



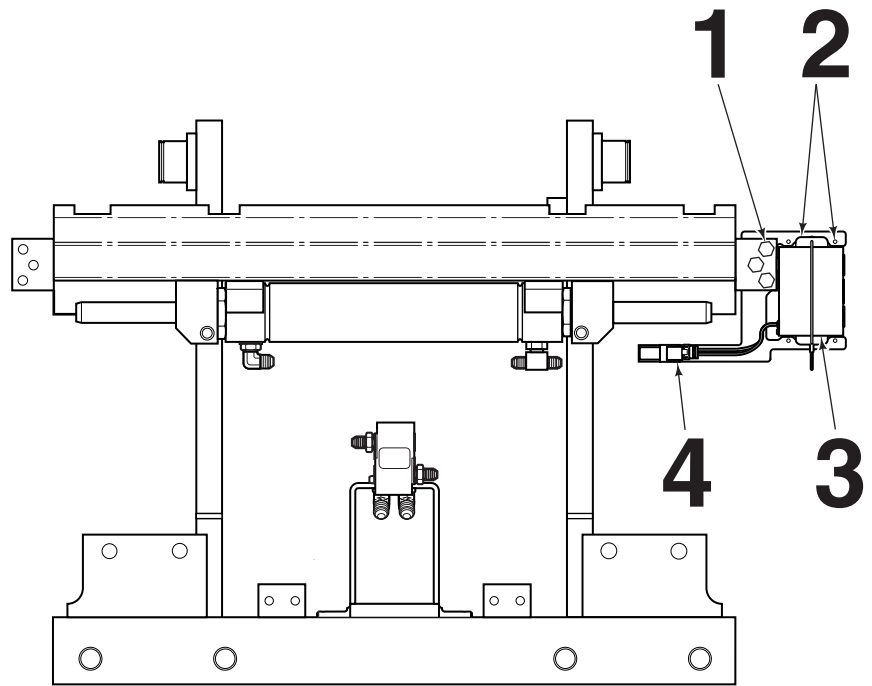
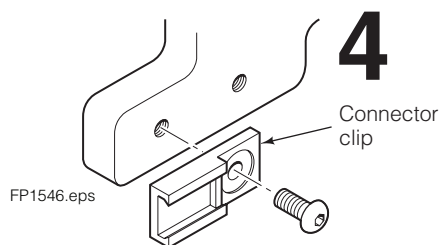
# Installation Instructions

## Radio Frequency (RF) Hydraulic Control Installation Kit 6083511

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 Kit 6083511

- 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 button-head capscrew.



