

Tow Secure

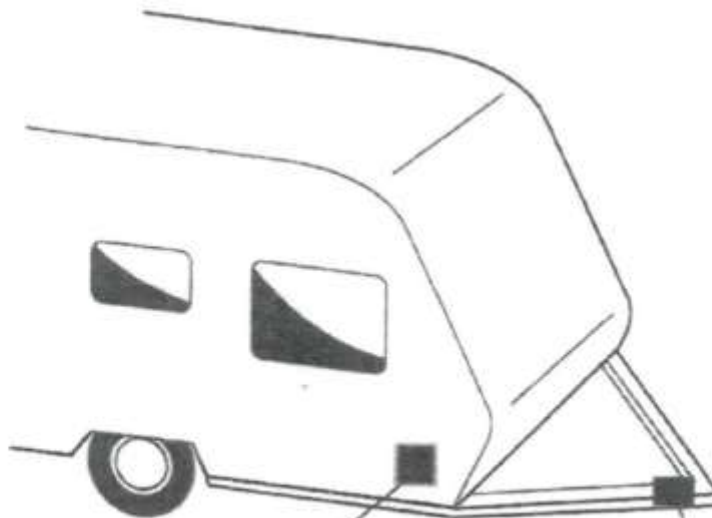
Installation Instructions

Once fully installed, please refer to the Operating Instructions for testing and how to operate the unit.

The system uses an internal battery (with in-line fuses) as its power source for the control module. Please ensure the internal battery is connected to the control module only after the installation is complete.

Installation of Breakaway switch

Mount the breakaway switch on the A-frame of the trailer as close to the front of the trailer as possible.



MOUNT CONTROL MODULE
INTERNALLY IN DRY AREA.

MOUNT BREAKAWAY SWITCH AS
CLOSE AS POSSIBLE TO THE FRONT.

Installation of Control Module

The tow secure control module should be mounted in a dry location. If the unit can only be mounted externally in a wet location, then the module needs to be protected with a rain cover.

Please note the control module is not waterproof. Water damage is not covered by warranty.

Wiring Schematic:

6 Pin Connector:

Black	+ve 12V input from tow vehicle ignition
White	Ground
Red	+ve 12V output to stop lights
Blue	+ve 12V output to trailer brakes
Orange (*2)	To breakaway switch

TOW SECURE BREAK-AWAY SYSTEM

Operating Instructions

The Tow Secure Breakaway system P/N. **TS1500** will automatically apply the Caravan Brakes and Caravan stop lights in the unlikely event that the Caravan accidentally separates from the Tow Vehicle.

The Tow Secure Breakaway system consists of the following parts:

- | | |
|---------------------------------|------------------|
| 1. Tow Secure Control Module | Part No. CM1500 |
| 2. Tow Secure Wireless Receiver | Part No. RX1500 |
| 3. Tow Secure Switch | Part No. SW1500 |
| 4. Tow Secure Hardware Kit | Part No. HW1500 |
| 5. Tow Secure Charger | Part No. CHR1500 |

Tow Secure Control Module

Make sure that the control module is always accessible, so that the Test button is able to be pressed to perform Manual Test.

As the TS1500 control module is not waterproof it is strongly recommended that the module is mounted internally or if fitted externally it **must** be mounted inside a waterproof housing.

It is also important to make sure that the correct location is chosen for mounting the control module, making sure that no loose objects can accidentally activate the TEST button.

The TS1500 system uses an internal battery as its power source for the control module. Ensure that the internal battery is kept charged when the caravan is not in use by connecting the supplied charger to AC power.

Tow Secure Wireless Receiver

The Tow Secure Wireless Receiver must be mounted inside the Tow Vehicle and must be clearly visible to the driver.

The Wireless Receiver is powered via the Cigarette lighter plug and the Break Away LED is illuminated to indicate that power has been applied.

Tow Secure Switch

The Tow Secure Switch is mounted on the A frame of the Caravan.

Care must be taken at all times not to place heavy or sharp items on top of the switch, if the switch or the wiring is damaged, the switch must be replaced.

Automatic Self-Test

The Tow Secure breakaway system will automatically perform a self-test (every time the Tow Vehicle engine is started) and report to the Wireless Receiver the condition of the system and the condition of the internal battery.

If, when the tow vehicle engine is started,

1. **Everything is OK.**
The Wireless Receiver will emit 5 quick audible chirps.
2. **A problem is detected with the Switch.**
The Wireless Receiver will emit an audible sound and the Break Away LED on the Wireless Receiver will flash.
3. **A low battery condition is detected.**
The Wireless Receiver will emit an audible sound and the "Low Battery" LED on the Wireless Receiver will flash.
While towing, the Tow Secure Breakaway system, will (every 30 minutes) perform a self-test. If the system detects a low battery condition, the Wireless Receiver will emit an audible sound and the "Low Battery" LED on the Wireless Receiver will flash.

Manual Test

Disconnect the Caravan plug from the Tow Vehicle before carrying out the Manual Test. Manual test must be carried out before commencing each journey.

Pull the pin out of the Switch and make sure that:

1. The Caravan brakes are applied
2. The Caravan rear stop lights turn ON
3. Audible sound and the Break Away LED flashes on the Wireless Receiver.

Reinstate the pin on the Switch and make sure that:

1. The Caravan brakes disengage
2. The Caravan rear stop lights turn OFF.
3. The Audible sound from the Wireless Receiver turns OFF and the Break Away LED stops flashing and turns ON solid.

Momentarily push the “Press To Test” button once on the Control Module to test battery condition.

1. The “Test OK” LED and the “Battery Normal” LED will turn ON to confirm that all is OK and the Wireless Receiver will emit 5 quick audible chirps.
When the “Press to Test” Button is released the “Test OK” LED will turn OFF and within 5 seconds the “Battery Normal” LED will also turn OFF
2. If the system detects a problem with the Tow Secure Switch” the Wireless Receiver will emit an audible sound and the Break Away LED will flash.
3. If the system detects a low battery condition, the Wireless Receiver will emit an audible sound and the “Low Battery” LED will flash.

Momentarily push the “Press To Test” button three times on the Control Module to energise the Brakes and turn ON the rear stop lights

Momentary push the “Press To Test” button on the control module three times within 5 seconds, on the third press maintain the button pressed, while the button is maintained the brakes will energise and the rear stop light will turn On, when the button is released the brakes will disengage and the rear stop lights will turn OFF.

Pairing up New Wireless Receiver to the Tow Secure Breakaway system.

If a new or extra receiver is required follow the procedure below to pair up new Wireless Receivers to the Control module:

1. Power up the new Wireless Receiver.
2. Press and hold the test button on the Control Module for 20 seconds.
3. When pairing is successful the “Low Battery” LED on the new Wireless Receiver will turn ON Constantly for 5 seconds
4. Release the Test Button and the “Low battery” LED on the wireless receiver will turn OFF.
The control module and the Wireless receiver are now paired together.