

Richards Auto – Electric Brake wiring harness to suit N80 HILUX & Redarc Tow Pro Elite V3

<p>Congratulations on purchasing our,</p> <p><u>Electric Brake wiring harness to suit HILUX and Redarc Tow Pro Elite V3</u></p> <p>This is designed to simplify the installation of electric brakes into the N80 HILUX. It is only compatible with the Redarc Tow Pro Elite V3 brake controller.</p> <p>This wiring kit includes an additional 20A power circuit to the tow plug. This is commonly connected to Pin # 2 for brake away charging.</p> <p>This kit is supplied to retail customers with Redarc Tow Pro Elite V3 – EBRH-ACCV3 included</p> <p>To the trade customers this will need to be purchased separately. EBRH-ACCV3</p> <p>Please watch the install video for better clarification on wiring. https://youtu.be/NS0tA0dd9gE?si=m-gr43KMrUtnAvWz</p>	<p><u>Fitting Time: 120 minutes</u></p> <p><u>No soldering or drilling required.</u> <u>This has been engineered to utilise existing fixings and connectors.</u></p> <p><u>Tools required: 7,8,10,12mm socket & handle, 10mm, 12mm spanner, Philips screw driver.</u></p>  <p>NOTE: EBRH-ACCV3 is the <u>only</u> compatible Redarc brake controller model.</p>
<p>Familiarise yourself with the kit and its parts.</p> <ol style="list-style-type: none">1. Wiring harness.2. Redarc Tow Pro Brake controller3. Redarc dash switch blank to suit HILUX N804. Fuse and labels	

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Start by mounting the Tow pro module to the supplied mounting bracket as per the picture alongside. Use 2x supplied M4 threaded bolts. Do not overtighten as it is plastic.

IMPORTANT

Connect the Black end of the 2 meter Redarc switch extension cable to the Redarc Brake control module. This can not be done once mounted.



Remember to connect 2m switch extension cable here.

Open Bonnet and locate Grommet on passenger firewall.



Cut end off the grommet nipple.



Tape harness to something rigid to pass through the grommet in the firewall, we use a good cable tie.



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Then feed spray a lubricant on it and feed through the grommet from under the bonnet to into the car.



Remove the passengers lower plastic cover below the glovebox.



Find the Cable up underneath the glove box that you have fed through, and pull it through. The 'Y' split part of the loom should be at the grommet. As pictured.



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Untape the loom. Grab the Black tow pro 4 pin power connector.

Fit the pins up the correct way
With tab on connector facing up push pins in as pictured. If inserted correctly they should click into place.

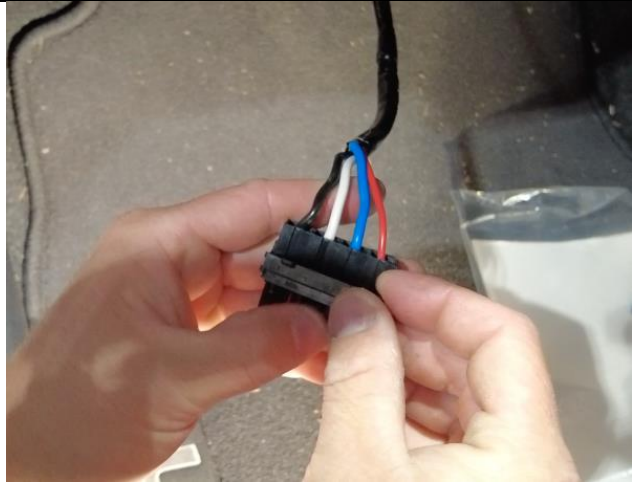
LEFT – BLACK
WHITE
BLUE
RIGHT -RED

AS PICTURED



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Install Safety Lock on the other side of the connector.



To mount Tow Pro – Locate the bolt holding some ECU's



Remove bolt and slide our bracket end between 2 metals, push tab as shown to separate the 2 metals.

Reinsert bolt to hold make sure it goes through the hole in our bracket.