FRONT VIEW

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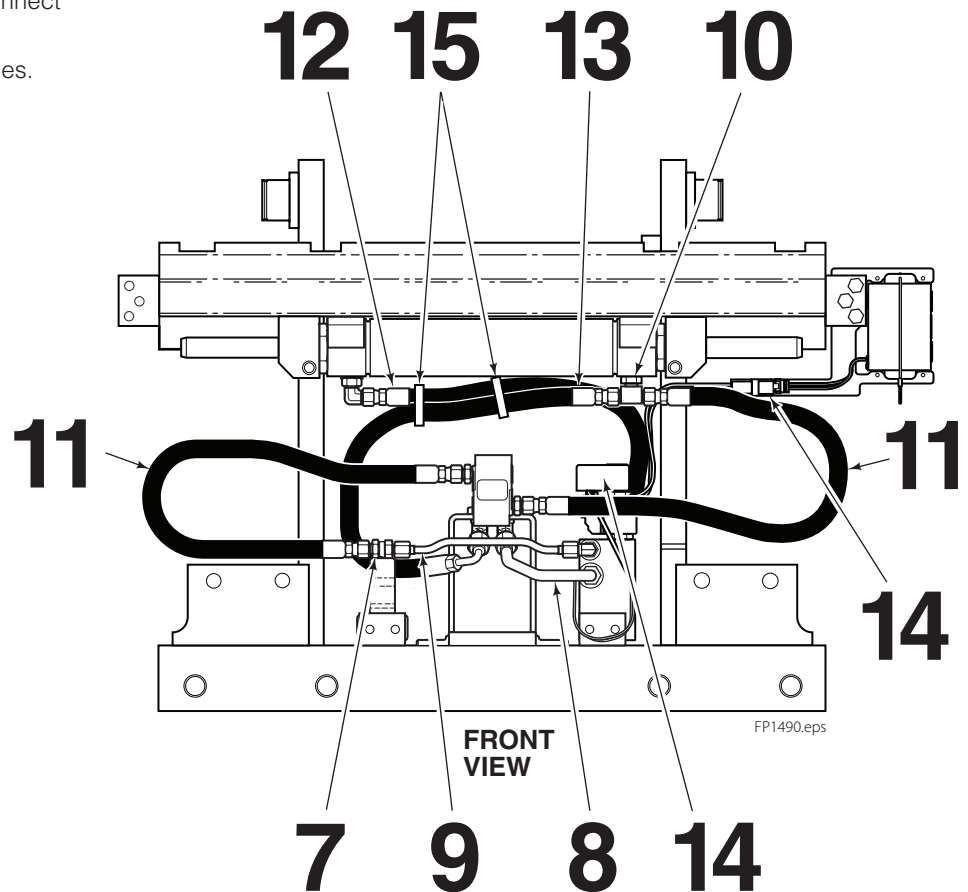
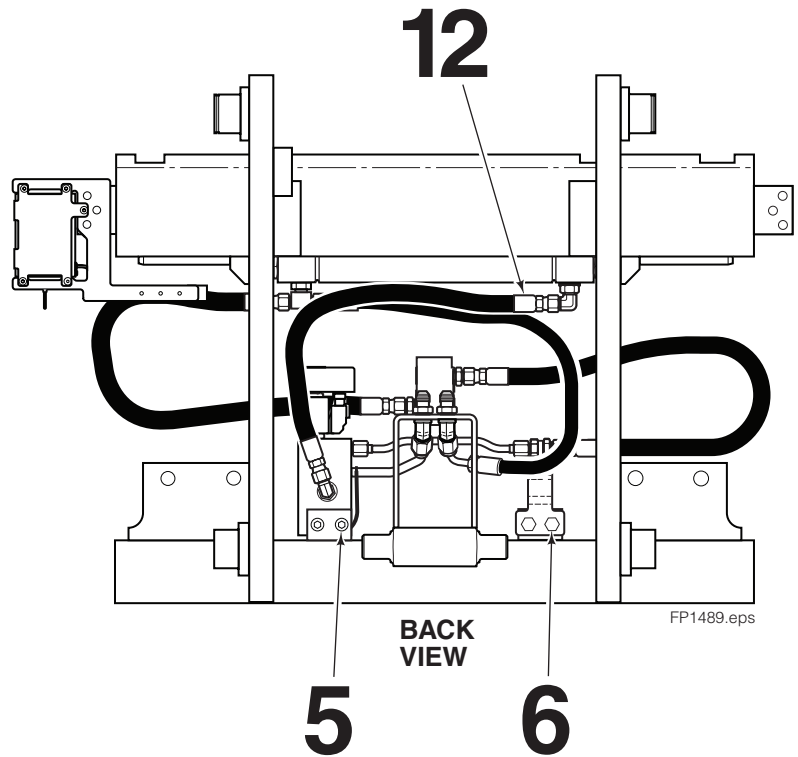
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- 5 Install the solenoid valve to the left-hand bracket with M8 sockethead capscrews and lockwashers. Tighten the capscrew to 15 ft.-lbs. (20 Nm).
- 6 Install the tube bracket to the right-hand bracket with M8 hex-head capscrews and lockwashers. The bend in the bracket faces forward. Tighten the capscrew to 15 ft.-lbs. (20 Nm).
- 7 Install the bulkhead 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 bulkhead fitting.
- 10 Install the tee fitting to the left-hand sideshift cylinder port.
- 11 Install the fork positioner supply hoses.
- 12 Connect the 18.3 in. hose to the sideshifter 90° fitting. Connect the other end to the Valve 90° fitting.
- 13 Connect the X.X in. 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.



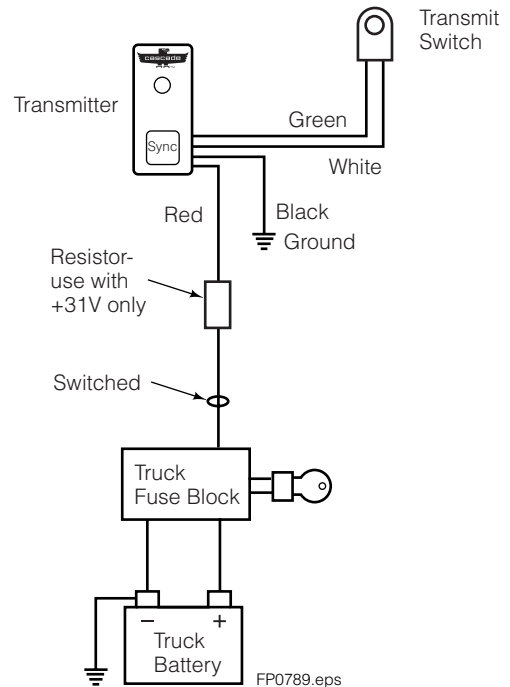
## Transmitter Installation

**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.



## Synchronizing Transmitter and Receiver

The transmitter and receiver have been synchronized at the factory. If resynchronizing is required, follow these steps:

