

We have had a request for instructions on how to replace the 50 AMP CR relay in the A/C electrical box with the upgraded 70 AMP relay.

This Carolina Thomas Bus Buzz provides instructions as to how we go about this and before and after photos for reference.

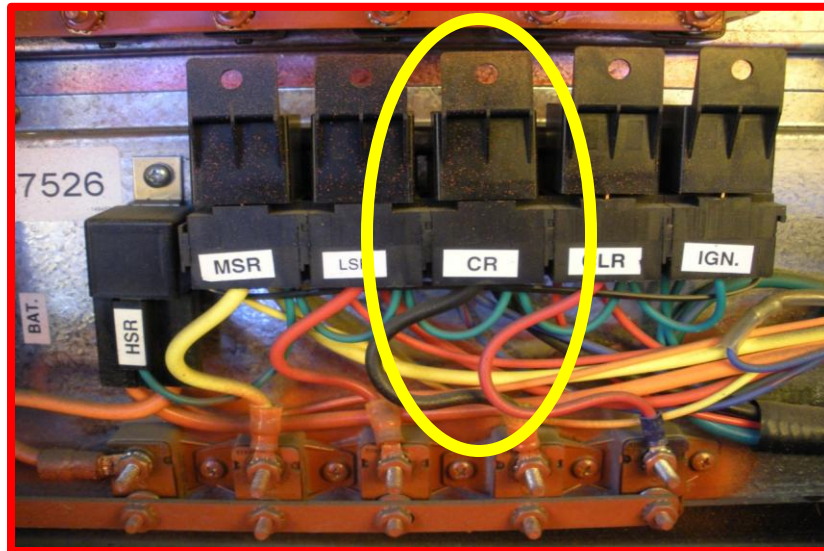
This is only applicable to older C2's and you must contact us prior to repairs for pre-approval and the components to make sure a unit is covered.



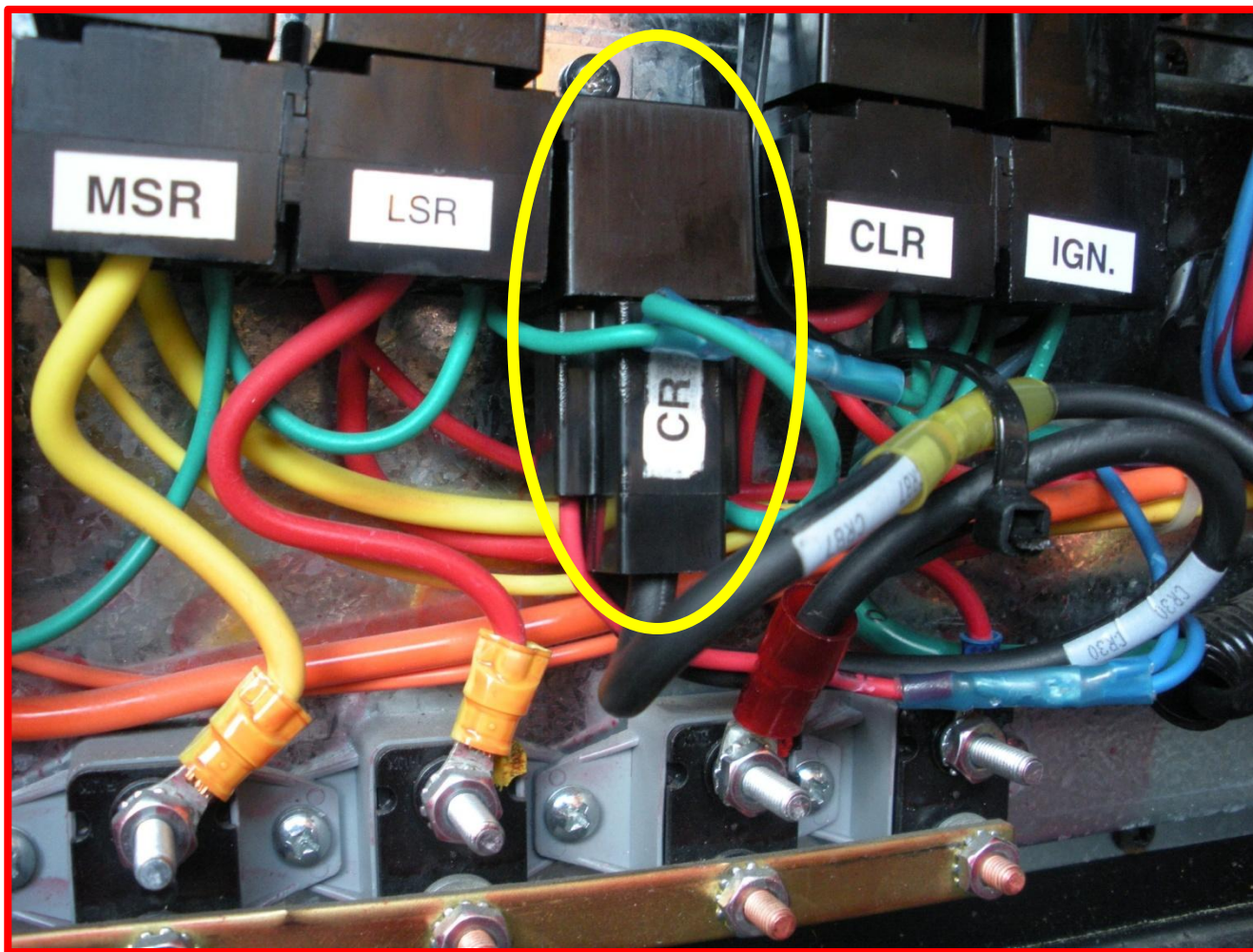
This photo shows the AC electrical box wiring and the 50AMP CR relay **BEFORE** the repair upgrade.

