

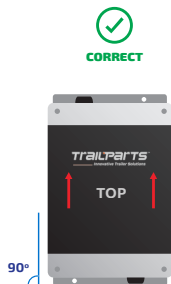
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Note: Check serial number to find correct instructions

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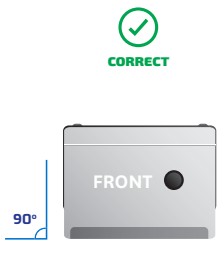
**Note: This instruction Book is
for Credo units with a serial
number btween 900 - 4500**

Orientation Guide

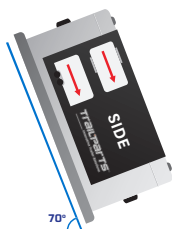


Direction of travel

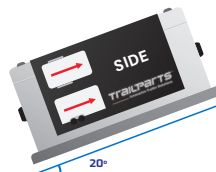
Must be mounted straight longitudinally, i.e. parallel to the direction of travel



Unit must be level laterally



Back can be up to 70 degrees up



Back can be up to 20 degrees down

Direction of travel

Credo General Installation Instructions

[Applies to Serial # 900 - 4499]

- Mount the brake controller according to the mounting orientation instructions on page 3.
- Wire the brake controller according to the instructions on page 9.
- It is important that trailers fitted with the Credo™ braking system are also fitted with 12/24 volt LED lights, not voltage specific incandescent or LED lights.
- Maximum of 2 tail lights and 4 marker lights to be connected to the unit. If more are required please phone us for installation support.
- Controller must be mounted to a metal surface which is mounted to the main chassis.

Credo Electric Installation Instructions

- The controller is capable of running trailers with up to 4 wheels braked with electric drum brakes.
- The earth from the trailer brakes and the trailer battery must only connect to the brake controller output earths as shown in the diagram. They cannot be connected to a common chassis earth.
- Cable gauge should be sufficient size to avoid voltage drop. For electric drum brakes a minimum of 15 amp cable should be used and a separate feed should be run per two wheels that are fitted with brakes.
- Magnet wires can be used interchangeably, for brakes positive and earth.

Credo Electric Drum Wiring Diagram

Wiring diagram below applies to Credo™
Brake Controller with electric drums only.

Applies to units in serial
range 900 - 4499

One 5 Amp/hr battery
must be fitted with the
battery supplied.
Do not use brake system battery
to power any other systems.

Battery Requirements:
Electric: 1x5Ah or bigger
Hydraulic: 2x5Ah or 1x12Ah
or bigger
30 amp blade fuse
required on orange wire
Must only be used for
credo connection

Electric Drum

Electric Drum magnet
wires are interchangeable

Connect one grey to each side
of the breakaway switch

There should be no more
than 2.5 metres of cable
between the controller and
the trailer plug to avoid
voltage drop.

White to Magnet

Blue to Magnet

Orange Not Used

Pink not used
May also be
green/yellow

Green - Right Indicator
Brown - Tail light
White - Earth
Red - Stop light
Yellow - Left Indicator

Connect trailer lights to
5 core output

All unused wires must be isolated.

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Credo Hydraulic Instructions

[Applies to Serial # 900-4499]

Credo General Installation Instructions

- Mount the brake controller according to the mounting orientation instructions on page 11.
- Wire the brake controller according to the instructions on page 11.
- It is important that trailers fitted with the Credo™ braking system are also fitted with 12/24 volt LED lights, not voltage specific incandescent or LED lights.
- Maximum of 2 tail lights and 4 marker lights to be connected to the unit. If more are required please phone us for installation support.
- Controller must be mounted to a metal surface which is mounted to the main chassis.

Credo Hydraulic Installation Instructions

- The earth from the BrakeRite actuator and the trailer battery must only connect to the brake controller output earths as shown in the diagram. They cannot be connected to a common chassis earth.
- Cable gauge should be of sufficient size to avoid voltage drop. The main power feeds to the actuator from the brake controller should be minimum 20amp.
- Mount the actuator in a protected position. Orientation is not important for this, but filler caps should be level and upright.
- Do not run the actuator without fluid as this will damage the pump. Use new DOT 3 or DOT 4 brake fluid.
- Bleed the brakes by activating the breakaway switch. However, do not run the actuator continuously for more than 1 minute every 5 minutes. All air must be removed from the system for the brakes to work correctly. Ensure that the fluid level does not drop below 20mm from the filler cap opening to avoid more air being pumped into the system.

