



# Installation Instructions

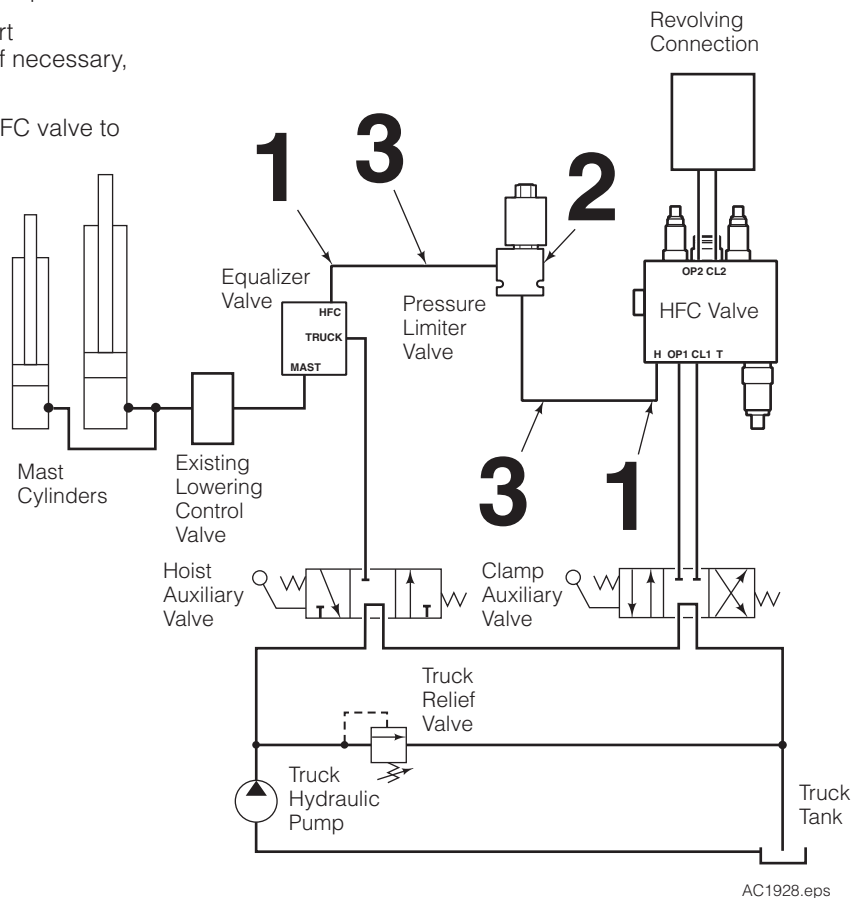
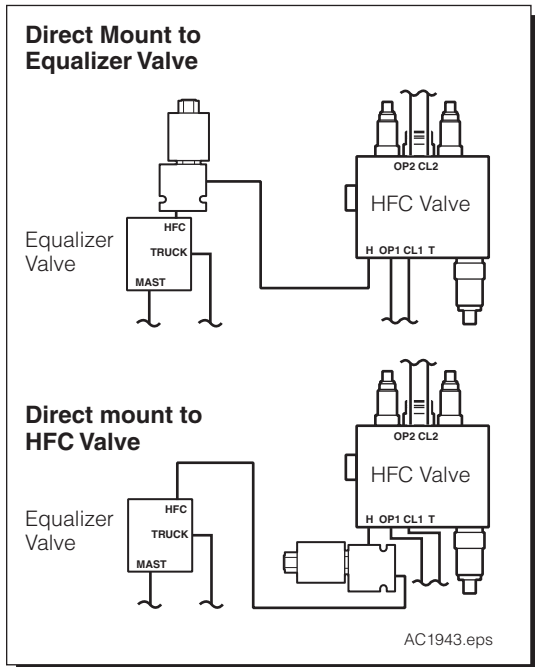
## Hoist Pressure Limiter Valve Kit 6805139

This sheet provides installation instructions for Hoist Line Pressure Limiter Kit to be used with Cascade HFC systems. When the switch senses the mast is at maximum lift height, a solenoid is energized and blocks oil between the hoist line and HFC valve. The Pressure Limiter Valve prevents a light load from being overclamped.



**WARNING:** Before removing any hoses, relieve pressure in the hydraulic system. With the truck off, open the truck auxiliary control valve(s) several times in both directions.

- 1 If equipped with HFC system already, remove hose(s) from the equalizer valve 'HFC' port to the HFC valve 'H' port.
- 2 Install the valve **directly** to the HFC valve 'H' port (recommended) or equalizer valve 'HFC' port. If necessary, mount valve in another location.
- 3 Install hose(s) from the equalizer valve and/or HFC valve to Pressure Limiter Valve.



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- 4** Mount the sensor switch in a location where the switch senses when the mast within .25-.50 in. (6-13 mm) of being fully extended, not during normal lifting. If needed, mount the bracket with the spring on a moving mast member.

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

- 5** Connect the harness solenoid connector to the solenoid coil.  
**6** Connect the harness sensor connector to the sensor switch.  
**7** Connect the harness cable ends to the components shown.

**12V Systems** – Connect the fused positive wire from the cable harness to a switched power source and the ground wire to a chassis ground.

**24V-48V Systems** – Connect the fused positive wire from the cable harness to a DC-to-DC converter positive output wire and the ground wire to the converter negative output wire. Connect a 24V-48V switched power source to the converter fused positive input wire and connect the converter input ground wire to a chassis ground.

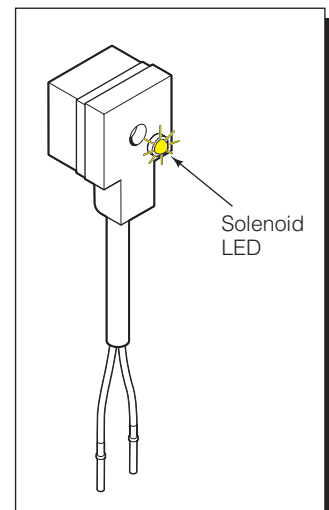
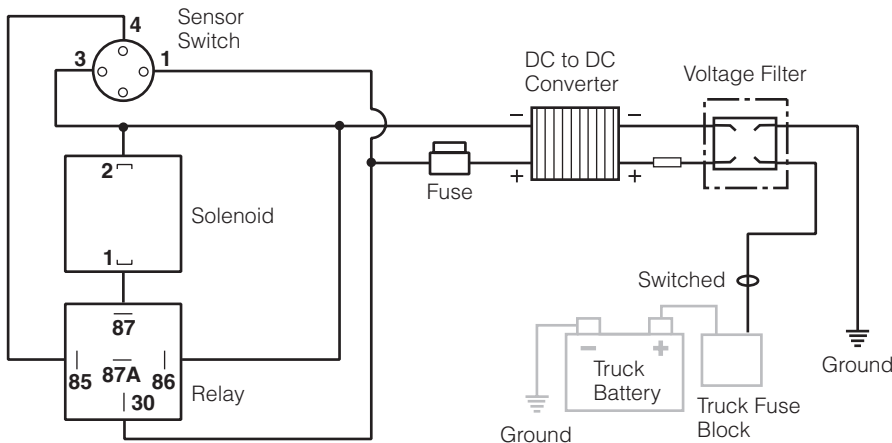
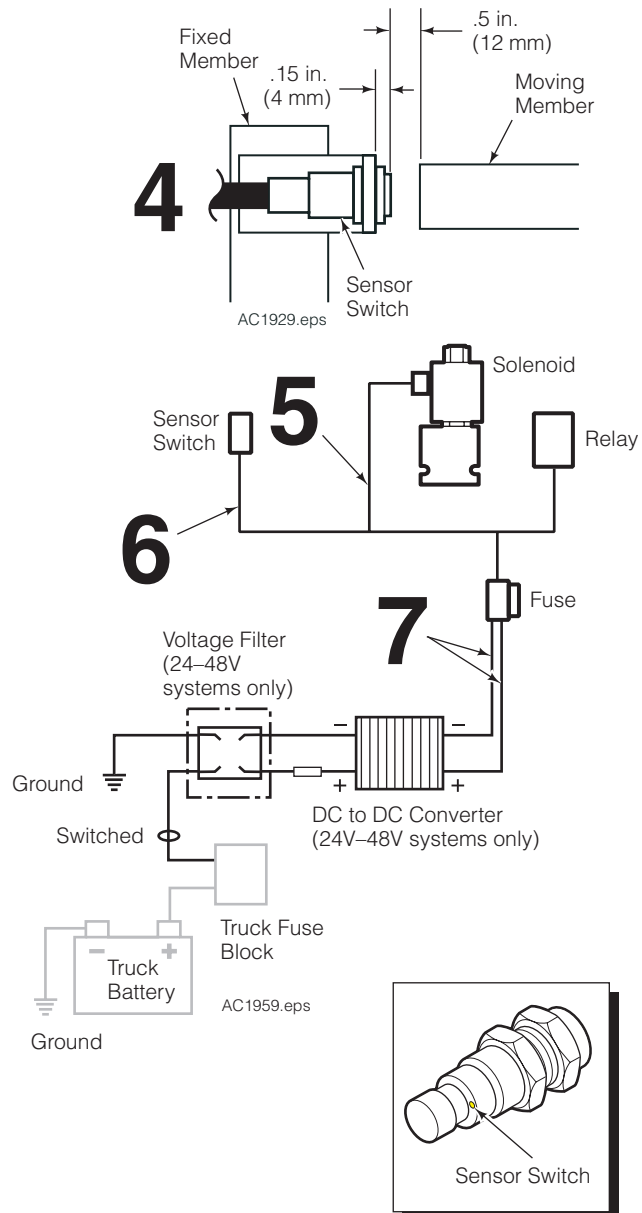
## Wire Harness Troubleshooting

Verify the sensor switch, solenoid and relay are working properly. Check the LEDs on the sensor switch and solenoid.

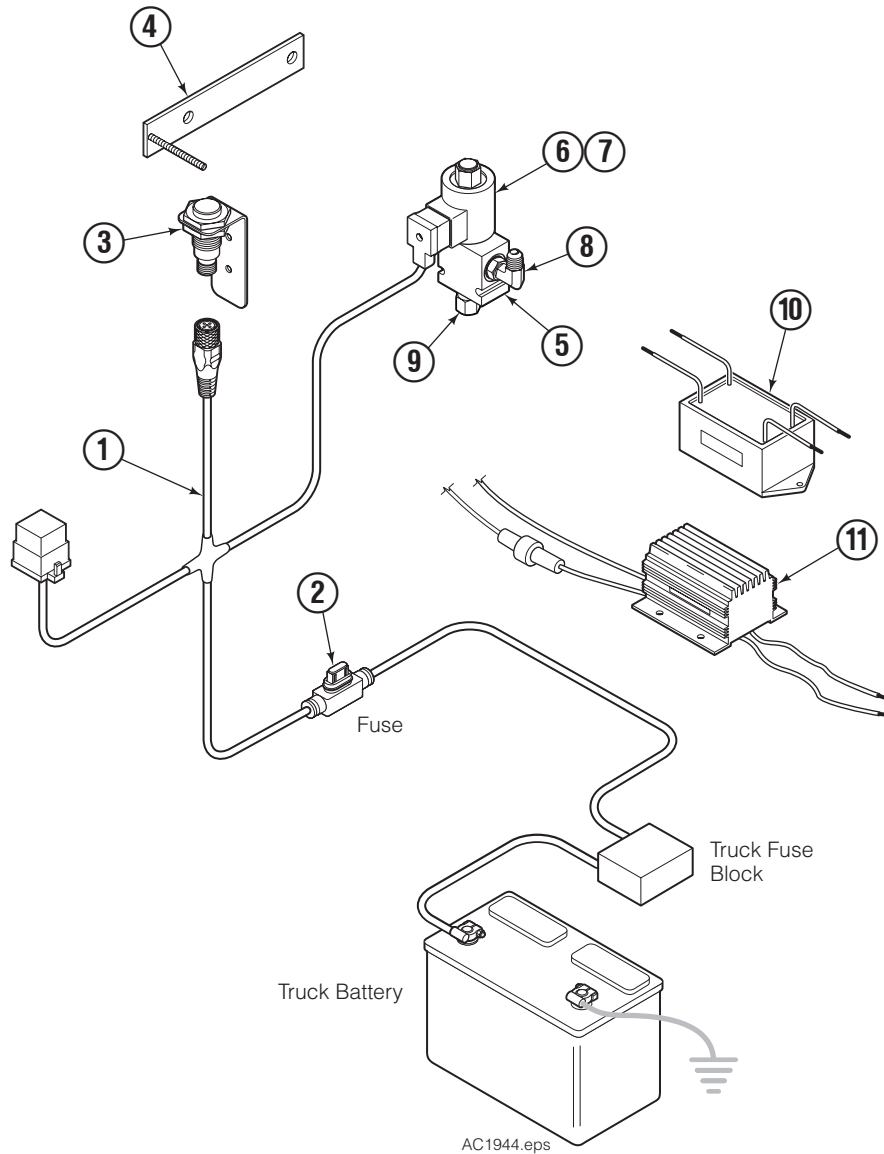
- When the mast is in freelif, the LEDs will be off.
- When at full height the LEDs will be on.

- 1 Check fuse.
- 2 Remove relay, sensor switch and solenoid coil.
- 3 Check for 12V power between relay socket terminal 30 and 86. If no power, check continuity:
  - 30 and (+) truck battery
  - 86 and (-) truck battery
- 4 Check for continuity at all corresponding pins and terminals.
- 5 Install sensor switch, fixed on a target (switch LED should be illuminated). Check for power at relay socket terminal 85.
- 6 Test the relay by adding 12V (+) power to 85 and (-) power to 86. With a meter, check for continuity between 30 and 87. Remove power, verify that there is no continuity between 30 and 87.
- 7 With the relay installed and the sensor switch fixed on a target (LED illuminated), check for power at the solenoid connector between 1 and 2. Solenoid connector LED should be illuminated.
- 8 Plug the coil in, listen for a 'click'. If there is no 'click', remove connector and check for coil resistance of 7.2 ohms at 60° F (20° C).

**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.**



# Pressure Limiter Valve Kit



REF	QTY	PART NO.	DESCRIPTION
		6805139	Pressure Limiter Valve Kit, 12V ▲
		6805191	Pressure Limiter Valve Kit, 24-48V ✕
		217932	Converter and Filter Kit ◆
1	1	6095957	Wire Harness ■
2	1	221720	Fuse, ATC type 5 Amp ■
3	1	6095969	Switch ■
4	1	6095839	Bracket ■
5	1	6075222	Valve Body ●
6	1	221192	Valve Solenoid ●
7	1	6014287	Coil, 12V ●
8	1	601676	Fitting, No. 6 ●
9	1	6805154	Fitting, No. 6 ●
10	1	6061953	Voltage Filter
11	1	6064659	Voltage Converter, 24-48V→12V

- ▲ Includes items 1-9
- ✕ Includes items 1-11
- ◆ Includes items 10 & 11
- Included in Valve Assembly 6805142.
- Included in Switch Assembly 6097464.

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