**1** Press and hold the SYNC button on the transmitter for 3 seconds. The LED will begin to flash red and green.



**WARNING:** Do not reach through the mast to access the receiver SYNC button. Access the SYNC button from the front of the attachment.

**2** Within 15 seconds, press and hold the SYNC button on the receiver for 3 seconds. When the units are synchronized to each other, the flashing red and green LED will stop and the receiver will respond to the transmitter when the transmit switch is pressed.

## Operation

**Transmitter** – When the transmit switch is pressed, the LED on the transmitter will blink **green** every 1/2 second if there is communication between the transmitter and receiver. The solenoid coil clicks when the valve internal spool shifts.

The transmitter will blink **green** once a second if there is no communication with the receiver.

The transmitter LED will blink **red** once a second for a truck battery low condition.

After 1 hour of inactivity, the receiving unit goes into a sleep mode to conserve power. Press and hold the transmit switch button for 3 seconds to wake the unit for operation.

**Receiver** – The receiver will blink every 1/2 second when it is receiving a signal from the transmitter. The color of the blink changes with battery use.

The receiver LED blinks **green** when the battery is operating.

The receiver LED blinks **amber** for a short period when the battery is running low and needs to be charged.

The receiver LED blinks **red** for a short period when the battery needs to be charged and will not operate the fork positioner.

The transmitter and receiver operate in the frequency range of 902.2 – 927.8 Mhz @ .004 watts output.

## Battery

**NOTE:** Charge new batteries prior to use.

It is recommended to charge the battery after each shift to optimize the life of the battery. The light on the receiver indicates battery power level:

**Green** – Full usable power.

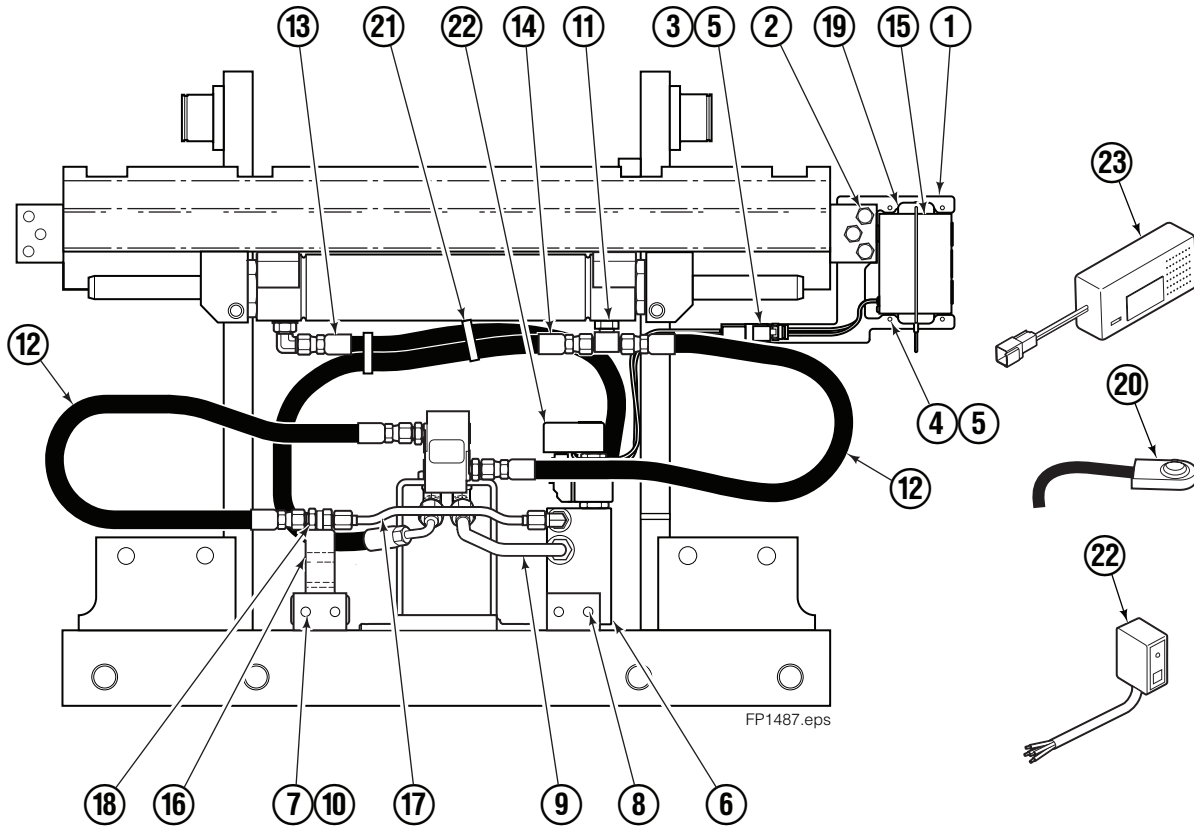
**Amber** – Low Power. Charge soon.

