

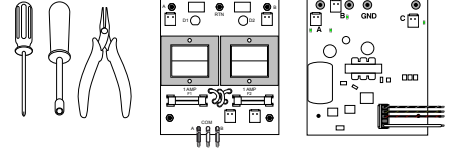
Instructions for replacing a power supply on a TCL sign purchased before 05/01/2016.

Voltage

This sign operates within an input range of 120VAC to 277VAC.

What You Need:

- Phillips Head Screw Driver
- 1/4" Nut Driver
- Needle Nose Pliers
- New Power Supply



Always turn off the power prior to installation.



To avoid damage do not overtighten connections

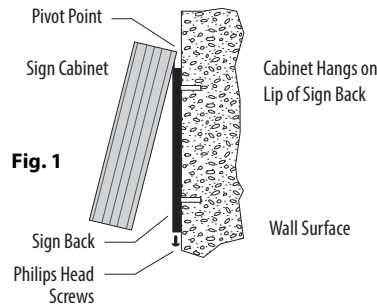


Be sure any metal debris cleared out of the cabinet.

Opening Sign Cabinet

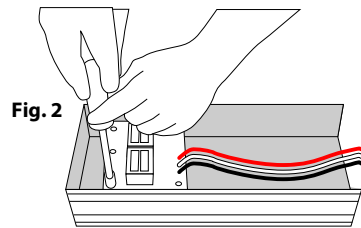
1. Turn off power to sign.

2. Using a Phillips head screw driver, remove the two screws on the bottom of the cabinet. With the screws removed, open the sign by pulling the bottom of the sign forward hinging it on the top.

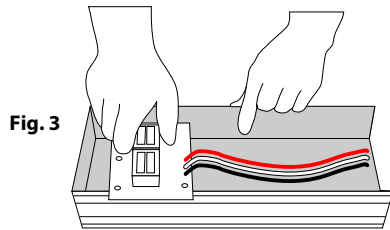


Removing Power Supply and Connections

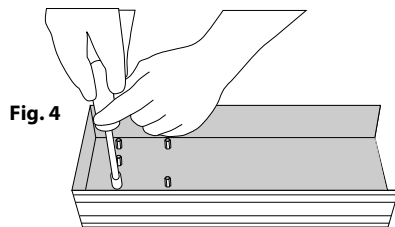
3. Disconnect the electrical connections noting the wire colors for later reconnections. Locate the five stand off studs holding the power supply to the circuit board. Using a 1/4" nut driver remove all ten 440 nuts. Keep the nuts to use when installing the new supply.



4. Lift the old power supply off the circuit board and discard.



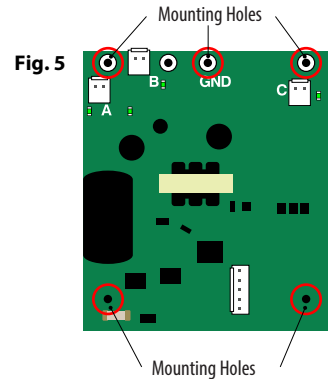
5. With the five standoffs exposed use the same nut driver to tighten the standoffs ensuring a good electrical connection.



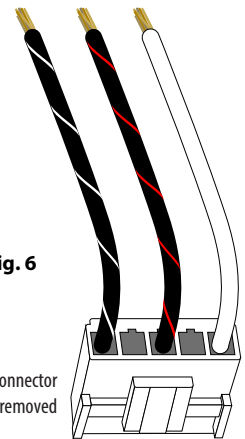
Install New Power Supply

6. The new power supply will fit on the same standoffs as the old power supply. Attach using five off the old 440 nuts removed in step 3. The five extra nuts were used as locking nuts during shipping and are not necessary.

(Note: Tighten using hand tools only. A screw gun may use too much torque and may damage the supply).



7. The new power supply uses a wiring harness that plugs into the power supply. Making it simpler to wire without holding the weight of the sign. Remove the White wiring harness connector from the new power supply and make your power connections to it.



8. The White wire is Neutral. Depending on the number of messages your sign has you may have had a red and black wire or just a black wire on your old supply. The old supply wires match up to the new supply as such:

(Actual wire count varies by number of messages)

Old Power Supply Wire Color	New Power Supply Wire Color
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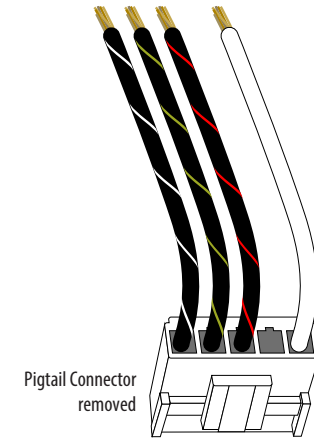
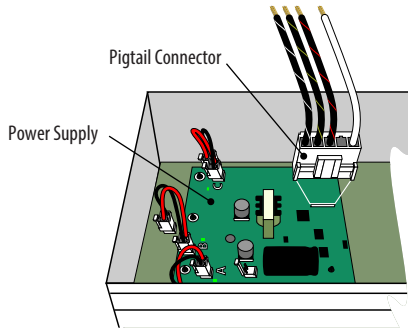
White	White
Black	Black with a White Stripe
Red	Black with a Red Stripe

See back for more wiring information

- Replace the sign cabinet back on the top hinge point and plug the new wiring harness you removed in step 7, into the new power supply.
- Close the sign cabinet and replace the screws removed from the bottom in step 2.
- Yay you're done! Turn on the power to the sign.

