

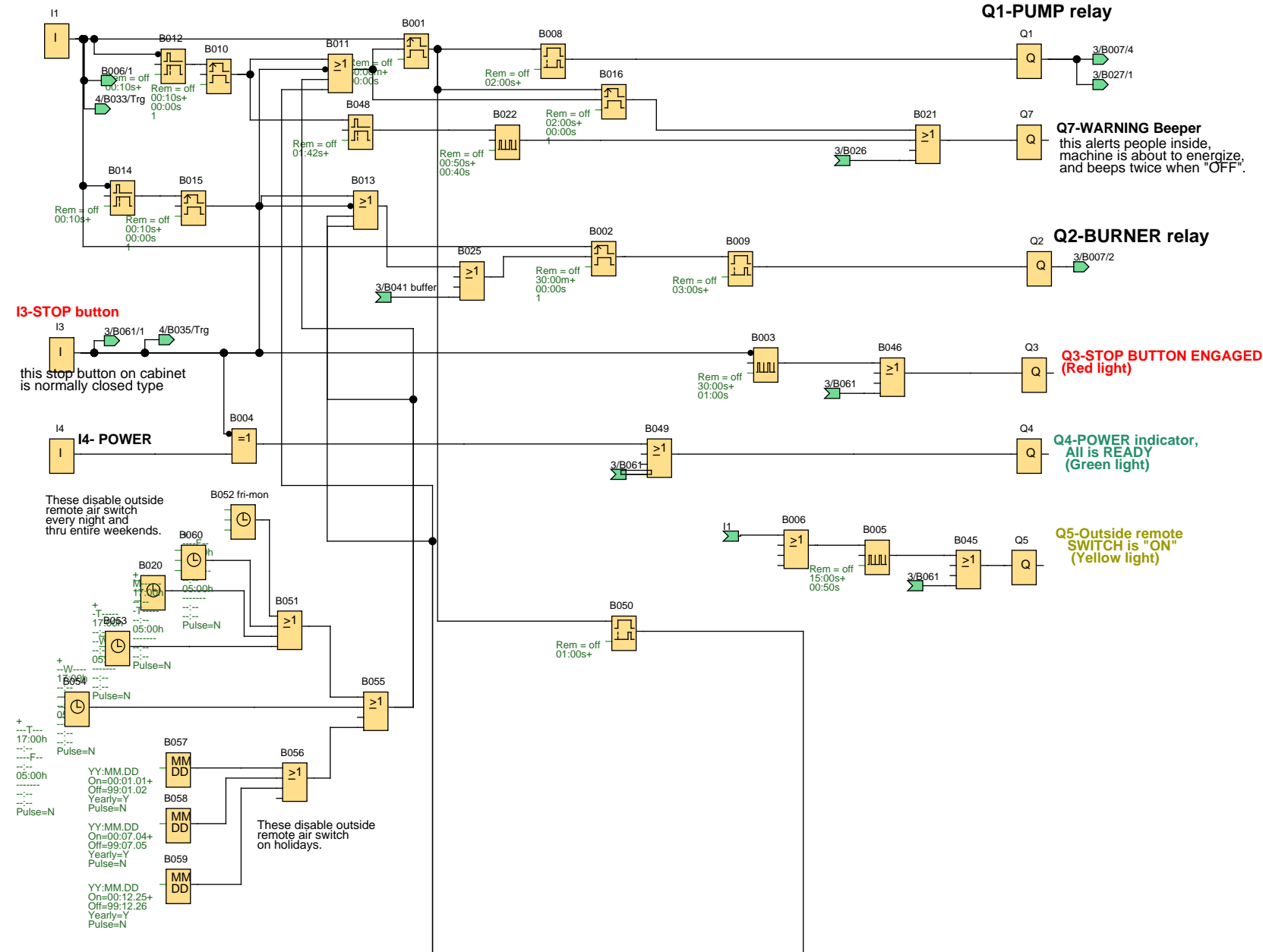
Comment

dnlded 10-31-19 with clock cam day adjustments
10-31-19 tested program / smart to see if water/pump/burner would come "on" at night or weekends on power outages,
messing with it, leaving on, out sw on /off, tampering, clock chng to 5am, etc, I could not get wtr pump to come on by itself
at all, so good test
1-25-22 pump oil was changed yes done
1-25-22 counters read, Impckcnt 51, soaplvc 23, fuel lowc 8, Stpbcnt 37, outswon 651, manswcnt 31,
pump oil h, 245 OT 73h 53m, MN 171h 7m, redwld all counts to zero,

| | | | | | | |
|----------|---------------------------------|-------------------|---------------|----------------------------|--------------|--------------|
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| Checked: | JBL 1-25-22 | | Installation: | | Diagram No.: | |
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I1- Remote outside switch

