

TRAILSAFE INSTALL GUIDE

Australian Design Rule mandates that all trailers having a gross trailer mass over 2,000 kg should utilise a break-away safety system on all wheels. Emergency braking system must also be capable of automatically activating should the trailer become detached from the tow vehicle. In such a situation the brakes must remain active for a minimum of 15 minutes.

TrailSafe is a highly effective break-away safety system designed to activate the electric brakes of a trailer or a caravan in the event of a disconnection from the towing vehicle. TrailSafe takes convenience a step further by utilising the trailer's house battery to power the brakes in a break-away situation. This means there is no need to maintain a second battery in your trailer throughout the year.

1. CONSIDERATIONS

The TrailSafe should only be installed by a trained auto electrician.

2. LOCATION

The TrailSafe must be installed on the right-hand side of the trailer's drawbar, about 300mm / 12" from the tow ball hitch.

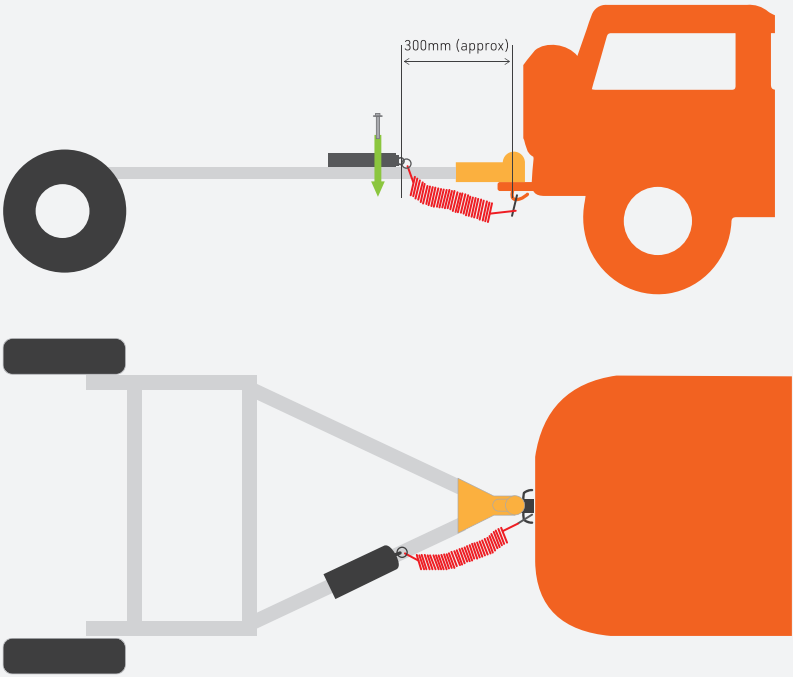
3. MOUNTING

Mount the TrailSafe horizontally on top or the side of the drawbar. The wires must point towards the rear of the trailer (away from the tow vehicle). The pull pin must face the tow vehicle.

Secure tightly to prevent it from vibrating loose.

Do not tighten the mounting screw to a torque higher than 30Nm.

Attach the other end of the pull pin cord to the towing vehicle using a D-shackle or similar.



4. WIRING

A 30A fuse must be placed near the trailer battery on the black/red wire. Failure to install the fuse may cause serious damage.

