

HYDROLEVEL CONTROL CONVERSION (NAT, LP GAS)

KIT #550003077 INSTRUCTIONS

Installation shall be completed by qualified agency.

⚠ WARNING

Fire, explosion, asphyxiation and electrical shock hazard. Improper installation could result in death or serious injury. Read these instructions and understand all requirements, including requirements of authority having jurisdiction, before beginning installation. Installation not complete until appliance operation is verified per Installation, Operation & Maintenance Manual provided with boiler.

Control installation shall conform to requirements of authority having jurisdiction or in absence of such requirements:

- United States
 - National Fuel Gas Code, ANSI Z223.1/NFPA 54.
 - National Electrical Code, NFPA 70.
- Canada
 - Natural Gas and Propane Installation Code, CAN/CSA B149.1.
 - Canadian Electrical Code, Part I, Safety Standard for Electrical Installations, CSA C22.1

Remove Existing Control

1. Follow instructions TO TURN OFF GAS TO APPLIANCE found on Operating Instructions label on boiler or in Installation, Operation & Maintenance Manual. Verify all electrical power to boiler is turned off.

⚠ WARNING

Electrical shock hazard. Turn OFF electrical power supply at service panel.

2. Remove gray plastic control cover. See figure 1.
3. Disconnect the following: See figures 1 & 2.
 - ▶ Remove line voltage supply to boiler (J Box)
 - ▶ Remove thermostat wires
 - ▶ Remove circulator harness from circulator (if used) from existing control
 - ▶ Remove vent damper harness from damper
 - ▶ Remove sensor from well
 - ▶ Disconnect gas valve mox and ground wire (on harness from Honeywell control)
 - ▶ Remove two (2) safety circuit wires (on harness from existing control)
 - ▶ Remove two (2) pilot wires connected to control
4. Remove control chassis holding control, transformer, and harnesses from existing control to boiler.

FIGURE 1 - Honeywell Control Cover

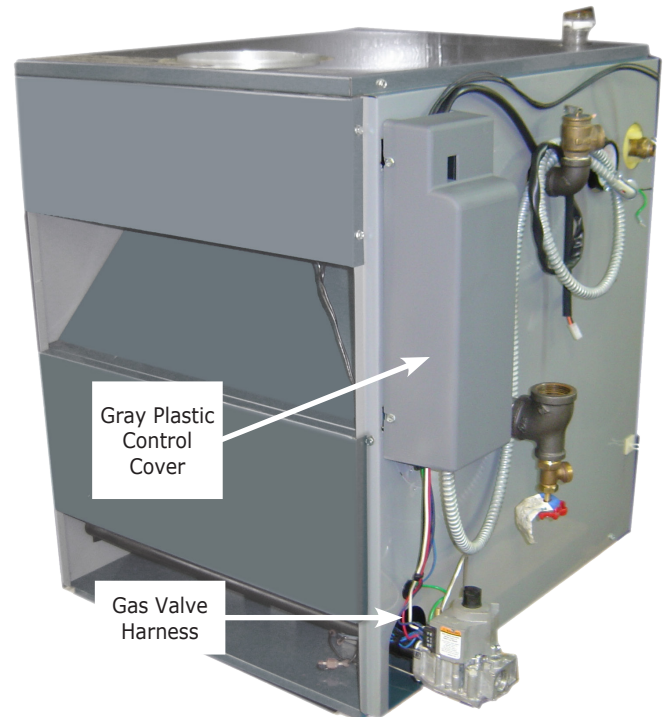
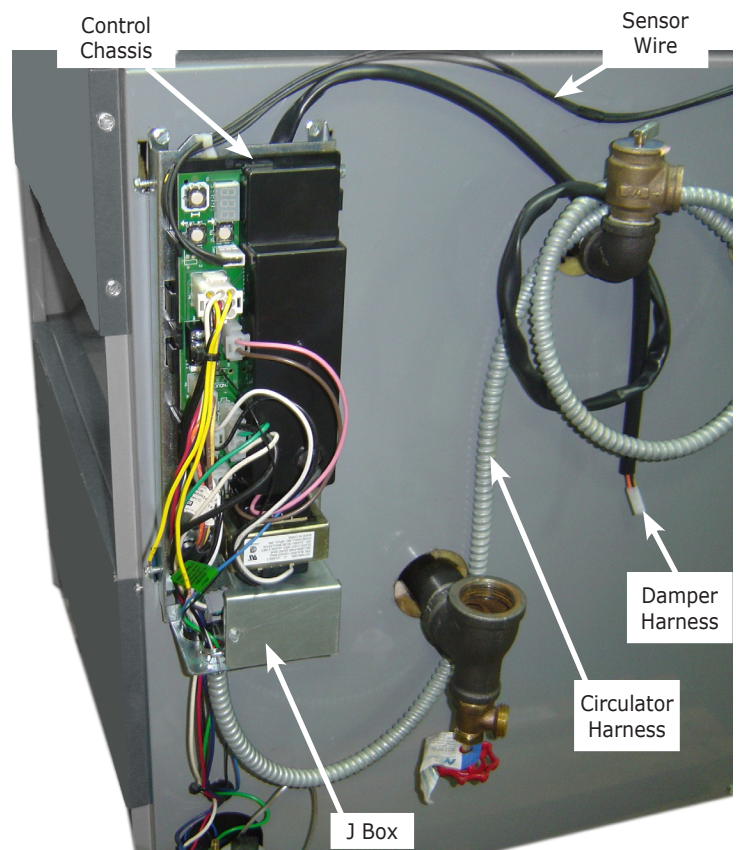


