INSTRUCTION SHEET

for: Part No. 2054(-GMD)



ADR - APPLICATION AND MOUNTING INSTRUCTIONS

ADR 49/00 Front End-Outline Marker Lamp ADR 49/00 Front Position (Side) Lamp

DuraLed® Front end-outline marker lamp and front position (side) lamp Lens Marking and ADR 13/00 Installation Requirements

This Front Position/End-Outline lamp, identified by lens marking 9560 and the logo was manufactured to comply with ADR 49/00 Front End-Outline Lamps / Front Position (Side) Lamps.

- A tolerance of +/-3 degrees applies on all mounting details.
- Lamp mounting surface must be vertical to the ground and be square to the vehicle longitudinal axis
- Lamp reference axis must be horizontal

Front End-Outline Marker Lamp

Lamp must be visible between

Horizontal angle: 0° inwards (parallel with vehicle axis) and 80° outwards

Vertical angle: 5° above and 20° below the horizontal

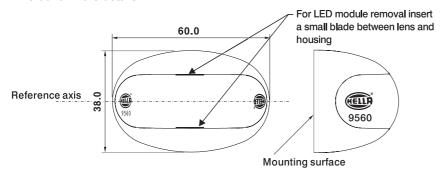
Front Position (Side) Lamp

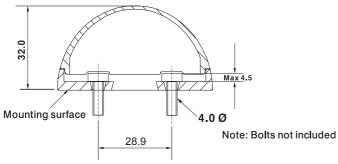
Lamp must be visible between

Horizontal angle: 45° inwards and 80° outwards

Vertical angle: 15° above and below the horizontal

Note: Please refer to ADR 13/00 for more details.





LENS IDENTIFICATION NUMBER: 9560

All dimensions in millimetres

	CATALOGUE NUMBER	E	NGINEERING NUMBER		RN MBER	COMPLIANO NUMBER	_	ADR 51/00 GLOBE	ADR APPLICABLE
	2054-GMD	2	PF 959 570-50	40	677	8-2054XTR-1	17	N/A LED	ADR 49/00
		AMENDMENTS						COMPLIANCE FIED	ISSUE DATE:
	02/2009		08/201	0	0.	1/2011		101	11/08
0-80 V06							•	Lams	959 150-80
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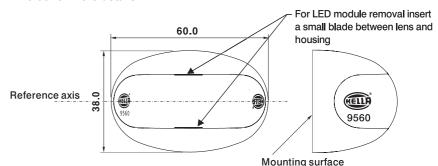
Front Position (Side) Lamp

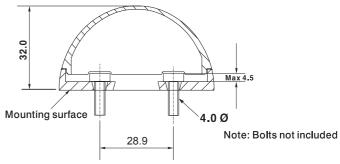
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			AMENDME	NTS			ADR VERI		ISSUE DATE:
	02/2009		08/2010		01/2011		101		11/08
								Kann	959 150-80
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HELLA-New Zealand Limited, Pakuranga

INSTRUCTION SHEET for: Part No. 2054(-GMD)



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

4mm Ø bolts are recommended with a maximum head height of 4.5mm (not included).

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 $4.5 \text{mm} \ \emptyset \ 28.9 \text{mm}$ apart, and mount the housing. Drill cable entry hole in the centre of the mounting holes at a recommended size of 6mm to 8mm \emptyset and ensure the hole has no sharp edges to chafe the cable. Push the cable through the hole and connect the wiring (see wiring instructions). Push the LED module firmly into the housing until it snaps into position.

Wiring Colour Coding

The $DuraLed^{@}$ marker range is multi voltage capable allowing full light output between 8 and 28 volts. LED lamps 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 (-)	-		
White (Red trace)		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 DuraLed[®] marker lamps in series.

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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