

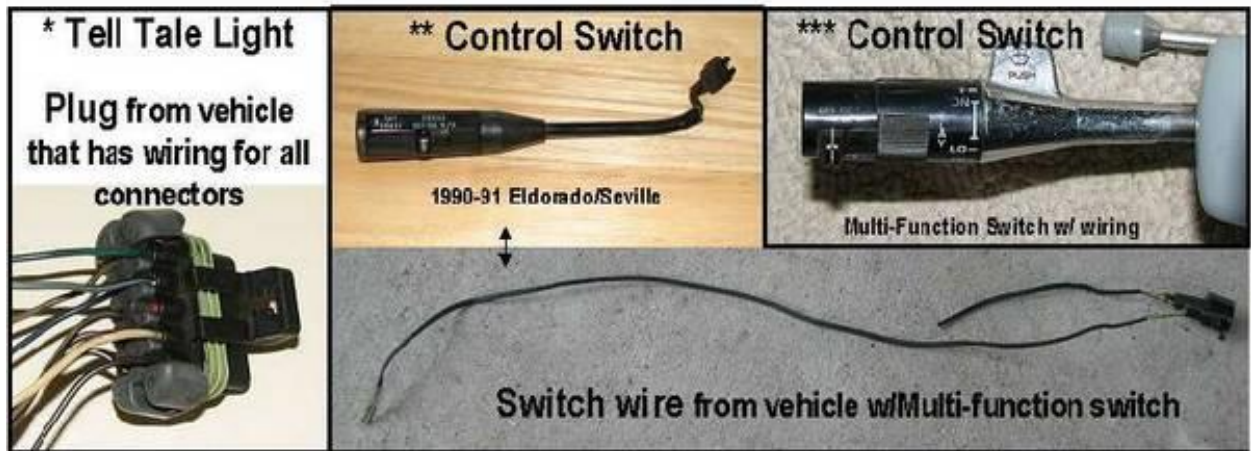
Installing a Delphi Stepper Motor Cruise Control on GMC Motorhome

- One Piece Module
- No Vacuum needed
- 'Resume' Feature
- Increase/Decrease speed in 1 MPH increments
- Factory Look
- GM Parts

