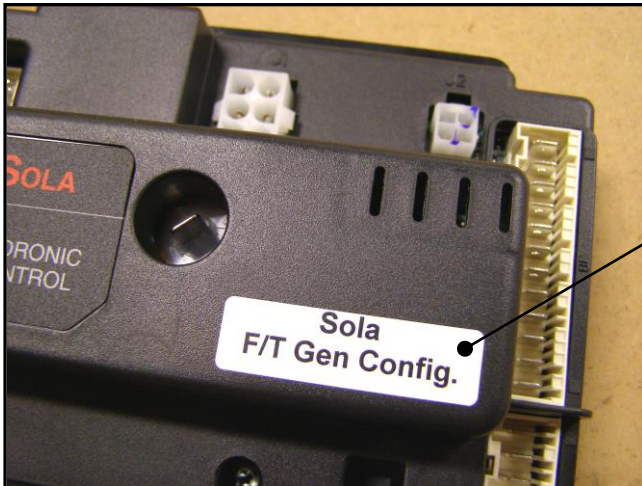


## #77777 - Trinity Tft Controller Replacement Instructions

**WARNING** The controller contained in this kit (part number 77777) is configured specifically for use with Trinity Tft-series boilers only. This controller shall NOT be used with non Tft-series boilers. Use of this controller on boiler models other than Trinity Tft-series will override some safety features and may lead to unsafe operation resulting in fire, explosion, property damage or loss of life.

**NOTICE** Check the contents of this kit to ensure the controller is labeled “F/T Gen Config.”, signifying that it is for use with Tft-series Trinity boilers; see illustration below. If the controller is not labeled, or has a different label, it is not intended for use with a Trinity Tft-series boiler.



Contact NTI if the replacement controller does not have this exact decal on the Controller.

### Controller Replacement Instructions

**WARNING** The instructions provided in this document are a supplement to the Installation and Operating Instructions originally provided with the boiler. Failure to follow the Installation and Operating Instructions may result in fire, explosion, property damage or loss of life.

These instructions describe the steps necessary to replace a controller from any model of the Trinity Tft series, sizes 60 to 399 inclusive, with a “generic” controller. Be sure to thoroughly read and understand these instructions before attempting a controller replacement.

Note: Before replacing an existing controller, record (if possible) the settings specific to the particular installation from the old controller, so they may be transferred to the new replacement controller.

#### Replace the Trinity Tft controller:

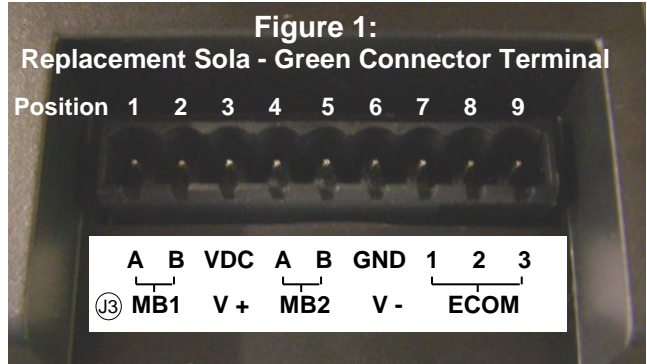
- 1) Turn off power to the appliance via the circuit breaker or remote switch.
- 2) Remove the front cover.
- 3) Disconnect wiring from the display assembly and remove it from the front of the controller to gain access.
- 4) For boilers with a serial number of 2060 and lower, perform the Wiring Modification detailed on page 2. **Complete this procedure prior to proceeding – failure to complete this procedure will damage the replacement controller.**
- 5) Unplug all electrical connections from the controller and remove the control from the panel. All wiring is connected to the controller by means of quick-connect plugs, each of which is uniquely keyed to its mating receptacle to prevent incorrect electrical connections.
- 6) Installation procedure is in reverse order.
- 7) Use the display to adjust the modulation rates to the values specific to the boiler model (see instructions below).

# #77777 - Trinity Tft Controller Replacement Instructions

## Wiring Modification (Serial numbers 2060 and lower)

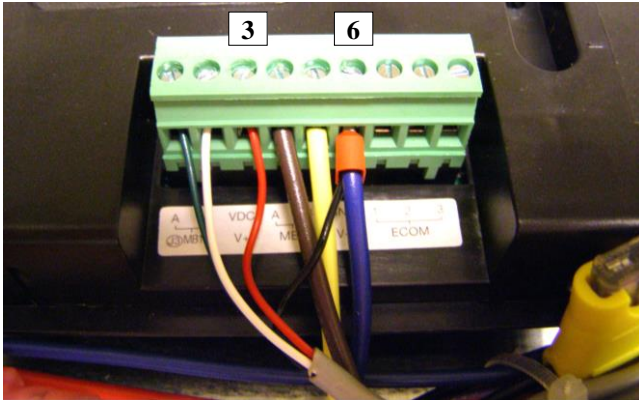
**SOLA Controller** - All Sola replacement controllers have a 5VDC + output at position 3 and GND V- at position 6 located at the green connector terminal (see **Figure 1**). Older Trinity Tft units, prior to serial number 2061, will require this wiring modification to be compatible with the replacement Sola.

**WARNING** **Damage to Sola** - Failure to follow the Wiring Modification Instructions detailed below will damage the replacement Sola. Contact NTI Tech Support if wiring assistance is required at 1-800-688-2575 or Fax 1-506-432-1135.

