

GSTOP®



WWW.GSTOP.CO.UK

Designed in Great Britain
Version 1.1

GSTOP® Overview

GSTOP® - Smart Brake Force Sensing Safety Device for Cars, Motorbikes, Vans and other road vehicles.

GSTOP® is a factory pre-set retrofit EBLD System. EBLD means 'Emergency Brake Light Display' as detailed in UNECE European Regulations for road vehicles.

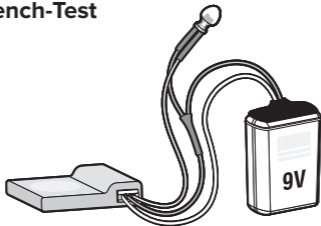
GSTOP® does not interfere with normal brake light operation, GSTOP® only activates under heavy sustained braking in excess of the preset g-force values of 0.6g and 0.8g. For comparison, Gravity (the mysterious force that holds everything on the ground) is 1.0g

GSTOP® utilises a high speed digital accelerometer to accurately measure deceleration when braking. 'Error Correction' (Smoothing ;-)) is applied to the accelerometer data to correct for inconsistent feedback commonly caused by but not limited to; Road noise, Uneven road surface, Vibration etc.

What's in your GSTOP® box

- 1x GSTOP®
- 3x Wire Connectors (2x 2-way 1x 3-way Crimp Type)
- 1x Universal Wiring Loom
- 1x Bench Test Wiring Loom
- 1x Foam Mounting Pad
- 1x Bumper Sticker

GSTOP® Bench-Test



Your GSTOP® device comes with a 'Bench-Test' wiring loom. You can use this to power up and test how your GSTOP® operates before installation. Connecting a 9v battery (**PP3**) to the battery connector simulates how GSTOP® powers up when the vehicles brake lights are switched on.

GSTOP® Features

- GSTOP® is inactive when vehicle is stationary
- Activation is triggered automatically by heavy sustained braking
- Activation is deactivated automatically when braking force is no longer present
- Dual Stage Inertia Activation (Brake Force)
- Does not interfere with vehicle bulb condition monitor
- Does not interfere with normal braking conditions
- FailSafe Design - in case of 'GSTOP®' failure.. the Vehicle Stop Light continues to function normally
- Accelerometer Smoothing ;-)

Factory Configuration

Your GSTOP® device is factory pre-programmed to operate with the following settings:

- Active Axis - see 'Direction Arrow on reverse of GSTOP®
- Low Force Trigger: 0.6g / @2Hz / 2.0 Seconds
- High Force Trigger: 0.8g / @3Hz / 3.0 Seconds
- Duty Cycle: 50%
- Error Correction: Enabled (Smoothing; prevents nuisance activation)

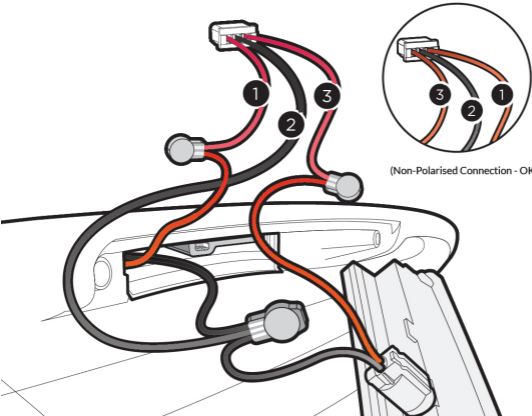
Wiring Installation

Please Note: You should be competent in automotive wiring before attempting to install the GSTOP® Module. If in doubt, please seek the assistance of a trained professional.

GSTOP® is shipped with a 3-wire universal wiring loom.

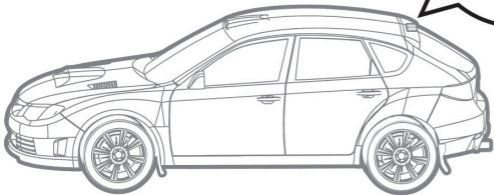
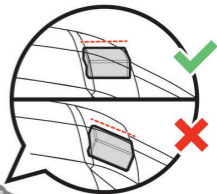
The centre Black wire (Terminal.2) must be connected to Vehicle ground / 0v. The two Red wires (interrupt relay) must be connected to the positive wire that goes to the vehicles High Level Brake Light. Terminals 1. and 3. are non-polarised, and can be connected in either direction.