Before any repairs begin, all safety precautions should be adhered to by chalking the wheels, removing the ignition key and then disconnecting the batteries to make sure the vehicle will not move or be accidently engaged during the repair. You must disconnect the battery power before beginning this repair.

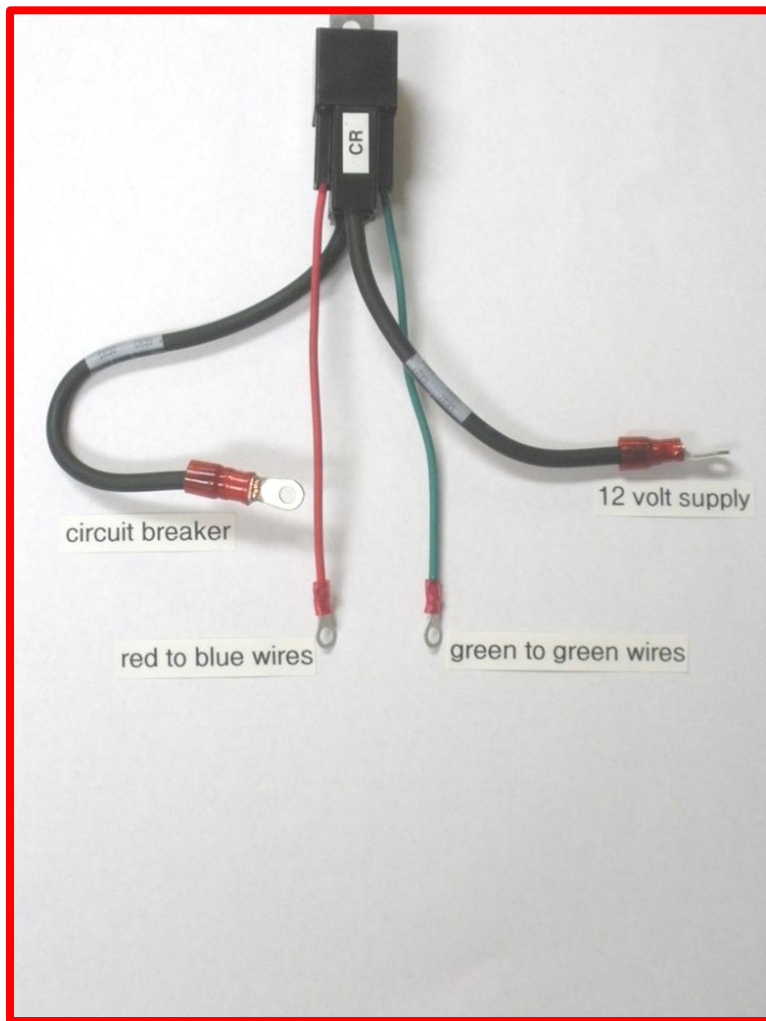
The CR 50 AMP relay (marked below) is the relay we are upgrading to a 70 AMP relay.

