air Source (to test/fill air springs)
- Heavy Duty Drill
- 3/8 & 5/16 drill bits (very sharp)
- 3/8 Nut Driver

KIT EXPLOSION DIAGRAM

PASSENGER SIDE ASSEMBLY SHOWN (Driver side assembly is mirrored)



! D▾ – ***HD Kits / HD Kits*** *w/ Jounce Bumper* (***HP1100***)
D▾ – ***XD Kits / XD Kits*** *w/ Jounce Bumper* (***HP1245***)

! C△ – ***HD Kits / HD Kits*** *w/ Jounce Bumper* (***HP10054***)
C△ – ***XD Kits / XD Kits*** *w/ Jounce Bumper* (***HP10069***)

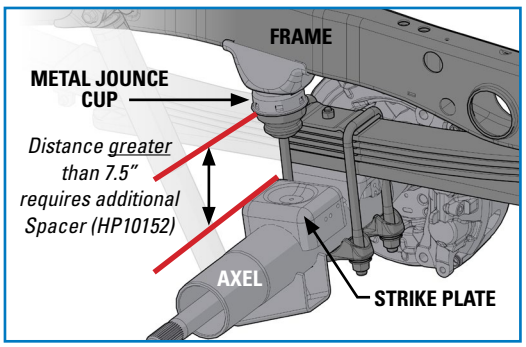
! A* – ***HD Springs*** (***HP10000***)
B** – ***HD Springs*** *w/ Jounce Bumper* (***HP10000J***)
A* – ***XD Springs*** (***HP10438***)
B** – ***XD Springs*** *w/ Jounce Bumper* (***HP10438J***)

! ***PLEASE BE AWARE: 5000lb HD kits*** *being installed on vehicles where the distance from the bottom of the metal jounce cup to the top of the strike plate is greater than 7.5" (see Figure A), require an additional 2" Air Spring Spacer (HP10152, sold separately).*

PLEASE NOTE: *AT4/Trail Boss models may have an extension adapter on the strike plate. The extension adapter must be removed for the installation of this kit.*

If the vehicle is equipped with an extension adapter: Remove prior to the measurement OR measure the distance from the bottom of the metal jounce cup to the white line (shown in Figure B) PLUS add 1".

! ***7500lb XD kits will not fit*** *on vehicles where the distance from the bottom of the metal jounce cup to the top of the strike plate is greater than 7.5"*



A

B

INSTALLATION INSTRUCTIONS

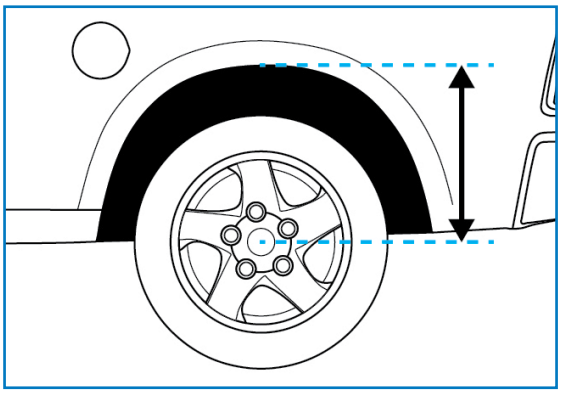
1A MEASURE STOCK RIDE HEIGHT & CLEARANCE

Park the vehicle on a level surface and remove any unnecessary weight from the vehicle to attain a "Normal Ride Height".

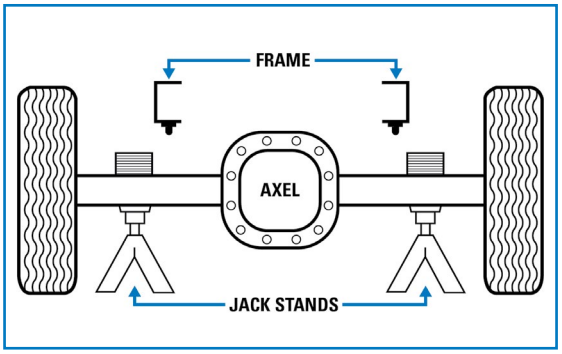
Using a measuring tape, measure the distance between the center of the wheel hub and the bottom of the fender well (see Figure 1A for reference) this will give you your stock Normal Ride Height.

