

### NOTICE

These instructions are for replacing the two existing thermostats with a single new solid-state thermostat.

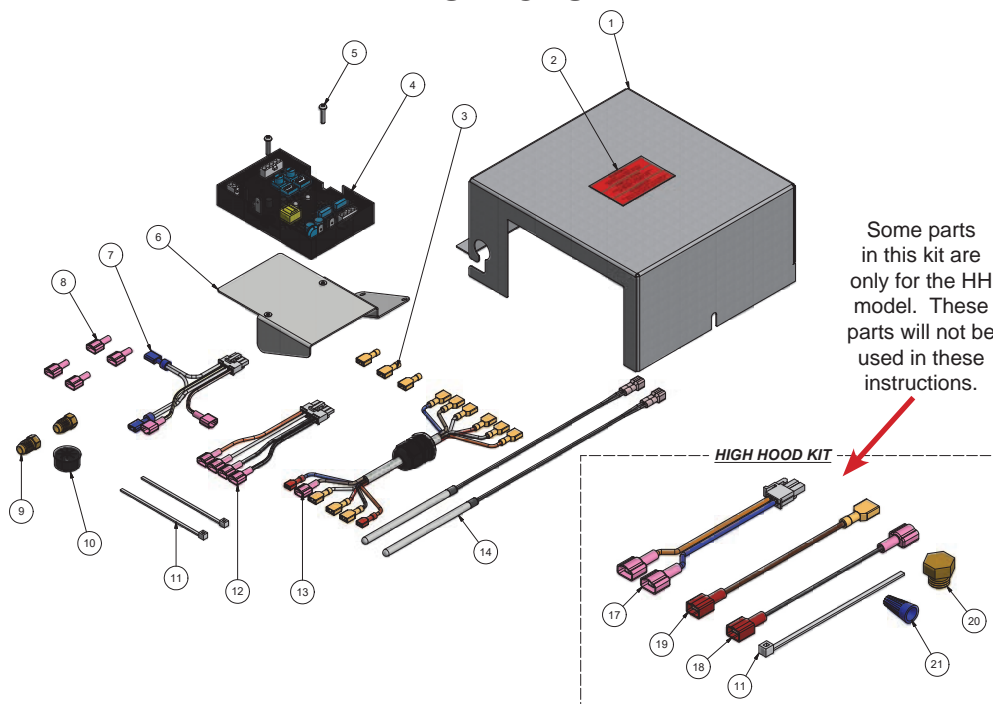
### PREPARATION



**Disconnect electrical power at the breaker or disconnect switch and lockout/tagout in accordance with procedures and codes.**

**Remove the strainer and drain stopper and completely drain the wash tank.**

### PARTS INCLUDED



### TOOLS REQUIRED

- Adjustable Wrench
- Phillips Screwdriver
- Small Bucket (~1 gallon)
- 5/16" Nut Driver
- Wire Crimper
- Flathead Screwdriver
- Step Stool
- Wire Stripper
- Needle Nose Pliers
- 3/8" Wrench
- 7/16" Wrench
- 5/8" Wrench

| ITEM | QTY | DESCRIPTION                                      | PART NUMBER     |
|------|-----|--------------------------------------------------|-----------------|
| 1    | 1   | Cover, Wash Tank Heater                          | 05700-004-22-15 |
| 2    | 1   | Decal, Warning-Disconnect Power                  | 09905-100-75-93 |
| 3    | 3   | Terminal, Female                                 | 05940-200-58-00 |
| 4    | 1   | Thermostat, Elan Electric                        | 06685-004-17-27 |
| 5    | 2   | Screw, 6-32 x 5/8"                               | 05305-011-39-85 |
| 6    | 1   | Thermostat Mounting Bracket Assembly             | 05700-004-22-17 |
| 7    | 1   | Harness, 4-Pin, 4-Wire                           | 05700-004-22-18 |
| 8    | 4   | Terminal, Male                                   | 05940-200-74-00 |
| 9    | 2   | Fitting, 1/4" Brass Nut/Sleeve                   | 05310-924-02-05 |
| 10   | 1   | Grommet, 7/8"                                    | 05975-200-40-00 |
| 11   | 3   | Zip-tie, 4"                                      | 05975-602-01-16 |
| 12   | 1   | Harness, 5-Pin Connector, 4-Wire                 | 05700-004-22-19 |
| 13   | 1   | Harness, 7-Conductor, 6-Wire                     | 05700-004-22-29 |
| 14   | 2   | Thermistor Probe, 4"                             | 06685-004-17-26 |
| 15   | 1   | Schematic (Not Shown)                            | 09905-004-22-10 |
| 16   | 1   | Instructions, Thermostat Retrofit (Not Shown)    | 07610-004-22-11 |
| 17   | 1   | Harness, 2-Pin Connector, 2-Wire                 | 05700-004-23-19 |
| 18   | 1   | Harness, Control Relay to 6-Conductor Cable 1    | 05700-004-23-30 |
| 19   | 1   | Harness, Control Relay to 6-Conductor Cable 2    | 05700-004-23-31 |
| 20   | 1   | Plug, Brass                                      | 05700-011-73-73 |
| 21   | 3   | Wire Nut, Blue Metal                             | 05945-111-01-00 |
| 22   | 1   | Instructions, HH Thermostat Retrofit (Not Shown) | 07610-004-22-18 |

