

SPEEDSTER® AND LTD SPEEDSTER® BALL FLOAT CONVERSION

Follow these instructions to remove old vacuum stacks from the recovery tank and replace with A116 Ball Float Conversion Kit for Speedsters® or A128 kit for LTD Speedsters®.

A116 and A128 Kits Include:

- 2x PVC vacuum stack assemblies
- 2x H490 ball floats
- 2x P520 PVC male pipe thread adaptors
- 4x E614 cap connectors
- 3x E514 black wire ties

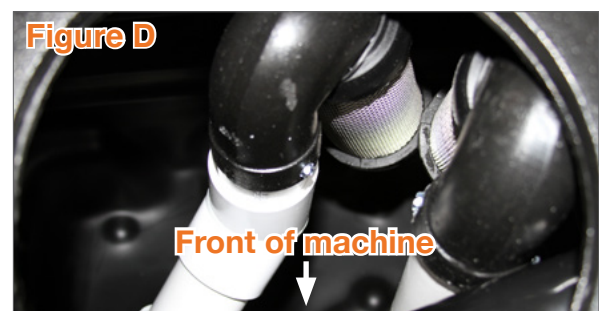
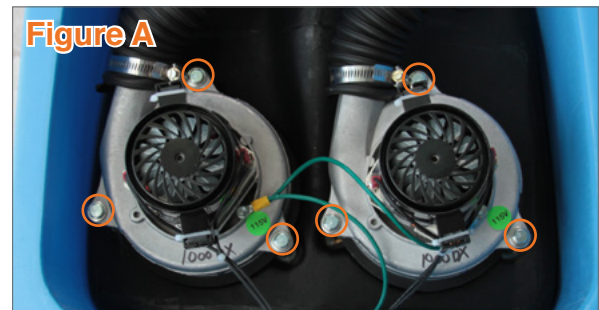
NOTE: Older machines may have a 2" vacuum stack. If that is the case, one **P538 2" to 1.5" reducer** and a **P684 adapter** will be needed.

- 1 Take the clear tank lid off the recovery tank. Open up the machine by unbolting the bracket on the bottom rear of the machine on Speedsters® or undo the rear latches on LTDs.
- 2 Uninstall the two vacuums by unplugging all the wires connected to it and unbolting the 6 bolts using a 7/16" socket (**Figure A**). Remember how the wires are connected so that you can correctly reconnect them later.
- 3 Using an adjustable wrench or tongue-and-groove pliers, unscrew the two 1-1/2" lock nuts (**Figure B**) holding the two vacuum stacks in place. Take out the two old vacuum stacks.
- 4 Apply silicone on the new 1-1/2" PVC adaptors (**Figure C**). Push the threaded side of the adaptors thru the two holes on the bottom of the recovery tank. Secure both adaptors in place by screwing on the lock nuts.
- 5 Apply PVC glue on the bottom of both of the PVC vacuum stack assemblies and install them on the PVC adaptors. The stack with the straight pipe goes on the right side when you're facing the front of the machine. Angle the stacks so the ball floats are located in the right-rear of the tank, as shown in **Figure D**.
- 6 Reinstall the vacuums the same way they were originally installed.
- 7 Unplug all the wire terminals connected to the water level control board. **See the next page for more detailed information on bypassing the float switch control board.**
- 8 Remove the water level control board from the machine.

Tools & Supplies Needed:

- 7/16" socket wrench
- Adjustable wrench or tongue-and-groove pliers
- PVC Glue
- Silicone sealant

