



# Installation Instructions

## 6-Position Electronic Pressure Regulator Kits

This manual provides instructions for Cascade 6-Position Electronic Pressure Regulator and Indicator System. The kit provides selectable clamp force for the attachment through a driver operated selector switch and indication of the force selected by four colored lights on a light bar or light tower.

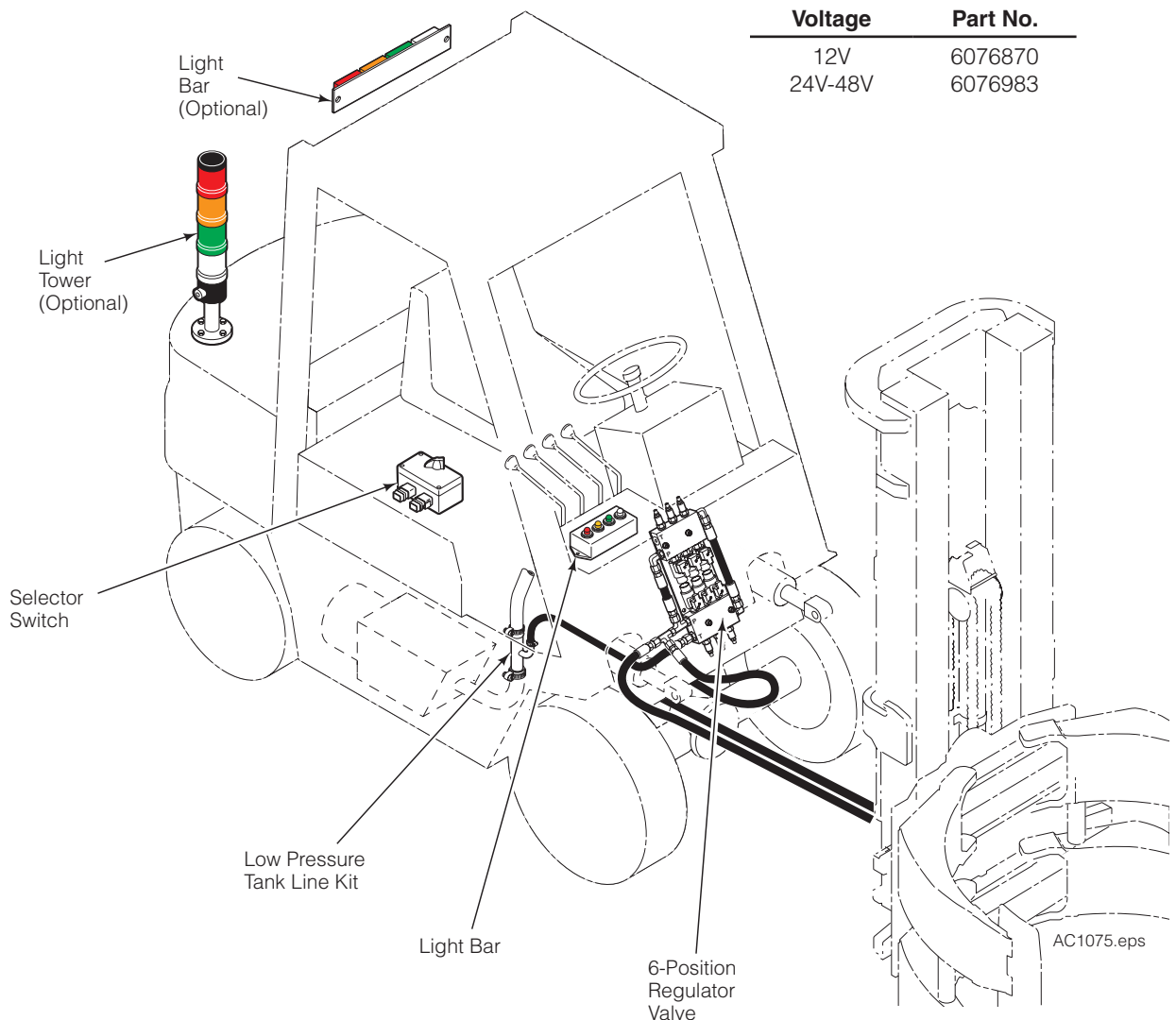
Cascade recommends using a Low Pressure Tank Line Kit for a dedicated return connection to the truck tank.

### Kits with Light Tower

Voltage	Part No.
12V	6049819

### Kits with Light Bar

Voltage	Part No.
12V	6076870
24V-48V	6076983



Part No. 6050087-R2

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**corporation**

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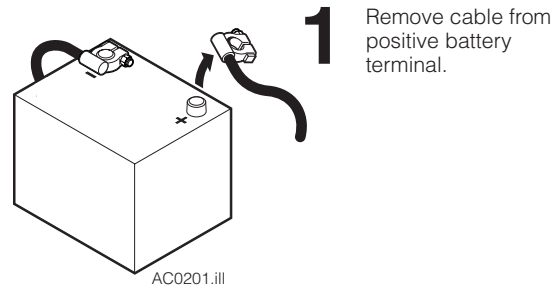
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Internet: [www.cascorp.com](http://www.cascorp.com)  
Write: Cascade Corporation, PO Box 20187, Portland, OR 97294

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Internet: [www.cascorp.com](http://www.cascorp.com)  
Write: Cascade Corporation, 2501 Sheridan Ave., Springfield, OH 45505

# Installation

**1** Disconnect the cable from the positive battery terminal.



**2** Locate and install the regulator valve assembly on the truck cowl or under the floorboard using 3/8 in. capscrews. Watch for clearance when the mast is tilted back if mounting on the cowl. The regulator valve has adjustment screws that need easy access for final adjustment.

