

TWO YEAR WARRANTY

REDARC Electronics warrants to the original purchaser that the product(s) on the reverse side of this sheet ("Product") will be free, under normal use and maintenance, from defects in material and workmanship for a period of TWO YEARS from the date of purchase, subject to the conditions shown below.

1. Warranty

Unless otherwise stated in this warranty, Redarc Electronics will at its sole discretion either replace or repair any of the Product that is defective in material or workmanship within the abovementioned period without charge to the original purchaser.

2. Other Warranty

Subject to any terms implied by law, this warranty contains the whole of the Redarc Electronics' obligations and any distributor and the agents, officers and employees of such distributor and of Redarc Electronics are not authorised to vary or extend the terms of the warranty. The benefits conferred by this warranty are in addition to the conditions and warranties implied by applicable legislation conferring rights upon consumers, which apply only to the extent to which they may not by law be excluded.

3. Exclusions

This warranty shall not apply to, or include, any of the following:

- 3.1 Any defect or failure due to accident, misuse, abuse, movement of the Product to a new site, negligence, non-observance of any of the instructions supplied with the Product including the instructions on the reverse side of this sheet ("Operating Instructions") or local regulations on the part of any user, choice of location, improper installation, configuration or connection, or faulty power supply.
- 3.2 If the Product is installed, repaired or serviced by a person who is not a qualified auto electrician or electronics technician, or if non-approved parts have been fitted.
- 3.3 Failure to obtain proper maintenance for the Product or any associated equipment or machinery.
- 3.4 Failure to pay for the products in full or comply with Redarc Electronics' Trading Terms.
- 3.5 If the Product is used other than for any reasonable purpose for which it was manufactured, or is used in a way not specified by Redarc Electronics.
- 3.6 If the original purchaser sells, leases or otherwise parts with possession of the Product.
- 3.7 Deterioration due to normal use and exposure, including abnormal environmental conditions such as lightning strike, flood and extreme heat.
- 3.8 Any freight, packing and insurance expenses relating to transportation of the Product.
- 3.9 Any expenses relating to installation and/or removal of the Product.
- 3.10 Any damage, indirect or incidental, of whatever nature.

4. Limitations

- 4.1 Redarc Electronics is not liable for any consequential, indirect or accidental loss or damage or for any service not expressly provided herein (including without limitation liability for any loss or damage caused by a fault in the Product or its external wiring connections) and the liability of Redarc Electronics under this warranty is limited to the repair or replacement of defective material or workmanship by a qualified auto electrician or electronics technician, provided such person and work is approved by Redarc prior to commencement. Subject to **clause 2**, Redarc Electronics is hereby excluded to the maximum extent permitted by law from all other liability in respect of the Product.
- 4.2 While Redarc Electronics warrants, where applicable, that the Product is free from defects in materials and workmanship under normal use at the time of delivery, Redarc Electronics does not warrant that the Product will meet any user specific requirements or that the operation of the Product will be uninterrupted or error-free.

5. Owner's Responsibilities

- 5.1 Maintenance of the Product and associated equipment and/or machinery is the responsibility of the owner. The owner must retain evidence that proper maintenance has been performed on the Product by Redarc Electronics or a qualified auto electrician or electronics technician. Claims made during the warranty term will not be accepted if resulting from lack of maintenance rather than faulty material or workmanship.
- 5.2 The owner must operate the Product in accordance with all of the Operating Instructions.
- 5.3 Upon discovery of a fault the owner must return the Product to the distributor with full details of the nature of the fault. Removal of the Product must be done by a qualified auto electrician or electronics technician to ensure that the warranty remains valid. A written report describing the circumstances of failure must accompany the returned Product with proof of purchase which clearly shows the date of such purchase by the original purchaser.
- 5.4 If the Product is found to be working satisfactorily on return to Redarc Electronics a reasonable charge will be made for the cost of testing, packing and freight. The Product will be returned on receipt of the amount charged.