Note the ride height for all four tires.

Check the clearance between the outside of the frame and the inside of the rear tires (as shown in red in Figure 1B), a minimum of 5" is required for adequate air spring clearance.



1A



1B

1B REMOVE REAR WHEELS

PLEASE NOTE: *This step is optional for this installation but will make the install easier to complete.*

Place wheel chocks in front of and behind both front wheels.

Raise the rear of the truck high enough to remove both wheels and attain a comfortable working height.

Place two jack stands under rear axle (as shown in Figure 1B).

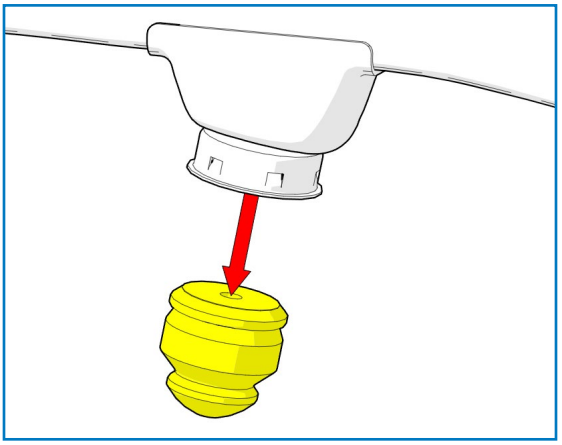
Lower the vehicle until the axle is supported by the jack stands.

Remove rear wheels.

2 REMOVE JOUNCE BUMPER

Remove the jounce bumper from the retaining cup on the frame (as shown in Figure 2).

A pry bar or large screwdriver may be needed to pry out the jounce bumper.



2

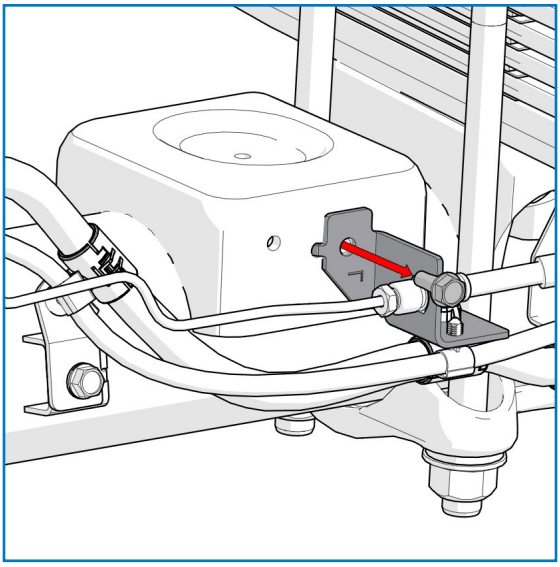
3 UNBOLT BRAKE LINE BRACKETS

Remove the bolt securing the brake line bracket to the strike plate on the axle on both sides of the vehicle (see Figure 3A for reference).

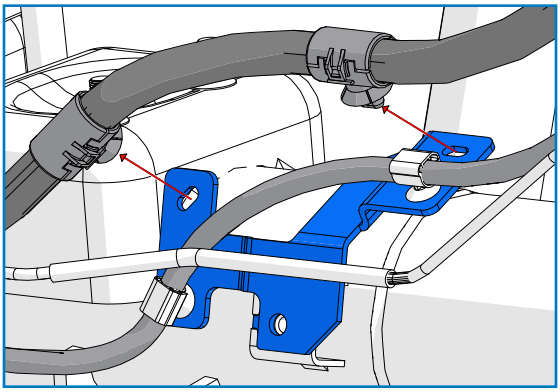
Gently pull the bracket with brake lines away from the strike plate.