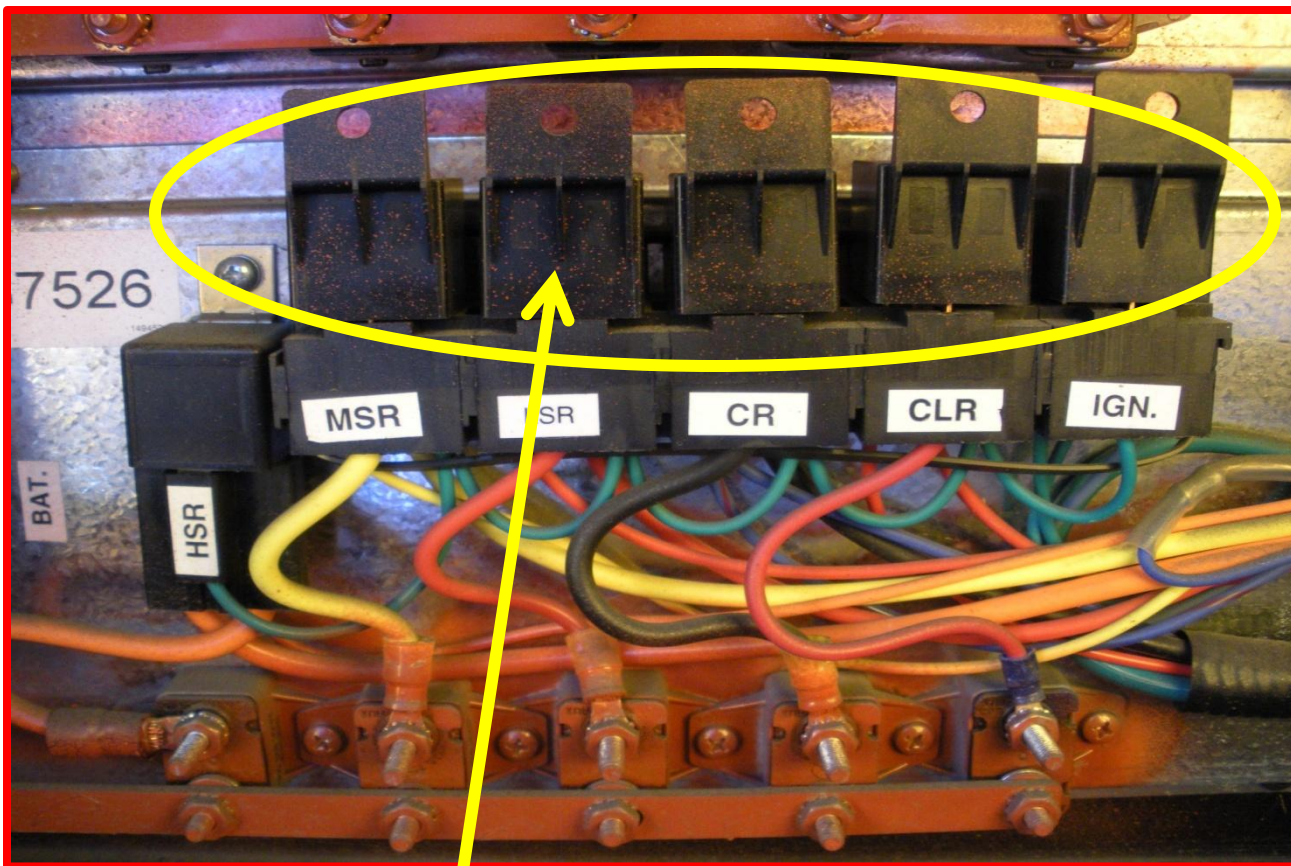


This photo shows the AC Electrical box **AFTER** the upgrade has been made to the 70AMP CR relay. This will help you orient yourself as to what the repair should look like after its completion. Notice that the new 70AMP relay mounts differently than the original.



