

# 6000 TO 6000<sup>XR</sup> SERIES CONTROL SYSTEM REPLACEMENT

Part # 102008  
REMOVAL and INSTALLATION



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## PURPOSE:

This kit is used to replace a failed Thunder 6000 Series control box and/or keypad with an updated 6000<sup>XR</sup> Series keypad and control box.

### Tools Needed:

### Control System Replacement Kit – Part #102008

	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
• 17/64" Drill Bit	032-47918	Nut 1/4"-20 Hex UNC	2
• Drill	102175	Keypad	1
• Phillips Screwdriver	101994	Control Box w/ Relay	1
• 1/4" Wrench	032-51281	Washer 1/4" Split Lock Med	2
• 1" Wrench	032-53715	Screw 1/4" x 3/4" SS Phillips	2
• 3/8" Torx Driver			

## REMOVE THE EXISTING KEYPAD

1. Disconnect the power cord from the 2-pole trailer connector.
2. Remove the two fasteners holding the old keypad to the nose of the trailer.
3. Unplug the keypad from the control wire coming from the old control box.
4. Remove the old rubber grommet.
5. Discard the old keypad and grommet.

## MOUNTING THE KEYPAD

1. Measure down 9/16" from the two existing 17/64" holes on the nose of the trailer and make a mark or use the template at the end of this instruction manual as a guide.
2. Drill two new 17/64" holes into the nose of the trailer for the keypad using the marks.
3. Place the new keypad on the trailer and install the two 1/4"-20 x 1 1/2" Phillips head screws, the 1/4" lock washers, and 1/4"-20 nuts to hold the key pad to the nose of the trailer.
4. Make sure that all fasteners are tight.

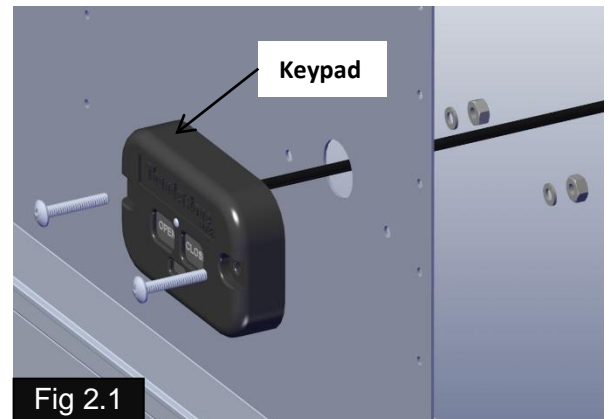


Fig 2.1

## REMOVING THE EXISTING CONTROL BOX

1. Remove the existing control box by removing the two 1/4"-20 x 1 1/2" Phillips pan head screws, the 1/4" lock washers, and 1/4"-20 nuts securing it to the mounting plate. (See Fig 2.2)
2. Unplug the existing motor control wire connector from the control box connector, if applicable. (See Fig 3.2)
3. Slide the rubber boot away from the back of the 2-pole plug to expose the connections. (See Fig 2.3)
4. Loosen the set screws for both of the power wires and remove them. These wires will be replaced with the new installation. Discard the old power wires.
5. Make sure to retain rubber boot for later installation.
6. Discard old control box and relay.

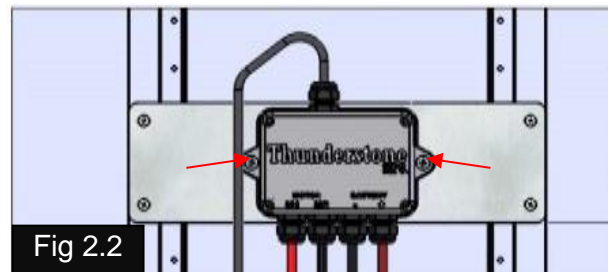


Fig 2.2



Fig 2.3

## MOUNTING THE CONTROL BOX

1. Attach the new control box lid to the mounting plate using two ¼"-20 x 1 ½" Phillips pan head screws, ¼" lock washers, and ¼"-20 nuts.
2. Slide the large rubber boot over the new BAT +/- wires.
3. Insert the red BAT+ wire into the top terminal hole and the black BAT- wire into the bottom terminal hole on the 2-pole receptacle and tighten the set screws securing the wires. Use dielectric grease on the wires prior to inserting them into the power receptacle. (See Fig 3.1)
4. Slide the large rubber boot down to cover the back of the 2-pole receptacle.
5. Plug the motor control wires into the motor wire connector from the tarp arm. (See Fig 3.2)
6. Plug the communication cable coming from the keypad into the control board connector. (See Fig 3.3)
7. Tighten the compression fitting nut into the control box with a 1" end wrench.
8. Remove existing wire guarding and use zip ties to secure the communications cable to the air line (or equivalent) below the keypad in the nose of the trailer. (See Figure 3.4)
9. Re-install the wire guarding with the communications cable routed behind for protection.
10. Reconnect the power cord to the 2-pole trailer connector.
11. Power up and operate the system in both directions to verify good operation.
12. Attach the control box to the lid using the supplied #4 x 3/8" Torx head screws.



