

INSTALLATION GUIDE



**ULTRARIDE®
BARKSDALE VALVE KIT
(Link Part No. 800M0197)**



PROUDLY INSTALLED BY :

COMPANY : _____

INSTALLER SIGNATURE : _____

DATE : _____

INSTALLATION INSTRUCTIONS INDEX

1.0	INTRODUCTION	Pg. 3
2.0	AIR LINE ROUTINGS	Pg. 4
3.0	PARTS LIST.....	Pg. 6
4.0	VALVE ORIENTATION CHART	Pg. 7
5.0	VALVE LINKAGE APPLICATION CHART.....	Pg. 8

APPENDIX A

FOR FORD F450/550 (8M000035)	Pg. 9
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APPENDIX B

FOR GM 4500/5500 4X2 (8M000070)	
FOR GM 4500 4X2 LOWER (8M000075)	
FOR GM 5500 15K 4X2 (8M000078)	
FOR GM 5500 19K 4X2 (8M000080)	
FOR GM 4500/5500 4X4 (8M000085)	
FOR GM 4500/5500 4X2 (8M000087)	Pg. 10

1.INTRODUCTION

IMPORTANT! It is important that the entire installation instructions be read thoroughly before proceeding with valve installation. It is important that the proper Appendix be referenced in connection with the original Link® UltraRide® application.

IMPORTANT! It is important that Lever assembly and orientation to the Height Control Valve be followed to ensure correct operation of Link® UltraRide® suspension.

IMPORTANT! Installation may require a modification of the Valve Linkage included in the kit to fit the intended application.


INTENDED USES

- This kit is intended for use in adding a second Height Control Valve to a Link® UltraRide® suspension which contains only a single Valve. Review the section showing the Air line routing using a 2 valve system to ensure proper connection of the air lines to the Air Control System.
- It can also be used in retrofitting an older UltraRide® suspensions that use a different Height Control Valve.

PRODUCT INSTALLER RESPONSIBILITIES

- Installer is responsible for installing the product in accordance with Link Mfg. specifications and installation instructions.
- Installer is responsible for providing proper vehicle components and attachments as well as required or necessary clearance for suspension components, axles, wheels, tires, and other vehicle components to ensure a safe and sound installation and operation.
- Installer is responsible for advising the owner of proper use, service and maintenance required by the product and for supplying maintenance and other instruction as readily available from Link Mfg.

INSTALLATION NOTES:

-  Proper tightening of fasteners is required for proper operation. Need for proper Torque value is indicated by wrench symbol and values will be found in Torque table below. Failure to maintain proper torque may cause component failure resulting in accident or injury.
- **Thread sealant** should be used on any and all fittings that do not have thread sealant pre-applied.

TORQUE TABLE		
LOCATION	FASTENER	TORQUE
VALVE MOUNTING	1/4 UNC NUTS	35-45 IN-LBS
RETROFITTING VALVE BRACKET	1/4 UNC NUTS	35-45 IN-LBS
PIVOT BALL	1/4 UNC NUTS	35-45 IN-LBS
LINKAGE	1/4 UNC NUTS	HAND TIGHT + 30° TO 60°
PIPE FITTINGS	1/4" NPT Fittings	HAND TIGHT + 270° TO 450°

2. AIR LINE ROUTING SCHEMATICS

IMPORTANT ! When connecting the airline during an installation the following procedure should be used to ensure proper airline function.

1. Be sure fitting and airline are free of debris and airline is cut squarely.
2. Insert tubing into fitting until it bottoms out.
3. Pull on tubing to ensure airline is properly attached.
4. Push in on tubing again to ensure full insertion.
5. Pull on tubing a second time to ensure proper attachment

IMPORTANT ! Thread sealant should be used on fittings without pre-applied thread sealant. Failure to properly apply thread sealant will result in air system leaks and reduced system performance and/or failure.

Figure 2-1 shows the layout of the Barksdale valve, Air Control system Solenoid, Fittings & Airline connections for a single HCV system.