### PANEL & COVERS 1. Lift up the front dress panel and pull out gently to remove.

*Set the panel to the side and keep the hardware. It will be re-installed later.*

*Set the rinse heater cover to the side and keep the hardware. It will be re-installed later.*

*Discard the wash heater cover but keep the hardware. A new cover will be installed later.*



### 2. Remove both wash and rinse heater covers using a 3/8" wrench.

Rinse Heater Cover



Wash Heater Cover

### CONTROL BOX SECTION

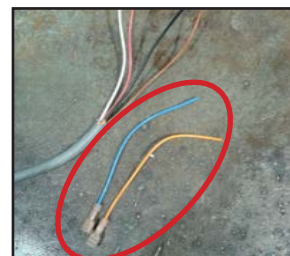
### 3. Remove the top of the control box using a phillips screwdriver.

*See page 12 for a layout of control box components.*



### 4. Get the gray 6-conductor cable from the kit. Cut the orange and blue wires off at the edge of the gray sheath and discard. Notice that one end has all female terminals (this is the bottom portion) and the other end has one male and three females (this is the top portion). Keep the strain relief near the bottom portion of the cable.

*6-conductor cable from the kit is used in this step.*



### 5. Route the cable from the top of the machine and trail it down to the wash heater area.

*Grommet from the kit is used in this step.*

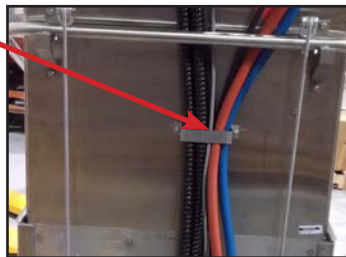
### 6. Pop-out a black blank on the back of the control box and insert a new grommet from the kit.

## CONTROL BOX SECTION

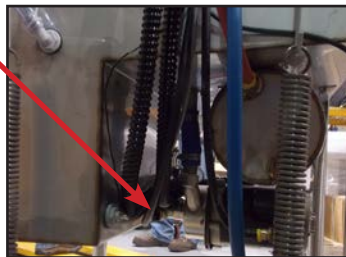
7. Insert the top portion of the cable (with the male and female terminals) through the grommet inserted in the previous step (leave ~12" in the control box).



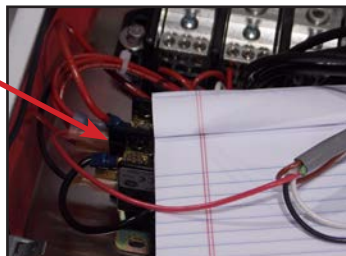
8. Run the cable down the back of the machine. Make sure to run the wire under the bar and bracket in the back so it's not hanging loose.



9. Route the cable between the wash tank and rinse booster, underneath the machine.

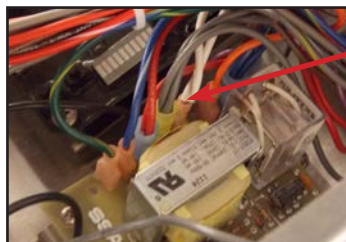


10. Once the cable is in the wash tank heater area, route the cable over the high-limit switch.
11. In the control box, attach the red wire from the 6-conductor cable to open tab on the L2 side of the wash motor contactor (R3).



*See page 12 for a layout of control box components.*

12. Locate and remove the two white wires in the single terminal on the water level controller (WL) at the #1 position. Cut the terminals off of the two white wires.



