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Thank you for purchasing a Butler Bale Bed!

Butler Beds have been manufactured to strict standards. Those standards have been in place for over 20 years allowing Butler Mfg to produce a durable yet economical bed for the bale bed industry. More than ever, Butler Beds have stood the test of time.

This bale bed is installed with an electric/hydraulic power unit. This allows for a dependable, quick, low cost transition when moving the bale bed from truck to truck. Please check with your local Butler Bale Bed dealer for bed/truck installation information before proceeding.

DISCLAIMER: BUTLER BALE BEDS ARE DESIGNED FOR MOVING / HAULING / UNROLLING HAY. ANY OTHER USE MAY CAUSE DAMAGE TO THE BED. READ ALL OPERATING INSTRUCTIONS BEFORE USE.

SAFETY WARNING: Follow safety operating procedures. A bale bed, like all farm related equipment can create a safety hazard when not used in the appropriate manner.

Butler Mfg is not responsible for accidents or injuries that result from misuse or lack of maintenance on your bed.

Do not make any adjustments to the hydraulic pump or bed. All adjustments are to be made by a Butler Bale Bed dealer.



Warranty

Butler Mfg warrants to each original purchaser of a new Butler Mfg bale bed from an authorized dealer to be free from manufacture defects which appear under normal operating conditions for a period of ONE YEAR starting with the date of purchase/install.

The obligation Butler Mfg has under this warranty is strictly limited to repair or replace defects at an authorized dealer. Parts will be replaced after inspection shows them to be defective. This warranty does not apply to defects caused by damage or inappropriate use (including not providing appropriate maintenance) while in the ownership of the original owner.

Butler Mfg shall not be liable for additional labor costs or transportation charges associated with repair or replacement of defective parts.

Any implied warranty including any warranty or fitness for a particular purpose are expressly limited under this warranty.

Butler Mfg makes no other expressed warranty.

For additional information please contact your nearest Butler Mfg dealer.

ATF fluid is the only fluid warranted in the operation of the bale bed. Hydraulic fluid is not warranted in the operation of the bale bed.

Arm Bed

Loading Instructions

- Back truck up to bale with arms open wide.
- Center spikes (spinners) as close as possible to center of bale.
- Squeeze the bale by pushing the IN button on the controller.
- Lift the bale by pushing the UP button on the controller.
- If you are loading 2 bales, release bale once it is resting on the truck bed. **DO NOT DROP THE BALE ON THE TRUCK.** Damage to the frame and suspension can result from a dropped bale.
- Repeat to load a second bale.
- Maintain pressure on second bale during transport.

CAUTION: When hauling one bale make sure there is down pressure on the bale to keep it from moving. Do not release the arms. Maintain constant steady pressure. When hauling two bales make sure the first bale is as far forward as possible.

CAUTION: Do not exceed the GVRW of the truck.

Unloading Instructions

- To unload one bale, push the IN button to maintain squeeze pressure. Push the DOWN button to lower the bale. Once bale is on the ground push the OUT button to release pressure.
- When unloading 2 bales, unload first bale as stated above. Raise arms to remaining bale on truck. Squeeze the bale as close to center as possible. To get a center grip on bale you may need to release the bale and squeeze it again near the center of the bale while it is still on the truck bed.

NOTE: When hauling multiple bales short distances, motor will become hot. Allow motor to cool down in between loading cycles. General rule of thumb is 25% motor on, 75% motor off. This equals about 2 ½ minutes “motor on” in a 10 minute period. Opening the tool box lid may help with the cool down.

Unrolling Instructions

- Position the spike in the center of the bale.
- Lift the bale off the ground and cut the wrap/string off.
- Lower the bale to make contact with the ground.
- Slowly drive forward letting the ground contact to unroll the bale.
- Bump the down switch to maintain ground contact with the bale.

Storing Of Arms

- Raise arms up to bed. Arms must touch bed before bringing arms to down position. Squeeze to stop.

Arm Bed Winter Use

Keep pivot area clear of debris (hay, foreign material, etc...). Check periodically. Clear if necessary. Frozen hay and debris can cause excessive pressure put on metal parts resulting in operational issues.

Spike Bed

Loading Instructions

- Center spikes as close as possible to center of bale.
- Back truck up to bale with spikes down, pushing spikes into bale.
- Lift the bale by pushing the UP button on the controller.

CAUTION: Do not exceed the GVRW of the truck.

NOTE: When hauling multiple bales short distances, motor will become hot. Allow motor to cool down in between loading cycles. General rule of thumb is 25% motor on, 75% motor off. This equals about 2 ½ minutes “motor on” in a 10 minute period. Opening the tool box lid may help with the cool down.

Unloading Instructions

- Lower bale to the ground by pushing the DOWN button on the controller.
- Pull truck forward.
- Once spikes are clear of bale, push the UP button to raise spikes to return to home position.

Spikes

Remove spikes at least once a month. Spikes seat into pivot very snug. Failure to remove spikes monthly could cause them to seize up and become difficult to remove.

Lifting Capacity

Butler Arm Bale Beds are designed to have a safe centered lifting capacity of 2,500 lbs.

Butler Spike Beds are designed to have a safe centered lifting capacity of 2,750 lbs.

Fluid Capacities:

Units and beds can vary. Fill reservoir, operate bed to distribute the fluid. Continue to fill reservoir and operate bed to distribute the fluid until it is 1” from the top of reservoir. Raise arms 1 foot off of bed. Squeeze arms in and hold for 15-20 seconds to eliminate air in lines.

Arm Bed: Approximately 10 Quarts ATF fluid (Dexron III)