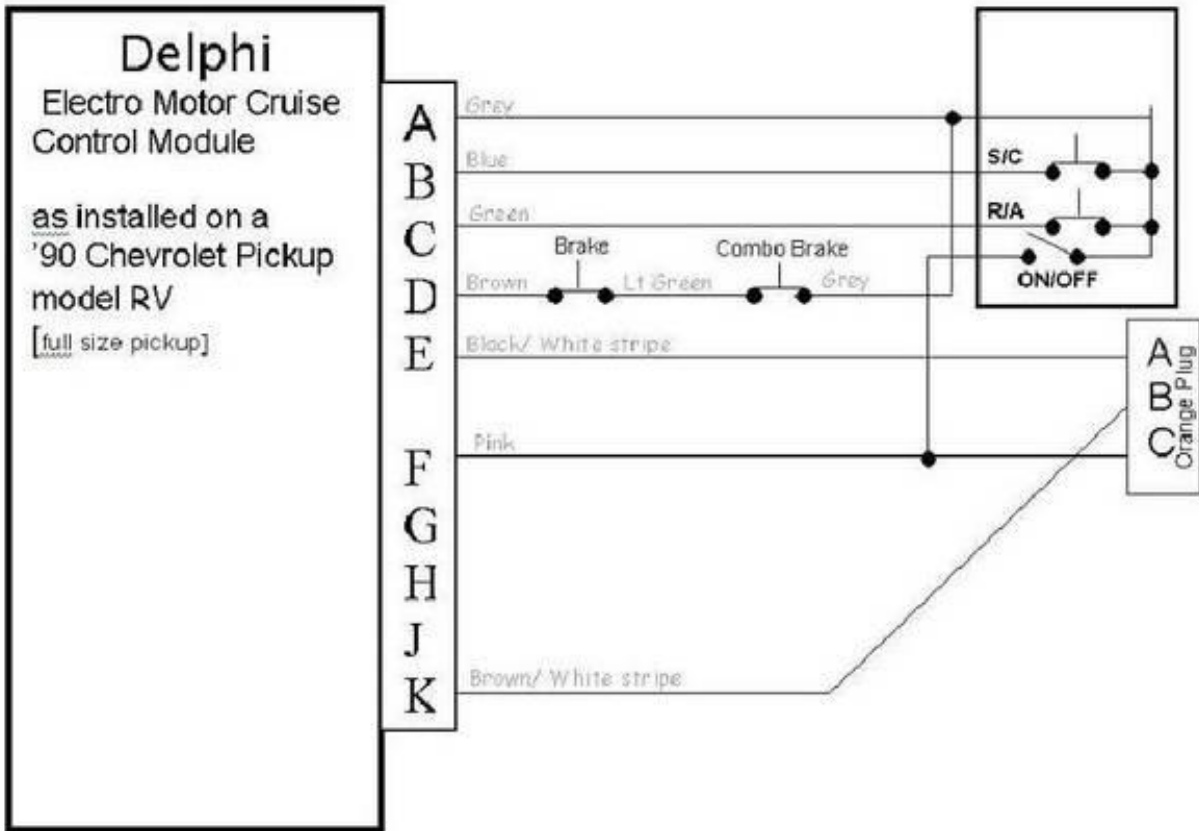
Parts Needed for Basic Installation



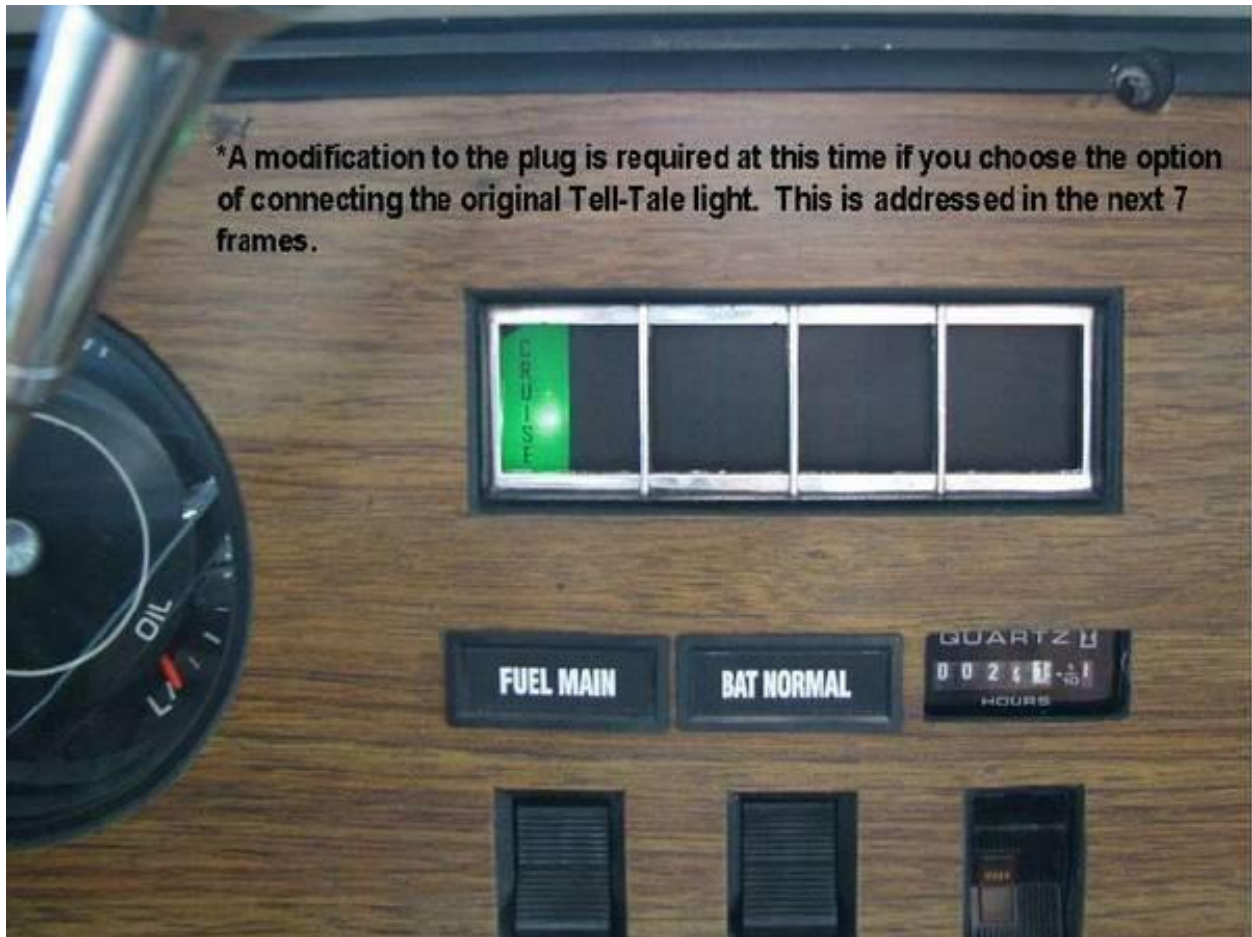
Parts for Enhancements



Wiring Diagram as installed on '90 Chevrolet Pick-up



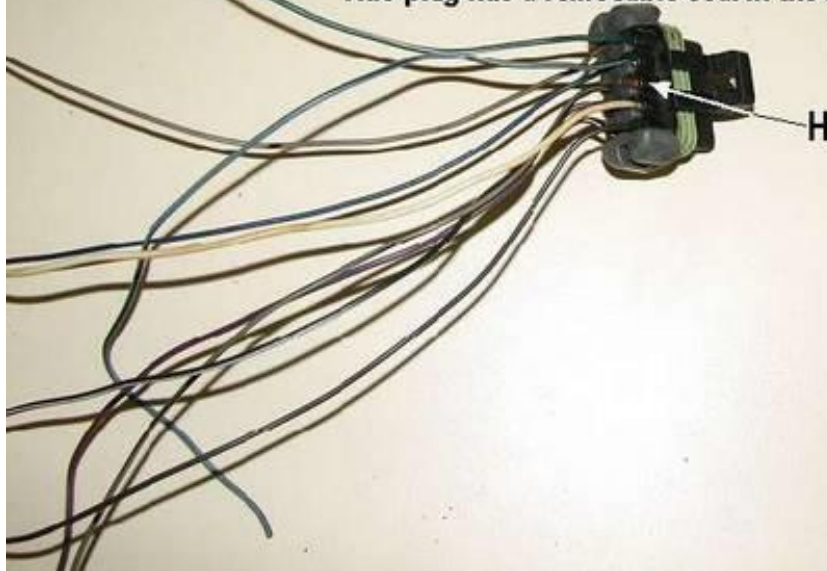
***A modification to the plug is required at this time if you choose the option of connecting the original Tell-Tale light. This is addressed in the next 7 frames.**



***To Connect Tell-Tale Signal Wire, Change the Module Plug**

The 'J' cavity on the MW unit is blocked and will not accept a wire. Select a suitable plug from another cruise control or anti-lock brake module.

NOTE: Required wire cavities must be open to accept wires. This plug has a removable seal in the blank ('H') cavity.



***The wires have to be relocated to the replacement plug.**

^ First the wire retainer has to be removed by releasing the tangs.



***This is a locking tang that holds the terminal into the plug. These tangs have to be depressed in order for the terminal to be released from the plug.**



***Using a pick, probe beside the terminal to depress the tang.**



***When the tang is released the terminal & wire will pull out the back of the plug..**



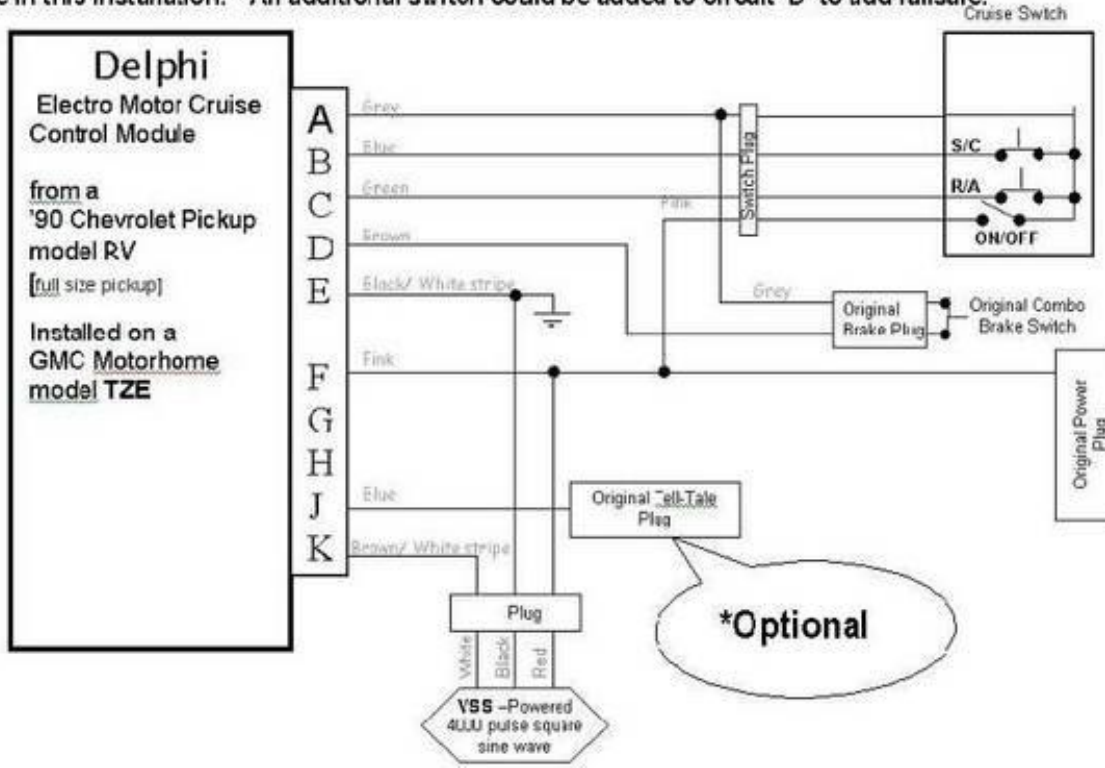
*Move Wires to Replacement Plug

- Bend the tangs back into locking position.
- Transfer wires to corresponding plug cavities.
- Install the terminals with the tangs toward the plug clip.
- Add a wire to 'J' for the Tell-Tale light.
- Add plug seals as necessary to seal the plug.
- Replace the retaining clip to hold wires into the plug.

