

# Installation Manual



## 10302

Air Spring Accumulator Tank Kit

*Increases the working volume of your air spring system and reduces the harsh ride associated with some air springs*



**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](http://www.P65Warnings.ca.gov)*

## IMPORTANT

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 exceed a maximum of 100PSI in the air springs. Staying under the pressure limit will ensure maximum air spring life. **Failure in doing so may result in damage to your vehicle and/or a void warranty.**

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## SAFETY WARNINGS!

- ❗ **Please read and abide 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.

**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 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.
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***Thank you and congratulations on the purchase of an Air Spring Accumulator Tank Kit.***

This kit was designed to increase the working volume of your air suspension spring system and reduce the harsh ride associated with some air springs.

Please read the entire installation manual prior to starting the installation to ensure you can complete the installation once started.

**KIT CONTENTS**

***Reference the kit explosion diagram on the following page for part assembly.***

**KIT CONTENTS**

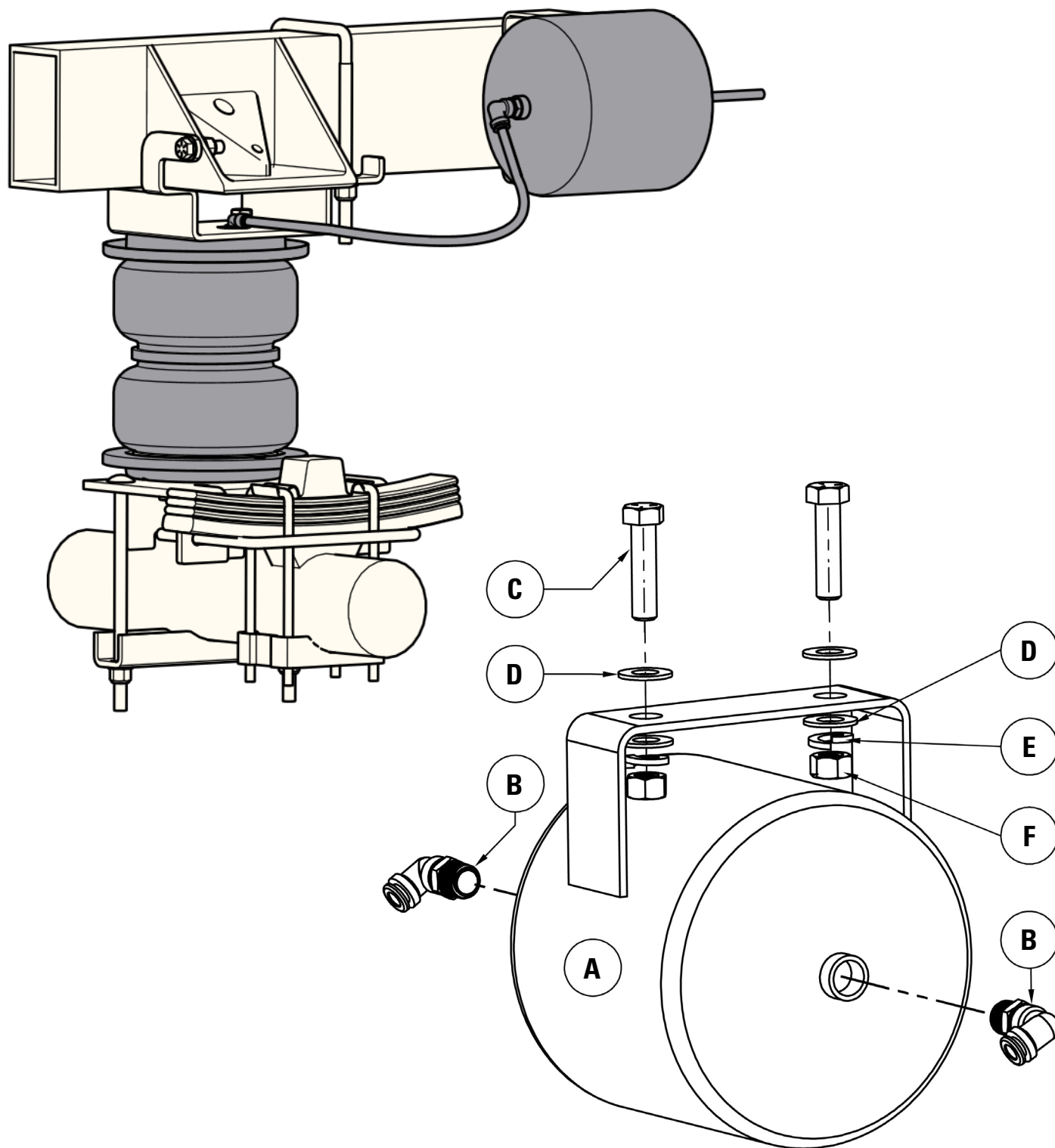
	QTY	PART #
<b>A</b> Auxiliary Air Tank, 1/2 Gallon	2	C11940
<b>B</b> 1/4" NPT 90° Fittings	4	C10527
<b>C</b> 3/8" x 1.5" NC Hex Head Cap Screw	4	C18018
<b>D</b> 3/8" Flat Washer	8	C653
<b>E</b> 3/8" Lock Washer	4	C18007
<b>F</b> 3/8" NC Nut	2	C11572
<b>G</b> Nylon Air Brake Tube	192"	M8280
<b>H</b> Nylon Hose Cutter ( <i>not shown</i> )	1	HP10208
<b>I</b> Zap Straps	8	C11618

