

#81-8115-000 – CHS Controller Replacement Instructions

WARNING The controller contained in this kit (part number 81-8115-000) is configured specifically for use with Slant/Fin CHS-series boilers only. This controller shall NOT be used with non CHS-series boilers. Use of this controller on boiler models other than Slant/Fin CHS-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 “Sola, CHS Gen Config.”, signifying that it is for use with CHS-series Slant/Fin boilers; see illustration below. If the controller is not labeled, or has a different label, it is not intended for use with a Slant/Fin CHS-series boiler.



Contact Slant/Fin directly if the replacement controller does not have this exact decal on it.

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 Slant/Fin CHS series, sizes 85 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.

Replacing the Slant/Fin CHS 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) Unplug all electrical connections from the controller. 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.
- 5) Remove the old controller from the panel. The controller is secured to the panel by 2 hooks on the left side and 2 “spring” tab clips on the right side which are molded into the plastic case. To remove the Sola: a) press in the spring tab clips to release the right side, b) rotate the controller outward.
- 6) To install replacement sola, follow the same procedure but in the reverse order.
- 7) Use the display to adjust the modulation rates to the values specific to the boiler model (see instructions below).

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Control Settings Verification and Adjustments:

- 1) **Control Configuration Verification** – From the “Advanced Setup” menu, select “System Config.” followed by “System ID & Access”. Check to ensure the control is equipped with the correct configuration – see illustration below. Replacement controllers intended for use on CHS-series will have an OEM ID that begins with “CHS Gen”. At this time the installer may choose to modify the “Boiler name” to reflect the boiler model the control is installed on, i.e. CHS110.

OEM ID
Must begin with “CHS Gen”

System ID & Access

Boiler name	CHS Generic
OEM ID	CHSGenv09-21-12
MB1 Modbus address	1
MB2 Modbus address	1
Modbus address	1
Modbus port used	MB1
Product ID	Residential
Product family	Hydronic boiler
OS number	R7910B1015
Model name	R7910B1015s1m
Software version	4104.2901
Date code	1209
Application revision	19
Safety revision	13

- 2) **Modulation Rate Adjustments** – Since the replacement control is generic to all CHS boiler models, the minimum and maximum modulation rates must be set to the applicable values. From “Advanced Setup” menu, select “Modulation Config.” and adjust the settings according to the following table:

Model	Max. modulation rate (CH / DHW)		Min. modulation rate
	Natural Gas	Propane	
CHS-85	6300	6300	1525
CHS-110	7000	7000	1625
CHS-154	7980	7500	1740
CHS-155	3700	3700	900
CHS-175	4100	4100	900
CHS-200	4650	4650	900
CHS-250	5900	5900	900
CHS-300	5000	4800	1500
CHS-340	6650	6650	1100
CHS-399 (pre s/n 84200)	6900	6600	1500
CHS-399 (post s/n 95974)	7800	7500	1050



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