



Installation Instructions

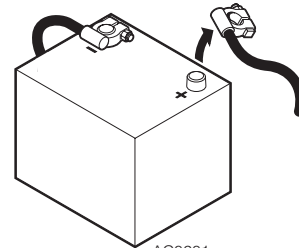
Electronic Pressure Regulator Kits 6081877, 6081887 & 6088660

This sheet provides installation instructions for Cascade Electronic Pressure Regulator Kits for Carton Clamps: 6081877, 6081887 and 6088660. These kits are designed to work in conjunction with a carton clamp equipped with a arm position switch or manual switch. It will not function without a switch mechanism. The kits include a valve that prevents damage to products and trailer walls due to excessive backhand force. The valve contains two adjustable clamp relief cartridges and two adjustable sideshift relief cartridges.

- 1 Disconnect the cable from the positive battery terminal.

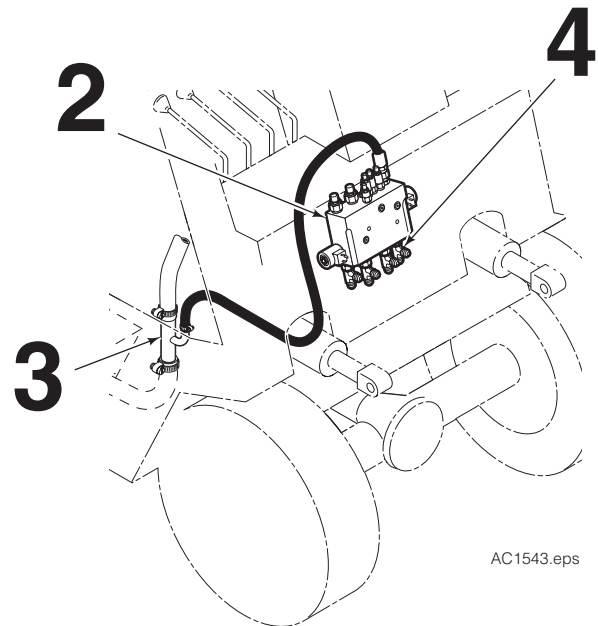


WARNING: Before removing hydraulic lines or components, relieve pressure in the hydraulic system. Turn truck off and open the truck auxiliary control valve(s) several times in both directions.



- 1 Disconnect cable from positive battery terminal

- 2 Locate and install the valve on the truck cowl or under the floorboard. If mounting on the cowl, watch the clearance when the mast is tilted back. The valve has adjustment screws that need easy access for final adjustment.
- 3 Install a return-to-tank line to the T port on the top of the valve to connect with the truck tank line. Cascade Lower Pressure Return Line Adapter Kits are listed:
 - .75 in. (19 mm) ID Tank Hose **Part No. 214062**
 - 1.00 in. (25 mm) ID Tank Hose **Part No. 211745**
 - 1.25 in. (31 mm) ID Tank Hose **Part No. 214066**
 - 1.50 in. (38 mm) ID Tank Hose **Part No. 6037507**
- 4 Install four No. 8 tee fittings to the SS ports, OP port and CL port located on the bottom of the valve.



NOTE: This information should not be interpreted as the basis for warranty claims unless so designated.

