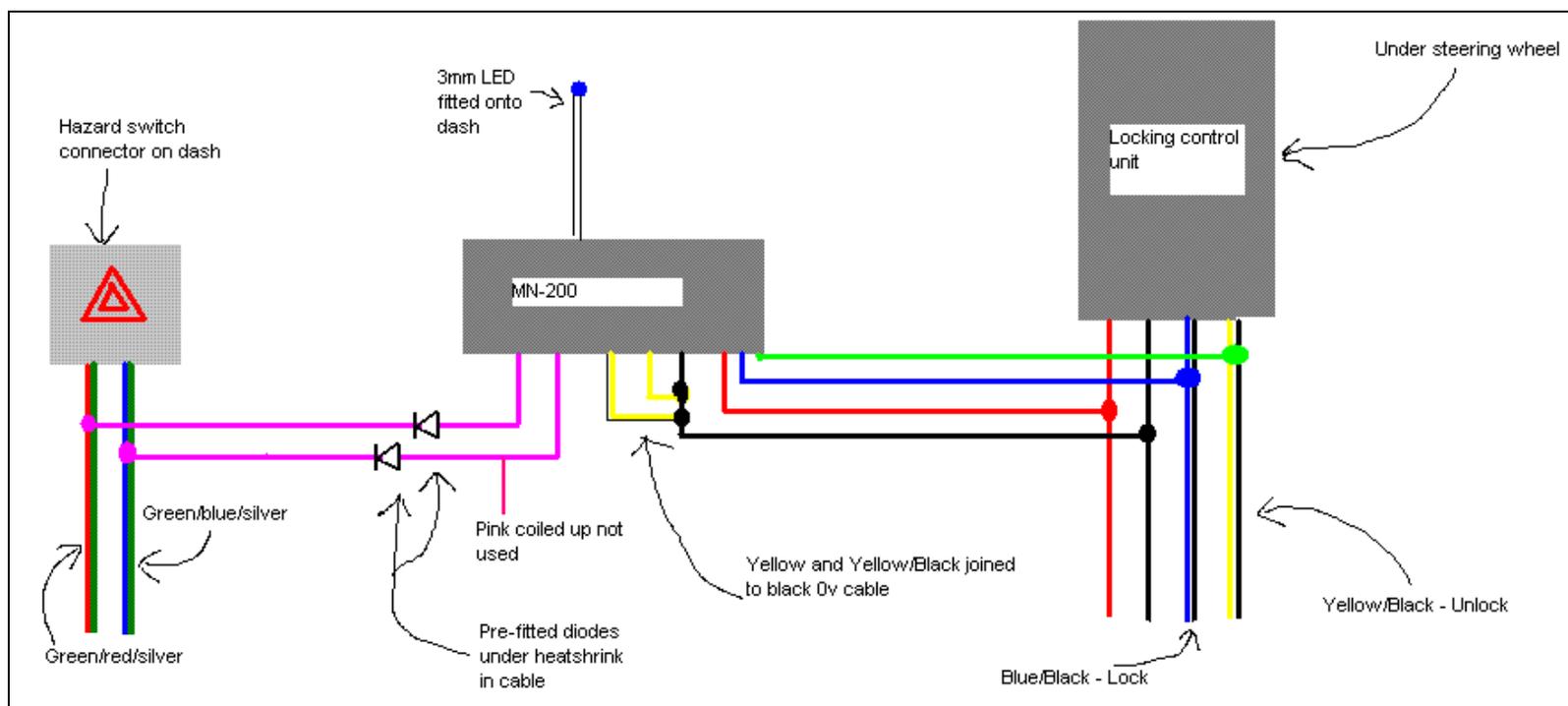


# Wiring a MN-200 remote central locking unit to a 1997 Estima Emina

The MN-200 Controller was fitted under the centre of the dash, to the right beneath the heater control unit.

The supplied 5mm LED and clip were no good. So I bought a 3mm and clip from my local Maplins for less than £1. (Part numbers YY39 & N31BY)

Wiring Diagram working to;





First prise up and remove the heater control surround, then remove the two screws (1 either side of the vents)  
  
(Thanks to Ian for picture!)



Remove the dash and instrument surround by prising the outer ends loose using a wide bladed knife (such as a putty knife).



