These instructions will allow you to install an airLift on the AVL 40. It is best to install this system after your loom has been fully assembled.

Air Requirements

In order for this air-activated system to work, you will, of course, need to have compressed air available at the loom. If you do not have an air compressor, one can be purchased through AVL Looms.

This system has been designed to operate from a line pressure between 60 p.s.i. (pounds per square inch) and 100 p.s.i. The pressure within the system can be adjusted depending upon how many harnesses you will be lifting within a given weave. This will be discussed in greater detail later.

Tools

- Phillips screwdriver
- Standard screwdriver

Contents

Remove all of the contents from the shipping box and check to see that you have the following items:

- air cylinder/mount plate assembly
- Filter/Regulator (FR) and mounting bracket
- foot pedal with tubing attached
- weight
- hardware package

Installing Parts

Install the new components on your loom in the following order:

1.) Use the four 3/8" x 4" hex bolts (with two washers and a hex nut per bolt) from you hardware package to mount the Air Cylinder/Mount Plate to the bottom of the Lift Support Assembly (Figure 50).

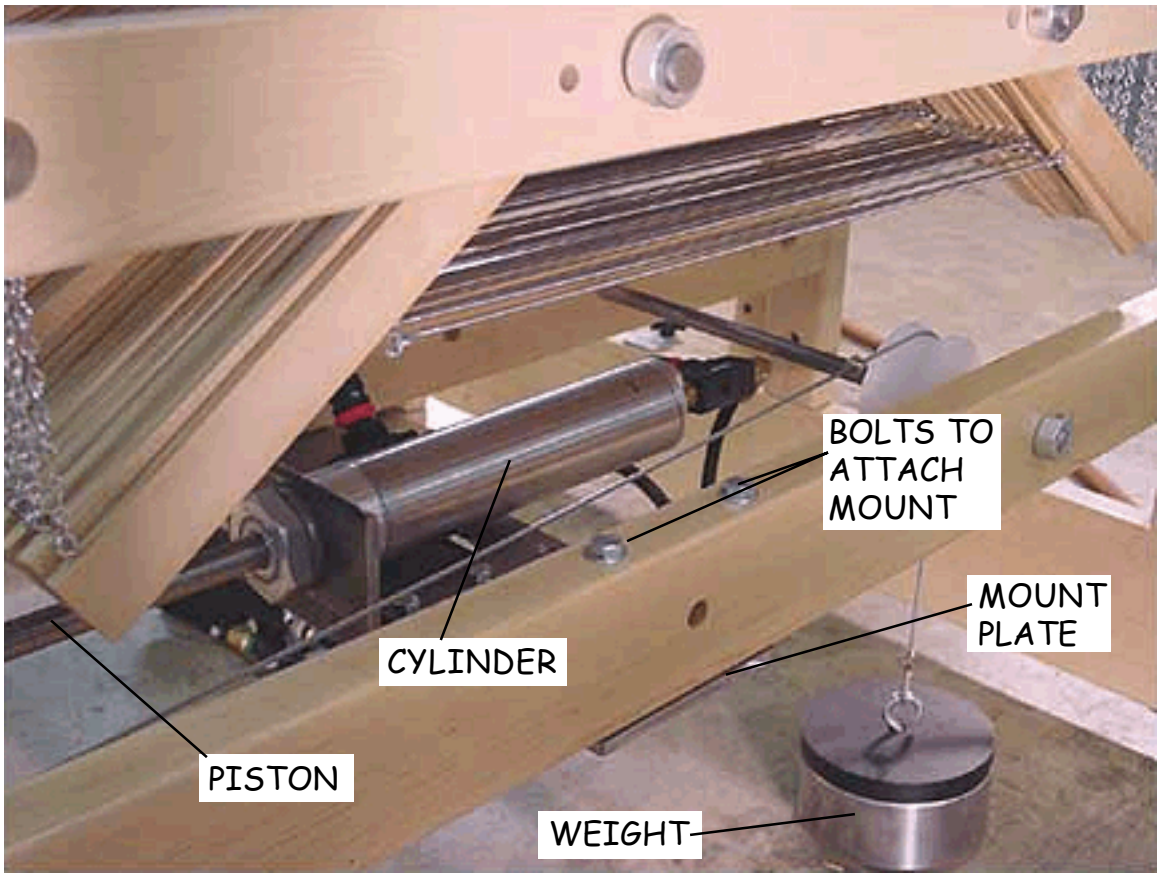

FIGURE 50: CYLINDER OF AIRLIFT UNDER HARNESSES OF AVL 40 (view from back)

2.) Use the remaining screws to install the Filter/Regulator (FR) to the left rear side support as shown Figures 51 and 52.