Labor hours allowed: 2

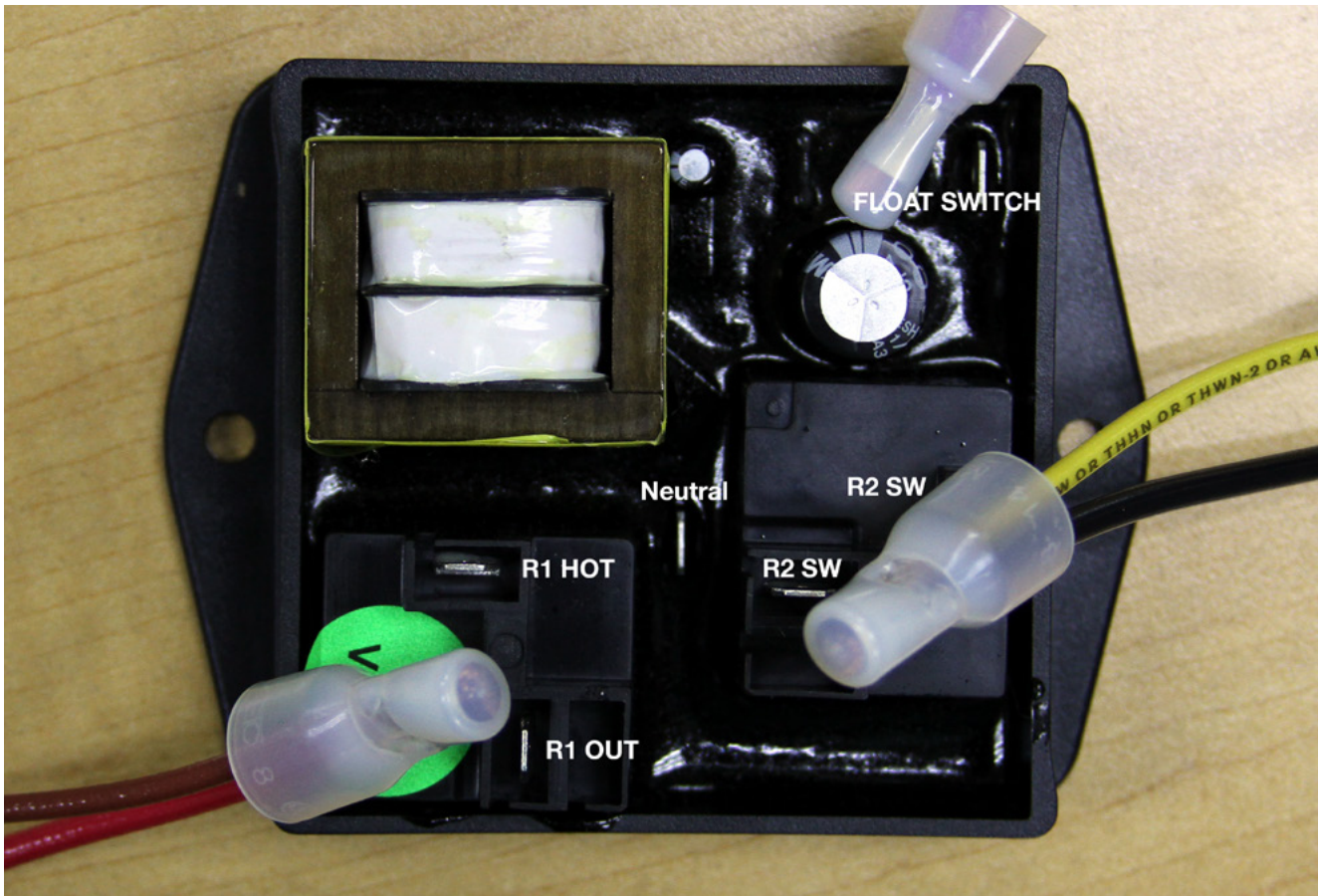


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To bypass the float switch control board, follow the instructions below:

