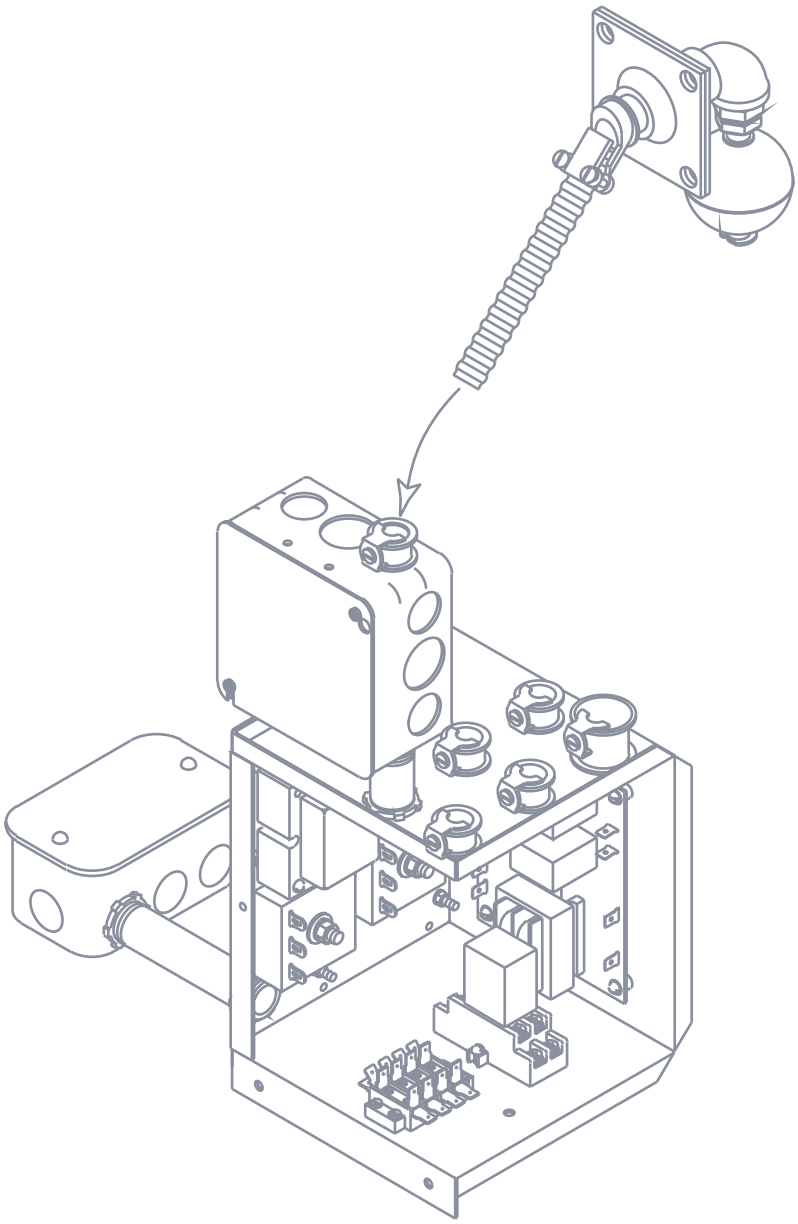
Assembly Instructions

Low Water Cut-Off Kit w/Timer



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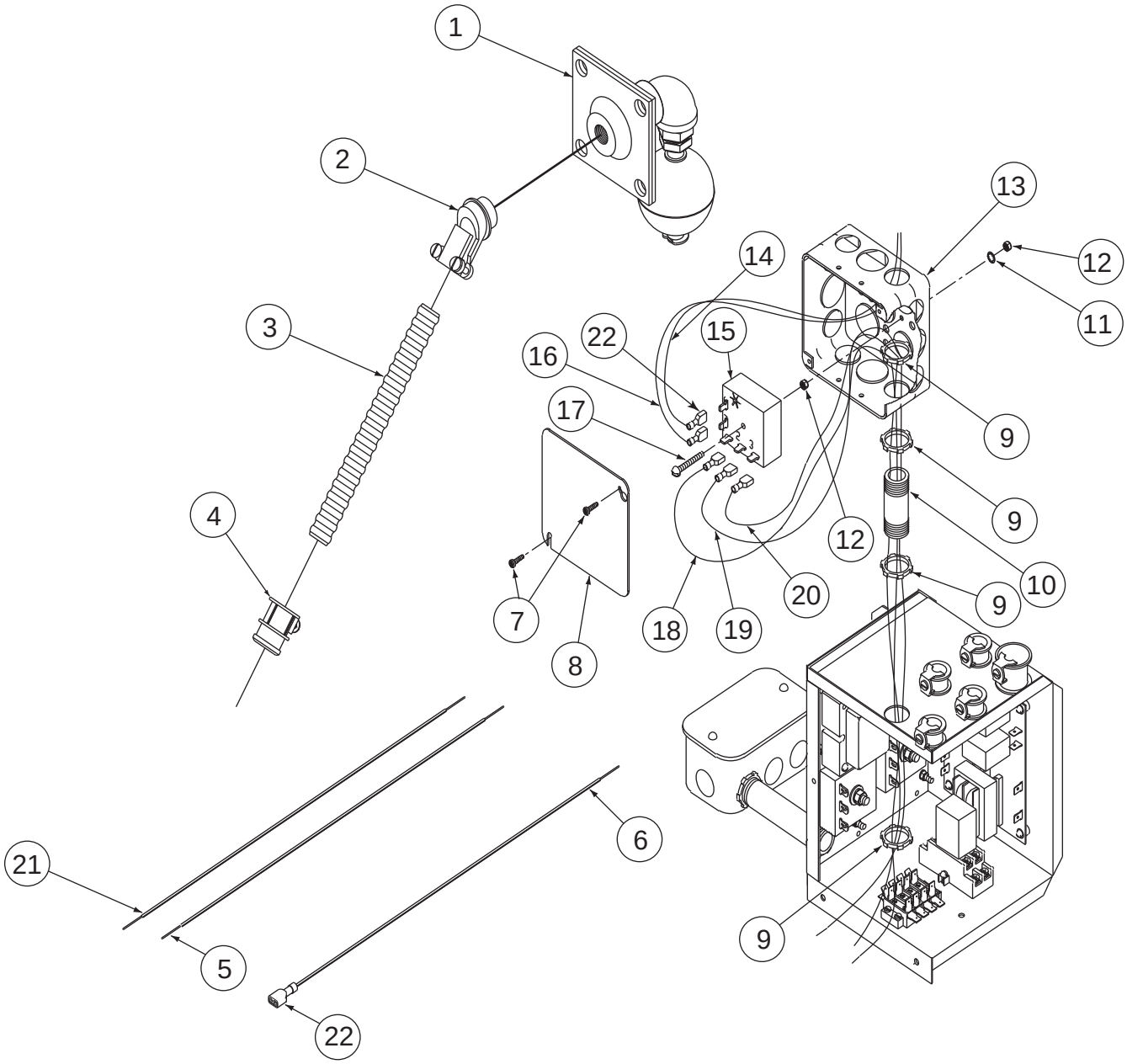
Part No.260ARW-A *8/99*

⚠ WARNING!

The Low Water Cut-Off Kit and installation instructions have been developed to provide a Cleveland Range steam generator with a low water sensing capability. This kit is intended for use with Cleveland Range products ONLY. Mis-use of this kit, or parts therein could result in personal injury, property or product damage and/or possible voiding of individual product warranties. Installation should be performed by an authorized Cleveland Range Service Representative.

Contents of Low Water Cut-Off Kit w/Timer
Part # 109564 (see page 2 for parts listing)



Contents of Low Water Cut-Off Kit w/Timer(cont.)