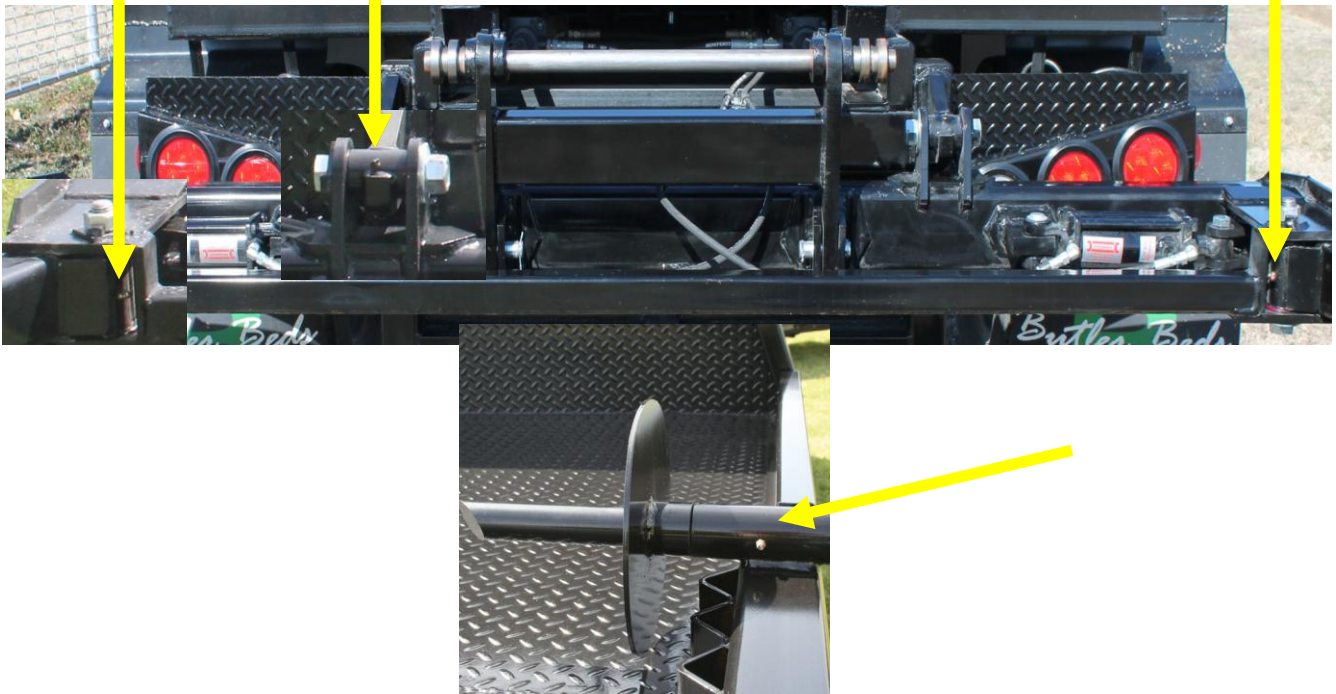
Spike Bed: Approximately 6 Quarts ATF fluid (Dexron III)

Sub zero temperatures may require H5606 or PRF87257

Maintenance/Lubrication

Before operating make sure the oil level in the reservoir is at the full mark. Grease all 6 zerks once a week to maintain fluid operation. Grease more often during heavy use. Grease arms and pivots as shown in the picture below. Also grease both spinners.

Arm Bed Grease Zerk Locations



Spike Bed Grease Zerk Locations

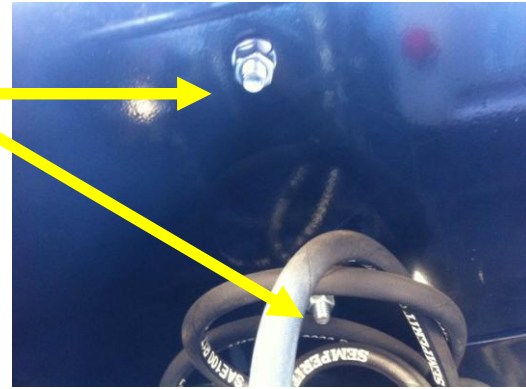
Put rear pivot all the way in down position. Locate the two zerks that are on the pivot pins. Grease both zerks.

Tool Box Mounting

Mount the box with the two bolt holes on the short end towards the front. Bolt the top of box to the welded bracket under the bed. All bolts are 3/8".



Bolt to welded bracket



Mounting of Power Unit

Place power unit in passenger side box with the reservoir facing the cab of the truck. Position the holes in bottom of pump block over holes in bottom of box. Using 3/8" bolts, secure the pump to the box. Run the hydraulic hoses through the rubber grommet in the box. The power unit operates best with a two battery set up. If needed, the second battery can be mounted next to the power unit in the tool box.



Wiring Instructions / Corded Remote Arm Bed

Blue wire attaches to the top outside manifold coil. This is the “OUT” on the arm wired remote. White wire attaches to the top inside manifold coil. This is the “IN” on the arm wired remote. Black wire attaches to the bottom outside manifold coil wire mates. This is the “DOWN” on the arm wired remote.

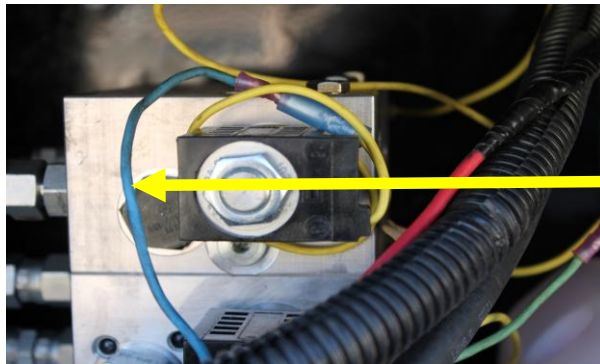
Green wire attaches to the bottom inside manifold coil. This is the “UP” on the arm wired remote.

Red wire attaches to the input on the motor start solenoid.

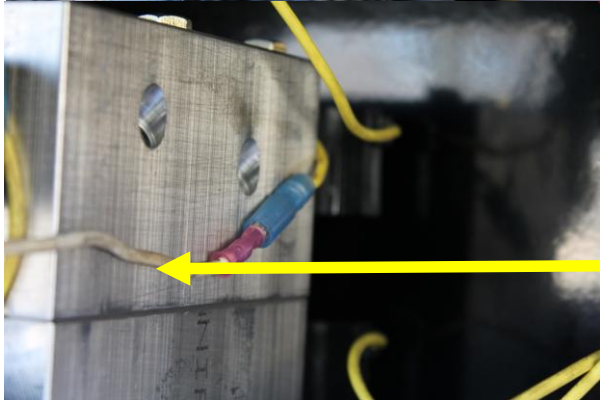
Orange wire attaches to the actuator (small post) on the motor start solenoid.

One end of the ground wire attaches to the bolt inside top of box and the other end attaches to bottom of pump block. Note: Scratch surface paint on box for proper grounding. Some trucks may require ground wire run all the way to the battery to establish grounding.

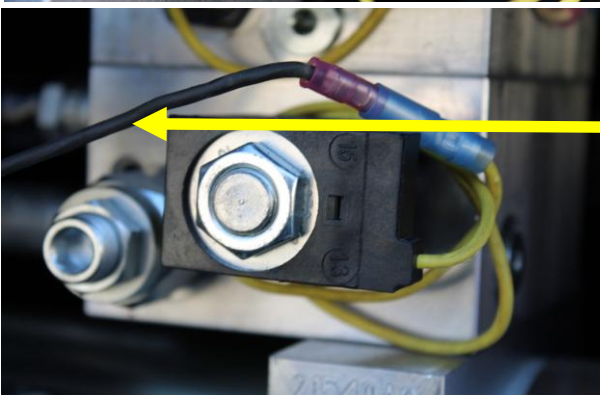
See pictures below. **Note: When wiring, inside coils are facing back of box. Outside coils are facing tool box lid.**



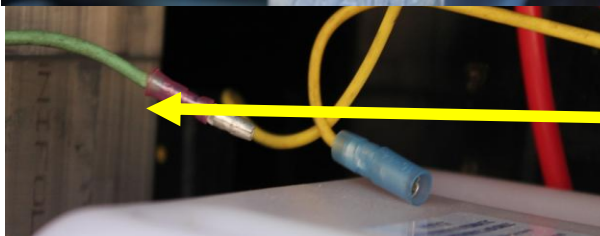
Blue wire attaches to the top outside manifold coil.



