



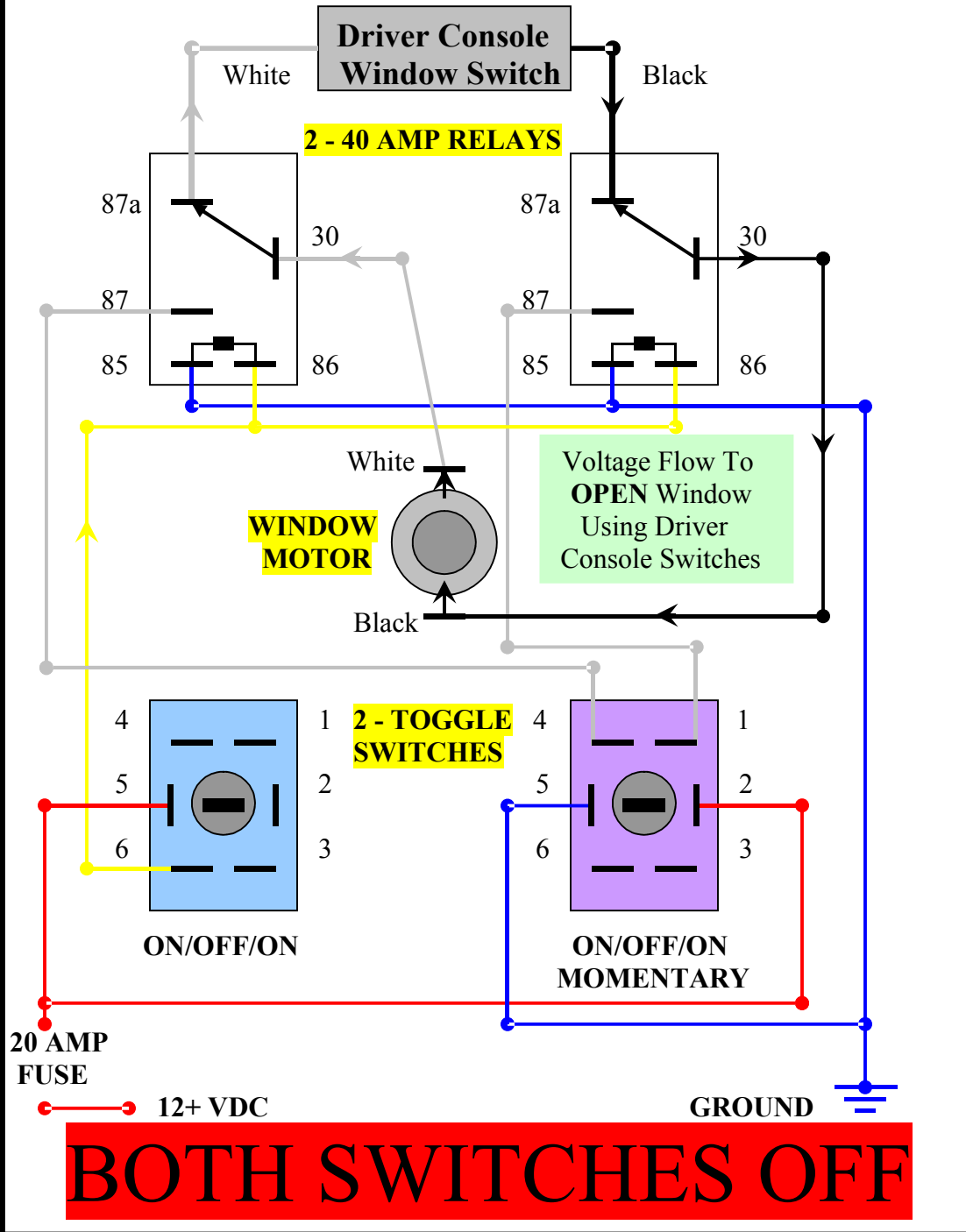
2010 43QGP Allegro Bus

12/25/2011

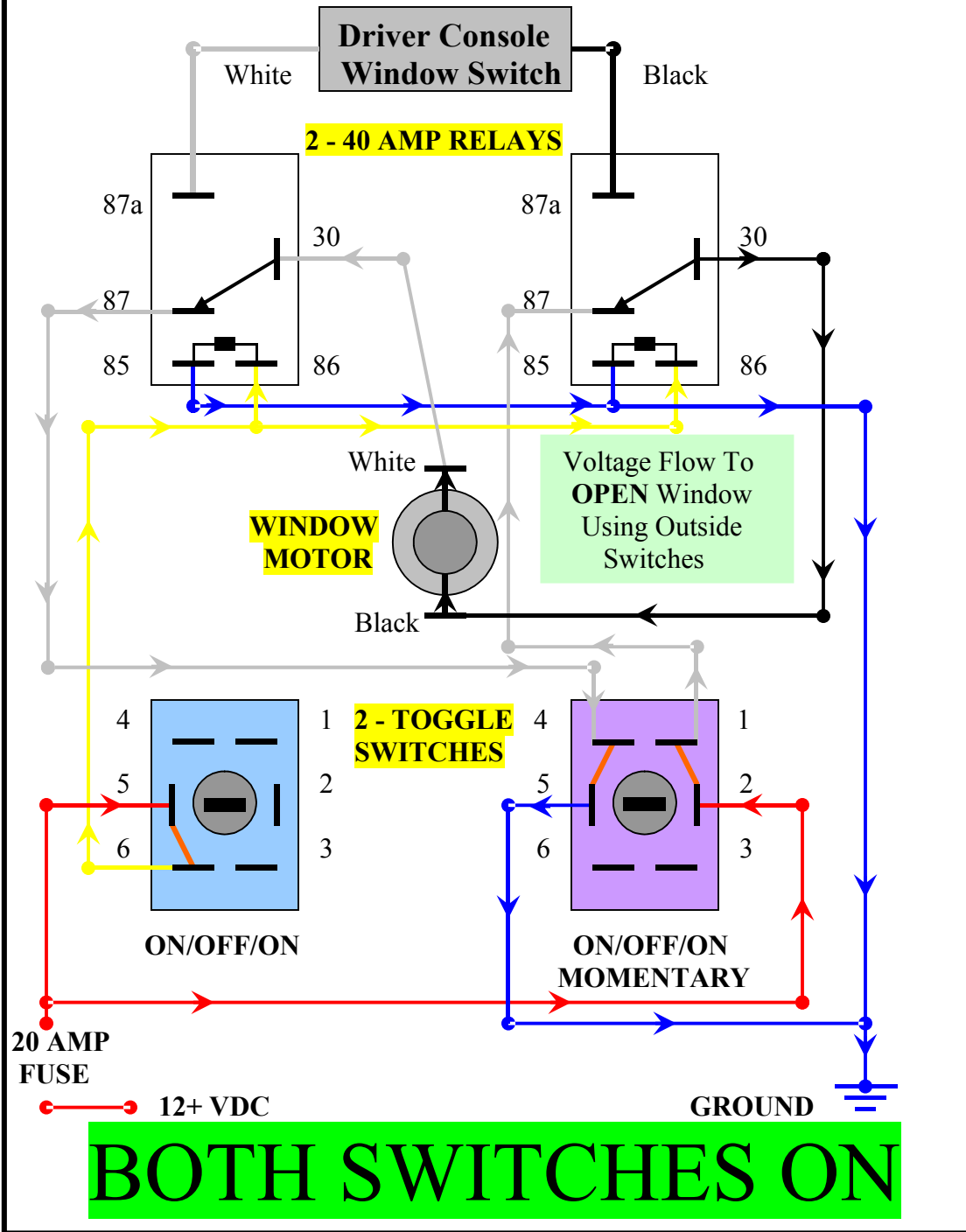
FORTY-THIRD - coach modification, **EMERGENCY COACH ACCESS via the ELECTRIC WINDOW.** In a continuing effort to improve our Allegro Bus, electrical/electronic components were added which allow the drivers side electric window to be powered OPEN from the outside of the coach. Components already in hand were used to the extent that was possible. Two 40 Amp contact SPDT (Single Pole Double Throw) automotive relays were used. Two automotive type toggle switches were used to transfer power between the internal mounted Electric Window switch and the external mounted switches. Two separate switches were necessary a ON/OFF switch mounted on the left side of the control box controls the operation of the two relays and will be referred to as the ISOLATION POWER SWITCH. When this switch is turned ON the two relay coils are energized causing the relay contacts to move changing them from a NO (Normally Open) to a NC (Normally Closed) output. Turning this switch ON isolates the drivers console switch from the window motor. This is necessary as the window motor is a DC motor, changing the direction of the positive voltage controls the direction of the window movement, opening or closing the window.

