

Hydraulic Wireless Control System

The receiver module should be located in an area where the back-up switches will be accessible without the use of the transmitter. Mounting the receiver module within cabinetry works well. **However, if you are mounting the module within a steel compartment it is recommended that you drill a 1/2" hole in the steel, feed the antenna in (screw the end to the Receiver Module), & mount the top of the antenna to the outside of the steel box. Mount antenna using self adhesive strict.**

Typical range with the wireless key fob is 50-100ft, depending on where the receiver module is mounted. The receiver module & transmitter are water resistant. All electrical connections that are made to the control box should be made with properly sized electrical butt connectors. All wiring should be routed in areas that will protect it from road hazards and sharp edges. The receiver module should be installed so that the electrical connections are fully insulated and protected from objects that may come in contact with them causing an electrical short. All connecting wires should be the same size as the wires on the receiver (14/16-gauge stranded copper wire).

BATTERY WIRING - INSTALLATION PROCEDURE:

1) **RED 14-Gauge Wire (Main 12volt +dc power)** - Connected in-line with this wire is a **10-amp Fuse**. Connect this red wire to the battery positive terminal. *The fuse is installed within 18" of the battery and may be installed in the battery enclosure or compartment, provided this compartment is well ventilated. This system can handle 12 volt dc input. The Receiver Module's LED will turn from Green to Red when the trailer battery is below 9-volts.*

2) **BLACK 14-Gauge Wire (Ground 12volt -dc)** - Connect this black wire to the battery negative terminal. *Improper grounding will cause malfunctions. Be sure ground is clean.*

PUMP WIRING - INSTALLATION PROCEDURE:

POWER-UP, POWER-DOWN (Wiring for a 4 wire switch)

Note: Look at your factory wiring at the end of your up/down switch. If you have 4 wires use these instructions.

3) **ORANGE 16-Gauge Wire (Common)(12volt for pump up&down)**
Connect this wire (12volt output) to the trigger side of the pump solenoid switch. *This pin will show 12volts only when the trailer is being raised & lowered. Follow the factory switch wiring. The solenoid is the round part with many wires connected to it. Including the 12volt positive battery cable. It will be the smaller of the two pins that the factory switch wiring is attached to.*

4) **BLUE 16-Gauge Wire (12volt output to raise trailer)**
Connect this wire (12volt output) to the UP side of the pump solenoid valve. *This will usually be a square box about 2" square. It's usually on the pump or near it. It will have 1 or 2 wires on it. (If the pump has only 1 square box valve, you have a single solenoid pump. Please disregard this step and skip to terminal #5). Follow the factory switch wiring. Hook up to the same wire that the factory switch is hooked up too. This wire will show 12volts only when the trailer is being raised.*

5) **GRAY 16-Gauge Wire (12volt output to lower trailer)**
Connect this wire (12volt output) to the DOWN side of the pump solenoid valve. *This will usually be a second square box about 2" square. It's usually on the pump or near it. It will have 1 or 2 wires on it. Follow the factory switch wiring. Hook up to the same wire that the factory switch is hooked up too. This wire will show 12volts only when the trailer is being lowered.*

POWER-UP, GRAVITY-DOWN (Wiring for a 3 wire switch)

Note: Look at your factory wiring at the end of your up/down switch. If you have 3 wires use these instructions.

3) **ORANGE 16-Gauge Wire (Common)** - Not used
If you have a harness, do not connect this wire. Clip the end off and tape up the end with electrical tape. If this wire touches any metal when unit is activated the unit will short out.

4) **BLUE 16-Gauge Wire (12volt output to raise trailer)**
Connect this wire (12volt output) to the UP side of the pump solenoid switch. *This pin will show 12volts only when the trailer is being raised. Follow the factory switch wiring. The solenoid is the round part with many wires connected to it. Including the 12volt positive battery cable. It will be the smaller of the two pins that the factory switch wiring is attached to.*

5) **GRAY 16-Gauge Wire (12volt output to lower trailer)**
Connect this wire (12volt output) to the DOWN side of the pump solenoid valve. *This will usually be a square box about 2" square. It's usually on the pump or near it. It will have 1 or 2 wires on it. Follow the factory switch wiring. Hook up to the same wire that the factory switch is hooked up too. This wire will show 12volts only when the trailer is being lowered.*

OPERATION:

● Depress the  on the transmitter, to activate. The blue light on the top should turn on. The transmitter should be in the  position when the unit is not in use. This transmitter has a safety time-out feature. When the unit was active and then 30s. not used in it will automatically turn off. Just hit the  to turn it back on!