There is a brake line bracket attached to the passenger side of the axle. If it is shaped like the bracket highlighted in Figure 3B, unclip the brake line indicated in Figure 3B to avoid interference in a subsequent step.

For vehicles where the distance from the bottom of the metal jounce cup to the top of the strike plate is greater than 7.5"; you will need to install the additional 2" Air Suspension Spacer kit (Part# HP10152) now+, as per the manual included in that kit.



3A



3B

4 ASSEMBLE AIR SPRINGS

Assemble air springs as shown in Figure 4A (HD kit Passenger side shown as reference).

⊕ **PLEASE NOTE: It is not necessary to install the lower roll plate of the air spring kit with the 2" spacer kit mentioned above.*

Set the roll plate and lower bracket over the bottom of the air spring.

⚠ ***PLEASE NOTE: The lower bracket has alternate holes depending on which side of the vehicle you are installing on. Align the holes in the lower bracket (as per Figure 4B) which details the correct bolt holes to use for each side of the vehicle.***

Secure using two 3/8"- 24 countersunk bolts.

Torque bolts to 27 N•m [20 ft-lbs]

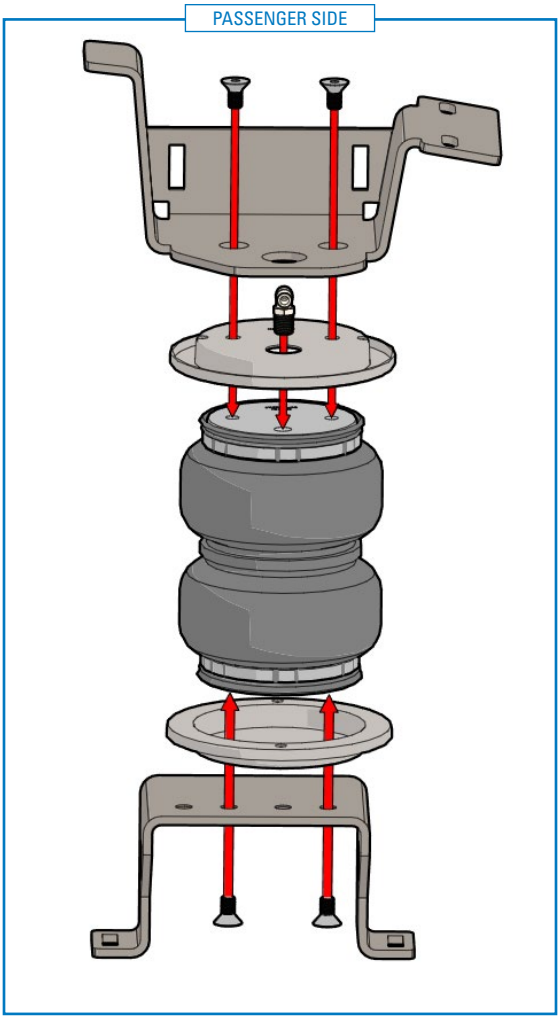
Install the swivel air fitting into the largest hole in the top of the air bag, hand tight plus 1.5 turns.

⊕ *Some air fittings have sealant pre-applied on threads. If no visible coating is present, apply a thread sealant or Teflon tape before assembling to help prevent leaks.*

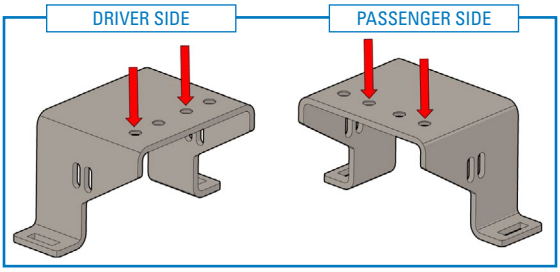
Set the roll plate and respective Driver or Passenger side upper bracket on the air spring.