FIGURE 2 - Honeywell Control Cover



REPLACEMENT INSTRUCTIONS

⚠ WARNING

Fire, explosion, asphyxiation and electrical shock hazard. Improper installation could result in death or serious injury. Failure to follow these instructions could result in death or serious injury.

Install Hydrolevel HydroStat 3200

1. Mount Hydrolevel HydroStat 3200 to boiler. HydroStat will not fit on the existing well. A remote mount kit is included which allows up to 4 feet from sensor well. Install and bottom sensor in well. Do not use thermal grease. See Hydrolevel kit instructions.
2. New vent damper harness is pre-mounted to HydroStat 3200. Plug new vent damper harness into vent damper.

⚠ WARNING

Electrical shock hazard. Turn OFF electrical power supply at service panel.

3. Verify electrical power is off at circuit breaker.
Connect line voltage supply (hot, neutral and ground) to HydroStat 3200 using BX conduit and 18 gauge wire.
 - ◇ L1 = hot, L2 = neutral, ground to green screw.
 - Service switch should remain functional.
4. If using zone control board, follow instructions received with zone control board.
5. New circulator harness is pre-installed into HydroStat 3200. Connect opposite end to circulator. C1 = black, C2 = white (if circulator harness was in use).
6. Connect thermostat to HydroStat 3200.
 - ◇ Connect two wires to terminals T and TV.
7. Mount Pilot spark control onto boiler side using supplied spark control bracket. See Figure 3 and 4. Locate new gas valve harness.
 - ◇ Connect Molex to MV-MV/PV-PV on spark control board.
 - ◇ Female spade connection on gas valve is connected to "GND BURNER" (Green) on spark control board. Connect female spade connection to GND BURNER terminal on the UT spark control and other end to gas valve. See Figures 4 and 5.
8. Refer to enclosed wiring diagram. The black & white stripe wire on new vent damper harness (connected to the HydroStat) is connected to "24V (GND)" (Green) on the new spark control board. See Figure 5.
9. Locate new supplied "spill switch" wire harness. Reconnect the safety circuit with this harness as follows:
 - First end of "spill switch" harness:
 - i. Female connector to 24V (yellow) spade on new ignition control board, Figure 5.
 - ii. Opposite connection to black non-striped wire on vent damper harness. (This goes to B1 on HydroStat 3200).