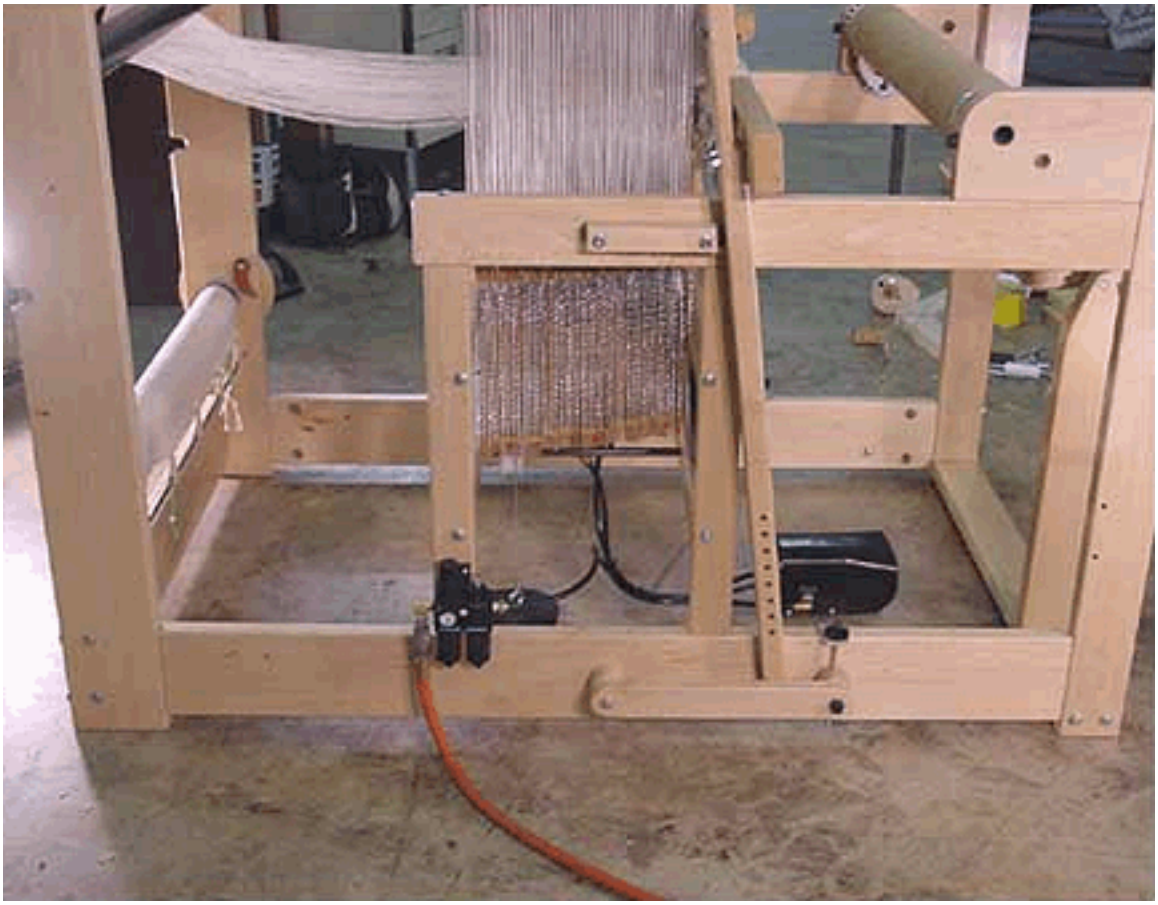

FIGURE 51: AVL 40 (left side) WITH AIRLIFT

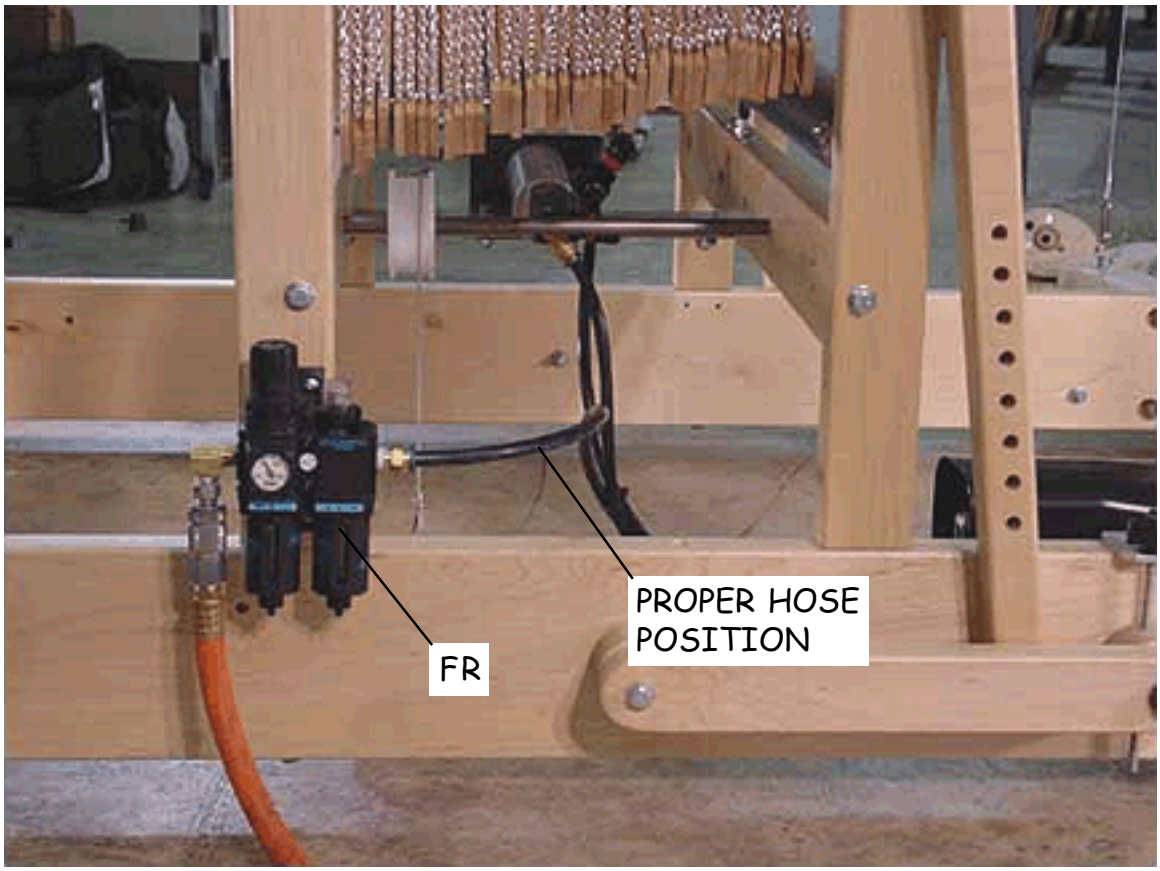

FIGURE 52: FR OF AIRLIFT ON AVL 40 (left side)

3.) Place the foot pedal under the loom near where your feet will be when you're sitting on the bench.

4.) Guide the cable dangling from the right side of the dobby down to the right pulley on the axle. Continue guiding the cable below the axle pulley, then over to the far left pulley on Lift Support Assembly. The cable should go above the metal Mount Plate and over the pulley. Clip the weight to the end of the cable and set the weight on the floor. Make sure that the hose traveling from the FR to the foot pedal bends away from the weight and toward the front of the loom (Figure 52).

The line of the cable from the dobby to the pulley to the second pulley to the weight should be straight. The cable should not be at a diagonal from any point to point. Therefore, you can slide the pulley into position on the axle and secure it into place by tightening a stop collar on either side of the pulley.