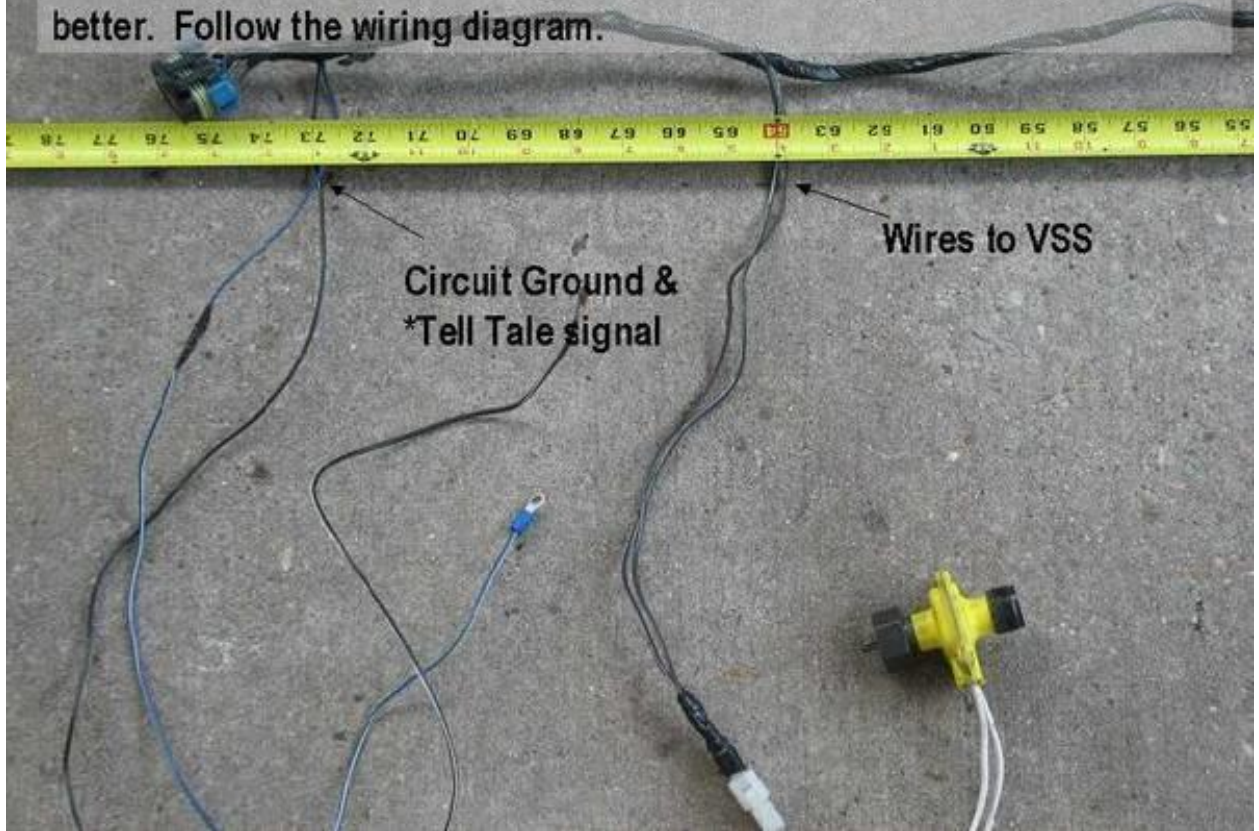


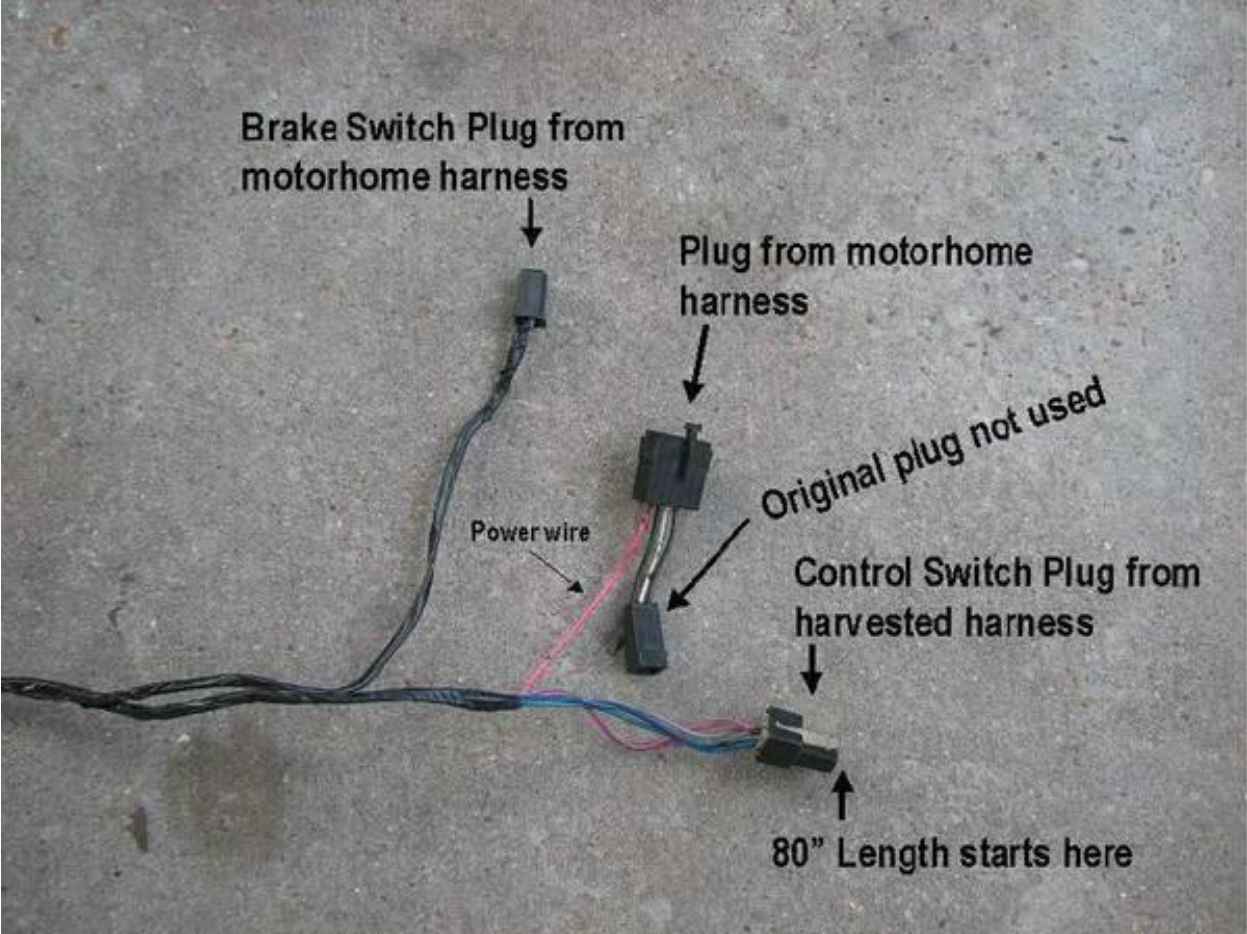
Wiring Diagram as Installed on GMC Motorhome

Warning: GM uses redundant brake switches in their installations for failsafe reasons. That was NOT done in this installation. *An additional switch could be added to circuit 'D' to add failsafe.



Using harvested & original wiring harnesses construct a new wiring harness for the motorhome that is at least 76" long. 80" would be better. Follow the wiring diagram.





