

### **Tow-Pro Wiring Kit**

# **Fitting Instructions**

Suitable for: Isuzu MU-X / D-Max

**Kit Part No: TPWKIT-006** 

**Accessory Kit** 

**Estimated Fitting Time: 120 Minutes** 



Kit Part No: TPWKIT-006

#### General Notes

- Read through the fitting instructions before installation of the accessory. Install the accessory following the fitting instructions. Failure to do so may cause damage to the vehicle or the accessory.
- Ensure all recyclable discarded vehicle accessory components are packaging are recycled following local recycling regulations.
- It is always recommended that this accessory is fitted by a qualified automotive technician.
- Safely store and protect any removed vehicle components.
- Ensure all bare metal surfaces are protected using automotive bare metal primer and touch-up paint, or suitable automotive rust inhibitor.
- Remove all metal swarf and dust from all vehicle surfaces if surface is used for accessory installation.

#### Safety Notes

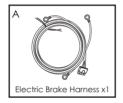
- Check that all work practices comply with safety standards.
- Please wear appropriate clothing and use safety equipment.

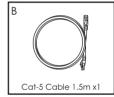


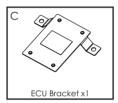


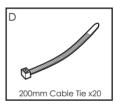


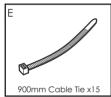
#### Parts Supplied

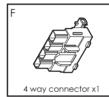


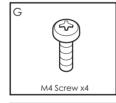


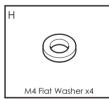




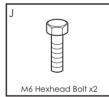




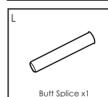




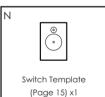












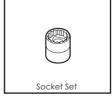


#### Tools Required



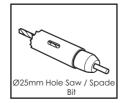




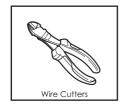
















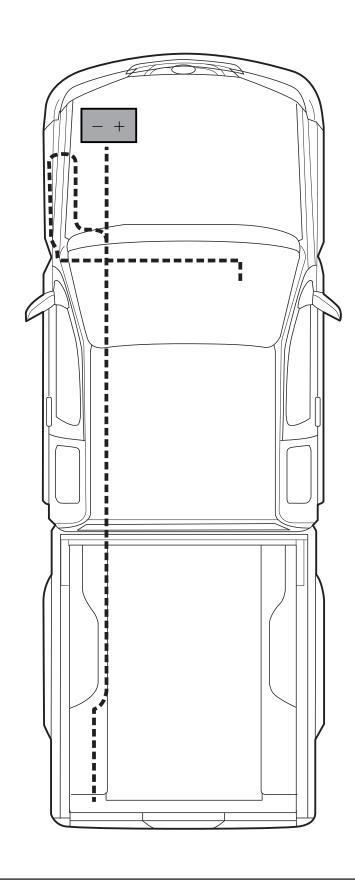


Issue: 3 Date: 15/08/2018



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#### – Wiring Diagram





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#### Step 1

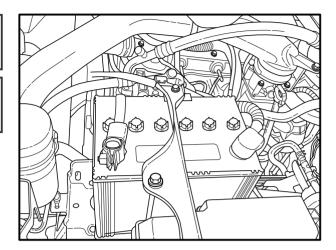


Always refer to the vehicle's Workshop Manual when removing vehicle components.



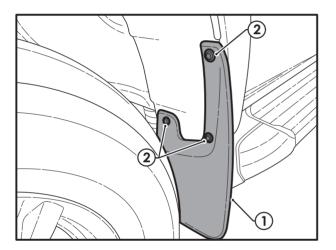
Note down all clock and radio settings.

• In the engine bay, disconnect the negative battery terminal.

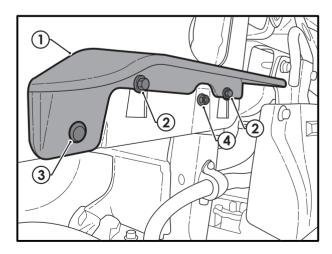


#### Step 2

- On the front passenger mud guard (1), remove the three bolts (2).
- Remove the mud guard (1).



- On the front lower rain shield (1), remove the two bolts (2), press clip (3) and nut (4).
- Remove the front lower rain shield (1).