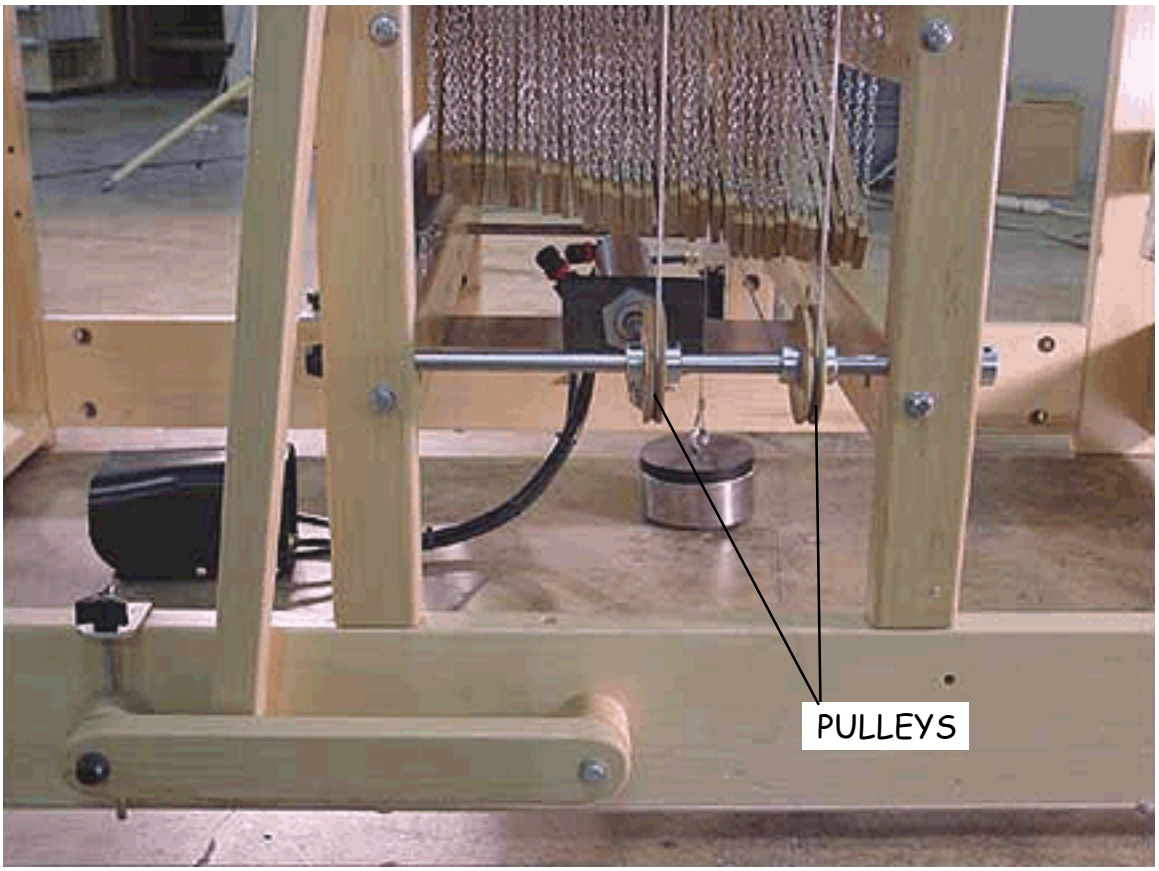

FIGURE 53: PULLEY POSITION FOR DOBBY CABLES

5.) Guide the cable dangling from the center of the dobby down to the left pulley on the axle. Clip the end of the cable to the rod end of the cylinder. The line of the cable from the dobby to the pulley should be straight. The cable should not be at a diagonal from any point to point (see Figure 53). Therefore, you can slide the pulley into position on the axle and secure it into place by tightening a stop collar on either side of the pulley. You can also adjust the tension of the cable by turning the turnbuckle on the cable.

6.) The air lines have been connected to their fittings by pushing them into place. They will not come out. In fact, the harder you pull, the harder it will hold. Try it!