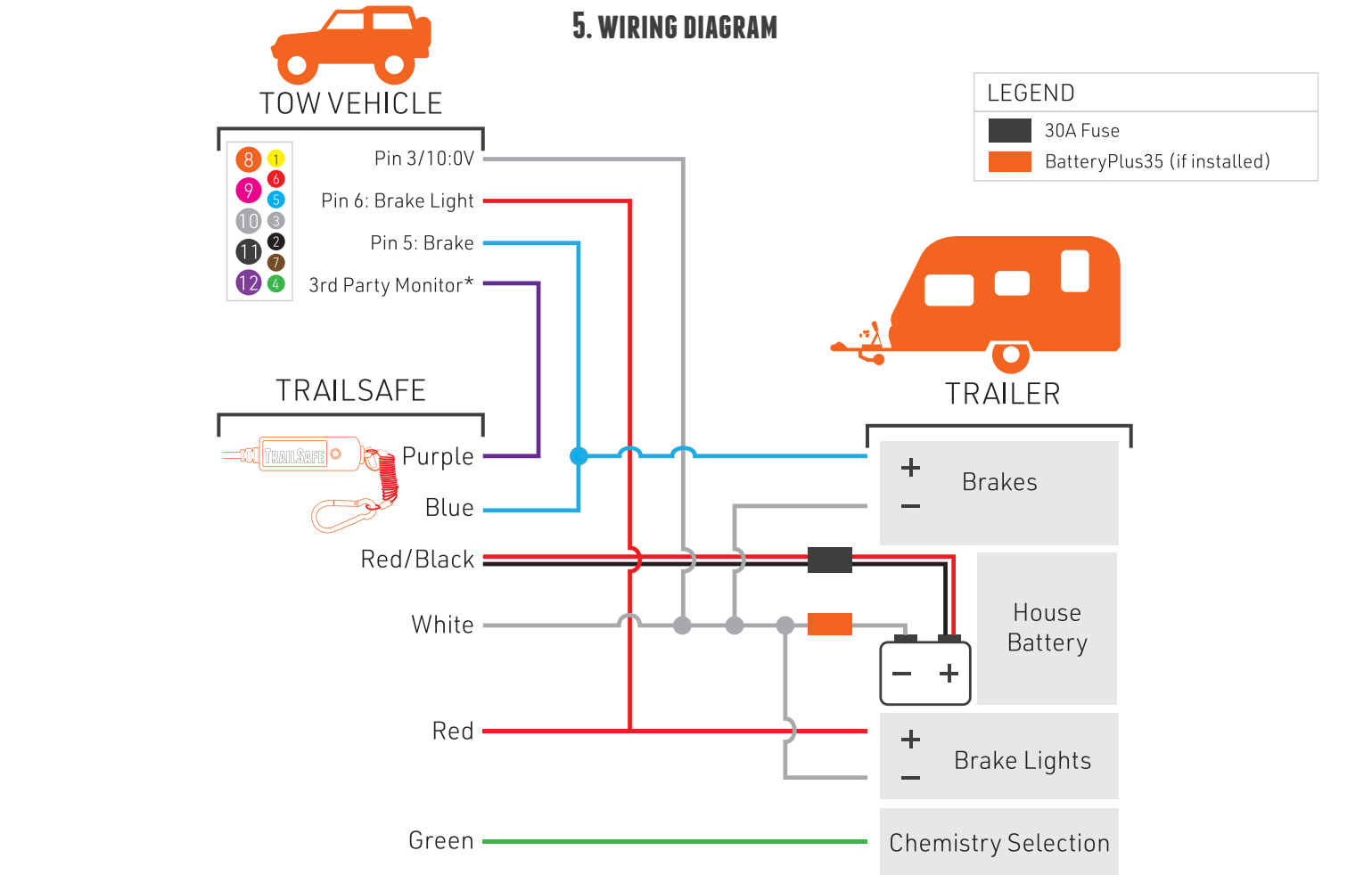
If a BatteryPlus35/J35 is installed, all negatives must pass through the BatteryPlus35/J35 before connecting to the house battery.

If a BC300 installed, all negatives must pass through the BatteryPlus35/J35, and then the BC300 before connecting to the house battery.

The negative wires of the brakes and brake lights from the trailer must be wired directly to either a negative output connection of a BatteryPlus35/J35, a non-battery side of a negative side shunt, or directly to the battery negative.

The house battery must have a charging source.







WIRE	CONNECTION
RED (14AWG / 2.5mm ²)	Connect to the positive of the brake lights.
BLUE (12 AWG / 4mm ²)	Connect to the positive of the brakes.
PURPLE (14 AWG / 2.5mm ²)	Connect to a remote voltage monitor.
WHITE (14 AWG / 2.5mm ²)	Connect to the negative of the house battery.
BLACK/RED (12AWG / 4mm ²)	Connect to the positive of the house battery (30A fuse required).
GREEN (20AWG / 0.5mm ²)	If using LiFePO4: connect to the positive terminal of the house battery. If using lead-acid: connect to the negative terminal of the house battery.










6. CALIBRATION

- To calibrate the TrailSafe:
1. Ensure the TrailSafe pull pin is in place.
 2. Power up the TrailSafe. The LED will be a continuous flashing PURPLE for up to 5 minutes.
 3. Once the LED is a solid PURPLE, pull the safety pin out. The LED will change to a continuous flashing PURPLE for up to 1 minutes.
 4. Once the LED is a solid PURPLE again, put the pull pin back in. The LED will display a status indicator.

7. LED STATUS INDICATORS

State	Status	Condition	Solution
Standby mode		The TrailSafe is in standby as no brake activity has been detected for 1 minute. The colour will change depending on the charge state of the battery.	
Brake pedal depressed	 For 1 minute	The colour will change depending on the charge state of the battery.	
Pin out		A trailer breakaway has occurred. The colour will change depending on the charge state of the battery.	
		There is a TrailSafe breakaway switch fault. The LED will flash both orange and red.	Do not use unit. Replace the unit.
Battery flat	 Always on	The battery is flat.	Charge or replace the house battery.
Other		The TrailSafe is in standby, or there is no power, or the voltage is less than: <ul style="list-style-type: none">10.5V for lead-acid batteries11.5V for Lithium batteries	If necessary, check the TrailSafe by depressing the brake.

LED STATUS KEY	
	Continuous Flash
	Blink Every Few Secs
	Solid Colour
	No Light

COLOUR	CONDITION
	The house battery capacity is sufficient for 15 minutes of emergency braking operation.
	The house battery may have insufficient capacity for 15 minutes of emergency braking operation. Check the battery to ensure at least 10Ah of house battery capacity is available.
	The house battery is not detected or there is insufficient capacity for 15 minutes of emergency braking operation. Charge or replace the house battery.



MANUAL



DATASHEET



PRODUCT PAGE