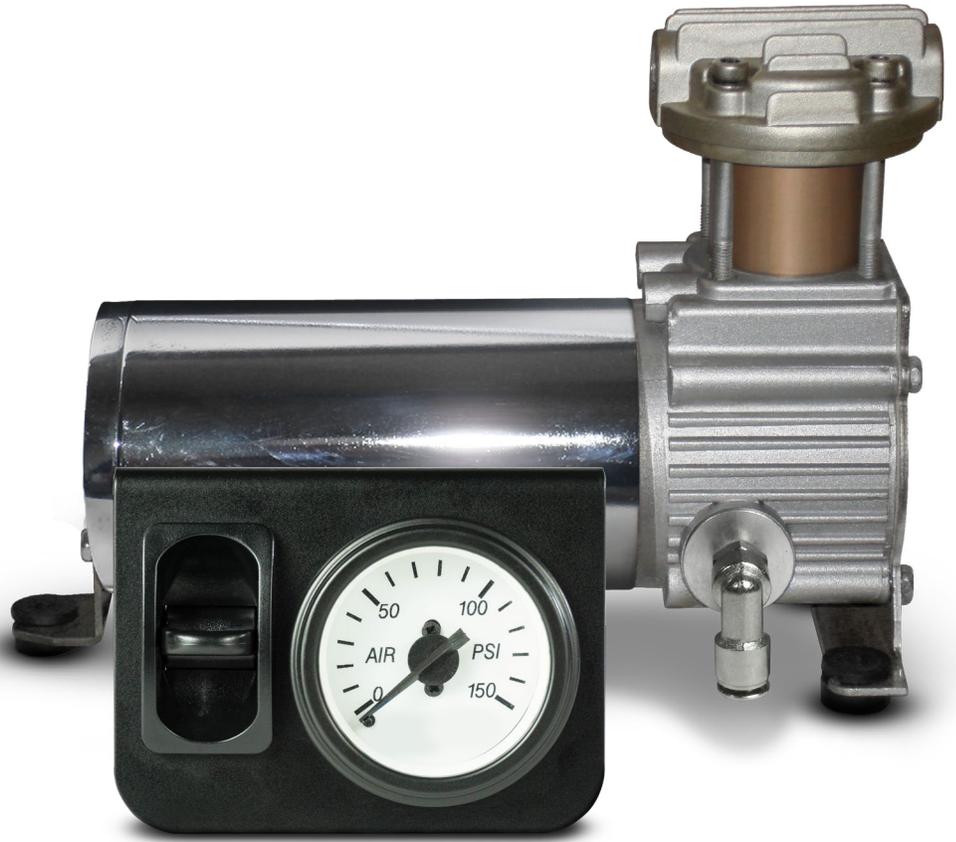


# Installation Manual



## **PREMIUM IN-CAB CONTROL KIT**

**w/ 325 SERIES AIR COMPRESSOR**  
*(for vehicles without a preexisting air system)*

**10135      SIMULTANEOUS ACTIVATION**  
Paddle Valve w/ Mechanical Gauge

*Operate your air springs (or other pneumatic accessories)  
right from the driver's seat.*



- 1 Choose a location to mount the gauge and switch panel. It should be in reach and in clear view to the driver.

Using the bracket as a template, mark and drill 2 - 3/16" holes to secure the bracket.

Do not install the bracket until the electrical and airlines have been installed.



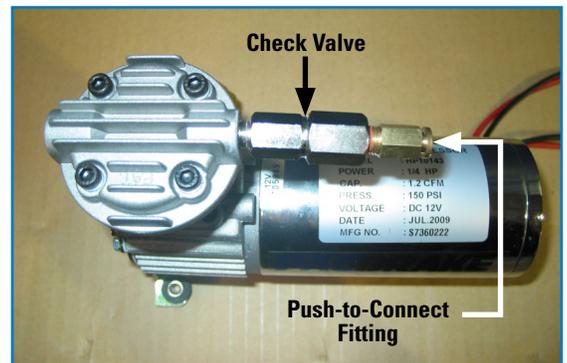
1

- 2 **INSTALL THE AIR SPRING ASSEMBLIES**  
*(if not previously installed).*

Follow the installation instructions provided in your air spring kit - with the exception of airline routing.

- 3 **PLEASE NOTE: Thread sealant or Teflon tape must be applied to all the fitting threads installed throughout this installation to prevent air leaks.**

Install the push to connect fitting into the check valve, then install the assembly into the outlet port of the compressor head, (as shown in the Figure 2).



3

- 4 **PLEASE NOTE: The compressor makes an audible pumping noise when activated. Consider this when choosing a mounting location. The location should also be in a clean, dry area to maintain long compressor life.**

Using the compressor as a template, mark and drill four 3/16" diameter holes. Secure the compressor using the fasteners provided.