Fig 3.1

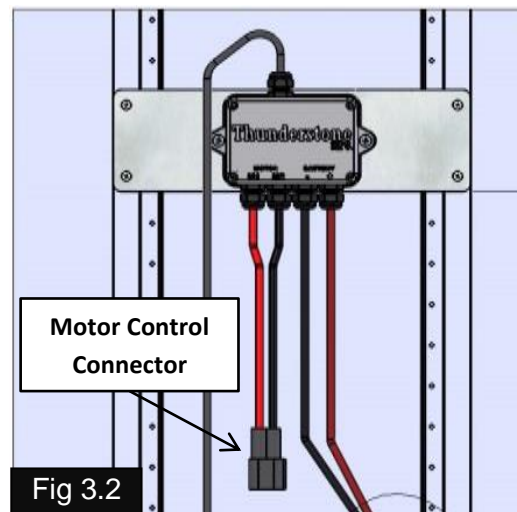


Fig 3.2

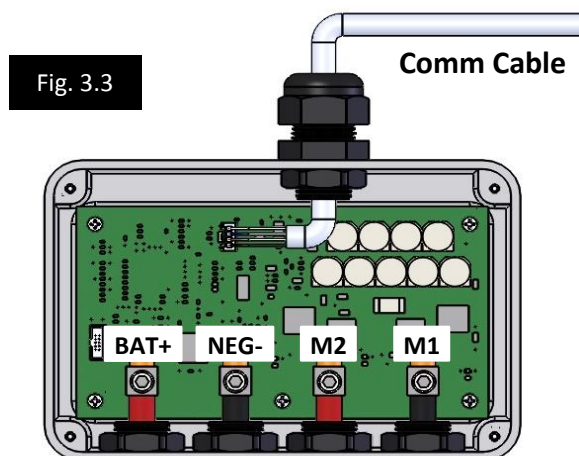


Fig. 3.3

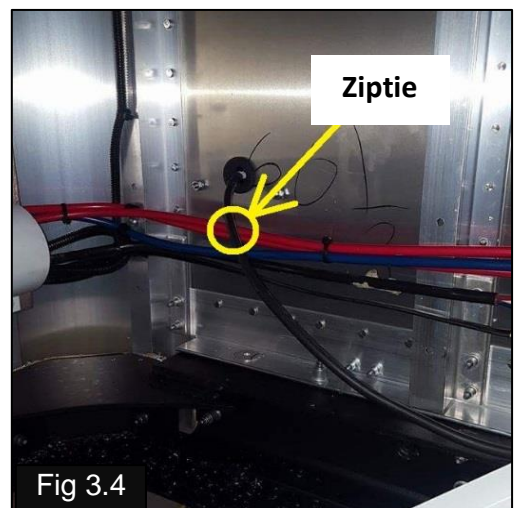
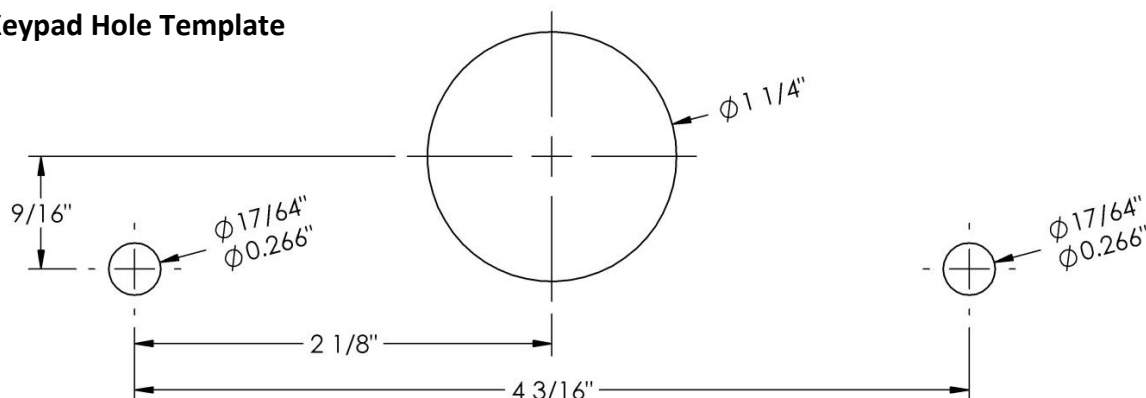


