

## **Tow-Pro Technical Bulletin**

**Electric / Hydraulic Braking Systems** 

Since the release of the Tow-Pro in June, our technical support staff have become aware of several technical challenges with using the Tow-Pro on the various Electric / Hydraulic systems on the market. The purpose of this technical bulletin is to outline solutions to the technical issues our customers have experienced.

## **Tow-Pro not calibrating**

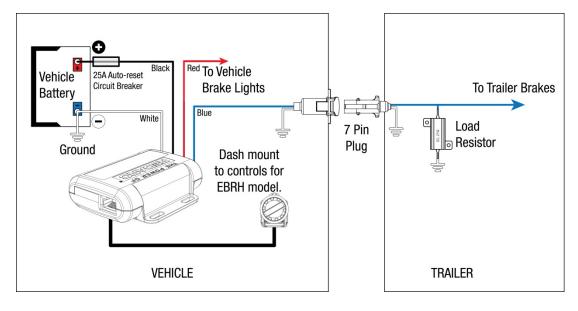
Due to the way that the Tow-Pro performs it's auto-calibration function, some Electric / Hydraulic systems will not allow the Tow-Pro to calibrate. This is due to the response time of the Electric / Hydraulic brake actuation and the frequency and duration of the calibration signal from the Tow-Pro being incompatible. In these situations, once the Tow-Pro is calibrated, the brake application on the Electric / Hydraulic trailer works as expected.

REDARC engineers are currently exploring potential upgrades to the Tow-Pro to allow calibration to work with trailers using these Electric / Hydraulic systems. In the meantime, the current solution to this issue is to calibrate the Tow-Pro installation using a trailer with Standard Electric Brakes first.

## Tow-Pro not detecting trailer

As Electric / Hydraulic systems do not use magnetic brake coils, the load observed by the Tow-Pro is sometimes not enough to indicate that a trailer is connected.

In order to allow the Tow-Pro to sense that a trailer is connected, REDARC recommend fitting a 21W, 24V Load Resistor (simulates a lamp load) from the Brake Output (BLUE) wire to GROUND, on the trailer. Please see the diagram below for detail on where the resistor should be fitted in circuit. (Load Resistors are available from Auto-Electrical suppliers)





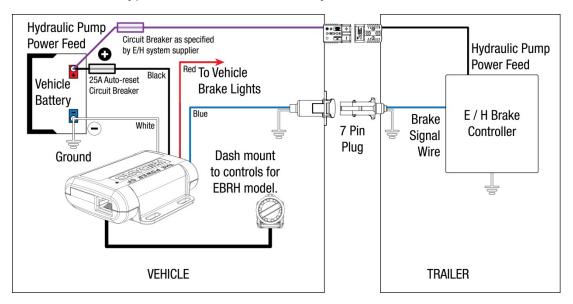


## Tow-Pro seems to work but there's no brake activation

In the event that the Tow-Pro is calibrated and is able to sense the trailer but the brakes do not actually apply, the probable cause is that the Electric / Hydraulic system's Hydraulic Pump Power Feed is not connected.

Electric / Hydraulic systems need power independent of the Tow-Pro installation to power the pump. Without this feed the Tow-Pro will control the hydraulic regulator but the brakes will not apply as there is no pump pressure.

We understand that in a lot of circumstances an installer may not view the trailer and so it is important to confirm with your customer the application the Tow-Pro installation will be used for. If the Tow-Pro is to be used with an Electric / Hydraulic trailer braking system, a separate power feed for the Hydraulic pump may be required. Please see the diagram below for detail on a typical Tow-Pro – Electric / Hydraulic installation.



For further technical support please call REDARC on (08) 8322 4848 and speak to one of our friendly customer support team.