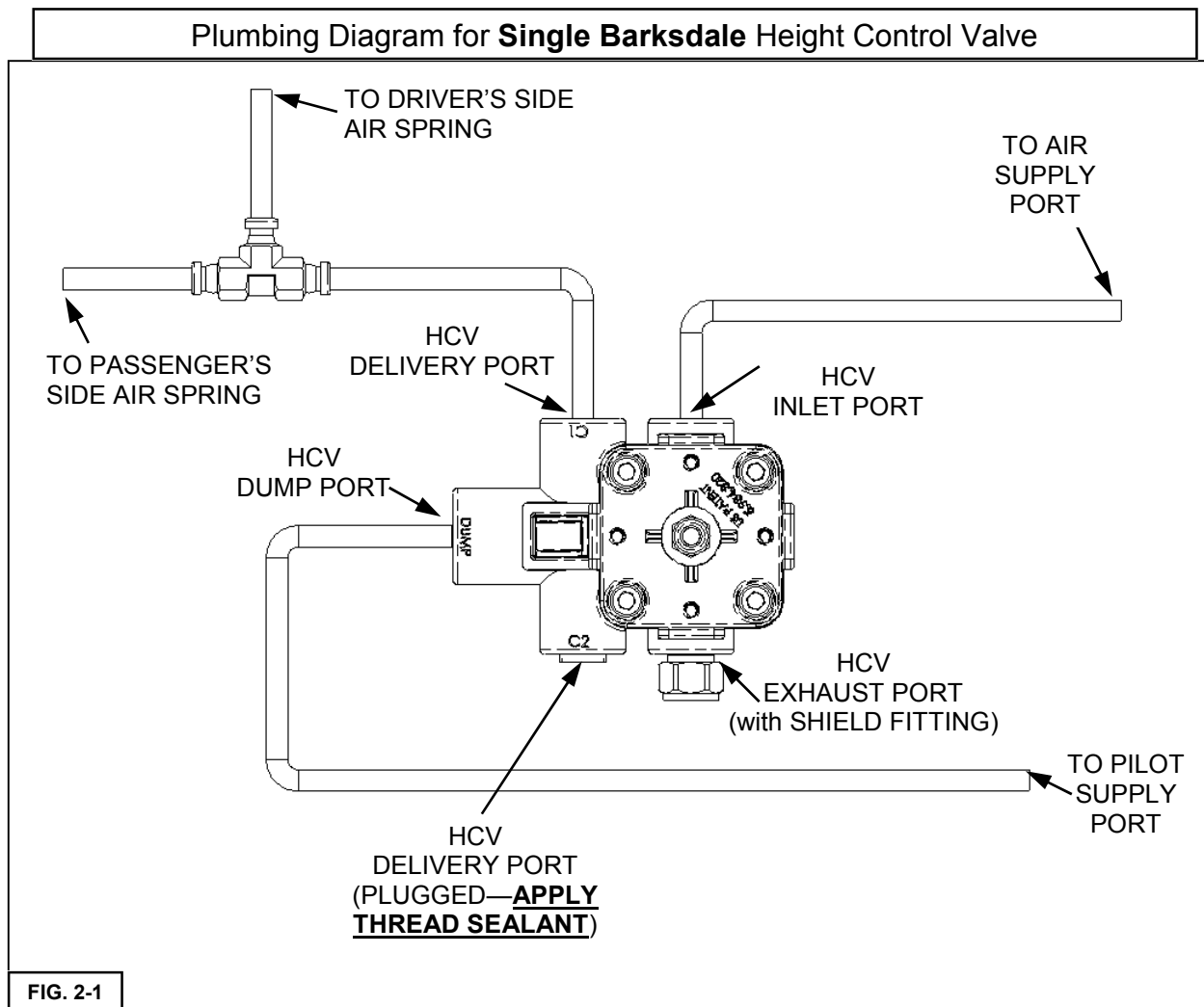
