

INSTALLER'S GUIDE

18-GJ59D1-2

ALL phases of this installation must comply with
NATIONAL, STATE AND LOCAL CODES

Models:
CNT06197

RS-485 Replacement Board

CNT06197 is a replacement board kit for the RS-485
hydronic heat control

IMPORTANT—This Document is customer property and is to remain with this unit. Please return to service information pack upon completion of work.

Section 1. General Information

The CNT06197 kit is for use with the BAYWV 05, 07, 08 hydronic heating coils. The kit is also used with BAYWA 05, 07, 08, and 11 series hydronic heating coils that have the RS-485 control.

Check the components received for damage. Report any defects or shortages to the transportation company immediately.

Section 2. Safety Considerations

IMPORTANT: Read this manual carefully before attempting to install, operate, or perform maintenance on this hydronic coil. Installation, service, and maintenance should be performed by qualified technicians only.

NOTE: “Warnings” and “Cautions” appear at appropriate places in this manual. Read these carefully. Your personal safety and the proper operation of this heating product require that you follow them carefully. The manufacturer assumes no liability for installations or services performed by independent dealers.

Safety signal words are used to designate a degree or level of seriousness associated with a particular hazard. The signal words for safety markings are **WARNING** and **CAUTION**.

WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in property damage, death or serious personal injury.

CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It is also used to alert against unsafe practices and hazards involving only property damage.

2.1 WARNINGS

WARNING

THE INFORMATION IN THIS GUIDE IS FOR USE BY INDIVIDUALS HAVING ADEQUATE ELECTRICAL AND MECHANICAL BACKGROUND. ANY ATTEMPTS, BY UNQUALIFIED PERSONS, AT PLUMBING, INSTALLING OR REPAIRING A HYDRONIC SYSTEM OR CENTRAL AIR CONDITIONING PRODUCT COULD RESULT IN PROPERTY DAMAGE, SEVERE PERSONAL INJURY OR DEATH. THE MANUFACTURER OR SELLER CANNOT BE RESPONSIBLE FOR THE INTERPRETATION OF THIS INFORMATION, NOR CAN IT ASSUME ANY LIABILITY IN CONNECTION WITH ITS USE.

WARNING

ELECTRICAL HAZARD!
DISCONNECT ALL ELECTRICAL POWER, INCLUDING REMOTE DISCONNECTS BEFORE INSTALLING OR SERVICING. FOLLOW PROPER LOCKOUT/TAGOUT PROCEDURES TO ENSURE THE POWER CAN NOT BE INADVERTENTLY ENERGIZED. FAILURE TO FOLLOW THIS WARNING COULD RESULT IN SERIOUS PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE.

WARNING

SAFETY HAZARD!

THIS HYDRONIC COIL MUST ONLY BE USED IN NON-POTABLE CLOSED WATER SYSTEMS. FAILURE TO FOLLOW THIS WARNING COULD RESULT IN SERIOUS PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE.

WARNING

HIGH PRESSURE HAZARD!

MAXIMUM ENTERING WATER TEMPERATURE IS 180°F. WATER TEMPERATURES EXCEEDING 180°F COULD CAUSE A HIGH PRESSURE BURST. FAILURE TO FOLLOW THIS WARNING COULD RESULT IN SERIOUS PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE.

WARNING

SCALD HAZARD!

THIS SYSTEM CONTAINS HOT WATER AND OPERATES UNDER PRESSURE. WATER TEMPERATURES ABOVE 125°F CAN INSTANTLY CAUSE SEVERE BURNS OR DEATH.

USE CAUTION WHEN SERVICING THIS EQUIPMENT. ALLOW SUFFICIENT TIME FOR THE WATER TO COOL BEFORE OPENING THE SYSTEM DRAIN. FAILURE TO FOLLOW THIS WARNING COULD RESULT IN SERIOUS PERSONAL INJURY, PROPERTY DAMAGE, OR DEATH.

WARNING

LEAK HAZARD!