There are spring clips all along the top edge and a good pull will remove it  
  
Wiggle it out from one of the open doors



Dashboard removed showing passenger airbag. (And no relays to be seen!)



Need to remove lower dashboard. Remove two screws marked with red arrows



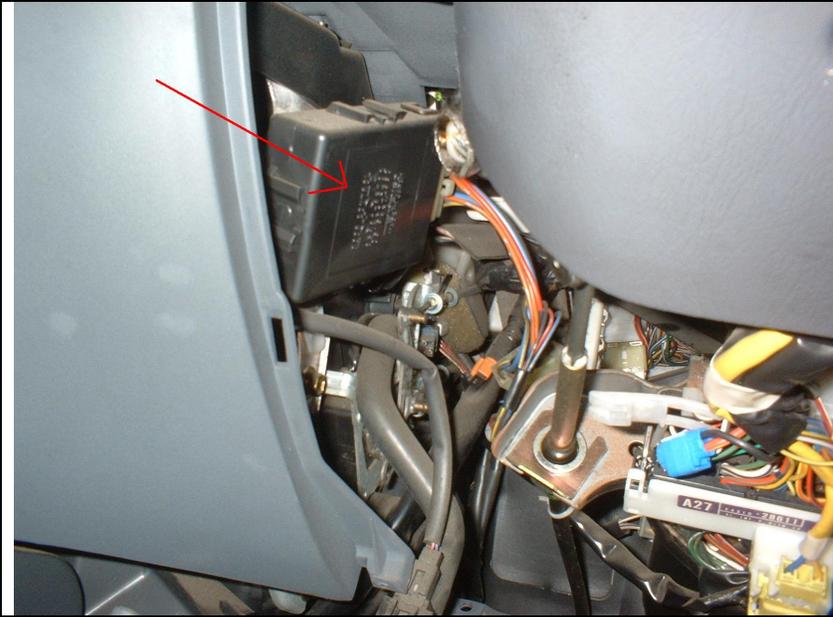
Remove cover by prising off.....



....on both sides



Pull rubber pipe off, and pull off plug to temperature receiver



This will reveal the central locking relay module



YOU CAN IGNORE THIS BIT UNLESS YOU ARE CURIOUS

This is what is inside the module to save you fiddlers opening it up!



Remove the plug from rear of unit



Remove the 4 self tapping screws marked here to remove the control unit.

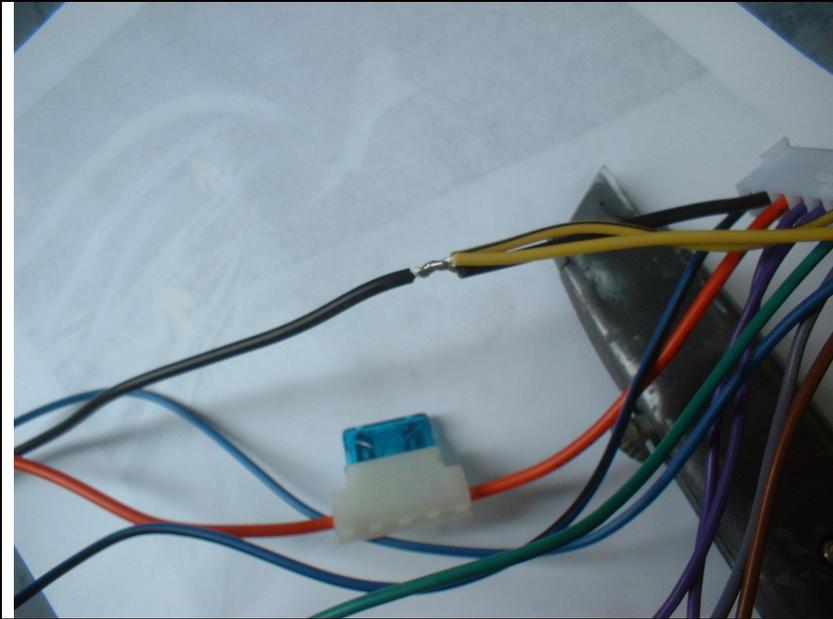
Lift the front upwards to tilt far back. You may have to remove the 3 connectors on the rear to do this



This is the hazard switch connector  
(Ignore my red meter probe!)



