



TPM 064 Installing FINCH II-6W into a Metal Enclosure

This document will describe the recommended procedure for installing a FINCH II-6W into the Titan Logix metal enclosure. For the purposes of this document, we are installing the maximum number of compartments, Rack Control Module (RCM) and relays.

A Titan Logix system must be installed and operated in accordance with the details described in the Titan Logix manuals, application notes and all other relevant publications.

WARNING:

Only qualified personnel familiar with the installation and operation of this equipment should install, adjust operate, or service this equipment. Failure to observe these instructions could result in bodily injury or loss of life.

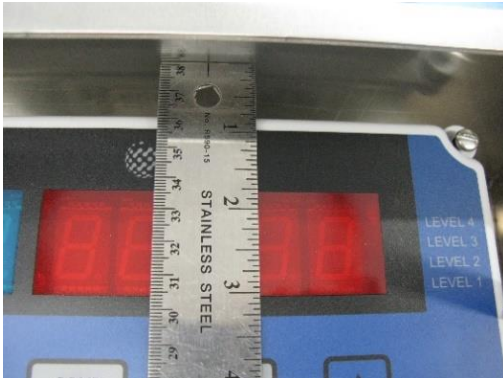
✓ CHECKLIST
☐ Ensure no flammable gases and/or fumes are present before installation or repair.
☐ Turn the vehicle power off before any installation activity.
☐ Ensure the tank is drained of liquid and free of vapors.
☐ Observe all federal, state/provincial, and local safety standards and industry best practices.
Ensure all required tools and materials are available for installation: ☐ Safety Glasses ☐ Drill Press, Hole Knock Out Punch Set, Wire Strippers, Standard Screwdriver ☐ FINCH II-6W, Metal Enclosure (Part # 1015-0088), Grommets
☐ Secure all wires and cables with clips or cable ties and tighten all compression fittings.
☐ Refer to the following manuals to view detailed procedures of the steps outlined in this Quick Reference Guide. All documentation is available on the Titan Logix website. - TD100 Installation & Operation Manual (TPM 057) - FINCH II Installation & Operation Manual (TPM 010) - RCM installation manual (TPM 007 rev2.0)

Installation of the FINCH II-6W into the Titan Logix Metal Enclosure

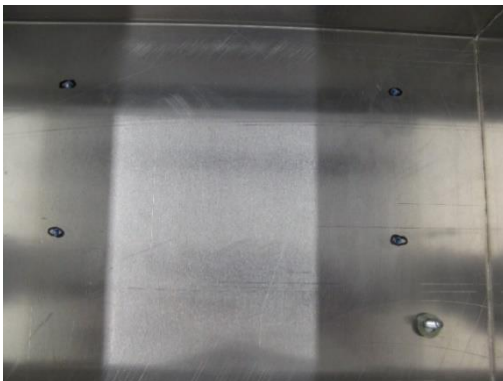
1.0 Preparing to Mount the FINCH II-6W



- a) Attach the Mounting Tabs to the bottom of the FINCH II-6W display.



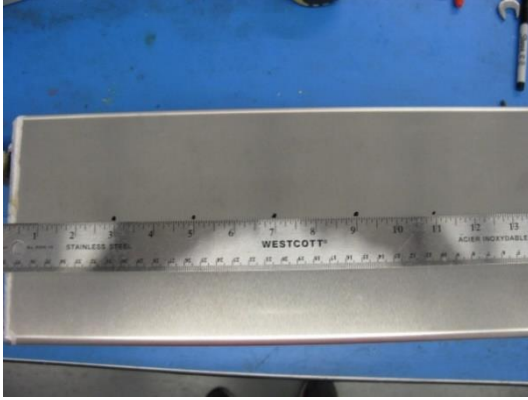
- b) Place the unit inside the enclosure $\frac{1}{2}$ " from the top of the unit.
c) Ensure that the door of the display can swing open without interference.



- d) Mark mounting tab holes to drill.

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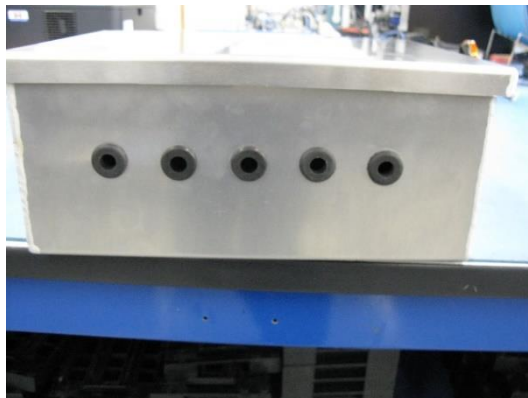
2.0 Preparing the enclosure



- a) Mark the bottom of the enclosure with the number of holes required for cables to go through.
- b) To ensure weather resistance, it is recommended that each cable has a separate gland on the FINCH II-6W. (Replace plugs with glands as required.)
- c) Each hole should be evenly spaced apart.



