IMPCO Technologies Canada	Installation Bulletin		
	Number: IB-5111	**Rev: A**	**Date: Feb 2014**
	Affected Parts: 55-815-01K		

Replacement of the Potential Relay

The following Safety Procedures Must Be Followed!

Prior to performing any electrical work, the system must be disabled to prevent any possibility of the APU starting as a result of automatic functions.

- Disconnect the battery terminals
- Ensure Shore Power is disconnected if installed
- Remove the upper access panel
- Disconnect the 12 pin connector from the APU Controller (Figure 1)

Disconnect 12 pin connector

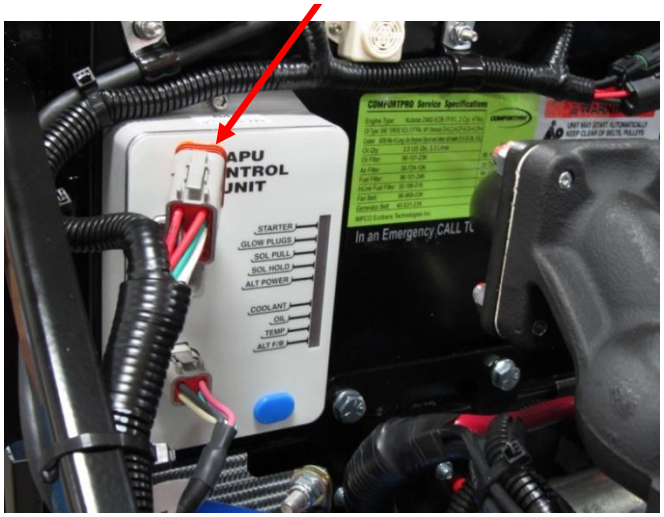


Figure 1

Required Tools

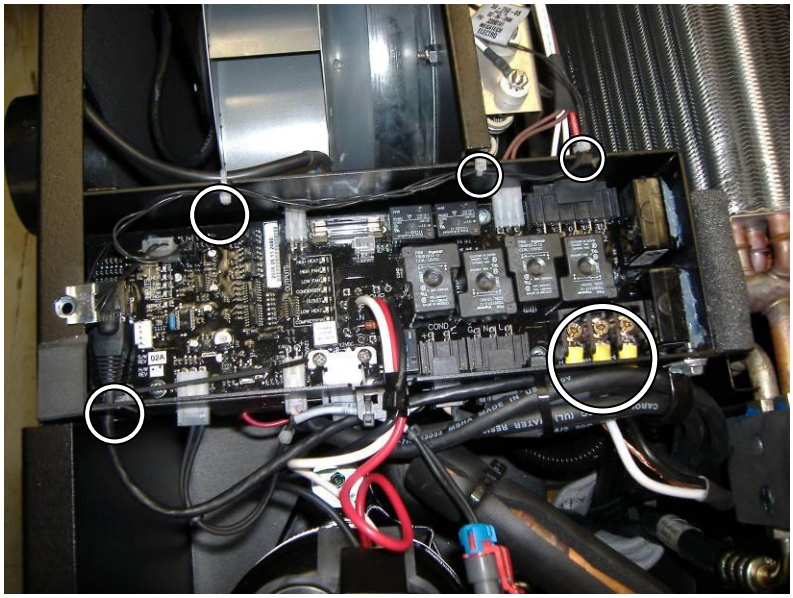
- Normal hand tools

Kit Contains:

- Potential Relay
- Zip ties:
  - 3 white (3.9” long)
  - 1 short black (5.6” long
  - 1 long black (7.5” long)