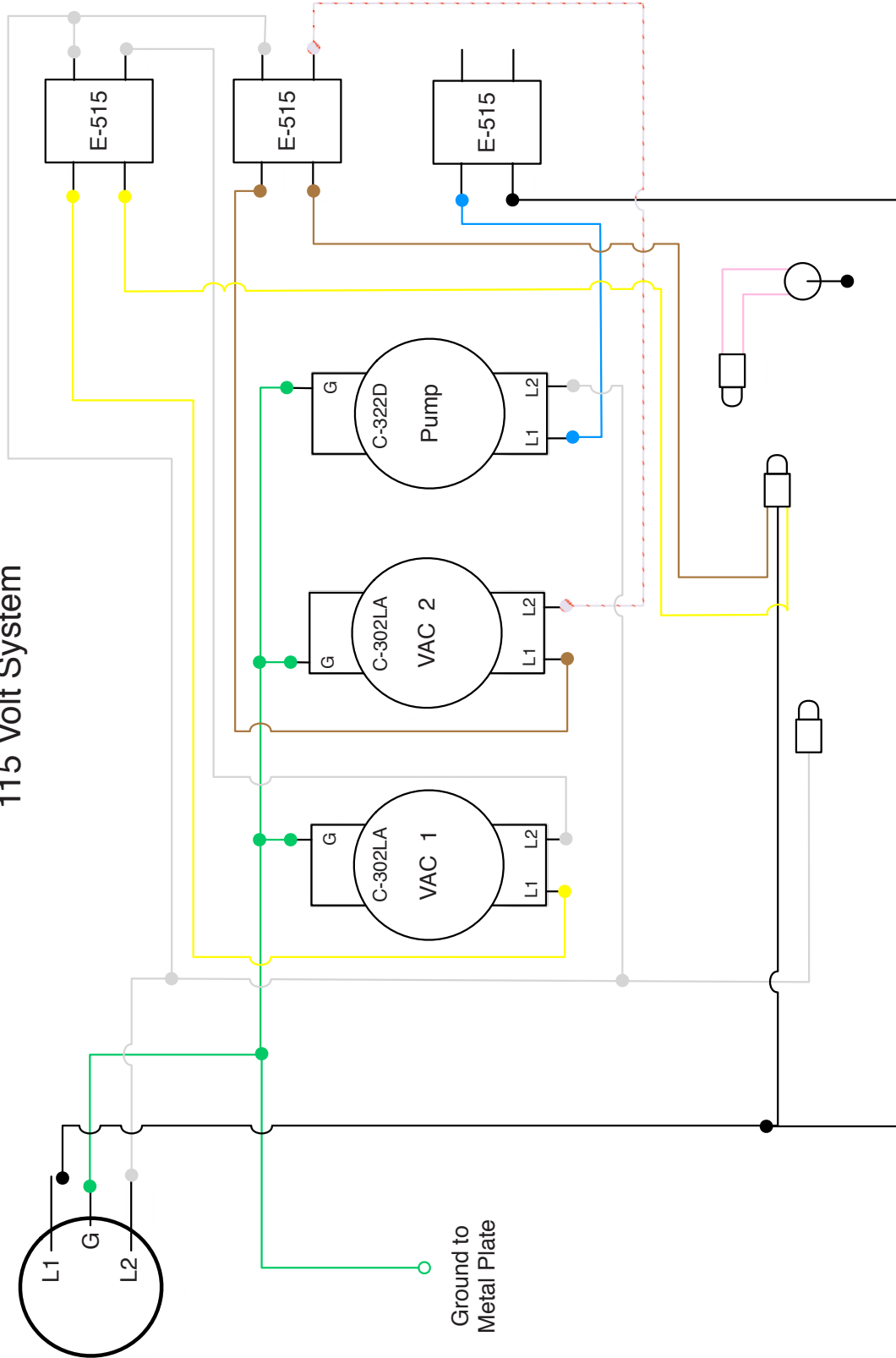
- 1 Disconnect and crimp together the wires connected to **R1 HOT** and **R1 OUT**.
- 2 Disconnect and crimp together the wires connected to the **R2 SW** terminals.
- 3 Disconnect and crimp together the wires connected to the **FLOAT SWITCH** terminals.
- 4 The **Neutral** line can be disconnected and zip-tied out of the way.

NOTE: Your float switch control board may look different from the one shown below, but the terminals will still be labeled the same.