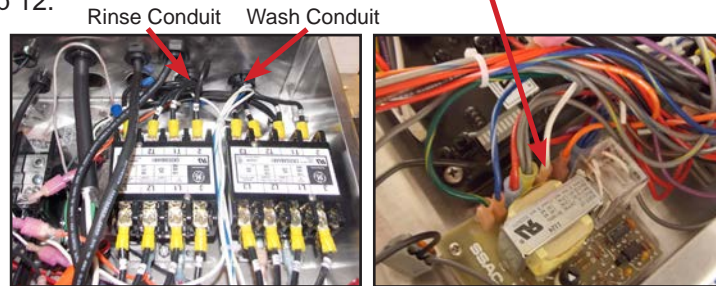
*See page 12 for a layout of control box components.*

**CONTROL BOX  
SECTION**

See page 12 for a layout of  
control box components.

Terminal from the kit is  
used in this step.

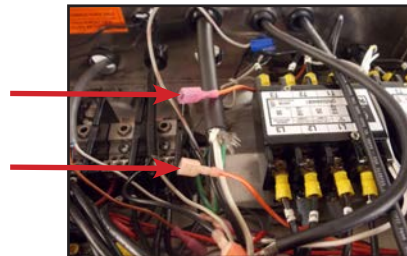
13. Trace the two white wires to the back of the control box. On the white wire that enters the wash conduit (from the front of the box, it is the conduit on the far right), strip and crimp a female terminal onto the end of it and then connect it back to the water level controller (WL) at the #1 position where it was removed in Step 12.



14. Trace the other white wire that was removed in Step 12 to the rinse conduit (from the front, it is the conduit to the immediate left of the wash conduit). Strip and crimp a male terminal onto the white wire and then connect it to the white wire from the 6-conductor cable.

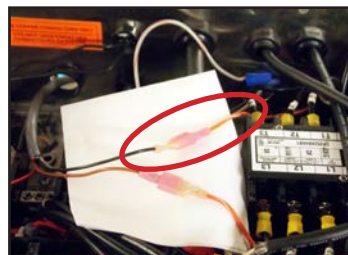


15. Locate the orange/white wire coming out of the rinse conduit (same conduit as in Step 14) and note it ends with a termination into the rinse heater contactor (R1). Strip and crimp a male terminal on the end that goes to the rinse conduit and a female terminal on the end that goes to the rinse heater contactor.



See page 12 for a layout of  
control box components.

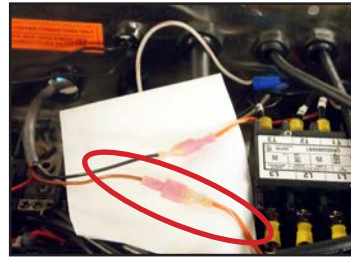
16. Connect the orange/white wire from the rinse conduit to the black wire from the 6-conductor cable.





### CONTROL BOX SECTION

17. Connect the orange/white wire from the rinse heater contactor to the brown wire from the 6-conductor cable.



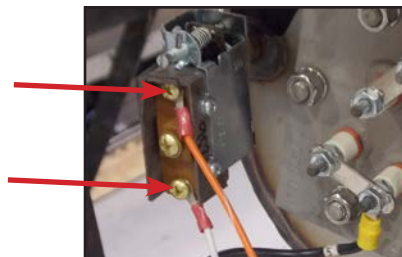
18. Replace the control box top using a phillips screwdriver.

### RINSE BOOSTER SECTION



**WARNING!** To prevent burns, make sure the machine has been off long enough for the water to cool before draining the booster tank!

19. Place a bucket under the booster.
20. Find the thermostat on the booster tank. Disconnect the orange/white and white wires from the thermostat.



21. Cut the ring terminals off of the orange/white and white wires. Strip and crimp each with a male terminal.

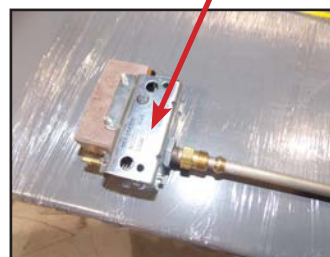
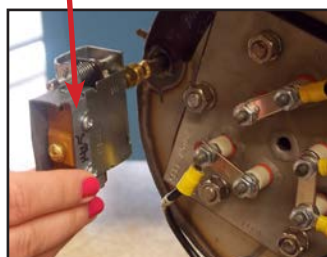


Terminals from the kit are used in this step.