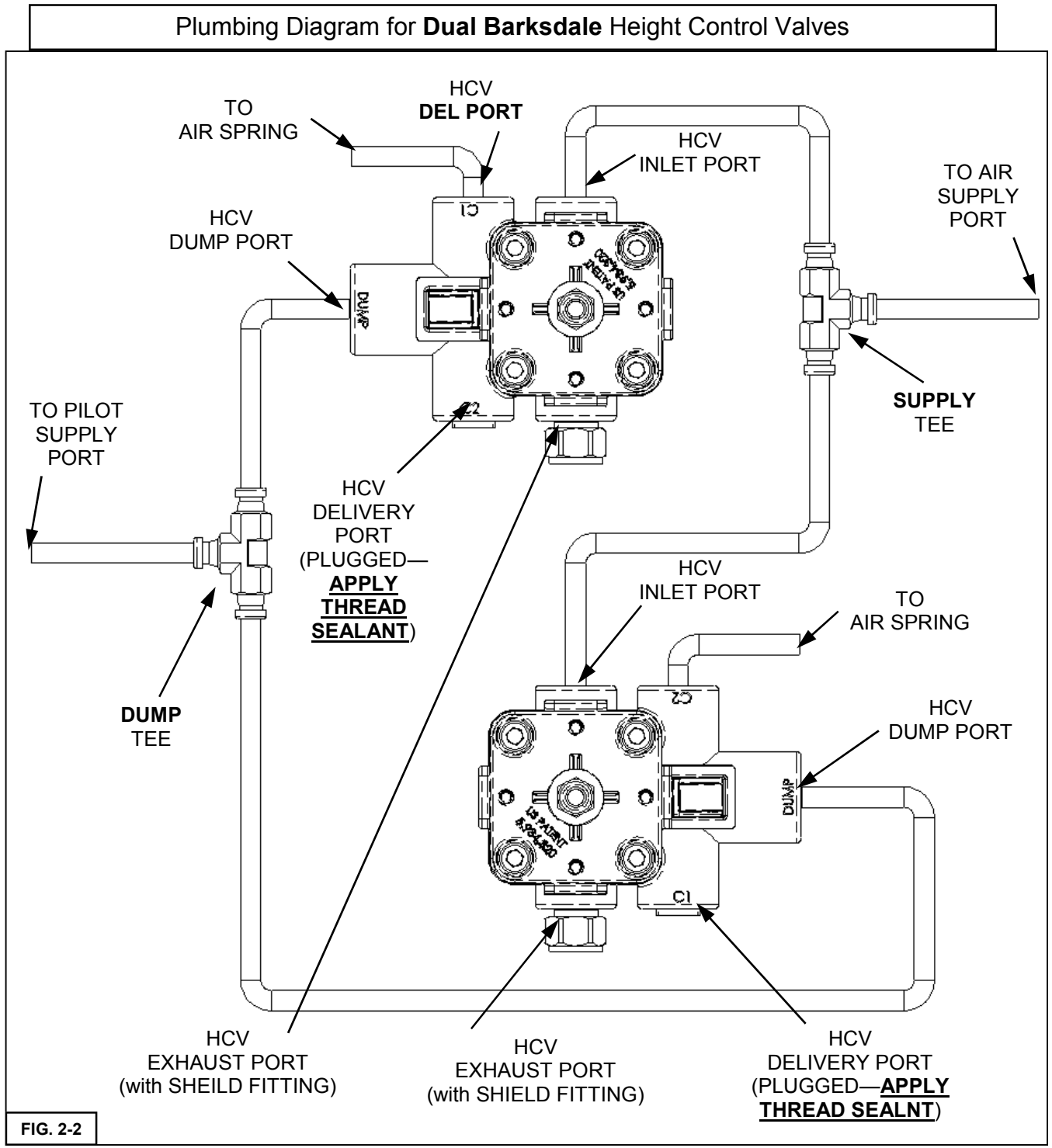