FIGURE 3- Ignition Control Bracket

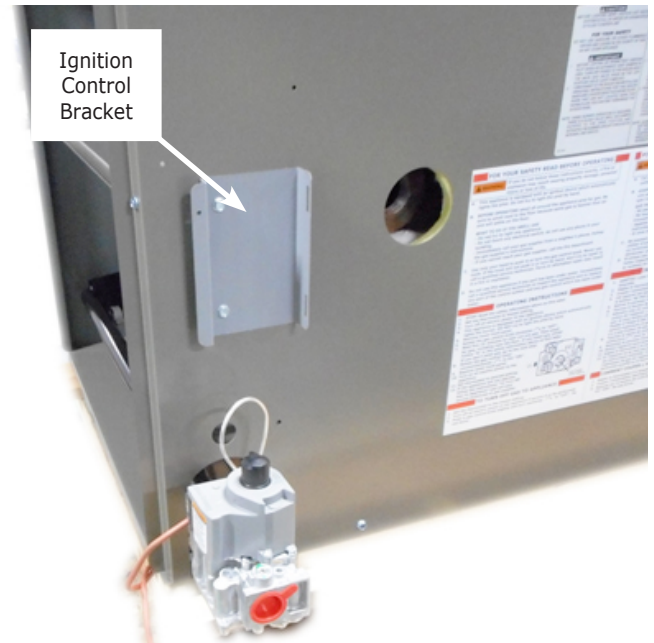
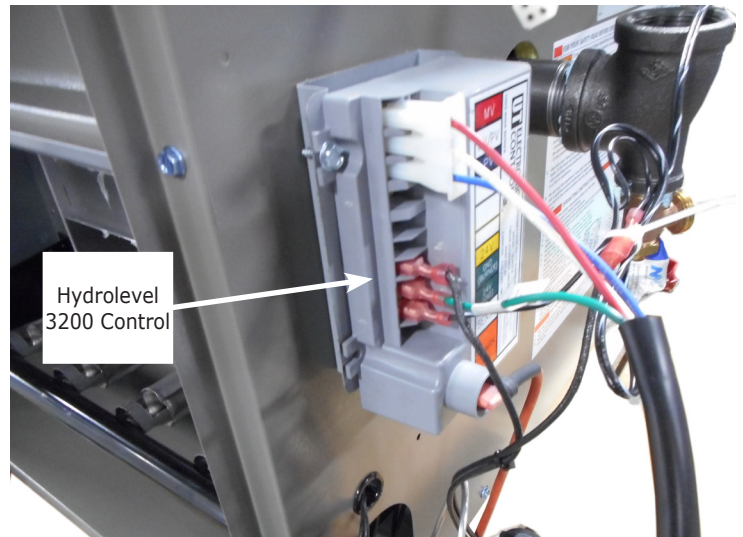


FIGURE 4 - Spark Control Board



REPLACEMENT INSTRUCTIONS

- Opposite end of “spill switch” harness:
 - i. Female connector to connection on rollout switch where Honeywell harness wire had been.
 - ii. Opposite connection to terminal on blocked vent harness where second Honeywell harness wire had been.
 - See enclosed wiring diagram.
- 10.** Replace pilot with supplied spark pilot kit 550003057. See Figure 6.
- ***For Natural Gas.*** Replacement pilot is shipped configured for use with natural gas. ***DO NOT use provided LP orifice.***
 - ***For LP boiler, convert pilot assembly*** to LP using provided LP pilot orifice.
 - After correct pilot orifice is verified, replace entire pilot assembly using instructions enclosed in spark pilot kit.

NOTICE

Verify correct pilot assembly is used for the type of fuel used. Use of wrong pilot WILL result in improper operation of the boiler.