**REQUIRED TOOLS**

- Hoist or Floor Jack
- Safety Glasses
- Pipe Thread Sealant
- Standard Combination Wrenches
- 7/32" Hex Allen Wrench
- 1-1/8" Wrench or Deep Socket
- Metric & Standard Sockets
- Spray Bottle with Dish Soap/Water
- Compressed Air Source (to test/fill air springs)
- Safety Stands
- Torque Wrench
- Ratchet

*Please make sure all the items shown in this explosion diagram are provided in your kit before starting the installation.*

**ASSEMBLY SHOWN:**



**BEFORE STARTING THE INSTALLATION:**

1. If your vehicle is already equipped with air bags it will be necessary to support the axle. Letting the axle hang under the vehicle with no support can over extend the air bag and cause damage to it. Failure in doing so may result in a void warranty.
2. It is recommended to use a good quality anti-seize on all fasteners. This will reduce the chance of corrosion on the fasteners and will help facilitate removal, if required at a later date.

**PLEASE NOTE: This kit contains push-to-connect fittings; using scissors or wire cutters to cut the nylon airline will distort the line and cause the connection to leak. THE AIRLINE MUST BE CUT OFF SQUARELY WITH THE NYLON HOSE CUTTER PROVIDED IN THIS KIT OR A SHARP UTILITY KNIFE.**

**1 RAISE THE REAR AXLE**

Park the vehicle on a level surface.

Raise the rear axle high enough to obtain a comfortable working height, it may be necessary to remove both rear wheels.

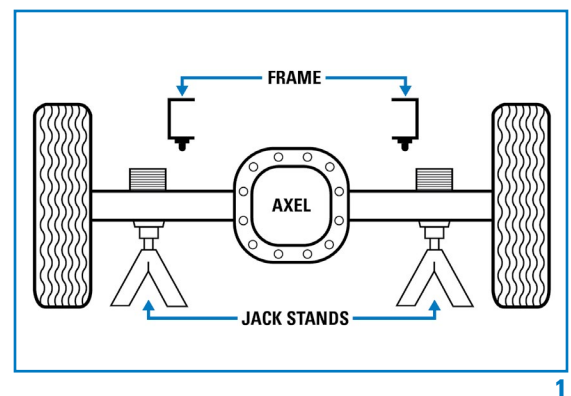
**2 INSTALL THE AUXILIARY TANK**

Install the air fittings into the tank according to the kit contents diagram on the previous page.

Choose two suitable mounting locations under your vehicle for the air tanks.

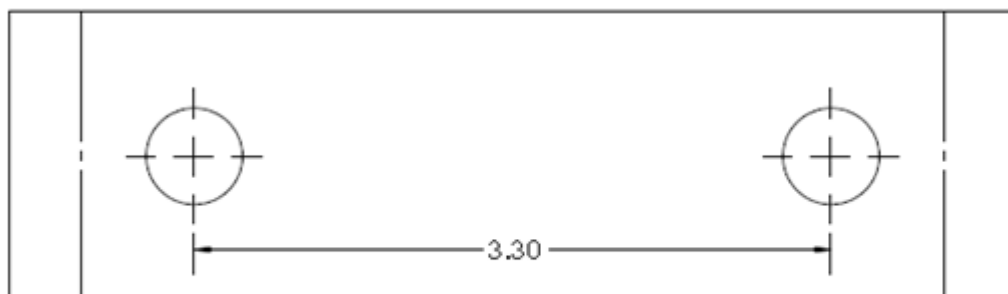
Cut out Figure 2 "Drill Template" below and use it as a template for drilling the mounting holes.