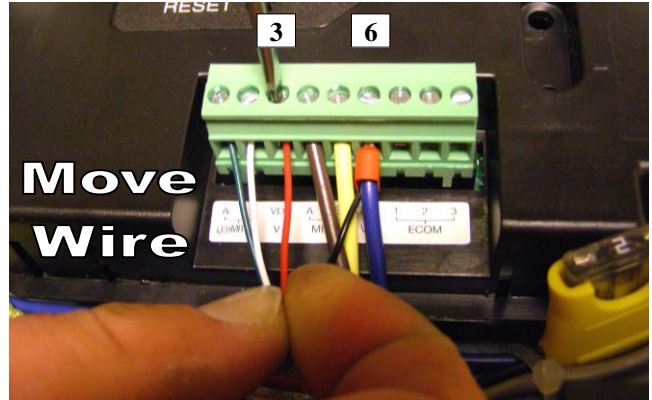


## Wiring Change Instructions for Replacement Sola

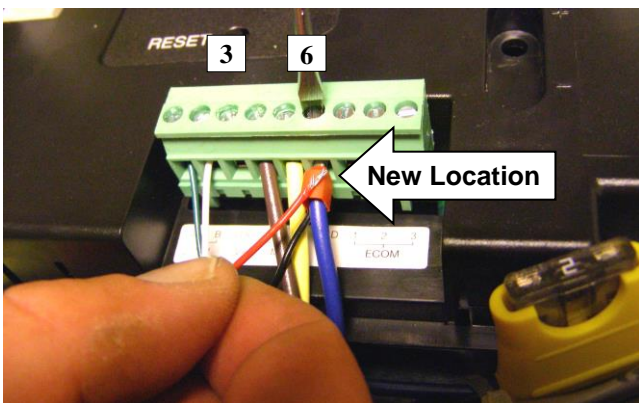
### Step 1: Existing Sola Wiring



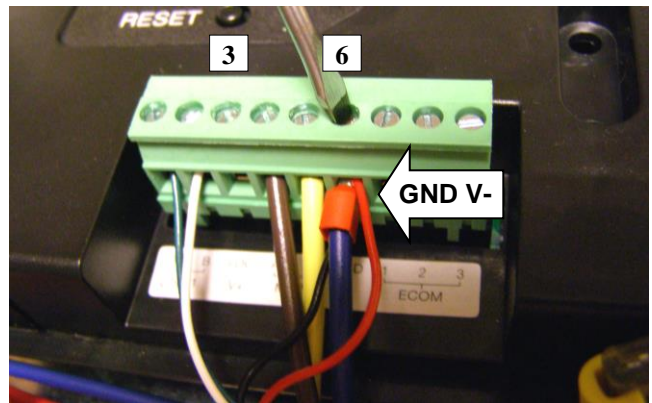
### Step 2: Disconnect the wire from Position 3



### Step 3: Loosen Position 6 screw



### Step 4: Insert wire into Position 6



# #77777 - Trinity Tft Controller Replacement Instructions

## Control Settings Verification and Adjustments

- 1) **Control Configuration Verification** – From the “Configuration” menu, select “System Identification and Access”. Check to ensure the control is equipped with the correct configuration – see illustration below. Replacement controllers intended for use on Tft-series boilers will begin with “NTI F/TGen”. At this time the installer may choose to modify the “Boiler name” to reflect the boiler model the control is installed on, i.e. Tft110.

**Configuration Identification**  
Must begin with “NTI F/TGen”

**Tft Generic**  
**System Identification & Access**

**NTI F/TGen v11-16-11**

Product type **Residential Hydronic Boiler**  
OS number **R7910B1015 R7910B1015s1k**  
Software version **3105.2432** Date code **1123**  
Application revision **12** Safety revision **9** Model **323**

Boiler name   
Installation   
MB1 Modbus Address   
MB2 Modbus Address

Factory Data 09490546

**Continued on next page**

## #77777 - Trinity Tft Controller Replacement Instructions

- 2) **Modulation Rate Adjustments** – Since the replacement controller is generic to all Tft boiler models, the minimum and maximum modulation rates must be set to the applicable values. Select “Modulation Configuration” from the “Configuration” menu and adjust the settings according to the following table:

Parameter	Description	Settings
CH max. modulation rate	Maximum permissible blower speed during CH demand. Setting is model dependent. <b>***For Tft399 after s/n 90974 use for CH max settings as 7800 (7500 LP)rpm</b>	Tft60 = 4650 rpm Tft85 = 6300 rpm Tft110 = 7000 rpm Tft154=7980rpm(7500LP) Tft155 = 3700 rpm Tft175 = 4100 rpm Tft200 = 4650 rpm Tft201 = 8000 rpm Tft250 = 5900 rpm Tft285 = 7300 rpm Tft300 = 5000 rpm Tft340 = 6650rpm Tft399 = 6900 rpm
DHW max. modulation rate	Maximum permissible blower speed during DHW demand. Setting is model dependent. <b>***For Tft399 after s/n 90974 use for DHW max settings as 7800 (7500 LP)rpm</b>	
Minimum modulation rate	Minimum permissible blower speed. Setting is model dependent. <b>***For Tft399 after s/n 90974 use for both CH and DHW min settings as 1050rpm</b>	Tft60-85 = 1525 rpm Tft110 = 1625 rpm Tft154 = 1740 rpm Tft155 = 900 rpm Tft175 = 1000 rpm Tft200 = 1150 rpm Tft201 = 1450 rpm Tft250 = 1300 rpm Tft 285 = 1000 rpm Tft340 = 1100 rpm Tft300 = 1500 rpm Tft399 = 1500 rpm



### WARNING

Failure to set the modulation rates appropriate to your specific boiler model according the table above may result in fire, explosion, property damage or loss of life.