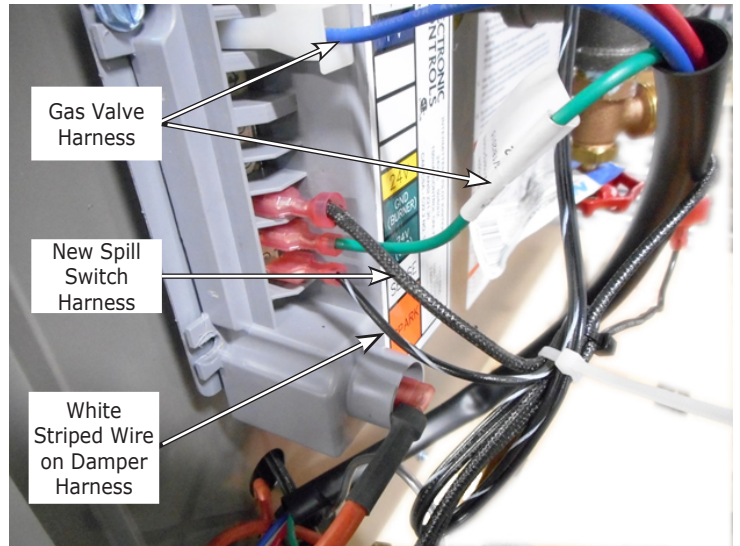
- 11.** Connect spark ignition wire to pilot spark control board.
- 12.** If using indirect hot water heater refer to enclosed Hydrolevel 3200 instructions which describe energy saving features of replacement control.

NOTICE

IMPORTANT This instruction includes new wiring diagram and replacement parts list! Retain enclosed literature with boiler for future reference.

- 13.** The default supply setpoint is 190° F. Adjust as required. HydroStat 3200 includes additional energy savings and indirect hot water management features not present on the Honeywell control. Refer to enclosed HydroStat 3200 instructions for more information.
- 14.** Installation not complete until appliance operation is verified per Installation, Operation & Maintenance Manual provided with boiler.
- 15.** Low water cutoff (LWCO) function of HydroStat 3200 should NOT function. In event of LWCO nuisance trip, most likely caused by well contamination, refer to page 9 of HydroStat 3200 Instructions to deactivate LWCO function.

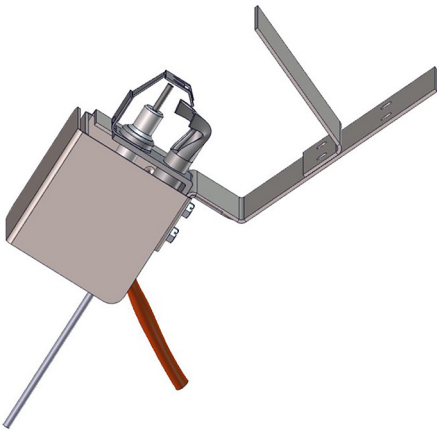
FIGURE 5 - First End connection of Spill Switch Harness



HYDROLEVEL CONTROL REPLACEMENT KIT # 550003077 CONTENTS	
Description	Qty
Control, 3200	1
Damper Harness	1
Wire Harness	1
Wiring Diagram	1
Spark Pilot Kit (NG & LP)	1
Ignition Harness	1
Pilot Spark Control	1
Bracket, Spark Control	1
Circulator Harness	1
Screw #10 X 1/2	6
Remote Mntg Kit	1
Instructions	1