**3** Install a return to tank line to the T port on the side of the valve to connect with the truck tank line. Cascade Low Pressure Return Line Adapter Kits are listed below.

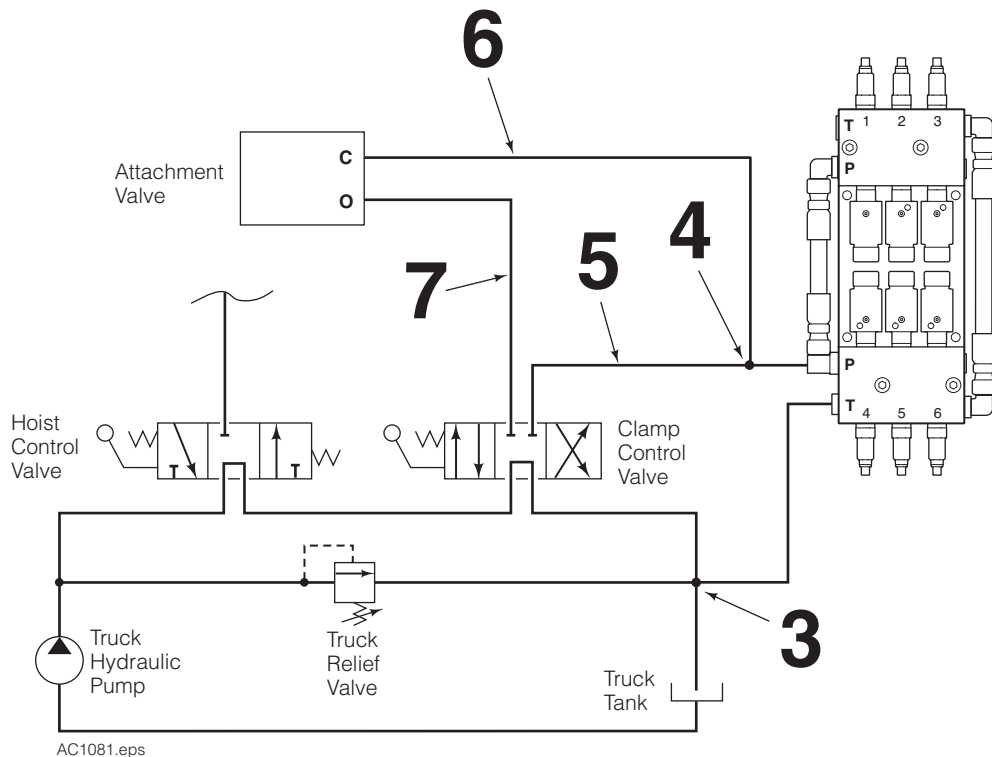
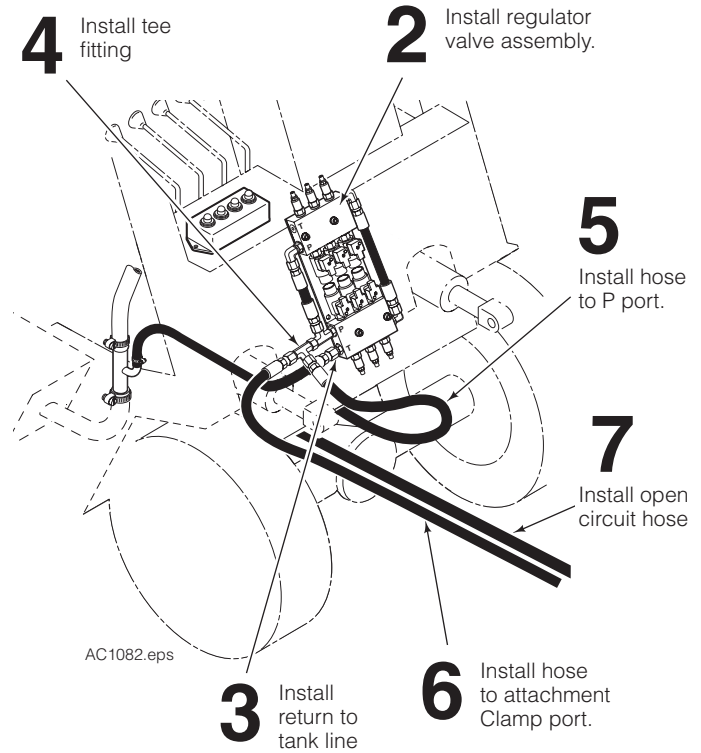
.75 in. (19 mm) ID Tank Hose	<b>Part No. 214062</b>
1.00 in. (25 mm) ID Tank Hose	<b>Part No. 211745</b>
1.25 in. (31 mm) ID Tank Hose	<b>Part No. 214066</b>
1.50 in. (38 mm) ID Tank Hose	<b>Part No. 6037507</b>

**4** Install a No. 8 tee fitting to the P port on the side of the regulator valve.

**5** Install a No. 8 hose from the truck clamp auxiliary valve CLAMP port to the P port tee fitting on the side of the regulator valve.