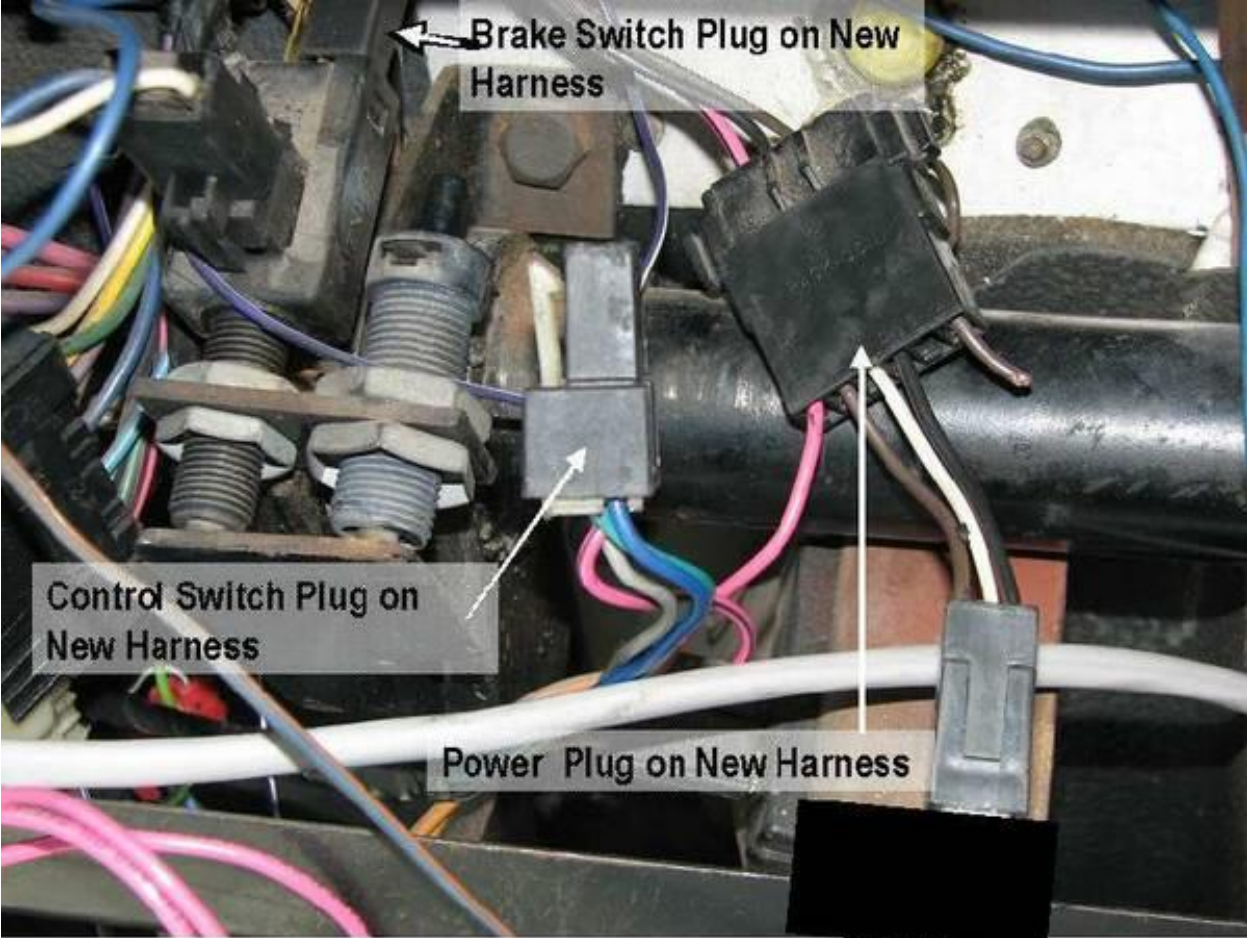
Wiring 15" to
VSS to Plug





Original Wires and Dump
Hose Removed

Cockpit Wires - threaded
through same hole as
original wires and dump
hose



← Brake Switch Plug on New Harness

Control Switch Plug on New Harness

Power Plug on New Harness

Ground Wire attached at Original Location





Tell Tale Wire Attached to Original Plug

Mount the Vehicle Speed Sensor and connect the 3 wires







Mounted Cruise Module
with plug installed

Mounting the Throttle Cable



Remove Throttle Cable & Cable Bracket

Bracket from '80's Olds 307 can be used without modification if original air cleaner is not used.



Bracket is too tall and interferes with original air cleaner housing



Modifying Bracket to Clear Air Filter Housing

Stock Height
3.25"



First Cut to Shorten



Second Cut
~ .75"