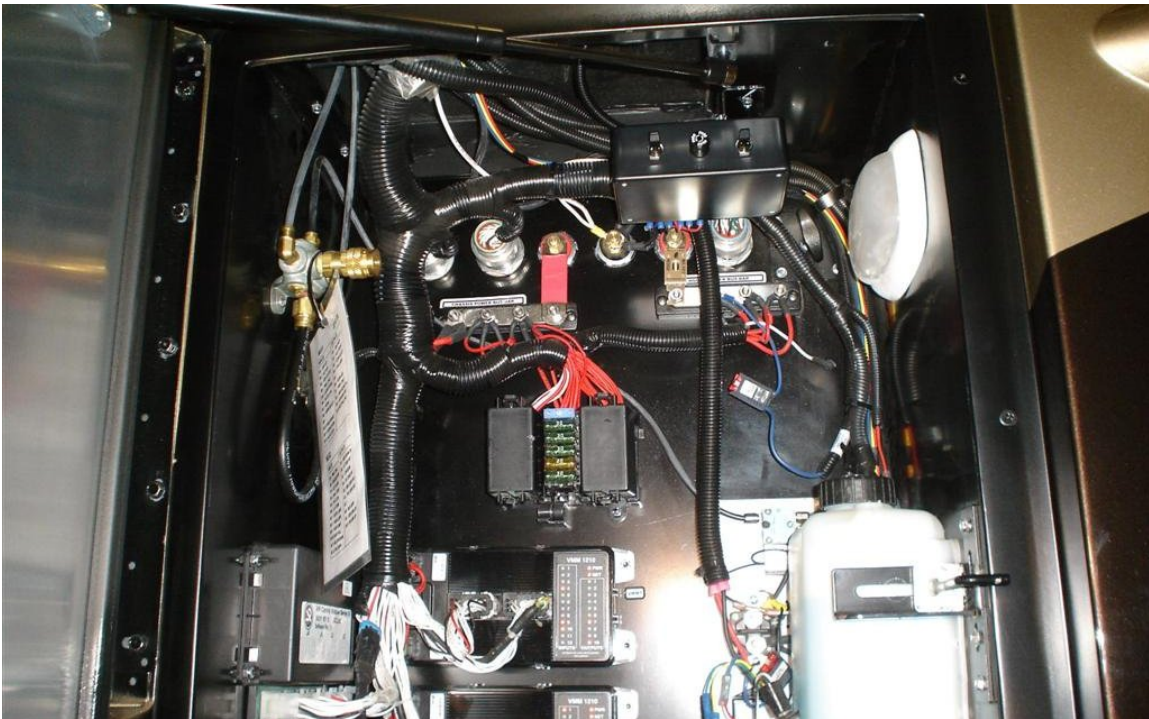
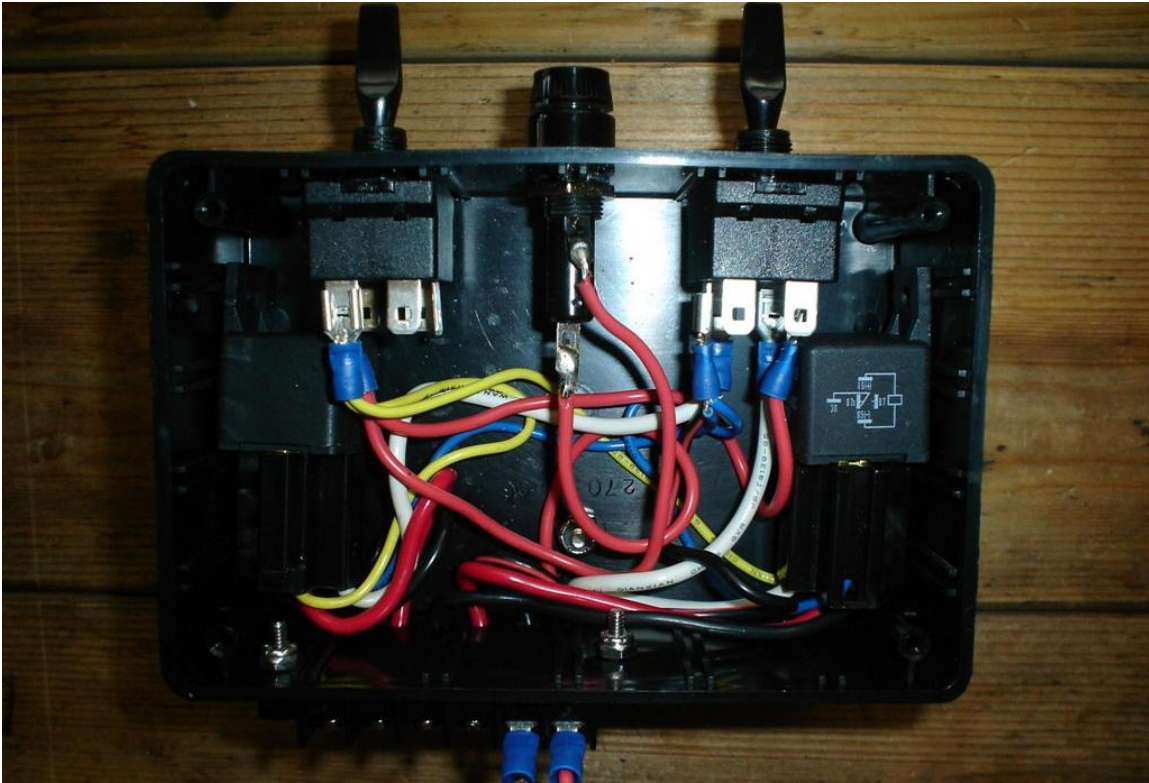
The window motor has been isolated from the inside switch now the outside MOMENTARY switch (mounted on the right side of the isolation power switch) must be enabled to provide power to OPEN the window. Notice no provision was made to CLOSE the window using the outside controls. Both switches and relays were mounted inside a 6" x 4" x 2" hobby box purchased from Radio Shack for about \$ 5.00. The box was mounted to the inside top of the basement electrical compartment mounted under the driver's seat. The second page shows an electrical schematic of the operation of the Allegro Bus Driver's Electric Window with both external switches turned OFF (Normal Operation) the driver's side console switch controls the windows movement. The third page shows an electrical schematic of the operation of the window with both external switches turned ON, the operation of the external switches controls the windows movement. The right side MOMENTARY toggle switch when released allows the switch to move to the OFF position. Depress the toggle to open the window. Once the window is open release the toggle move the isolation power switch back to its OFF position, window control is restored to the inside window switch.

Emergency Coach Access via the Electric Window



Emergency Coach Access via the Electric Window





This modification can be considered overkill unless or until it is needed to gain alternate entry to the coach. As previously stated turning ON (flipping UP) the left side switch isolates the OEM electric window controls by energizing two relays which transfer window control to the right side switch. Depressing the right switch opens the driver electric window.