- d) Using a drill press, drill a starter hole that is large enough for the centre post of the hole knock out.
- e) 1/2" holes are recommended for this.



- f) Once all holes are drilled, insert a grommet to protect cables from the sharp edges.

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3.0 Mounting the FINCH II-6W in the metal enclosure



- a) Using proper sized bolts and nuts, attach the FINCH II-6W inside the enclosure.



- b) The Enclosure is now ready to be mounted on the tanker/trailer/truck in the desired location.

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4.0 Wiring Power, Compartments 1 & 2



- a) Starting with the wire harness cable for power to the display, insert cable through grommet and up through the gland on the far right of the unit.



- b) Pull enough cable through so that the door can be fully opened without the wire being strained.
- c) Cut back the outer jacket a few inches inside the enclosure.



- d) Strip back the wire and insert the Power and Ground wires into the 2-pin connector (Black is Power, White is Ground,).

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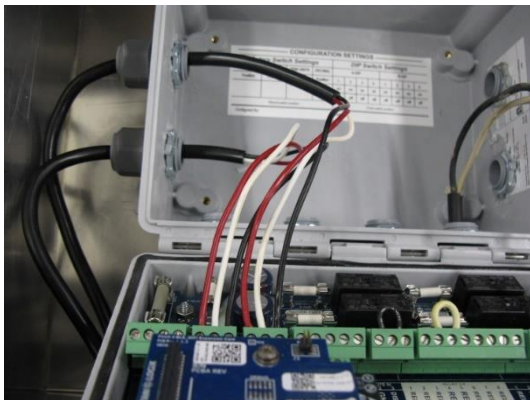
Wiring Power, Compartments 1 & 2 (Continued)



- e) Insert Cables from Compartment 1 & 2 through the grommet furthest to the left.
- f) Both cables can be inserted through the same grommet on the enclosure.



- g) Connect the cables onto separate glands into the FINCH II-6W. Be sure to allow enough cable so they are not strained when door is open.

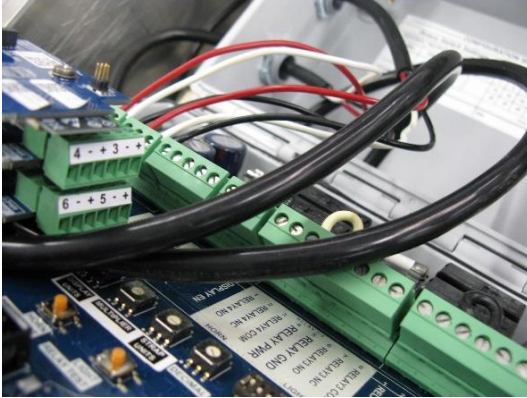


- h) Strip wires and insert wires into proper terminal strip locations.

