

Kit Part Number	Description	Model	
PARKIT102	Control Module Replacement	Prestige with Serial number starting with PB	

Each Kit Includes:

· Control Module

Recommended Tools:

Pen

NOTICE

- Requires Display Software 4.03 and up
- To be used with boiler serial numbers starting with PB
- Contact Triangle Tube right away if the boiler does not meet both criteria above



Indicates a potentially hazardous situation which, if ignored, can result in serious injury or substantial property damage.

NOTICE

Indicates special instructions on installation, operation or maintenance, which are important to equipment but not related to personal injury hazards.



For your safety, turn off electrical power supply at service panel and allow unit to cool before proceeding to avoid possible electrical shock and scald hazard. Failure to do so can cause severe personal injury or death.



Failure to follow instructions below can result in severe personal injury or damage if ignored.

- Instructions are for a qualified installer/ service technician only.
- Read all instructions before proceeding.
- Follow instructions in proper order.



1. Preliminary Instructions

- 1. Verify that the replacement kit is correct for the model of boiler. See table on page 1.
- 2. Carefully open and unpack the PARTS BOX from its shipping carton.
- 3. Carefully remove and check for any damage.



Installing a damaged equipment will cause malfunction of the boiler. Contact Triangle Tube right away if the control module is damaged in any way.

4. Close the manual gas shut off valve to the unit.

2. Save Settings



Prior to replacing the control module and/or display module, it is important to access and document the boiler's settings. This will ensure any settings revised from factory defaults are transferred to the new module(s). Use Table 1 to record the existing settings. Do not revise any settings when recording settings.

1. To access the parameter screen, press the round installer button as shown in Fig. 1.

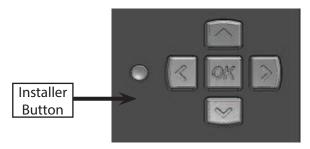


Fig. 1: Installer Button

 Enter the installer access code "054" by using the LEFT and RIGHT buttons to select a digit and the UP and DOWN buttons to change the digit. Press the OK button to enter the access code.



Fig. 2: Installer Access Code

3. Press the OK button while the CH & DHW Settings icon is highlighted.

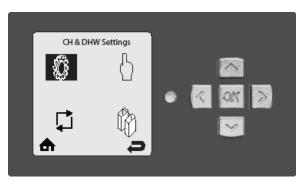


Fig. 3: CH & DHW Settings

4. Press the OK button while the CH Settings icon is highlighted.

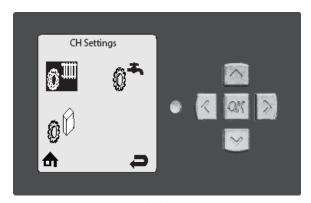


Fig. 4: CH Settings

Press the **UP** and **DOWN** buttons to scroll thru the various settings.



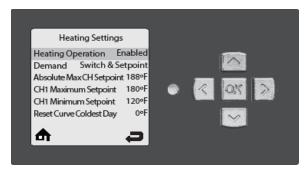


Fig. 5: Heating Settings

- Record all CH Settings in Table 1. Once completed, press the **RIGHT** button to highlight the Previous Screen icon, then press the OK button.
- 7. Press the **RIGHT** button to highlight the DHW Settings icon then press the OK button.



Fig. 6: DHW Settings

 Press the **UP** and **DOWN** buttons to scroll thru the various settings and record all DHW Settings in Table 1. Once completed, press the **RIGHT** button to highlight the Previous Screen icon, then press the OK button.

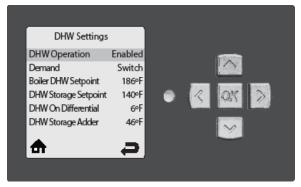


Fig. 7: DHW Settings

9. Press the **DOWN** button to highlight the Boiler Settings icon if present icon, then press the OK button.

10. Press the **UP** and **DOWN** buttons to scroll through the various settings and record all Boiler Settings in Table 1. Once completed, press the **RIGHT** button to highlight the Previous Screen icon, then press the OK button.

NOTICE

Perform the following steps if the Instinct is part of a Cascade System or the System Temperature Sensor is being used on a single Instinct.

- 11. Press the **RIGHT** then **DOWN** buttons to highlight the Previous Screen icon, then press the OK button.
- 12. Press the **RIGHT** then **DOWN** buttons to highlight the Cascade icon, then press the OK button.
- 13. Press the **RIGHT** button to highlight the Cascade Settings icon, then press the OK button.
- 14. Press the **UP** and **DOWN** buttons to scroll thru the various settings, and record all Cascade Settings in Table 1.

3. Remove Control Module

- 1. Turn the electrical power "OFF".
- 2. Remove the front jacket panel by removing the screws on the bottom of the panel. Pull the panel out and up to remove the panel. Do not discard these screws as they will be reused.
- 3. Pull the retaining tab on top of the control module case to remove the cover. The cover should still be held in place by a single wire.



Fig. 8: Prestige Control Module



Triangle Tube

- 4. Record the current location of all plugs.
- Remove the 1 ignition wire threaded through the cover. Unthread the wire from the cover and remove the cover completely to provide additional space.
- Remove all Molex wiring connectors from the Control Module. Some plugs are equipped with a locking clip. Squeeze the clip to unlock the plug. Support Control Module with one hand while removing individual Molex connectors. Press tabs on Molex plugs for quick release.
- 7. Unclip the 1 clip on the side of the control module and pull the module out.