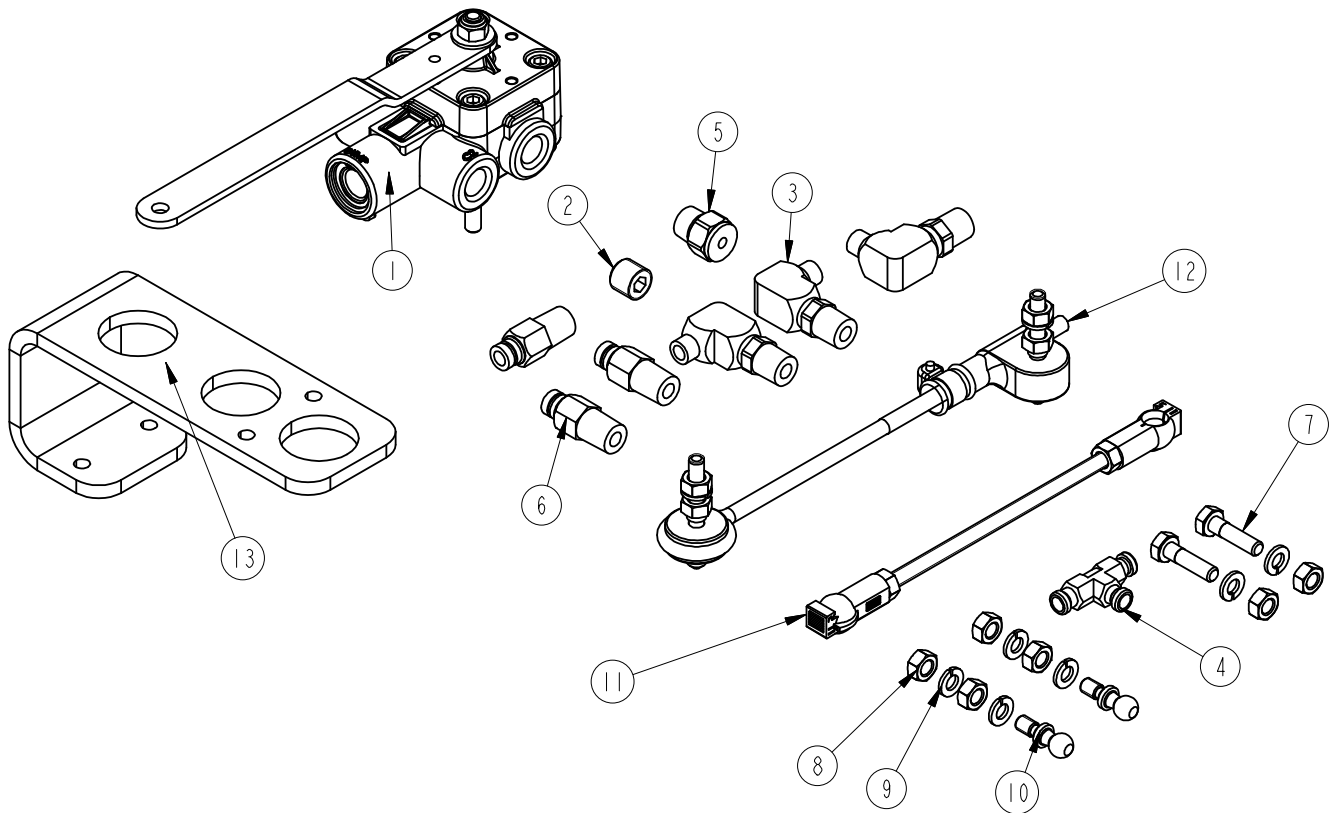