PREPARING THE NEW LOOM  
  
Cut the Yellow and Yellow/Black cables about 75mm long



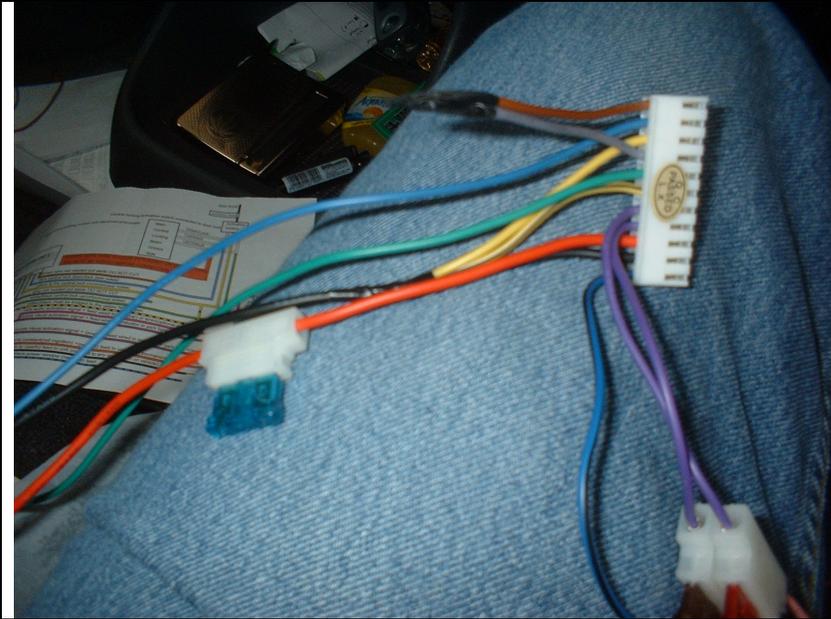
Strip insulation back on black wire and twist the Yellow and Yellow/Black to it



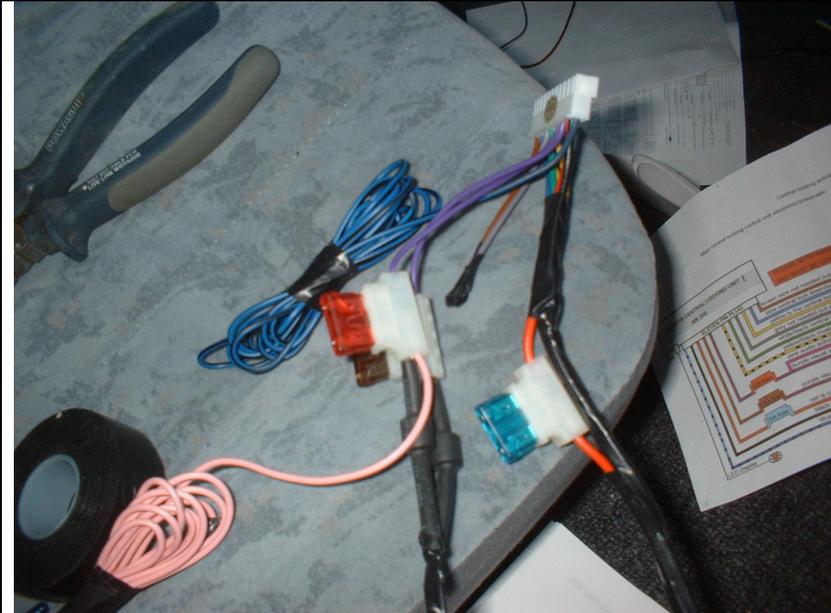
Make a nice soldered joint



Cut off the Brown and Grey and tape up ends.  
Also wrap some insulation tape tightly around the joint



Form the Red, Black, Blue and Green wires ready to tape up for wiring loom.