Please see the attached wiring diagrams:

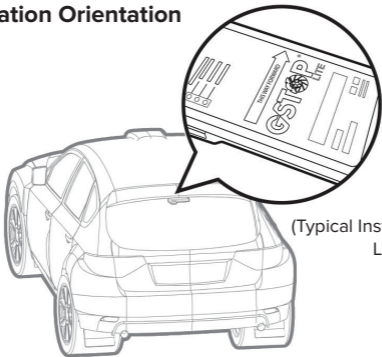


(Non-Polarised Connection - OK)

Installation Level Surface



Installation Orientation



(Typical Install for Car Roof
Lining)

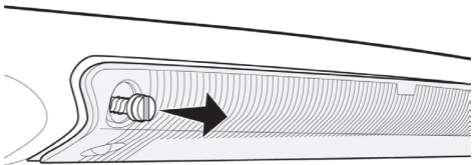
Installation Location and Fitment

Take care to observe the direction of travel arrow

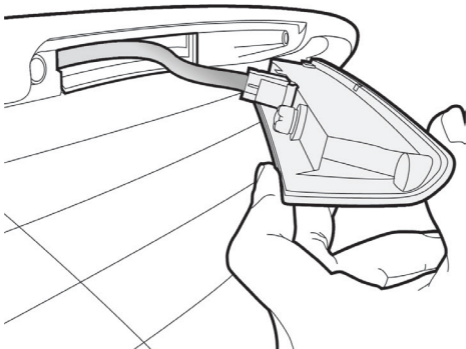


printed on the reverse of GSTOP® when installing the GSTOP® Module.

Brake Light Removal



Brake Light Removed



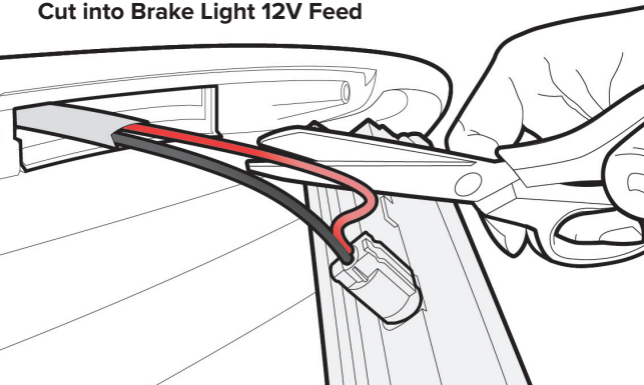


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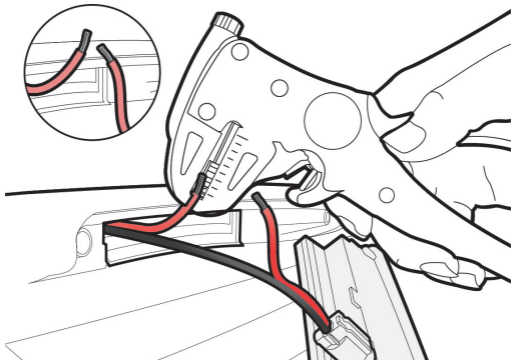
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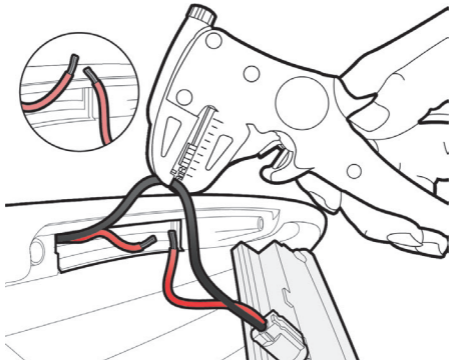
Cut into Brake Light 12V Feed



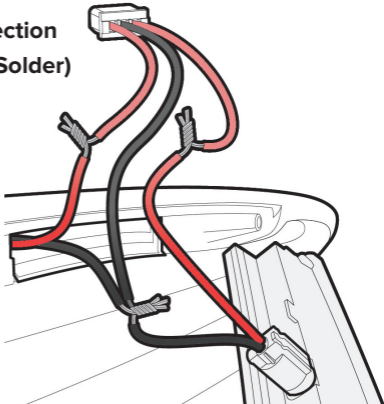
Prepare Wiring for Connection to GSTOP



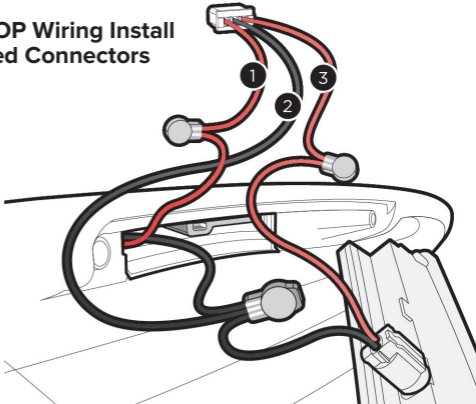
Strip Insulation on Ground Wire



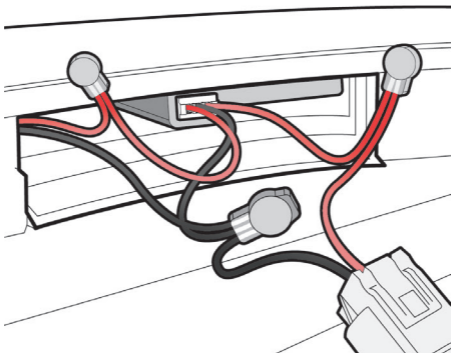
**Shows Basic Connection
(If installer wish to Solder)**



