

980 703-50 / 03.20



## INSTRUCTION SHEET for: 2BP 980 660-1xx / 2027 / 2027-BULK



## LED Module Instructions

To remove the LED module hold the housing near the base and push firmly on the back of the module. Note: The LED module is fully sealed and has no serviceable components.

The LED module is securely fastened to prevent dislodging in service, and removal would not normally be required. If it becomes necessary to remove the module, insert a small blade on both sides of the LED module and the housing at the correct position and prise the module free from the housing (See diagram over page).

## Lamp Mounting Instructions

Two 4mm Ø bolts are recommended with a maximum head height of 3mm (not included).

### New installations

Ensure the lamp is mounted on a flat surface. The housing may be used as a template for the mounting holes. Do not mount the lamp where damage is likely to be sustained due to tie-downs and other securing devices. Drill two mounting holes up to 4.5mm Ø at 28.5mm apart and mount the housing. Either feed the cable through the recess in the housing or drill a cable entry hole through the mounting surface. A recommended hole size of 6-8mm Ø should be made between the mounting holes, ensure the hole has no sharp edges to chafe the cable when feeding it through the hole. Connect the wiring (see wiring instructions below). Push the LED module firmly into the housing until it snaps into position.

## Wiring Colour Coding

The LED lamp is multi voltage capable for optimum brightness in 12 and 24 Volt systems. LED modules are polarity conscious. Reverse polarity will not damage this product but will inhibit its function. HELLA recommends wire connections be soldered, and heat shrink tubing applied to seal the joint.

Colour	Connect to	Power Consumption
Black	Earth (-)	-
Orange	Positive (+)	0.4 watts @ 12 volts 0.8 watts @ 24 volts

**NB:** Lamp must be protected by a fuse rated at 2 amperes maximum

## Energy saving recommendation for 24 volt systems

To derive the full benefit of the low power consumption (0.4 watts) HELLA recommends to wire pairs of LED marker lamps in series.

## Compatibility to existing electrical systems

It is important for the installer to ascertain the compatibility of the low power consumption LED lamps with the electrical and/or electronic systems of the complete vehicle, including trailers. In most cases the reduced power consumption is beneficial by imposing less demands on the entire electrical system.

For certain functions some electrical systems rely on a set power consumption for monitoring whether, for example, a trailer is connected.

Operation of this lamp using alternating current or modulated direct voltage will cause premature light failure. HELLA recommends connecting ADR or ECE certified Multivolt LED signal and marker lamps to a continuous (unmodulated) 12V or 24V power supply to ensure safe light operation.

## FIT AND FORGET - BY DESIGN

Congratulations, the product you have selected comes from *HELLA* - a world leader in LED lighting design.

Following the launch of the first LED automotive signal lamps in 1990. HELLA Design and Innovation continues to set new standards. HELLA innovative solutions have been incorporated into millions of lamps, engineered and tested to the most stringent standards, to suit the most demanding environmental conditions.

The cornerstone to the success of our products is our no compromise *Fit and Forget - by Design* philosophy which is incorporated into every step of the product life cycle.

In a world consuming finite resources at an ever faster rate, Fit and Forget - by Design is the right environmental choice that also makes perfect economic sense to customers that consider the total life cycle Cost of Ownership.

For general comments about HELLA's products please contact us on E-mail at techfeedback@hella.co.nz

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