

**Suspension  
Controls**

**LINK**<sup>®</sup>

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# INSTALLATION INSTRUCTIONS

## 1500 SERIES Height Control Valve

NON-DUMP CONFIGURATION  
(H01500)



**IMPORTANT:** IT IS IMPORTANT THAT THE ENTIRE INSTALLATION INSTRUCTIONS BE READ THOROUGHLY BEFORE PROCEEDING WITH THE INSTALLATION.






## 1. INTRODUCTION

Thank you for choosing a Link Suspension Control. We want to help you get the best results from this height control valve and to operate it safely. This instruction contains information to assist in the installation of the Height Control Valve. This instruction is intended solely for use with this product.

All information in this instruction is based on the latest information available at the time of printing. Link Manufacturing reserves the right to change its products or manuals at any time without notice.

Damaged components should be returned to Link with a pre-arranged Returned Materials Authorization (RMA) number through the Customer Service Department. The damaged component may then be replaced if in compliance with warranty conditions.

## 2. SAFETY SYMBOLS, TORQUE SYMBOL, and NOTES

	<b>DANGER</b> indicates a hazardous situation which if not avoided, will result in death or serious injury.
	<b>WARNING</b> indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	<b>CAUTION</b> indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.
	<b>NOTICE</b> indicates a potentially hazardous situation which, if not avoided, may result in property damage.
	<b>TORQUE</b> indicates named fasteners are to be tightened to a specified torque value.
<b>NOTE:</b>	A Note provides information or suggestions that help you correctly perform a task.

## 3. SAFE WORKING PRACTICES

### ▲ CAUTION

When handling parts, wear appropriate gloves, eye-glasses, ear protection, and other safety equipment.

### ▲ CAUTION

Proper tightening of fasteners is important to the performance and safety of the suspension. Follow all torque specifications throughout the instructions.

## 4. SAFE WORKING PRACTICES

### ▲ CAUTION

### 4.1

Air lines are pressurized and may blow debris, USE EYE PROTECTION.

## 5. DETERMINE MOUNTING AND VALVE ORIENTATION

### 5.1

Hold 1500 Series Valve next to height control valve to be replaced and determine mounting orientation of the 1500 Series Valve for best hose routings.

### 5.2

**NOTE:** The supply port must be horizontal or pointing up.

### 5.3

Determine location of the 2 mounting studs and proper lever length.

## 6. DETERMINE FILL AND EXHAUST ORIENTATION

### 6.1

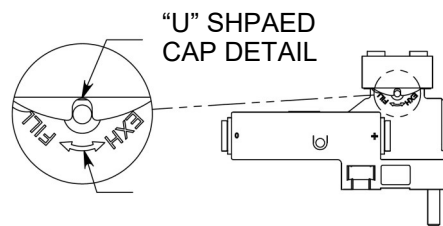
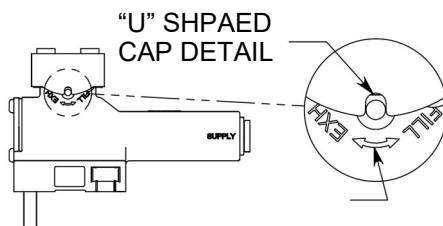
Each side of the 1500 Series Valve has arrows pointing toward the fill and exhaust directions.

### 6.2

Align the U-shaped cap detail with the fill/exhaust arrows that correspond with the fill and exhaust movements on the lever. Rotating the cap 180° will result in the opposite fill and exhaust lever movement.

Figure 1.

WHEN CAP DETAIL IS ON THIS SIDE OF THE VALVE THE FILL/ EXHAUST WILL BE IN THIS ORIENTATION



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## 7. ASSEMBLE 1500 SERIES VALVE

### 7.1

Install the correct lever onto the valve. The lever can be mounted in one of four directions.

### 7.2

Tighten screw to 50-60 in-lbs.

### 7.3

Install mounting studs into the T-slots. Use a hammer to tap square head into the T-slot if needed.

## 8. INSTALL 1500 SERIES HCV

### 8.1

Remove old height control valve and note the hoses and ports.

### 8.2

Attach the 1500 Series Valve to mounting bracket and tighten nuts to 60 – 80 in lbs.

### 8.3

Examine the end of each tube prior to insertion and trim the end as necessary to get a clean, 90° cut.

### 8.4

Attach hoses into the proper ports by pushing the tubes into the push-to-connect (PTC) fittings. Use the plug and 90° stem fitting included in this kit if necessary. Make sure tubing does not interfere with lever rotation.