5

- 5 **COMPRESSOR AIR INTAKE FILTER**

The air intake filter is remote mounted. Locate a clean, dry area for the filter housing. Install the barbed fitting provided to the filter housing. Using the nylon hose marked "air intake", connect the filter to the barbed fitting at the compressor and secure the hose with the tie-straps provided.

## 6 ELECTRICAL CONNECTIONS

Provided in the kit is a pre-wired relay receptacle to make this part of the installation easy.

Find a convenient location to mount the relay receptacle close to the positive battery terminal.

Using the self tapping screw provided, secure the relay receptacle and install the relay provided.



6

- 7 Locate either one of the two RED 12 gauge wires of the relay harness. Cut to length and connect the 30 amp fused link.

Connect the 30 amp fused link to the positive terminal of the battery (as shown in Figure 7A).

Locate the second RED 12 gauge wire and route to the compressor (as shown in Figure 7B). Cut to length and crimp on the supplied connector, then connect to the RED compressor wire.

Locate the BLACK wire of the compressor and connect to a good chassis ground or the negative battery terminal.



7A

- 8 Locate the 16 gauge RED with WHITE strip and WHITE wire of the relay harness.

Route these wires into the cab through the firewall boot.

Using the "T" tap connector provided, connect the RED with WHITE strip wire to the 5 amp inline fuse provided, then to a 12 volt ignition power source.

Test the ignition power source with a volt meter prior to attaching the "T" tap. Some ignition circuits are less than 12 volts which may not be enough to activate the relay coil. This wire can be connected through an ON/OFF switch to override the compressor activation, should the customer prefer this option. (Switch available separately and not provided in this kit).



7B

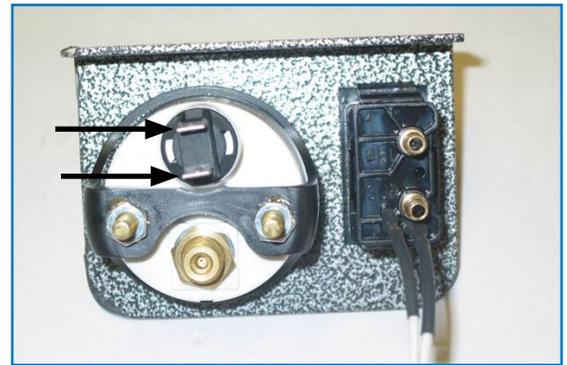


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- 9 At the rear of the air pressure gauge, locate the two spade terminals (shown by the arrows in Figure 9). These are for the gauge lighting.

Using the RED 'T' tap provided, connect to the dashboard illumination circuit. Crimp the insulated male blade terminal to the RED fused wire provided. Connect to the 'T' tap. Using the BLACK wire and terminals provided, connect the other terminal to a good chassis ground.

**NOTE: If you do not wish to have the ability to dim the gauge light with the vehicles dimmer switch, then attach the 'T' tap and inline fuse to a 12 volt + ignition power source**