Item#	Part#	Description	Quantity
1	45006	SWITCH ASSEMBLY LOW WATER	1
2	105244	CONNECTOR,GREENFIELD, 45 DEGREE	1
3	105248	CONDUIT, ELECTRICAL	2Ft
4	105243	CONNECTOR,GREENFIELD, STRAIGHT	1
5	23406	WIRE, WHITE/BLACK, 16GA.	1Ft
6	23416	WIRE, WHITE/BLUE, 16GA.	1Ft
7	106126	SCREW,8-32X1/2,TORX	2
8	1072331	COVER, OUTLET	1
9	14614	NUT, LOCK, 1/2"	4
10	14327	NIPPLE,1/2X2	1
11	101337	WASHER, LOCK	1
12	14598	NUT,HEX,8-32	2
13	107233	BOX,OUTLET	1
14	N/A	SWITCH WIRE, LOW WATER	N/A
15	107212	TIMER, DELAY	1
16	N/A	SWITCH WIRE, LOW WATER	N/A
17	19150	SCREW,ROUND HD SLOTTED	1
18	1060732400	WIRE ASSEMBLY, ORANGE	1
19	1059622400	WIRE ASSEMBLY, BLACK	1
20	1050302400	WIRE ASSEMBLY, WHITE	1
21	23425	WIRE, WHITE/YELLOW, 16GA.	1Ft
22	20351	TERMINAL, SLIPON	8

⚠ WARNING!

DO NOT perform this procedure while hazardous voltage is present. Can cause shock, burn, or death.

⚠ CAUTION!

Allow unit to cool to safe levels before starting this procedure

NOTES:

Conventions

The Installation Instructions Section offers instructions for mechanical installation of components common to Gas and Electric boilers. Item references are located on pages 1-2 and apply to both versions. Electrical connections are covered on pages 5-6. Reference the section that applies to your equipment.

⚠ WARNING!

DO NOT perform this procedure while hazardous voltage is present. Can cause shock, burn, or death.

Installation Instructions

1. Remove low water cutoff plate and gasket located on right side of boiler (see Fig.1).
2. Install Switch Assembly(item 1) using gasket and hardware from step 1(see Fig.2).
3. Install 45 Degree Greenfield Connector (item 2) to Switch Assembly as shown (see Fig.2).

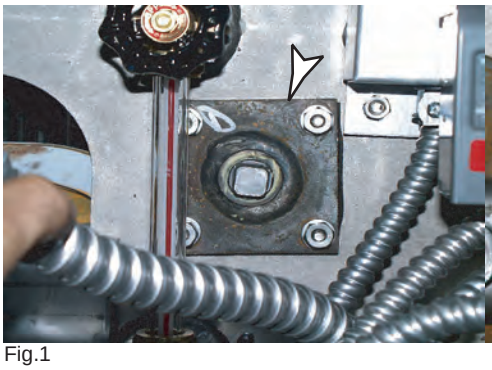


Fig.1

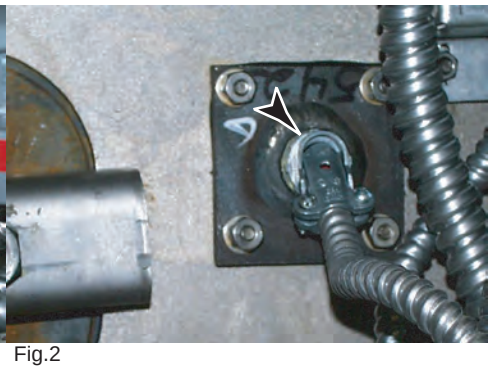


Fig.2

4. Thread (1 per end) 1/2" Electric Nut (item 9) onto ends of 2" Nipple (item10) for use as backing nuts. Insert Nipple into knock-out located on top of the electrical enclosure at the pressure switches (see Fig.3) and secure the nipple to the enclosure using 1/2" Electric Nut as shown (Fig.4).

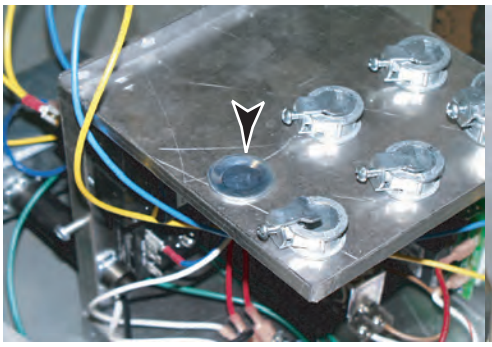


Fig.3

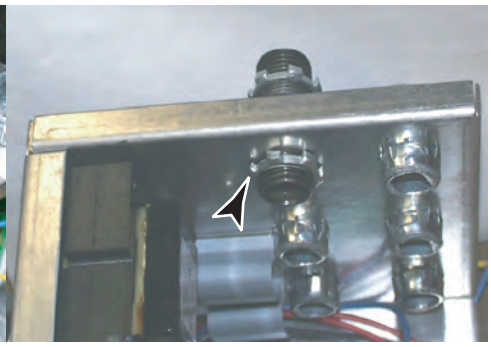


Fig.4

NOTES:

Installation Instructions (cont.)