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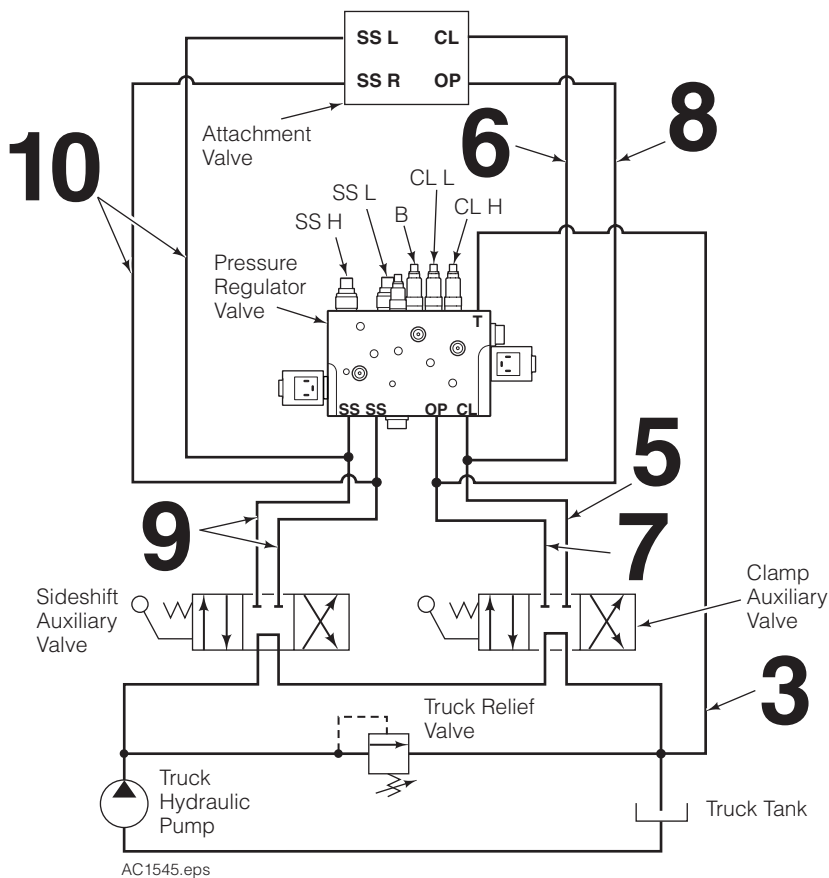
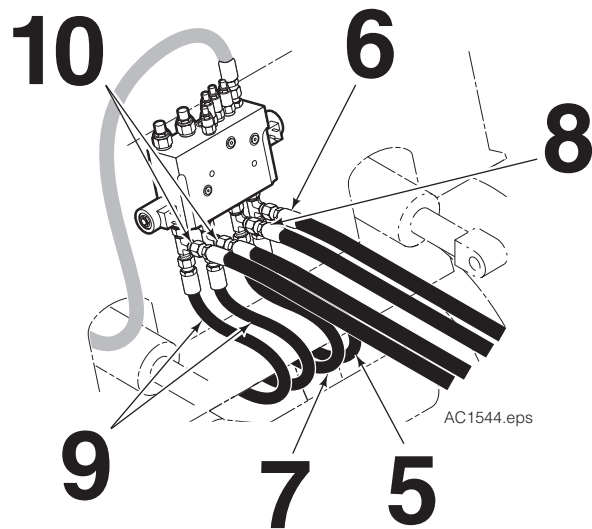
For Technical Support . . .

Call: 1-800-227-2233 Fax: 1-888-329-8207
Internet: www.cascorp.com
Write: Cascade Corporation, PO Box 20187, Portland, OR 97294

To Order Parts . . .

Call: 1-888-227-2233 Fax: 1-888-329-0234
Internet: www.cascorp.com
Write: Cascade Corporation, 2501 Sheridan Ave., Springfield, OH 45505

- 5 Install a No. 8 hose from the truck auxiliary valve CLAMP port to the CL port tee fitting on the bottom of the regulator valve.
- 6 Install a No. 8 hose from the valve CL port tee fitting to the supply circuit for the attachment CLAMP port.
- 7 Install a No. 8 hose from the truck auxiliary valve OPEN port to the OP port tee fitting on the bottom of the regulator valve.
- 8 Install a No. 8 hose from the valve OP port tee fitting to the supply circuit for the attachment OPEN port.
- 9 Install No. 8 hoses from the truck auxiliary valve SIDESHIFT ports to the SS port tee fittings on the bottom of the regulator valve.
- 10 Install No. 8 hoses from the valve SS port tee fittings to the supply circuit for the attachment SIDESHIFT ports.



