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86129

Ignition Controller 210MN Kit (rev 3H)

Figure 1

(Replaces part # 84712-1)

Applicable Boiler Models

- Vmax All models
- FTV All Models
- Tx All models

Tx boilers prior to serial number 72170 not equipped with the external spark generator will require part 85040 in addition to the Ignition control.

Kit Contents

1 x 86129 Ignition Controller 210MN Kit (rev 3H)

Tools Required

• 1/4" Nut Driver

Replacement Instructions

- 1) Turn off power and gas to the boiler.
- 2) Remove the existing controller.
- 3) Install the replacement controller.
- 4) For boilers **not** equipped with an external spark generator see **Additional Instructions** below.
- 5) Follow the Controller Set-up Instructions (next page).

CAUTION

Appliance Type Setting - Failure to properly set the appliance type will cause the boiler to operate incorectly and may lead to property damage.

Appliance Type Setting

The Appliance Type setting is retained in the boiler controller; the setting determines certain operating characteristics specific to a particular boiler model, such as combustion blower RPM (i.e., firing rate). Use the tables below to identify the Appliance Type setting for each boiler model.

Boiler Model	Appliance Type
Tx51	1
Tx81	2
Tx101	3
Tx151	4
Tx151C	5
Tx200	6
Tx200C	7

Boiler Model	Appliance Type
VM110	NG = 8
	LP = 12
VM110P	NG = 9
	LP = 15
VM153	NG = 10
	LP = 13
VM153P	NG = 11
	LP = 14

Boiler Model	Appliance Type
FTV110	NG = 16
	LP = 22
FTV110C	NG = 19
	LP = 23
FTV150	17
FTV150C	20
FTV190	18
FTV190C	21





Replacement Procedure – the replacement controller is factory set with an Appliance Type setting of zero (0); upon replacement of the control the display will prompt you to set the appliance type, i.e. "tYPE 0" will automatically be displayed on the screen (see Notice below). Adjust to the applicable Appliance Type setting (see table above) using the UP & DOWN buttons; press the OK button to enter the value. After the appliance type is set, and the controller enters the "dAir" sequence, turn the power off for a minimum of 5 seconds, then back on. Check the appliance setting via Installer Menu setting 2-11; make sure it matches the value for your boiler model (see table above). Set the remainder of the control settings as desired. Verify proper boiler operation for DHW and Central Heat demands.

NOTICE

If "*tYPE 0*" does not automatically display upon replacing the controller, the Appliance Type setting must be adjusted using the "Appliance Selection Method" detailed below.

Alternate Appliance Type Selection Method

If the above method of setting the appliance type does not work, or if you incorrectly set it, us the following alternate method to set the appliance type:

- 1. Turn the power off; while holding the UP and DOWN buttons, turn the power on using power switch on the display console; see Figure 2. Continue holding the UP and DOWN buttons until "tYPE 0" is displayed on the screen, then release the UP and DOWN buttons.
- 2. Increase the setting by pressing the UP button; when the correct setting is displayed (see table above), press the OK button to enter the value.
- 3. Wait for the controller to enter the "dAir" sequence, then cycle the power off for 5 seconds, and then back on.
- 4. Check the appliance setting via Installer Menu setting 2-11; make sure it matches the correct boiler model as per table above.
- 5. Set the remainder of the control settings as desired. Verify proper boiler operation on Domestic Hot Water and Central Heat demands.



Figure 2 Appliance Selection



Additional Instructions (for Tx Models *Not* equipped with External Ignition Transformer)

Tx boilers prior to serial number 72170 may not be equipped with an external ignition transformer as shown below. If the boiler is not equipped with an external ignition transformer, an external ignition transformer kit (p/n 85040) is required.

NOTICE

If an external ignition transformer kit needs to be installed, confirm that your display provides access to installer menu setting 2-32. Setting 2-32 must be set to "On" for the controller to operate the external ignition transformer. If your display does not have access to setting 2-32 (i.e., the menu stops at setting 2-31) then a replacement display (p/n 86002-1) is also necessary.