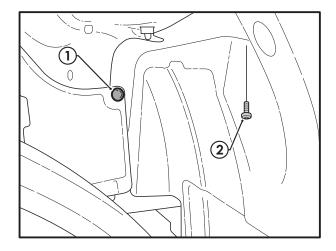




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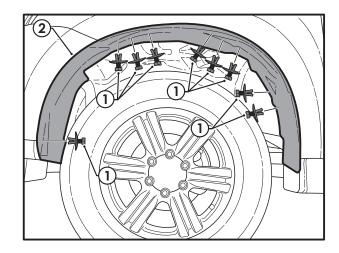
#### Step 4

- Remove the scrivet (1) from inner splash guard.
- Remove bolt (2) from wheel liner.



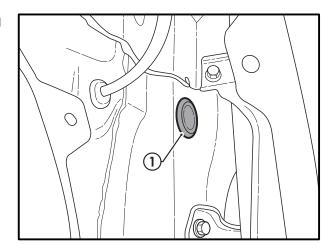
#### Step 5

- Remove the nine scrivets (1) from the wheel liner (2).
- Dislodge the wheel liner (2) and rest on tyre.



#### Step 6

• Locate and remove vehicle grommet (1) from behind the wheel liner

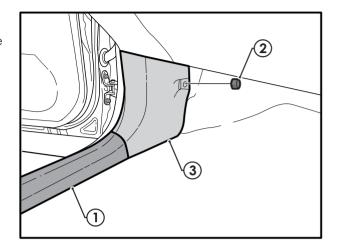




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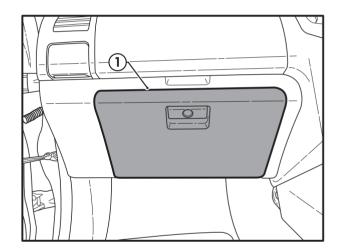
#### Step 7

- From inside the cabin, remove the front passenger scuff plate (1).
- Remove the passenger side kick panel fastener (2) before removing the passenger side kick panel (3).

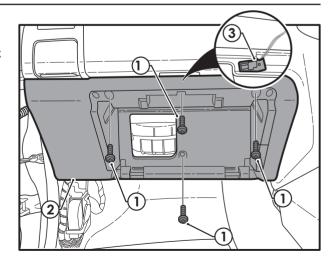


#### Step 8

• Remove the glovebox (1).



- Remove the four screws (1) from the glovebox surround (2).
- Dislodge the glovebox surround (2) and disconnect the glovebox light (3) by twisting clockwise if present.
- Remove the glovebox surround (2).

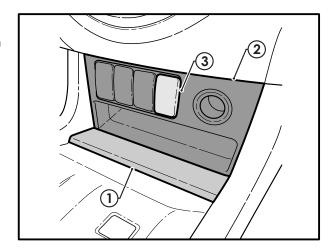




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#### Step 10

- Under the fan control unit, dislodge and remove the lower trim (1).
- Dislodge the accessory panel (2) and remove all connectors from behind before removing.
- Remove a suitable blanking cap (3) from the accessory panel (2).

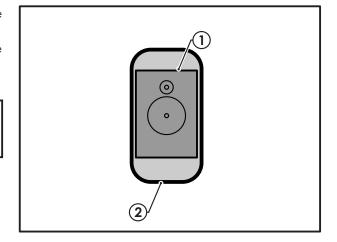


#### Step 11

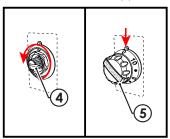
- Cut out and adhere the Switch Template (page 15) (1) to the centre of the previously removed blanking cap (2).
- Drill a Ø2mm pilot hole in the two marks on the Switch Template
   (1).
- Drill out the top hole to Ø3.5mm and the bottom hole to Ø10mm.

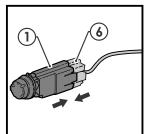


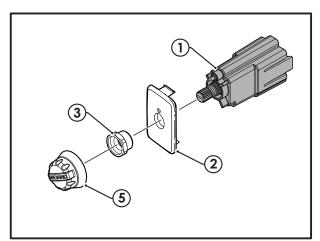
Ensure the large hole on the Switch Template (1) is adhered centrally on the blanking cap (2).