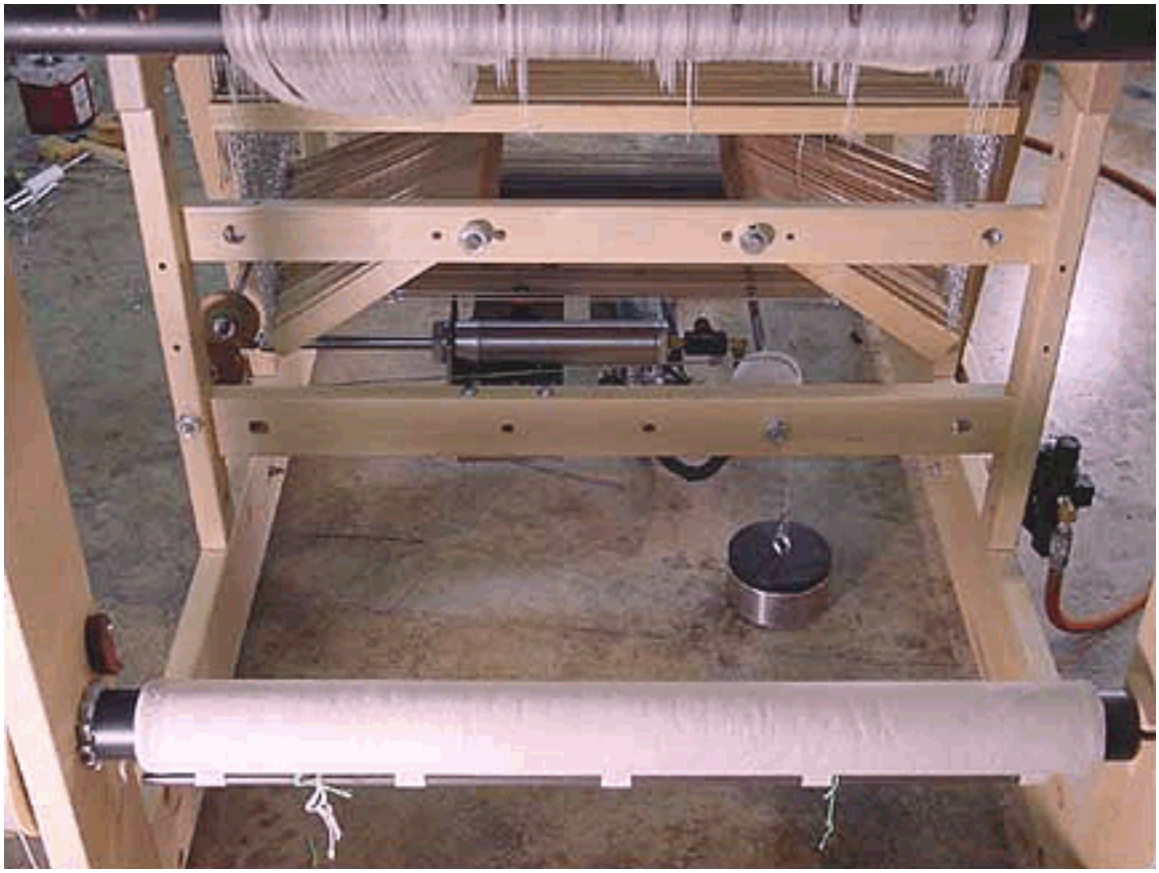

FIGURE 54: AIRLIFT ON AVL 40 (back view)

7.) Your loom is now ready to be hooked up to a compressed air line. This line will be connected to the FR unit. You need to purchase a fitting to hook up to your air line. For convenience, we suggest that you use a "quick disconnect" type fitting which can easily be released from the loom without any tools.