Dissected Bracket



Bracket Welded Together

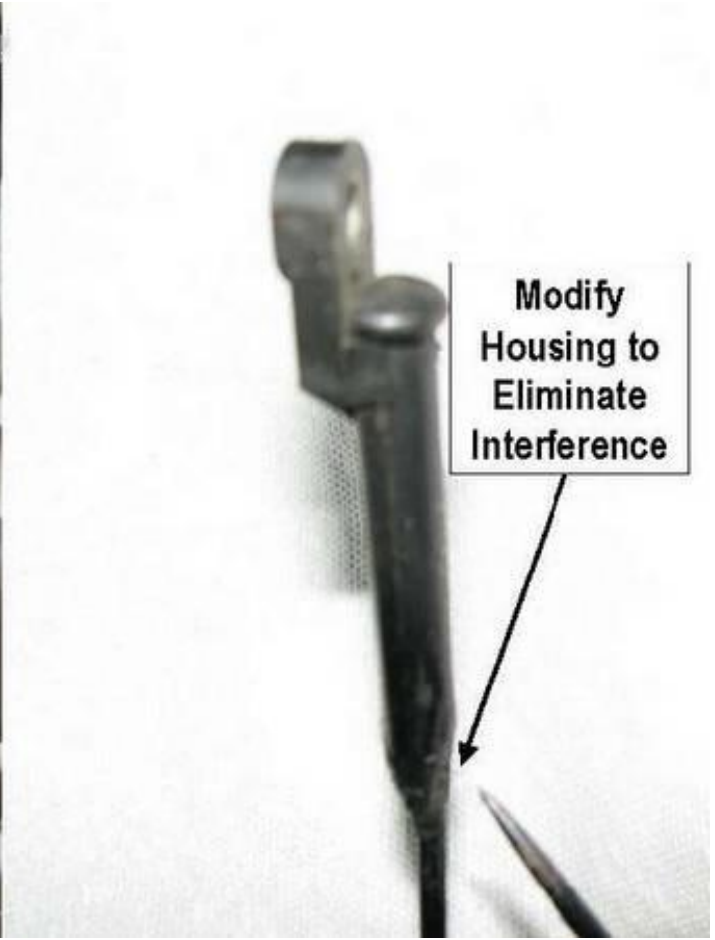


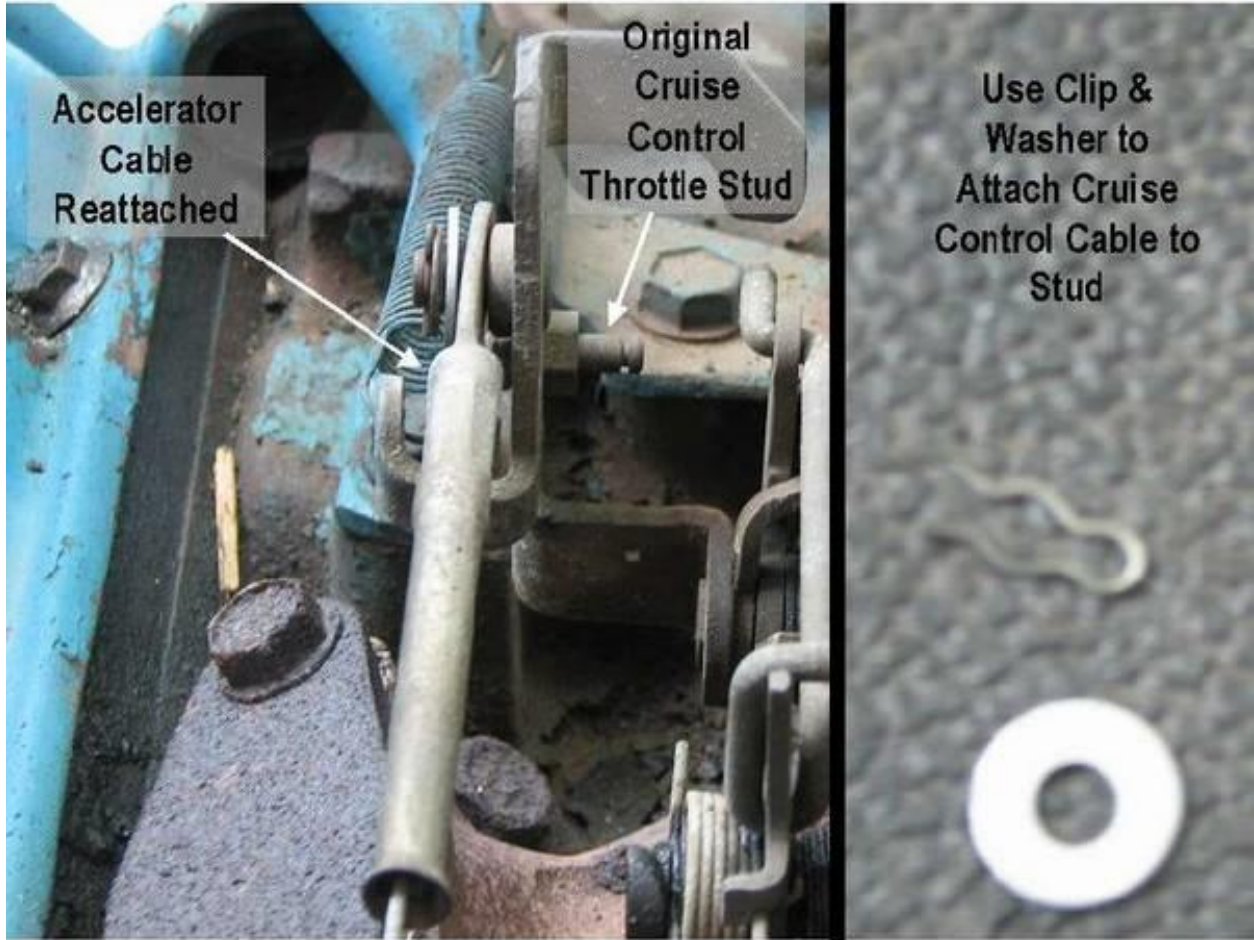
Comparing Height of Brackets





Bevel the Locator Tab so it will fit into the slot.





Accelerator
Cable
Reattached

Original
Cruise
Control
Throttle Stud

Use Clip &
Washer to
Attach Cruise
Control Cable to
Stud

Throttle Cables & Bracket Installed and Ready for Air Filter





**** '90-'91 Eldorado/Seville Cruise Control Switch**

Plug is accessible
without removing
steering wheel



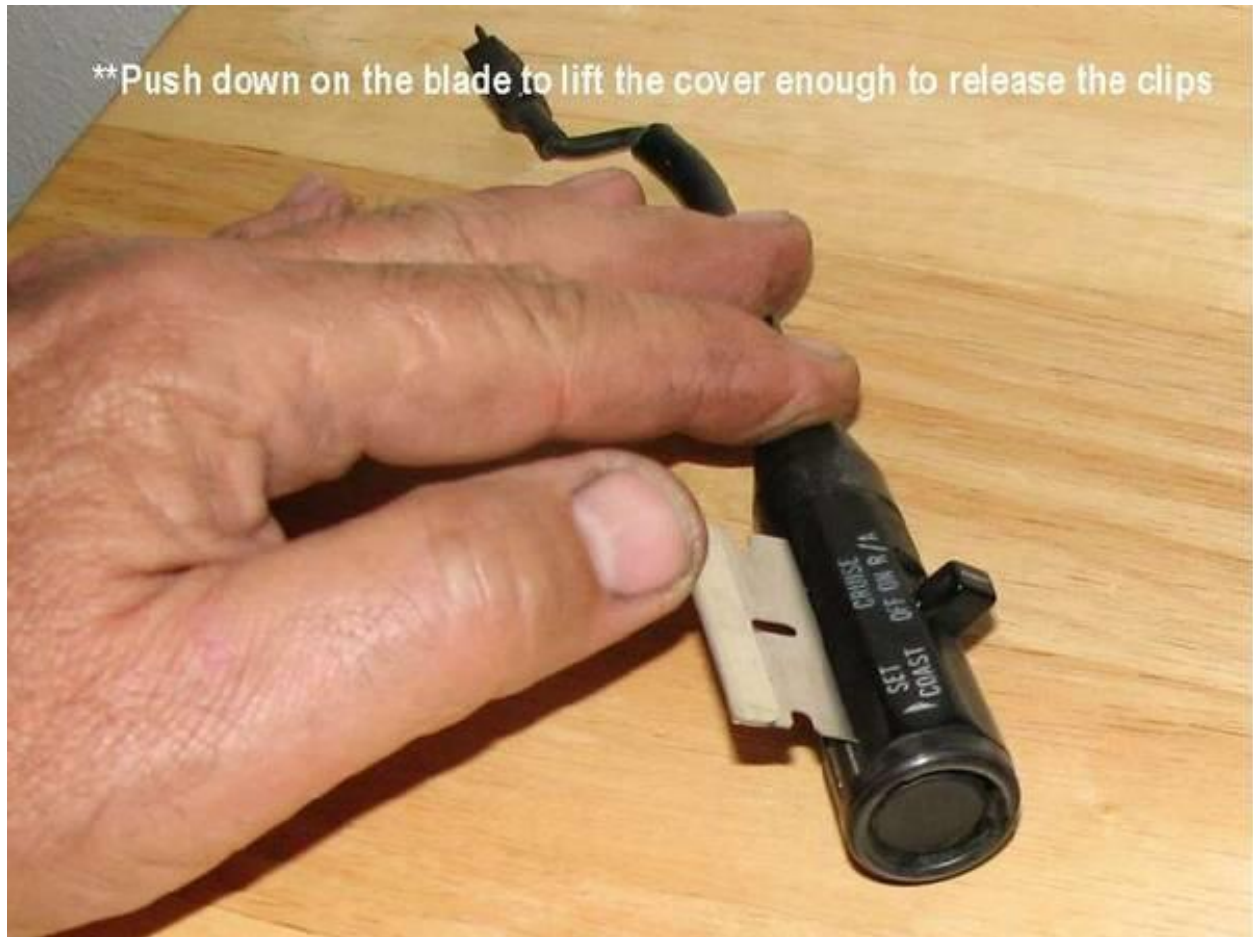
Break off lever from
donor vehicle

****These clips are very fragile. The following is a technique to use for removing the cover with a single edged razor blade.**



****Insert the blade into the slot just deep enough to allow the blade to lift on the back side of the cover. If the blade is too deep it will get caught in the switch housing and not pry the cover up to disengage the clips.**





Video missing from original slide show. Text from slide:

1) remove switch lever 2) release clip behind 'set/coast button 3) slide switch out

****Cut plug from wire and remove switch from housing.**



**To hold the switch housing onto the lever shaft the original and a few of the later model levers are splined.



Most levers are crosshatched and difficult to remove. There is no distinguishing feature identifying to the method of attachment.