- Insert the Electric Brake Switch (1) into the blanking cap (2) from behind.
- Fasten the supplied Nut (3) locking the Electric Brake Switch (1) to the blanking cap (2). Torque the nut (3) to 0.8Nm.
- Rotate the shaft (4) fully anti-clockwise and fit the knob (5) to the shaft (4) with "0" pointing upwards as shown.
- Insert the Cat 5 Cable (6) supplied in the wiring kit, into the Electric Brake Switch (1).
- Route the Cat 5 Cable (6) through the accessory panel cavity and reassemble the accessory panel and lower trim.









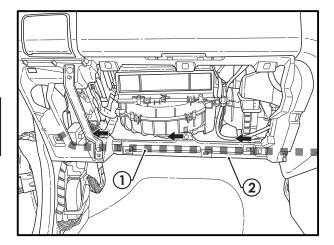
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#### Step 13

- Continue routing the Cat 5 Cable (1) towards the left side of the glovebox cavity.
- Secure the Cat 5 Cable (1) behind the base of the glovebox support (2) following the factory harness using the supplied Cable Ties.

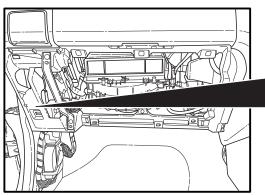


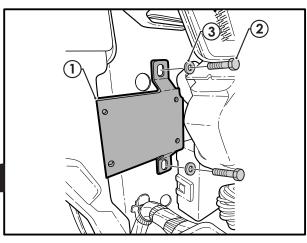
Ensure the Cat 5 Cable (1) is secured away from any moving parts or sharp edges.



#### Step 14

• Above the passenger kick panel area, secure the Brake Controller ECU Bracket (1) to the two existing vehicle chassis captive nuts using the supplied M6 Bolts (2), M6 Flat Washers (3).



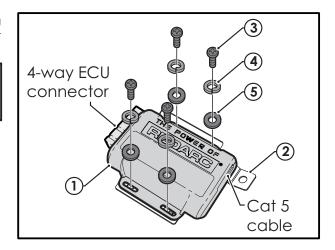


#### Step 15

 Secure the Brake Controller ECU (1) to the ECU bracket (2) using the supplied M4 Screws (3), M4 Spring Washers (4) and M4 Flat Washers (5).



Ensure the Cat 5 side of the Brake Controller ECU (1) is facing the ground.

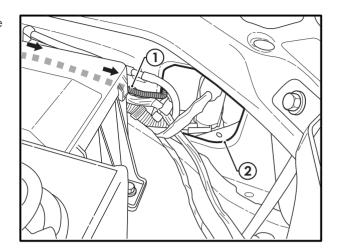




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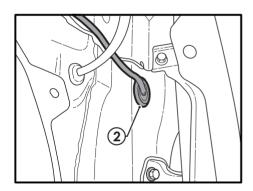
#### Step 16

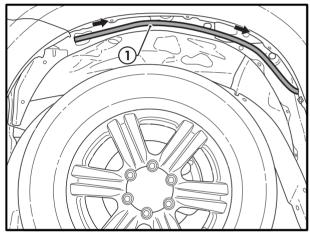
• In the engine bay, route the grommet branch of the Electric Brake Harness (1) through the washer bottle reservoir cavity (2).



#### Step 17

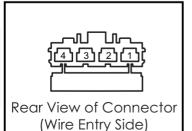
- Continue routing the Electric Brake Harness (1) along the wheel arch and through the grommet hole.
- Make sure the grommet (2) is seated correctly.
- Secure the Electric Brake Harness (1) using the supplied Cable Ties.

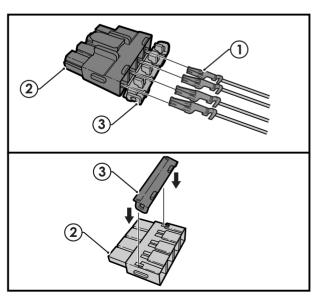




- Inside the vehicle, using the table below, house the terminals (1) from the Electric Brake Harness into the supplied 4-Way Connector (2), ensuring the terminals lock into the housing.
- Snap off the secondary lock (3) from behind the 4-Way Connector (2).
- Fit the secondary lock (3) to the underside of the 4-Way Connector (2).

