

# Installation Manual

**PACBRAKE**<sup>®</sup>

www.pacbrake.com 800.663.0096



**HP10188 KIT**



*Dodge 1500 Pickup 2WD & 4WD\**

\* See application guide for proper fitment.

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

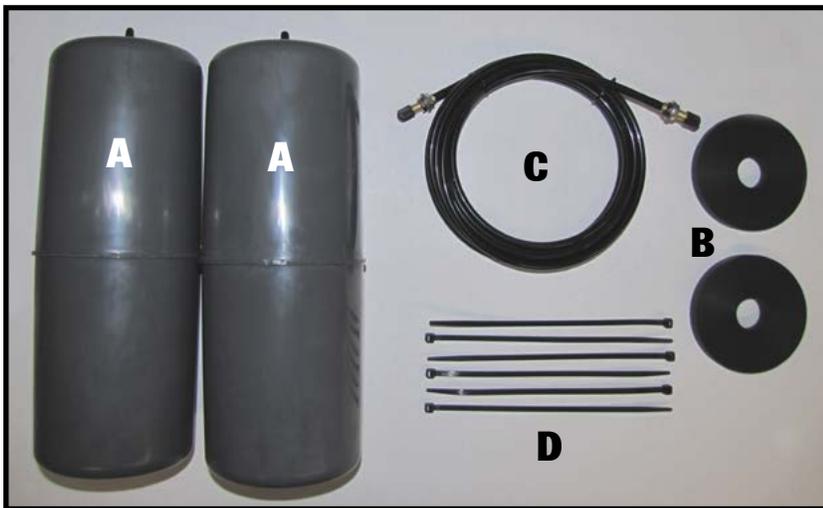


Thank you and congratulations on the purchase of a Pacbrake air suspension kit. Please read the entire installation manual prior to starting the installation to ensure you can complete the installation once started.

**IMPORTANT:**

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

## KIT LAYOUT



**Make sure all the items shown in the photo are provided in your kit before starting the installation.**

**PLEASE NOTE:**

This kit includes “push to connect OR barbed” airline fittings. They require the end of the airline to be round, square and cleanly cut to ensure the internal seal will not leak.

The airline must only be cut with a sharp razor knife or a hose cutter.

### KIT CONTENTS

- |                                    |         |
|------------------------------------|---------|
| <b>A</b> Air Spring (2)            | HP10189 |
| <b>B</b> Nylon Spacer (2)          | HP10190 |
| <b>C</b> Air Line / Valve Assembly | HP1344  |
| <b>D</b> Tie Strap (6)             | C11618  |

### REQUIRED TOOLS

- 21mm Deep Sockets and Wrenches
- Box Knife or Hose Cutter
- Air Compressor or Compressed Air Source
- Hoist or Floor Jack
- Safety Stands
- Safety Glasses
- Spray Bottle with Dish Soap & Water Solution

**PLEASE NOTE:** Photos shown in this manual are of the driver's side (unless otherwise noted)

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## 1. RAISE THE REAR AXLE

Park the vehicle on a level surface and remove all weight from the vehicle to attain normal ride height. This is important for correct initial air spring setup and adjustment.

- A. Raise the rear axle high enough to remove both rear wheels and attain a comfortable working height. Place jack stands under the frame (as shown in photo A). Lower the vehicle until the frame is supported by the jack stands.



- B. Mark the coil spring/bottom spring perch with a marker so that the coil spring can be reinstalled in this proper location.



## 2. DISASSEMBLY

Remove the shock absorbers from the lower shock mounts on the axle using the 21mm deep socket. Lower the axle (or raise the body of the vehicle) until the coil springs can be removed.

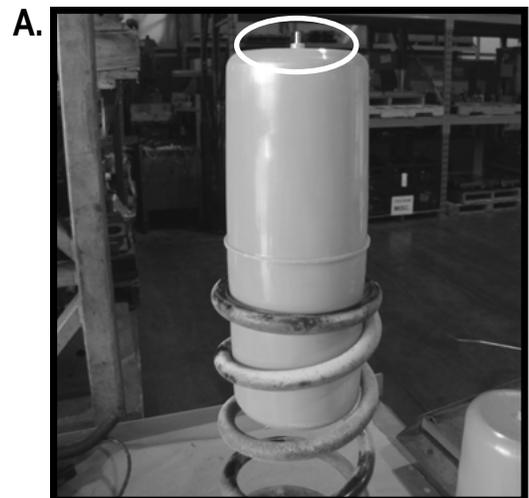
**NOTE:** The brake line will get pulled down once the axle is lowered/body is raised. Remove any mounting to create more slack if the brake line is being strained.