Fit Power Connector to Redarc Controller

Direct the switch cable to the centre of the car.

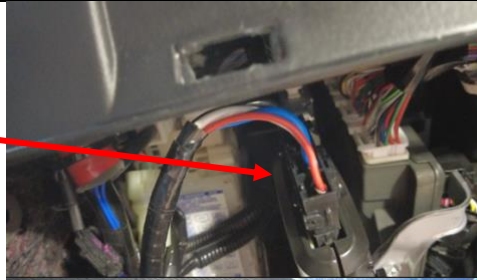
Remove the Aircon control panel by pulling on trim as pictured right

Then pull RHS of air con control panel trim towards you.

Aircon controls should pull out, then let them gently hang. This gives us access to behind middle switch blanks.

Route wiring from under glovebox area and into behind this central control panel switches area.

Watch install video for more clarification if needed.



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Feed switch loom to one of the switch blanks. Push out the switch blank from behind, and feed wire through.



Mount the Tow pro control switch into the supplied dash blank. It will only go 1 way.

Tighten the clear plastic nut (supplied by Redarc in white box) with 12mm socket by fingers or pliers. (Do not over tighten)

Dial the shaft all the way anticlockwise and press on the Redarc knob with the (0) position to the top dead centre.



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IMPORTANT

Connect the White end of the 2 meter Redarc switch extension cable to the Redarc Tow Pro switch.



Insert the Redarc blank with Tow pro switch fitted.



Re-fit Aircon control panel etc

Make sure wiring is tidy under glove box and re-fit tray/pan under glove box.



Out by the bonnet, Tape the wiring loom that will go to the rear of the vehicle to make it easier to direct

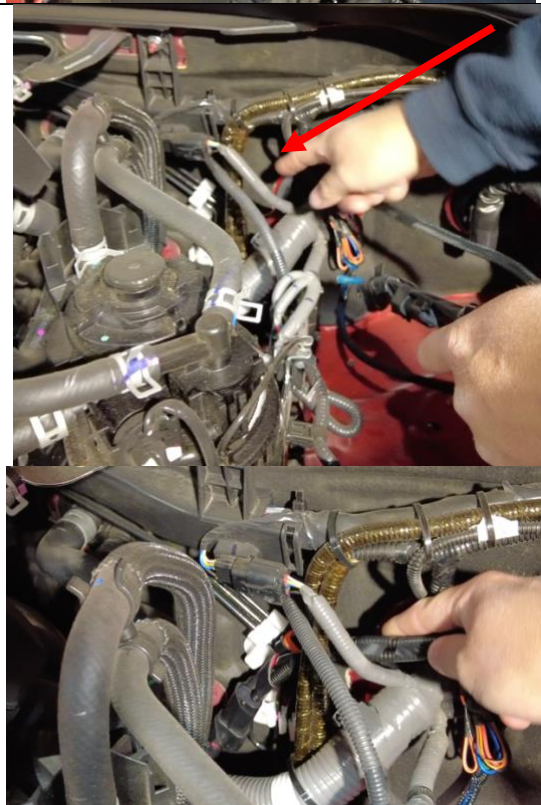


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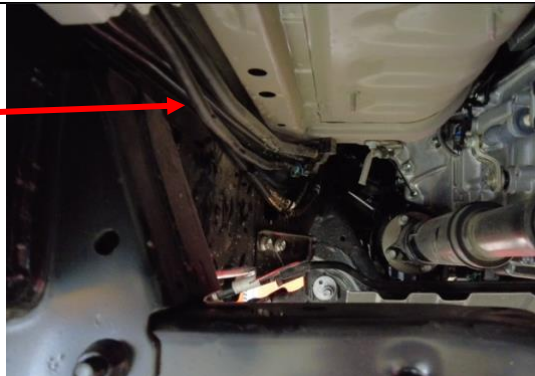


Poke wiring down to the ground through this spot. Avoid anything sharp or anything that could get hot.