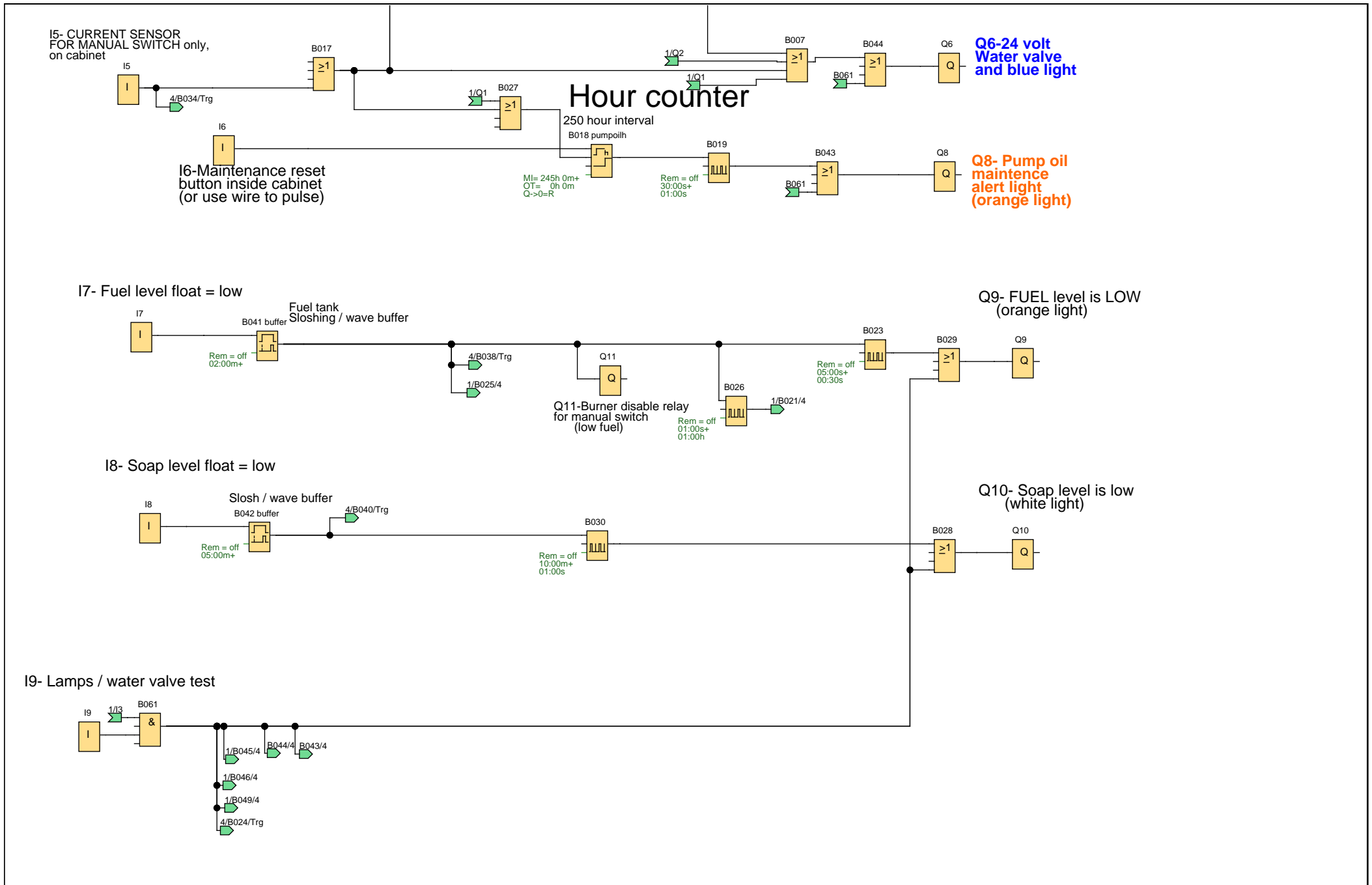
Pressure washer at lineshop 1-25-22pm hrdwr FL1E



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| | Denver Fire Dept. | | | | |