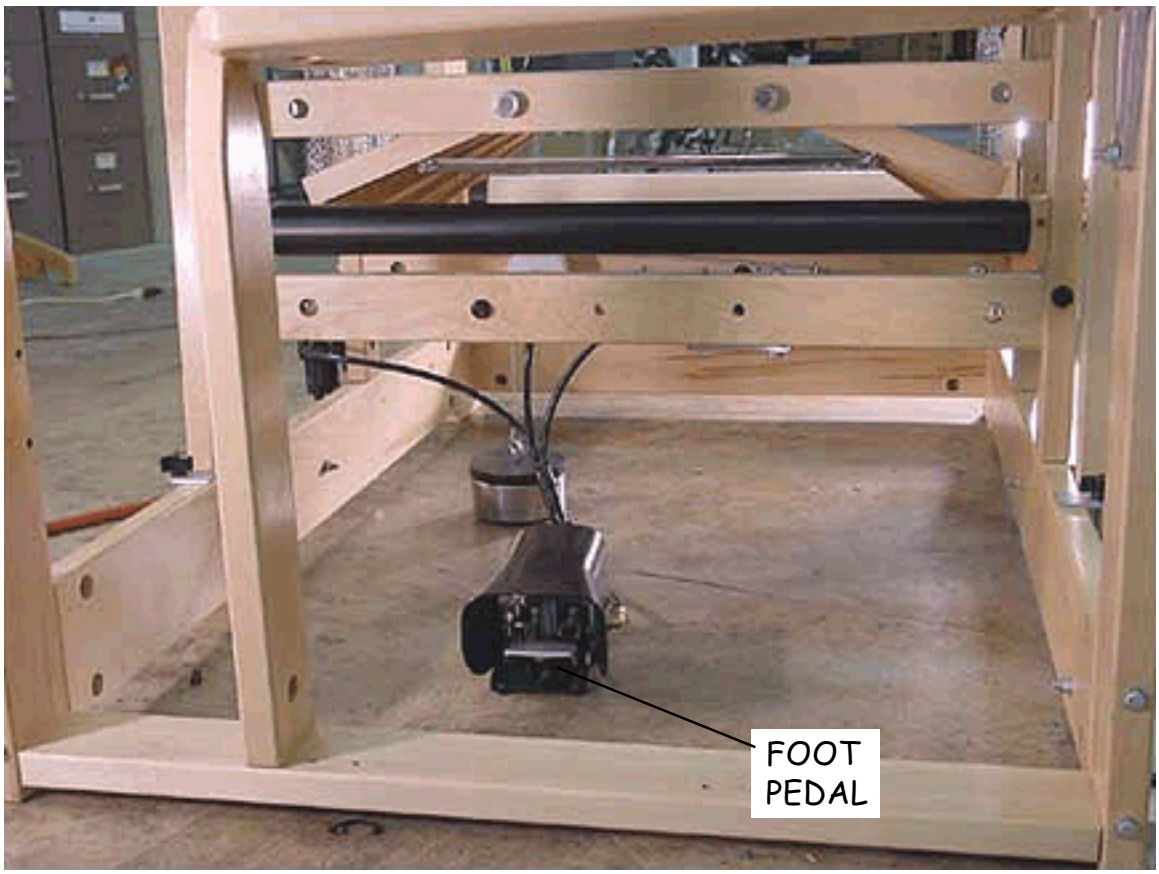

FIGURE 55: FOOT PEDAL OF AIRLIFT ON AVL 40 (front view)

8.) Once the loom has been hooked up to an air line, set the regulator to a pressure range that will operate the cylinder to your satisfaction. Start at 40 to 50 p.s.i. You may wish to change this adjustment when you change peg plans as you will find that a higher pressure is needed when you are lifting more harnesses. The cylinder can now be activated by depressing the Foot Valve. The speed of how quickly the harnesses lift (your weaving speed) can be further altered by adjusting the Flow Control Valves (as shown if Figure 56) The left valve adjusts inward motion and the right valve adjusts outwards motion of the rod in the cylinder.

