Suspension Controls

INSTALLATION INSTRUCTIONS

1501 SERIES
Height Control Valve

VOLVO CHASSIS HCV
(H01501HVS)

Link Mfg. Ltd.
223 15th St. N.E.
Sioux Center, IA USA
51250-2120
www.linkmfg.com

QUESTIONS?
CALL CUSTOMER SERVICE
1-800-222-6283

H16687
01/19/2022

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

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

3. SAFE WORKING PRACTICES

⚠CAUTION

When handling parts, wear appropriate gloves, eyeglasses, 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. PARTS BAG

ITEM NO	DESCRIPTION	QTY
1	LOCK NUT	2
2	3/8” T FITTING	2
3	1/4” UNION	1
4	1/4” TUBING—18” LONG	1

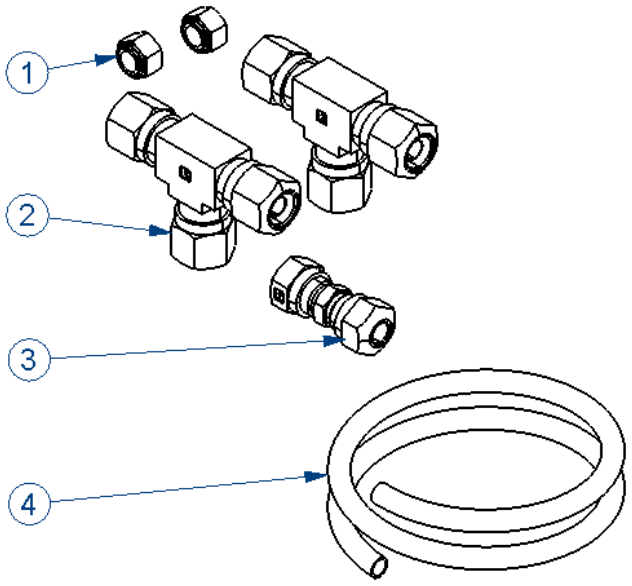

Figure 1.

6. REMOVAL OF HALDEX/EXISTING VALVE

6.1
Dump the rear suspension via cab controls
- Be careful as the supply line will still be under pressure
- There will also be air pressure to the dump pilot port

6.2
Disconnect air lines from existing Leveling Valve
- The Volvo application uses a 4 port suspension valve (existing), you will be replacing this with a 2 port suspension Link valve and t-fittings (see diagram on opposite side)
- Disconnect air lines form existing valve:
  - Cut tubing at 90° angle as close to fitting as possible
  - Label which line is used for supply, dump pilot port (1/4" tube), and suspension lines (3/8")

6.3
Remove Upper linkage bolt from existing lever
- Do not disconnect the lower linkage bolts, leave as is
- You will use the existing linkage
- Move to the other side or let drop – we will use this upper attachment later.

6.4
Remove the nuts on the existing valve / bracket interface and remove valve from bracket.
- DO NOT remove the bracket
- Existing bracket must remain in place and will be utilized

7. INSTALLATION OF LINK H01501VS/ H01501VHS VALVE:

7.1
Mount the valve with no pre-assembled bolts

7.2
Put the bolts into the existing mounting holes in bracket

7.3
Lever should already be installed on the valve

7.4
Bolt the valve to the bracket using the nylock nuts provided and torque to 60-80 inch lbs

8. AIR LINE CONNECTIONS

8.1
See diagram on page 5 for reference

8.2
Supply Line
a. There should be enough tubing left to connect to the supply port (labeled "Supply") in line without adding tubing
   i. Clean up any cut tubing and make sure that they are as straight and flat as possible
      1. To avoid pinching use tube cutter only
      2. Do not use wire cutters, scissors…etc. This can create pinch points and cause leaks.
   ii. Push tube into the fitting until it bottoms out.

8.3
Dump port (1/4")
1. There is a length of ¼" tubing provided in the kit, you will have to use this to install the Dump line to the valve
   (See blue line in Link Valve picture)
2. Install one end of the coupler fittings to the factory dump port line ¼". Install the Link provided tubing to the other side of the coupler. Route the tubing (staying clear of lever travel) to the valve and install to dump port (leveled Dump Port)
   a. Clean up any cut tubing and make sure they are as straight and flat as possible
      i. To avoid pinching use tube cutter only
      ii. Do not use Wire cutters, scissors…etc. This can create pinch points and cause leaks.
   b. Push tube into the fitting until it bottoms out.
   c. Keep tubing as long as possible to aid in faster and easier installation

8.4
Suspension Lines
1. The suspension lines for the Volvo chassis are not plumbed in line with Link replacement valve and will need to be modified slightly
2. Locate the 2 rear suspension lines,
   a. Trim approximately 8" from one line
   b. Connect the rear suspension lines into opposite ends of one of the provided Tee fittings
   c. Use the 8" cut piece to connect the tee to the suspension port on the valve that is nearest the pilot port
3. Locate the 2 front suspension lines,
   a. Trim approximately 8" from one line
   b. Connect the front suspension line into opposite ends of one of the provided Tee fittings
   c. Use the 8" cut piece to connect the tee to the suspension port on the valve that is nearest the supply port.
5. Assemble OE linkage: Connect OE Linkage to Valve Lever using existing mounting bold
6. Air Up the suspension: Validate ride height per Volvo recommendations

8. INSTALLATION DIAGRAMS

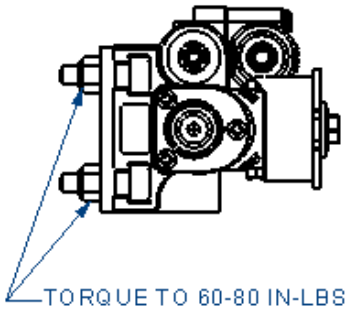

Figure 2.