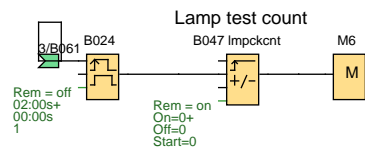
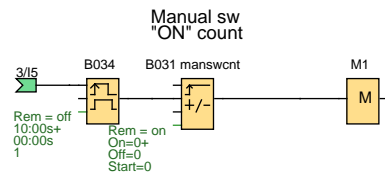
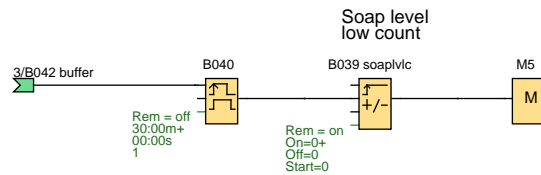
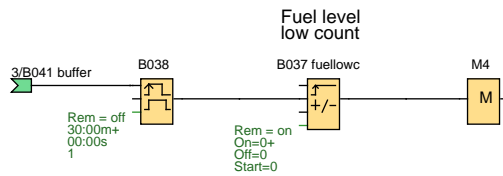
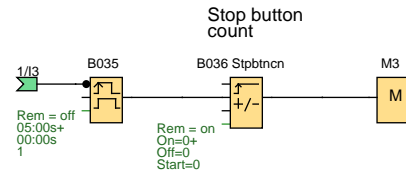
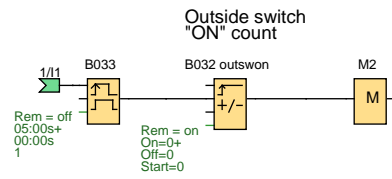


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| | Denver Fire Dept. | | | | |

Counting section



| | | | | | | |
|----------|---------------------------------|-------------------|---------------|-----------------------------|--------------|--------------|
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Notes:

Leave main electrical disconnect "ON" always, except for service and emergency.

Leave outside switch "OFF", when not in use.

Visually check manual water valves, (that they are open), before use.

Outside switch will not function at night and weekends, to avoid flooding/safety. Use inside manual switch.

Burner will not function if fuel level is low, even with manual switch.

9-27-19 =read 15.3 amps total at main disconnect on each leg, with pump and burner running.

10-18-19 == VERIFIED THAT CURRENT SENSOR ONLY COMES ON with manual switch, yes,

also verified fuel low device works as programmed when Dan B. ran low on fuel and could

not get burner to work, yes

10-31-19 verified that outside remote will not work thru out nights, weekends and holidays, period, for prgrm and smart, good tests.

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| Block Number (Type) | Parameter |
|---|---|
| B001(Edge-triggered interval time-delay relay) : | Rem = off 30:00m+ 00:00s 1 |
| B002(Edge-triggered interval time-delay relay) : | Rem = off 30:00m+ 00:00s 1 |
| B003(Asynchronous pulse generator) : | Rem = off 30:00s+ 01:00s |
| B005(Asynchronous pulse generator) : | Rem = off 15:00s+ 00:50s |
| B008(On-delay) : | Rem = off 02:00s+ |
| B009(On-delay) : | Rem = off 03:00s+ |
| B010(Edge-triggered interval time-delay relay) : | Rem = off 00:10s+ 00:00s 1 |
| B012(Off-delay) : | Rem = off 00:10s+ |
| B014(Off-delay) : | Rem = off 00:10s+ |
| B015(Edge-triggered interval time-delay relay) : | Rem = off 00:10s+ 00:00s 1 |
| B016(Edge-triggered interval time-delay relay) : | Rem = off 02:00s+ 00:00s 1 |
| B018 pumpoilh(Operating hours counter) : 250 hour interval | MI= 245h 0m+ OT= 0h 0m Q->0=R |
| B019(Asynchronous pulse generator) : | Rem = off 30:00s+ 01:00s |
| B020(Seven-day time switch) : These disable outside remote air switch every night and thru entire weekends. | + -T----- 17:00h --- --W---- --- 05:00h ----- --- --- Pulse=N |
| B022(Asynchronous pulse generator) : | Rem = off 00:50s+ 00:40s |
| B023(Asynchronous pulse generator) : | Rem = off 05:00s+ 00:30s |
| B024(Edge-triggered interval time-delay relay) : | Rem = off 02:00s+ 00:00s 1 |
| B026(Asynchronous pulse generator) : | Rem = off 01:00s+ 01:00h |
| B030(Asynchronous pulse generator) : | Rem = off 10:00m+ 01:00s |