****To remove switch housing:**

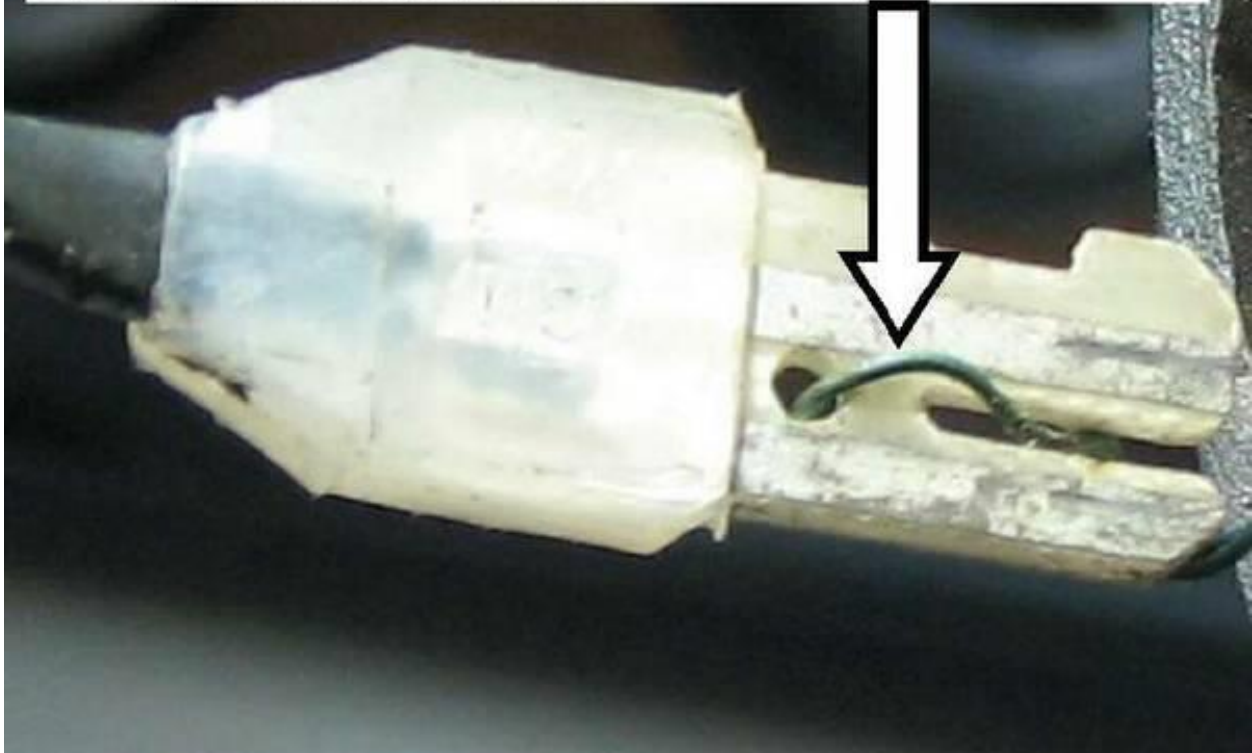
- use a heat gun to warm the shaft
- hold the shaft with lock pliers
- grab the switch housing and pull the housing off.
- Be careful not to overheat.
- May take several conservative attempts.



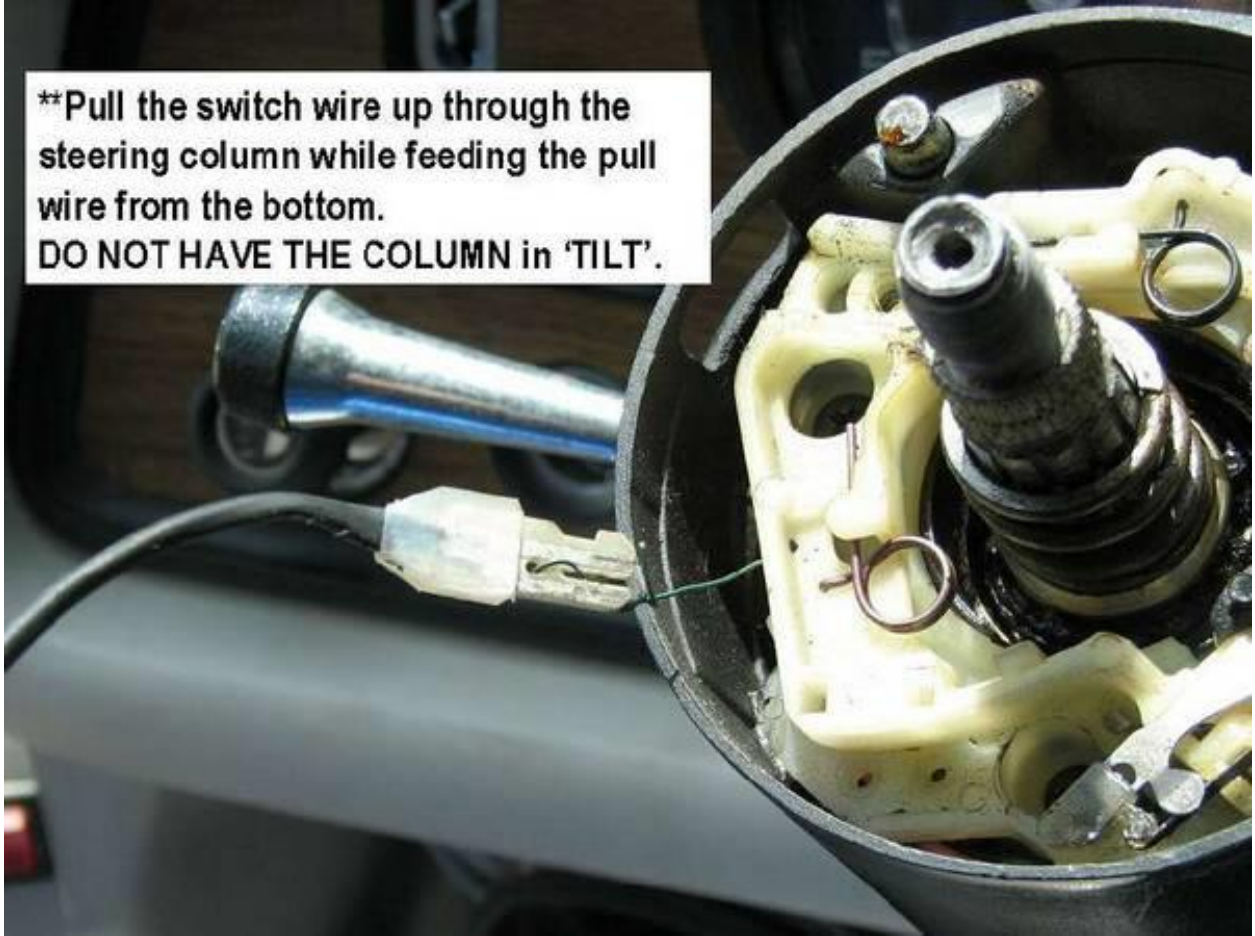
****Using the Maintenance Manual as a guide remove the steering wheel and locking plate from the steering column. This will expose the turn signal switch lever. Remove the single screw located here**



****Attach a pull wire into the end of the Cruise Control Switch Wire located near the brake pedal switch.**



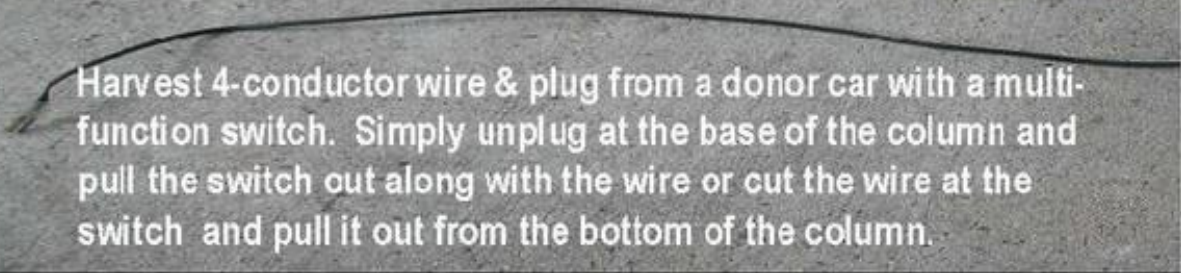
****Pull the switch wire up through the steering column while feeding the pull wire from the bottom.
DO NOT HAVE THE COLUMN in 'TILT'.**