Remove spare wheel
Grab the wiring underneath and run it along the brake lines & looms. Keep away from exhaust and any moving parts. Cable tie accordingly.

Run loom over top of the fuel tank.
And continue along the lines.



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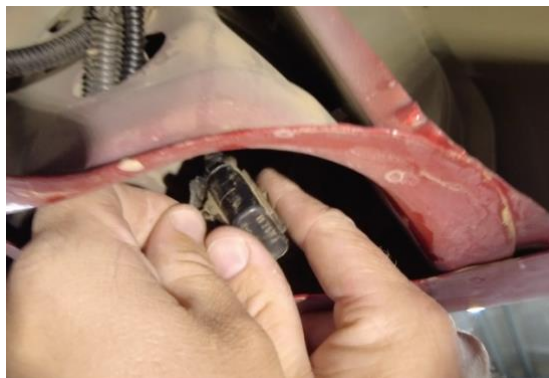
When you get to the spare tyre cross brace, run the single 2 pin connector to the passengers tail light. Continue the rest of wiring across the brace towards the drivers side.



Route the 2 pin connector up and over through this frame. Under the passengers tail light.



Find the fuse holder un-tape it, remove cover, remove fuse then plug in our 2 pin connector. Discard the lid and fuse. Push wire back up nice and neatly, cable tie if required.



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Route the rest of the loom over the spare tyre mount / chassis brace.



Locate the fuse holder with the red wires going to it.



Open lid, remove fuse and replace with our 2 pin plug.



Place the fuse you took out and put it into our fuse holder that's in our loom. Then put the lid you removed on our fuse holder.



Cable tie the loom neatly.

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On LHS of the chassis brace above the spare wheel locate a grey connector. Cut off and crimp the blue inline barrel joiner onto it. Heat shrink it down.

(If your loom has come with the grey mating connector, please join together, don't cut off.)

Cable tie loom neatly all the way back to the engine bay.

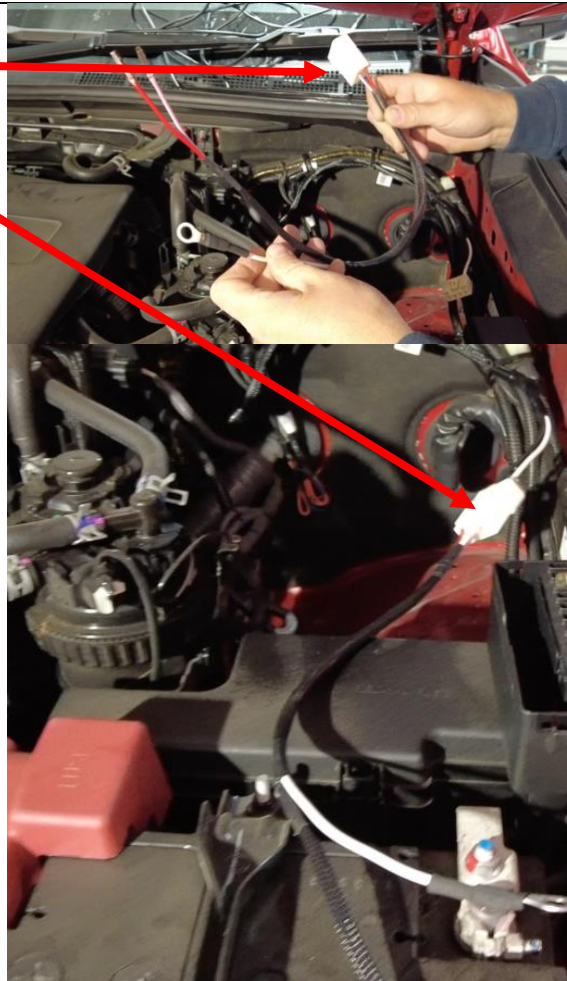


Under engine bay, cable tie short part of the loom white while connector as shown. Cut off excess on cable ties.



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Connect mating half of white connector to it.



Open Accessory fuse box under bonnet.

