

||| PACBRAKE®

Installation MANUAL



HP10124

INDEPENDENT AIR SPRING DASH ACTIVATION SWITCH

Thank you and congratulations on the purchase of a Pacbrake independent air spring dash activation switch. This kit was designed to interface in-cab adjustment of air springs with a pre-existing air system on the vehicle.

NOTE: The existing vehicle air system must be capable of 100 PSI.

Before starting, ensure the kit includes all the items shown in the photo.

HP10124



CAUTION: This kit includes “push to connect” airline fittings. They require the end of the airline to be round, square and cleanly cut to ensure the internal seal will not leak air. The airline must only be cut with a sharp knife or hose cutter, using scissors or wire cutters will distort the airline causing the connection to leak air past the o-ring seal.

INSTALLATION

- 1 Install the air spring assemblies (if not previously installed).**
Follow the installation instructions provided in your air spring kit. Use the red and green nylon hoses provided in the control system kit to connect the air springs to the control panel as they are longer than the black nylon hoses provided in the kit. Connect the green nylon hose to the right side air spring and the red nylon hose to the left side air spring. Route these airlines to the control panel mounting location.



1

- 2 Source air from the tank.**
Install the tee fitting and straight push-to-connect fitting provided into the top of the air tank. Cut the end of the black nylon hose off squarely with a sharp razor knife, then insert it into the push-to-connect fitting until it clicks and stops.

Route this nylon hose into the cab through the firewall boot with the red and green air spring to gauge panel mounting location.

Once complete, secure all 3 nylon hoses away from heat sources and moving components with the tie-straps provided.



2

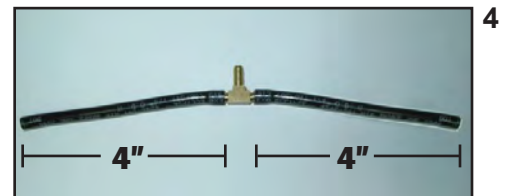
COMPONENT MOUNTING

- 3 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 two $\frac{3}{16}$ " diameter holes to secure the bracket. Do not install the bracket until the electrical and airlines are connected.



GAUGE PLUMBING

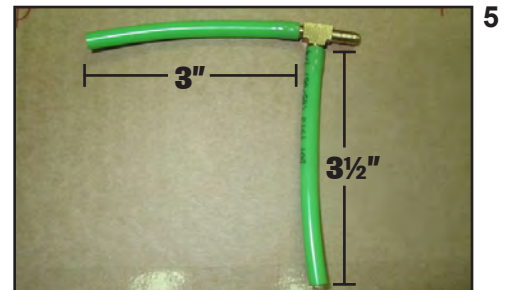
- 4 Locate the two $\frac{1}{8}$ " NPT female push-to-connect fittings provided. These fittings are installed on the back of the dual needle gauge. Use thread sealant or Teflon tape on the threads to prevent leaks. When tightening these fittings, hold the jam nut on the back of the gauge fitting to provide support.



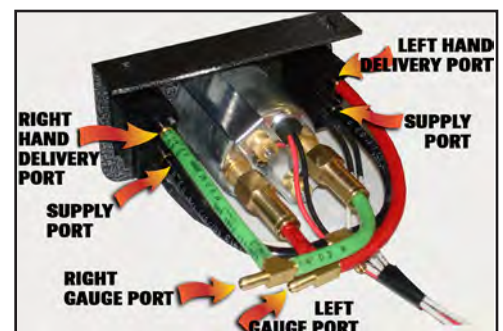
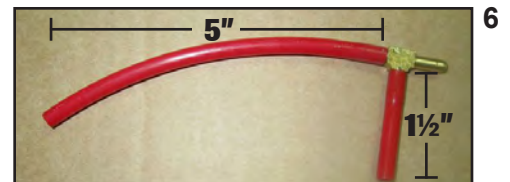
Cut two 4" pieces of black airline. Insert one end of each piece onto the supplied push-on "T" fitting (shown in fig 4).

Connect the black hose and "T" fitting (as shown in fig 4) push each end of the hose onto the SUPPLY port on both switches (as shown in fig 10). This is the air supply line.

- 5 Cut two pieces of green airline provided. One to 3" and one to 3½". Connect the two airlines to the bared "T" fitting provided, as shown in the the photo (fig 5). Connect the 3½" long airline onto the R/H switch DELIVERY port. Insert the 3" long airline into the left air gauge supply fitting.