Credo Hydraulic Disc / Drum Wiring Diagram

Wiring diagram below applies to Credo™
Brake Controller with hydraulic brakes only.

**Applies to units in serial
range 900 - 4499**

There should be no more than 2.5 metres of cable between the controller and the trailer plug to avoid voltage drop.

Connect one grey to each side of the breakaway switch

One 5 Amp/hr battery must be fitted with the battery supplied.
Do not use brake system battery to power any other systems.

Battery Requirements:

Electric: 1x5Ah or bigger

Hydraulic: 2x5Ah or 1x12Ah or bigger

30 amp blade fuse required on orange wire

Must only be used for credo connection

Hydraulic Pump

White to Pump

Blue to Pump

Orange Not Used

Pink to Brown

Green - Right Indicator
Brown - Tail light
White - Earth
Red - Stop light
Yellow - Left Indicator

Connect trailer lights to 5 core output

All unused wires must be isolated.

Actuator must have Trailparts™ isolator fitted.

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Credo Hydraulic Pre-assembled Instructions [Applies to Serial # 900-4499]

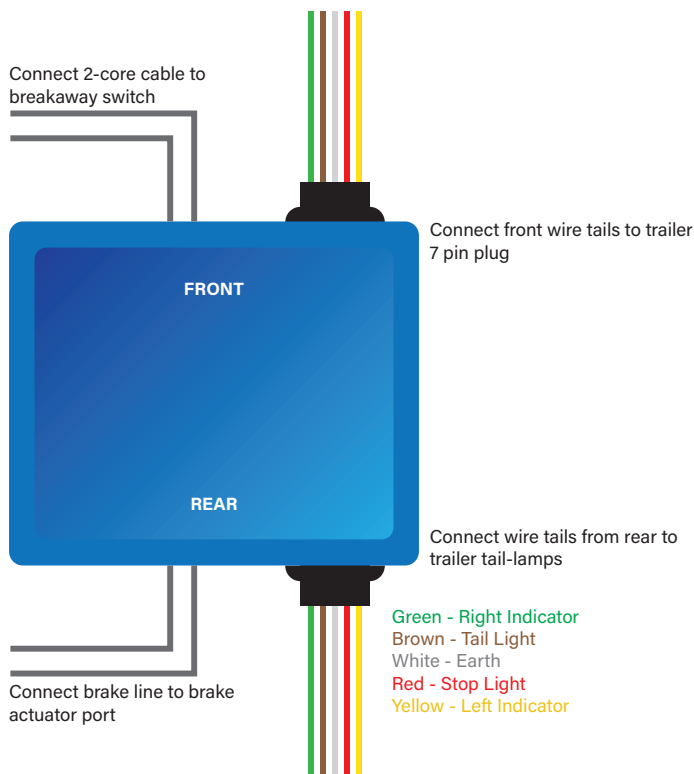
- Mount the on-trailer module according to the mounting orientation instructions on page 3.
- Wire the on-trailer module according to the instructions on page 7.
- It is important that trailers fitted with the Credo™ braking system are also fitted with 12/24 volt LED lights, not voltage specific incandescent or LED lights.
- Maximum of 2 tail lights and 4 marker lights to be connected to the unit. If more are required please phone us for installation support.

Credo Pre-assembled Hydraulic Installation Instructions

- Do not run the actuator without fluid as this will damage the pump.
Use new DOT 3 or DOT 4 brake fluid.
- Bleed the brakes by activating the breakaway switch. However, do not run the actuator continuously for more than 1 minute every 5 minutes. All air must be removed from the system for the brakes to work correctly. Ensure that the fluid level does not drop below 20mm from the filler cap opening to avoid more air being pumped into the system.
- The multi core cable marked "7 pin plug" must be wired directly to the trailer plug, and it is important that the earth wire from that cable must only be earthed using the trailer plug earth pin, i.e. it cannot be connected to a common chassis earth.
- The twin core cable joins to the breakaway switch cables.
- Connect the cable marked "trailer lights" from the on-trailer module to the trailer tail camp circuit. DO NOT bypass this directly to the trailer plug.
- The on-trailer module assembly can be mounted off centre side to side, but MUST BE, A) parallel with the front-rear centre line of the trailer, and B) mounted level on the trailer in its loaded state.

Credo Hydraulic Pre-assembled Wiring Diagram

**Applies to units in serial
range 900 - 4499**



**Wiring diagram above applies to Credo™ pre-assembled
Brake Controller with hydraulic brakes only.**

All unused wires must be isolated.