5. Install Outlet Box (item 13) onto nipple as shown (Fig.5) using 1/2" Electrical Nut.

6. Secure the Round Head Slotted Screw (item 20) to the Delay Timer (item 18) using (1) #8-32 Hex Nut (item 12), then secure the Delay Timer to the Outlet Box as shown (Fig.6) using Lock Washer (item 11) and (1) #8-32 Hex Nut.

7. Cut Conduit (item 3) to fit between the Switch Assembly Installed in Step 2 and the knock-out located directly above the 2" Nipple on top of the Outlet box. Install the Straight Greenfield Connector (item 4) into the knock-out (Fig.7) and install the Conduit between the Switch Assembly and the Outlet Box .

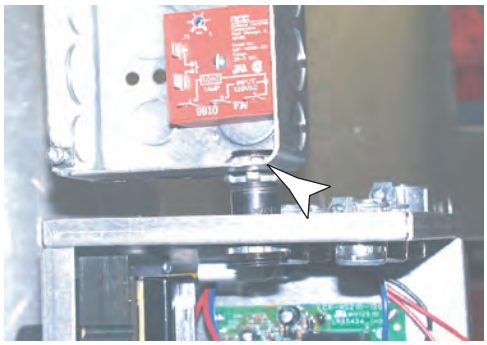


Fig.5

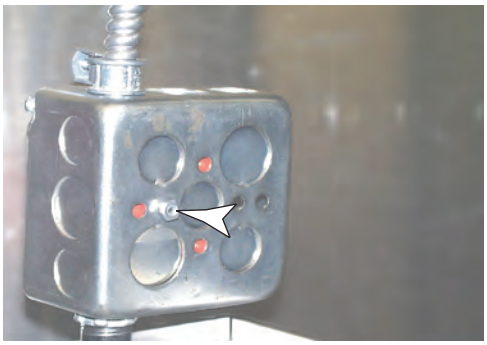


Fig.6

8. Thread wires from Switch Assembly through the Conduit into the Outlet Box. Attach Slip-on Terminals to the Switch Assembly wires and connect them to PIN 6 and PIN 7 (Fig.8).

9. Connect Orange Wire (item 18) to PIN 1 of Delay Timer. Connect Black Wire (item 19) to PIN 2 and connect White Wire (item 20) to PIN 3 (Fig.8). Thread these wires through the 2" Nipple installed in Step 4 into the electrical enclosure.

10. Install Outlet Cover (item 8) using (2) #8-32 Torx Screws (item 7). Mechanical Installation is now complete.

Fig.7

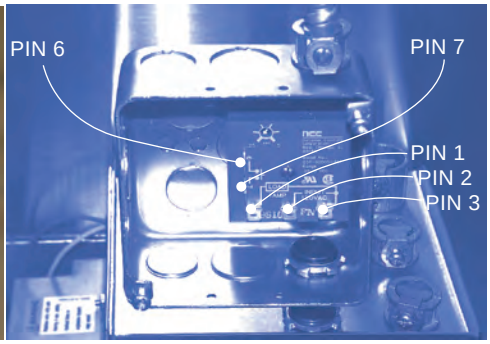


Fig.8

NOTES:

Electrical Connections

2 Probe Gas Boiler Release

1. Remove orange wire from "HTR" PIN on the water level board and connect it to the Orange Wire from PIN 1 on the Delay Timer using butt-connector or wire-nut.

2. Remove the yellow wire from terminal 13 on the relay socket and connect it to the "HTR" PIN on the water level board using a Slip-on Terminal.

3. Connect the Black wire (item 19) from PIN 2 on the Delay Timer to the "L1" PIN on the water level board using a Slip-On Terminal.

5. Remove the blue wire from the 25V terminal located on the ignition module. Remove the Female Push-On Connector, strip the wire back, and connect the wire to terminal 8 on the relay socket.