This photo shows the new 70AMP CR relay and its wiring **PRIOR** to installation. The new part does NOT look the same as the 50amp removed so the steps in this bulletin are important to follow.



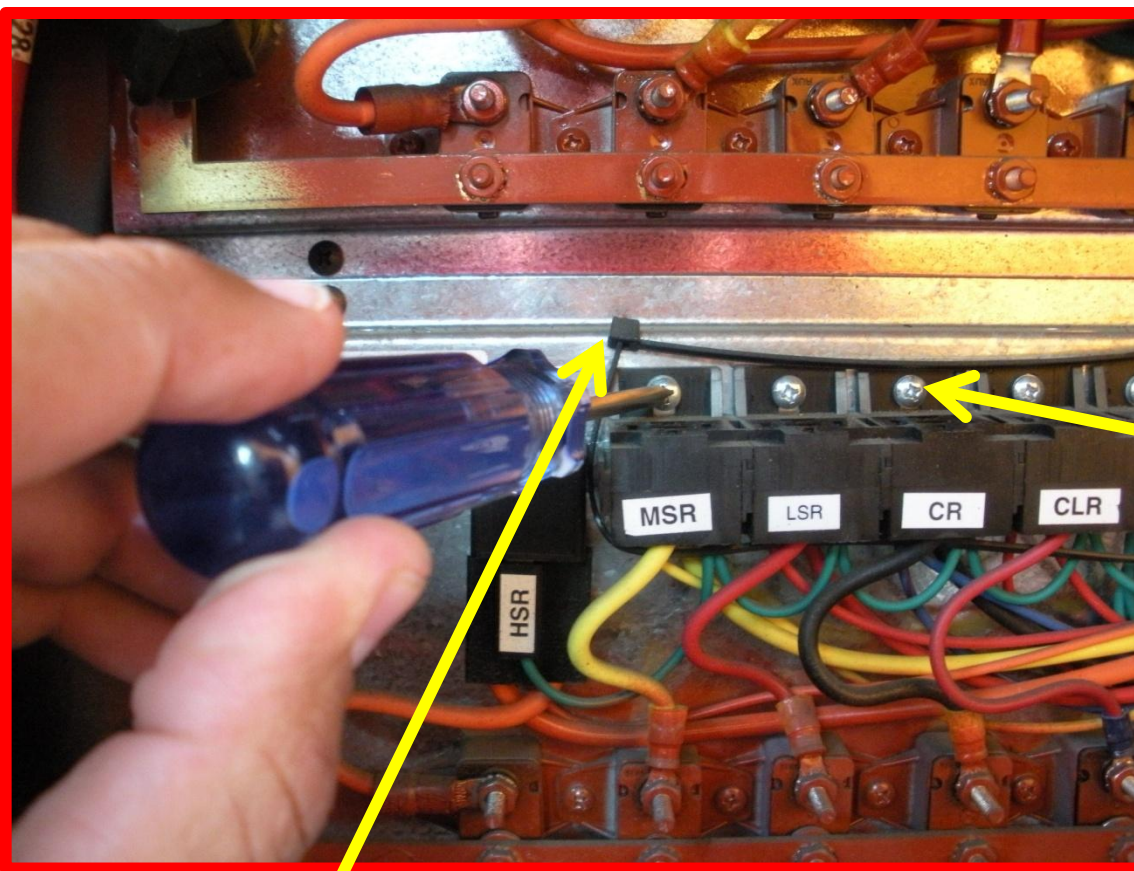


Step 1: Block wheel, remove ignition key and disconnect batteries before starting this repair.

Step 2: Remove 5 relays in A/C electrical box and set aside in the order removed. NOTE: There is a tie wrap securing all of these relays into their receptacles.

Step 3: Behind the relays are 5 screws to remove to allow CR relay receiver to be removed.
See next photo.