#### NOTICE

*If Steps 22 and 23 are done rapidly, minimal water will drain from the booster tank.*

22. Use a 7/16" wrench on the fitting behind the thermostat. After the fitting is loosened, pull out on the thermostat until the probe is removed from the wash tank.

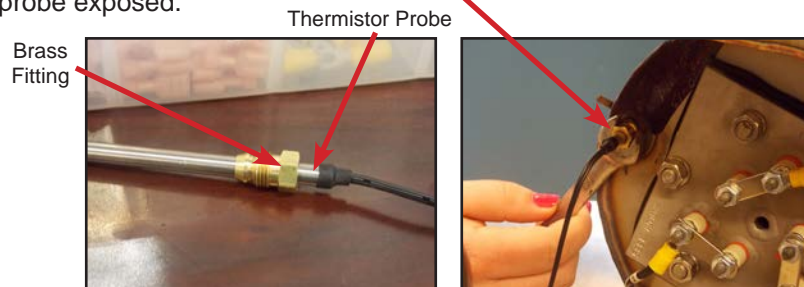


## RINSE BOOSTER SECTION

*Brass fitting from the kit is used in this step.*

*Thermistor probe from the kit is used in this step.*

23. Slide a 1/4" brass fitting from the kit onto the new rinse probe from the kit. Slide the probe into the hole the same way the rinse thermostat came out. Tighten the fitting on the probe with a 7/16" wrench, making sure to leave 1/4" of the probe exposed.



24. Connect the orange/white wire to the black/white wire from the rinse probe. Connect the white wire to the black wire from the rinse probe. Use a zip-tie to gather the wires.



*Zip-tie from the kit is used in this step.*

*Use cover and hardware removed in Step 2.*

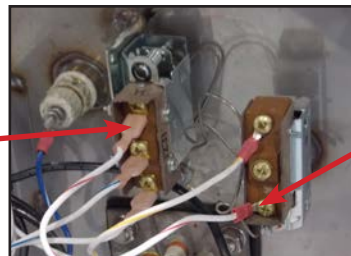
25. Re-attach the rinse heater cover with a 3/8" wrench.

## WASH TANK SECTION



**WARNING!** Make sure the drain stopper has been removed and the wash tank drained before proceeding!

26. Disconnect the white/red wire from the wash thermostat as well as from the high-limit switch. Remove the wire completely and discard.



27. Disconnect the white/yellow wire from the wash thermostat.

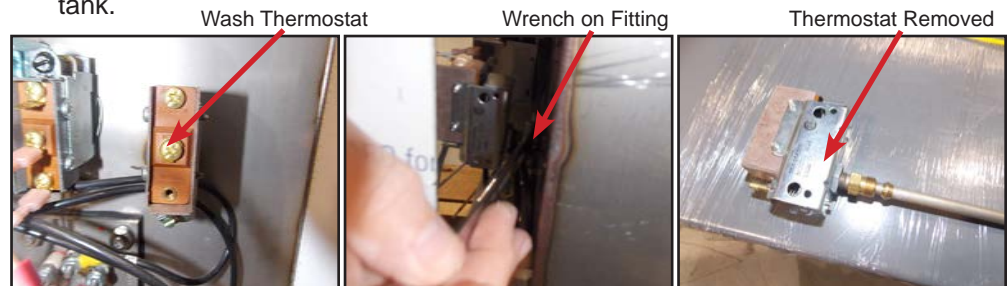


28. Cut the ring terminal off of the white/yellow wire. Strip and crimp a female terminal to the white/yellow wire.

*Terminal from the kit is used in this step.*

**WASH TANK  
SECTION**

29. Use a 7/16" wrench on the fitting behind the wash thermostat. After fitting is loosened, pull out on the thermostat until the probe is removed from the wash tank.



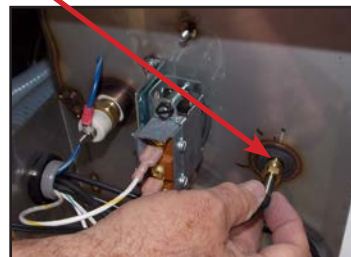
30. Slide a 1/4" brass fitting from the kit onto the new wash probe from the kit.



