

FULLY AUTOMATIC RIDE HEIGHT CONTROL KIT

K71-632-01

2306



Installation Instructions

Congratulations on your purchase of a new Automatic Ride Height Control Kit. This kit is designed to provide automatic height control of your Airflex™ equipped trailer.

Please take a few minutes to read through the instructions, identify the components, and learn how to properly install your automatic Ride Height Control Kit.

Be sure to take all applicable safety precautions during the installation of this kit. The illustrations in this manual show the right, or passenger side of the trailer.

Note: Prior to the installation of this kit you must install the Airflex™ Suspension on the trailer, and if it will be used, the optional Air Compressor Accessory Kit.

Types of Fittings

Compression Fitting

To connect the tubing to the fitting, first remove the nut and ferrule from the fitting. Slide the nut over the tubing, followed by the ferrule. If the fitting does not have a built-in tube support, insert one from your kit into the end of the tubing. Push the tubing as far as possible into the fitting and tighten the nut on the fitting (see Figure "B"). Fittings with brass ferrules should be finger-tight plus 3½ turns.

Should a leak be detected, do not overtighten. Instead, loosen the nut and make sure that the ferrule and sleeve are properly seated. Then reinstall, making sure the tubing is pushed as far into the fitting as possible.

Push-to-Connect Fitting

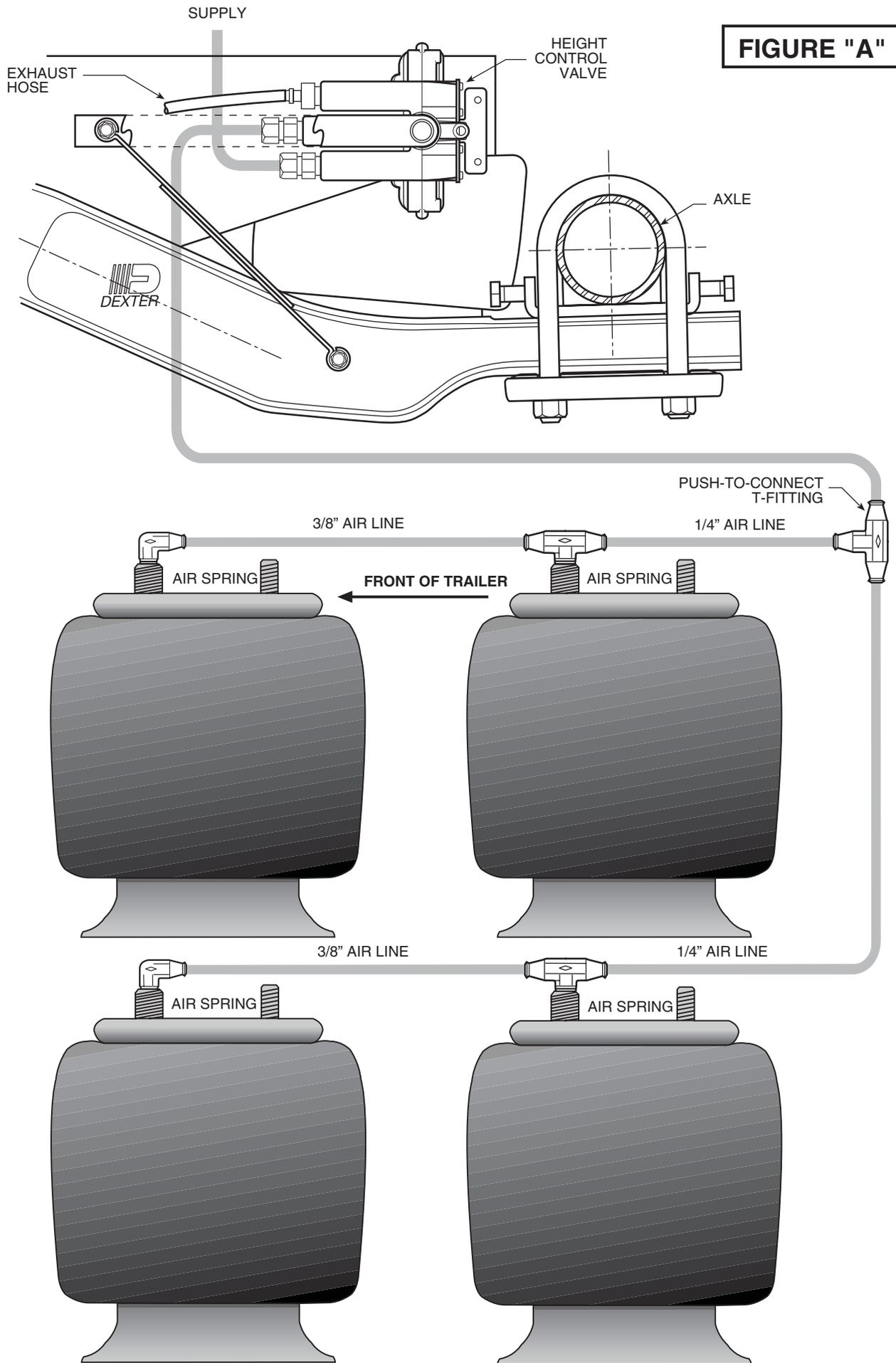
Your Airflex™ springs have push-to-connect fittings. Cut the air line tubing square, then push the air line tubing into the fitting as far as possible.