Making your Wiring Connections

1. To make your electrical connections easier, gently unplug the supplied wired pigtail connector from the power supply.



(Actual wire count varies by number of messages)

2. With your incoming power already running through the mounted back you can easily make all connections to the pigtail using wire connectors. (See below for diagrams of the various wiring applications)
3. Plug the pigtail connector back into the power supply to finish off the electrical part of your installation. The connector is "keyed" and can only be installed in one orientation
4. You're done with the electrical! Time to close up the sign by pushing the cabinet closed and replacing the two screws you removed from the bottom of the cabinet.

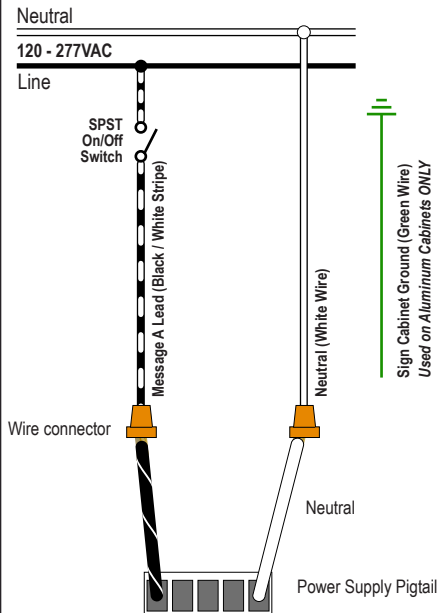


Note: Make appropriate wiring connections per local code.

Wiring for a Single Message Sign

- Wire color of Message A Black/White Stripe

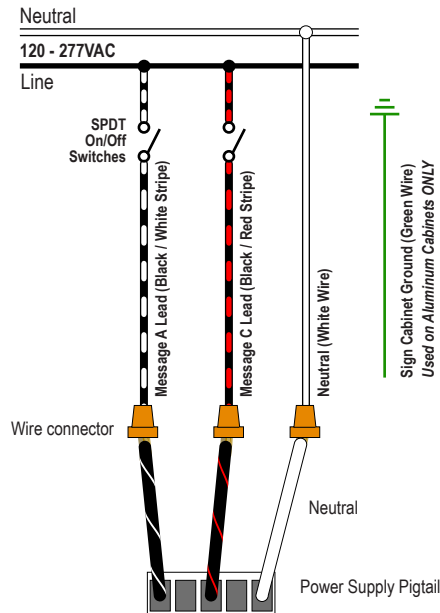
Input range of 120 to 277VAC



Wiring for a Two Message Sign

- Wire color of Message A Black/White Stripe
- Wire color of Message C Black/Red Stripe

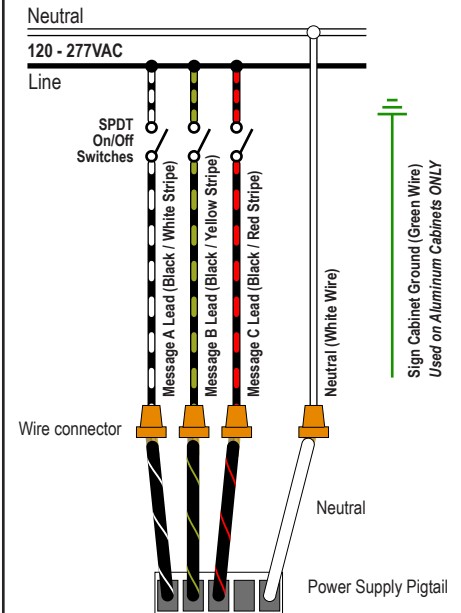
Input range of 120 to 277VAC



Wiring for a Three Message Sign

- Wire color of Message A Black/White Stripe
- Wire color of Message B Black/Red Stripe
- Wire color of Message C Black/Yellow Stripe

Input range of 120 to 277VAC



Note: Make appropriate wiring connections per local code.

Note: Any holes drilled into sign cabinet MUST be sealed. Failure to do so may cause a short and void warranty.

Note: This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electric Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

Normal Operation

There are 4 LEDs on the power supply

+12V LED

Illuminates green when 120-277V power is applied to the Pigtail.
Note: Transformer on power supply converts 120V power to 12V.

A Output LED

Illuminates with power applied to Black/White stripe wire

B Output LED

Illuminates with power applied to Black/Yellow stripe wire

C Output LED

Illuminates with power applied to Black/Red stripe wire