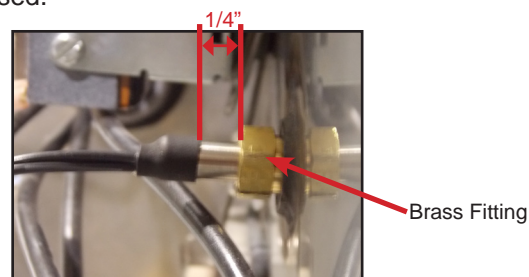
*Brass fitting from the kit is used in this step.*

*Thermistor probe from the kit is used in this step.*

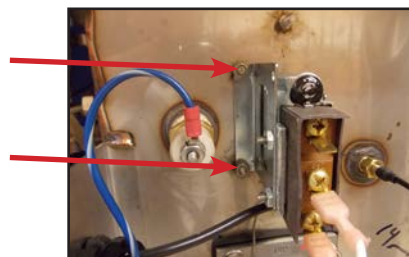
31. Slide the probe into the hole the same way the wash thermostat came out.



32. Tighten 1/4" brass fitting on probe with a 7/16" wrench, making sure to leave 1/4" of the probe exposed.



33. Using a 5/16" nut driver, remove the two nuts securing the high-limit switch bracket (keep the nuts to re-attach later). Be careful with the thin tubing coiled behind the high-limit switch as you remove the bracket and switch from the studs.

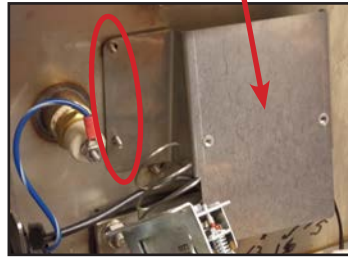


**Keep hardware!**

### WASH TANK SECTION

*Thermostat mounting  
bracket from the kit  
is used in this step.*

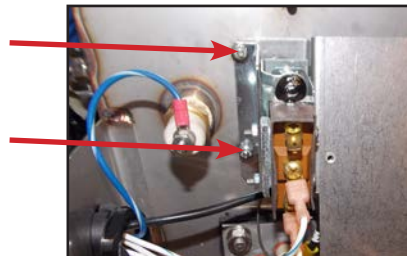
34. Place the new thermostat mounting bracket from the kit onto the two studs where the high-limit switch was removed.



35. Reposition the coil of thin tubing on top of the mounting bracket.



36. Fasten the high-limit switch (with the nuts from Step 33) on top of the mounting bracket to the open studs from Step 33.



*Use hardware  
from Step 33.*

37. Install the new thermostat onto the mounting bracket using the 6-32 screws from the kit. Make sure the thermostat is configured so the 5-pin connector is at the bottom.

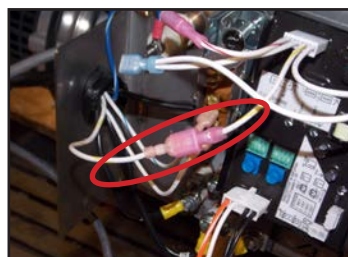
*Elan electric thermostat  
from the kit  
is used in this step.*

*Screws from the kit are  
used in this step.*



Elan Electric  
Thermostat  
5-pin  
Connector

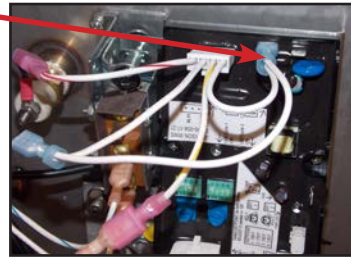
38. Connect the 2-pin, 4-pin, and 5-pin connectors to the thermostat.
39. Connect the white/yellow wire removed in Step 27 to the white/yellow wire in slot 3 of the 4-pin connector.



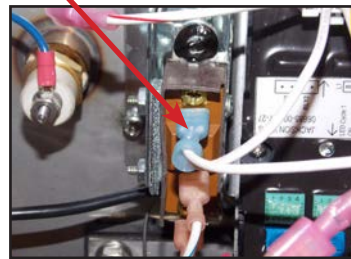


**WASH TANK  
SECTION**

40. Locate the white wire in slot 4 of the 4-pin connector. It has a blue female terminal and is attached to a white jumper. Plug the blue female terminal into the L1 tab on the thermostat.



41. Locate the white wire in slot 2 of the 4-pin connector. It has a blue female terminal and is attached to the same jumper described in Step 40. Plug the blue female terminal into the top position (normally-closed) on the high-limit switch.