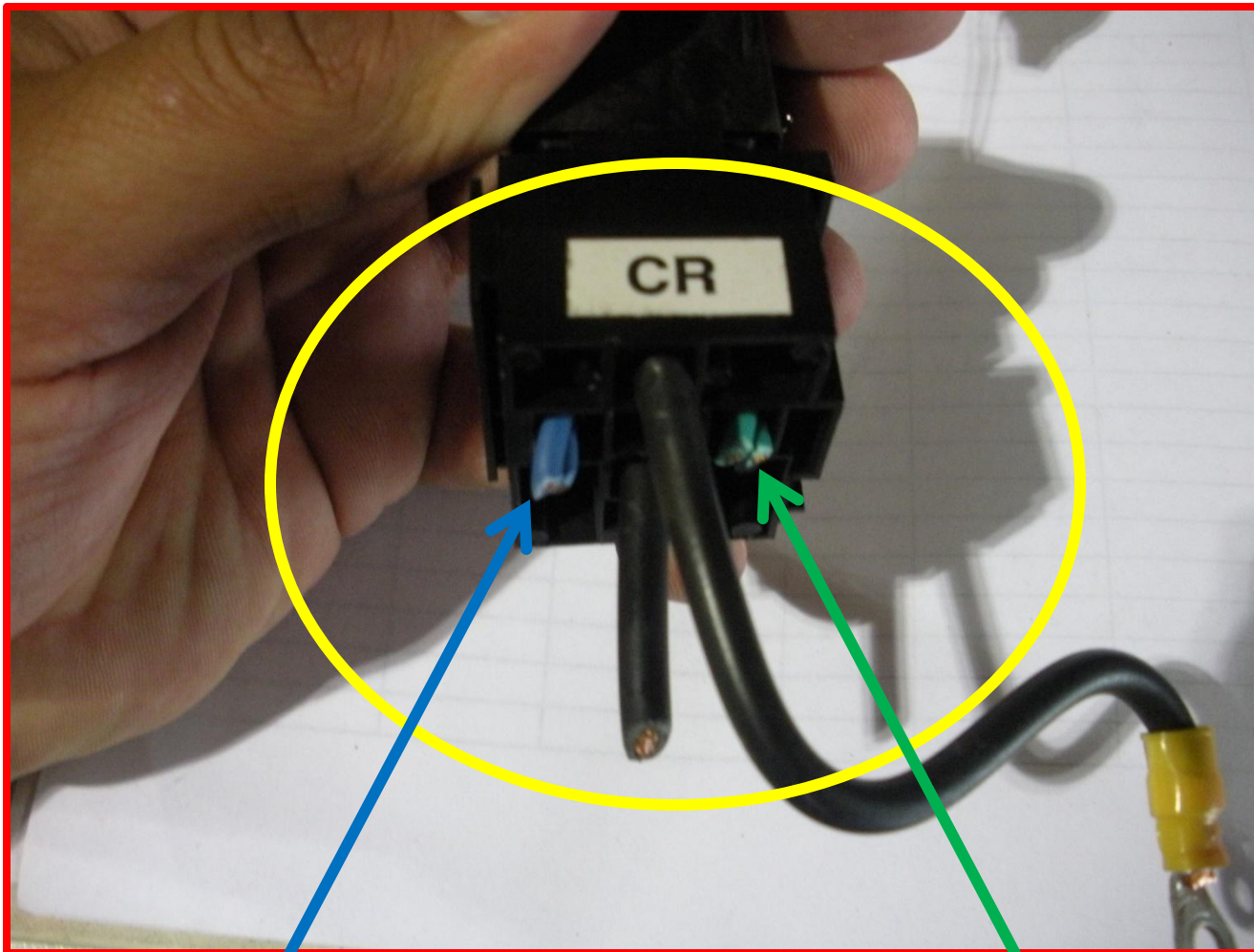




Step 4: Behind the A/C relays are 5 screws to remove to allow relay receptacles to be removed. Remove these screws so you can separate and access the CR 50 amp relay.

Notice that a tie wrap is used to hold relays tight into the holders during operation. This can be discarded and replaced later when this repair is complete.





Step 5: Once all relay holders are loose you will cut the wires as shown as close to the CR relay holder **ONLY** so most of the wire stays in the A/C electrical box for use in a later step. Save the parts as you will have to return these to us in order for us to cover this under warranty.

Two **BLUE** wires cut.

Two **GREEN** wires cut.



VERY IMPORTANT:
The following connections
should be made with high
quality butt splices and heat
shrink at each connection to
prevent corrosion or a loose
connection(s) at a later date.