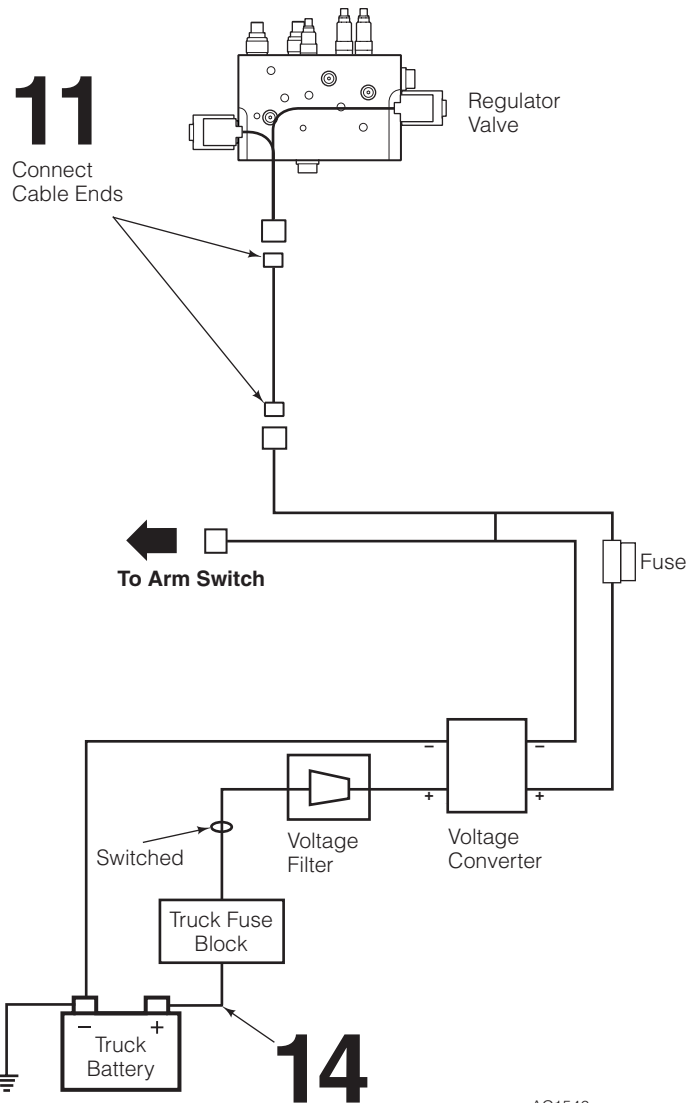
CAUTION: Consult the Lift Truck OEM for proper + power source connection.

- 11 Connect the cable ends. Connect the fused positive wire from the cable harness to the voltage converter supplied. Connect the voltage converter to the voltage filter. Connect the voltage filter to a switched power source. Connect the ground wire.

NOTE: When installing on electric trucks with regenerative braking, voltage filter 6061953 must be installed. Failure to install voltage filter can cause damage to electrical components.

Check the cable routing for pinch points and clearance. Use wire ties as needed.

- 12 Reconnect the positive battery cable to the battery.



Relief Adjustment

To set the valve clamp relief cartridges, use a clamp force indicator. Refer to your clamp force indicator guide.

NOTE: If using a pressure gauge for cartridge adjusting, install a pressure gauge in the attachment value test port.

IMPORTANT: All four relief cartridges are preset to 2300 psi. Relief pressure for each cartridge must be adjusted for your application.

BACKHAND OPEN RELIEF

- 1 Loosen the jam nut on relief cartridge B. Adjust the relief cartridge inward (CW) to raise the pressure or outward (CCW) to lower the pressure.
- 2 Open Clamp arms. Adjust the cartridge so that adequate backhand force is achieved. Tighten the nut.

WIDE LOADS

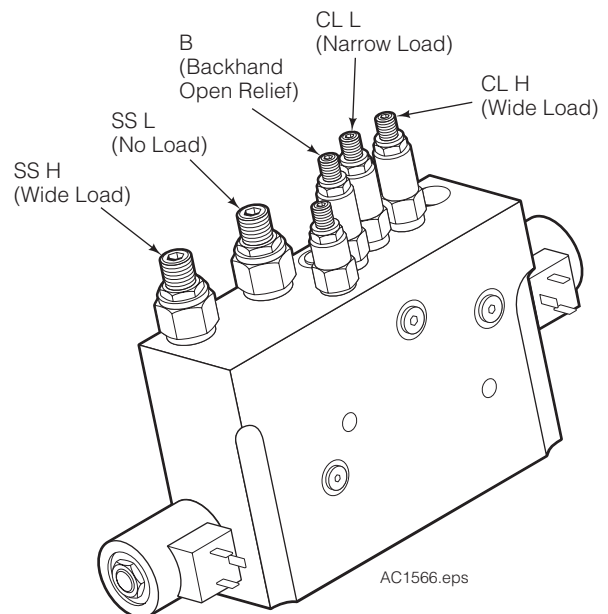
- 1 Loosen the jam nut on relief cartridge CL H. Adjust the relief cartridge inward (CW) to raise the pressure or outward (CCW) to lower the pressure.
- 2 Clamp a wide load. Adjust the cartridge so that the load starts to slip. Turn the cartridge 1/2 turn (CW). Tighten the nut.