Secure using two 3/8"-24 countersunk bolts.

Torque bolts to 27 N•m [20 ft-lbs]



4A



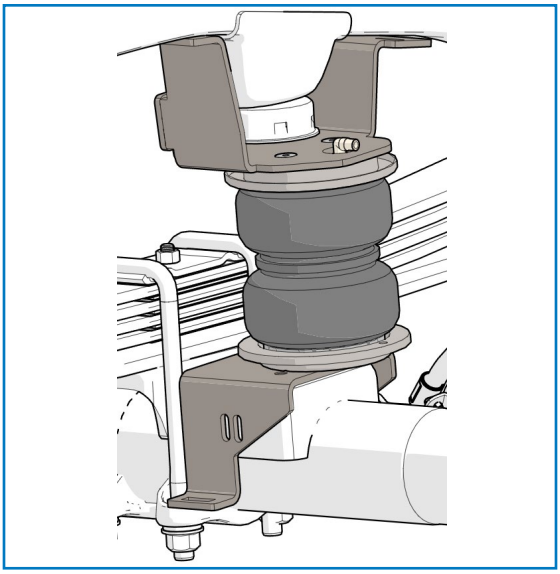
4B

5 INSTALL SPRING ASSEMBLIES

PLEASE NOTE: *It may be necessary to raise the frame of the truck a few inches to allow more clearance to install the air spring assemblies.*

Position the air spring assembly such that the lower bracket rests on the jounce bumper strike plate and the upper bracket nests around the jounce bumper retainer. (See Figure 5 for reference)

The air fitting will be positioned on the inboard side of the frame.



5

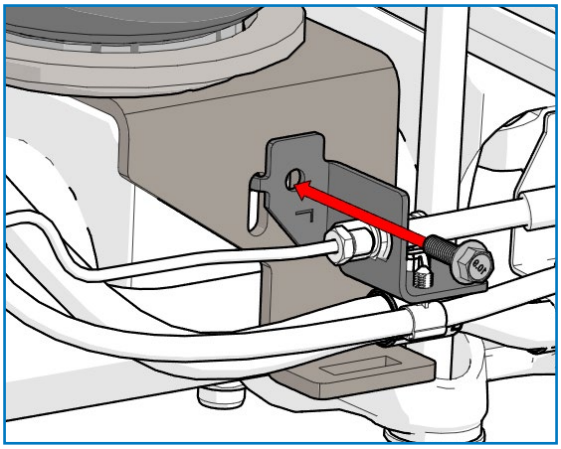
6 ATTACH BRAKE LINE BRACKET

Attach the brake line bracket (previously removed in Step 3) to the lower bracket of the air spring kit using the original mounting hole and the longer M8 bolt provided in this kit.

Torque bolt to 25 N•m [19 ft-lbs]

Reconnect the brake line that was unclipped in Step 3.

If the brake line interferes with the lower bracket, use a zip tie to secure it to the other brake line secured to the brake line bracket. DO NOT force the line into the original position if there is interference.



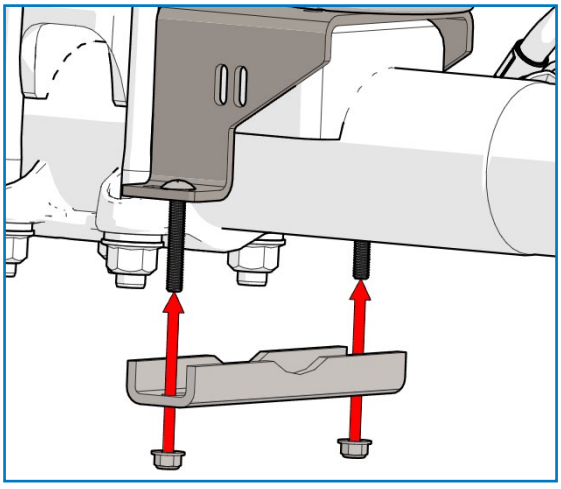
6

7 INSTALL AXLE STRAP

Insert a 3/8"-16 x 2.5" carriage bolt through each slot in the lower bracket.