6. Install the White/Blue 16Ga.Wire (item 6) between terminal 12 on the relay socket and the 24V terminal on the ignition module by threading it through the hole located on the side of the electrical enclosure.

7. Re-connect power to unit and test for correct operation of Low Water Cut-Off.

Electrical Controls for Gas Units

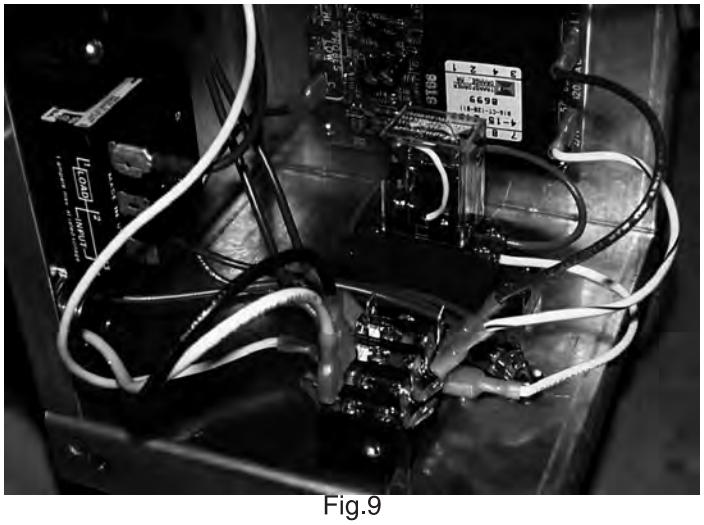


Fig.9

NOTES:

NOTES:

Electrical Connections (Cont.)

2 Probe Electric Boiler Release

1. Remove orange wire from High Limit Switch "common" terminal and connect it to Orange wire (pin 1 on delay timer) using a butt-connector or wire-nut.

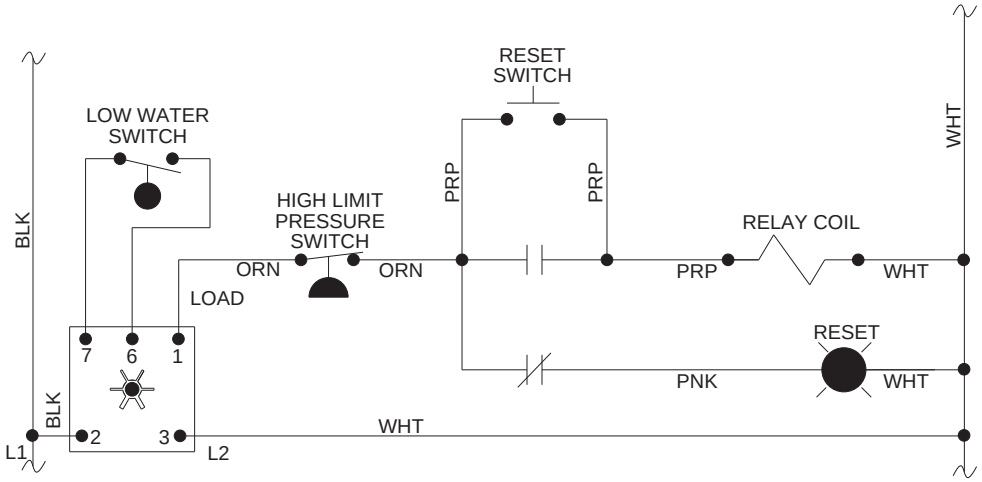
2. Install the White/Black 16Ga. Wire (item 5) to the Black wire (pin 2 on delay timer) and the terminal block L1 side (black or "Hot" side) using a butt-connector or wire-nut. Connect White wire(pin 3 on delay timer) to the terminal block L2 side (common) using a slipon connector.

3. Locate and remove the wire-nut that connects a yellow wire to 2 purple wires. Using a 1/4 in. Female Push-on Connector, re-connect this yellow wire to the "HTR" terminal on the water level board. Re-connect the 2 purple wires using the wire-nut.