**Remove from the pull wire, remove the switch from the lever & cut the wire to remove it from the lever.



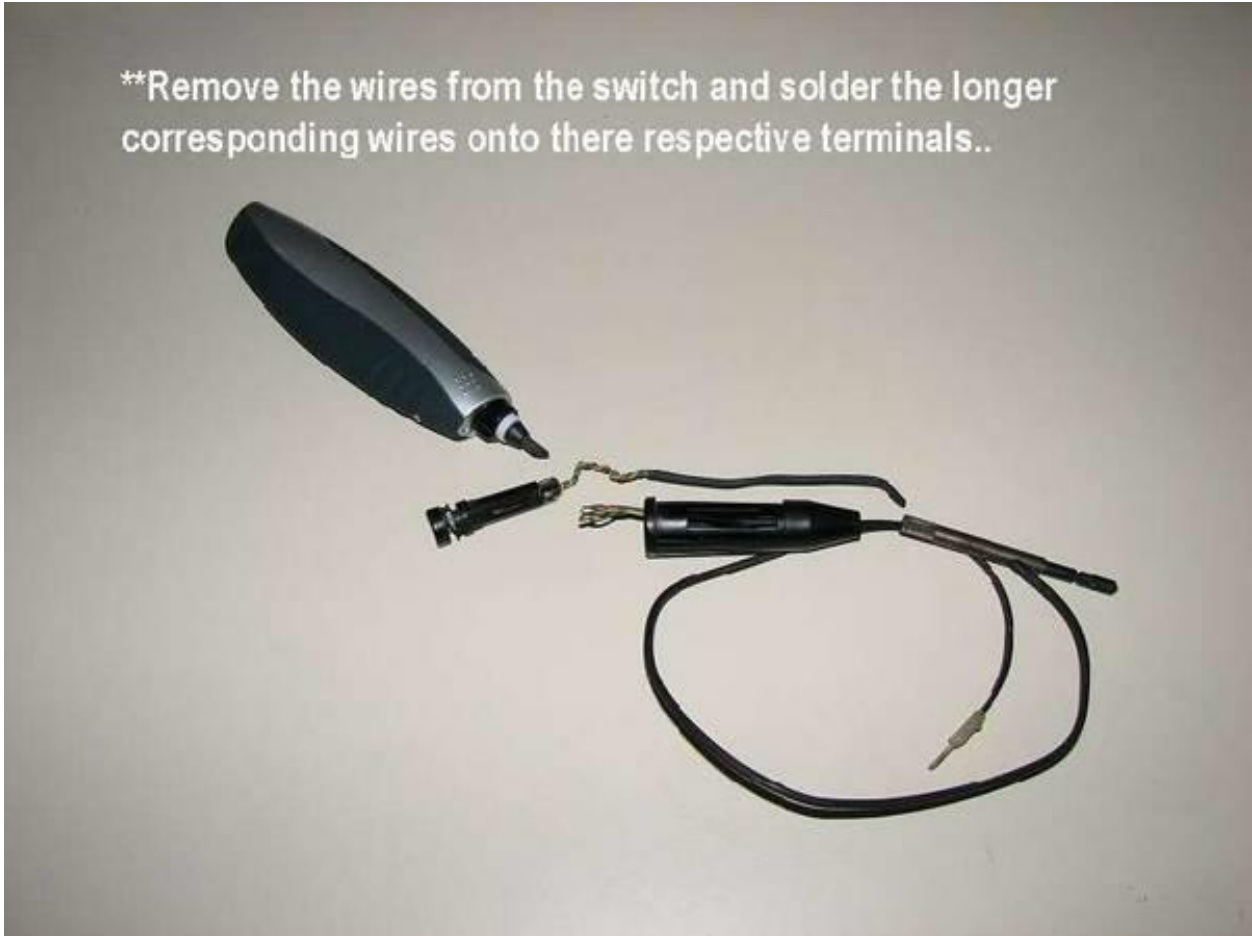
Harvest 4-conductor wire & plug from a donor car with a multi-function switch. Simply unplug at the base of the column and pull the switch out along with the wire or cut the wire at the switch and pull it out from the bottom of the column.



Run the wire through the GMC lever and switch housing

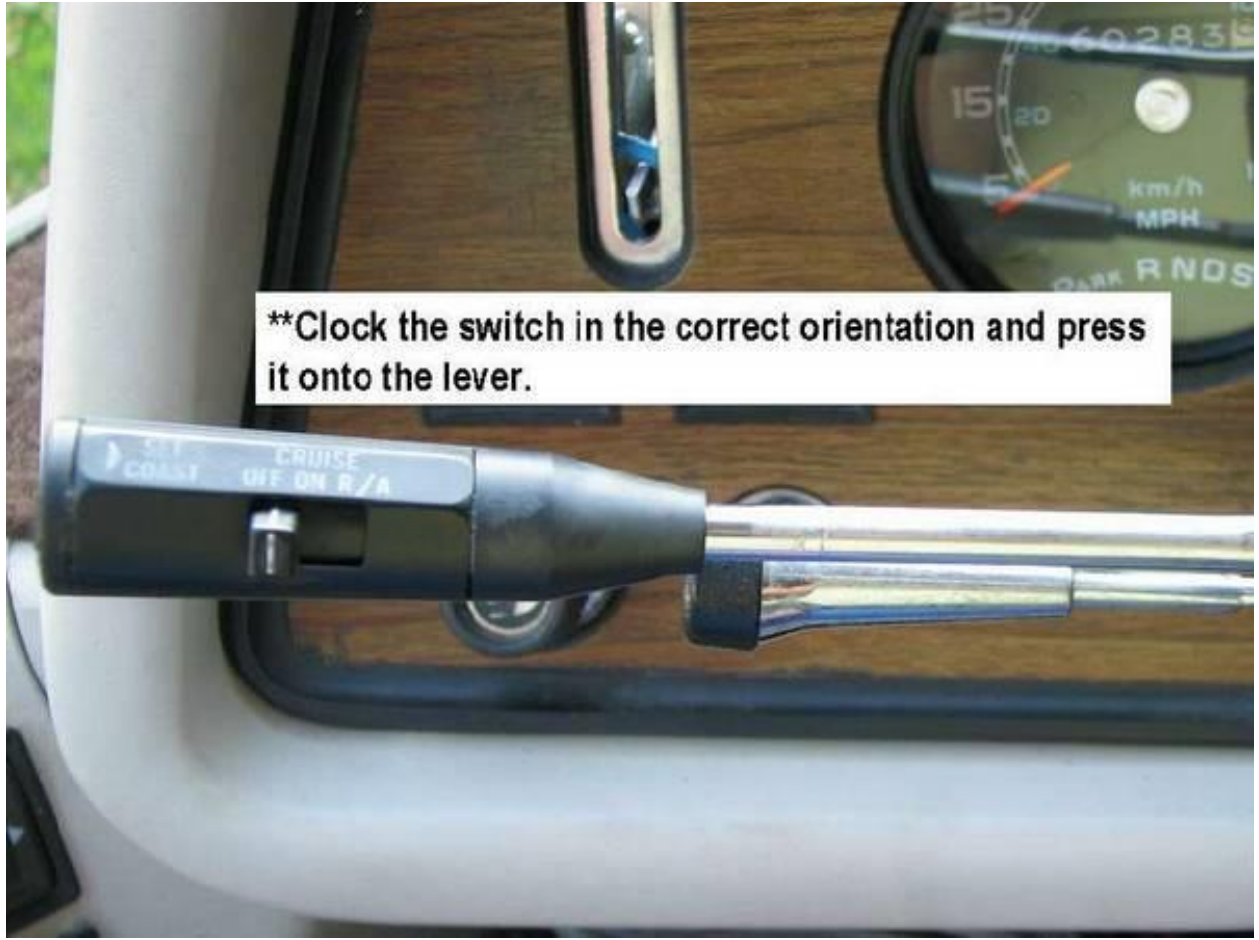


****Remove the wires from the switch and solder the longer corresponding wires onto there respective terminals..**



Video missing from original slide show. Text from description:

Showing how to install switch back into housing. 1)slide the switch into housing 2) Seat clip that retains switch 3) replace switch lever 4) snap cover back into place If the clip is not installed correctly the cruise switch will not turn off.