Figure 2-2 shows the layout of 2 Barksdale valves, Fittings & Airline connections for a Dual HCV system.



3. UltraRide® - 800M0197

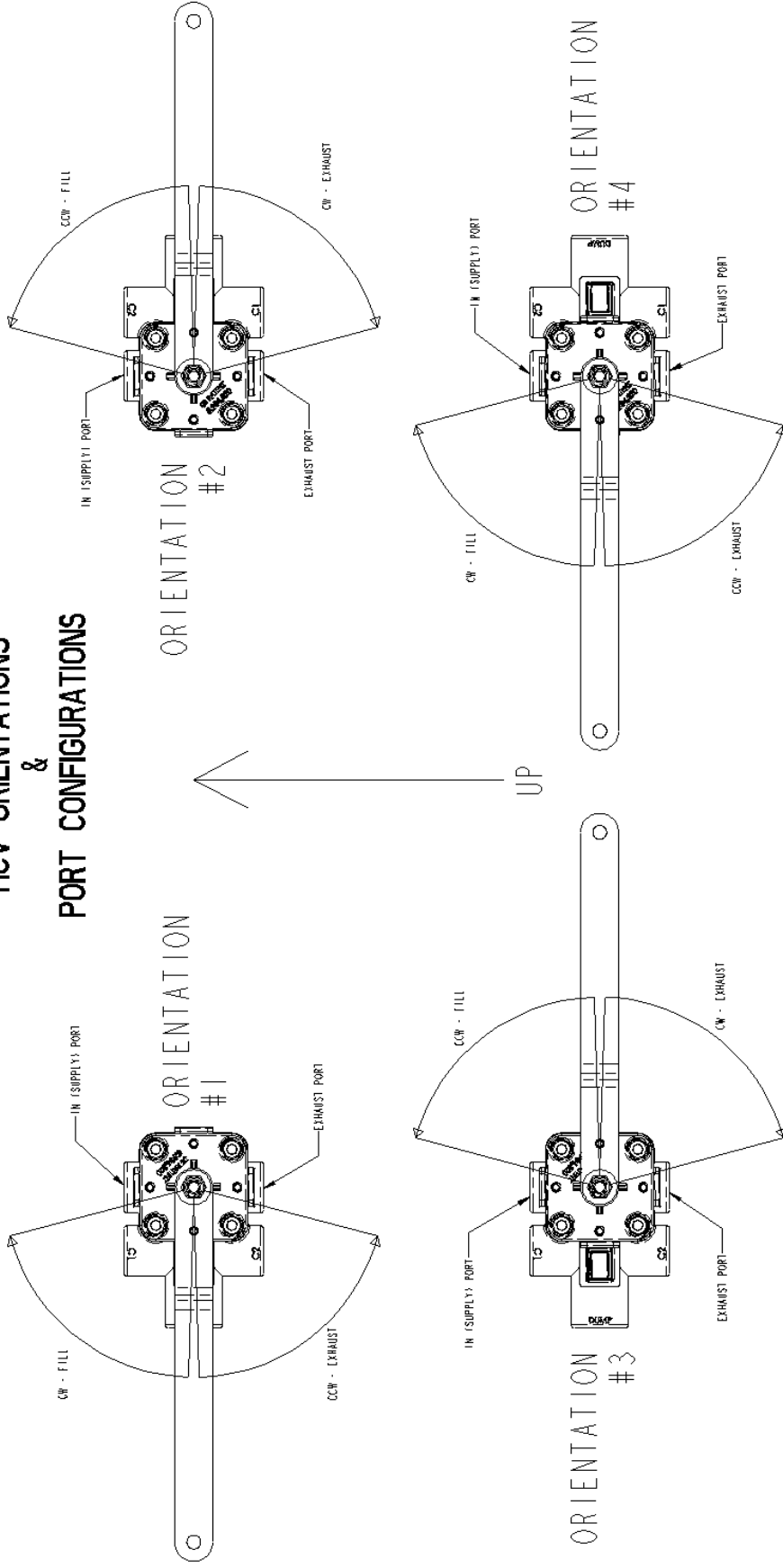
BARKSDALE VALVE KIT PARTS LIST



ITEM	PART NO.	DESCRIPTION	QTY
1	13010064	VALVE-CONTROL, HEIGHT	1
-	13020090	AIRLINE-NYLON, .250 O.D., BULK	20 FT
2	13022077	AIR FTG / PLUG (1/4 NPT)	1
3	13025091	ELBOW, 1/4 TB 1/4 M-NPT, PUSH-IN DOT	3
4	13025563	UNION TEE, 1/4 TB, PUSH-IN	1
5	13029974	MUFFLER-EXHAUST, 1/4 M-NPT	1
6	13025046	CONNECTOR, 1/4 TB 1/4 M-NPT	3
7	14080808	1/4 X 1 UNC HEX CAP SCR (GR 5)	2
8	14700800	1/4 UNC HEX NUT (GR B)	6
9	14850800	1/4 LOCK WASHER	6
10	15000224	BALL-PIVOT, THREADED	2
11	15000271	LINKAGE-VALVE, HEIGHT CONTROL (7.13)	1
12	15000327	LINKAGE-VALVE, HEIGHT CONTROL, BARKSDALE	1
-	15000435	0.25 CORRUGATED LOOM, BULK	20 FT
13	80002113	BRACKET-MOUNT, HCV (For use with 8M000035)	1