**6** Install a No. 8 hose from the valve P port tee fitting to the supply circuit for the attachment CLAMP port.

**7** Install a No. 8 hose from the truck clamp auxiliary valve OPEN port to the supply circuit for the attachment Open port.

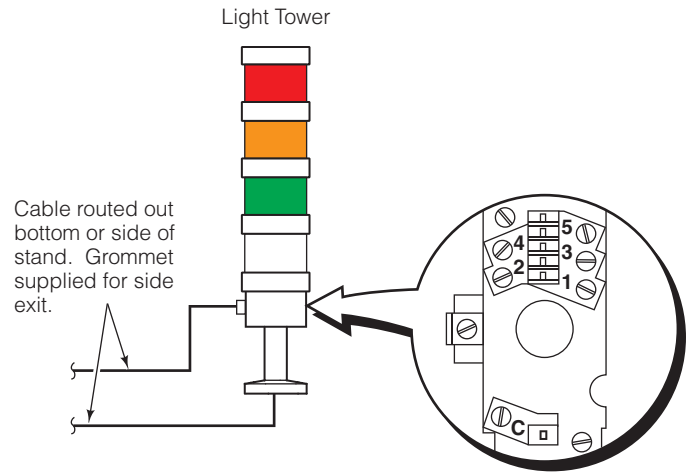


**8** Locate and mount the Cab Light Bar on the truck dashboard or overhead guard. Position for best peripheral viewing due to brightness of lights.

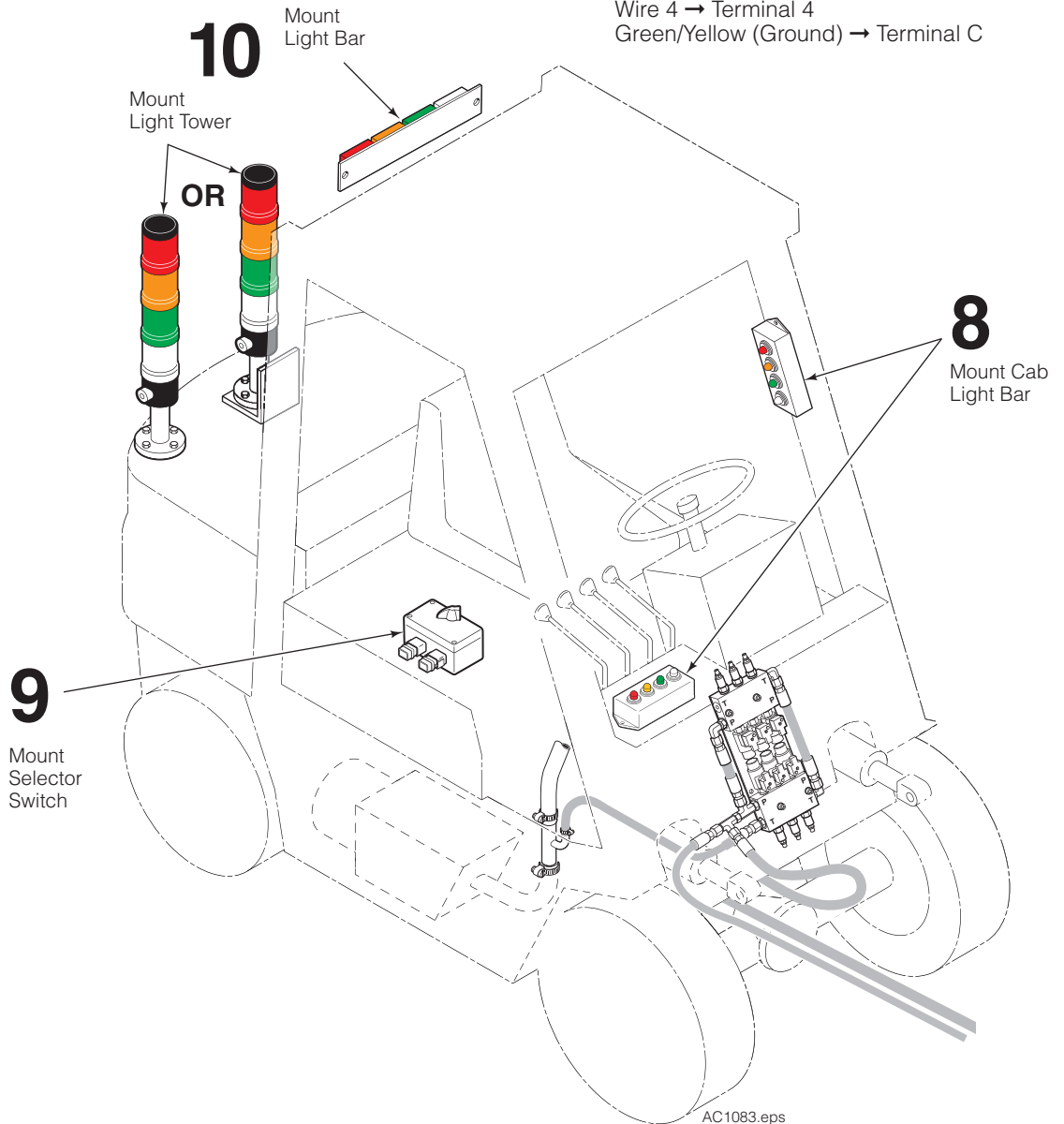
**9** Locate and mount the Selector Switch in a location convenient to the truck operator.