Terminal	Wire Colour
1	Red
2	Blue
3	White
4	Black



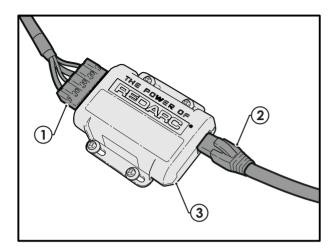




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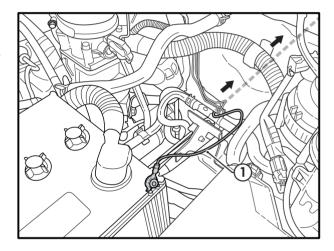
#### Step 19

• Connect the 4-Way Black Connector (1) and Cat 5 Cable (2) to the Brake Controller ECU (3).

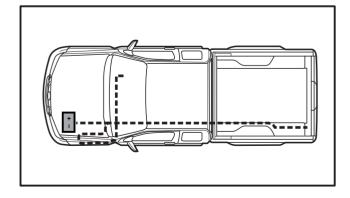


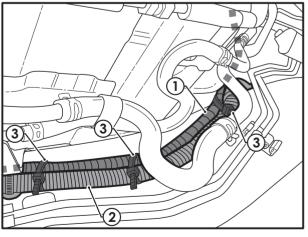
#### Step 20

- In the engine bay, route the secondary branch of the Electric Brake Harness (1) from the battery down the engine bay.
- Secure the Electric Brake Harness (1) using the supplied Cable Ties.



- Continue routing the Electric Brake Harness (1) along the left hand side chassis rail towards the rear of the vehicle following the existing vehicle harness (2).
- Using the supplied Cable Ties (3), secure the Electric Brake Harness (1) to the vehicle harness every 300mm.



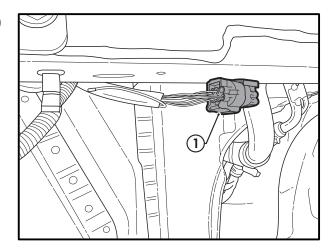




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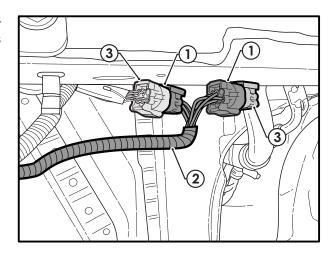
#### Step 22

 At the rear of the vehicle, disconnect the grey 8-way (1) connector on the trailer wiring harness.



#### Step 23

• Patch the grey 8-way connectors (1) from the Brake Controller Harness (2) into the trailer wiring harness grey 8-way connectors (3).



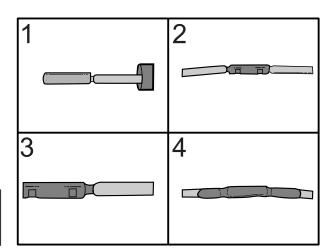
#### Step 24

- Locate the 'Blue' wire that is taped back on the trailer wiring harness near the 8-way connector.
- Locate the 'Blue' wire that is taped back on the Electric Brake Harness.
- Cut the brass ferrule off and strip the insulation back 10mm on both the 'Blue' wires.
- Slide the supplied Heatshrink over the wires before crimping both wires using the supplied Butt Splice with an indent type crimpers.
- Solder the wires to the butt splice. Ensure that a good connection is made.



Keep heatshrink away from joint until after soldering is complete and cooled.

 Wait for the butt splice to cool, slip heatshrink over the joint and heat.



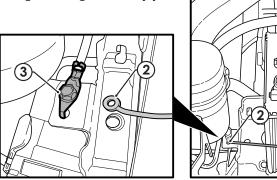


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#### Step 25

• Install the positive ring terminal (1) from the Electric Brake Harness to the vehicle positive battery terminal.

• Connect the Electric Brake Harness negative ring terminal (2) to the vehicle earth point (3).



#### Step 26

- Re-connect the negative battery terminal.
- Test the operation of the Tow-Pro system as per the Tow-Pro user manual.
- Dispose of any parts not used from the fitment.



Secure all harnesses to the vehicle using cable ties. Refit all removed parts and secure all fasteners to the Service Manual torque specifications.



Reprogram all radio stations and clock settings by referring to the vehicle's Owner's Manual.



Please place the Fitting Instructions and Owner's Manual in the glovebox after installation is completed.

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#### TWO YEAR PRODUCT WARRANTY



Over the last three decades our company has established a reputation as the power conversion specialist.