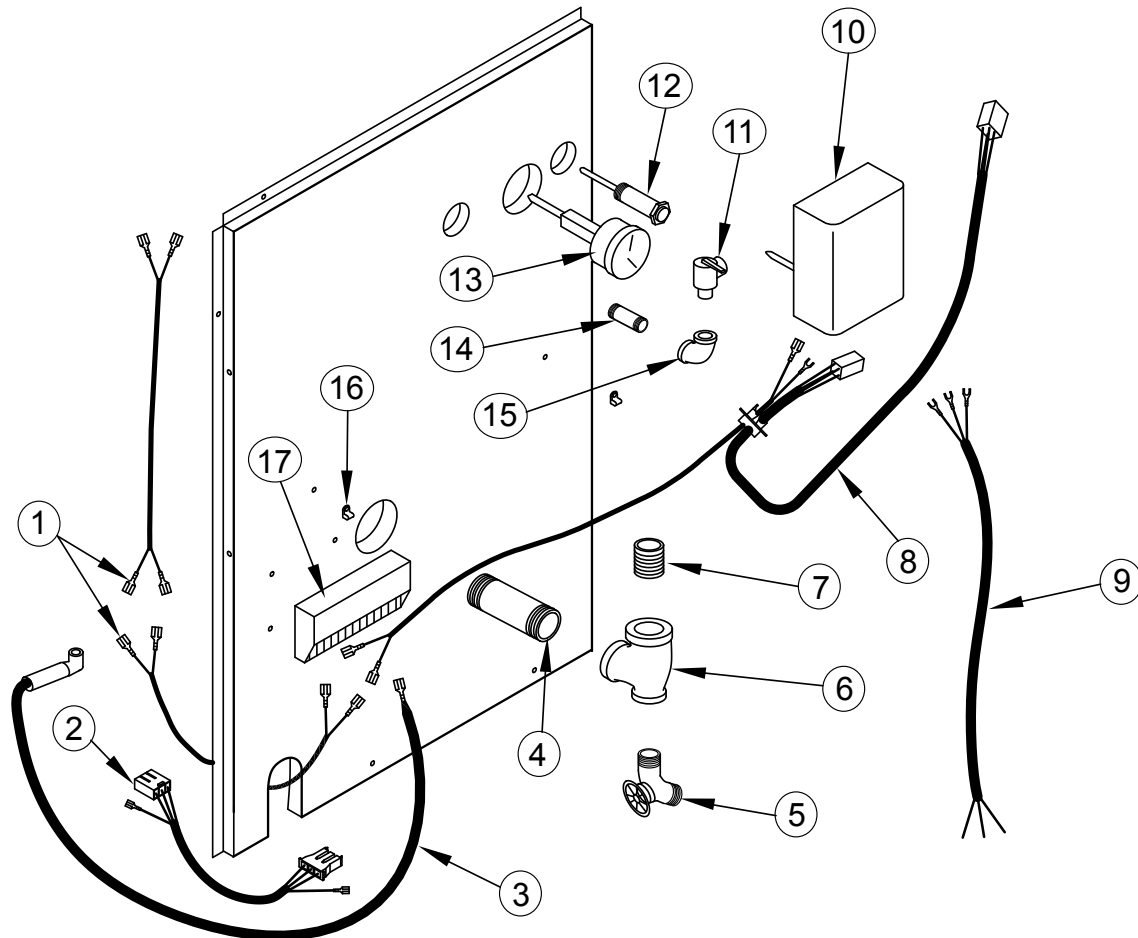
REPLACEMENT PARTS

FIGURE 6 - Spark Pilot



Spark Pilot Kit - Natural Gas 550003057		
Item #	Description	Qty.
1	PILOT AND BRACKET ASSEMBLY (NAT. GAS)	1
*	BRACKET SCREW	2
*	COMPRESSION FITTING	1
* NOT SHOWN		