FREE TECHNICAL ASSISTANCE

REDARC

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BREAKSAFE SERIES 6000 AND 6000XP

Electric Brake Break-away system

The Break-Safe Break-Away system is designed to apply the **trailer brakes** and **brake lights** if the trailer or caravan is accidentally separated from the tow vehicle. The system has a built in battery that can be charged from the tow vehicle's auxiliary line or by a battery charger. The easy to operate test button is used to indicate the level of charge in the battery. This should be checked before the trailer is towed. Please ensure that you select the correct model for your requirements

Series 6000 to suit 2 and 4 wheel trailer brakes.
Series 6000XP to suit 2,4 and 6 wheel trailer brakes.

WARNING

The Break-Safe should be mounted **internally** but can be mounted externally if necessary although the Break-Safe is **not waterproof** and should have a **rain** and **splash** cover if it is mounted externally. The mounted position of the Break-Safe should be determined by the installer in conjunction with the vehicle owner's preference. When mounting inside the trailer or caravan, choose a position where air can circulate around the box. Do not position the box where articles can be stored against it as they may activate the test button.

TEST BUTTON

Use the test button to test the condition of the built-in battery. This should be checked each time the trailer is used. Depress the button momentarily and check the battery level lights. **The test button will also energise the trailer brakes and brake lights.**



RM6000 Remote Monitor
(optional)



BA6000 Break-Safe 6000

GREEN - Battery normal.
RED - Battery low (charge before use).
NO LIGHT - Battery flat, charge before use or replace battery.

CHARGING

Charging of the Break-Safe battery can be done via the tow vehicle auxiliary line (Break-Safe black wire) or by connecting a small battery charger (8 amps maximum) to the red and black terminals on the front of the Break-Safe box. The orange charge light next to the red terminal will illuminate when the Break-Safe battery is connected to 12 volts for charging. The charging system in the Break-Safe unit is a **trickle charge circuit** only and it may take several hours for the battery to fully recharge.

All Break-Safe wires must be connected for correct operation of Break-Safe unit

WIRING

BLACK 12 volt tow vehicle auxiliary line
RED Stop light circuit
WHITE Earth return from trailer brakes
BLUE Positive supply to trailer brakes
ORANGE Both wires to Break-Away switch

Caravans and horse floats
mount battery box internally.

Mount Break-Away switch here.



Trailers, mount unit on side. Break-Safe is not waterproof. Fit rain and splash cover.

FREE TECHNICAL ASSISTANCE, contact Redarc Electronics
Ph (08) 8322 4848, Fax (08) 8387 2889
or Email power@redarc.com.au
Specifications are subject to change without notification.

TESTING

Disconnect the trailer plug from the tow vehicle. Pull the Break-Away pin from the breakaway switch attached to the A frame. The electric brakes and brake lights of the trailer should immediately activate and the battery level light should illuminate. The brakes will release when the pin is replaced in the switch.

PARKING YOUR TRAILER

When parking your trailer, it is necessary to replace the plastic plunger into the BA Switch after the vehicle has been disconnected from the trailer. Removing the plastic plunger from the BA Switch will activate the trailer brakes, and as such will eventually flatten the Break-Safe battery.

NOTE

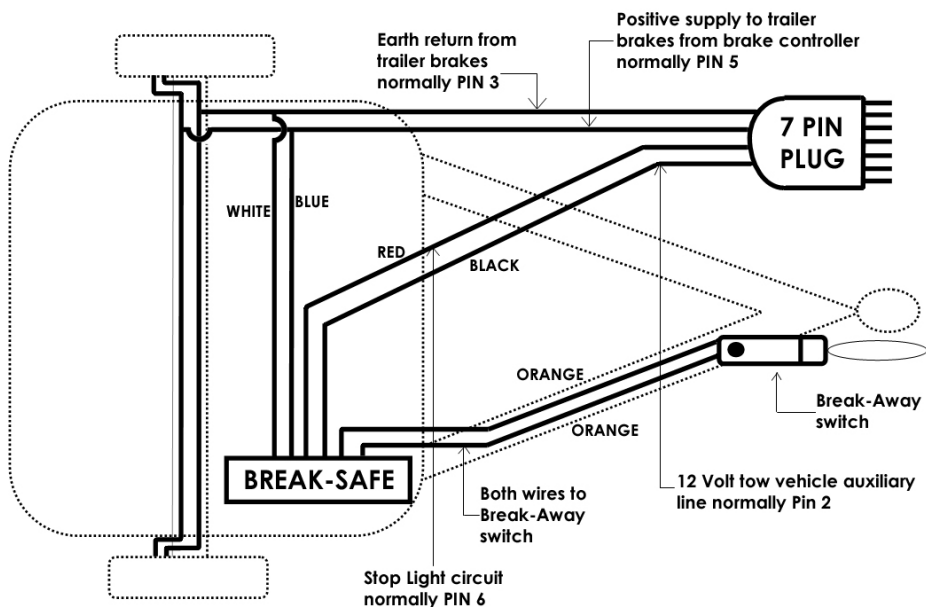
Attach the Break-Away cable to the rear of the tow vehicle using a secure anchor point. Do not hook cable to tow ball or safety chain anchor.

