

Normal operation:

Operate button: Push and hold to apply or release the EPB. The last state of the EPB is remembered if power is removed from the controller e.g. the vehicle battery is disconnected.

Warning lamp: Illuminated when EPB applied, extinguished when EPB released. If during normal operation the unit detects a fault, then the warning lamp will 'double-blink' every few seconds until either a new EPB operation is performed, or the diagnostic code is read via the Service button.

The 'double-blink' is opposite to the warning lamp state i.e. if the lamp is on (because the EPB is applied) then it will blink off. If the lamp is off (EPB not applied) then the lamp will blink on.

Service operation:

Service button: Single short press - generates extended diagnostic flash codes as per table below.

Long press (until warning lamp illuminates) - enter Service mode.

Service mode allows you to adjust the applied clamping force from level 1 (weak) to level 9 (strong), the default being level 5.

The warning lamp blinks several times every few seconds to indicate the selected clamping force e.g. by default there will be 5 blinks, then a pause before repeating the sequence.

A single short press of the Service button increases the clamping force to the next level.

Once at level 9, the next press selects level 1. Therefore, to reduce the clamping force by 1 level, press the Service button 9 times.

Press and hold the Service button for about 1 second to store the clamp force and exit Service mode.

Service mode also allows you to use the Operate button to retract the pads back to the service position as determined by the calliper limit switches.

Ideally, you should also apply the EPB in Service mode if the pads have been fully retracted as this allows a longer 'drive-time' for the pads to reach the disc.

Test mode:

Apply power to the unit with both the Operate and Service buttons pressed. The warning lamp will illuminate for 1 second – release both buttons while the lamp is still lit (in practice, let go as soon as you see the lamp come on).

The warning lamp will now double-blink every few seconds.

Use the Operate button as normal (press and hold for about 1 second) to start or stop the test sequence which alternately applies and removes the EPB every 10 seconds or so.

Remove power to the unit to quit Test mode.

Extended Diagnostic Flash Codes:

1	Overcurrent apply left
2	Overcurrent apply right
3	Overcurrent retract left
4	Overcurrent retract right
5	Load fault apply left
6	Load fault apply right
7	Load fault retract left
8	Load fault retract right
9	Limit switch left
10	Limit switch right
11	Timeout apply left
12	Timeout apply right
13	Timeout retract left
14	Timeout retract right
15	Timeout apply both
16	Timeout retract both
17	Load fault apply both
18	Load fault retract both
19	Short apply left
20	Short apply right
21	Limit switch not released during apply left
22	Limit switch not released during apply right

Control unit Connections

- BLACK X 2 - Power ground connection for control unit
- RED X 2 - Main power connection to control unit up to 15Amp for 1 second

Brake calliper connections

- WHITE - Motor – drive
- RED - Motor + drive
- GREEN – Limit switch circuit + (Signal)
- BROWN - Limit switch circuit – (Ground)

Auxiliary connections

- BLACK / pink - Handbrake on warning light – Ground when handbrake applied (Hand brake status only, Diagnostic function displayed by button warning light)
- WHITE / green - Ignition Input – **Function not active**
- BLUE / red – Road speed – **Function not active**

Determining motor (-) and (+) for the correct control function

To connect the motor up correctly the description of motor – and motor + need to be determined. Working with the motor the connections can be determine and marked as follows.

The Motor (–) will be the terminal that is connected to Battery – when the other terminal is connected to battery + making the motor driven “IN” and clamp the disk.

The Motor (+) will be the terminal that is connected to Battery + when the other terminal is connected to battery - making the motor driven “IN” and clamp the disk.

Reversing the terminals **must** drive he motor out.