**10 Light Tower Option** – Locate and mount the optional Light Tower at the rear of the truck. A simple bracket can be fabricated to mount the Light Tower on the back of the overhead guard. The light tower cable can be routed out the bottom of the stand or out the side of the light assembly using the grommet supplied. See the wire and terminal connections shown.

**Light Bar Option** – Locate and mount the optional Light Bar on the back of the overhead guard.



- Wire 1 → Terminal 1
- Wire 2 → Terminal 2
- Wire 3 → Terminal 3
- Wire 4 → Terminal 4
- Green/Yellow (Ground) → Terminal C



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

**11** Connect the cable ends.

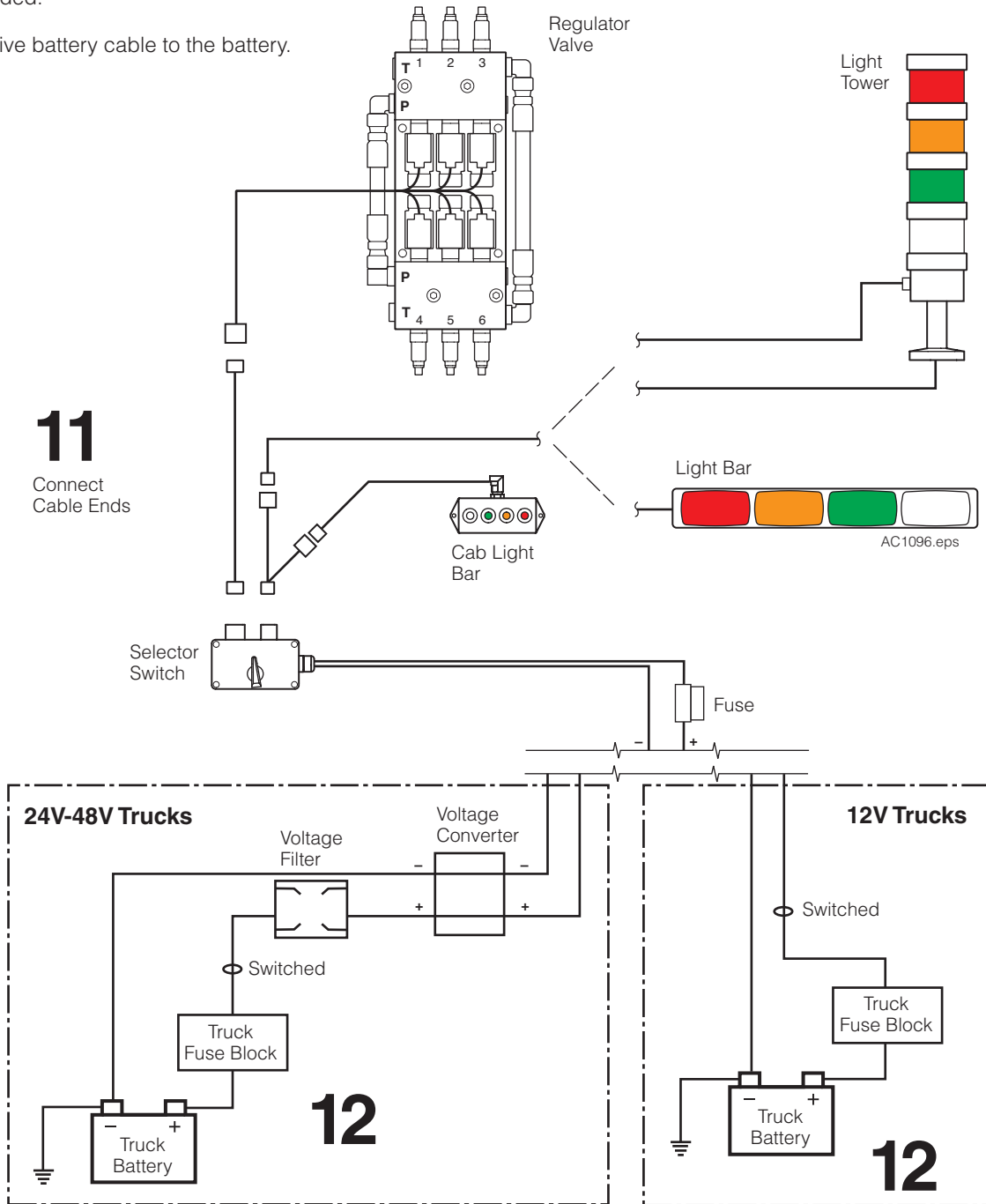
**12V Trucks** – Connect the fused positive wire to a 12V switched power source. Connect the ground wire.