A 100% Australian-owned company, we have met the needs of customers in transport and other industries through exciting, innovative thinking.

We believe in total customer satisfaction and practice this by offering our customers:

- Technical advice free of jargon and free of charge
- Prompt turnaround of orders throughout Australia and globally
- Friendly, personalised, professional service and product support

In the unlikely event that a technical issue arises with a Redarc product, customers are encouraged to initially contact the Redarc Technical Support Team on (08) 8322 4848 or power@redarc.com.au for prompt and efficient diagnosis and product support.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

The benefits of this Warranty are in addition to other rights and remedies available at law in respect of the Products and shall not derogate from any applicable mandatory statutory provisions or rights under the Australian Consumer Law.

Redarc Electronics Pty Ltd atf the Redarc Trust trading as Redarc Electronics ("Redarc") offers a warranty in respect of its Products where the Products are purchased from an authorised distributor or reseller of Redarc by a person ("Purchaser"), on the terms and conditions, and for the duration, outlined below in this document ("Warranty").

- In this Warranty, the term Products means:
  - 1.1 all products manufactured or supplied by Redarc (excluding its solar products which are covered by Redarc's Solar Product Warranty); and
  - any component of or accessory for any product in clause 1.1 manufactured or supplied by Redarc.

#### Offer and duration of product warranties

- Redarc warrants that its Products will be free, under normal application, installation. use and service conditions, from defects in materials and workmanship affecting normal use, for 2 years from the date of purchase (Warranty Period ).
- Where a Product malfunctions or becomes inoperative during the Warranty Period, due to a defect in materials or workmanship, as determined by Redarc, then subject to further rights conferred by the Australian Consumer Law on the Purchaser, Redarc will, in exercise of its sole discretion, either:
  - 3.1 repair the defective Product;
  - 3.2 replace the defective Product; or
  - 3.3 provide a refund to the Purchaser for the purchase price paid for the defective Product,

without charge to the Purchaser.

- The warranty given by Redarc in clause 3 covers the reasonable costs of delivery and installation of any repaired or replaced Products or components of Products to the Purchaser's usual residential address notified to Redarc, together with the reasonable costs of removal and return of any Products determined by Redarc to be
- If the Purchaser incurs expenses of the nature referred to in clause 4 in the context of making a claim pursuant to this Warranty that is accepted by Redarc, the Purchaser will be entitled to claim for reimbursement of those expenses which Redarc determines, in exercise of its sole discretion, to be reasonably incurred, provided that the claim is notified to Redarc in writing at the postal address or email address specified in clause 21 and includes:
  - details of the relevant expenses incurred by the Purchaser; and
  - 5.2 proof of the relevant expenses having been incurred by the Purchaser.

#### **Exclusions and limitations**

- This Warranty will not apply to, or include any defect, damage, fault, failure or malfunction of a Product, which Redarc determines, in exercise of its sole discretion, to be due to:
  - 6.1 normal wear and tear or exposure to weather conditions over time;
  - 6.2 accident, misuse, abuse, negligence, vandalism, alteration or modification;6.3 non-observance of any of the instructions supplied by Redarc, including
  - instructions concerning installation, configuring, connecting, commissioning, use or application of the Product, including without limitation choice of location; failure to ensure proper maintenance of the Product strictly in accordance with Redarc's instructions or failure to ensure proper maintenance of any associated
  - equipment or machinery
  - repairs to the Product that are not strictly in accordance with Redarc's instructions:
  - installation, repairs or maintenance of the Product by, or under the supervision of, a person who is not a qualified auto electrician or technician, or if nongenuine or non-approved parts have been fitted;
  - faulty power supply, power failure, electrical spikes or surges, lightning, flood, storm, hail, extreme heat, fire or other occurrence outside the control of Redarc
  - use other than for any reasonable purpose for which the Product was manufactured:
  - any indirect or incidental damage of whatever nature outside the control of
- Warranty claims in respect of a Product must be made in writing to Redarc at the postal address or email address specified in clause 21 within the Warranty Period. Such claims must include the following:
  - details of the alleged defect or fault and the circumstances surrounding the defect or fault:
  - evidence of the claim, including photographs of the Product (where the subject of the claim is capable of being photographed); the serial number of the Product, specified on the label affixed to the Product;
  - 7.3 and proof of purchase documentation for the Product from an authorised distributor
  - or reseller of Redarc, which clearly shows the date and place of purchase. The return of any Products without the prior written instructions of Redarc will not be accepted by Redarc.