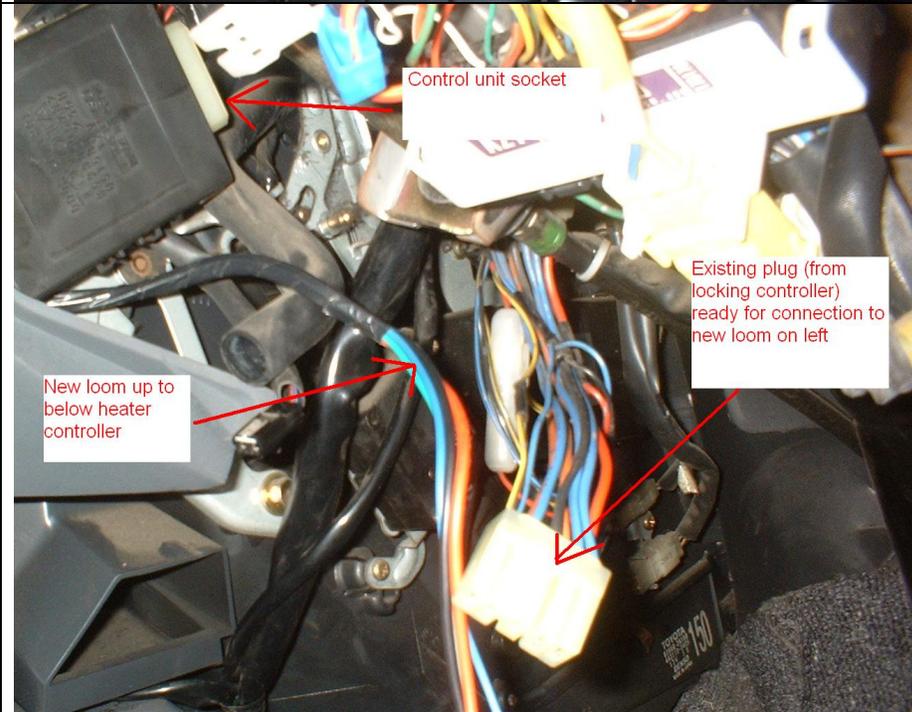
Tape up Blue/Black (Un-used at the moment; signal for winding up electric windows. Further investigation required!)

I also did not bother with the pink sounder/buzzer signal, so taped this up too.

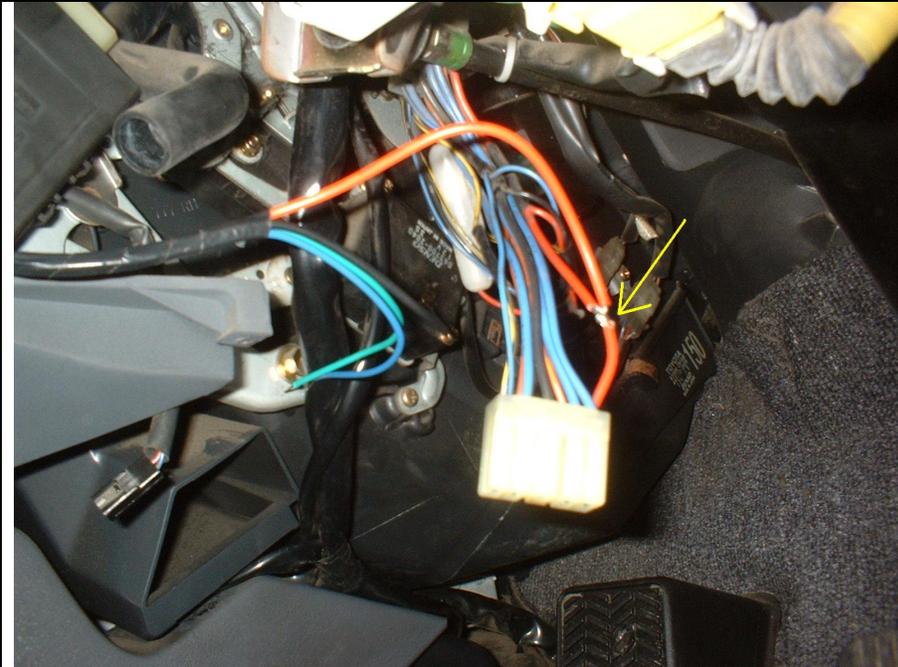
This left the two purple wires to trigger the indicators. Notice the diodes pre-fitted under the black heatshrink. These only allow current out from the fuse to prevent all your indicators coming on together.