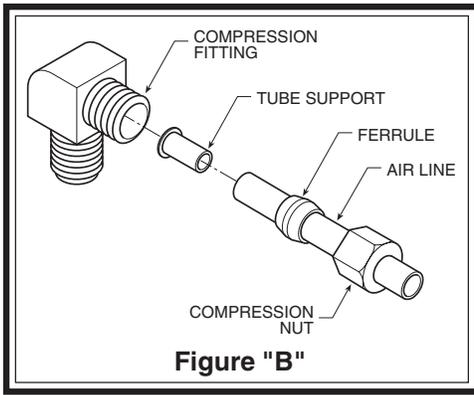
If for any reason the tubing must be removed, first release the air pressure from the air system, then push the collar toward the body of the fitting. Now the tubing can easily be removed. To reassemble, make sure the tubing is cut square and push the tubing back into the fitting.

PARTS LIST

Description	Part No.	Quantity
Height Control Valve	034-289-00	1
18' Air Line Tubing, ¼"	034-286-00	1
8' Air Line Tubing, ⅜"	034-288-00	2
Push-to-Connect Tee Fitting	034-290-00	1
Push-to-Connect Elbow Fitting	034-291-00	2
Push-to-Connect Branch Tee Fitting	034-292-00	2
Linkage Pack (links, bolts,nuts, washers)	034-287-00	1
Spacer	033-085-00	1
Bolt, ¼-20 x 3¼"	007-265-00	1
Nylon Tie Wrap*	n/a	6

*Obtain replacement parts locally.





Step 1 - Prepare the Air System

The air tank and compressor kit should have been previously installed on the trailer.

Ensure that the air tank contains no pressure. Disconnect the compressor from the 12 volt power source and release any air from the system. If an external inflation valve is present, remove the valve core or use a tire pressure gauge to release air pressure from the system.

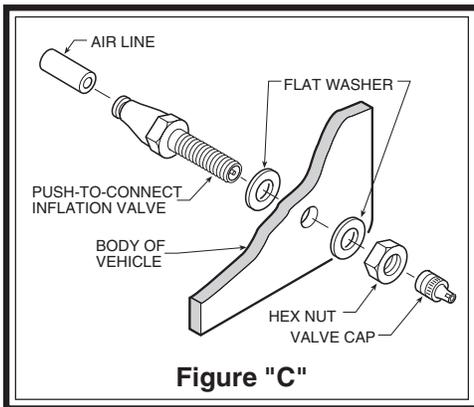
This installation assumes that there is no load in the vehicle.

Step 2 - Mount the Ride Height Control Valve

Review Figure "A" to become familiar with the installation of the height control valve. The height control valve must be in a location that will allow the link-arm to reach the trailing arm and attach without any interference. The valve-arm on the height control valve must have enough clearance to operate freely; the link-arm will be oriented diagonally. *Dexter Axle recommends the installation of the Ride Height Control Valve on the rear axle of multi-axle trailers and in a location that is easily accessible.*

Mount the height control valve on the inside of the inner suspension support mounting bracket with the provided holes. Use the 1/4" x 1" hex bolts, 1/4" washers, and 1/4" hex nuts to secure the valve to the suspension bracket (see Figure "D").

If a hole is not present in the forged trailing arm as shown in Figure "E", drill it.



Step 3 - Attach the Link-Arm

Ensure that the arm on the height control valve is aligned horizontally. Measure the distance from the hole in the trailing arm to the mounting hole on the arm of the height control valve. Fasten the individual link-arms together so that they span the measured distance with the provided #10 hex bolts, #10 hex nuts and #10 washers (see Figure "E").

Fasten the link-arm to the height control valve with a 1/4" x 1 1/4" hex bolt, two 1/4" washers, and a 1/4" hex nut (see Figure "E"). Follow this same procedure to attach the link-arm to the trailing arm using the spacer and the 3 1/4" bolt.