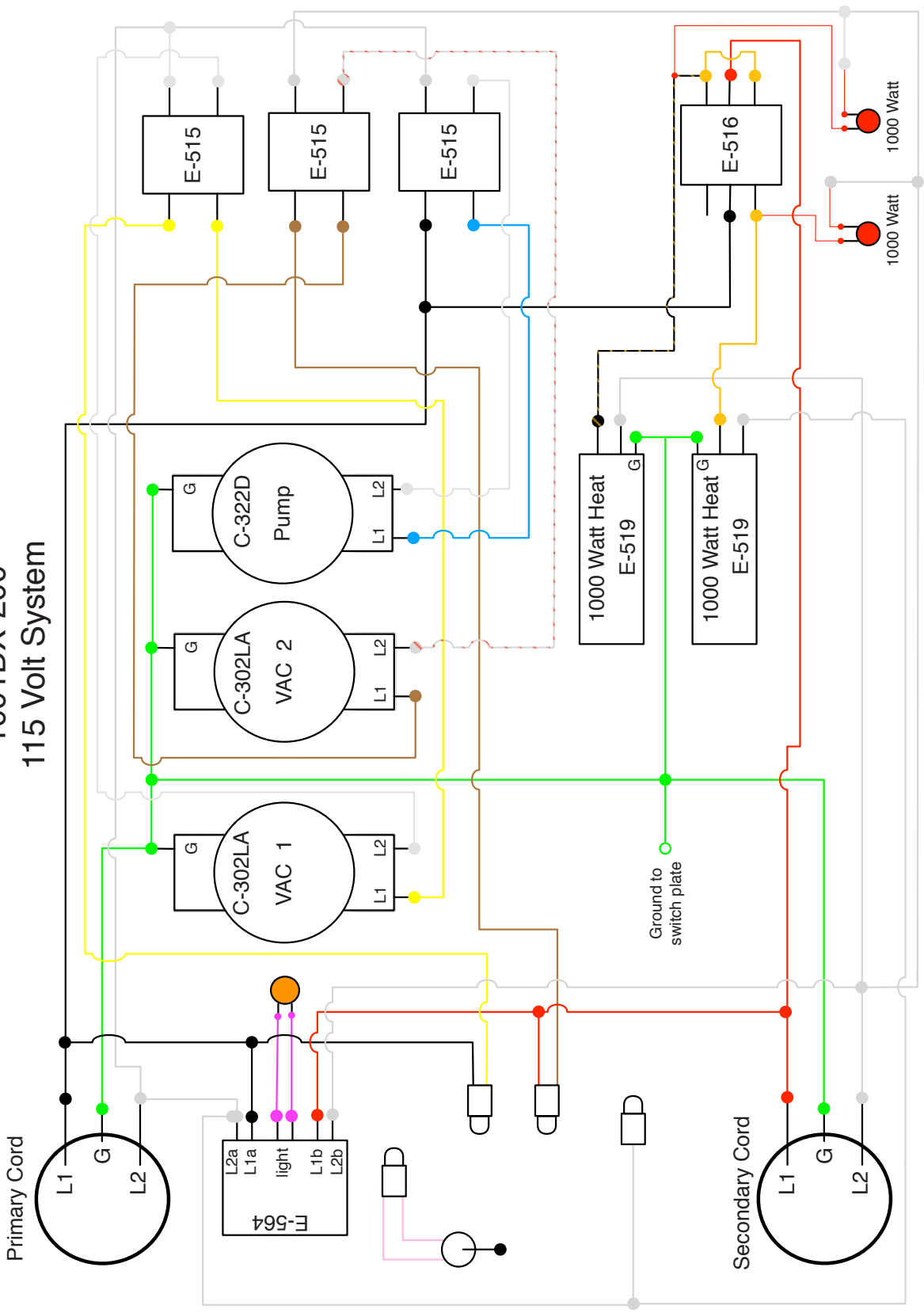
1000DX-200 SPEEDSTER® WIRING DIAGRAM

1000DX-200 115 Volt System



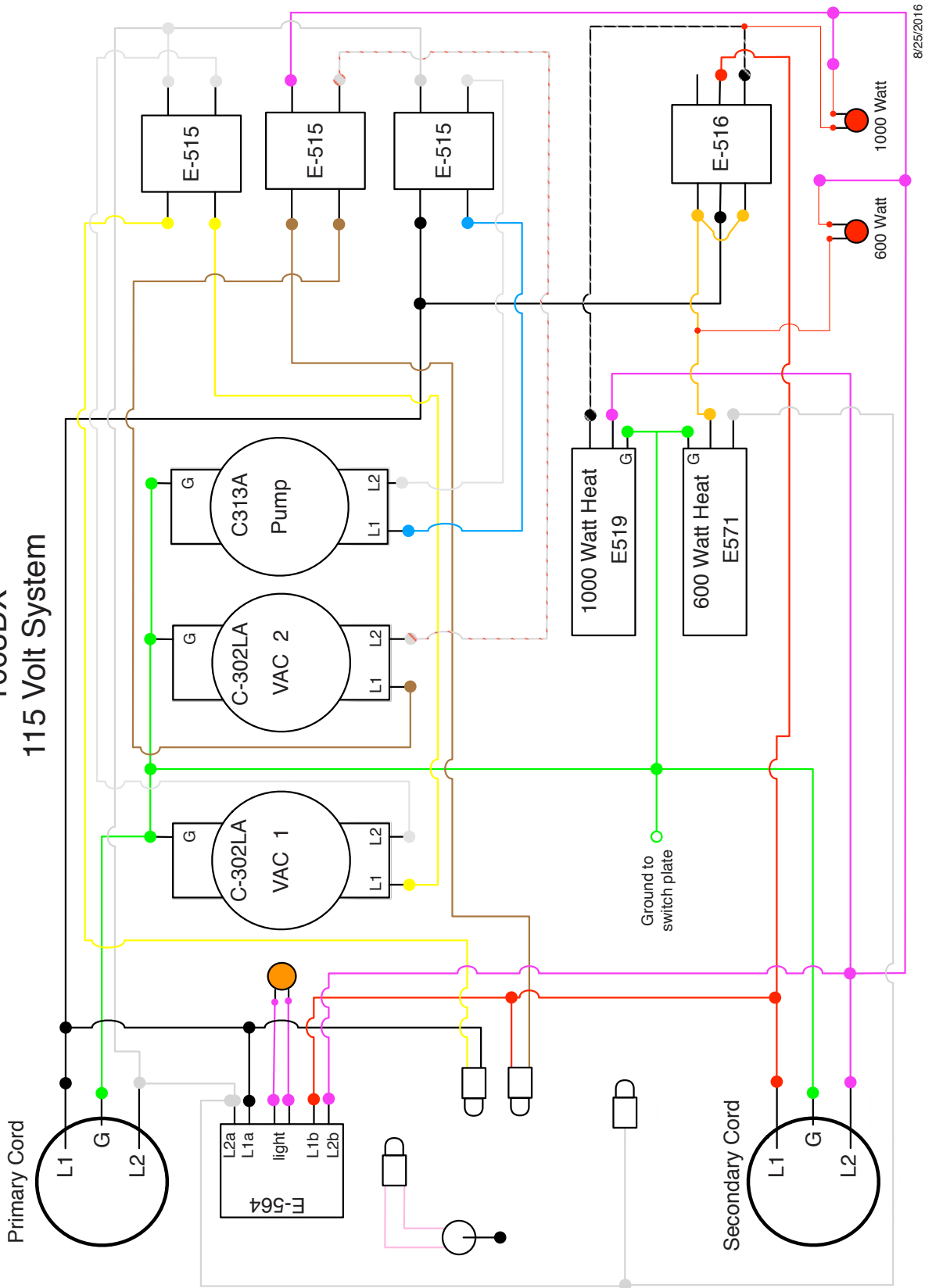