## 9. 1500 SERIES VALVE TEST PROCEDURE

### 9.1

**NOTE:** 90 PSI minimum supply and pilot pressure

### 9.2

Rotate lever in the fill direction and fill air springs.

### 9.3

Rotate lever in the exhaust direction and exhaust air.

**NOTE:** if fill and exhaust modes are backwards, exhaust air from suspension, loosen lever screw enough to separate lever from valve. Rotate lever 180°, reseal in cross pattern of valve and retighten lever screw. Rotate lever 180° to original position. Retest fill and exhaust modes.

## 10. RIDE HEIGHT ADJUSTMENT

### 10.1

Manually air up the valve to ride height. Check the vehicle manufacturer's ride height recommendations for correct height.

### 10.2

Reconnect linkage to end of lever.

### 10.3

Measure ride height.

### 10.4

Readjust ride height by loosening the lever screw enough to rotate the bottom to fill or exhaust the air until the correct ride height is attained.

### 10.5

Tighten the lever screw to 50 – 60 in lbs.

### 10.6

Double check the ride height measurement by dumping the suspension and allowing the 1500 Series Valve to air up to ride height (Disconnect and reconnect the linkage).

### 10.6

Remeasure ride height and adjust if necessary.

## 11. HCV INSTALLATION NOTES

### 11.1

Optimal lever angle for full up or down travel is between 20° and 45°

### 11.2

Mount HCV with supply port horizontal or pointing up

## 12. HCV TEST PROCEDURE

### 12.1

1. With a minimum of 90 psi at the supply port, rotate the lever up (as indicated on the side of the valve) 30° to 45°. Air should flow into the air springs.
2. Rotate the lever to the neutral position. Air flow should stop.
3. Rotate the lever down 30° to 45°. Air should exhaust from the air springs.
4. Rotate the lever to the neutral position. Air flow should stop.
5. If a valve fails to flow air or shut off as specified, replace with a new one.

## 13. REASONS TO REPLACE THE HCV

1. HCV did not pass the test procedure
2. Air leaks from the HCV
3. HCV is damaged

# 14. TROUBLESHOOTING AND DIAGRAMS

PROBLEM	POSSIBLE CAUSE
Air springs flat	Obstructed air line Insufficient air pressure to suspension Defective Pressure Protection Valve Defective HCV (see test procedure) Air leak in system
Air springs raise to full height but do not exhaust	Obstructed air line Supply line installed in suspension port Defective HCV (see test procedure)
Air springs deflate when parked	Leak in air system (check with soapy water) Defective HCV (see test procedure)
Suspension will not maintain proper height	Obstructed air line Ride height out of adjustment Defective HCV (see test procedure)
Hard ride	Ride height out of adjustment (readjust per vehicle service manual)
Ride height unequal side to side for (2) valve system	Reset ride height on each side

Figure 2.

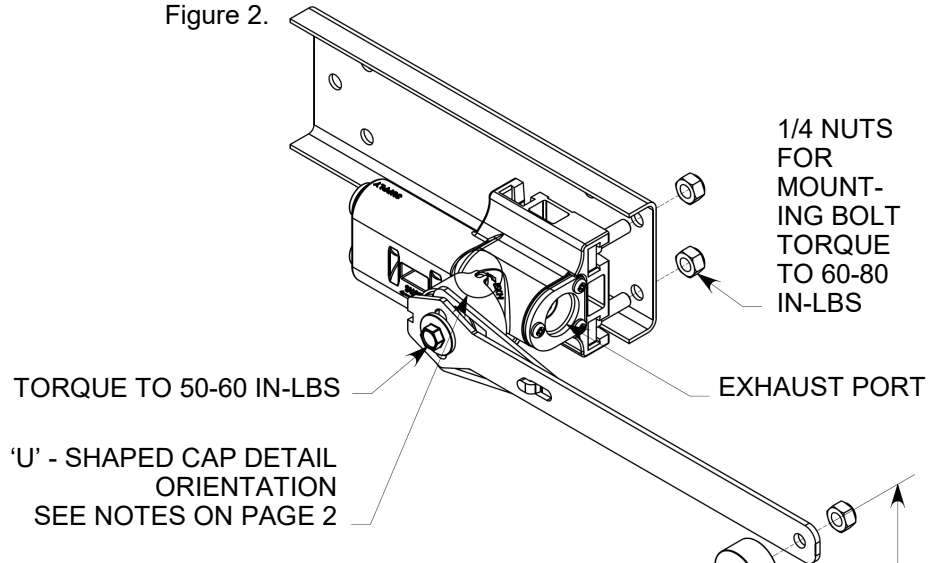


Figure 3. PLUMBING DIAGRAM