Actuator must have Trailparts™ isolator fitted.

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Troubleshooting

Fault

In-cab controller shows 'Low Trailer Battery' warning (old style In-cab Controller shows Eb Error)

Or

No tail lights / tail lights go out when brakes are applied.

Possible Causes

- Battery is excessively discharged.
- Bad connection between trailer mounted brake controller and battery.
- Blown battery fuse.
- Poor connection on battery terminals.

Repairs/Checks

- Check battery is over 12.5V when disconnected. If lower replace the battery.
- Check if battery is charging by disconnecting the battery leads, connect to vehicle and switch lights on. Then check for 14V on the end of the battery leads. A measurement of 14V means the charger is working – if no voltage then a replacement or repaired controller is required.
- Check leads, fuse holder and any connections between the battery and controller for poor / corroded connections. Any high resistance joins will cause excessive voltage drop to the controller under braking resulting in the 'Low Battery' error.

In-cab controller shows 'Please Drive with Your Headlights On' message, even though the headlights are on

(old style In-cab shows Ec Error).

- Serial number mismatch between Controller and Trailer.
- Faulty trailer plug
- In-cab controller cannot communicate with the trailer mounted controller due to interference
- Incorrect wiring by-passes controller.
- Poor connection on battery terminals.

- Obtain serial number: Refer to page 19
If they do not match then follow instructions on page 16/17.
- Check trailer plug pins are not corroded or crushed in, and either spread the pins, remove corrosion or replace the plug.
- Check the controller to In-cab connection by taking the in-cab unit back to beside the trailer mounted controller, if still error is still present controller needs to be replaced or repaired.
- Check the vehicle connection goes to only the trailer mounted controller and all tail and marker lights from the controller lights output.

Fault

Brakes randomly come on and lock up.

Possible Causes

- Faulty Break-away switch.
- Faulty Break-away wiring.
- In-cab controller has 'emergency stop' button pressed.

Repairs/Checks

- Check breakaway switch and wiring for a short circuit. Replace any faulty components or wiring.
- Make sure In-cab controller is securely mounted on vent holder and emergency stop button not inadvertently pressed.

Braking output on In-cab controller stays at '-' on the screen when brakes are applied.

- Faulty trailer plug / vehicle connection.
- Incorrect wiring bypasses controller.

- Check and repair trailer plug and vehicle socket and associated wiring – replace any faulty parts.
- Check vehicle connection goes directly to the controller and does not bypass the controller.

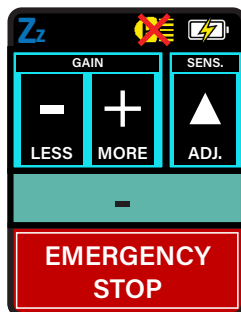
In-cab Controller shows '0' or higher numbers when brakes applied but no braking happens.

- On electric drums – Faulty wiring or magnets.
- On hydraulic actuator driven brakes – Faulty wiring or isolator if fitted

- On electrics check wiring and drum magnets for faulty connections. Normal magnet resistance is 5 Ohms. 2 Magnets together is 2.5Ohms and 4 is 1.25 Ohms.
- On Hydraulic the Blue signal wire should be checked for voltage when the emergency stop being is pressed. If there is some voltage and there is no brakes then call for assistance.

Recoding of Touch-Screen In-cab Controller

- 1 Power up In-cab controller on the USB cable and leave plugged in for the duration of coding the controller.
- 2 Wait till the screen displays the gain and sensitivity control buttons.
- 3 Press and hold the battery symbol for 5 seconds ignoring the screen flashing any messages.
- 4 The In-cab controller will do a single beep and display 2 buttons 'SET' and 'ESC', and a 4 digit number. This number is the number serial number of the matching trailer mounted controller.
- 5 Change the number by tapping each digit to increment the digit by one. To reach 0 increment the digit till it reaches 9 and then the next tap brings it back to 0. (Tip: tap lower on the numbers to avoid bumping ESC or SET).



Refer to step 2



Refer to step 3



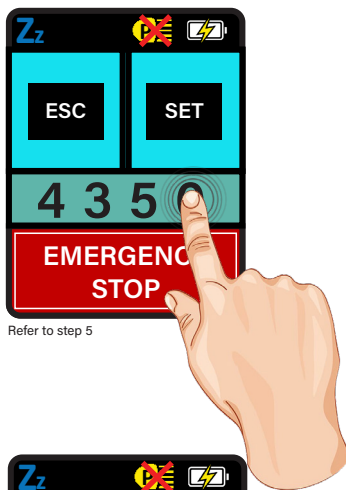
Refer to step 4

6 Once you have the serial number of your trailer mounted controller showing press 'SET' to lock the In-cab controller to that serial number.