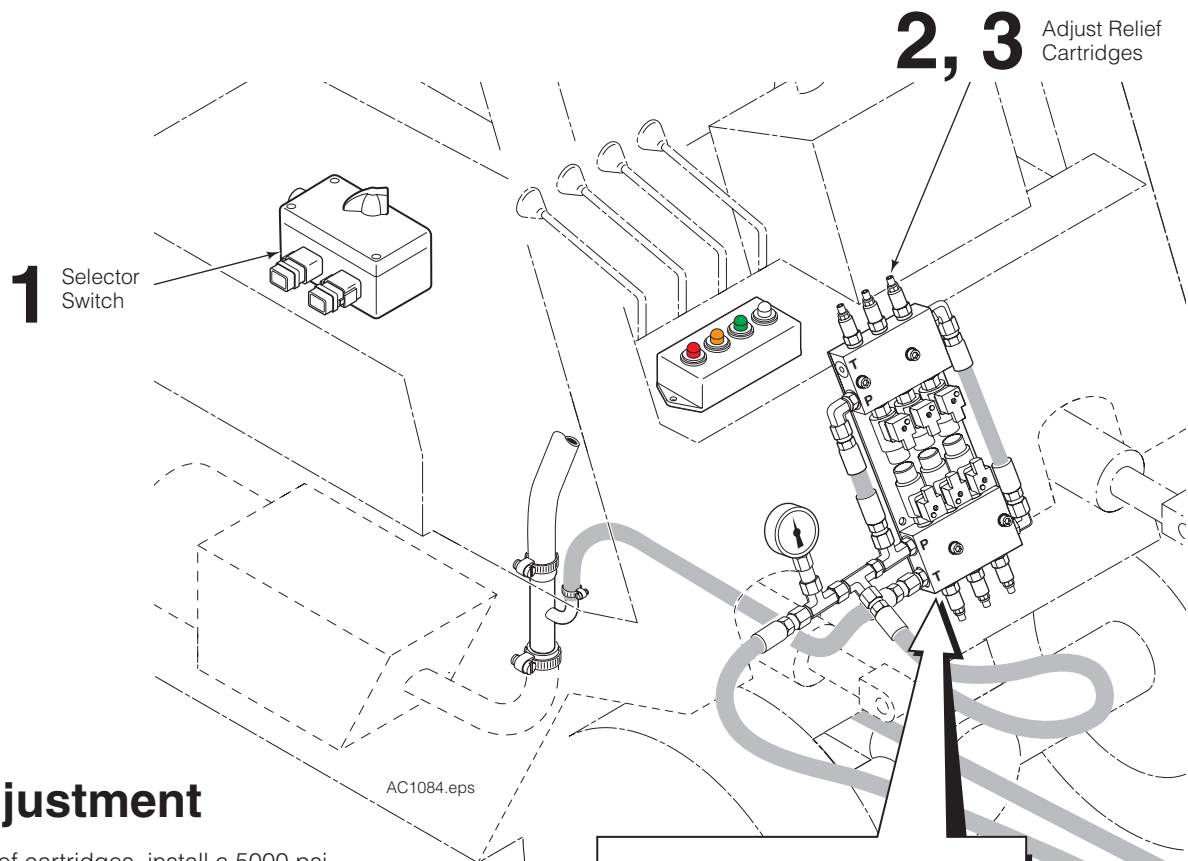
**24V-48V Trucks** – Connect the fused positive wire from the cable harness to the voltage converter supplied. Connect the voltage converter to the voltage filter. Connect the voltage filter to a switched power source. Connect the ground wire.