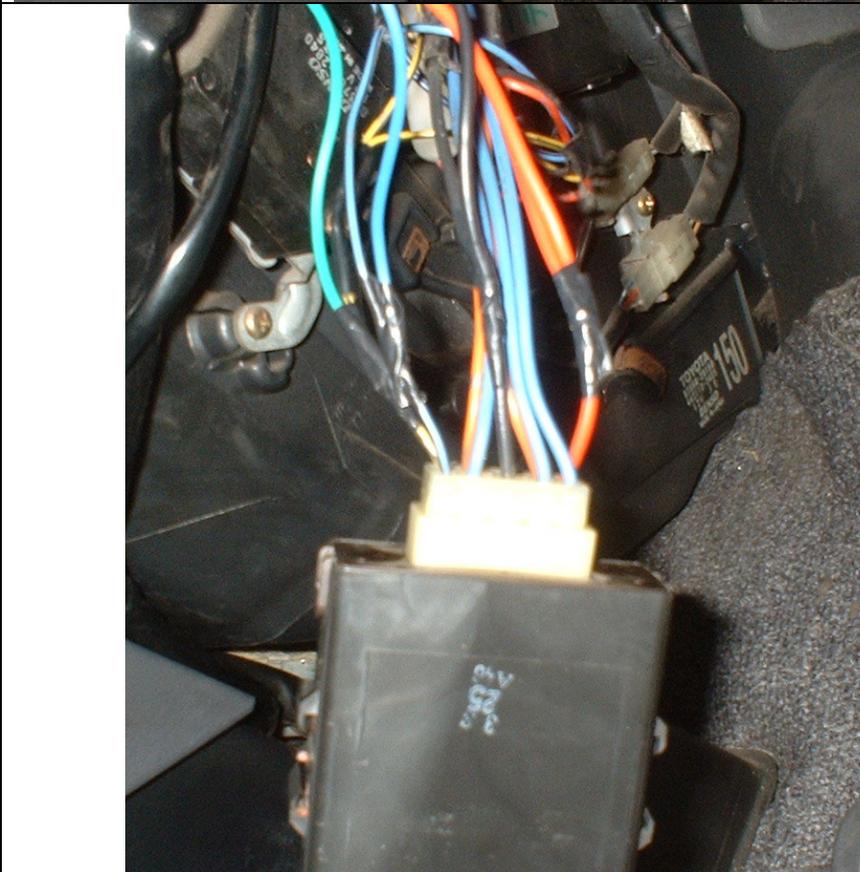
Run the (Red, Black, Blue and Green) loom from beneath the heater controller down to the existing locking control unit.



Cabling ready for connection



Solder New Red to Old Red



Tape up this joint.  
Then New Black to Old Black.  
New Blue to old Blue/Black  
New Green to old Yellow/Black  
Tape up all connections



Fit the plug back to the control unit.



The hazard connector (in my hand!) Showing the heater control unit disconnected and moved to side ready for soldering the indicator circuits.