FUSING

The Break-Safe unit is protected by two internal fuses. If the unit fails to operate, please check the fuses first. Care must be taken when opening the unit. Replacement fuses are as follows:

- Electric Brake Fuse - To Suit Series 6000 2 & 4 Wheel Electric Brakes - 20amp
- To Suit Series 6000 XP 6 Wheel Electric Brakes - 25amp
- Brake Light Fuse - To Suit All Models - 15amp

WIRING DIAGRAM



TROUBLESHOOTING

Charge light NOT ON when the trailer is connected with the tow vehicle.	Check to vehicle's auxiliary line. The red and black terminals on the front of the Break-Safe unit should be live when auxiliary power is connected and the brakes are applied.
BUZZING NOISE from Break-Safe when the test button is pressed or the Break-Away pin is pulled.	Battery is dead flat or there is a short circuit in the trailer's electric brakes which has blown the Break-Safe's internal fuse. Charge battery and check internal fuses and replace as necessary.
Electric brakes &/or brake lights do not activate when test button is pressed or Break-Away pin is pulled.	Check battery level and check internal fuses.
Battery level test lights remain ON.	Break-Away pin not fully inserted in Break-Away switch.

BREAK-SAFE REMOTE MONITOR

Part no.: RM6000

To suit Break-Safe 6000 & 6000XP Break-Away kits only.



The new RM6000 remote monitor provides the only accurate way to monitor the breakaway battery condition, and will give an audible and visual signal if the battery condition falls below the acceptable levels (using a volt meter to monitor the Break-Safe battery is **dangerous**, as it will not give a true indication of the battery condition). The new RM6000 remote monitor operates each time the brake pedal in the tow vehicle is pressed. The additional circuitry in the Break-Safe 6000 & 6000XP disconnects the Break-Safe battery from the charge wire and then connects it to a small electronic load. Should the Break-Safe battery be good, a green light will illuminate on the front panel of the RM6000. If the battery is below the safe level, a red light will flash and a buzzer will sound for about 10 seconds.

NOTE: The RM6000 should be disconnected from the RED charging terminal if a charger is connected.

FITTING INSTRUCTIONS

Mount the remote monitor to the tow vehicle dashboard (using the u bracket or the sticky tabs provided) in a position where the front panel of the remote monitor is visible to the driver in the normal driving position. Connect the negative terminal of the remote monitor to a good earth. Fit a wire to the sensor terminal of the remote monitor and run the wire through the vehicle and trailer plug (a 12 pin plug may be required) to the red positive charge terminal of the Break-Safe unit.

Note: a 12 volt auxiliary wire must be fitted to the tow vehicle for charging the Break-Safe internal battery and for correct operation of the RM6000 remote monitor. If an auxiliary is fitted, the orange charge light next to the red terminal on the Break-Safe will illuminate.

TESTING

After installation is complete, connect the trailer plug to the tow vehicle. Sit in the driver's seat and turn the ignition of the tow vehicle on. Press the brake pedal. A green light should illuminate on the front panel of the remote monitor.

BREAK-AWAY SWITCH

Also available for separate purchase is the **BASWITCH**. If ever your current Break-Away switch needs replacement, you can purchase a new switch separate from the Break-Safe unit.