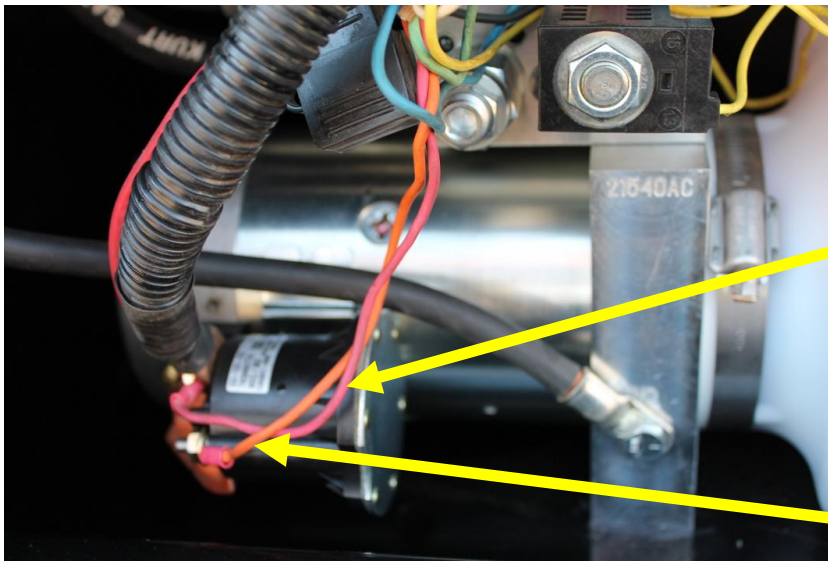
White wire attaches to the top inside manifold coil.



Black wire attaches to the bottom outside manifold coil.

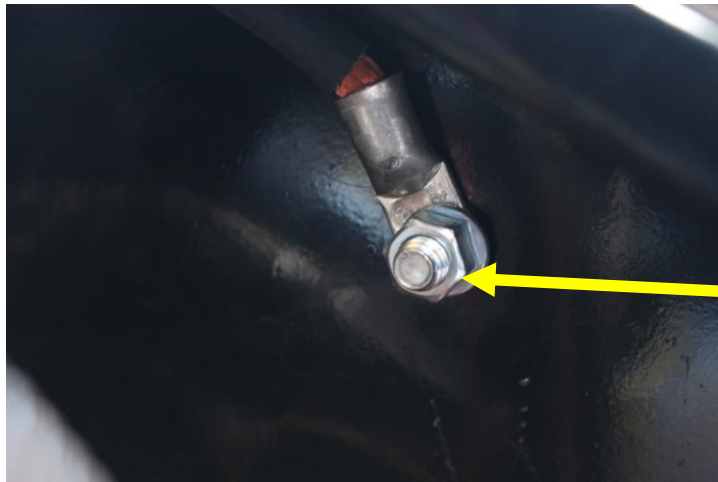


Green wire attaches to the bottom inside manifold coil.

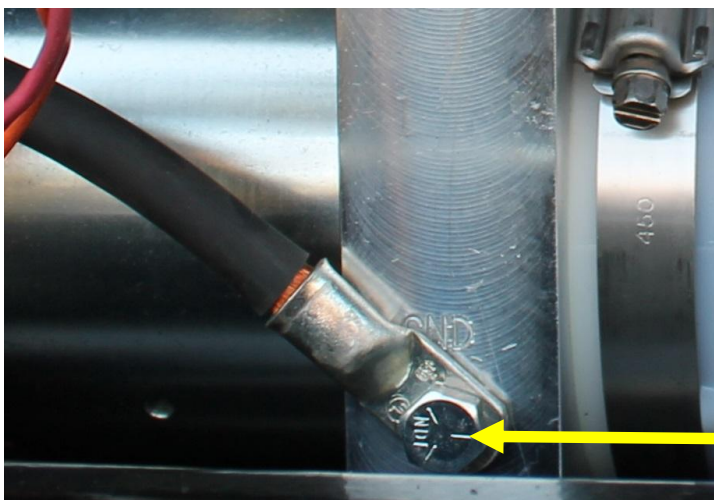


Red wire attaches to input on motor start solenoid.

Orange wire attaches to actuator (small post) on motor start solenoid.



Ground wire attaches to bolt inside top of box. Scratch/remove paint for better ground. If grounding is not successful run ground wire all the way to battery.



Ground wire attaches to bottom of pump block.

Wiring Instructions / Wireless Remote Arm Bed (optional)

Receiver mounts next to pump inside of tool box.

Blue wire attaches to top outside manifold coil.

Brown wire attaches to top inside manifold coil.

Green wire attaches to bottom outside manifold coil.

Yellow wire attaches to bottom inside manifold coil.

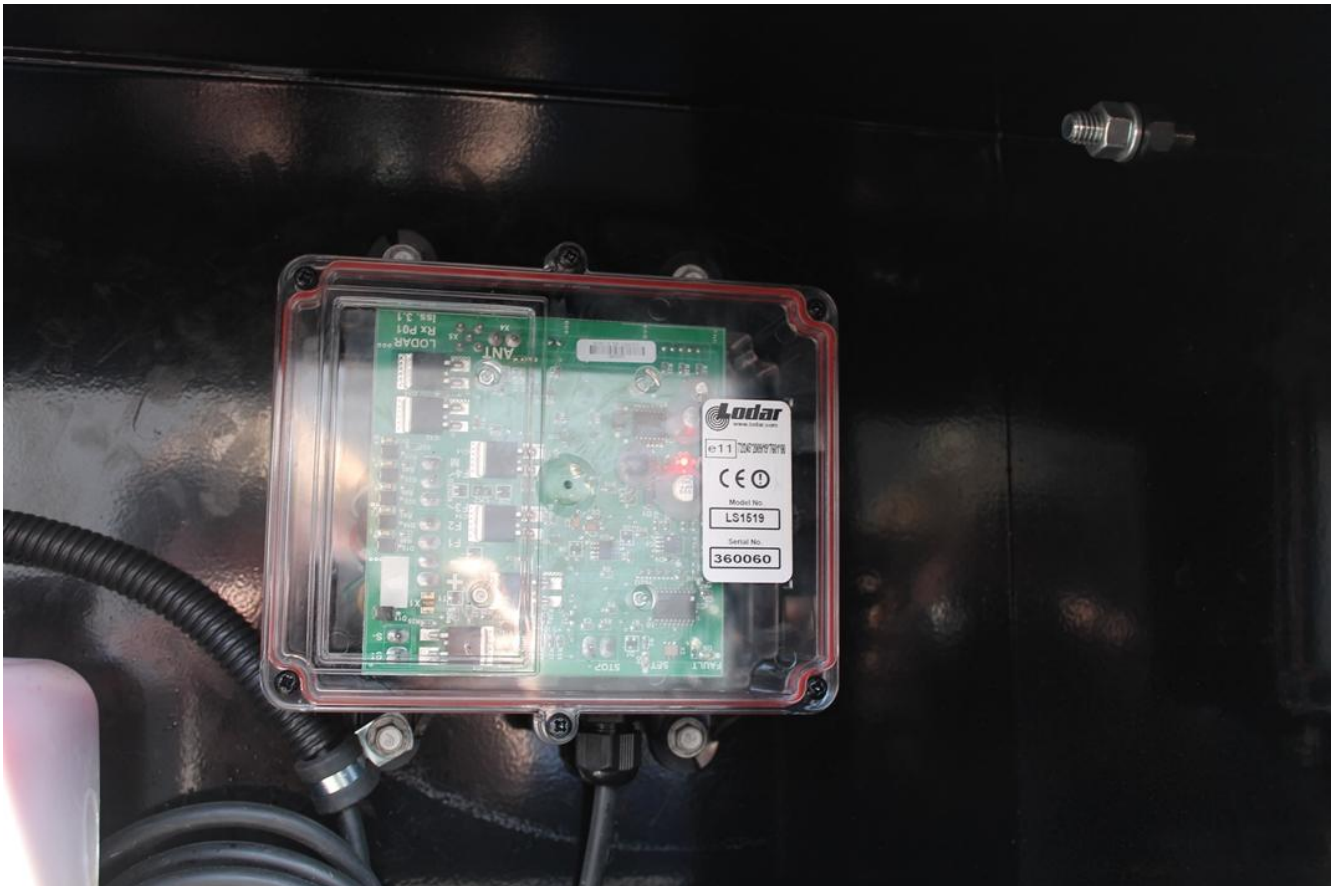
Black wire attaches to bottom of block.

Red wire attaches to inline 15 amp resettable/replaceable fuse.

White wire attaches to orange wire that connects to the actuator on motor start solenoid.

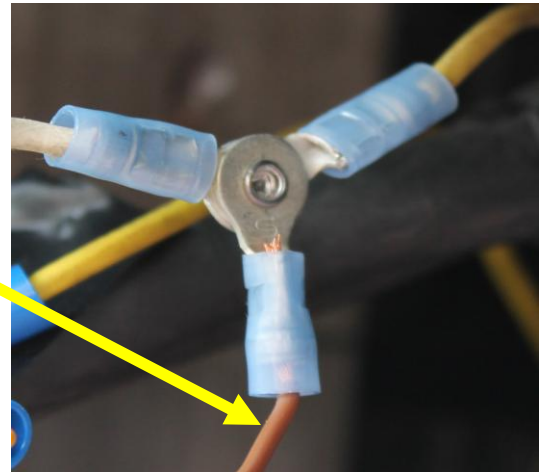
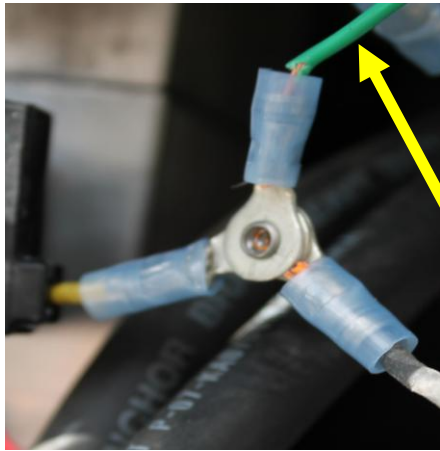
15 amp resettable/replaceable fuse connects to input on motor start solenoid.

Note: If you are tying this in with the corded remote (recommended), mate corded and wireless with a three way adapter as shown below.



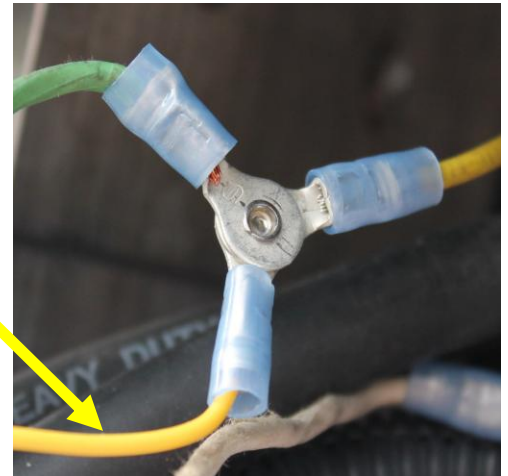
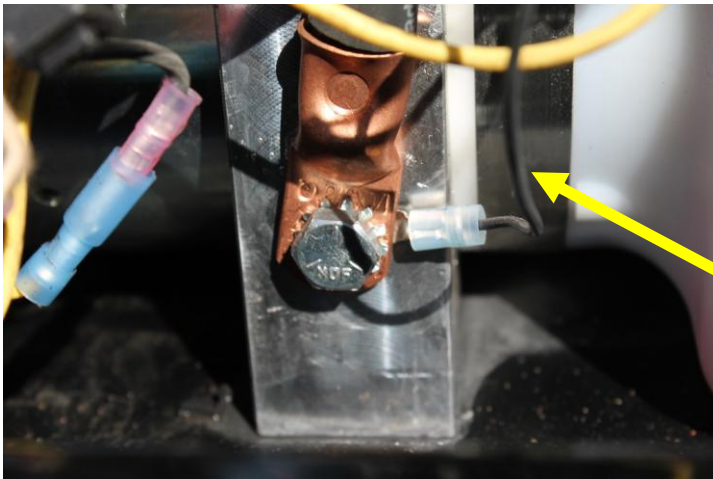
Blue wire attaches to top outside manifold coil.

Brown wire attaches to top inside manifold coil.

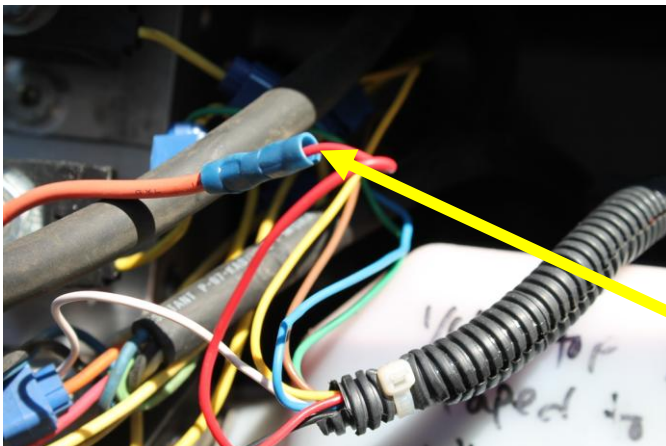


Green wire attaches to bottom outside manifold coil.

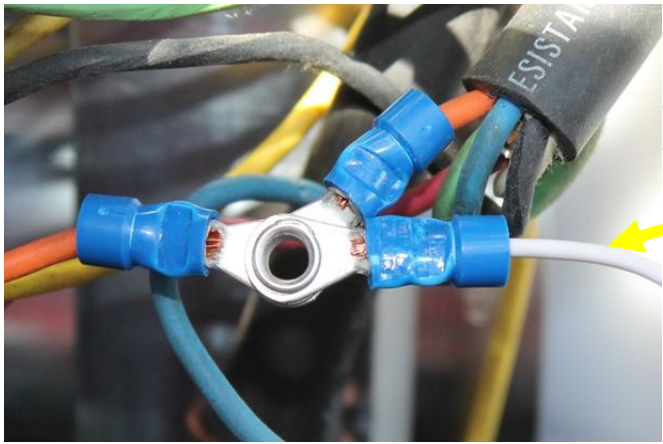
Yellow wire attaches to bottom inside manifold coil.



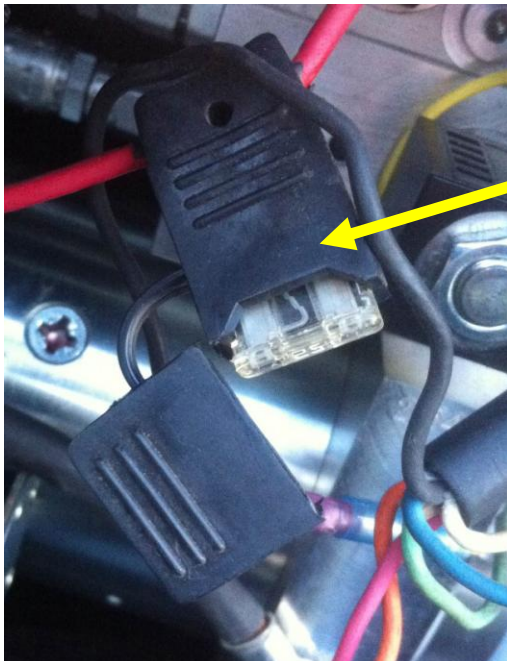
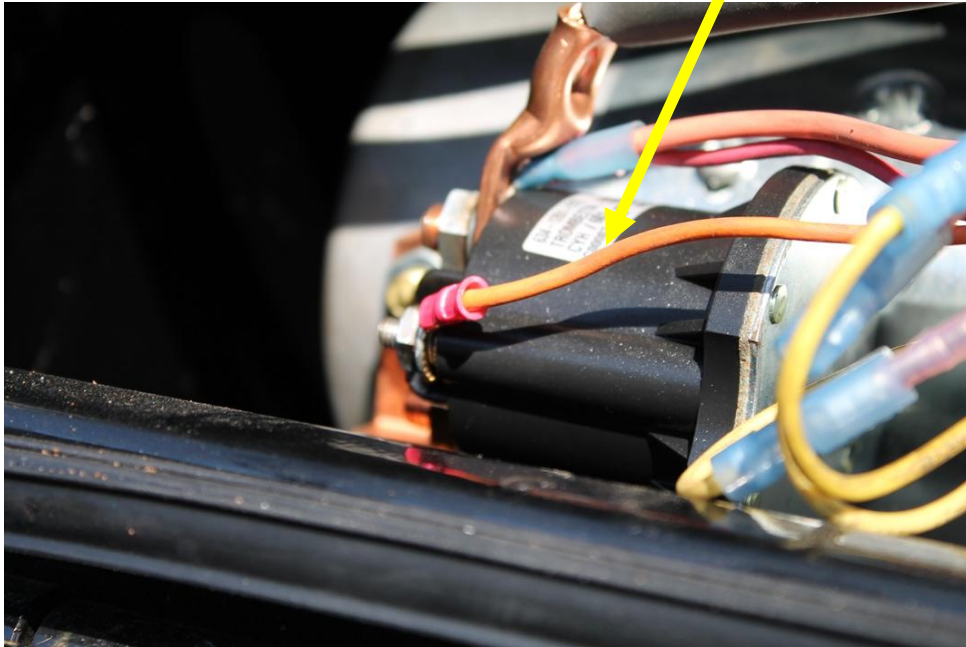
Black wire attaches to bottom of block.



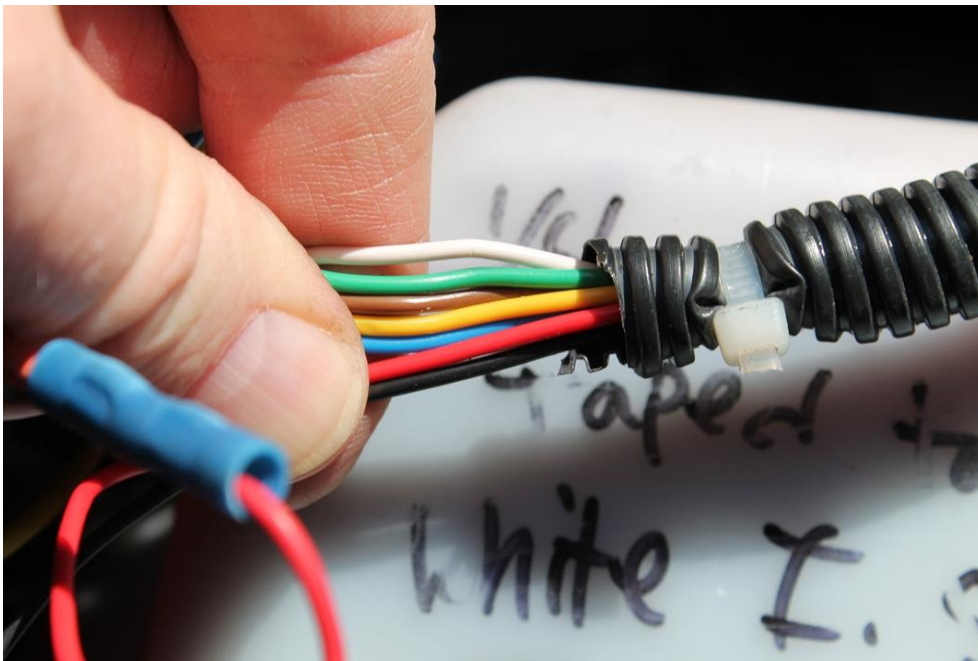
Red wire attaches to inline 15 amp resettable/replaceable fuse.



White wire attaches to orange wire that connects to the actuator on motor start solenoid.



15 Amp resettable/replaceable fuse attaches to input on motor start solenoid.



All seven wires.

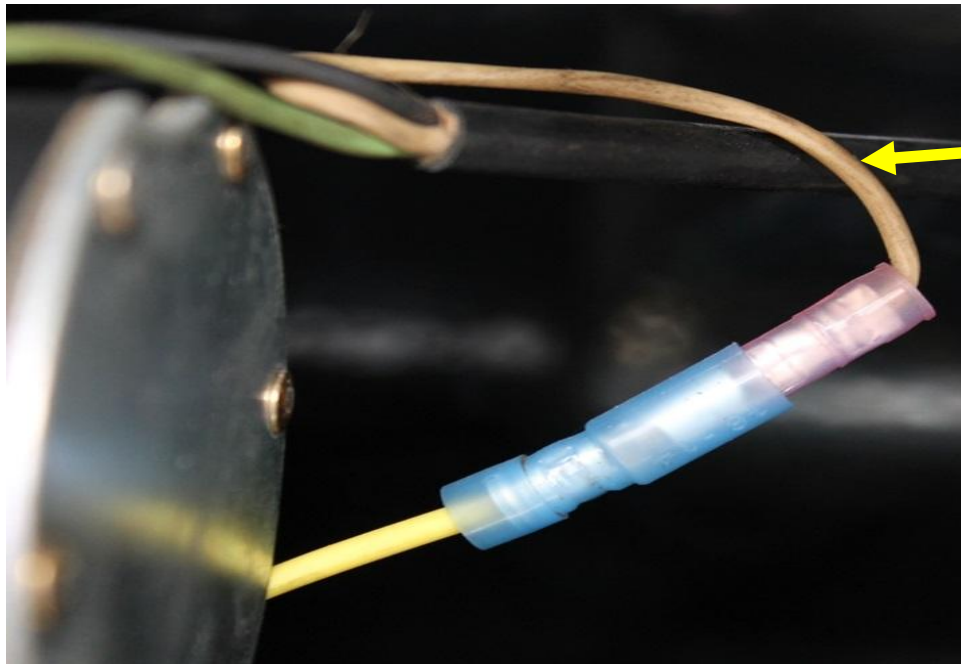
If the transmitter does not function when turned on for the first time, disconnect the power supply to the receiver that's mounted inside the tool box and then reconnect. This opens a 20 second window for registration. When you see the LED light flashing inside the receiver, PRESS and HOLD the green button on the transmitter (remote) and the F1 button. Continue to hold BOTH buttons for a minimum of 5 seconds during the 20 second period. Keep holding down buttons and if the transmitter is successfully registered, you will see the LED light illuminate solid for 3 seconds. First release the F1 button and then the green button within the 3 second period.

Wiring Instructions / Corded Remote Spike Bed

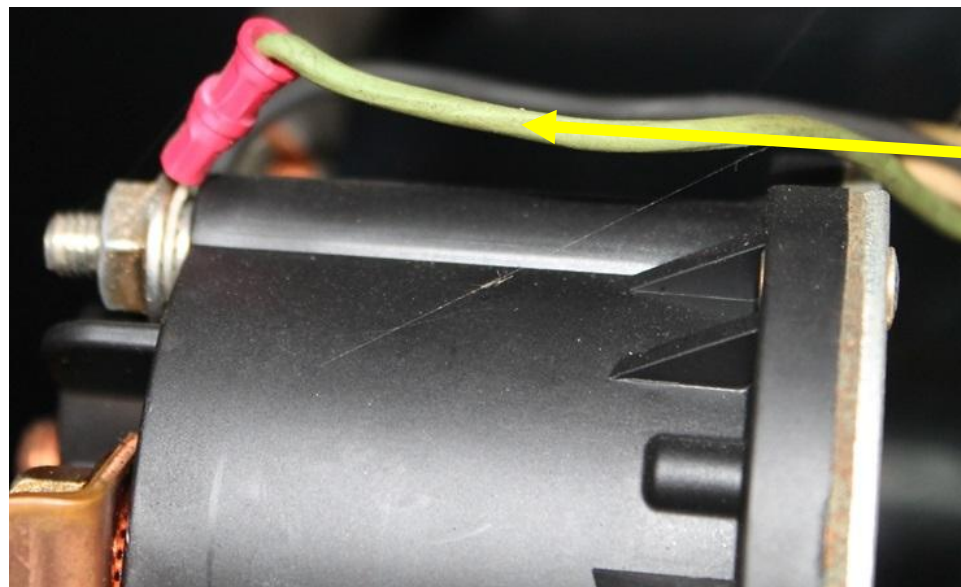
White wire attaches to the yellow coil wire.

Green wire attaches to the actuator on motor start solenoid.

Black wire attaches to the input on motor start solenoid.



White wire attaches to yellow coil wire.



Green wire attaches to actuator on motor start solenoid.



Black wire attaches to input on motor start solenoid.

Wiring Instructions / Wireless Remote Spike Bed

Receiver mounts next to pump inside of tool box.

Green wire attaches to the yellow wire on the coil.

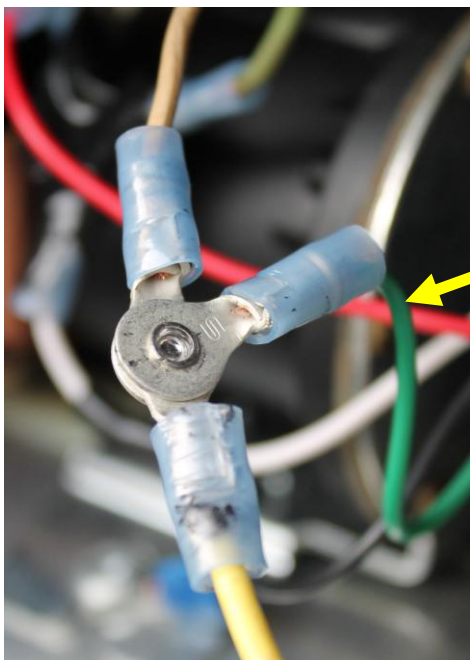
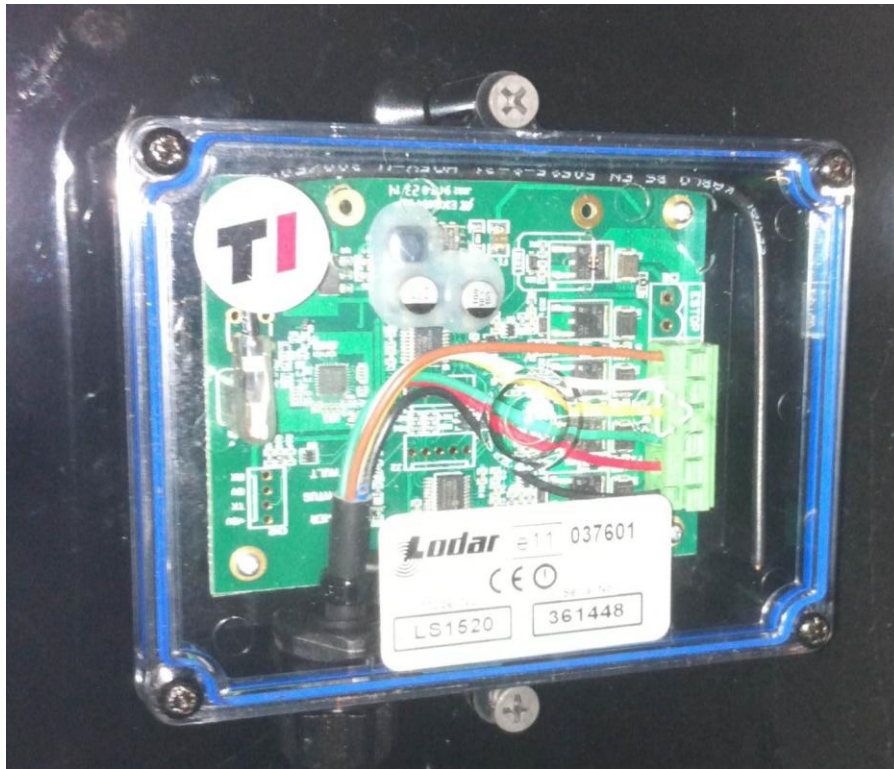
White wire attaches to green wire that connects to the actuator on motor start solenoid.

Red wire attaches to black wire that connects to the input on motor start solenoid.

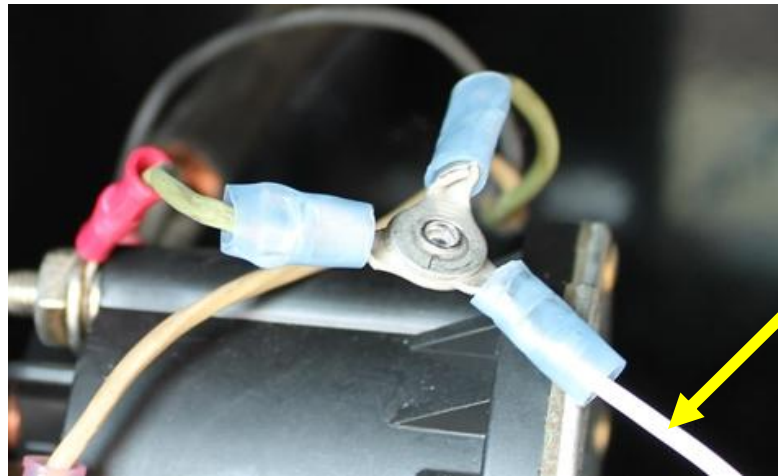
Black wire attaches to ground.

Yellow, brown and blue wires are not used and can be bent over and taped to the cord.

Note: If you are tying this in with the corded remote (recommended), mate corded and wireless with a three way adapter as shown below.



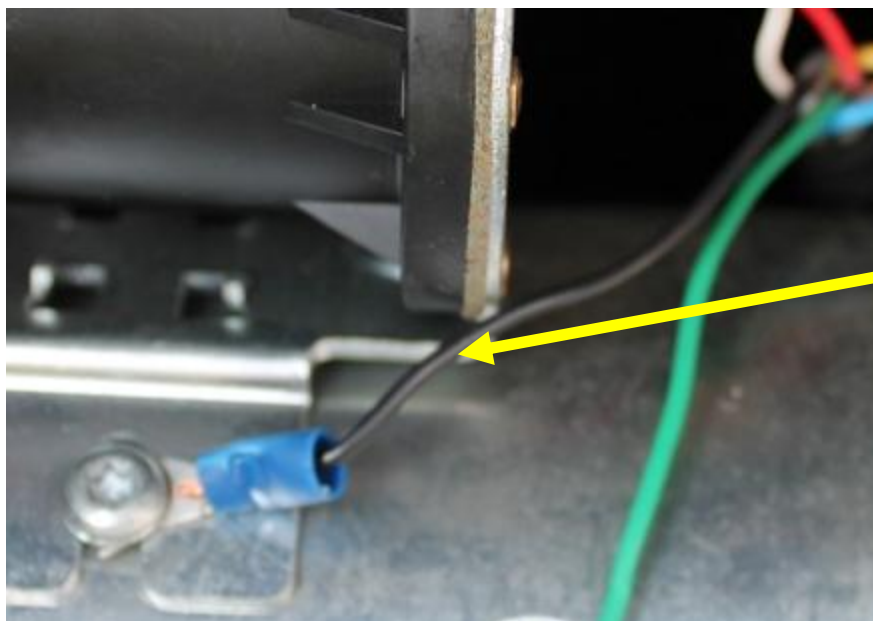
Green wire attaches to yellow coil wire.



White wire attaches to green wire that connects to the actuator on motor start solenoid.

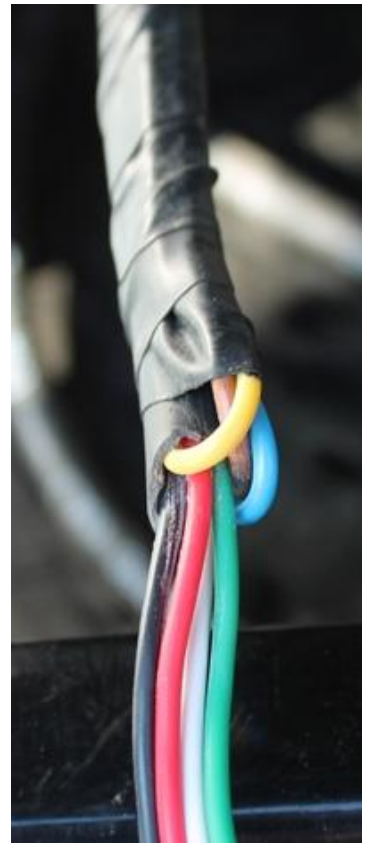


Red wire attaches to black wire that connects to input on motor start solenoid.



Black wire attaches to ground.

All 7 wires. Yellow, Brown & Blue not used.