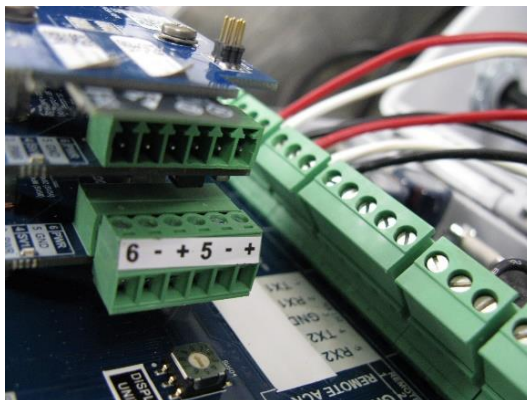


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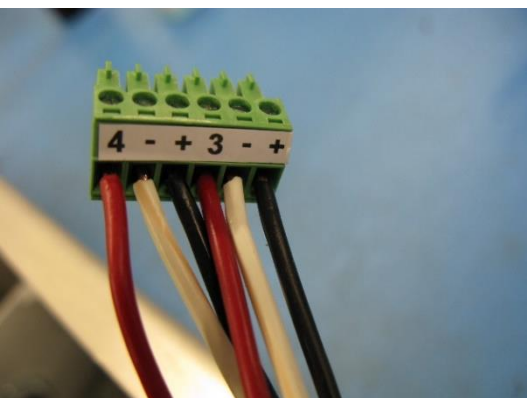
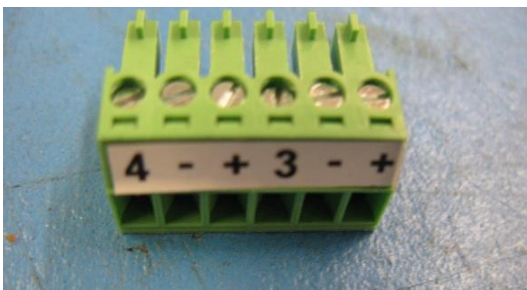
5.0 Wiring compartments 3 & 4



a) Insert Cables for Compartment 3 & 4 into the next grommet and through the bottom left strain reliefs on the FINCH II-6W, allowing enough cable so they are not strained when the door is open.



b) For compartment 3 & 4 it is recommended to remove the terminal connector to insert the wires.



c) Strip wires and insert wires into proper terminal strip locations.

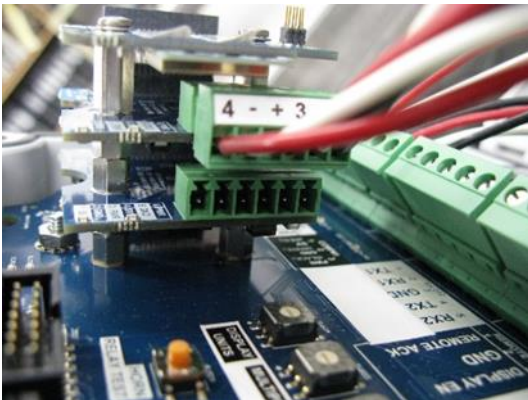
d) Re-insert connector into the terminal block.

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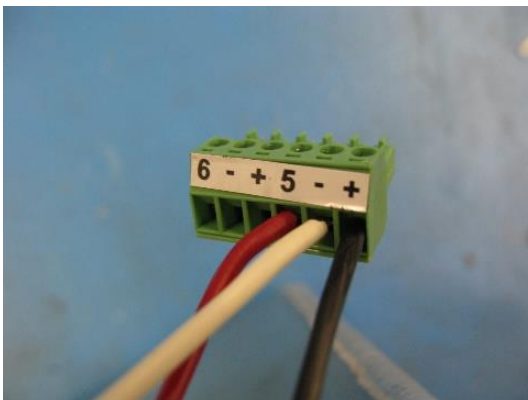
6.0 Wiring Compartments 5 & 6



- a) Insert wire for Compartment #5 through the same grommet as the power cable and through the strain relief on the top right side of the FINCH II-6W.
- b) Be sure to allow enough cable so there is no strain when the door is open.



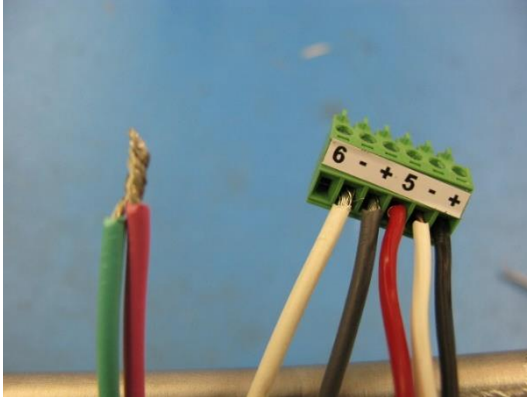
- c) Remove the terminal connector for compartment 5 & 6.



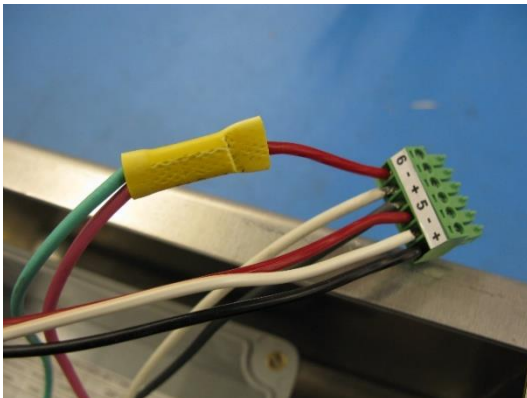
- d) Strip wires and attach them to the terminal strip.
- e) ***Do not re-insert it back into the daughter card yet.***