4. Installation of Control Module

- 1. Mount the control module into the case by secureing it behind the mounting clips on both sides of the case.
- Reconnect the Molex connectors to proper position. Each connector is designed to fit only in its respective mating connector. If the plug is equipped with a locking clip, ensure the clip is engaged.
- 3. Thread the wire through the cover and reconnect onto the control module.
- 4. Place the cover in place and lock in the bottom retaining tab.
- 5. Remount the front jacket panel to the boiler.
- 6. Turn power to the unit "ON" and return the boiler to service.

5. Programming new Control Board

1. Follow the instructions in step 2 to gain access to the installer menu.



The appliance code displayed is not reflective of the software on the newly installed control module. The appliance code MUST be entered when a new control module is installed.

2. Go to boiler settings and click appliance setting, as

seen in Fig. 9 and Fig. 10.

3. The required code is written on the data plate located at the side of the boiler. Use the code for the gas type, either Natural Gas or Propane.

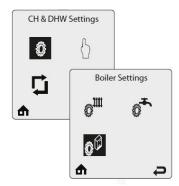


Fig. 9: Installer Menu

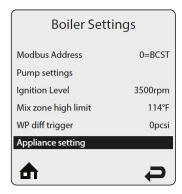


Fig. 10: Appliance setting

- 4. Increase/decrease the value (from 0 to 9, then A to Z) using the UP or DOWN keys to, then change position with the LEFT or RIGHT keys.
- 5. Follow the instructions on the screen to enter the appliance code for your boiler.



The appliance code MUST be entered even if the correct code is displayed. Not entering the appliance code may cause the boiler to malfunction and can result in serious injury or substantial property damage.

6. The boiler will now be factory set for that particular model. Return to step 2 and enter settings recorded in Table 1 back into the controls to return the boiler to the customized settings of the old control.





Table 1: Controls Settings

HEATING SETTING	FACTORY DEFAULT	MINIMUM SETTING	MAXIMUM SETTING	EXISTING SETTING
Heating Operation	Enabled			
Demand Type	Thermostat & Outd. Curve			
CH Maximum Capacity	100%	0%	100%	
CH Minimum Capacity	0%	0%	100%	
Absolute Max CH Setpoint	185°F [85°C]	68°F [20°C]	188°F [87°C]	
CH1 Maximum Setpoint	180°F [82°C]	68°F [20°C]	188°F [87°C]	
CH1 Minimum Setpoint	80°F [27°C]	60°F [15°C]	188°F [87°C]	
Outdoor Curve Coldest Day	10°F [-12°C]	-30°F [-34°C]	50°F [10°C]	
Outdoor Curve Warmest Day	64°F [18°C]	60°F [15°C]	78°F [25°C]	
CH2 Circuit	Enabled			
CH2 Maximum Setpoint	140°F [60°C]	68°F [20°C]	194°F [90°C]	
CH2 Minimum Setpoint	80°F [27°C]	60°F [15°C]	190°F [88°C]	
Warm Weather Shutdown	Off	Off	78°F [25°C]	
Circulation Pump Permanent	Disabled			
CH Post Pump Time	5 Minutes	Off	20 Minutes	
Freeze Protection	Enabled			
Frost Protection Setpoint	-22°F [-30°C]	-22°F [-30°C]	50°F [10°C]	
Parallel Shift Value	0°F [0°C]	0°F [0°C]	144°F [80°C]	
CH Call Blocking	2 Minutes	0 Minutes	30 Minutes	

DOMESTIC SETTING	FACTORY DEFAULT	MINIMUM SETTING	MAXIMUM SETTING	EXISTING SETTING
DHW Operation	Enabled			
Demand Type	Thermostat			
DHW Boiler Setpoint	168°F [76°C]	96°F [35°C]	188°F [87°C]	
DHW Setpoint	140°F [60°C]	68°F [20°C]	186°F [86°C]	
DHW On Differential	6°F [3°C]	4°F [2°C]	18°F [10°C]	
DHW Storage Adder	28°F [15°C]	10°F [5°C]	54°F [30°C]	
DHW Post Pump Time	2 Minutes	Off	30 Minutes	
DHW Priority Timeout	Off	Off	120 Minutes	
DHW Priority	Enabled			
DHW Call Blocking	0 Minute	0 Minute	30 Minutes	
DHW to CH Call Blocking	1 Minute	0 Minute	30 Minutes	
Antilegionella Function	Disabled			



Table 1 Cont:

BOILER SETTING	FACTORY DEFAULT	MINIMUM SETTING	MAXIMUM SETTING	EXISTING SETTING
Lockout Temp.	210°F [99°C]			
Modbus Address	0=BCST	0=BCST	247	
Flex. Relay 1(CH)	CH1			
Flex. Relay 2(DHW)	DHW			
Flex. Relay 3(P3)	CH1/CH2/DHW			
Flex. Relay 4(ERR)	N/A			
Flex. Relay 5(Flame)	FLAME			
Flex. Relay 6(P4)	CH2			
Error Relay	On Lockout, Blocking and Warning			
Pump PWM Minimum	30%	1%	100%	
Ignition Level	Varies by model			
Mix Zone High Limit	114°F [45°C]	68°F [20°C]	176°F [80°C]	
Appliance Setting	Varies by model			

CASCADE SETTING	<u>FACTORY DEFAULT</u>	MINIMUM SETTING	MAXIMUM SETTING	EXISTING SETTING
Stage Delay	60 Seconds	0 Seconds	255 Seconds	
Minimum Firing Rate	18%	0%	100%	
Max. Firing Rate	Varies by model	0 MBH [0kW]	869 MBH [255kW]	
CH/DHW Boilers	0	0	6	
Auto. Rotation	Enabled			
CH Prop. Gain	7	1	255	
CH Integral Gain	245	1	255	
DHW Prop. Gain	7	1	255	
DHW Integral Gain	245	1	255	