● On the transmitter, depress & hold the  to raise the trailer. Depress & hold the  to lower the trailer.

● The switch mounted on the receiver module will function the same as the transmitter buttons. The tethered controller, which is usually supplied with the hydraulic pump, will also function to control the hydraulic system. Installation of the tethered system is not required, and can be discarded.

HOW TO LEARN A TRANSMITTER:

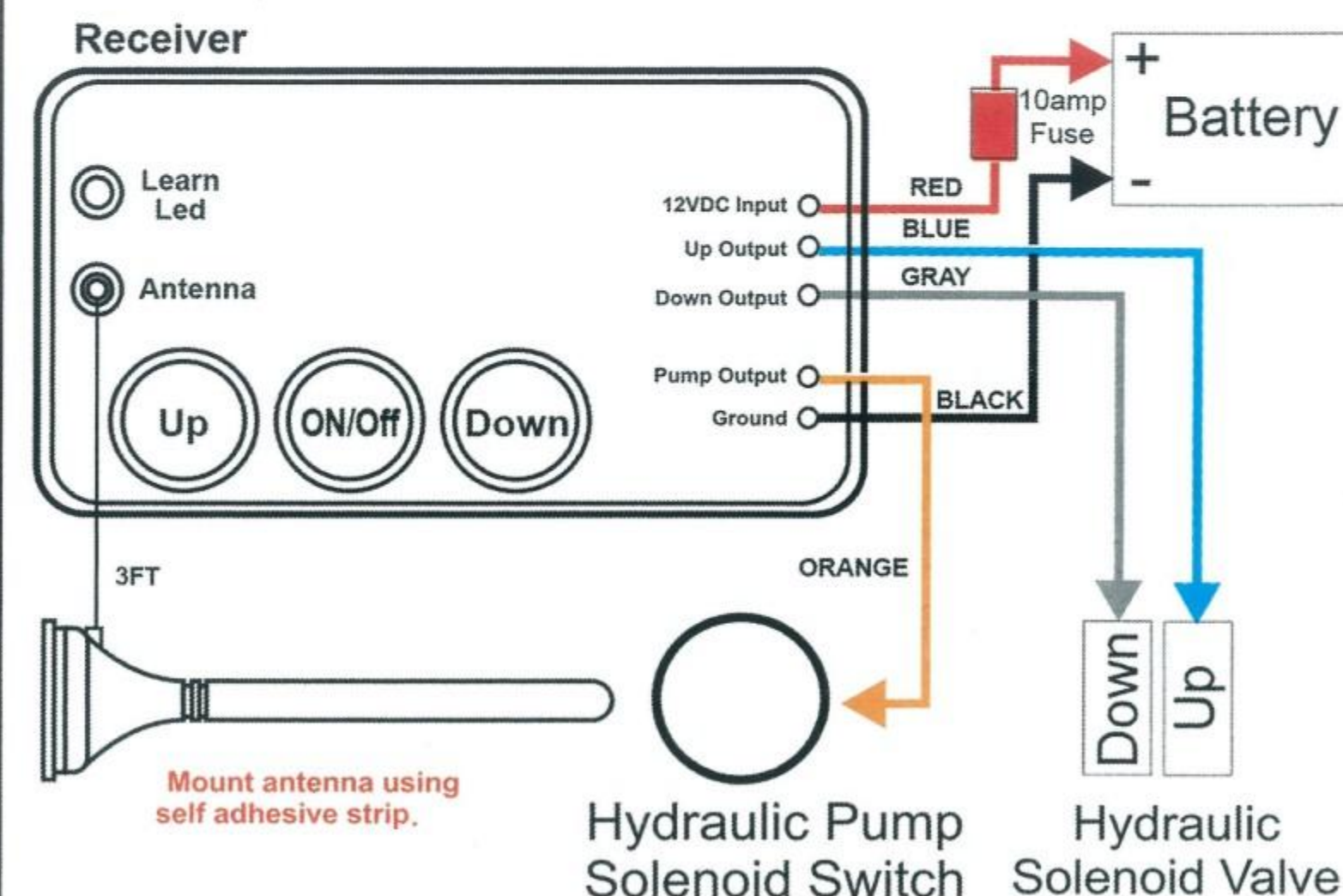
- 1) Enter learn mode: Push & hold the on/off button on the Receiver Module until the LED starts to flash, then release the button
- 2) Push & hold the on/off button on the Transmitter until the LED on the Receiver Module comes on constant. Release the on/off button. The Transmitter is now "learned".
- 3) Option: Learn another transmitter by repeating steps 1 & 2. Note: The Receiver Module exits the "learn mode" after each transmitter is learned. **You can learn up to 10 transmitters.**
- 4) To clear all transmitters out of the Receiver Module: Push & hold the on/off button on the Receiver Module for 10 Seconds.