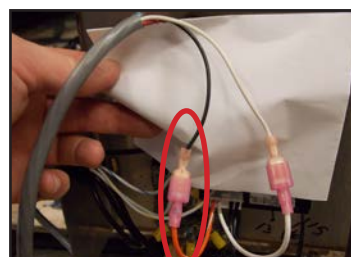
42. Locate the white/red wire in slot 1 of the 4-pin connector. Connect it to the brown wire from the 6-conductor cable.



43. Connect the red wire from the 6-conductor cable to the L2 tab on the thermostat.

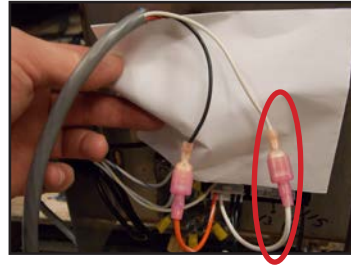


44. Connect the black wire from the 6-conductor cable to the orange/white wire in slot 5 of the 5-pin connector.

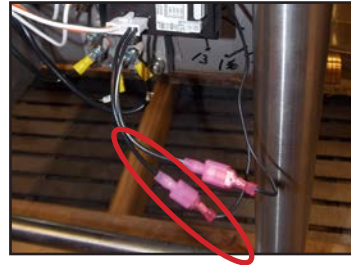


**WASH TANK  
SECTION**

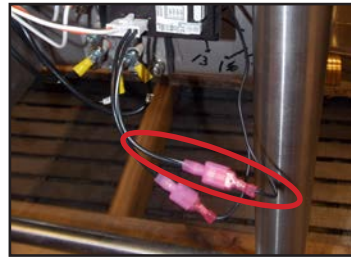
45. Connect the white wire from the 6-conductor cable to the white wire in slot 4 of the 5-pin connector.



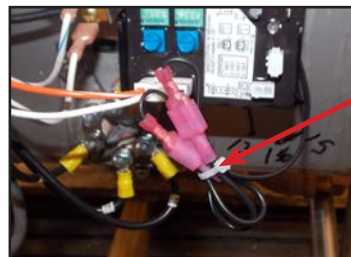
46. Connect the black wire from the probe to the black wire in slot 2 of the 5-pin connector.



47. Connect the black/white wire from the probe to the black/white wire in slot 1 of the 5-pin connector.



48. Using a zip-tie, coil and secure the black and black/white wires from the 5-pin connector and probe.



*Zip-tie from the kit is used  
in this step.*

## WASH TANK SECTION

*The switches can be moved through the protective film with either a fingernail or flathead screwdriver.*

49. Adjust the settings for the thermostat as follows:

- Set dip switch #1 (rinse) to the 1 position (1 set closest to the numbers and 2, 3, and 4 set away from the numbers).
- Set dip switch #2 (wash) to the 3 position (3 set closest to the numbers and 1, 2, and 4 set away from the numbers).
- Set the blue dials as shown below (or mid-position between the two stops).



50. Replace the drain stopper and strainer.

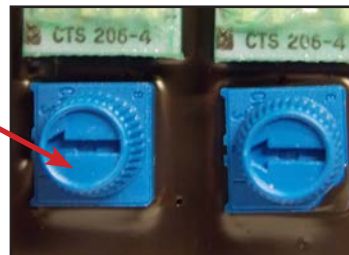
51. Reconnect electrical power at the breaker or disconnect switch. Turn the power switch to the "ON" position and wait until tanks are heated to setpoints. Run the machine three cycles and check rinse and wash temperatures.

52. Adjust the blue dial on the left until the desired rinse temperature is achieved (between 180 °F and 195 °F) for the entire rinse cycle.

*Turning the dial clockwise increases the temperature.*

*Total adjustment range is  $\pm 10$  °F.*

Rinse Dial

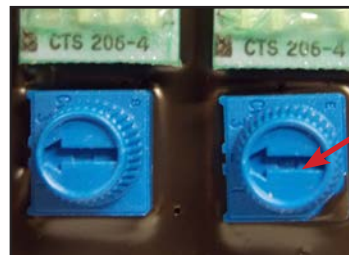


53. Adjust the blue dial on the right until 150 °F wash temperature is achieved.

*Turning the dial clockwise increases the temperature.*

*Total adjustment range is  $\pm 10$  °F.*

Wash Dial



54. Adjust the strain relief and tighten once in position. Install the new wash tank heater cover from the kit. Replace the front dress panel.

*Wash tank heater cover from the kit is used in this step. Use hardware removed in Step 2.*

*Use panel and hardware removed in Step 1.*



## CONTROL BOX LAYOUT