Place the axle strap on the axle and secure using the carriage bolts and two 3/8"-16 flanged nylon lock nuts.

Torque flange nuts to 27 N•m [20 ft-lbs]



7

8 SECURE UPPER BRACKET

Install the square U-bolt around the frame of the vehicle and through the mounting holes in the upper bracket (as shown in Figure 8A).

PLEASE NOTE: Ensure no brake lines or wires are pinched between the U-bolt and the frame.

Install a 3/8”-16 flanged nylon locking nut on each end of the U bolt.

Do not fully tighten yet.

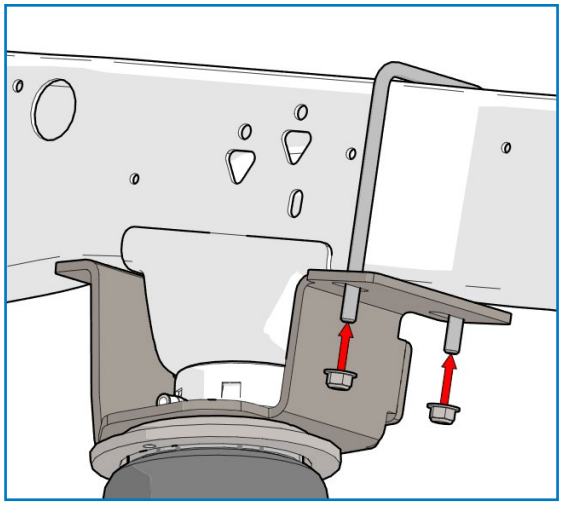
Insert two 3/8”-16 x 3.5” carriage bolts into the large slots on the upper bracket.

Place the round strap around the jounce bumper retainer and onto the carriage bolts (as shown in Figure 8B).

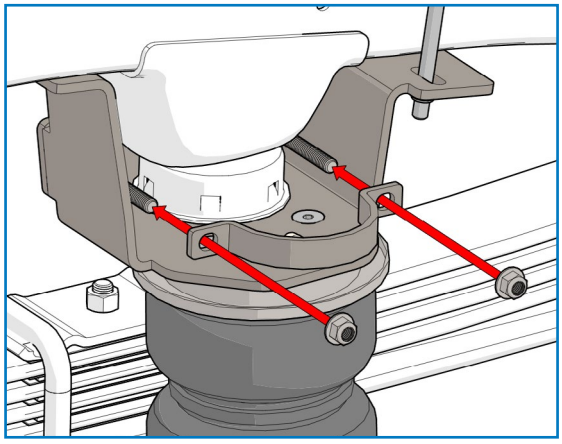
Secure the strap using two 3/8”-16 flanged nylon locking nuts.

Torque flange nuts on round strap to 20 N•m [15 ft-lbs]

Torque flange nuts on square U-bolt (installed in the previous step) to 20 N•m [15 ft-lbs]



8A



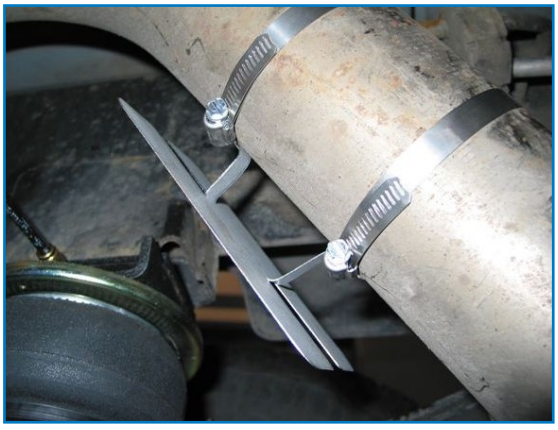
8B

9 INSTALL HEAT SHIELD

Bend tabs on the heat shield so the required ½” of dead space exists between the heat shield and exhaust when attached.