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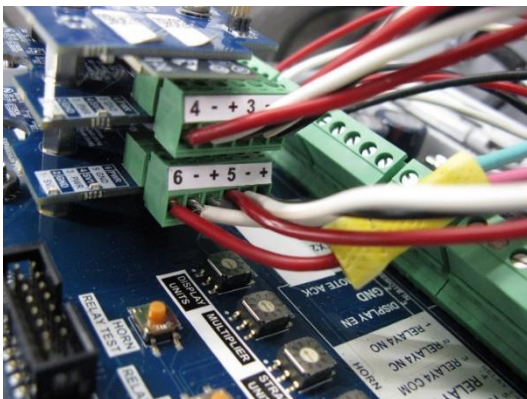
Wiring Compartments 5 & 6 (Continued)



- f) Insert the 4-pin cable from the RCM through the third grommet of the enclosure and through the bottom strain relief in the FINCH II-6W.
- g) The Black wire for power inserts into the + terminal and the White wire inserts in the – terminal of input #6.



- h) The Red and Green wires should be twisted together and inserted in the #6 terminal.
- i) It is recommended to crimp the red and green wires together and have 1 wire into the terminal strip



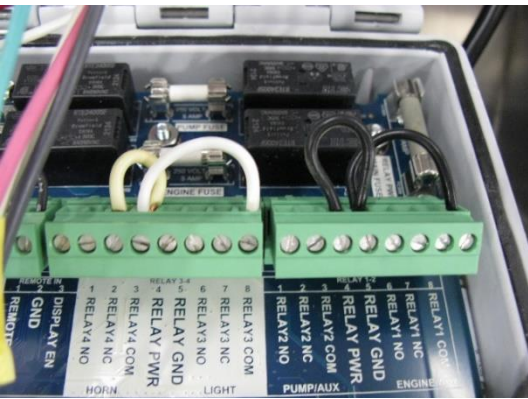
- j) Re-insert the terminal connector into the terminal block.

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7.0 Relays



- a) Depending on the number of relays to be enabled, it is recommended to use a multi wire cable that connects inside the FINCH II-6W and then goes out to a junction box that connects to Horn, Light, and Pump Engine shutdown.

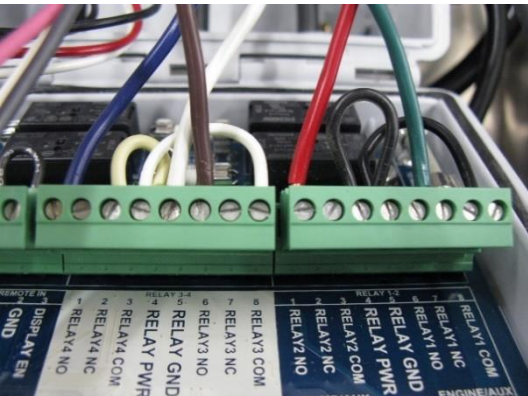


- b) On the Terminal Strip insert a jumper between Relay Power and Relay Common for each of the relays that are being used.



- c) Inset Multi Conductor cable through the last grommet and through the bottom gland on the right side of the FINCH II-6W.

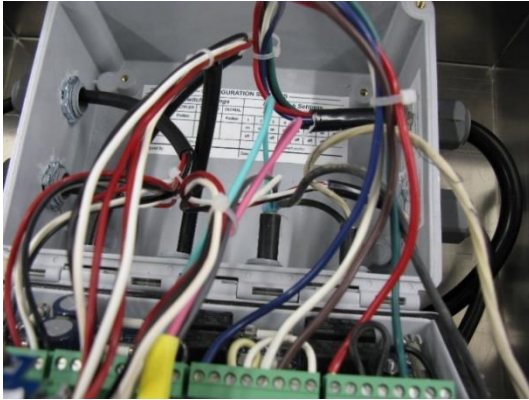
- d) Remove the outer covering of the cable and note down the colour scheme you are using for these relays i.e.: Blue = Horn, Brown = Lights, Red Pump, Green = Engine.



- e) Strip wires and insert into terminal Strip N.O. (normally open) connections for each relay.

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8.0 Completing the Install



- a) Tie-wrap wires into groups to make troubleshooting easier in the future.
- b) Tighten all Glands to 35 in/lbs of torque to ensure water seal.



- c) Tighten down cover screws ensuring no wires are being pinched.



- d) Close lid of Metal Enclosure.
- e) Secure lid as required.