IF THE HYDRONIC COIL HAS A LEAK, USE CAUTION WHEN SERVICING THIS EQUIPMENT. THOROUGHLY WIPE OFF EXCESS WATER FROM ALL COMPONENTS AND ALLOW ADEQUATE TIME FOR THE COMPONENTS TO DRY COMPLETELY BEFORE SERVICING SYSTEM.

FAILURE TO FOLLOW THIS WARNING COULD RESULT IN SERIOUS PERSONAL INJURY, PROPERTY DAMAGE, OR DEATH.

2.2 CAUTIONS

CAUTION

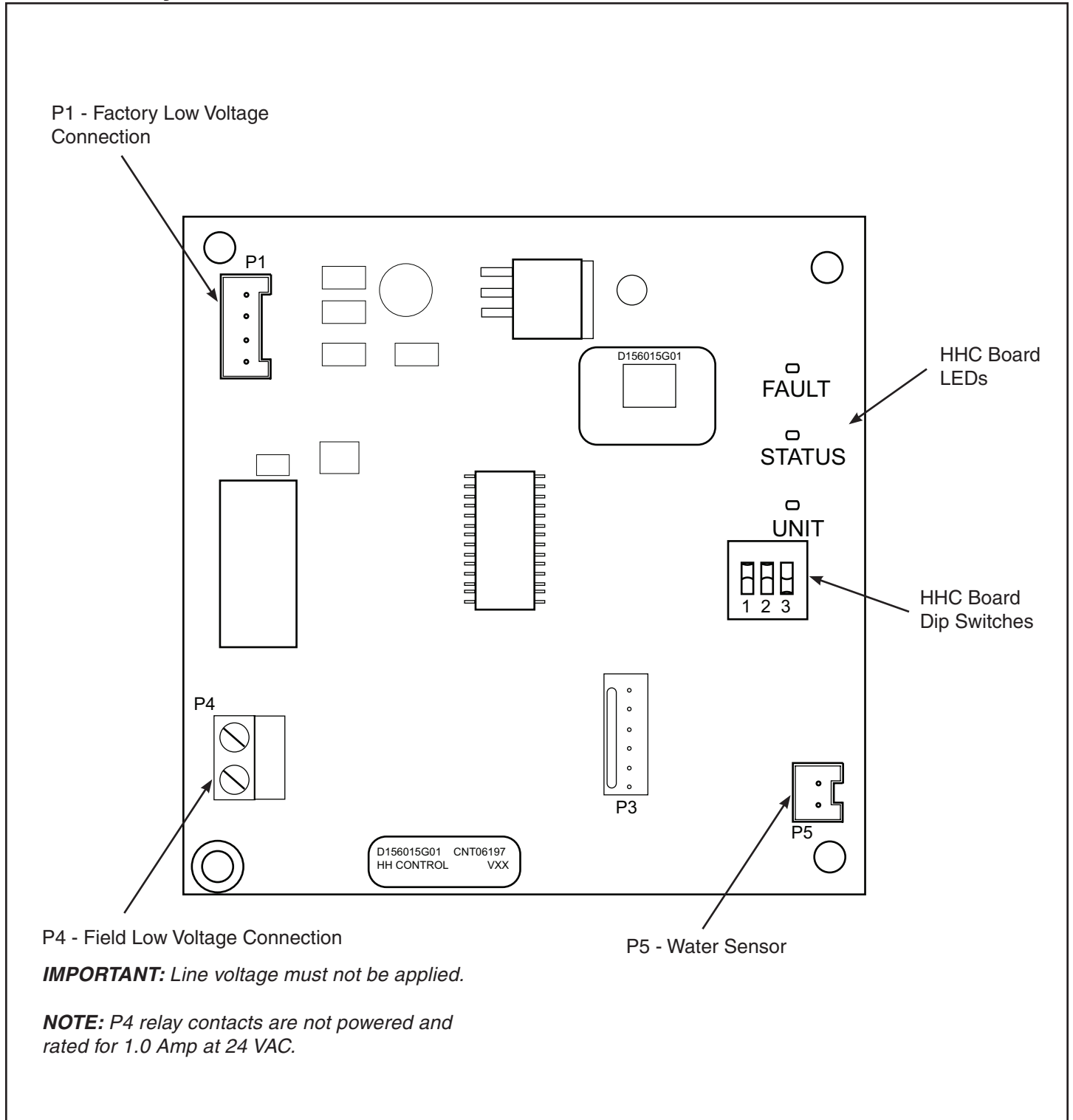
SAFETY HAZARD! Sharp Edge Hazard. Be careful of sharp edges on equipment or any cuts made on sheet metal while installing or servicing. Personal injury may result.