Attach the heat shield to the exhaust pipe on passenger side using two ring clamps (shown in Figure 9).

Each hose clamp holds a tab against exhaust pipe.



9

INSTALL AIR LINE

Two fill valves are provided in this kit. The most common place to install them is in place of the license plate fasteners. Alternatively, two 5/16" holes can be drilled in a location of your choosing.

Cut the air line assembly into two equal lengths with the hose cutter provided in this kit or a sharp utility knife.

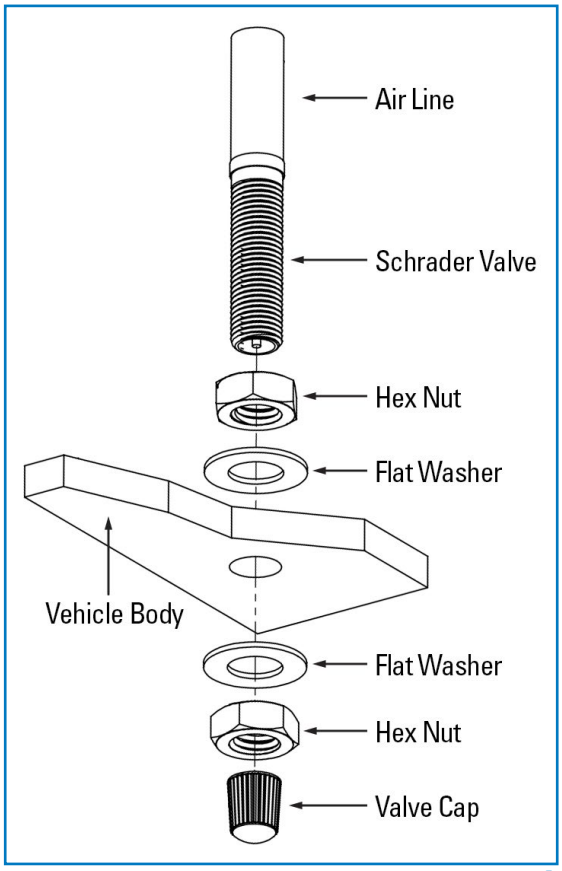
***PLEASE NOTE: This kit contains push-to-connect fittings**; using scissors or wire cutters to cut the nylon air line will distort the line and cause the connection to leak. The air line must be cut off squarely with a hose cutter or a sharp utility knife.*

Install one air line at a time starting at the fill valve location. Place a 5/16" nut on the air valve. Leave enough of the inflation valve in front of the nut to extend through the hole, install a flat washer, and 5/16" nut and cap (reference Figure A for assembly). There should be enough valve exposed after installation – approximately ½" – to easily apply a pressure gauge or an air chuck.

Route the air line back to the NPT fitting on the air spring, then cut the hose to length. Moisten the end of the air line prior to inserting it into the fitting and push it in until it stops.

Repeat with the other fill valve.

Secure the air lines using the provided tie-straps, away from any moving items and heat sources.