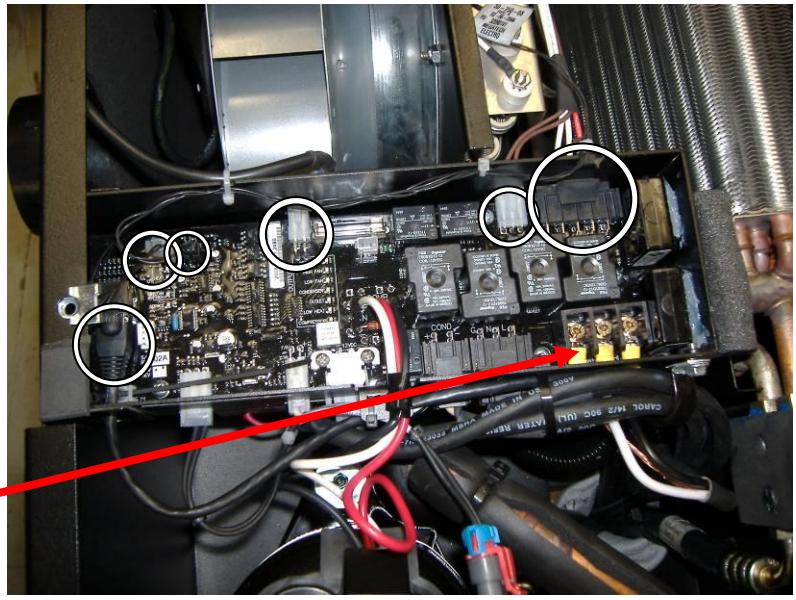
Remove controller housing

Remove two covers from top of CCU.
Cut 5 zip ties highlighted by circles

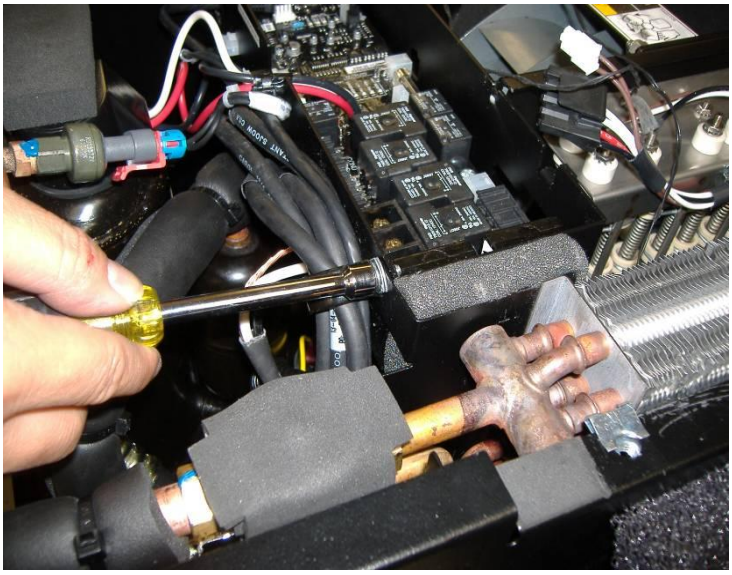


Disconnect 6 harnesses highlighted by circle
Disconnect the Green Ground Wire If Applicable.

Disconnect the 110VAC input to the CCU, 3 terminals shown



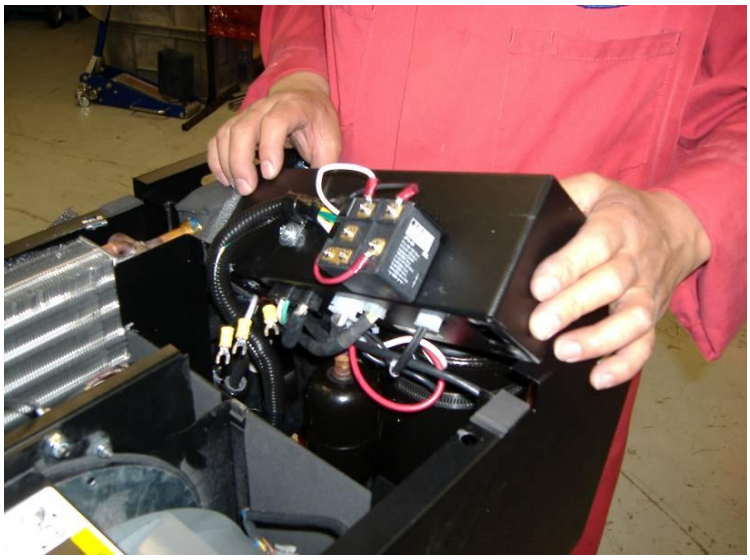
Unfasten controller housing at p-clamp Remove housing by lifting up at the p-clamp end.



