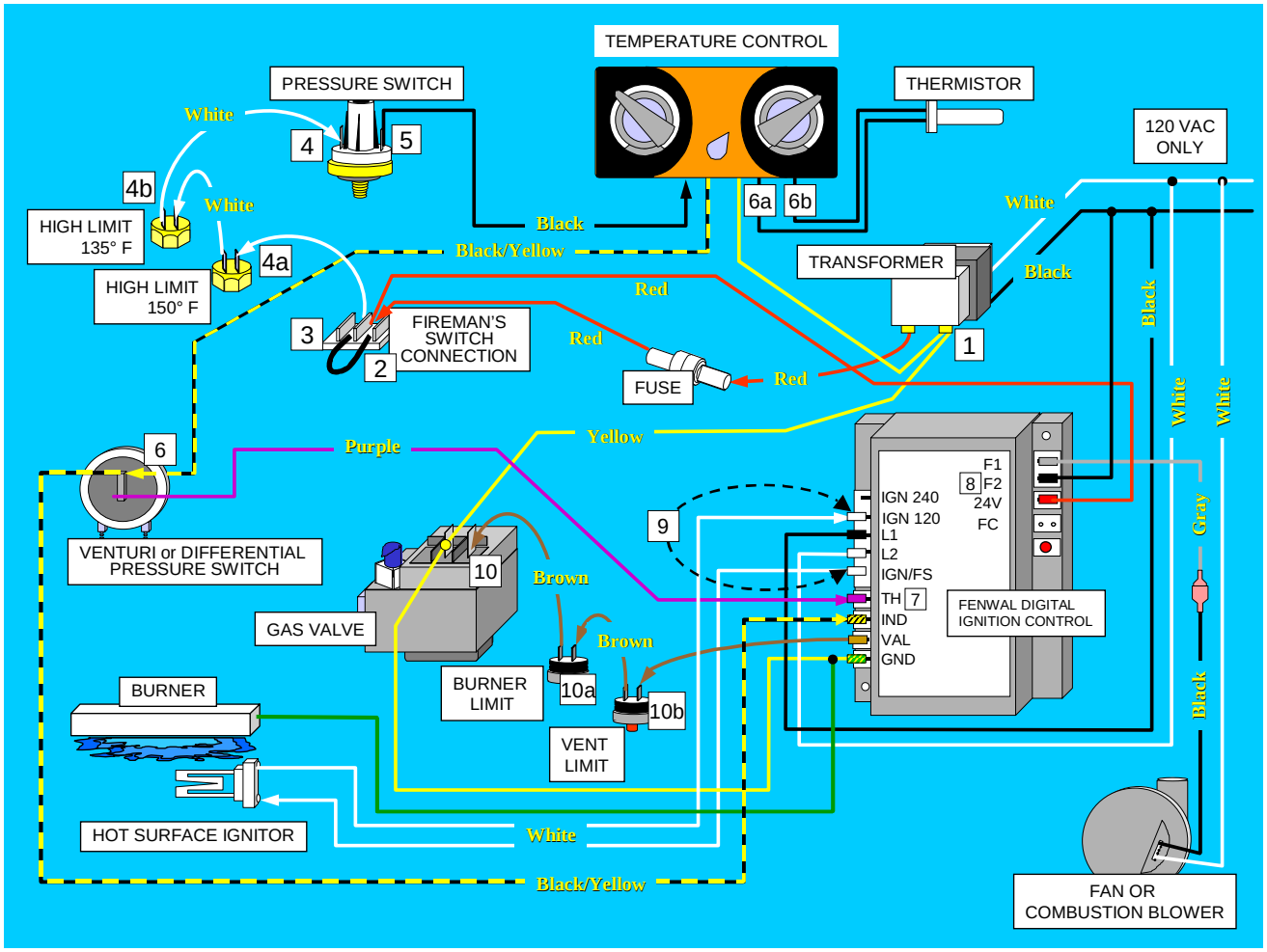
HiE2 TROUBLESHOOTING w/ Digital Ignition Control



STEP 1

24 VAC at Transformer?

- No ⇨ 1. Check incoming power 2. Check Transformer wiring. 3. Replace Transformer.
- Yes ⇩

STEP 2

24 VAC at Red wire of terminal block?

- No ⇨ Fuse is blown. Look for short circuits. Do not jumper or bypass fuse. Replace fuse with same size & amperage.
- Yes ⇩

STEP 3

24 VAC at White wire of terminal block?

- No ⇨ Check Fireman's switch. If a remote is installed make sure it is calling for heat.
- Yes ⇩

STEP 4

24 VAC at White wire of Pressure Switch?

- No ⇨ 1. Check each Limit individually. [4a & 4b] 2. Check if damage to disc, head, exchanger. 3. Perform *Temperature Rise Test*.
- Yes ⇩

STEP 5

24 VAC at Black wire of Pressure Switch?

- No ⇨ Is Pump On? *Perform Back Pressure test.* If 2 PSI or more replace pressure switch. If less, check pump, filter, plumbing and heat exchanger for water flow restrictions.
- Yes ⇩

STEP 6

24 VAC at Black/Yellow wire of Ignition Control?

- No ⇨ Is Temp Board calling for heat?
  - Yes ⇩ Do *Thermistor Test*.
    - Good ⇨ Replace Temp Board.
    - Failed ⇨ Replace Thermistor.
- Yes ⇩ Go to Step 7

STEP 7

Is Fan On?

- No ⇨ Is there 120 VAC at F2? [8]
  - No ⇩ Check supply wire.
  - Yes ⇩ Is there 120 VAC at F1?
    - No ⇩ Make sure there is 24 VAC at IND, if there is, replace Ignition Control.
    - Yes ⇩ Check wiring to Fan. If wiring is OK, replace Fan.
- Yes ⇩

STEP 8

24 VAC at TH of Ignition Control?

- No ⇨ 1. Check for vent blockage or dirty air filter. 2. Perform *Air Flow Test*. 3. Replace Venturi Pressure Switch.
- Yes ⇩

STEP 9

Is Ignitor glowing

- No ⇨ Check Ignitor and supply wiring. Perform *Ignitor Resistance Test*. Replace Ignitor. [9]
- Yes ⇩

STEP 10

24 VAC at Brown wire of Gas Valve?

- No ⇨ Check Burner and Vent Limits. [10a & 10b]
- Yes ⇩

Does heater fire?

- No ⇨ Is Gas Valve On? Do a supply side gas pressure test. Replace Gas valve.
- Yes ⇩ Yes, but goes out after a few seconds. Heater is not sensing rectification. Check commons, make sure combustion chamber is grounded. If all is OK replace Ignition Control.