- Without limiting any other clause in this Warranty, Redarc has the right to reject any Warranty claim made by a Purchaser pursuant to this Warranty where:
  - 8.1 the Purchaser does not notify Redarc in writing of a Warranty claim within the Warranty Period:
  - 8.2 the Purchaser does not notify Redarc in writing of a Warranty claim within 1 month of becoming aware of the relevant circumstances giving rise to the claim, so that any further problems with the Product are minimised;
    8.3 the serial number of the Product has been altered, removed or made illegible
  - without the written authority of Redarc;
  - 8.4 the Purchaser is unable to provide proof of purchase documentation in accordance with clause 7.4 or evidence that the Product was properly installed and removed (if relevant), and that proper maintenance has been performed on the Product, by, or under the supervision of, a qualified auto electrician or technician, in accordance with the instructions of Redarc.
- If the Product is found to be working satisfactorily on return to Redarc or upon investigation by Redarc, the Purchaser must pay Redarc's reasonable costs of testing and investigating the Product in addition to shipping and transportation charges. Where Redarc is in possession of the Product, the Product will be returned to the Purchaser on receipt of the amount charged.

  Any replaced Products or components of Products shall become the property of
- 11. Redarc may, in exercise of its sole discretion, deliver another type of Product or component of a Product (different in size, colour, shape, weight, brand and/or other specifications) in fulfilling its obligations under this Warranty, in the event that Redarc has discontinued manufacturing or supplying the relevant Product or component at the time of the Warranty claim, or where such Product or component is superior to that originally purchased by the Purchaser.

#### Other conditions of Warranty

- If the Purchaser acquired a Product for the purpose of resupply, then this Warranty shall not apply to that Product.
- In particular, the sale of a Product via an online auction, online store or other internet website by a party that is not an authorised distributor or reseller of the Product will be deemed to be a resupply within the meaning of the Australian Consumer Law and will render this Warranty void, as Redarc has no control over the storage, handling, quality or safety of Products sold by such persons
- A Purchaser shall only be entitled to the benefit of this Warranty after all amounts owing in respect of the Product have been paid.
- 15. While Redarc warrants that the Products will be free from defects in materials and workmanship in the circumstances set out in this Warranty, to the maximum extent permitted by law Redarc does not warrant that the operation of the Products will be uninterrupted or error-free.
- To the maximum extent permitted by law, Redarc's determination of the existence of any defect and the cause of any defect will be conclusive
- Spare parts or materials for the Products are guaranteed to be available for a period of at least 2 years after purchase of the Products.
- The agents, officers and employees of any distributor or reseller of the Products and of Redarc are not authorised to vary or extend the terms of this Warranty.
- Redarc shall not be responsible or liable to the Customer or any third party in connection with any non-performance or delay in performance of any terms and conditions of this Warranty, due to acts of God, war, riots, strikes, warlike conditions, plague or other epidemic, fire, flood, blizzard, hurricane, changes of public policies, terrorism and other events which are beyond the control of Redarc. In such circumstances, Redarc may suspend performance of this Warranty without liability for the period of the delay reasonably attributable to such causes. If a clause or part of a clause in this Warranty can be read in a way that makes it
- illegal, unenforceable or invalid, but can also be read in a way that makes it legal enforceable and valid, it must be read in the latter way. If any clause or part of a clause in this Warranty is illegal, unenforceable or invalid, that clause or part is to be treated as removed from this Warranty, but the rest of this Warranty is not affected.

#### Redarc's contact details

21. Redarc's contact details for the sending of Warranty claims under this Warranty are:

Redarc Electronics Ptv Ltd

23 Brodie Road (North), Lonsdale SA 5160

Email: power@redarc.com.au Telephone: +61 8 8322 4848



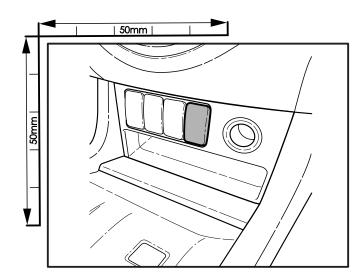
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#### - Template





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