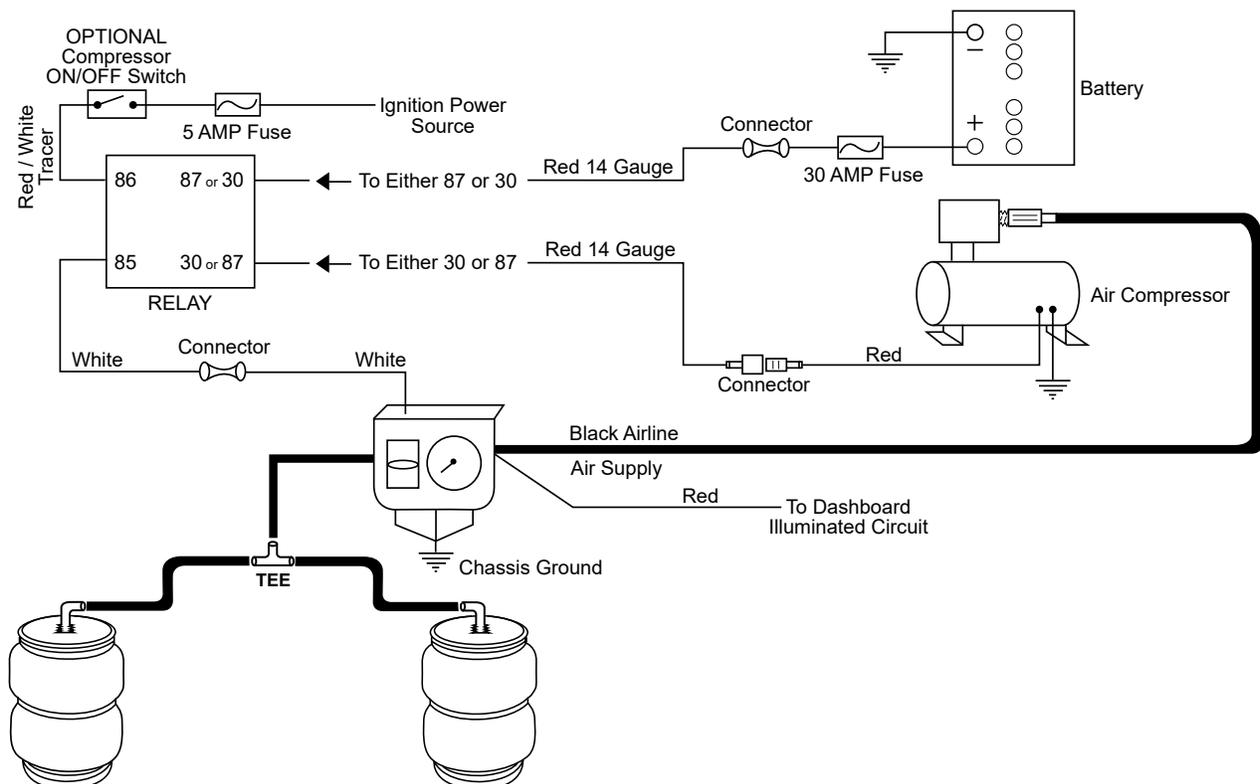
9

- 10 At the rear of the paddle switch are two white wires. These make a connection when the paddle switch is moved to the upper (inflate) position. This is an optional circuit to enable the air compressor when inflating the air springs.

One wire needs to be connected to a good chassis ground. The remaining WHITE wire of the paddle switch is connected to the WHITE wire of the relay harness previously installed in Step 9.



10



**11 GAUGE PLUMBING**

**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.*

Locate the 1/8" NPT female push to connect fitting provided. This fitting is installed using thread sealant onto the port on the rear of the air pressure gauge (see Figure 11 for reference).

Cut one 2" and one 5" piece of RED nylon airline. It must be cut off squarely with a sharp razor knife to ensure a leak free connection within the push to connect fitting.

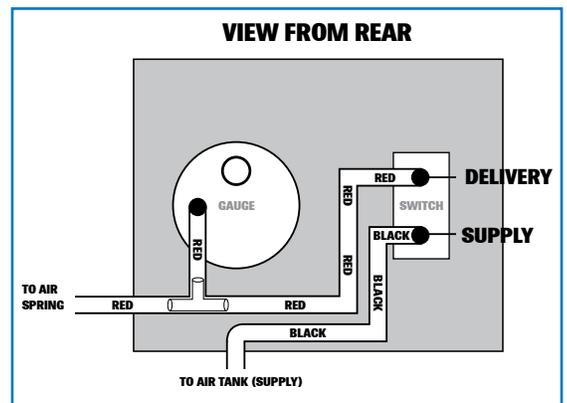
Insert one end of the 2" piece of RED airline into the gauge fitting and push it in until it stops.

Connect one end of the 5" piece of RED airline to the paddle switch port marked "DEL".

Using the barbed TEE fitting provided, connect the two RED airlines together and connect the remaining length of RED airline to the unused leg of the barbed TEE.



11



12

**12** Connect the length of BLACK airline provided to the paddle switch port marked "SUP".

Route the BLACK and RED nylon airlines through the firewall boot into the engine compartment. The BLACK airline connects to the air compressor discharge port. Ensure the end of the airline is cut squarely with a sharp razor knife.

The RED airline is connected to both air springs using the second barbed TEE fitting provided.

Secure both airlines with the tie straps provided.

**13** Using the fasteners provided, secure the control panel to the chosen mounting location.

Secure the wiring and airlines with the tie straps provided.

## 14 TESTING THE SYSTEM

Turn the ignition ON, move the paddle switch to the UP position. The needle of the gauge should show air pressure being delivered to the air springs raising the vehicle. Then move the paddle switch to the lower position. The needle of the gauge should show the air pressure dropping and lowering the vehicle. Check the system for air leaks, fill the air springs to a predetermined value, then periodically check the gauge for any air pressure loss. Repeat as necessary.

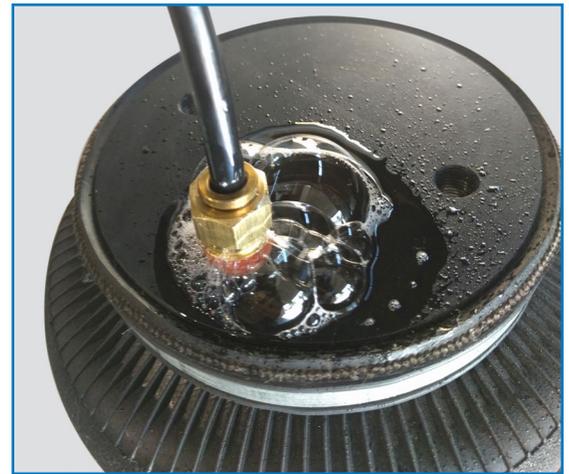
## 15 CHECK SYSTEM FOR LEAKS

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 15).

**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

15

## 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.**