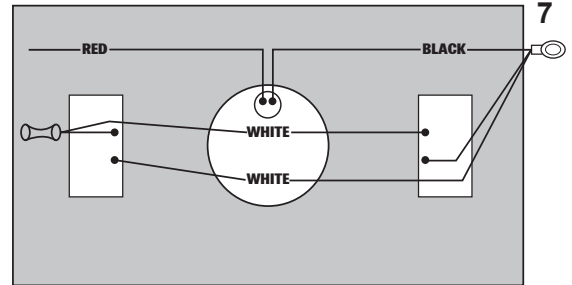
- 6 Cut two pieces of red airline provided. One to 5" and the other to 1½". Connect the two airlines to the barbed "T" fitting provided as shown in the photo (fig 6). Connect the 5" long airline onto the L/H switch DELIVERY port. Insert the 1½" long airline into the right air gauge supply fitting.



ELECTRICAL CONNECTIONS

7 At the rear of the control panel, locate the single red wire. It is for the air pressure gauge lighting. Using the red “T” tap provided, connect this wire to the dashboard illumination circuit. Crimp the insulated male blade terminal to the red wire and connect it to the red “T” tap.

NOTE: If you do not wish to have the ability to dim the gauge lights with the vehicles dimmer switch, then attach the red wire from the gauge to a 12 VDC fused ignition source.



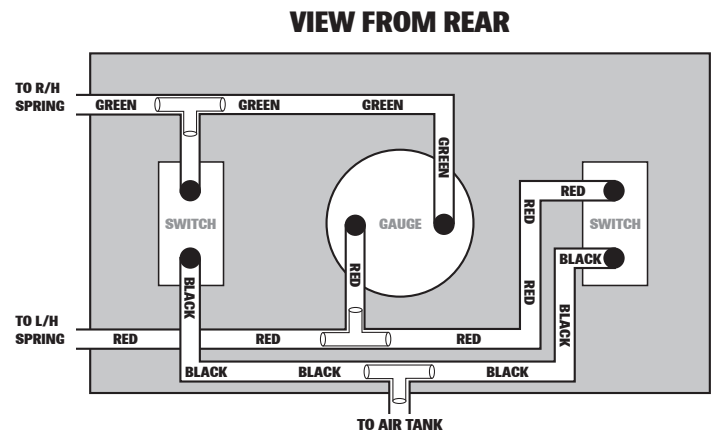
8 At the rear of the control panel, locate the three wire harness (one black and two white wires) with the eye terminal. Attach this eye terminal to a good chassis ground. It is not necessary to connect the two white wires with the blue butt connector for this installation.

PLUMBING CONNECTIONS

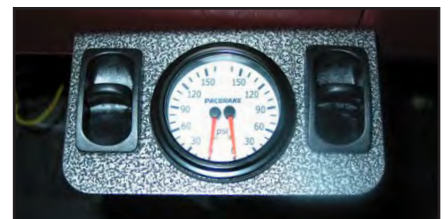
9 The remaining lengths of red and green nylon airline are to connect the control panel to the air springs. The airline colour identifies which air spring they will be connected to. Red is for the left and Green is for the right air spring. Starting at the control panel, route two lengths of nylon airline through the firewall boot and along the frame rail to the correct air spring. Cut the ends of the airlines off squarely with a sharp knife, then push firmly all the way into the fitting at the air spring. Secure the nylon airline with tie-straps provided.

10 At the rear of the control panel, locate the three “T” fittings with different coloured airline. These colours pertain to where they get connected. Black is the supply line from the air tank to the control panel. Green is the inflate/deflate line to the right side air spring and red is the inflate/deflate line to the left side air spring.

See diagram for airline routing.



11 Using the fasteners provided, secure the control panel to the chosen mounting location. Secure the wiring and airlines with the tie-straps provided.



TESTING THE SYSTEM

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

DO NOT EXCEED 100 PSI TO THE AIR SPRINGS AT ANY TIME

AIR LEAK CHECK

Inflate both the air springs to 90 PSI. Use a dish soap and water mixture on all airline connections to detect air leaks. Repair as necessary and retest. Inflate the air springs to a predetermined value and then the following day recheck the pressure. If one or both of the air springs have lost pressure, a leak is present. The leak must be repaired and then retest the vehicle until no leaks exist.



OPERATING YOUR VEHICLE WITH PACBRAKE AIR SUSPENSION

Air springs have minimum and maximum pressure requirements. Never operate your vehicle with less than 10 PSI in the air spring and never inflate the air springs over 100 PSI. 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 vehicles stock ride height with a load. Do not use the air springs as a means to lift the vehicle with no load. A rough ride will result.

SERVICING YOUR VEHICLE WITH PACBRAKE 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.