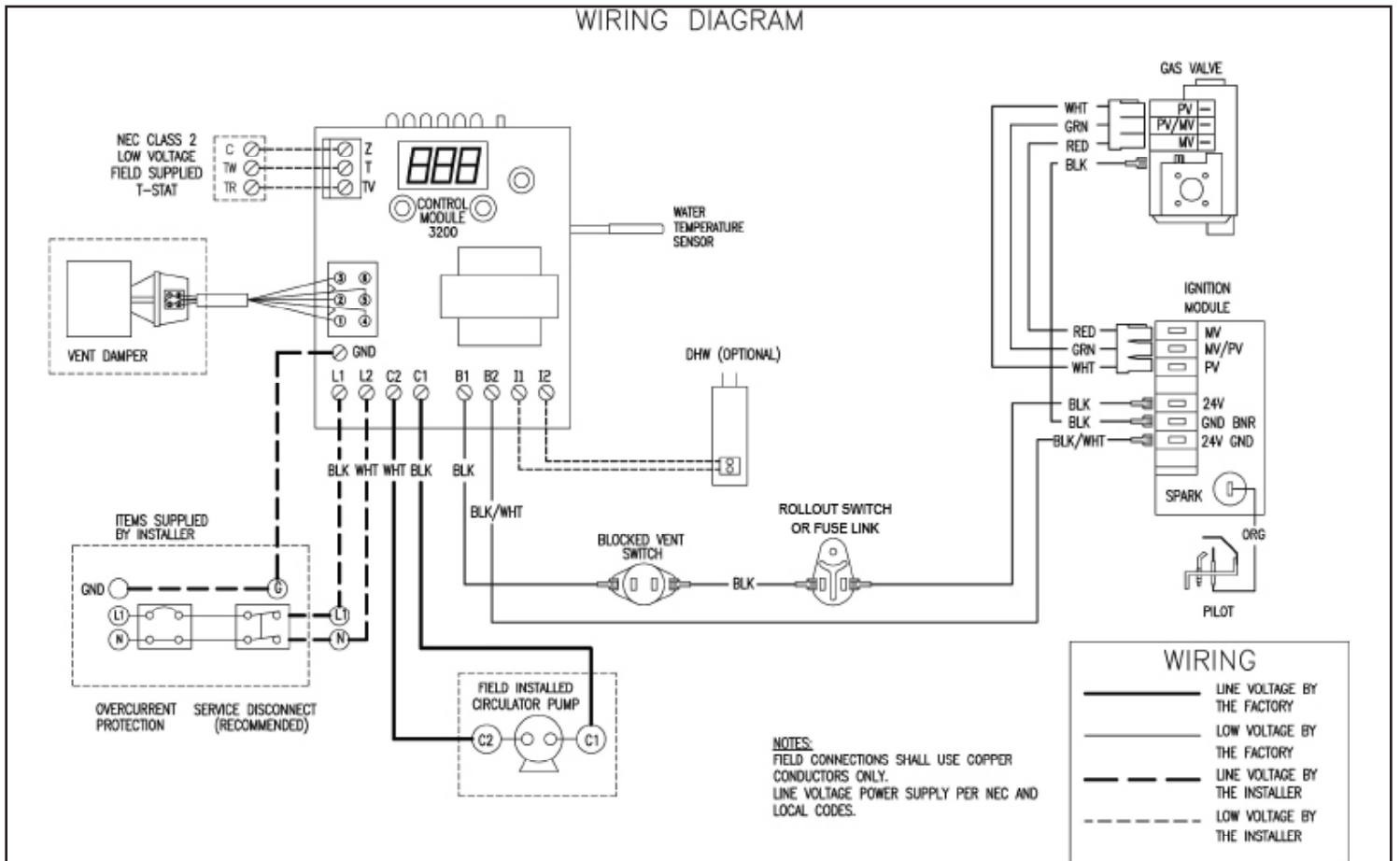
REPLACEMENT PARTS - CONTI.



ITEM	DESCRIPTION	P/N	QTY.
1	WIRE ROLLOUT/SPILL 28"	240010924	2
2	HARNESS IGN TO G/V 18"	37413602	1
3	PILOT IGNITION CABLE 30"	240009313	1
4	PIPE - NPL 1.1/4X4.1/2 NPT	PF-006.07	1
5	DRAIN - SHORT	240009323	1
6	PIPE - TEE 1.1/4X3/4X1.1/4	PF-008.03	1
7	PIPE - 1.1/4" CLOSE NPL	PF-006.01	1
8	WIRE LOW VOLTAGE/DAMPER	240005480	1
9	HARNESS CIRCULATOR 72"	37519501	1
10	CONTROL HYDROLEVEL 3200	240009113	1
11	RELIEF VALVE 30#	VR-001.01	1
12	WELL HYDROLEVEL	240009115	1
13	GAUGE - TEMPERATURE - PRESSURE	GA-001.00	1
14	PIPE - NPL 3/4"X4"	PF-005.11	1
15	PIPE - ELBOW 3/4" 90°	PF-002.04	1
16	CLAMP #3600 WHITE	EF03601	2
17	PLT SPARK CTRL S8600	14662070	1
	BRACKET, SPARK CONTROL	109008481	1

WIRING DIAGRAM SPARK PILOT

WIRING DIAGRAM



WIRING DIAGRAM SPARK PILOT

WIRING SCHEMATIC

