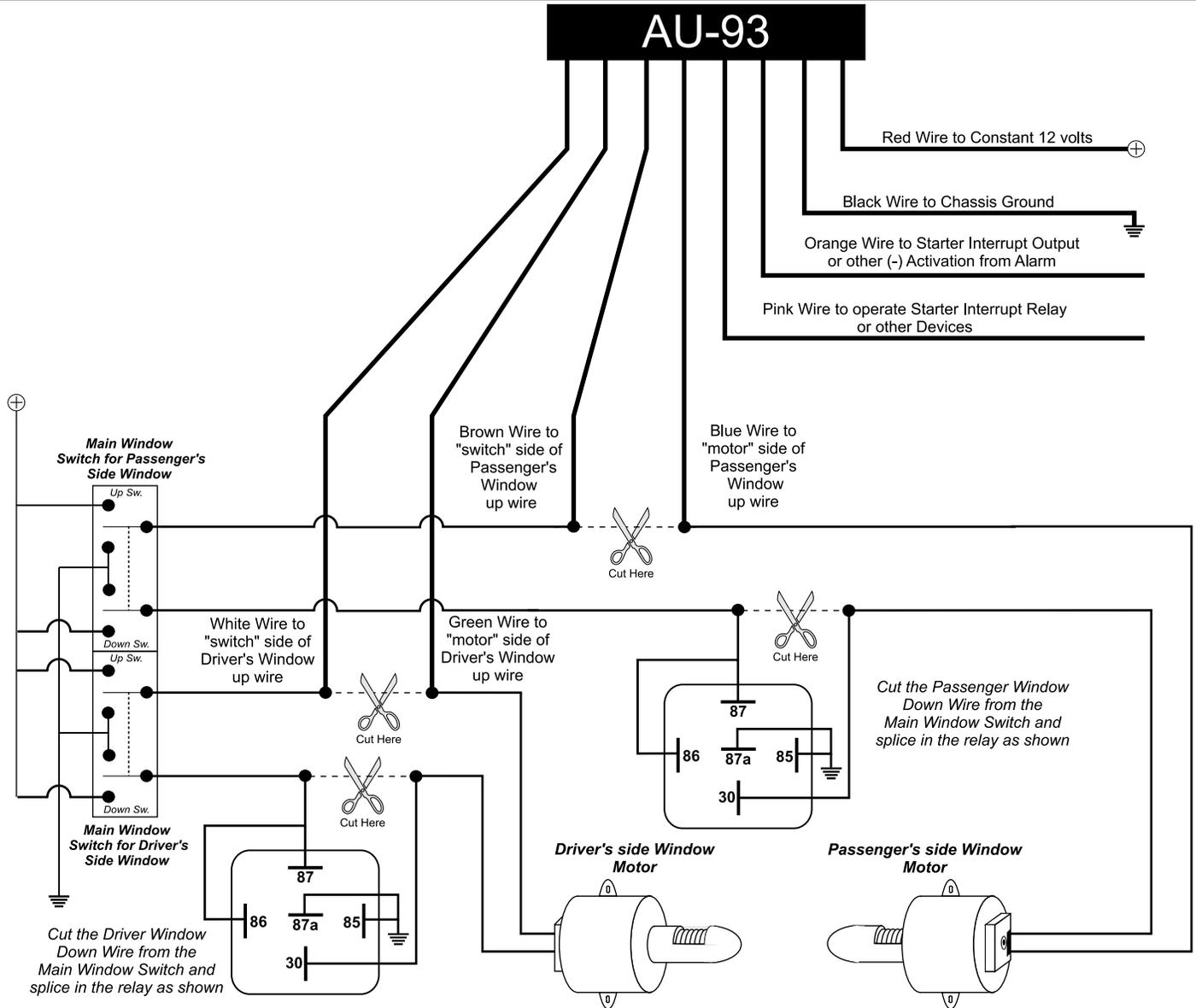


## Note #213 - Reversal Rest at Nothing Window Circuit



• In a Reversal Rest at Nothing type power window circuit, both wires leading from the switch to the window motors will rest at nothing. When the window switch is used to roll up the windows, the up wire will show 12 volts and the down wire will show ground. When the switch is used to roll down the windows, the down wire will show 12 volts and the up wire will show ground. When interfacing the AU-93 to a Rest at Nothing type window circuit, a relay must be added to each of the window roll down wires. The relays are needed to ground the down wires while the switches in the vehicle are not being used. The down wires in the window circuit must rest at ground for the AU-93 to operate properly.

• The AU-93 is designed to automatically roll up two windows when the security system is armed. The AU-93 is triggered by the security system's Orange starter interrupt output wire, which is constant ground output when armed. The unit will not operate from a single ground pulse. If a starter interrupt socket and relay is also being used, the starter interrupt's Orange wire must be connected to the AU-93's Pink wire. The AU-93 has a current draw circuit which monitors each window wire that passes through it. When the glass reaches the fully closed position, a current spike occurs which is detected and the unit automatically stops supplying voltage to the window circuit.

• The AU-93 is primarily used as a window roll up module, however, the unit can be configured so that, when triggered, the unit will roll down two windows. This is done by connecting the AU-93 to the window down wires at the main switch instead of the up wires. A second or third channel output from the alarm or keyless entry can be used to roll the windows down as long as the output is constant or can have an output as long as the button is pressed. This is because the AU-93 will not operate from a single pulse.

**Note:** If the window regulator or the guide channels have broken, worn or misaligned parts, the current draw circuit can be activated prematurely, causing the window glass to stop before closing completely. Before starting an AU-93 installation, especially on older vehicles, roll each window up several times and carefully watch for any hesitation or binding. In some cases, the door panel can be removed and the window regulator, guide channels and tension pads can be cleaned, lubricated or adjusted to provide proper AU-93 operation.

**CONNECTION:** The diagram above shows how to connect the AU-93 to a Reversal Rest at Nothing type window circuit. Notice that a relay must be spliced into each window roll down wire to ground the down wires so that the AU-93 can operate the windows. Also notice that the window up wires must be cut to interface the AU-93 to the window circuit. Special care should be taken to make sure that WHITE and BROWN wires from the AU-93 are connected to the switch sides of the cut window up wires and that the GREEN and BLUE wires are connected to the motor sides of the cut window up wires.