Firstly take the lid off, then Remove the fuse box from the mounting bracket by releasing the tabs on the back.



Feed the Red and Pink wires with terminals up into the fuse box

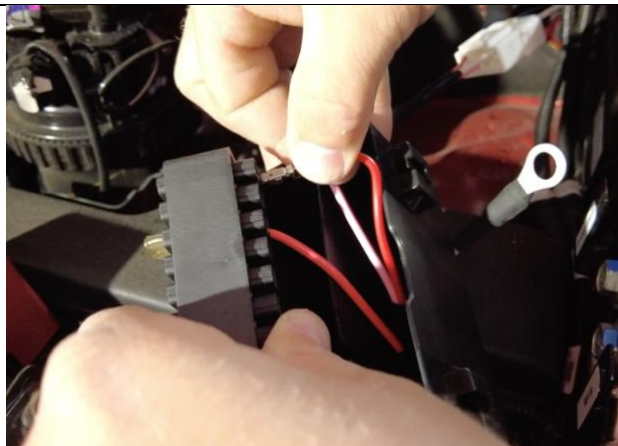


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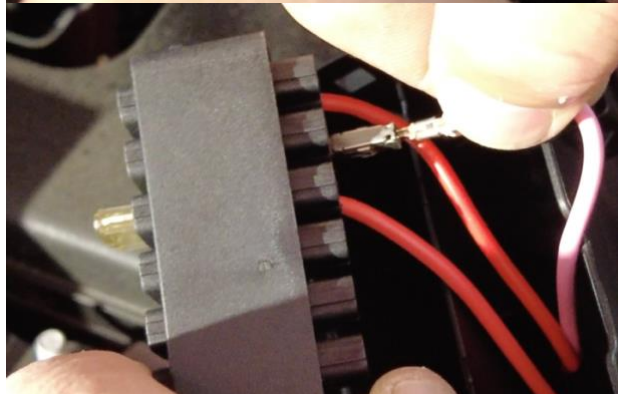
With a flat screw driver lever the fuse panel out from both ends.



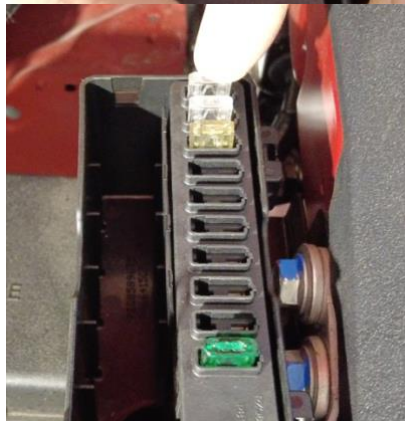
Insert the red pin (elec brakes) into the top position. Should hear a small click if inserted correctly.



Insert the pink (pin 2, 12v power) in the next one down.






Fit the fuse holder back into the block. And back onto the mounting brackets.



Fit the 25A fuses supplied

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<p>Fit the white wire with ring terminal to the negative battery terminal</p>	
<p>Cable tie White connector to the loom.</p>	
<p>Insert new label provided, into lid of fuse box, if any other accessories installed in your fuse box, feel free to write what they are in the empty fields.</p> <p>Put the lid back on the fuse box.</p>	

To test the wiring, press the Redarc Tow Pro knob once.
The knob should light up blue, then fade off.

Full Operation of the Redarc Tow Pro can only be correctly determined when a trailer with electric brakes connected. Use your Redarc manual to complete this test and complete the calibration.
If a suitable trailer is not available, you can apply an imitation load such as a globe type test light across trailer socket pins 5- service brakes and 3- earth.
The Redarc Tow Pro knob should light up Blue and begin to flash its calibration sequence.

Check output on the test light by,

1. Dialling up setting 5 or greater on Tow Pro knob.
2. Depressing vehicle brake pedal with ignition on.
3. Check the test light illuminates.
4. Press and hold on the Tow Pro knob to check the over-ride function.

Check the test light illuminates.