Drill four holes using a 3/8" drill bit and mount the air tanks with the supplied fasteners.



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DRILL TEMPLATE



**PLEASE NOTE: If printing out the Drill Template online, make sure your printer is not scaling the image or stretching it. Open your print dialogue box and select print at 100% scale.**

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### 3 INSTALL THE AIRLINE

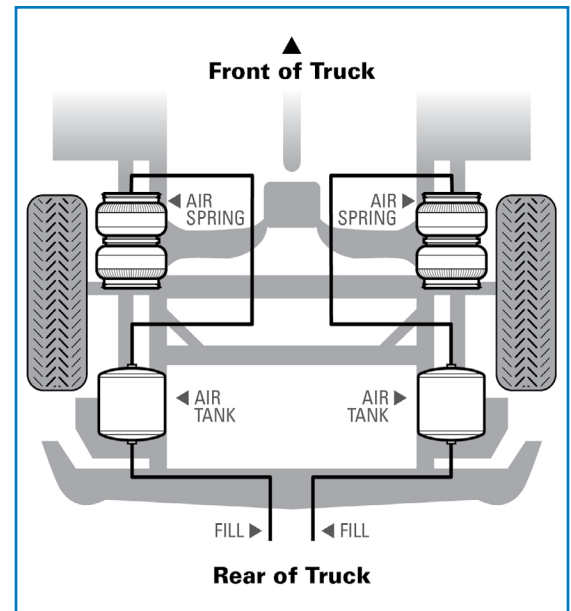
Using the supplied nylon hose cutter\* and black nylon air line, install the air tanks into the system according to Figure 3.

**\*PLEASE NOTE: This kit contains push-to-connect fittings; using scissors or wire cutters to cut the nylon airline will distort the line and cause the connection to leak. THE AIRLINE MUST BE CUT OFF SQUARELY WITH THE NYLON HOSE CUTTER PROVIDED IN THIS KIT OR A SHARP UTILITY KNIFE**

Route the nylon air line to an air spring fitting and cut the hose. 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 airlines using the tie-straps, away from moving items and heat sources.



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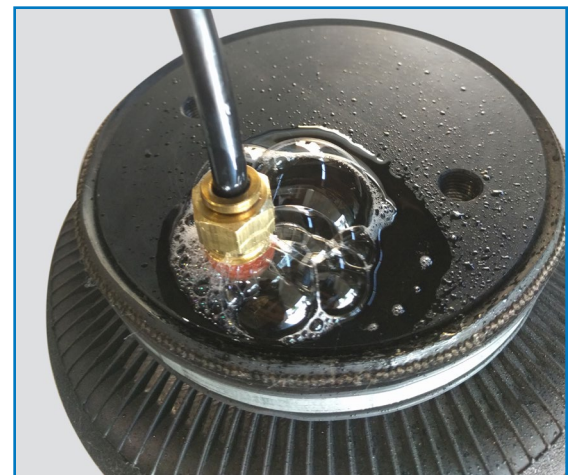
### 4 CHECK SYSTEM FOR LEAKS

Inflate both air springs to 90 psi (60 psi for in-coil bags) and 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 4).

**Repair as necessary and retest.**

Inflate air springs to a predetermined value and on following day recheck pressure. If one or both of air springs have lost pressure, an air leak is present.

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



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

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### AFTER COMPLETING THE INSTALLATION

- The air spring must have clearance between itself and the surrounding components to prevent any contact when 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.
- If removed, re-install the wheels and torque fasteners to the manufacturer's specifications. Re-torque all fasteners after the first 500 miles of driving.

## OPERATING YOUR VEHICLE WITH AIR SUSPENSION

Air springs have minimum and maximum recommended pressure requirements:

PART #	SPRING STYLE	SPRING TYPE	MIN PSI	MAX PSI
HP10189	In-Coil	STANDARD DUTY	5 PSI	70 PSI
HP10560		STANDARD DUTY		
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

For safe and proper operation, never operate the vehicle over the maximum listed PSI in the air springs. Staying under the pressure limit will ensure maximum air spring life. **Failure in doing so may result in damage to your vehicle and/or a void warranty.**

**!** *It is recommended to check the air pressure in your air springs daily for first couple of 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

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

## WARRANTY

**See additional warranty included with this kit for details.**

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