NARROW LOADS

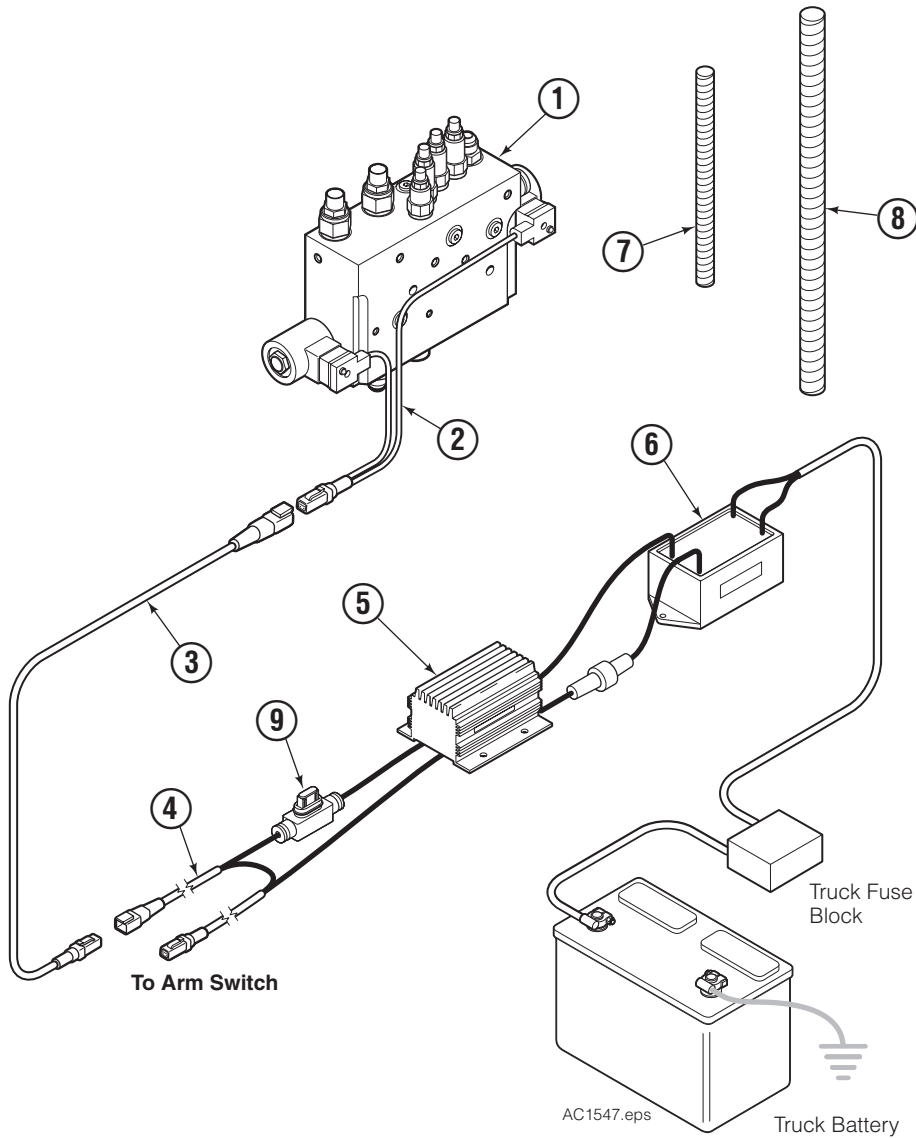
- 1 Loosen the jam nut on relief cartridge CL L. Adjust the relief cartridge inward (CW) to raise the pressure or outward (CCW) to lower the pressure.
- 2 Clamp a narrow load. Adjust the cartridge so that the load starts to slip. Turn the cartridge 1/2 turn (CW). Tighten the nut.

SIDESHIFTING

- 1 Loosen the jam nut on the relief cartridge SS H. Adjust the relief cartridge inward (CW) to raise the pressure or outward (CCW) to lower the pressure.
- 2 Clamp a wide load. Raise the load and sideshift. Lower the pressure (turn CCW), until load can not be sideshifted. Increase pressure (turn CW) until the load can be fully sideshifted left and right. Tighten the nut.