4. VALVE ORIENTATION CHART

HCV ORIENTATIONS & PORT CONFIGURATIONS



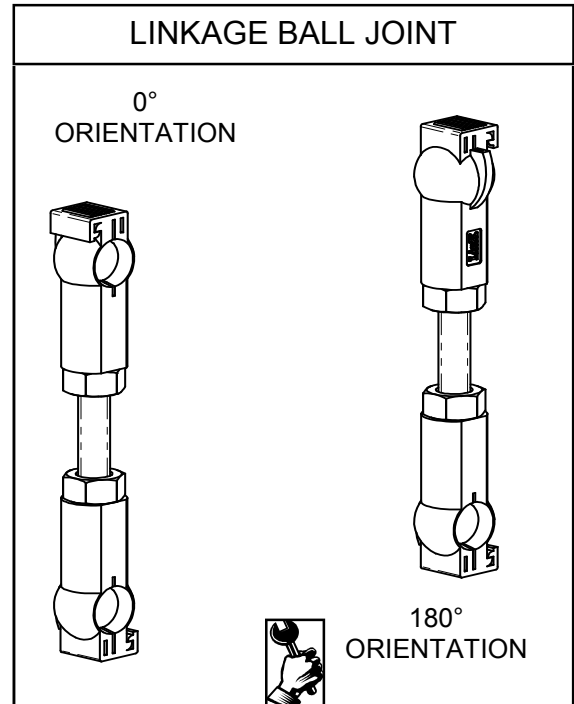
NOTE: In all 4 possible orientations, the inlet port always points up on the vehicle and the exhaust port points down. The C1 and C2 ports can both be connected to the air spring. When only one port is used, the other must be plugged.

5. VALVE LINKAGE APPLICATION CHART

IMPORTANT! Refer to modification procedure and table below for correct dimension and orientation of the linkage for intended application.

LINKAGE MODIFICATION PROCEDURE:

1. Remove Latching Ball Joint and Hex Nut from one end of linkage assembly.
2. Cut off excess threaded rod for intended application.
3. Replace Hex Nut and Latching Ball Joint onto linkage assembly.
4. Set center to center distance between Latching Ball Joints according to chart in the correct orientation.
5. Tighten Hex Nut against Latching Ball Joint to lock orientation and length.



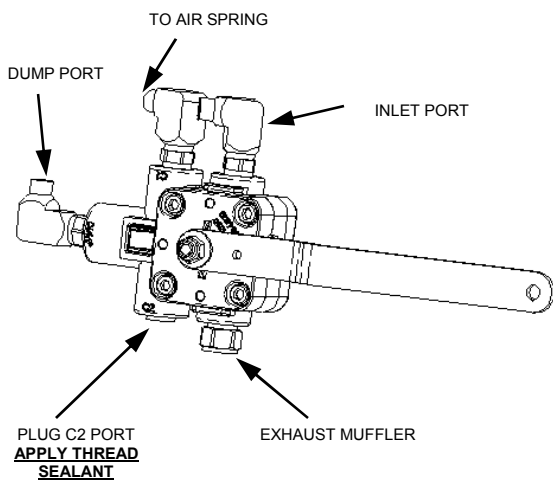
LINKAGE APPLICATION CHART					
Base Suspension	Threaded Linkage Part #	Rubber-End Linkage Part #	Center to center Dimension	Threaded rod length (cut rod to length)	Ball Joint Orientation
8M000035	15000246		4.000	3.000	180°
8M000063	15000231		2.120	1.120	180°
8M000070	15000264	150000327	6.250	5.250	90°
8M000075	15000270	150000327	7.000	6.000	90°
8M000078	15000271	150000327	7.130	6.130	90°
8M000080	15000271	150000327	7.130	6.130	90°
8M000085	15000262	150000327	6.000	5.000	90°