NEW 70AMP Relay and Wiring

Step 6: SHORT BLACK WIRE FROM RELAY TO 12 VOLT POWER SUPPLY

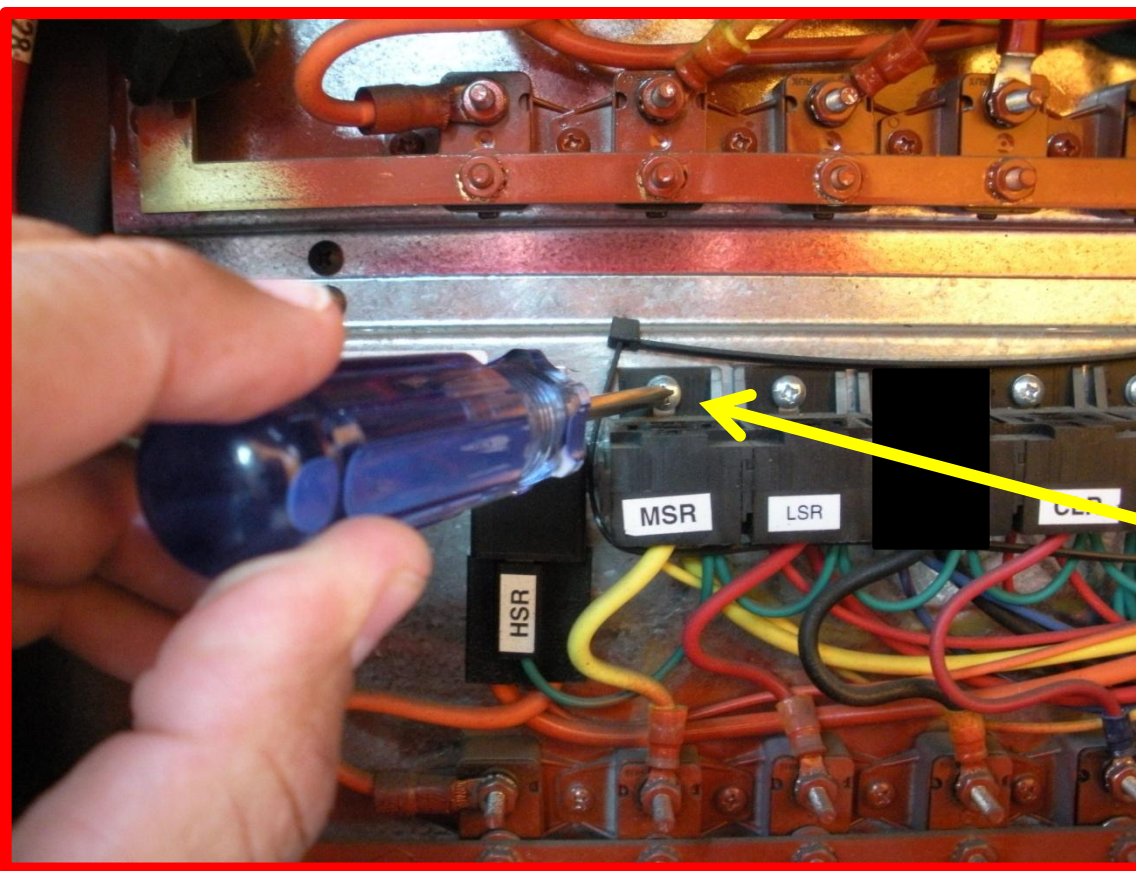
Step 7: GREEN WIRE FROM RELAY TO 2 GREEN WIRES

Step 8: RED WIRE FROM RELAY TO 2 BLUE WIRES

Step 9: LONG BLACK WIRE FROM RELAY TO CIRCUIT BREAKER

SHORT BLACK WIRE FROM RELAY TO 12 VOLT POWER SUPPLY
LONG BLACK WIRE FROM RELAY TO CIRCUIT BREAKER
GREEN WIRE FROM RELAY TO 2 GREEN WIRES
RED WIRE FROM RELAY TO 2 BLUE WIRES