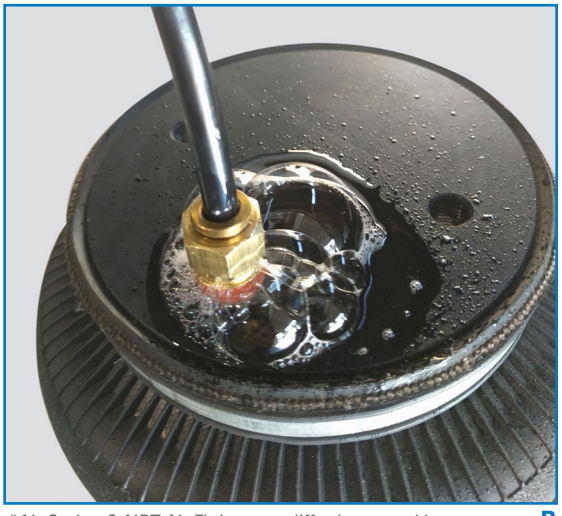
A

CHECK SYSTEM FOR LEAKS

Using the *MIN/MAX PSI* chart on the following page; inflate both air springs to 10 psi less than the maximum recommended pressure for the air spring part number included in this kit; then use a mixture of dish soap and water on all air line connections to detect any air leaks. Large, expanding bubbles indicate a leak (as shown in Figure B).

Leak must be repaired, and then retested until no leaks exist.

Recheck the pressure on the following day. If one or both of air springs have lost pressure, an air leak is present and must be repaired.



**Air Spring & NPT Air Fitting may differ between kits*

B

CONGRATULATIONS! You have completed the install

After Installation continues on the following page.

Thank you again, and congratulations on the installation of your Air Suspension kit.

AFTER COMPLETING THE INSTALLATION

- The air spring must have clearance between itself and the surrounding components to prevent any contact when the air spring is inflated or compressed. Trimming off excess bolt length may also be required to ensure no contact with the spring or other suspension components can be made once installed. **Failure to do so will void the warranty.**
- If the vehicle's tires were removed during the installation; re-install and torque all wheel fasteners (lug nuts) to the manufacturer's specifications. Re-torque all wheel fasteners after the first 500 miles of driving.
- If the vehicle is equipped with an advanced driver assistance program (ADAS), the system must be recalibrated.

OPERATING YOUR VEHICLE WITH AIR SUSPENSION

Air springs have minimum and maximum recommended pressure requirements:

MIN / MAX PSI: REQUIREMENTS FOR YOUR AIR SPRING(S)

PART #	SPRING STYLE	SPRING TYPE	MIN PSI	MAX PSI
HP10687	In-Coil	STANDARD DUTY	5 PSI	50 PSI
HP10560		STANDARD DUTY	5 PSI	70 PSI
HP10001	Sleeve Style	STANDARD DUTY	10 PSI	100 PSI
HP10173		STANDARD DUTY		
HP10199		STANDARD DUTY		
HP10083	Single Convoluted	HEAVY DUTY	5 PSI	100 PSI
HP10083J		HEAVY DUTY with JOUNCE BUMPER	0 PSI* / 5 PSI	100 PSI
HP10000	Double Convoluted	HEAVY DUTY	5 PSI	100 PSI
HP10000J		HEAVY DUTY with JOUNCE BUMPER	0 PSI* / 5 PSI	100 PSI
HP10068	Large Double Convoluted	HEAVY DUTY	5 PSI	100 PSI
HP10438	Double Convoluted	EXTREME DUTY	5 PSI	100 PSI
HP10438J		EXTREME DUTY with JOUNCE BUMPER	0 PSI* / 5 PSI	100 PSI

** Springs with a jounce bumper can be run at zero PSI when vehicle is unloaded only*

Never operate the vehicle under the minimum or over the maximum listed PSI in the air spring(s). Staying within the pressure limits will ensure maximum air spring life. **Failure in doing so may result in damage to your vehicle and void the warranty.**

It is recommended to check the air pressure in your air springs daily, for the first 5 days, to ensure a leak has not developed.

Air springs are designed to maintain the vehicle's stock ride height with a load. Do not use the air springs as a means to lift vehicle with no load. This will result in a harsh ride.

SERVICING YOUR VEHICLE WITH AIR SUSPENSION

It is recommended to always jack the vehicle on the axle. If lifting the vehicle with a floor jack or hoist on the frame, never allow the air spring to limit the travel of the axle. Suspending the axle with the air spring limiting the axle travel **will damage the air spring and void the warranty**.

WARRANTY

See accompanying limited warranty included with this kit for details.