Fig 3.4

### Keypad Hole Template



## PROGRAMING REMOTE TO THE KEYPAD

1. Four remotes can be programmed to the keypad. Have all of the remote units that are to be programmed ready.
2. To program a remote, open the flip style lid and make sure the remote is set to mode one (first light flashing). See figure 4.2
3. Turn the trailer keypad on by pressing and holding the two large buttons “**Open**” and “**Close**” for approximately 3 seconds or until the status LED and the two large buttons illuminate. See figure 4.1
4. Press and hold the program button (small button) and the “**Open**” button simultaneously until the status LED turns solid green then release both buttons. The LED will then flash orange rapidly which indicates it is ready to receive remote programming. See figure 4.1
5. On the first remote, press and hold the “**On/Open**” button until the LED on the trailer keypad blinks green rapidly for 2 seconds then turns solid white. Release the button and the keypad should then start blinking orange again to accept additional remotes.
6. Repeat step 5 until the desired amount of remotes (no more than 4) are programmed. The LED will blink red two times once programming has been completed or will go back to regular operating mode after 10 seconds of inactivity. Pressing the programming button will also exit programming mode.

*The control box resets the list of remotes it remembers every time you enter the programming mode to program a remote. Remotes that were previously programmed are removed from the control box memory and will no longer be able to control the system. This is why all remotes need to be programmed at the same time.*

## OPERATING THE TARP SYSTEM

**Powering up or down the system** - To turn the system on or off, locate the “**Open**” and “**Close**” buttons on the keypad on the front of the trailer. Press and hold both buttons simultaneously for approximately 3 seconds. The LED status light and the two large buttons will illuminate on the keypad when the power is on and ready for operation. You can also press and hold the “**On/Open**” and “**Off/Closed**” buttons on the remote for 3 – 5 seconds to power the system on or off.

**One Touch Operation** - *The one touch function is fully automated. The system will stop when fully opened or closed.* To open or close the tarp using the one touch operation feature, press and hold the desired directional button on the keypad or remote for 1 – 1 ½ seconds until the keypad status light turns solid green. Release the button and the keypad status light will start flashing green indicating one touch operation. The tarp will travel in that direction automatically and stop when it is fully open or closed.

**Incremental Operation** - To inch the tarp in either direction, press then release the desired directional button on the keypad or remote for less than 1 – 1 ½ seconds intermittently to move the tarp in that direction.

**Press and Hold operation** - To open or close the tarp using the press and hold feature, press and hold the desired directional button on the keypad or remote for more than 2 ½ seconds or until the keypad status light turns from solid green to solid white. The tarp will travel in that direction until you release the button.

**Never travel with the tarp in a partially covered position. The trailer should always be covered when traveling.**

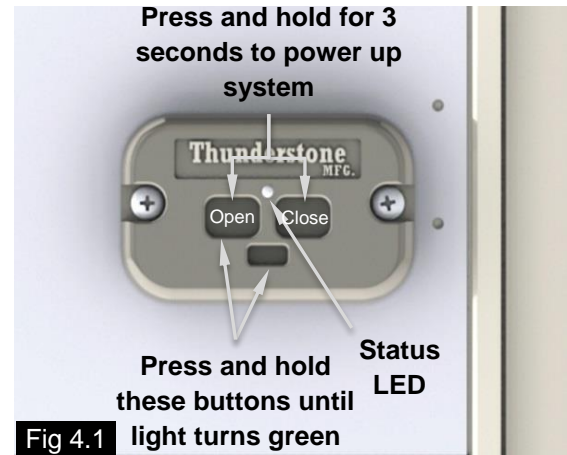


Fig 4.1

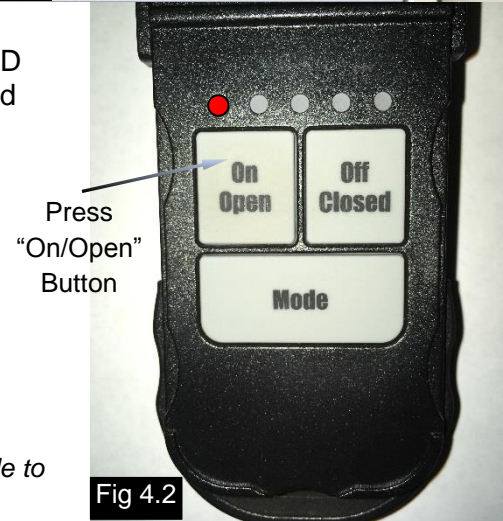


Fig 4.2