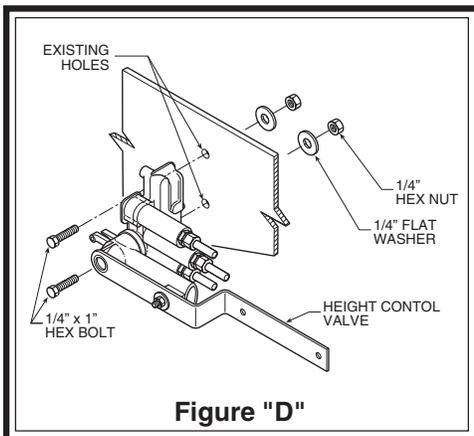
Step 4 - Route the Air Line Tubing

Verify there is no air pressure in the air system (refer back to Step 1). Measure a length of air line tubing that will reach from the air tank to the height control valve and cut the ends square. Insert one end of the air line tubing into the fitting on the air tank. Route the tubing to avoid sharp and abrasive edges. Secure the tubing to the trailer with the nylon ties provided. Insert the other end of the tubing into the bottom port of the height control valve (see Figure "A"). Secure the tubing to the height control valve with the compression fittings (see Figure "B"). Insert a short length of tubing into the middle port on the height control valve. On the other end of the tubing, install a push-to-connect Tee fitting.

Cut two lengths of air line tubing that will reach from the Tee fitting to each air spring. Insert one end of each piece of air line into the Tee fitting. Route each piece of tubing to an air spring to avoid sharp edges, heat, and abrasive surfaces. Secure the tubing to the trailer with the provided nylon ties. *Do not fold or kink the tubing as it may buckle.* Insert the other end of the tubing into the air fitting on the air spring (see Figure "A").

If installing the optional manual inflation valve (see Figure "C") and/or the air release (dump) valve (kit K71-632-03), do so now.

Install the exhaust fitting and the air line tubing into the top port on the height control valve (see Figure "A"). The tubing should be approximately 6" in length and will allow the air springs to exhaust air when the load is removed from the trailer.



Step 5 - Test and Adjust the System

Reattach the power source to the compressor. The compressor will run for a short period of time to build pressure in the air tank and air springs. The pressure switch will automatically turn the compressor off once the system reaches 120 psi. Check the fittings for leaks with an applied solution of soap and water. If a leak is detected at a tubing connection, release the air pressure then remove the tubing from the fitting (refer to the section on Types of Fittings). Verify the tube is cut square and is pushed completely into the fitting. If a leak is detected where the brass fitting screws into the spring, first release the air pressure, remove the tubing, then screw the brass fitting into the air spring one additional turn or until the leak stops. Reinstall the tubing and reinflate the air springs. Recheck for leaks.

When the trailer is loaded, the Ride Height Control Valve Kit will detect the reduction in ride height. The air tank and compressor will inflate your air springs until the proper ride height is achieved. When the load is removed, the air springs will automatically deflate to achieve normal ride height. If your trailer does not achieve the desired ride height, the length of the link-arm may be increased or decreased.

To adjust the Ride Height control valve, measure clearance between the bottom of the frame and the top of the U-bolt on the rear axle. The ride height will need to be adjusted so that clearance is 3.50". If the measurement is over 3.50", add weight to the trailer or use a ratchet strap placed around the upper and lower air spring mount to ratchet the suspension down to the correct clearance. If the measurement is smaller than 3.50", connect the red wire from the pressure switch to the power supply and allow the compressor to fill the air tank and shut off. Now raise the ride height valve arm towards the trailer floor. After a 3 to 5 second delay the valve should start to fill the air springs. When clearance from the frame to the top of the U-bolt gets to 3.50", rotate the valve arm back to the horizontal position which will turn off the air supply to the springs. With the ride height valve arm still in the horizontal position, connect the lower and upper link arms. If the link-arms are too long they can be cut to size. Installation is now complete.

Should the compressor fail for any reason, air can be introduced into the system using the optional manual inflation valve installed with the compressor kit (see Figure "A"). Attach an air chuck to the manual inflation valve and the air system will operate using the air introduced into the system.

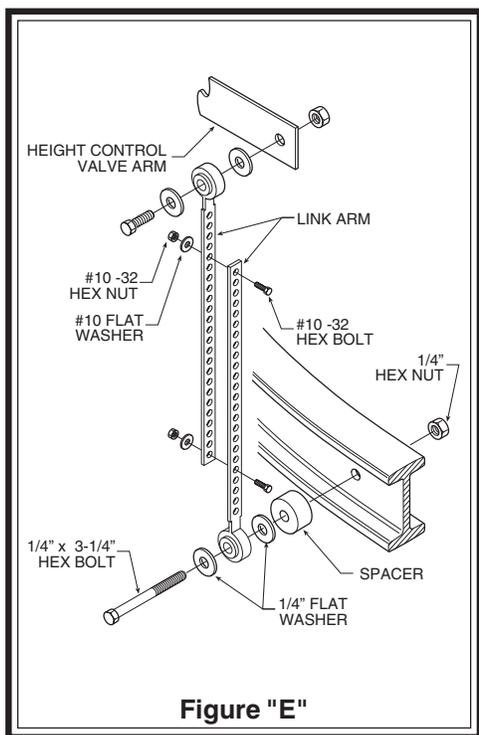


Figure "E"