TROUBLESHOOTING:

- 1) Remote is not waking up receiver – Check battery in transmitter. Pull fuse in red wire, verify that the fuse is not blown & reinsert.
- 2) Remote not communicating with receiver – Follow procedure to clear & relearn remote code (above).
- 3) Short range/intermittent operation – Check battery in Remote. Verify battery supply voltage at rest & during operation (if low the Green LED on the receiver will turn Red). Unhook Red & Black wires from the battery, twist them together & reconnect Red wire to (+) & Black wire to (-). Move antenna to a better location or buy a longer antenna.

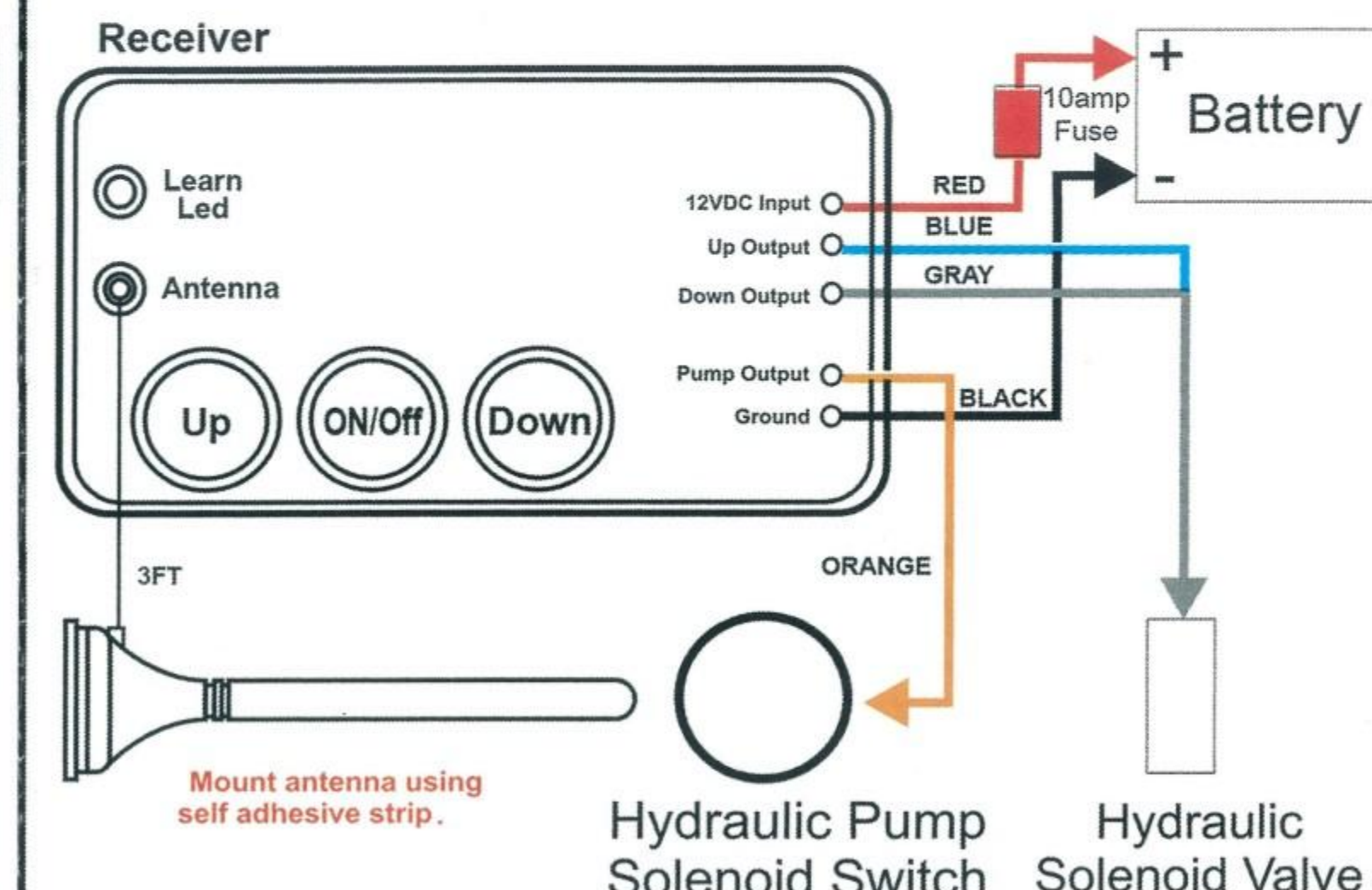
Hydraulic Wireless Control System

1 Power-Up, Power-Down Double Acting Solenoid Installation



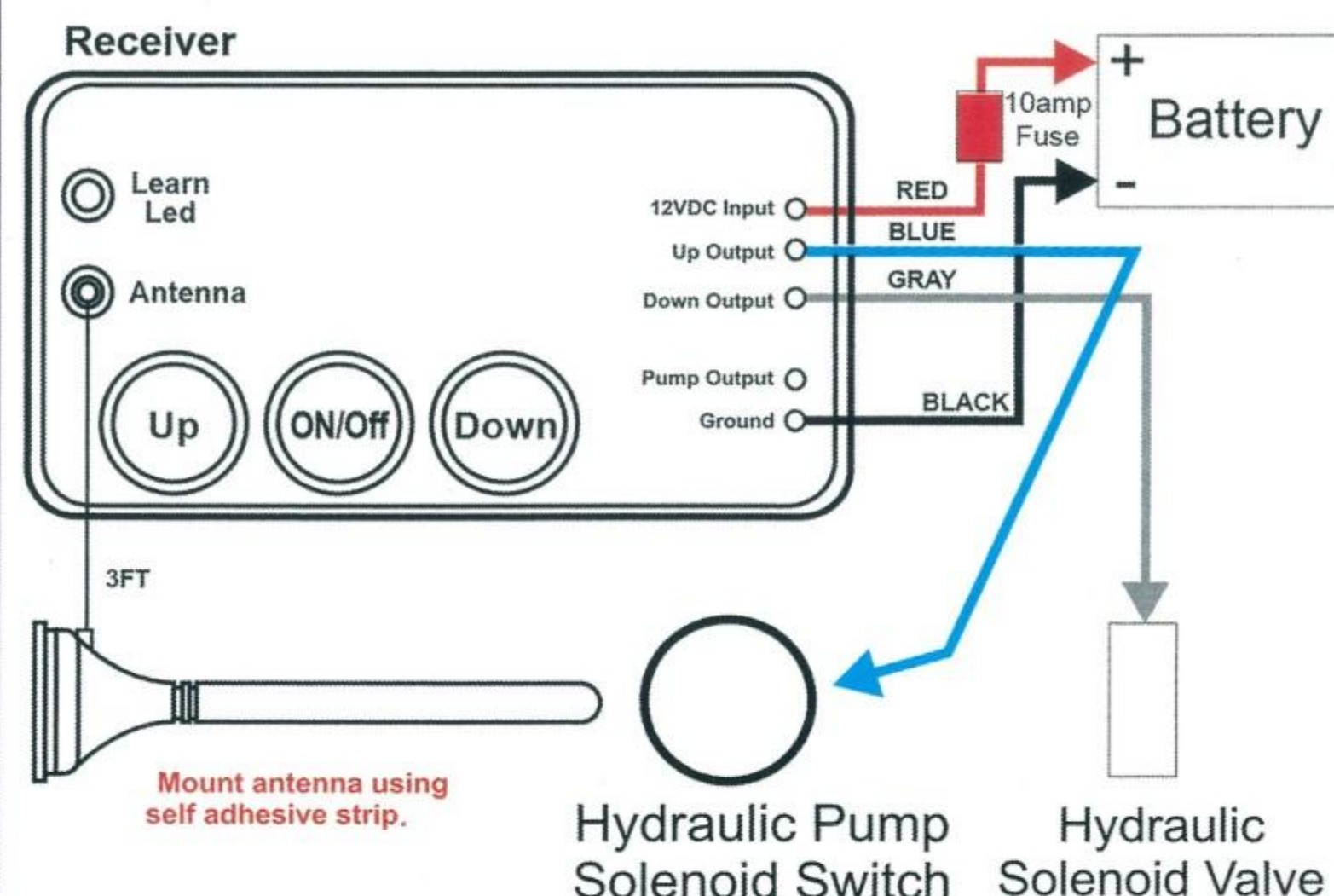
2 Power-Up, Power-Down Single Solenoid Installation

With single Hydraulic solenoid installation use either the Blue or Gray only, depending on system.