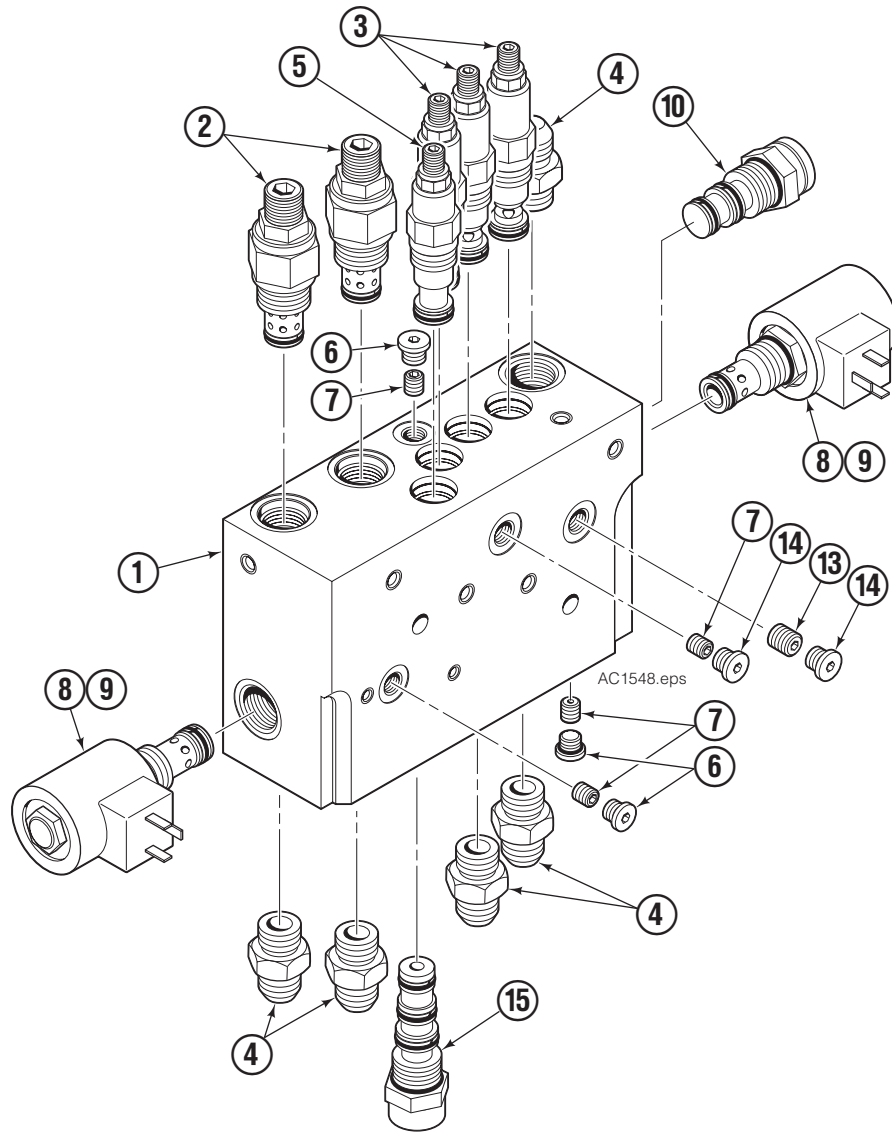
Electronic Pressure Regulator Kits



REF	QTY	PART NO.	DESCRIPTION
		6081877	Pressure Regulator with Anti-Spike-12V
		6081887	Pressure Regulator-12V
		6088660	Pressure Regulator with Anti-Spike-48V
		217932	Converter & Filter Kit ●▲◆
1	1	6081937	Valve Assembly-12V ▲
		6081976	Valve Assembly-12V ◆
		6088661	Valve Assembly-48V ★
2	1	6081967	Solenoid Cable Harness
3	1	6048338	Solenoid Cable
4	1	6082127	Power Harness
5	1	6061953	Voltage Filter
6	1	6064659	Voltage Converter, 24-48V→12V
7	1	6021369	Conduit, 9 mm ID X 300 mm
8	1	6057697	Conduit, 25 mm ID X 1000 mm
9	1	219414	Fuse, ATM type 10 Amp

- ▲ Included in kit 6081877
- ◆ Included in kit 6081887
- ★ Included in kit 6088660
- Includes items 5 & 6

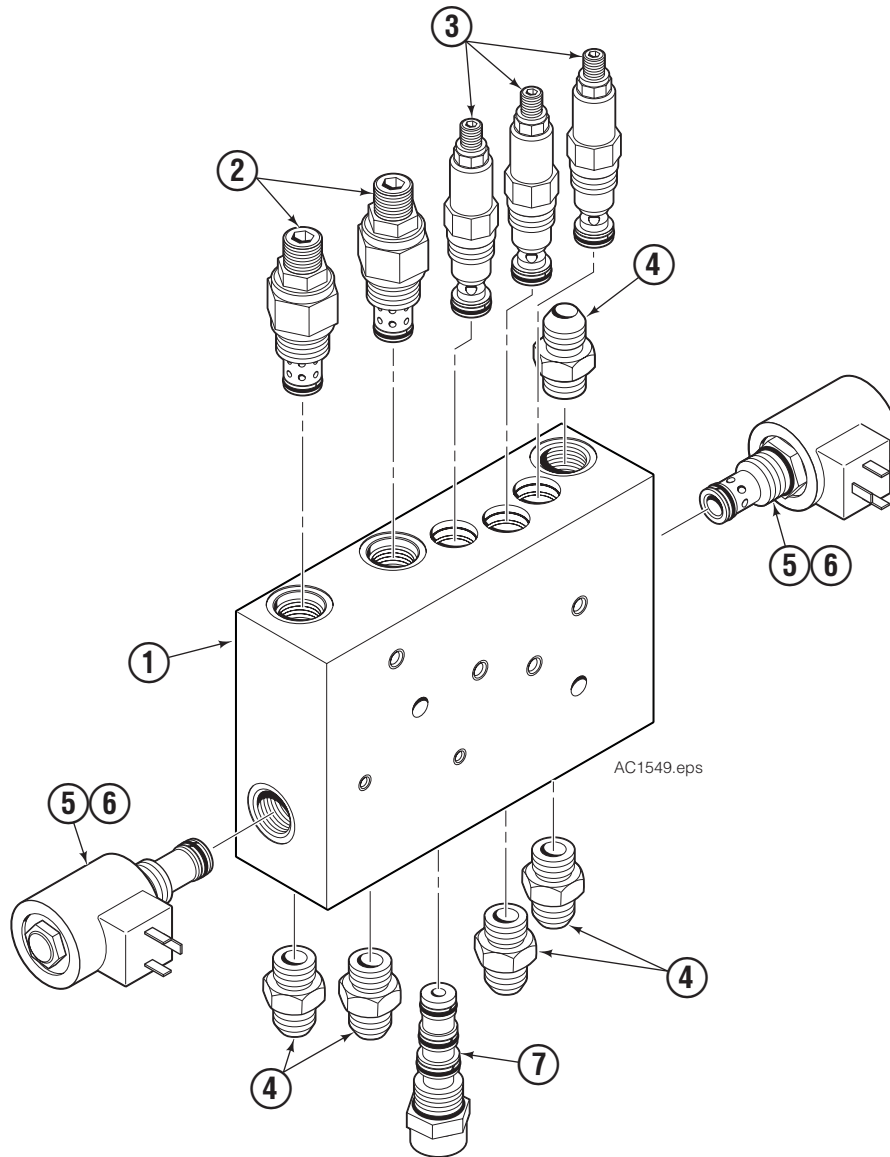
Valve Assembly with Anti-Spike (6081937 & 6088661)



REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		6081937	Valve Assembly-12V	8	2	6014287	Solenoid Coil – 12V ●
		6088661	Valve Assembly-48V			6018038	Solenoid Coil – 48V ■
1	1	6081938	Valve Body	9	2	221192	Solenoid Cartridge
2	2	6001450	Crossover Relief Cartridge	10	1	6026861	Flow Directional Cartridge
3	2	6041432	Relief Cartridge	11	2	6047299	Seat
4	5	601377	Fitting, 8-8	12	2	6047293	Spool
5	1	6026853	Relief Cartridge	13	1	6026895	Orifice, .150
6	3	663694	Plug	14	2	609234	Plug
7	4	6054498	Orifice, .020	15	1	6064027	Flow Directional Cartridge

- Included in Valve Assembly 6081937
- Included in Valve Assembly 6088661

Valve Assembly without Anti-Spike (6081976)



REF	QTY	PART NO.	DESCRIPTION
		6081976	Valve Assembly-12V
1	1	6081977	Valve Body
2	2	6001450	Crossover Relief Cartridge
3	2	6041432	Relief Cartridge
4	5	601377	Fitting, 8-8
5	2	221192	Solenoid Cartridge
6	2	6014287	Solenoid Coil - 12V
7	1	6064027	Directional Flow Valve