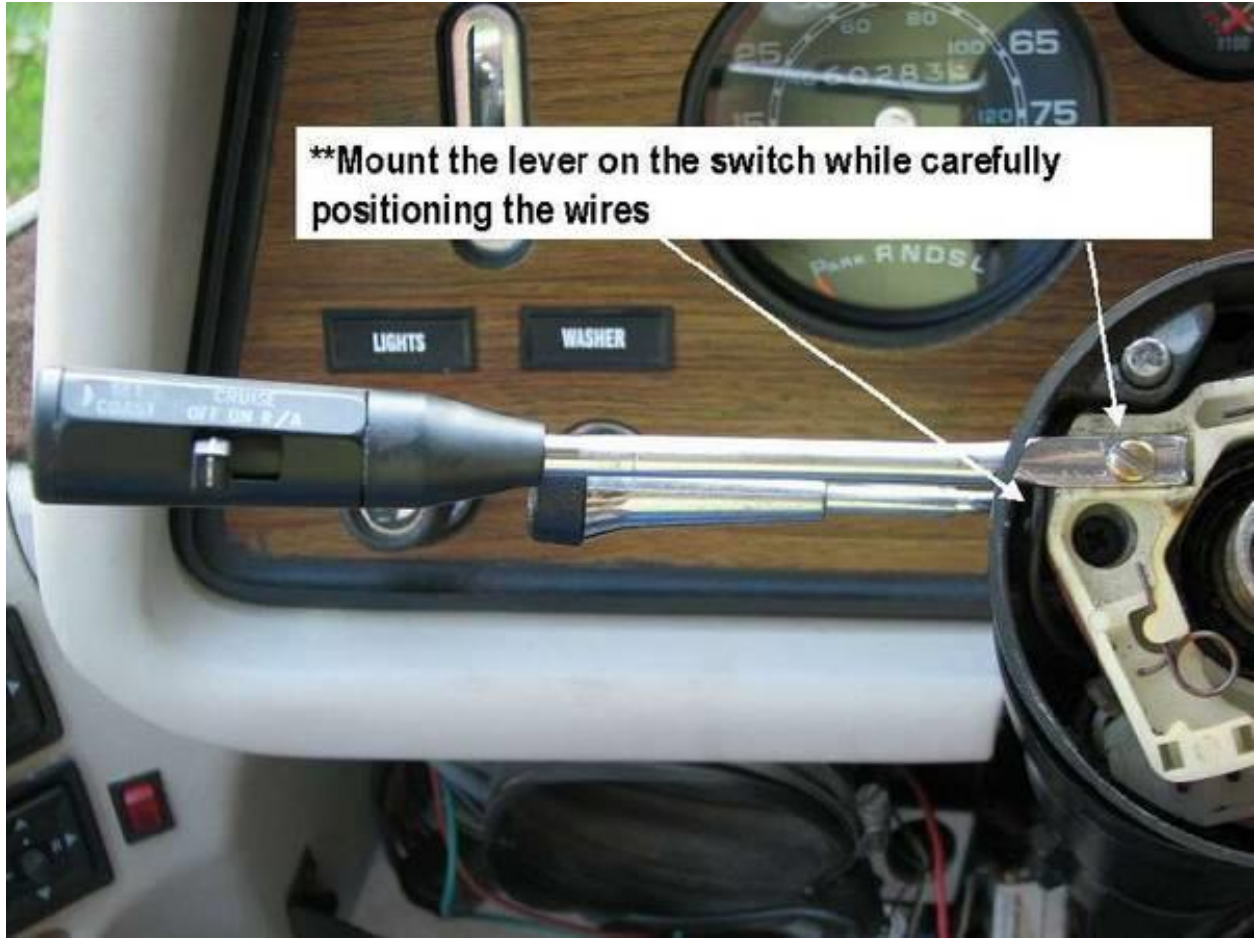


****Clock the switch in the correct orientation and press it onto the lever.**

****Put the end of the wire through the lever hole; attach to the pull wire and thread the wire down through the steering column.**



****Mount the lever on the switch while carefully positioning the wires**



Connect the switch wire to the plug on the Cruise Control Harness



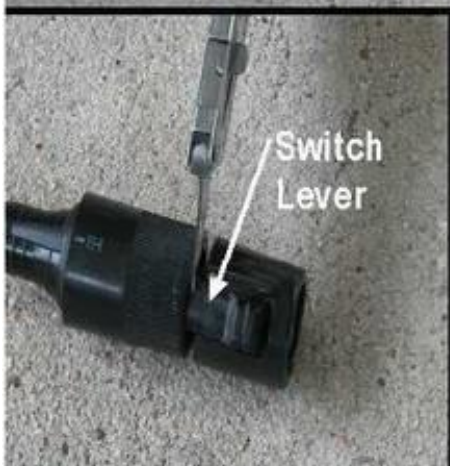
****Replace the lock plate and steering wheel**



*****If you choose to use the more common Multi-Function Switch, here are a few considerations.**



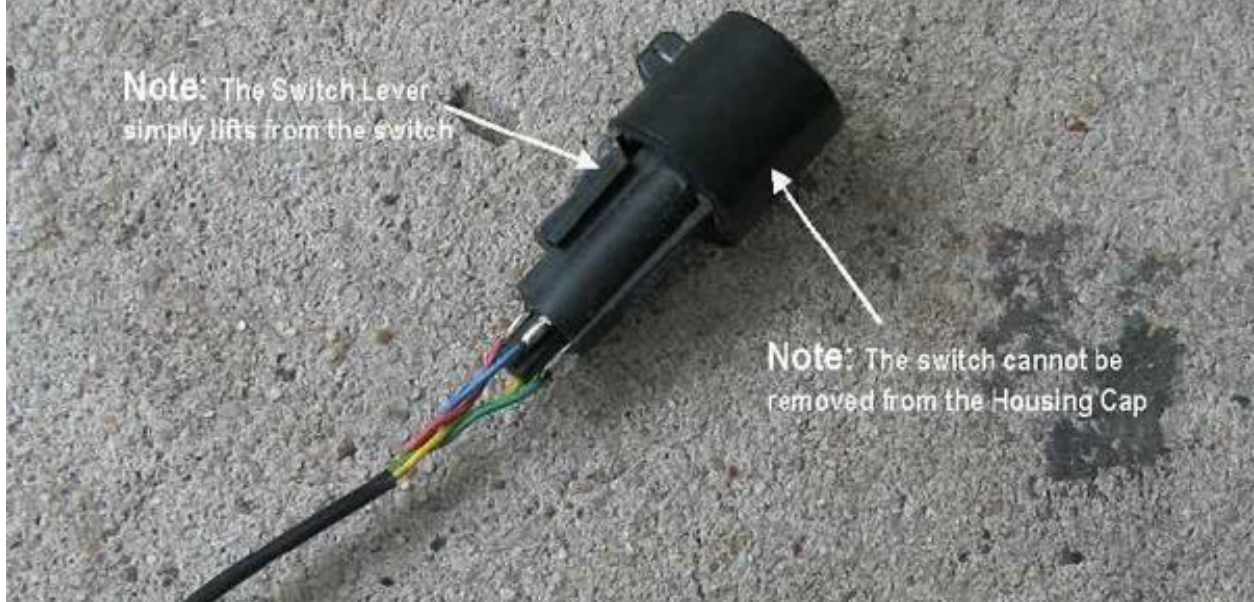
- Instead of cutting the plug from the switch wire, the wires could be disconnected from the switch.
- The switch housing is glued together so it needs to be cut in a 'C' fashion for access to the switch. The area of the switch lever is not to be cut.



- The wires can be de-soldered
- Run through the Lever and the Switch Housing
- Reattached in their respective locations on the switch

Note: The Switch Lever
simply lifts from the switch

Note: The switch cannot be
removed from the Housing Cap



*****Install the switch and glue the switch housing back together:**

- Protect the surface from glue
- Do not allow glue to contact Switch Lever
- Clock the cap in proper alignment