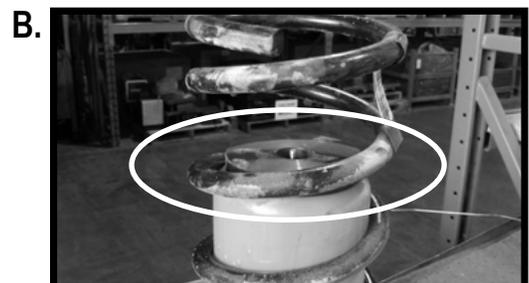
## 3. INSTALL THE AIR SPRINGS

**NOTE:** Make sure to clean the coil springs before proceeding with the following steps.

A. Insert the air spring into the coil spring that was just removed. Ensure the stem of the air spring is at the top (as shown in photo A).



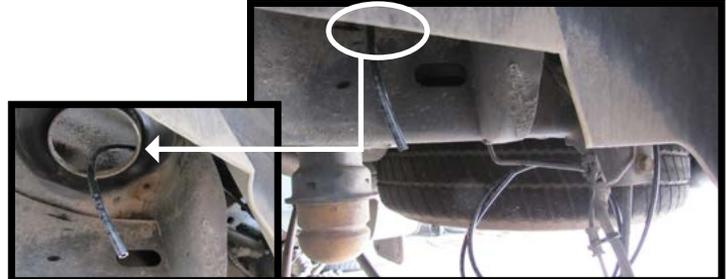
B. Push the air spring to the bottom of the coil. If it's too difficult, spray the coil spring with a water/soap mixture to help the spring slide more easily.



Insert the nylon spacer at the top (see photo B).

#### 4. INSTALL THE AIR LINE

Provided in the basic air spring kit are two fill valves. The most common place to install them is to replace the license plate fasteners with the fill valves. Alternately two holes can be drilled in a convenient location. Install one airline fitting, provided, route the nylon hose to an air spring fitting, cut the hose and connect to the air spring fitting.



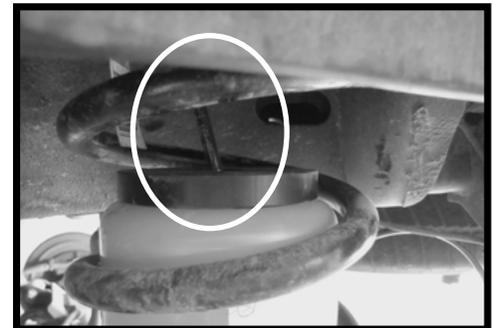
**NOTE:** Using scissors or wire cutters to cut the nylon airline WILL distort the line and cause the connection to leak. THE AIRLINE MUST BE CUT OFF SQUARELY WITH A SHARP RAZOR KNIFE. Moisten the end of the airline prior to inserting it onto the barbed fitting and push until it bottoms out.

#### 5. INSTALL THE AIR SPRINGS

After the air line is cut, insert one end through the upper spring perch and spacer, and push the airline onto the barbed fitting, completely covering the barbed section (as shown). Repeat on other side.

Re-install the coil spring/air spring assembly back into the vehicle spring mounts and use the marks made in Step 1 to properly align the spring.

Raise the suspension up far enough to install the lower shocks in the mounts. Do not tighten at this time.



**NOTE:** Repeat steps 2 to 5 on other side of vehicle.

## 6. DO A LEAK CHECK

Inflate both the air springs to 20 PSI, then use a dish soap and water mixture on all air line connections to detect any air leaks. Repair as necessary and retest.

Inflate the air springs to a predetermined value, and on the following day recheck the pressure. If one or both the air springs have lost pressure, a leak is present. The leak must be repaired, and then retested until no leaks exist.



## 7. TORQUE ALL FASTENERS:

Lower the shock mounts and torque to factory specifications. Reinstall the tires.

Re-torque all the fasteners after the first 500 miles of driving.

For safe and proper operation, never operate the vehicle under the minimum of 5 PSI or over the maximum of 35 PSI. Staying within the pressure limit will ensure maximum air spring life. Failure in doing so may result in air spring damage and will void the warranty.

## OPTIONAL ACCESSORIES

Pacbrake offers an optional dual needle air gauge to monitor the pressure in each air spring from the vehicle's cab. Pacbrake also offers a full line of air compressors, air tanks and solenoids to control the air spring system.

## OPERATING YOUR VEHICLE WITH PACBRAKE AIR SUSPENSION

Air springs have minimum and maximum pressure requirements. Never operate your vehicle with less than 5 PSI in the air spring and never inflate the air springs over 35 PSI, or damage to the air springs will result.

Check the air pressure in the air springs daily for the first couple of days to ensure a leak does not develop. The 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 the vehicle with no load, or a rough ride will result.

## WARRANTY

To be eligible for warranty, the owner must submit their warranty card (or register online at [pacbrake.com/warranty](http://pacbrake.com/warranty)) within 30 days of purchase date.

**NOTE:** The warranty will be void if the air springs run with less than the minimum of 5 PSI.