APPENDIX A

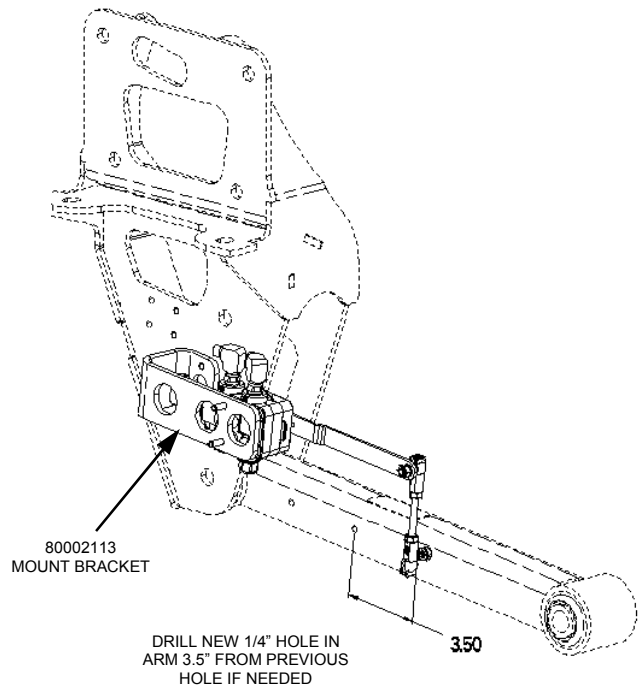
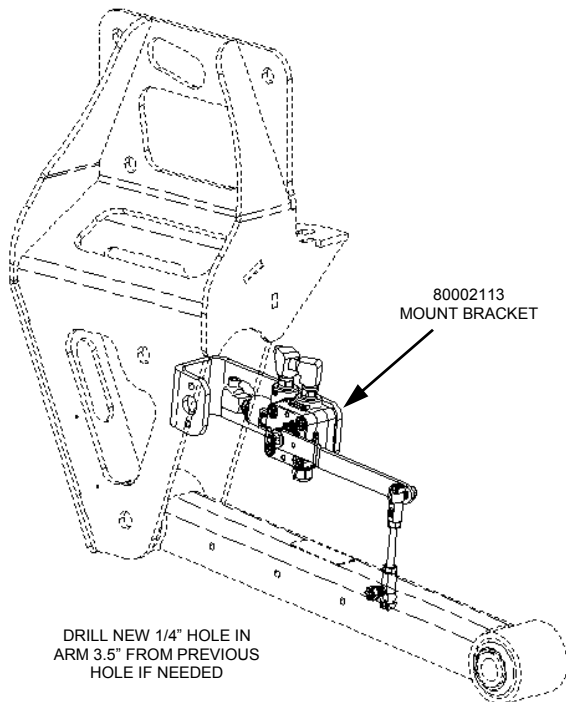
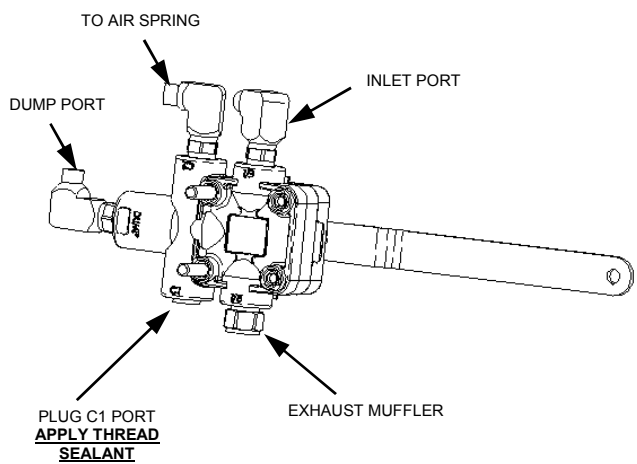
FOR FORD F450/550 PARALLELOGRAM ULTRARIDE®

PART NO. 8M000035

DRIVER'S SIDE VALVE ASSEMBLY
USE ORIENTATION #3 (SEE PAGE 7)