1001DX-200 SPEEDSTER® WIRING DIAGRAM

1001DX-200 115 Volt System



1003DX SPEEDSTER® WIRING DIAGRAM

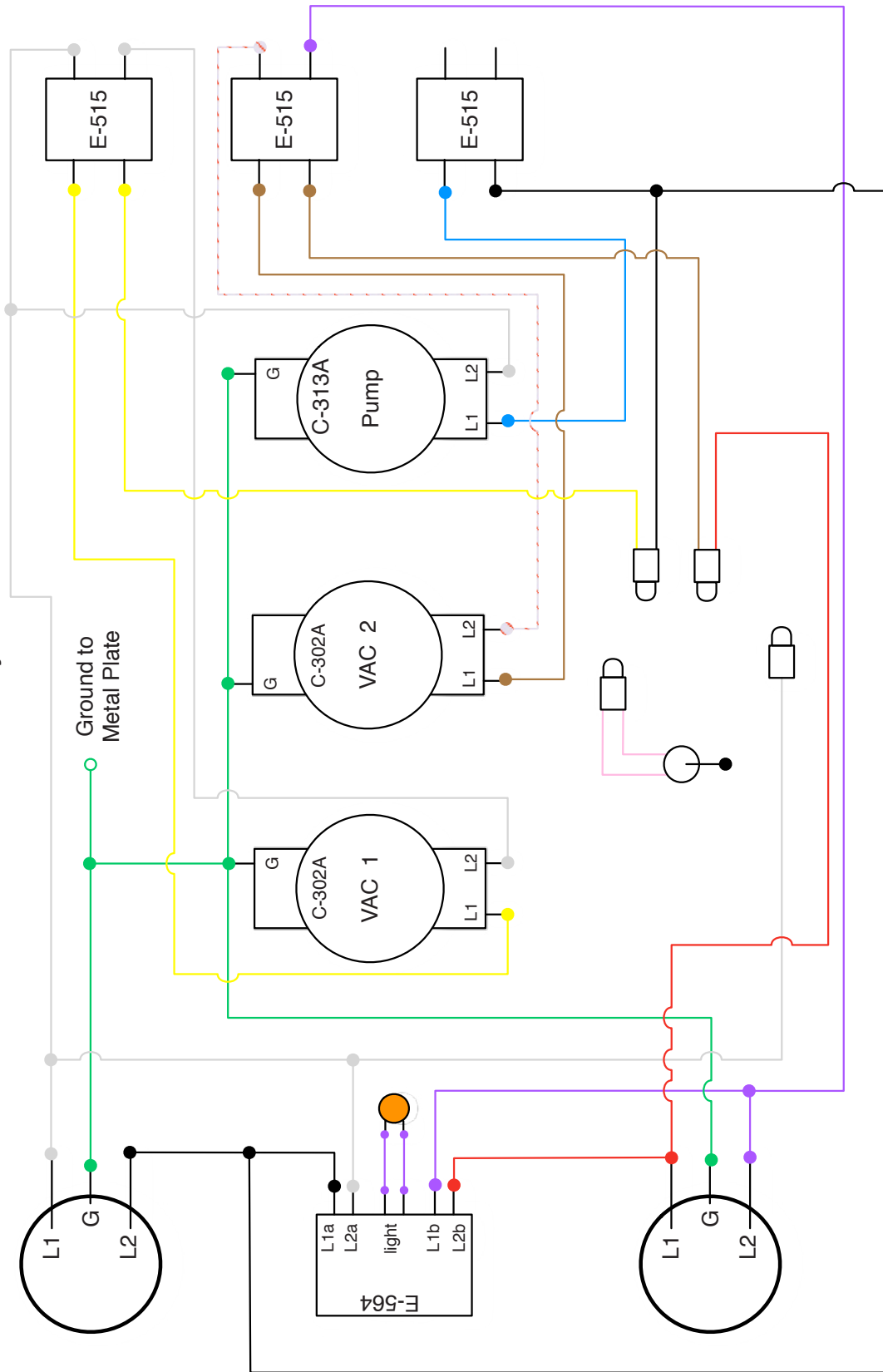