CAUTION

SAFETY HAZARD!

All joints must be leak free.

Section 3. Hydronic Heat Control Board



P1 - Factory Low Voltage Connection

HHC Board LEDs

HHC Board Dip Switches

P4 - Field Low Voltage Connection

P5 - Water Sensor

IMPORTANT: Line voltage must not be applied.

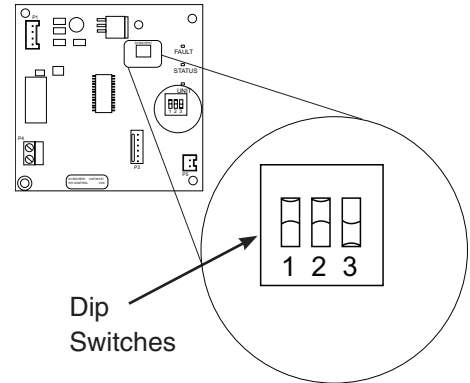
NOTE: P4 relay contacts are not powered and rated for 1.0 Amp at 24 VAC.

Section 4. Dip Switch Settings

STEP 4 - Low Voltage board Dip Switches - DS1 dip switches are not factory set. Adjustments must be made per the table.

HHC DIP SWITCH SETTINGS			
COIL MODEL / AHU MODEL	S1-1	S1-2	S1-3
BAYWAAA05 w/*AM7A0A24, BAYWAAA05 w/*AM8A0A24 BAYWAAA05 w/TAMGA0A24	OFF	OFF	ON
BAYWABB07 w/*AM7A0B30, BAYWABB07 w/*AM8A0B30	OFF	ON	OFF
BAYWACC08 w/*AM7A0C36, BAYWACC08 w/*AM7A0C36 BAYWACC08 w/TAMGA0C36	OFF	ON	ON
BAYWACC08 w/*AM7A0C42, BAYWACC08 w/*AM8A0C42	ON	OFF	OFF
BAYWACC08 w/*AM7A0C48, BAYWACC08 w/*AM7A0C48 BAYWACC08 w/TAMGA0C48	ON	OFF	ON
BAYWACC08 w/*AM7A0C60, BAYWACC08 w/*AM7A0C60 BAYWACC08 w/TAMGA0C60	ON	ON	OFF
BAYWACC11SC1A w/*AM7A0C60 BAYWACC11SC1A w/*AM7A0C60 BAYWACC11SC1A w/TAMGA0C60	ON	ON	ON

* May be "A" or "T"



Section 5. Alert LED Codes

HHC FAULT CODES (RED LED)

HHC Fault LED	Description
OFF	No fault
1	Internal communication error
2	Water temp is at 38F or lower
3	Water temp sensor is shorted
4	Water temp sensor is open
5	Configuration error (1)
6	Heat demand error
NOTES:	1) Confirm heater model and dip switch configuration

HHC STATUS CODES (GREEN LED)

HHC STATUS LED	Description
1 per second	Standby or idle (see note)
2 per second	Heating demand is present

HHC UNIT LED (BLUE LED)

Unit LED	Description
1 Flash	Normal (1 flash every 4 seconds)
Rapid	Communication Busy Error (2 flashes per second)
SOLID ON	Communications cannot be established with the AFC
Off	No Power

