INSTRUCTION SHEET
for: 2SB 959 040-xxx / 2SK 959 041-821 / 2SK 959 040-6XX / 2320LED / 2332-H24 / 2332-V24

ADR - APPLICATION AND MOUNTING INSTRUCTIONS

Designline LED Multivolt (9 - 33 VOLT) MODULE STOP / TAIL LAMP

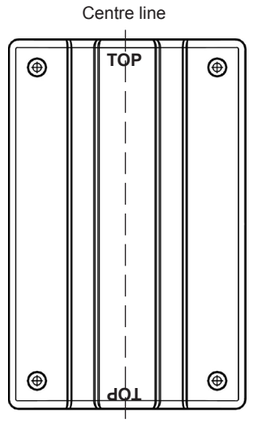
Lens Marking and ADR 13/00 Installation Requirements

This lamp module, identified by lens marking HNZ 9040, with red lens was manufactured to comply with ADR 49/00 Rear position (Side) / Stop Lamps

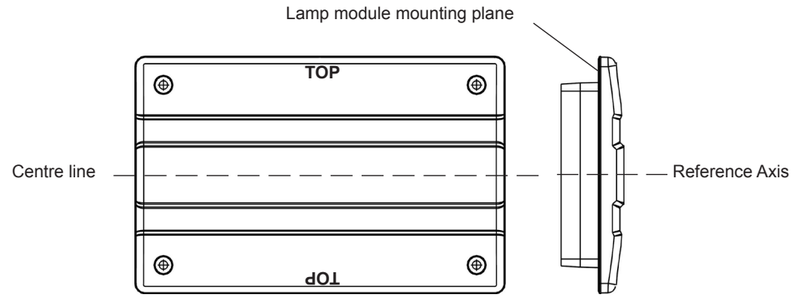
- A tolerance of +/-3 degrees applies on all mounting details.
- Lamp module mounting plane must be vertical to the ground
- Lamp module reference axis must be parallel to the vehicle longitudinal axis
- Lamp module centre line must be horizontal (P/N 2332-H24) or vertical (P/N 2332-V24) to the ground (Please note the "TOP" engraving on the inner surface of the lens)
- Lamp module must be visible from 45° inboard and 80° outboard, as well as from 15° above and below the horizontal axis

Notes: Please refer to ADR 13/00 for more details.
Lamp module does not include a reflex reflector. An additional reflector would be required to be fitted to ensure vehicle compliance.

P/N 2332-V24



P/N 2332-H24



LENS IDENTIFICATION NUMBER: HNZ 9040

CATALOGUE NUMBER	ENGINEERING NUMBER	CRN NUMBER	COMPLIANCE NUMBER	ADR 51/00 GLOBE	ADR APPLICABLE
2332-H24 2332-V24	2SB 959 040-50 2SB 959 040-70	34509 / 34502 36722 / 36721	8-2332-H24-17 8-2332-V24-17	N/A LED	ADR 49/00

AMENDMENTS			ADR COMPLIANCE VERIFIED	ISSUE DATE:
06/2006	03/2010			04/2005
				959 149-87

HELLA-New Zealand Limited, Auckland

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Lamp Module Mounting Instructions

- Remove existing lens, bulb holder and hardware from housing
- Connect cable inside existing lamp housing as per chart below
  NB: HELLA recommends wire connections be soldered, and heat shrink tubing applied to seal the joint.
- Ensure housing drain hole is clear
- Ensure there are no sharp edges to cut or chafe the cable
- Test all lamp functions
- Mount module into lamp housing with new gasket and existing screws, and fit screw caps

Please note: This lamp contains a patented hydrophobic breathing system to equalise air pressure inside the lamp. The module is sealed against moisture and dust but not designed for prolonged submersion.

Wiring Colour Coding

Note: Lamp is polarity conscious. The reversal of the polarity will not damage this product but will inhibit its function.

Colour	Connect to	Power Consumption
White	Earth (-)	-
Red	Stop (+)	6 watts
Brown	Tail (+)	2 watts

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*

Important Notes for the Installer and Vehicle Owner

Introduction

Multivolt LED signal and marker lamps offer many advantages over conventional bulb lamps. Significantly reduced power consumption, ultra long life and high tolerance to shock and vibration make the LED lamps the ideal choice for the commercial transport industry, where the cost of ownership versus the initial purchase price of the product is well understood.

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.

Electromagnetic Compatibility (EMC)

Multivolt LED lamps are electronic devices. The electrical circuits contain components that suppress possible interference, both emission as well as susceptibility, to the technical requirements for the application of the Regulatory Compliance Mark (RCM).

To avoid false signals or interference, it is recommended practice that the installer always ascertians that a good earth is provided to potentially sensitive equipment such as the ECU's of the ABS, TCS, or Tachographs etc. If this cannot be assured, a direct earth path should be provided.

Protection against damage due to voltage spikes

This Multivolt LED lamp is protected against damage from positive voltage spikes caused by events such as load dump conditions up to severity level 3 of ISO 7637-2 and contains a Transient Voltage Suppressor (TVS) designed to withstand a pulse of up to 5000 Watts.

The lamp is protected against reverse polarity connection and negative voltage spikes of up to 1000 volts.