**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.



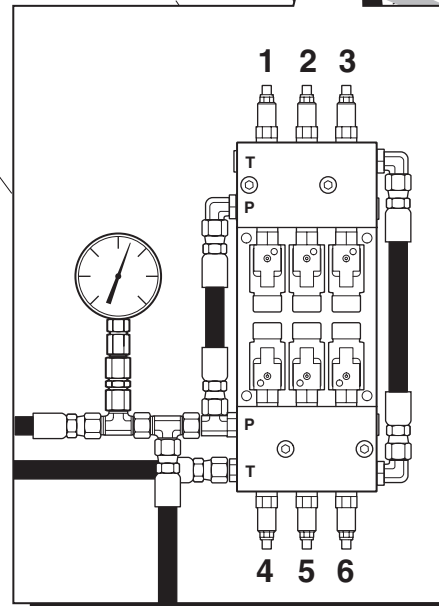


## Relief Adjustment

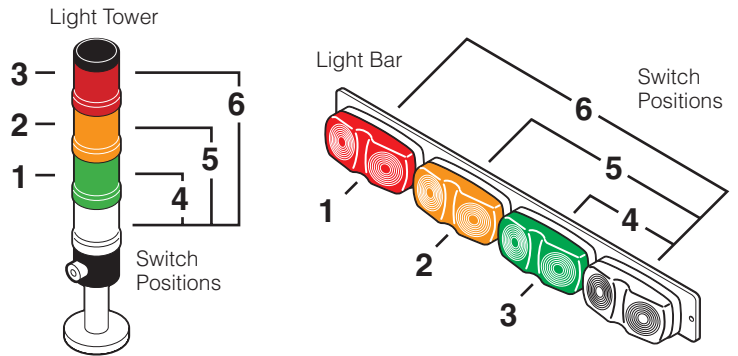
To set the valve relief cartridges, install a 5000 psi (345 bar) pressure gauge (Cascade Part No. 664158) and tee fitting to the valve **P** port. A clamp force indicator can also be used to adjust the relief cartridge settings. Refer to Clamp Force Indicator Operator Guide 6053280 for Carton Clamps or 214750 for Paper Roll Clamps.

**IMPORTANT:** All 6 valve relief cartridges are preset to 1200 psi. Relief pressure for each cartridge must be adjusted for your application.

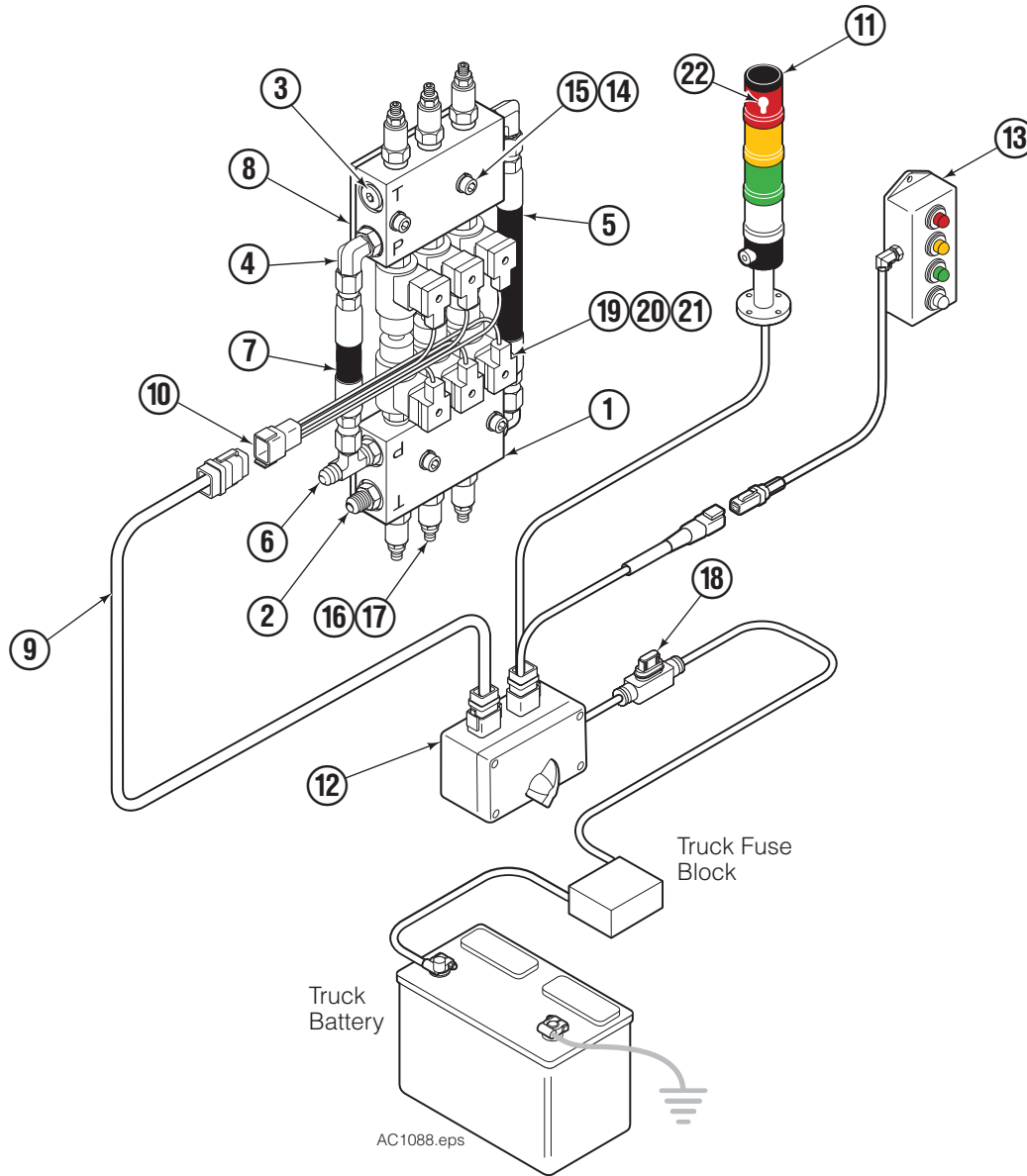
- 1 Shift the selector switch to position **1**. See the light display chart below. The solenoid coil also has a small indicator light.
- 2 Loosen the jam nut on the No. 1 relief cartridge. Adjust the relief cartridge (3/16-in. Allen hex wrench) inward (CW) to raise pressure or outward (CCW) to lower the pressure.
- 3 Clamp a load and check the pressure. Readjust as required. Tighten the jam nut.
- 4 Shift the selector switch to position **2**. Repeat steps 2 and 3 for the other 5 relief positions.
- 5 With the selector switch in the 7th position, the relief valve has no effect. Pressure to the attachment is determined by the truck system relief pressure.



Switch Position	Relief Cartridge	Light Display	Pressure
1	1	Green	Lowest
2	2	Amber	
3	3	Red	
4	4	Clear & Green	Highest
5	5	Clear & Amber	
6	6	Clear & Red	
7	None	All	

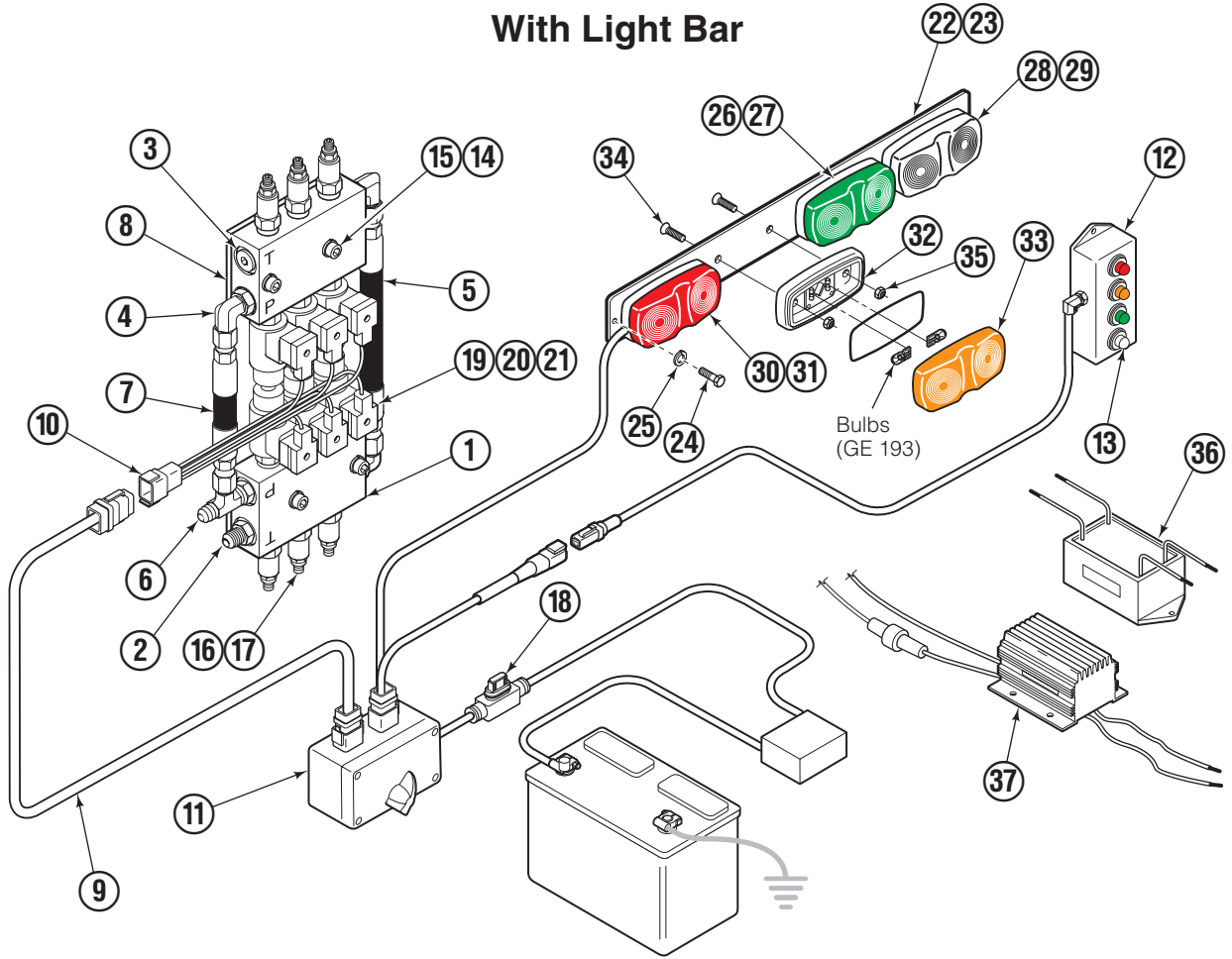


# 6-Position Electrical Pressure Control & Indicator Kit With Light Tower



REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		6049819	Electrical Pressure Control – 12V	12	1	6061305	Selector Switch
1	2	838489	Relief Valve	13	1	6049983	Cab Light Bar
2	1	601377	Fitting, 8-8	14	4	6288	Lockwasher, 3/8
3	3	602580	Fitting, 8	15	4	4473	Capscrew, 3/8 NC
4	3	601250	Fitting, 8	16	6	661676	Relief Cartridge
5	1	685991	Hose	17	6	661312	Seal Kit
6	1	610402	Fitting, 8	18	1	6008233	Fuse, 10 Amp
7	1	6049833	Hose	19	6	6002189	Solenoid Cartridge
8	1	6049732	Mount Plate	20	6	6002190	Solenoid Coil – 12 V
9	1	6049931	Cable	21	6	209048	Seal Kit
10	1	6049881	Solenoid Cable Harness	22	4	6057068	Bulb, Square D Type DL1BLJ
11	1	6049908	Light Tower				

# 6-Position Electrical Pressure Control & Indicator Kit With Light Bar



AC1841.eps

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		6076870	Electrical Pressure Control – 12V ▲	17	6	661312	Seal Kit
		6076983	Electrical Pressure Control – 24V ■	18	1	6008233	Fuse, 10 Amp
		217932	Converter Kit ●	19	6	6002189	Solenoid Cartridge
1	2	838489	Relief Valve	20	6	6002190	Solenoid Coil – 12 V
2	1	601377	Fitting, 8-8	21	6	6062857	Seal Kit
3	3	602580	Fitting, 8	22	1	6076871	Light Bar Assembly with Cable ◆
4	3	601250	Fitting, 8	23	1	6076676	Aluminum Bar
5	1	685991	Hose	24	2	763169	Capscrew, M6 X 20
6	1	610402	Fitting, 8	25	2	206323	Lockwasher, M6
7	1	6049833	Hose	26	1	6076819	Green Lamp Assembly
8	1	6049732	Mount Plate	27	1	217952	Green Lens
9	1	6049931	Cable	28	1	6076818	Clear Lamp Assembly
10	1	6049881	Solenoid Cable Harness	29	1	6077910	Clear Lens
11	1	6061305	Selector Switch	30	1	6076820	Amber Lamp Assembly
12	1	6049983	Cab – Light Bar	31	1	217950	Amber Lens
13	1	6049981	Bulb – Clear	32	1	6076821	Red Lamp Assembly
	1	6011823	Bulb – Red	33	1	217948	Red Lens
	1	6004133	Bulb – Amber	34	8	640584	Capscrew, M4 X 20
	1	6004132	Bulb – Green	35	8	686453	Nut, M4
14	4	6288	Lockwasher, 3/8	36	1	6061953	Voltage Filter
15	4	4473	Capscrew, 3/8 NC	37	1	6064659	Voltage Converter, 24-48 → 12V
16	6	211230	Relief Cartridge				

▲ Includes items 1 through 31  
 ■ Includes items 1 through 33

● Includes items 32 and 33  
 ◆ Includes items 23 through 31

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**Cascade Corporation  
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Springfield, OH 45505  
Tel: 888-CASCADE (227-2233)  
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**Cascade Canada Inc.**  
5570 Timberlea Blvd.  
Mississauga, Ontario  
Canada L4W-4M6  
Tel: 905-629-7777  
Fax: 905-629-7785

**Cascade do Brasil**  
Rua João Guerra, 134  
Macuco, Santos - SP  
Brasil 11015-130  
Tel: 55-13-2105-8800  
Fax: 55-13-2105-8899

### **EUROPE-AFRICA**

**Cascade Italia S.R.L.  
European Headquarters**  
Via Dell'Artigianato 1  
37050 Vago di Lavagno (VR)  
Italy  
Tel: 39-045-8989111  
Fax: 39-045-8989160

**Cascade (Africa) Pty. Ltd.**  
PO Box 625, Isando 1600  
60A Steel Road  
Sparton, Kempton Park  
South Africa  
Tel: 27-11-975-9240  
Fax: 27-11-394-1147

### **ASIA-PACIFIC**

**Cascade Japan Ltd.**  
2-23, 2-Chome,  
Kukuchi Nishimachi  
Amagasaki, Hyogo  
Japan, 661-0978  
Tel: 81-6-6420-9771  
Fax: 81-6-6420-9777

**Cascade Korea**  
121B 9L Namdong Ind.  
Complex, 691-8 Gojan-Dong  
Namdong-Ku  
Inchon, Korea  
Tel: +82-32-821-2051  
Fax: +82-32-821-2055

**Cascade-Xiamen**  
No. 668 Yangguang Rd.  
Xinyang Industrial Zone  
Haicang, Xiamen City  
Fujian Province  
P.R. China 361026  
Tel: 86-592-651-2500  
Fax: 86-592-651-2571

**Cascade India Material  
Handling Private Limited**  
No 34, Global Trade Centre  
1/1 Rambaugh Colony  
Lal Bahadur Shastri Road,  
Navi Peth, Pune 411 030  
(Maharashtra) India  
Phone: +91 020 2432 5490  
Fax: +91 020 2433 0881

**Cascade Australia Pty. Ltd.**  
1445 Ipswich Road  
Rocklea, QLD 4107  
Australia  
Tel: 1-800-227-223  
Fax: +61 7 3373-7333

**Cascade New Zealand**  
15 Ra Ora Drive  
East Tamaki, Auckland  
New Zealand  
Tel: +64-9-273-9136  
Fax: +64-9-273-9137

**Sunstream Industries  
Pte. Ltd.**  
18 Tuas South Street 5  
Singapore 637796  
Tel: +65-6795-7555  
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