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| Block Number (Type) | Parameter |
|---|--|
| B031 manswcnt(Up/Down counter) : Manual sw "ON" count | Rem = on On=0+ Off=0 Start=0 |
| B032 outswon(Up/Down counter) : Outside switch "ON" count | Rem = on On=0+ Off=0 Start=0 |
| B033(Edge-triggered interval time-delay relay) : | Rem = off 05:00s+ 00:00s 1 |
| B034(Edge-triggered interval time-delay relay) : | Rem = off 10:00s+ 00:00s 1 |
| B035(Edge-triggered interval time-delay relay) : | Rem = off 05:00s+ 00:00s 1 |
| B036 Stpbtncnt(Up/Down counter) : Stop button count | Rem = on On=0+ Off=0 Start=0 |
| B037 fuellowc(Up/Down counter) : Fuel level low count | Rem = on On=0+ Off=0 Start=0 |
| B038(Edge-triggered interval time-delay relay) : | Rem = off 30:00m+ 00:00s 1 |
| B039 soaplvc(Up/Down counter) : Soap level low count | Rem = on On=0+ Off=0 Start=0 |
| B040(Edge-triggered interval time-delay relay) : | Rem = off 30:00m+ 00:00s 1 |
| B041 buffer(On-delay) : Fuel tank Sloshing / wave buffer | Rem = off 02:00m+ |
| B042 buffer(On-delay) : Slosh / wave buffer | Rem = off 05:00m+ |
| B047 Impckcnt(Up/Down counter) : Lamp test count | Rem = on On=0+ Off=0 Start=0 |
| B048(Off-delay) : | Rem = off 01:42s+ |
| B050(On-delay) : | Rem = off 01:00s+ |
| B052 fri-mon(Seven-day time switch) : | + ---F-- 17:00h ---- M----- ---- 05:00h ----- ---- --- Pulse=N |
| B053(Seven-day time switch) : | + --W---- 17:00h ---- ---T--- ---- 05:00h ----- ---- --- Pulse=N |

| Block Number (Type) | Parameter | | | | | |
|--|---|-------------------|---------------|----------------------------|--------------|--------------|
| B054(Seven-day time switch) : | + ---T--- 17:00h ---- ----F-- ---- 05:00h ----- ---- Pulse=N | | | | | |
| B057(Twelve-month time switch) : | YY:MM.DD On=00:01.01+ Off=99:01.02 Yearly=Y Pulse=N | | | | | |
| B058(Twelve-month time switch) : | YY:MM.DD On=00:07.04+ Off=99:07.05 Yearly=Y Pulse=N | | | | | |
| B059(Twelve-month time switch) : | YY:MM.DD On=00:12.25+ Off=99:12.26 Yearly=Y Pulse=N | | | | | |
| B060(Seven-day time switch) : | + M----- 17:00h ---- -T----- ---- 05:00h ----- ---- Pulse=N | | | | | |
| I1(Input) : I1- Remote outside switch | | | | | | |
| I3(Input) : I3-STOP button | | | | | | |
| I4(Input) : I4- POWER | | | | | | |
| I5(Input) : I5- CURRENT SENSOR FOR MANUAL SWITCH only, on cabinet | | | | | | |
| I6(Input) : I6-Maintenance reset button inside cabinet (or use wire to pulse) | | | | | | |
| I7(Input) : I7- Fuel level float = low | | | | | | |
| I8(Input) : I8- Soap level float = low | | | | | | |
| I9(Input) : I9- Lamps / water valve test | | | | | | |
| Q1(Output) : Q1-PUMP relay | | | | | | |
| Q2(Output) : Q2-BURNER relay | | | | | | |
| Q3(Output) : Q3-STOP BUTTON ENGAGED (Red light) | | | | | | |
| Q4(Output) : Q4-POWER indicator, All is READY (Green light) | | | | | | |
| Q5(Output) : Q5-Outside remote SWITCH is "ON" (Yellow light) | | | | | | |
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| Block Number (Type) | Parameter |
|--|-----------|
| Q6(Output) : Q6-24 volt Water valve and blue light | |
| Q7(Output) : Q7-WARNING Beeper | |
| Q8(Output) : Q8- Pump oil maintence alert light (orange light) | |
| Q9(Output) : Q9- FUEL level is LOW (orange light) | |
| Q10(Output) : Q10- Soap level is low (white light) | |
| Q11(Output) : Q11-Burner disable relay for manual switch (low fuel) | |

| Connection | Label |
|------------|-------|
| I1 | |
| I3 | |
| I4 | |
| I5 | |
| I6 | |
| I7 | |
| I8 | |
| I9 | |
| M1 | |
| M2 | |
| M3 | |
| M4 | |
| M5 | |
| M6 | |
| Q1 | |
| Q2 | |
| Q3 | |
| Q4 | |
| Q5 | |
| Q6 | |
| Q7 | |
| Q8 | |
| Q9 | |
| Q10 | |
| Q11 | |

| | | | | | |
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