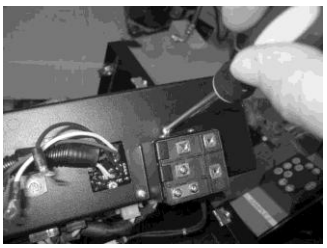
Replace potential relay and re-install controller housing

Turn controller housing over compressor.

Disconnect all 3 terminals from the existing potential relay (retain hardware)



Unfasten and remove the existing potential relay with bracket



For replacement of the potential relay, determine the style on the following three pages and follow the appropriate instructions.

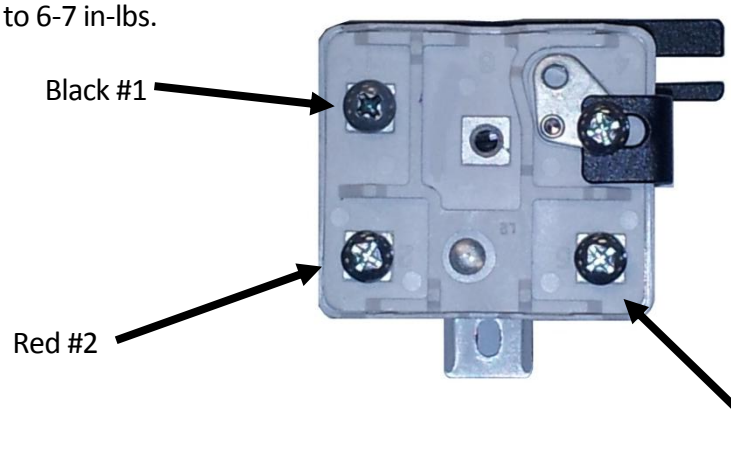
For replacement of the CCU board, remove the potential relay with mounting hardware and install to the new board.

Install new potential relay using one short original screw and one longer screw provided.
Torque screw for bracket to relay to 8-10 in-lbs.
Mount bracket to controller module enclosure.
Torque screws to 20-25 in-lbs.

#8-32 x 3/8" fastener, supplied

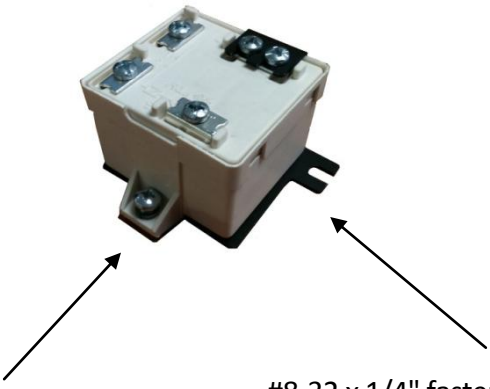
#8-32 x 1/4" fastener, original

Reconnect terminals as shown and torque to 6-7 in-lbs.