4. Remove the yellow wire from the contactor coil and connect to the relay at terminal 7.

5. Install White/Yellow 16Ga. Wire (item 21) between the contactor coil and terminal 4 on the relay.

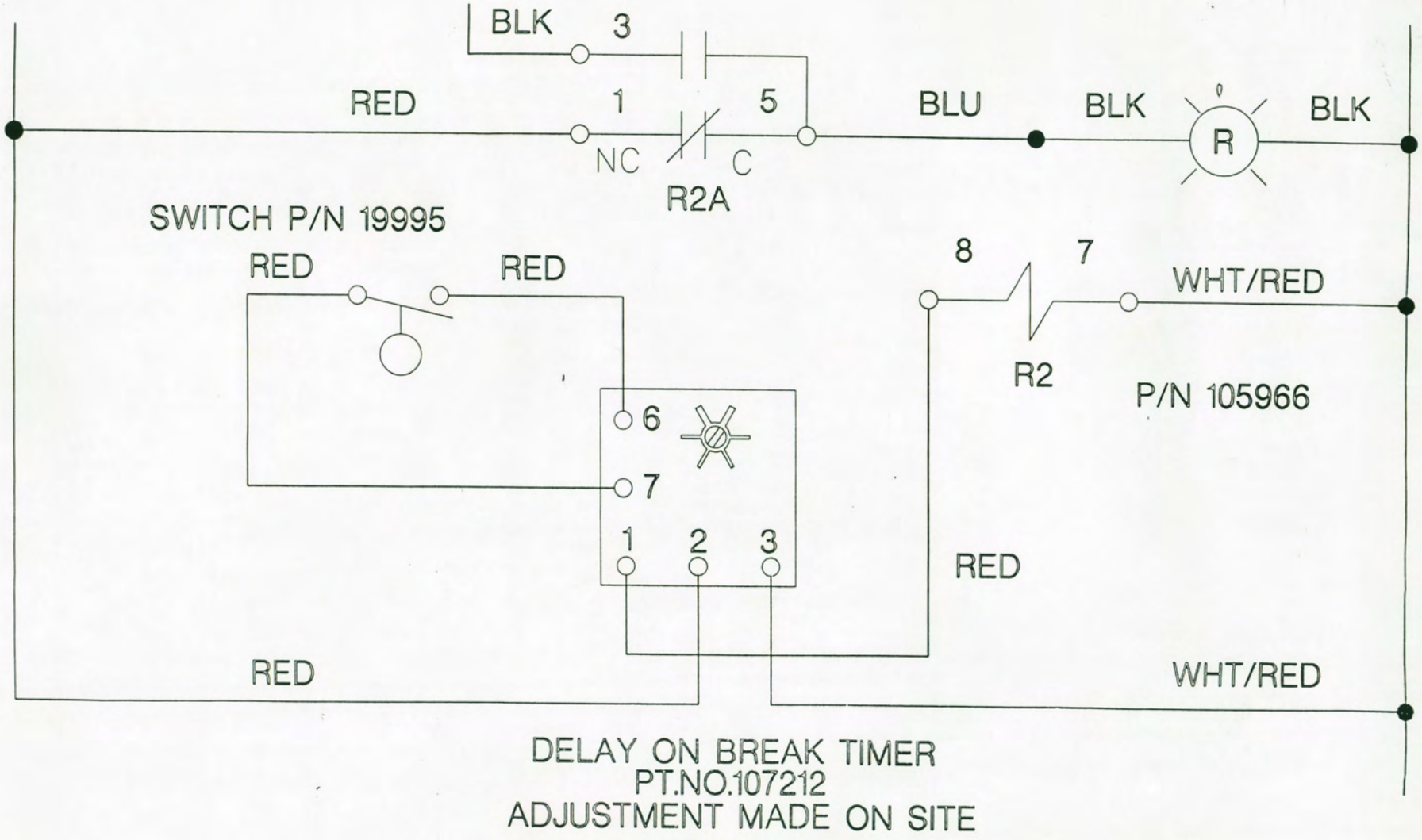
6. Re-connect power to unit and test for correct operation of Low Water Cut-Off.



GENERATOR CONTROL WIRING
TIMER CIRCUIT
One relay

Dealer

GAS GENERATOR
FLOAT DELAY CONTROL WIRING
(TO BE USED WITH WIRING DIAGRAM P/N 109800)



Two relays