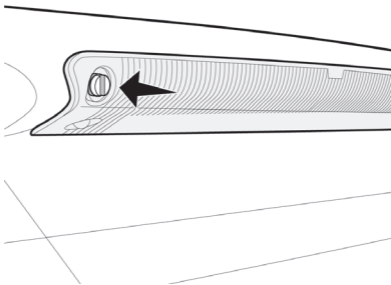
**Shows GSTOP Wiring Install
with Supplied Connectors**



Connect GSTOP Plug to Installed GSTOP Module



Refit the Brake Light



Technical Specification

- GSTOP® Encasement: Flame Retardant ABS Plastic
- Moisture Protection: Protective Lacquer Treated Circuit Board
- FailSafe: Interrupt relay configured 'Normally Closed'
- Dimensions: (L)46mm (W)27mm (H)6mm~10mm
- Connector: 3 Terminal Snap-Fit
- Input Voltage: 6v~30vdc
- Power Consumption: <200mW
- Power Handling: Max 4 Amp
- (@6 volts Max = 24 Watt)
- (@12 volts Max = 48 Watt)
- (@24 volts Max = 96 Watt)

Package: Cardboard Box / 90mm x 60mm x 16mm

Shipping Weight: Approx <50g

Trouble Shooting

Problem: GSTOP® does not flash when I stamp on the brakes?

Solution: GSTOP® is configured to smooth out erratic movements that maybe caused by bumps and shocks. Heavy braking in an instant shouldn't activate GSTOP® easily, try braking over a longer distance with a sustained moderate to heavy brake force.

Problem: GSTOP® will only flash when I tilt it towards the ground?

Solution: GSTOP® is pre-set to 0.6g and 0.8g to activate the EBLD Warning Signal (Flashing). Gravity exerts 1.0g, so if tilting the arrow towards the ground activates Trigger.1 and Trigger.2 flash rates, GSTOP® is working perfectly and as designed. Contact us if you require assistance: www.GSTOP.co.uk

Problem: GSTOP® accelerometer isn't accurate?

Solution: GSTOP® is shipped with Error Correction enabled. This means it is difficult to trigger GSTOP® handheld with hand movements, or with instant shocks or vibration. Slowly Tilt the direction arrow on GSTOP® toward the ground to test, at a certain angle GSTOP® should trigger flash stage 1 @ 2Hz (twice a second) and if you continue to tilt GSTOP® towards the ground, GSTOP® should then trigger flash stage 2 @ 3Hz (3x a second). If this is the result, the accelerometer is working correctly. If not, please contact us for assistance; www.GSTOP.co.uk

Problem: GSTOP® wiring is so tiny, how can it work properly?

Solution: GSTOP® has been designed with a 4 Amp power handling capability. This is in excess of the rated current of typical high level LED and/or single bulb Tail Lamps. Also check the wire size in your vehicle, it should be a good match for the included connectors to work without issues.

Problem: GSTOP® does not work when installed on the vehicle?

Solution: GSTOP® ships with a bench test wiring loom. Test with a pp3 9v battery, if GSTOP® is working correctly, it may be necessary to recheck the installation on the vehicle.

Problem: GSTOP® flashes when the tailgate is open and I apply the brakes?

Solution: Have you installed GSTOP® in the tailgate? Is GSTOP® forward arrow facing 1.0g of gravity when the boot is open? This maybe the reason why.. 'Don't drive with the tailgate open'. ;-)

Problem: Is there someone I can contact about my issue?

Solution: Yes, if you need any help or advice with your GSTOP® purchase, Fitment and/or operation please visit www.GSTOP.co.uk for contact information

Compliance

Compliance:

UK/EU Road Legal: E/ECE/324 E/ECE/TRANS/505 (in factory configuration)

CE Approved

FCC Exempt CFR47:15.103(a)

Directive WEEE (2002/96/EC)

The product is in compliance with the directive WEEE.

EMI / EMC Compliance

Copyright & Trademark

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Warranty

- GSTOP® hardware has a 2 year manufacturers warranty. If in event of a claim, please see our website for return information. www.GSTOP.co.uk

Liability

The Company does not accept any liability to the Customer for any indirect or consequential loss or damage, or for any direct or indirect loss of data, profit, revenue or business in each case, however caused, even if foreseeable.