1003DX 115 Volt System



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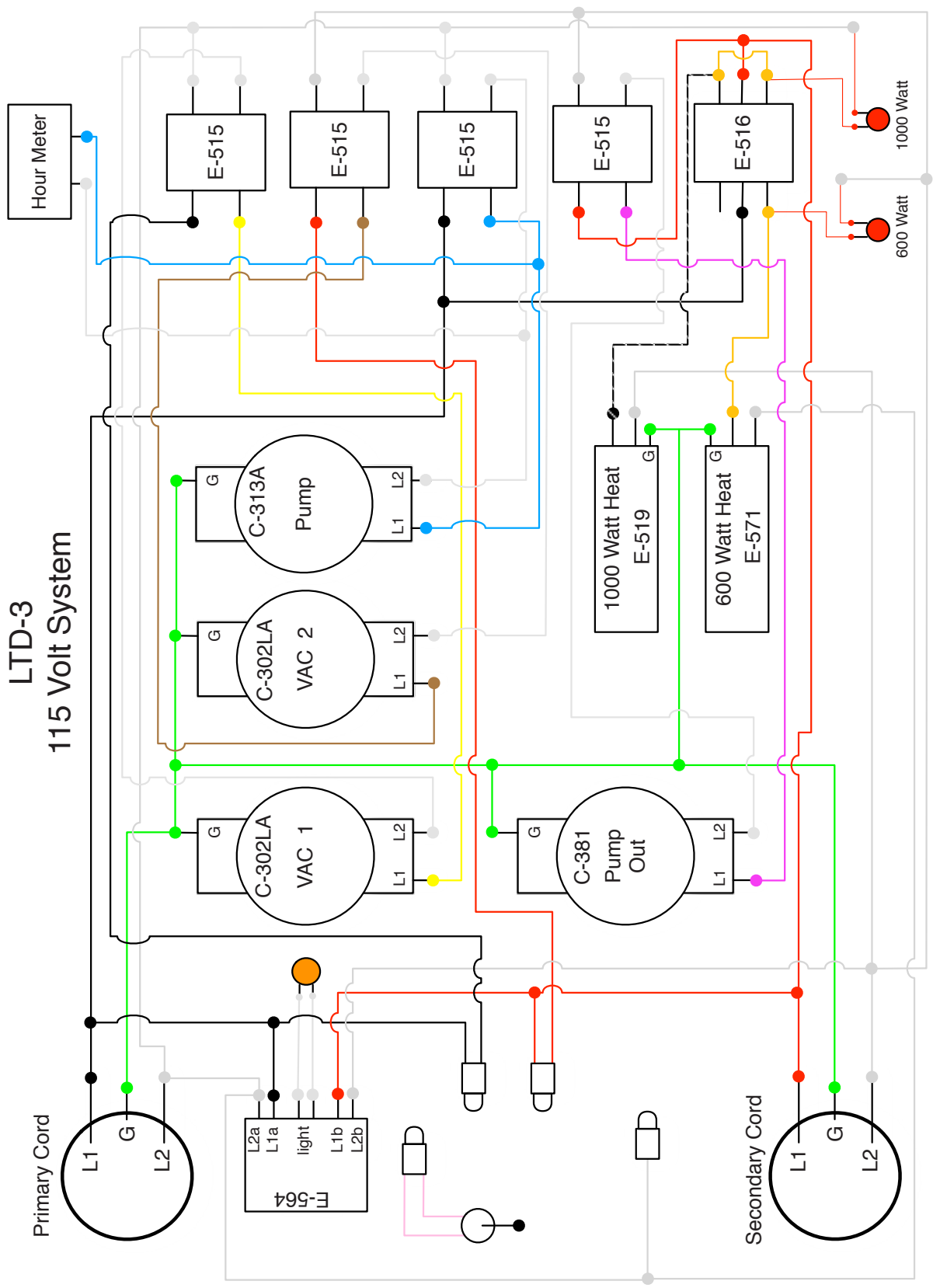
1005DX SPEEDSTER® WIRING DIAGRAM