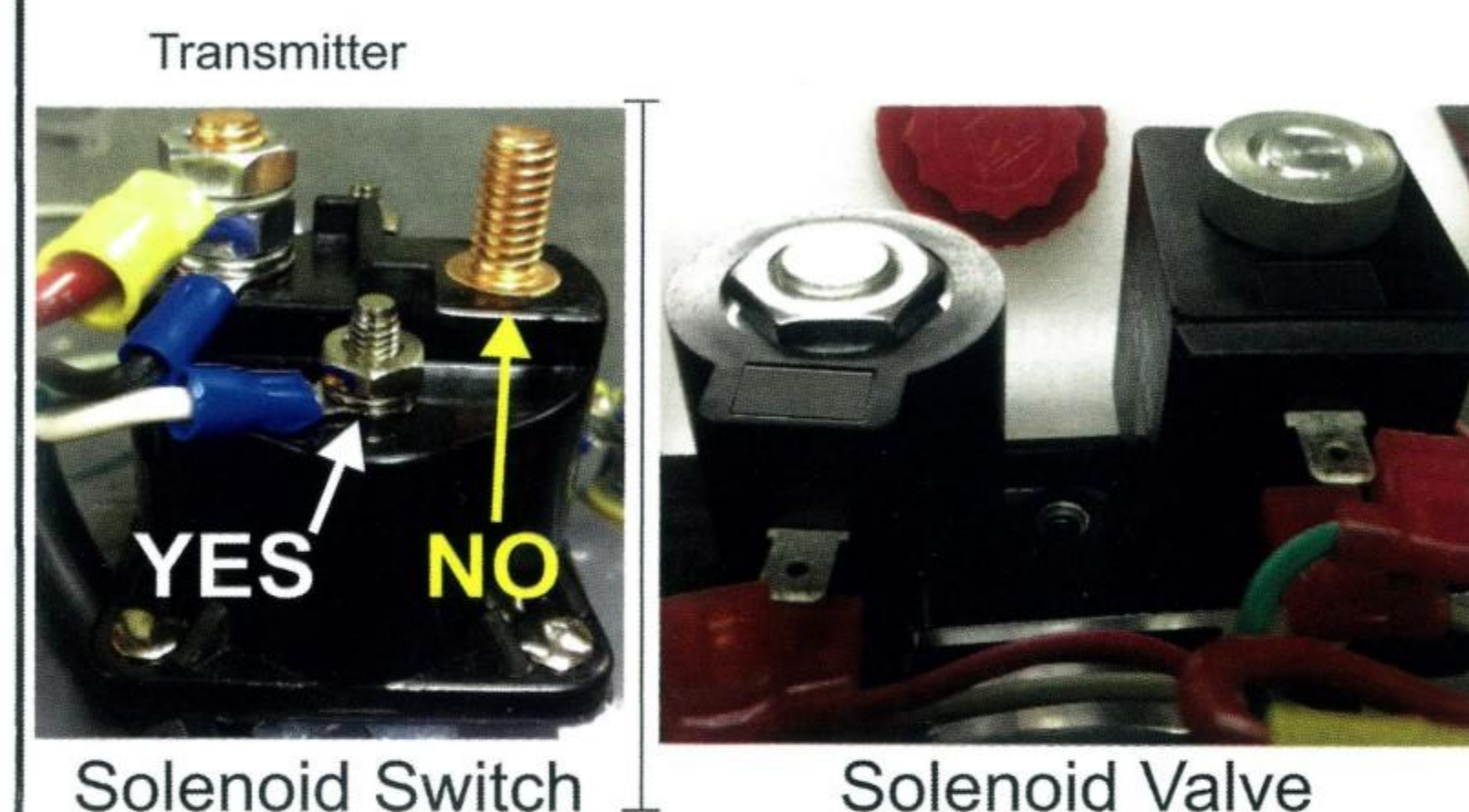


3 Power-Up, Gravity-Down Single Solenoid Installation

With single Hydraulic solenoid installation use the Blue and Gray wires only.



Function:
When the  button is depressed the **Orange & Blue** wires are powered with 12VDC.
When the  button is depressed the **Orange & Gray** wires are powered with 12VDC.



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction