



# EZ FLOW CONTROL SYSTEM REPLACEMENT FOR 54" DOOR

Part # 102285
REMOVAL and INSTALLATION



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### PURPOSE:

This kit is used to replace a failed EZ Flow Control Box for 54" door installations with an updated EZ Flow Keypad and control box.

### Tools Needed:

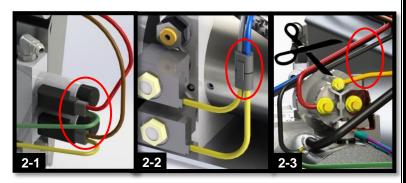
Phillips ScrewdriverHex Wrench Set

### Control System Replacement Kit - Part #102285

Drill	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
• 17/64" Drill Bit	102066	Keypad w/ Bracket & Hardware	1
• 7/16" Wrench	102146	Control Box Assembly	1
• 7/16" Socket w/ Ratchet	032-43152	Screw, ¼-20 X 1¼ SS	5
• 1" Wrench	032-44653	Nut, ¼-20 Nylock SS	4
T-10 Torx Driver	101672	Nut, 1/4-20 Serrated Flange	1
Die Grinder or Air Chisel		-	

# REMOVE THE EXISTING CONTROL BOX

- Disconnect the tractor power cord from the 2pole trailer connector.
- Unplug the existing front & rear solenoid connectors from the blocking valve. (Fig 2-1) (Red/Green & Brown/Yellow wires).
- Unplug the directional valve connector. (Yellow to Blue/Gray wires) (Fig 2-2)
- Cut or remove the coil wire from the motor solenoid. (Orange wire) (Fig 2-3)
- Cut or remove the power wires from the motor solenoid. (Red/Black wires). (Fig 3-3)
- Remove the two fasteners holding the old control box to the lower rail by grinding or chiseling the huck bolts off. Use caution not to grind or gouge the bottom rail. (Fig 2-4)
- Discard the old control box.





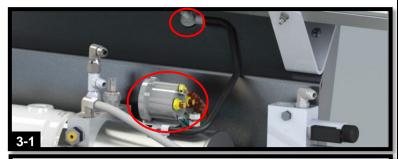
# MOUNT THE NEW KEYPAD

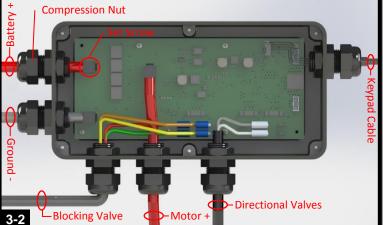
- Place the new keypad w/ bracket over the old control box location.
- Use provided fastener through one of the existing hole locations. (Fig 2-5)
- Drill 17/64" hole through the vacant bracket hole.
- Secure the bracket with another fastener.

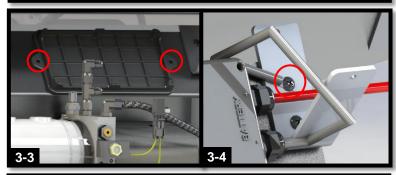


### MOUNT THE NEW CONTROL BOX

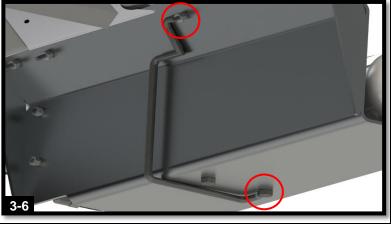
- Remove or cut the remaining wires from the motor solenoid. (Fig 3-1)
- Remove the existing ground wire, bolt and nut and save for later. (Fig 3-1)
- Remove and discard the old motor solenoid.
- Using wire strippers, remove ½" of insulation on the existing 4GA battery + cable end.
- Insert the existing 4GA Battery + wire through the compression nut fitting on the new control box and into the Set Screw mounted on the control board. (Fig 3-2)
- Tighten the Set Screw with a hex wrench. (Fig 3-2)
- Tighten the compression nut with a 1" end wrench to hold the cable in place and to keep moisture from entering the box. <u>Failure to do</u> <u>so may void any warranty</u>. (Fig 3-2)
- Place the control box lid onto the motor mount bracket above the motor as a guide. (Fig 3-3)
- Drill 2 17/64" holes through the motor mount bracket on either side of the mounting lid.
- Fasten the mounting lid onto the new control box with the provided Torx screws.
- Tighten screws with a T10 Torx driver.
- Secure the new control box to the motor mount bracket with the provided fasteners.
- Install Battery ground wire from control box to the mounting bracket fastener. Make sure to clean the surfaces with a wire brush to ensure good conductivity. (Fig 3-4)
- Insert the new blocking valve connectors into the blocking valve sockets. Brown/Yellow on top for front door. Red/Green on bottom for rear door. (Fig 3-5)
- Insert the directional valve wire plug into the existing Delphi connector from the directional valves. (Fig 3-5)
- Connect the Motor Power + wire from the control box to the + stud on the pump/motor using the existing nuts and washer. (Fig 3-5) Use dielectric grease to protect the connection.
- Slide protective boot over the stud connector to keep moisture and debris out.
- Use zip ties to secure the keypad communications cable along the C-channel to keep it from hanging down.
- Use the existing grounding cable that was saved earlier and fasten one end to one of the pump/motor mounting bolts on the underside of the bracket and the other end to the new fastener used to hold the control box. Use a wire brush and clean the mating surfaces to ensure good conductivity. (Fig 3-6)











# PROGRAMMING REMOTE TO KEYPAD CONTROLLER

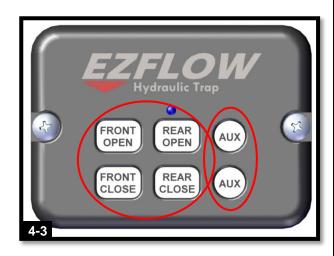
- Power on the keypad controller by holding the "FRONT/OPEN" and "FRONT/CLOSE" buttons on the keypad simultaneously for 5 seconds or until the status light turns blue to indicate the system is on. (Fig 4-1)
- 2. Open the lid on the remote and observe the flashing light.
- 3. Press the "**Mode**" button two times and wait two seconds for remote to toggle to "**Front Hopper**" Mode. (First two lights flashing) (Fig **4-2**)
- 4. Repeat steps 2 3 for each remote to be programmed. Up to four remotes can be programmed. Have all remotes ready for steps 5 and 6.
- Press and hold the two "AUX" buttons on the keypad controller simultaneously for 10 seconds until the blue flashing light stays solid then release. (Fig 4-1)
- 6. The light on the keypad controller should now be blinking violet. Press and hold the "On/Open" button on the first remote for 2 seconds until the blue flashing light turns white then release. The keypad controller light should then continue blinking violet.
- 7. Repeat step 6 for up to four remotes to be programmed.
- Once all remotes are programmed press the top "AUX" button to exit programming. The keypad controller light should blink two sets of red indicating the remotes have been saved.





# **KEYPAD CONTROLLER OPERATION - MANUAL OPERATION**

- Power on the keypad controller by holding the "FRONT/OPEN" and "FRONT/CLOSE" buttons on the keypad simultaneously for 5 seconds or until the status light turns blue to indicate the system is on.
- Press desired button to perform the required operations. (Fig 4-3)
  - FRONT/OPEN Opens Front Door
  - FRONT/CLOSE Closes Front Door
  - REAR/OPEN Opens Rear Door
  - REAR/OPEN Closes Rear Door
- "AUX" buttons will control optional work lights.
- Power off keypad controller when finished. Push and hold the "FRONT/OPEN" and "FRONT/CLOSE" buttons on the control box simultaneously for 5 seconds or until blue status light turns off.



**REMOTE OPERATION - Remote functions listed on decal under flip lid**