**Red** – No power. Recharge required.

**None** – No power. Recharge required.

Use battery charger 6055457.

# Installation Kit

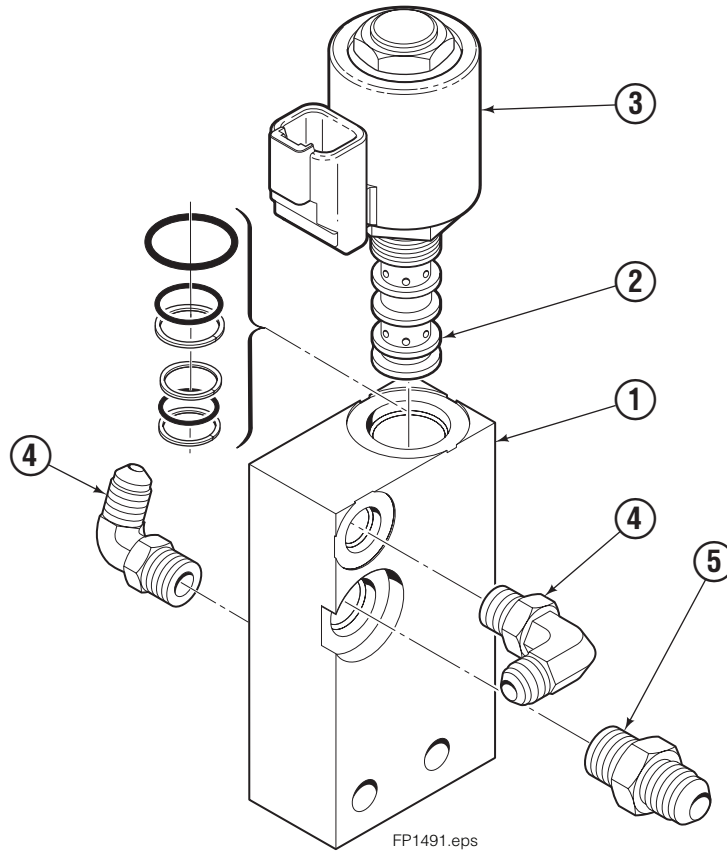


FP1487.eps

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		6083820	Installation Kit	12	2	6050405	Hose, 22.0 in.
1	1	6085718	Bracket	13	1	6084779	Hose, 18.3 in.
2	3	787372	Capscrew, M8 x 20	14	1	X	Hose, X.X in.
3	1	6079201	Clip	15	2	6075736	Battery
4	5	685899	Lockwasher, M4	16	1	6083697	Bracket
5	6	6076098	Capscrew, M4 x 6	17	1	6084777	Tube
6	1	6081900	Solenoid Valve ●	18	3	2373	Fitting, 4-4
7	4	787384	Lockwasher, M8	19	4	6096066	Retainer Clip
8	2	768796	Capscrew, M8 x 35	20	1	6014880	Control Switch
9	1	6084776	Tube	21	3	200343	Cable Tie
10	2	767961	Capscrew, M8 x 16	22	1	6076165	RF Transmitter & Receiver Kit
11	1	6050638	Fitting, 6-4				

● See Valve page for parts breakdown.

# Solenoid Valve



REF	QTY	PART NO.	DESCRIPTION
		6081900	Solenoid Valve
1	1	6081901	Valve Body
2	1	6008166	Solenoid Cartridge
3	1	6054451	Solenoid Coil
4	1	617917	Fitting, 4-4
5	1	604511	Fitting, 6-6

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