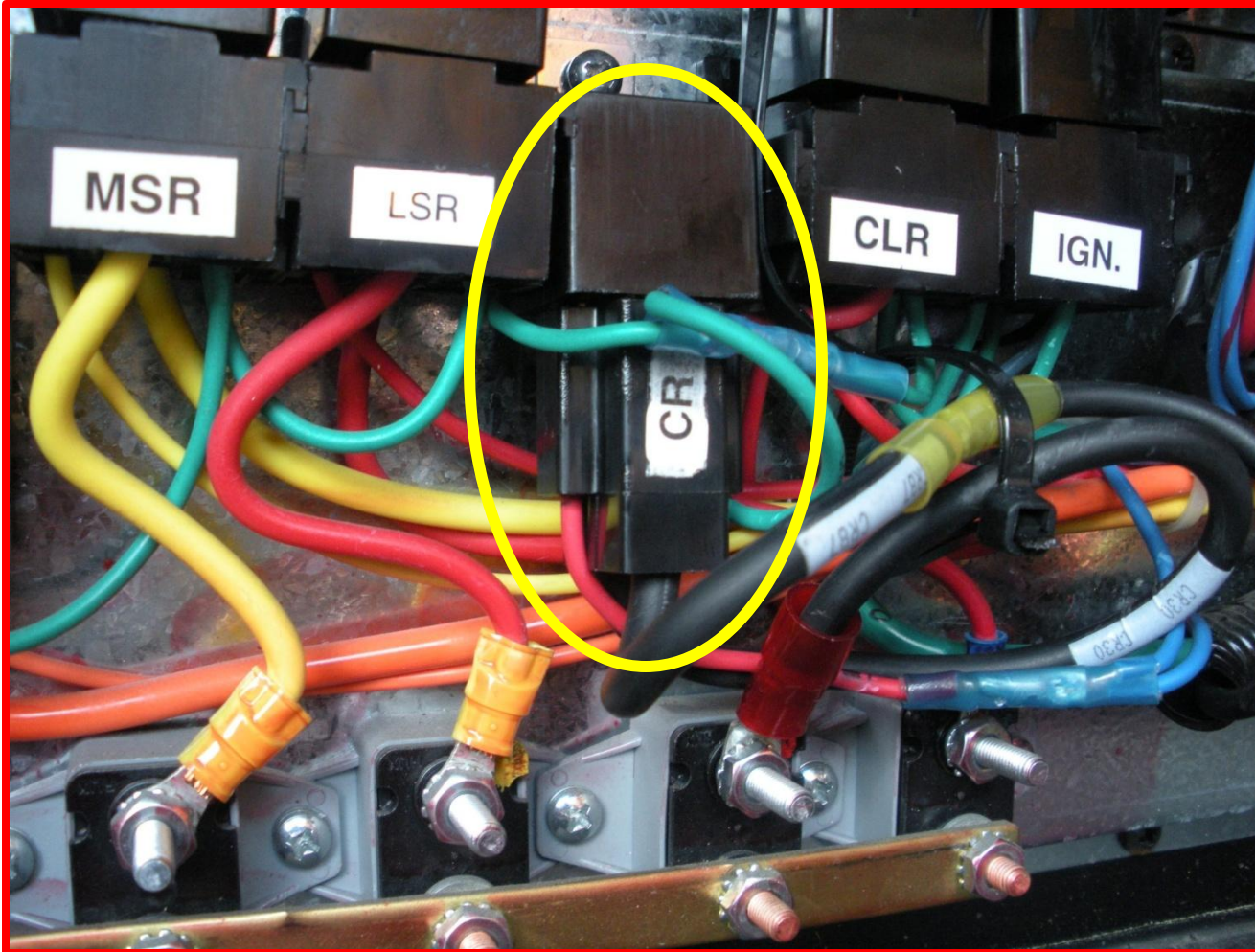


Step 10: Secure receptacles back to A/C electrical Box.
NOTE: New 70 AMP relay mounts differently per next photo.

See next photo for 70AMP relay and receptacle mount.



Step 11: Mount the 70AMP relay as shown. This photo shows the AC Electrical box AFTER the upgrade has been made to the 70AMP CR relay. This photo shows what the finished repair should look like and how the 70AMP relay and receptacle fits.



Step 12: Use a tie wrap to secure relays into receptacles. Being careful not to disturb electrical connections.



Final step: Reconnect the battery connections and test all a/c systems for proper operation. A final inspection to make sure nothing is chafing should be conducted and corrected as necessary.

Please call us at 1-800-440-3492 if you have any questions.