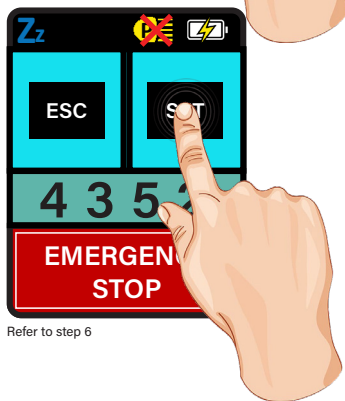
7 The In-cab controller will after a pause emit 3 beeps and return to the normal operation screen.

8 Connect the trailer to vehicle and turn on the headlights – check the head light symbol loses the red cross to prove it is connected to the trailer and functioning as normal.

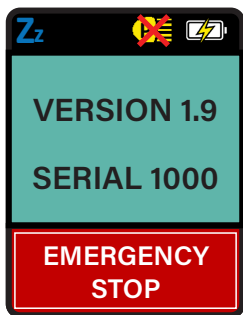
9 If red cross doesn't go away, unplug In-cab controller and select immediate sleep if this screen appears. Leave unplugged for approx 5 seconds. Plug in the In-cab controller and if the serial number on the fourth start up screen does not match the number on the trailer, start recoding process again.



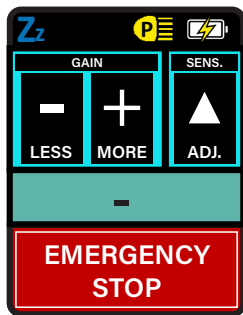
Refer to step 5



Refer to step 6



Fourth start up screen



Refer to step 8

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Warranty Terms and Conditions

LIMITED EIGHTEEN MONTH WARRANTY CONDITIONS

Trailequip Ltd warrants that the mechanical and electrical components of the TRAILPARTS/CREDO products as listed below will be free of defects in material and workmanship for a period of eighteen months from the original date of purchase.

Whilst we take every effort to ensure compatibility with all known vehicles we cannot guarantee 100% compatibility for all vehicles.

To obtain any warranty service, you must provide Trailequip Ltd with proof of purchase, such as a copy of your tax invoice or purchase receipt, which will include a purchase date and the serial number of your product. This warranty does not cover the removal or re-fitting of the product.

TRAILPARTS/CREDO will, at its discretion, repair, replace or refund the purchase price of a defective product or component, provided you return the defective product or component during the warranty period, freight charges prepaid, to Trailequip Ltd or to an authorized TRAILPARTS/CREDO dealer or stockist.

Attach your name, address, email address, telephone number, a description of the problem, and a copy of the tax invoice or purchase receipt listing the date of purchase and the TRAILPARTS/CREDO serial number of the defective product.

This warranty does not apply if the product has been damaged by misuse, overloading, impact, modification, improper installation. This warranty is void if any TRAILPARTS/CREDO serial number has been removed, altered, or defaced.

Please contact the below for warranty service or support:

TRAILPARTS/CREDO
C/ Trailequip Ltd
2 Tuna Street
Dargaville 0310
New Zealand
International Phone: +649 439 5508
Australia Phone: 1300 538 598

Maintenance and checks

- Check battery is keeping well charged. A well charged battery should be at or above 13 volts. This is particularly important if the trailer is left parked for extended periods of time. If the trailer is not used for extended periods the battery should be removed every 2 months and charged to ensure it does not become damaged. This can happen if the battery charge drops below 10.5 volts.
- Check the trailer plug and vehicle socket to ensure they are not damaged and they give a sound electrical connection. An intermittent or faulty connection could mean the brakes do not function correctly.
- If fitted with a hydraulic actuator make sure the fluid level remains sufficient. The fluid should be changed in line with general trailer service intervals.
- If fitted with electric drums make sure they are kept properly adjusted and that the magnets and linings are not excessively worn and are replaced in line with general trailer service intervals.

Serial Number Locations

Incab Controller:

For serial numbers 1-2700 the serial number is located on the grey base of the controller or at the bottom of the black plate on the back if it is a touch screen controller.

Serial numbers 2701- when the touch screen controller is first connected to power the serial number is shown on the 4th screen that displays on start up.

Trailer Mount Controller:

Either engraved/stamped into the alloy base plate or etched into the front face of the trailer mount controller.



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