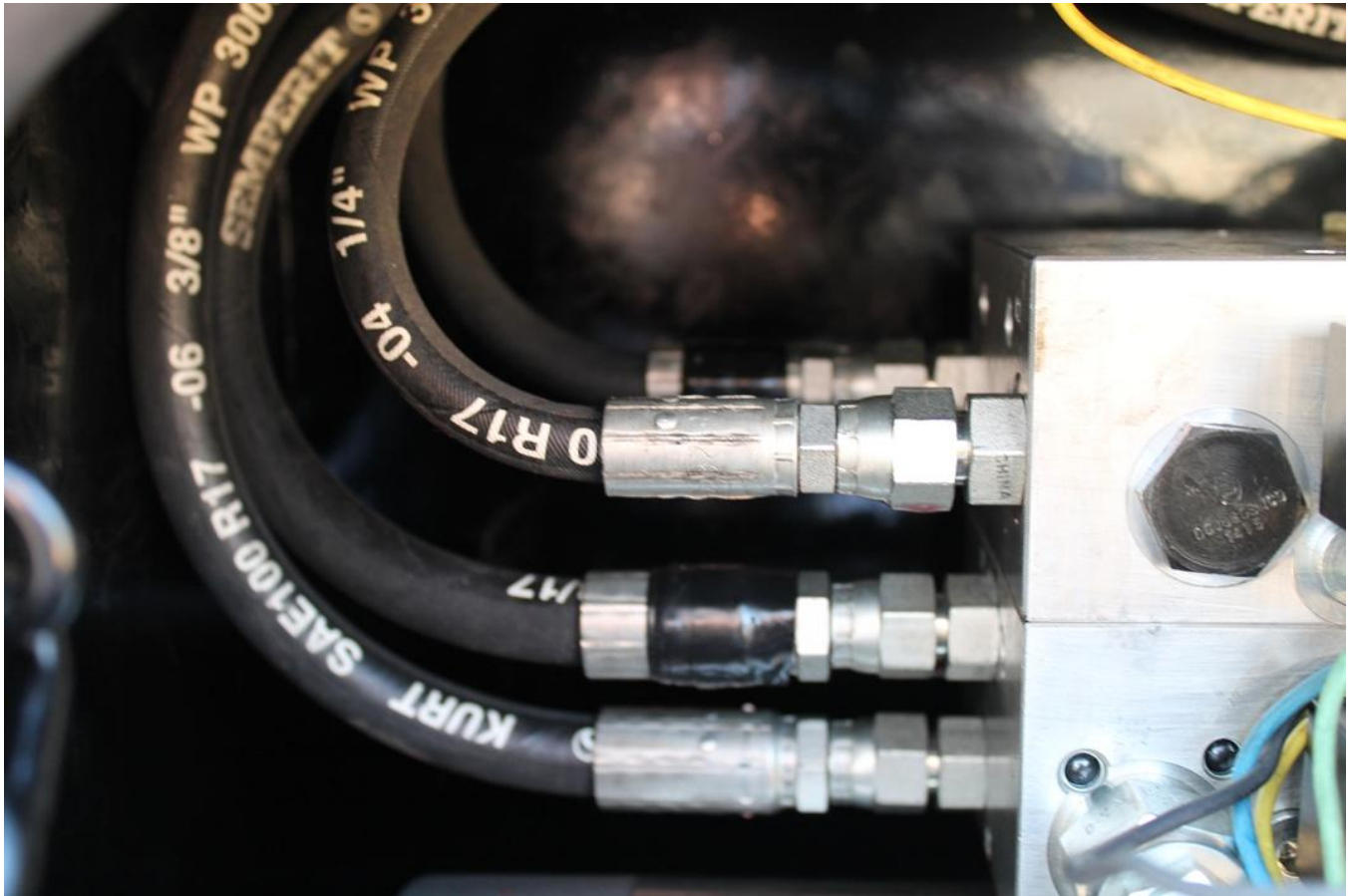
If the transmitter does not function when turned on for the first time, disconnect the power to the receiver that's mounted in the tool box. Next press the red button on the transmitter and release. Now PRESS and HOLD both the red and green buttons until the LED light starts to flash. This takes about 5 seconds. Now release both buttons. You should see a flash and pause pattern in the LED light now. Reconnect the power to the receiver and a 10 second window opens. Within the 10 seconds, PRESS and HOLD the green button for 5 seconds or until the light on the receiver is on solid (not flashing).

Hydraulic Hose Connections

1/4" Hoses (squeeze) attach to top valve body. Taped hose screws into C1.

3/8" Hoses (lift) attach to bottom valve body. Taped hose screws into C1.

After filling with ATF, synchronize arms (Arm Bed) and remove air from lines (Arm & Spike Bed). See Trouble Shooting.



Mega Fuse & Fuse Box (Not Included)

The 250 amp (arm bed) or the 200 amp (spike bed), Mega Fuse and fuse box should be installed on the power cable.



TROUBLESHOOTING

**** READ FIRST ** VERY IMPORTANT**

The most common problems with a power unit are due to low voltage from a battery, fuse failure, faulty wire or a failing ground connection. To narrow down the problem, connect jumper cables to the pump (positive to input side of solenoid & negative to the ground on pump base). Use a separate good battery (from another vehicle or a new battery). If the pump and bed operate properly, then have the battery tested, check in line fuse and power cord, and/or run ground cable directly to the battery instead of inside the tool box or frame. If the pump does not operate properly with jumper cables, then check solenoid and/or motor.

PROBLEM:

SOLUTION:

No lights / not working properly

Check all light connections and fuses on truck.

Power unit not responding to remote when toggle is activated

Use test light on remote connections to solenoid. If any connections are not working, the problem is in the remote. If all connections are working, check solenoid. If solenoid is working properly, the problem is in the pump motor.

Motor is humming or bed is operating slowly

Pump motor is failing.

One of the four operations is not working. Example: bed will lift, lower and squeeze in but will not squeeze out

Check wire on cartridge valve coil for a short or take coil off and activate remote while putting a screwdriver inside coil. If screwdriver does not magnetize to coil, the coil is failing. If coil is magnetizing, then failure is in cartridge valve.

Spike Bed pivot moving erratic

1. Squeeze pivot closed for 20 seconds to clear air from lines.

Arm Bed arms are not moving in unison (synchronized)
(The most common problem after hoses are replaced.)

1. Squeeze arms together above the welded stops. Assist the arms by hand if needed until they are both at maximum squeeze point. Hold toggle active for 20 seconds in order to clear air from lines.
2. Check rubber bumpers that are on each arm on the opposite side of cylinder hook up point.

Bale drops on its own when suspended in the air or will not maintain a tight squeeze

One or both of the check valves are failing or has debris in screen. Remove and clean screen if blocked. Replace check valve if problem persists.

Bed will not lift heavier bales / arms will not release bale when suspended in air

Pressure relief needs to be adjusted by turning half turns clockwise until bale can be lifted. Do not tighten screw all the way down. If problem persists, pump needs to be replaced.

Bale shutters or falls too fast

Valve failing.

Fluid leaking under bed or in tool box

Check hose connection at leak. Tighten or replace if needed. Leaks in tool box are best diagnosed by activating the remote while watching the power unit. Determine where the leak is coming from and replace O ring / plug / valve if needed. Some leaks are fixed by tightening the plug/valve. Make sure the plastic reservoir is not cracked.

HOW TO CHECK...

Solenoid

Check the two posts. If post show voltage, then the solenoid is good.

Pump

Make sure there is good voltage to the motor. Check for broken or worn gear. If there is a grinding or metallic noise, the pump needs to be replaced.

Motor

Check amp range using chart below. Arm & spike beds draw different amps at different pressures.

How to test the motor		
PSI	Spike Amps Draw	Arm Amps Draw
50	82	96
250	96	114
500	112	137
750	128	159
1000	144	180
1250	160	201
1500	175	221
1750	190	241
2000	204	260
2250	219	279
2500	233	297
2750	246	315
3000	260	332

NOTE: Units with several malfunctions, or older units that have had heavy use, are better off being replaced. Buying several parts can be more costly in the long run than just buying a new unit.