Installation Instructions

This sheet provides installation instructions and replacement parts list for Cascade Hydraulic Control Kits. Each kit provides two function operation using a single function hydraulic supply and radio frequency (RF) solenoid actuation to select the sideshift or fork position functions. The attachment mounted solenoid is battery powered and driver activated by a remote transmitter mounted on the truck.

Installation Kits 6083685 & 6083820

IMPORTANT: Prior to installation, disconnect hoses that connect from the attachment fittings to the truck supply hose fittings. Set aside the sideshift right hose.

1. Install the battery bracket to the upper carriage bar bracket. Tighten the capscrew to 15 ft.-lbs. (20 Nm).
2. Install the battery clip to the bracket with M4 buttonhead capscrews and lockwashers.
3. Install the battery to the clip.
4. Install the connector clip to the battery bracket with an M4 buttonhead capscrew.

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.
5 Install the solenoid valve to the left-hand bracket with M8 sockethead cap screws and lock washers. Tighten the cap screw to 15 ft.-lbs. (20 Nm).

6 Install the tube bracket to the right-hand bracket with M8 hex head cap screws and lock washers. The bend in the bracket faces forward. Tighten the cap screws to 15 ft.-lbs. (20 Nm).

7 Install the bulk head fitting to the tube bracket.

8 Install the tube between the lower valve fitting and left-hand internal reeving fitting.

9 Install the tube between the upper valve fitting and the tube bracket bulk head fitting.

10 Install the tee fitting to the left-hand sideshift cylinder port.

11 Install the fork positioner supply hoses (22 in., 560 mm length hoses).

12 Connect the kit hose to the sideshifter 90° fitting (sideshift left). Connect the other end to the solenoid valve 90° fitting.
   Kit 6083685 – 16.4 in. (417.5 mm) length hose
   Kit 6083820 – 18.4 in. (467.5 mm) length hose

13 Reconnect the attachment hose to the sideshifter tee fitting. Connect the 90° fitting end to the right hand internal reeving fitting.

14 Install the RF receiver to the valve solenoid coil connector. Fasten the RF wire connector to the clip on the battery bracket. Connect the battery and RF wire connectors.

15 Secure hoses and wiring with cable ties.
**Installation Kit 6083511**

1. Install the battery bracket to the upper carriage bar bracket. Tighten the cap screw to 15 ft.-lbs. (20 Nm).

2. Install the battery clip to the bracket with M4 buttonhead capscrews and lock washers.

3. Install the battery to the clip.

4. Install the connector clips to the battery bracket and to the solenoid valve with M4 buttonhead capscrews.

5. Install the solenoid valve and spacer to the right hand carriage bracket. Use kit M8 sockethead capscrews and lock washers. Tighten the cap screw to 15 ft.-lbs. (20 Nm).

6. Install the tube between the lower valve fitting and right hand internal reeving fitting.

7. Install the tube between the upper valve fitting and left hand internal reeving fitting.

8. Install the tee fitting to the lefthand sideshift cylinder port.

9. Install the fork positioner supply hoses (22 in., 560 mm length hoses).

10. Connect the 17.1 in. (435 mm) kit hose to the sideshifter 90° fitting. Connect the other end to the Valve 90° fitting.

11. Connect the 11.6 in. (295 mm) kit hose to the sideshifter tee fitting. Connect the 90° fitting end to the solenoid valve straight fitting.

12. Install the RF receiver to the valve solenoid coil connector. Fasten the RF wire connector to the clip on the solenoid. Fasten RF extension cable to the clip on the battery bracket. Connect battery, RF extension cable and RF connector ends.

13. Secure hoses and wiring with cable ties.
Transmitter Installation

1. Install the transmitter in an easy to view and accessible location for the driver. Provide at least 8 in. (20 cm) clearance between the driver and transmitter.

   **IMPORTANT:** The transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

2. Connect the transmitter red wire to a switched terminal on the truck fuse block. Connect the black wire to chassis ground. Connect the two remaining wires to the control knob transmit switch.

   **IMPORTANT:** The resistor connected to the red wire is for use on trucks operating at 31V and higher. Remove the resistor on trucks operating at 30V or less.

Operation

**NOTE:** Charge new batteries prior to use. Use battery charger 6825330.

Verify that the transmitter has been properly connected to truck battery and receiver is plugged into the battery. The light on the transmitter and receiver will operate as follows:

- **No signal light:** Check transmitter supply voltage. If transmitter voltage is not the problem, install charged battery on the receiver.
- **Solid/flashing green:** Transmitter and receiver have adequate power and are working properly.
- **Solid/flashing red:** Receiver battery is low, replace with charged battery.

**NOTE:** After one hour of inactivity, the receiver goes into sleep mode to conserve power. Press and hold the transmit switch for two seconds to wake the unit for operation.
Installation Kit

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● See Valve page for parts breakdown.
Installation Kit

Front View

Back (Driver's) View

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See Valve page for parts breakdown.
## Solenoid Valve
(Kit 6083511)

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1 | 1 | 6096036 | Solenoid Valve
2 | valve body | 6096017 | Valve Body
3 | 1 | 6008166 | Solenoid Valve
4 | 1 | 6054451 | Solenoid Coil
5 | 1 | 617917 | Fitting, 4-4
6 | 1 | 609234 | Plug, 4
7 | 1 | 617915 | Fitting, 4-4
8 | 2 | 604511 | Fitting, 6-6
Solenoid Valve
(Kits 6083685 & 6083820)

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Do you have questions you need answered right now?
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