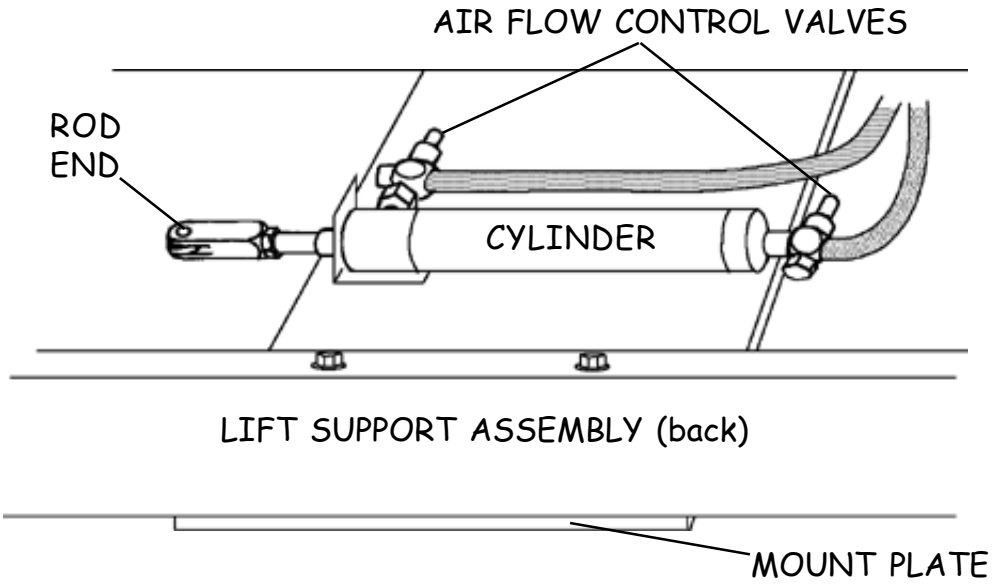

FIGURE 56

This completes the installation instructions for the airLift. For further information on the FR, refer the enclosed manufacturer's instructions (also see Figure 57).

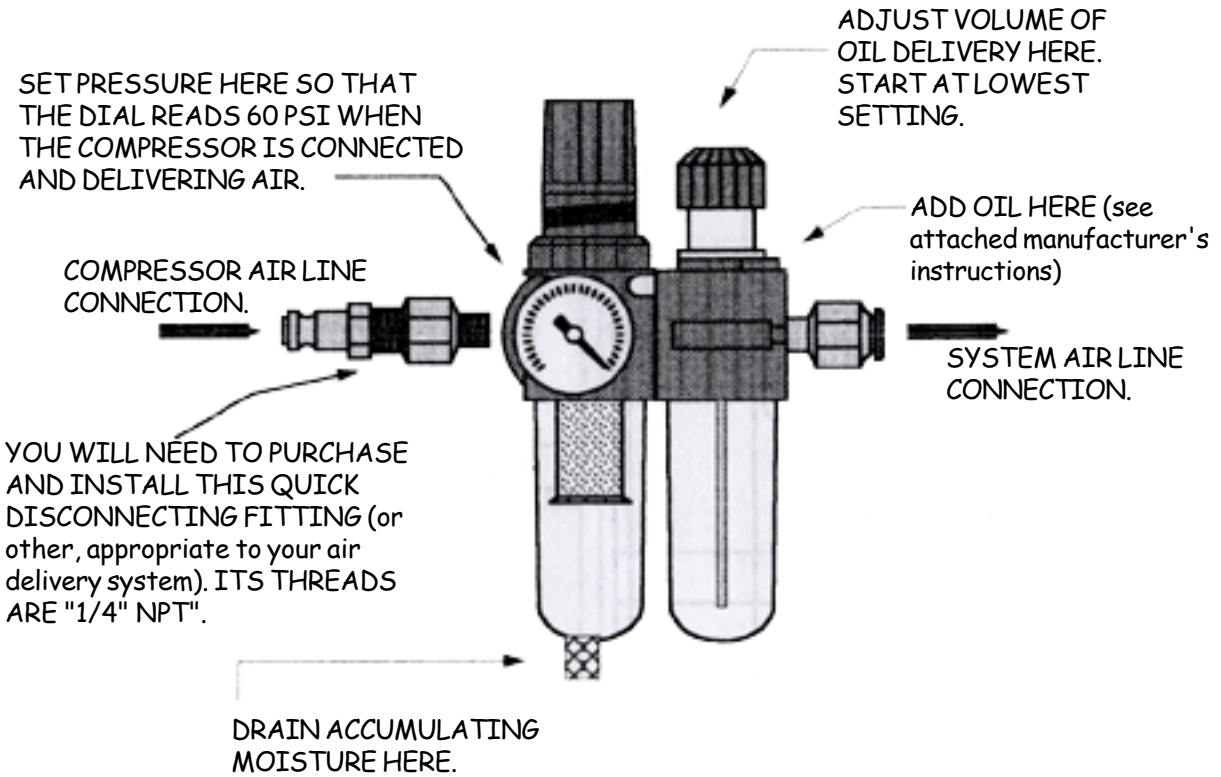

FIGURE 57