1005DX 115 Volt System



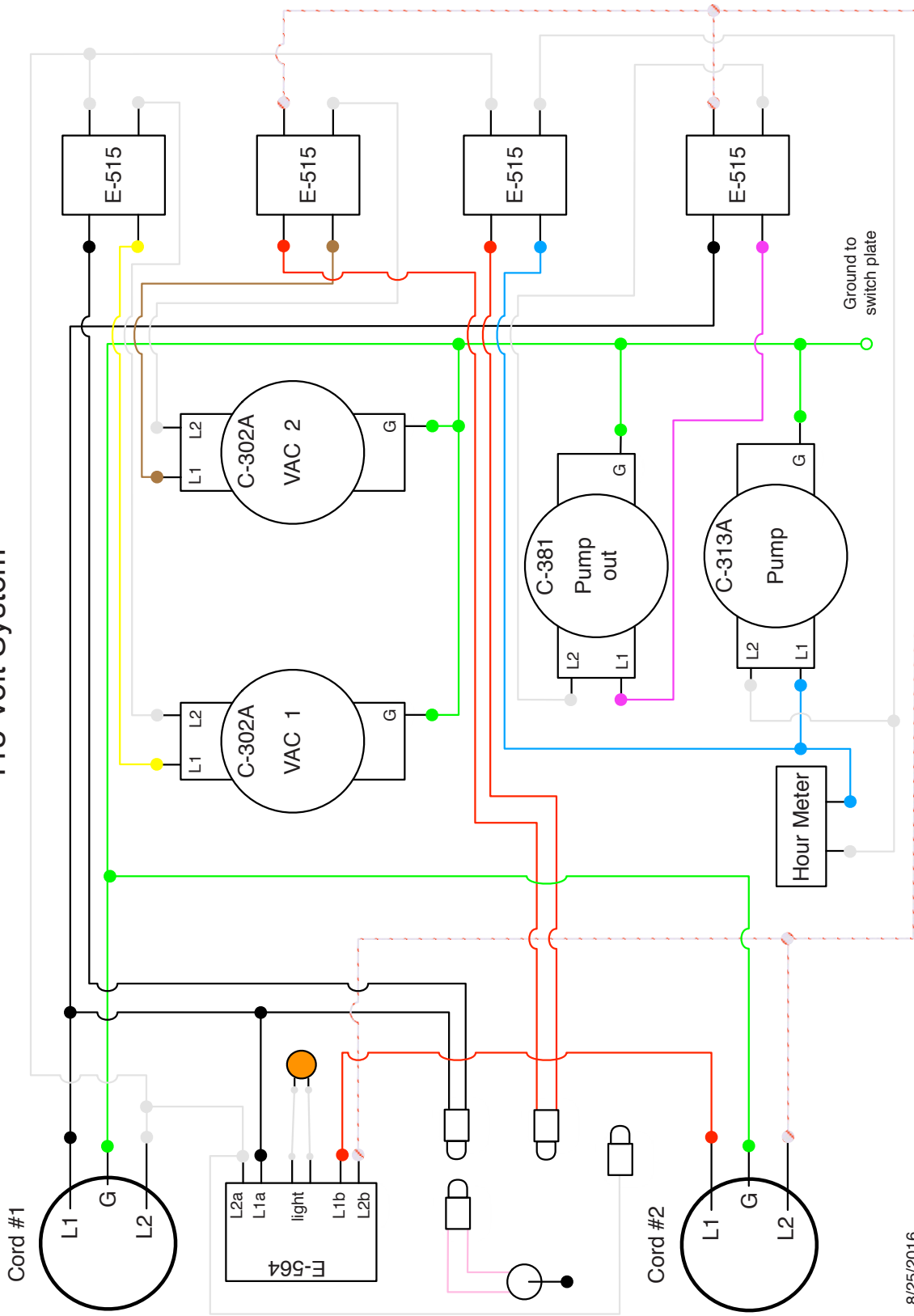
LTD3 SPEEDSTER® LTD WIRING DIAGRAM

LTD-3 115 Volt System



LTD5 SPEEDSTER® LTD WIRING DIAGRAM

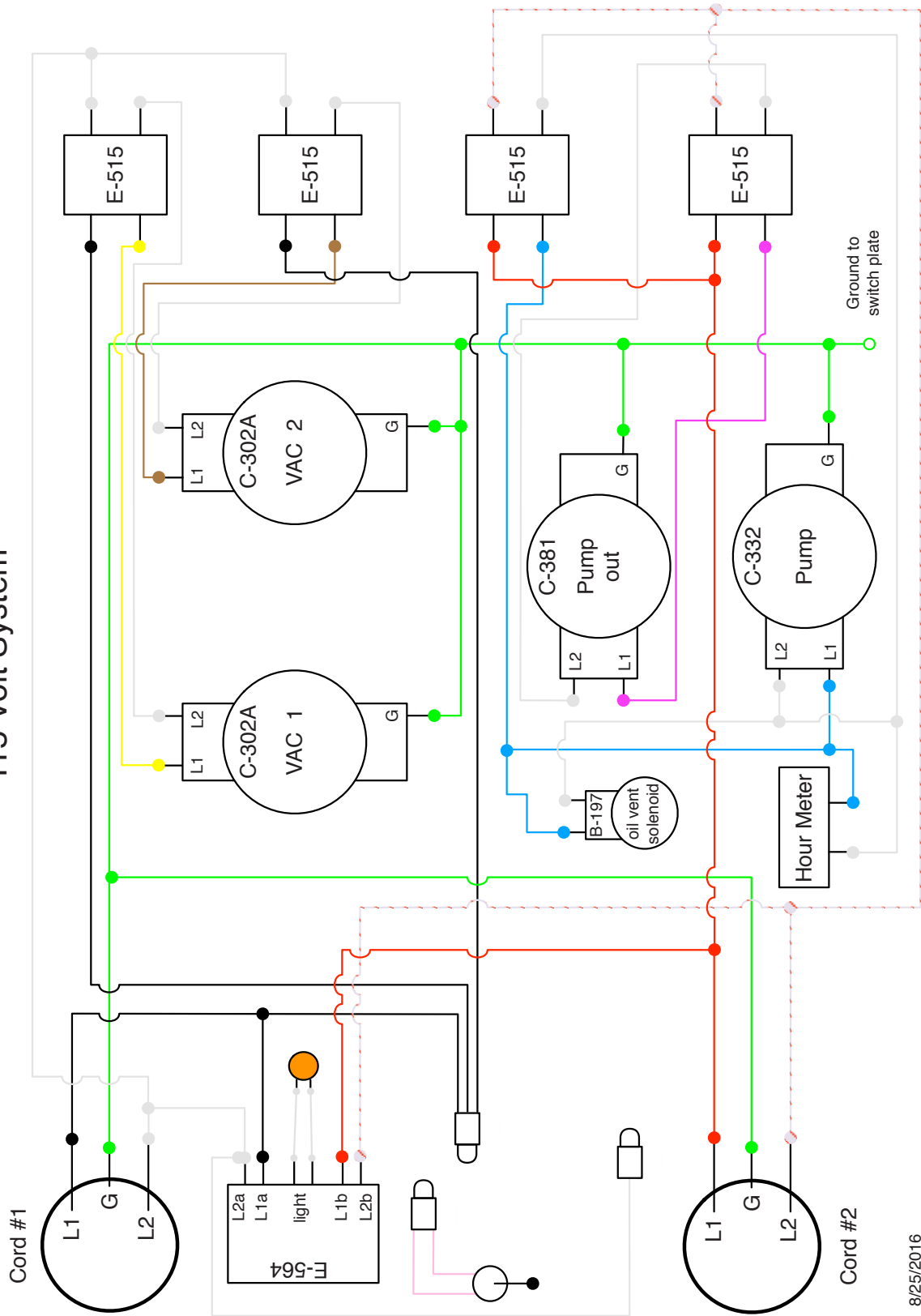
LTD-5 115 Volt System



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LTD12 SPEEDSTER® LTD WIRING DIAGRAM

LTD-12 115 Volt System



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