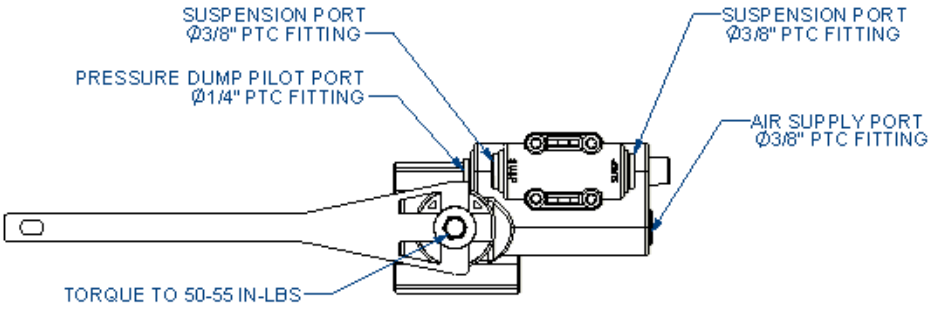

Figure 3.

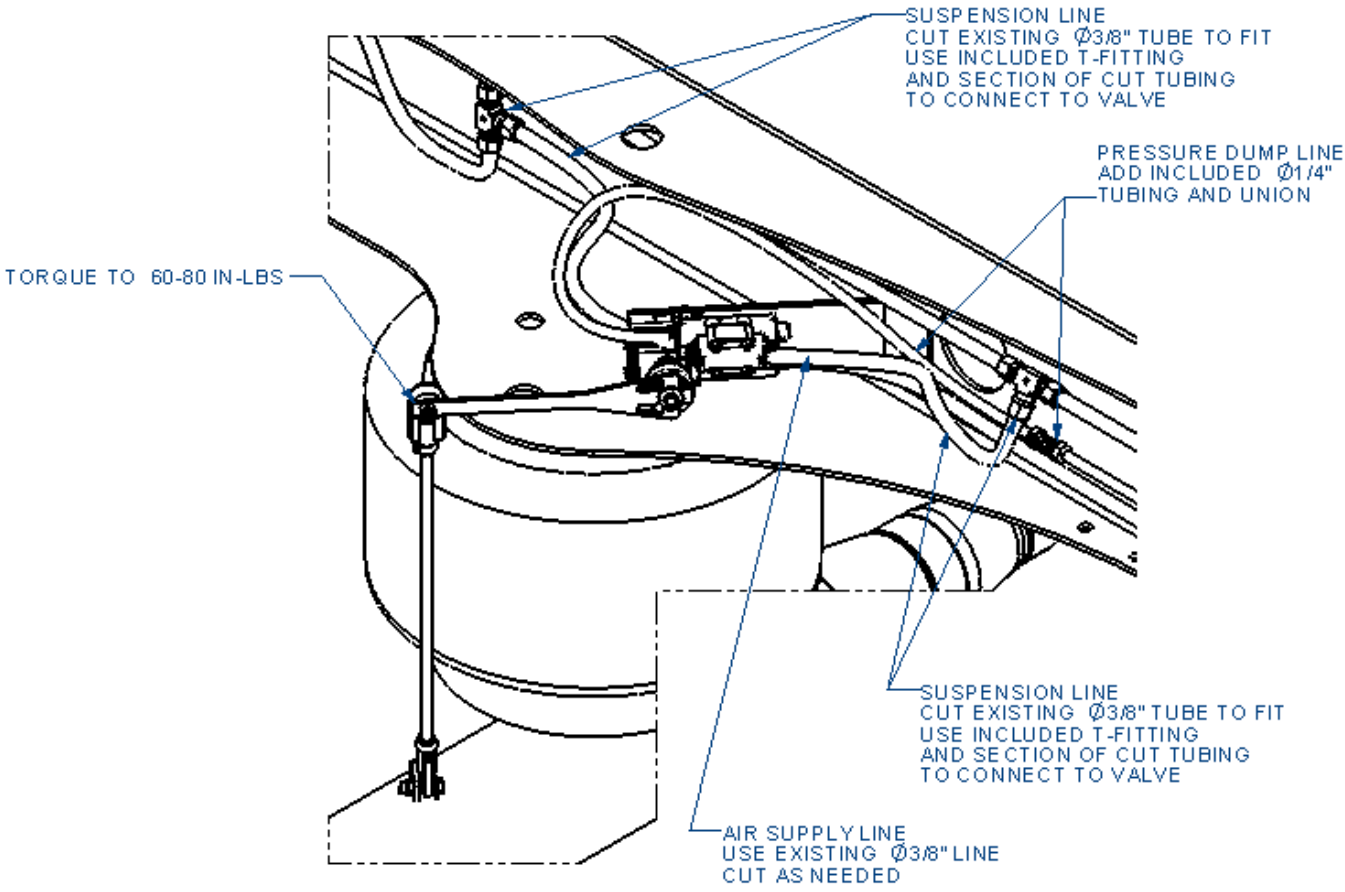

Figure 4.

LINK MANUFACTURING, LTD.
223 15TH ST. NE, SIOUX CENTER, IA 51250
1-800-222-6283 www.linkmfg.com