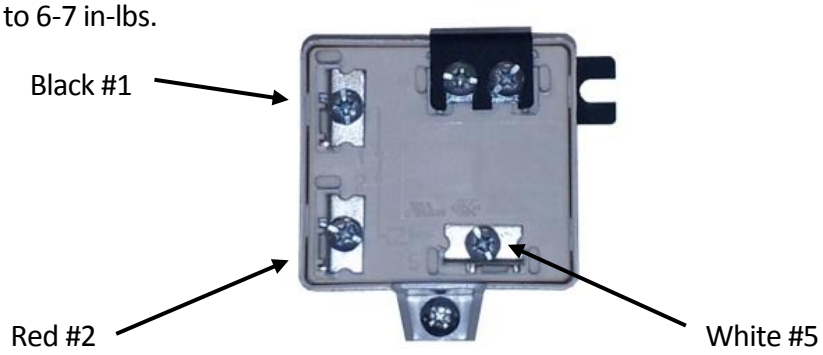


Reinstall controller module into CCU.
Refasten controller housing and p-clamp with #10-24 HHCS and torque to 20-25 in-lbs

Install new potential relay using one short original screw and one longer screw provided.
Torque screw for bracket to relay to 8-10 in-lbs.
Mount bracket to controller module enclosure.
Torque screws to 20-25 in-lbs.

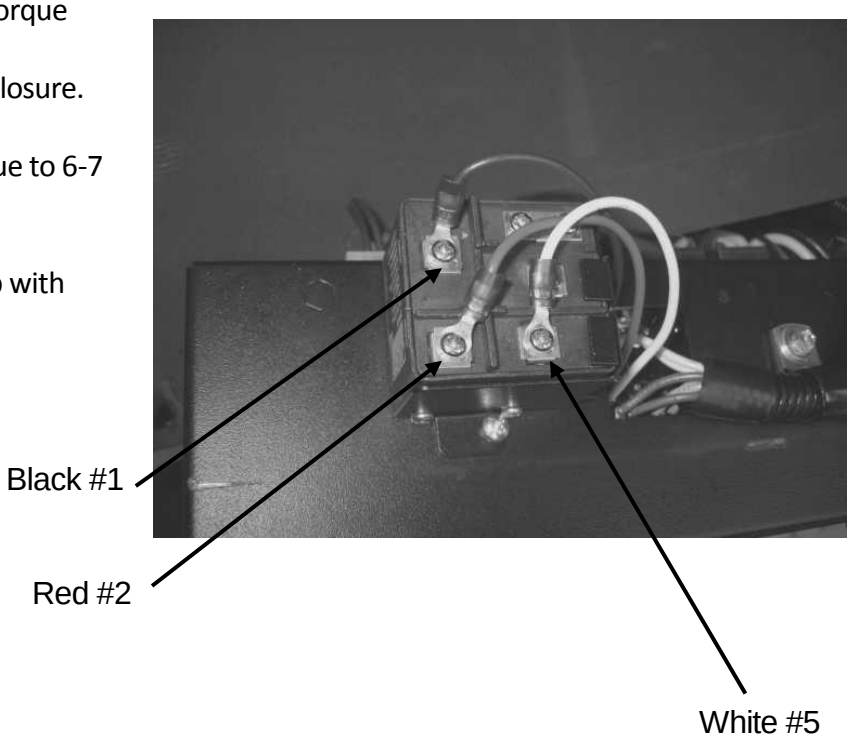


Reconnect terminals as shown and torque to 6-7 in-lbs.



Reinstall controller module into CCU.
Refasten controller housing and p-clamp with #10-24 HHCS and torque to 20-25 in-lbs

Install the potential relay into bracket. Torque screws to 8-10 in-lbs.
Mount bracket to controller module enclosure. Torque screws to 20-25 in-lbs
Reconnect terminals as shown and torque to 6-7 in-lbs.
Reinstall controller module into CCU.
Refasten controller housing and p-clamp with #10-24 HHCS and torque to 20-25 in-lbs



Reconnect 6 harnesses.
Reconnect 3 terminals as shown .
(bare, white, black indicated on PCB) and secure.
Reconnect the Green Ground Wire If Applicable.
Replace 5 zip ties.
Re-install covers.
Reconnect APU controller 12 pin connector.
Reconnect battery negative & positive terminals.