PASSENGER'S SIDE VALVE ASSEMBLY
USE ORIENTATION #4 (SEE PAGE 7)



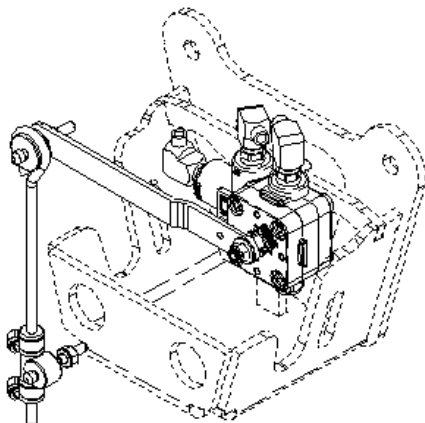
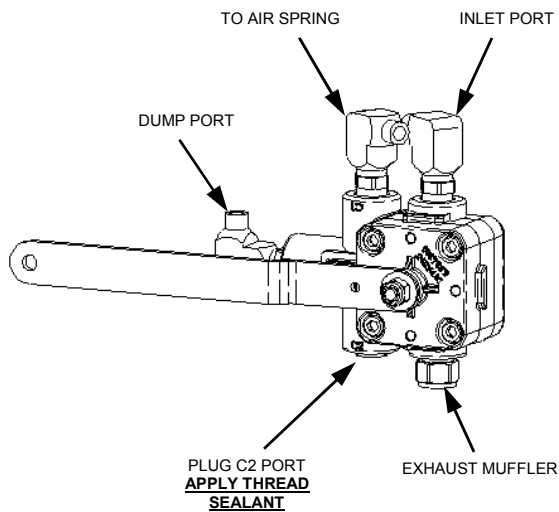
APPENDIX B

FOR GMC 4500/5500 ULTRARIDE®

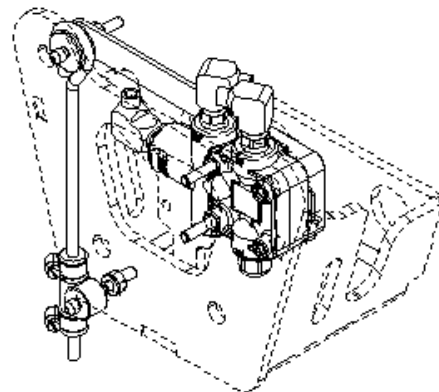
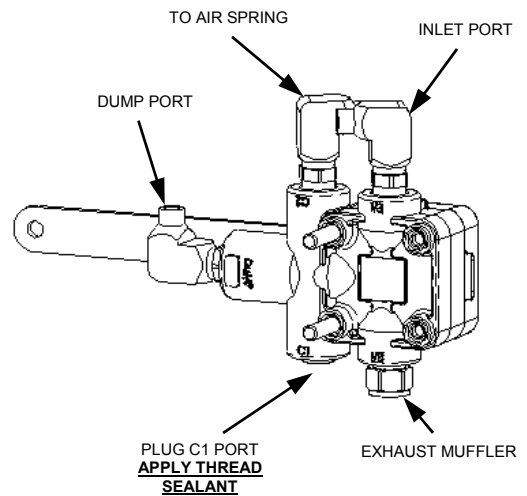
8M000070, 8M000075, 8M000078, 8M000080, 8M000085, 8M000087

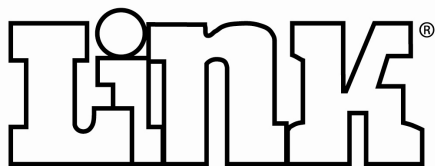
Note: Valve Mount Brackets for 8M000087 are shown. Valve Mount Brackets for other suspension part numbers will have slightly different appearance, but Valve orientation / operation will be the same.

DRIVER'S SIDE VALVE ASSEMBLY
USE ORIENTATION #1 (SEE PAGE 7)



PASSENGER'S SIDE VALVE ASSEMBLY
USE ORIENTATION #2 (SEE PAGE 7)





Link Mfg. Ltd.
223 15th St. NE
Sioux Center, IA USA
51250-2120

(712) 722-4874

<http://www.linkmfg.com/>