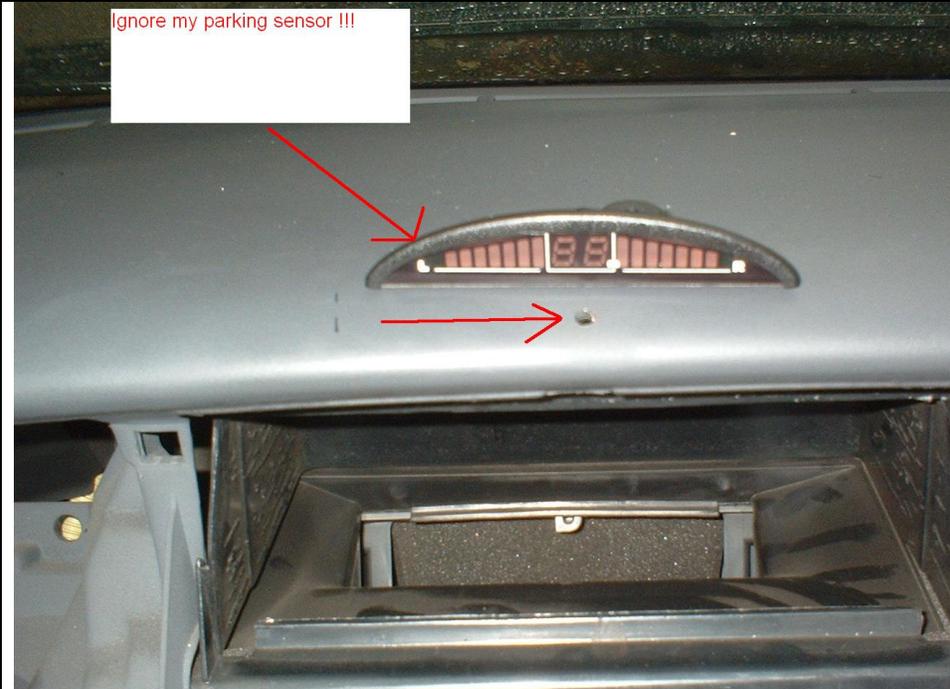


Connect the two new Purple wires to the hazard switch plug.

One to Green/red/silver bands  
One to Green/blue/silver bands

Tape them up also

AT THIS POINT I TESTED THE SYSTEM AFTER PROGRAMMING BOTH TRANSMITTERS. I THEN SAT THE MN-200 UNIT UNDER THE HEATER CONTROL UNIT (NEXT TO THE STEREO)

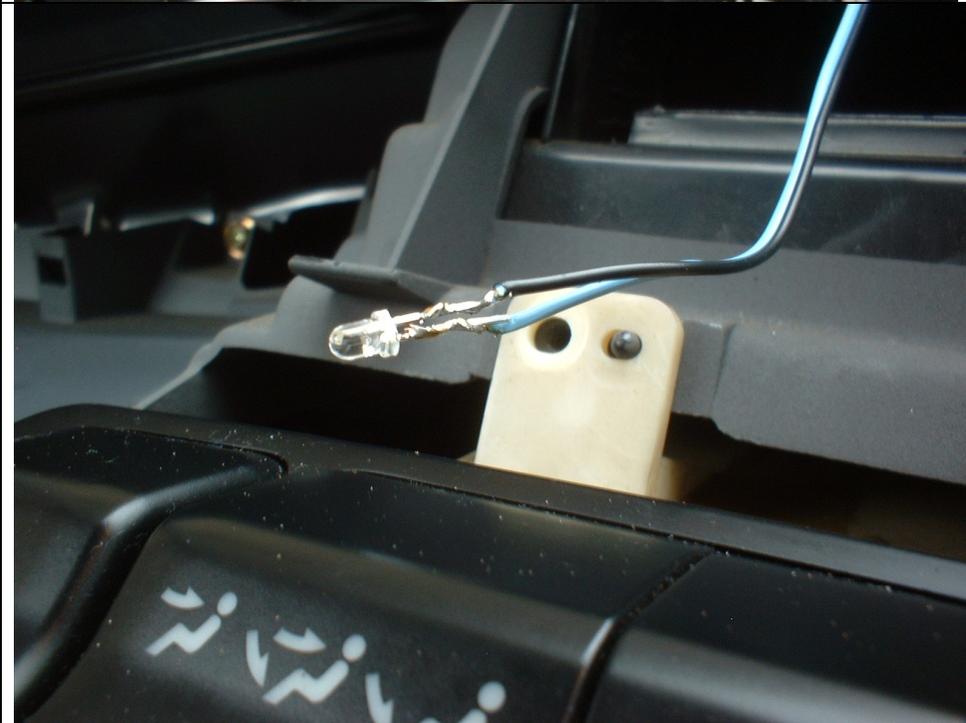


Ignore my parking sensor !!!

Drilled a 4.5mm hole here for the LED clip.



The led was cut off the end of the led cable and discarded. The bare cable end run up through dash, next to rev counter, over top of air pipe and up out through new hole in dash. Cable ends stripped ready to solder on the new 3mm LED.



The LED soldered on and tested.

**LEDS ONLY WORK ONE WAY, SO IF IT DOES NOT WORK THEN SWAP YOUR WIRES.**

Lock system with remote to test LED

Then tape around one leg only, then both. This makes sure they cannot short together either!



Clip pressed into hole ready



LED pushed up from back, it can be difficult!



Proof that it works!



Tested and working, fit all screws back to the heater control unit



Re-fit dash and covers

ALL DONE ☺

Compiled by "Timbo" from [www.estimaownersclub.com](http://www.estimaownersclub.com)

Whilst all info here is given in good faith, we cannot be held responsible for any errors!