# Important Notes for Installer and Vehicle Owner



#### Introduction

This LED lamp offers many advantages over conventional bulb lamps. Significantly reduced power consumption, ultra long life, fully sealed construction and high tolerance to shock and vibration makes this LED lamp the ideal choice for boat and small / medium sized trailers.

#### 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.

## **Electromagnetic Compatibility (EMC)**

This LED lamp is an electronic device. 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).

### Protection against damage due to voltage spikes

This LED lamp is protected against damage from positive voltage spikes caused by events such as load dump conditions specified in ISO 7637.

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

# **Electric Welding**

Electric Welding may damage the LED lamps. For LED lamps, Hella recommends the negative connection to be wired isolated from the vehicle chassis. If the lamp uses the chassis as the earth return it is recommended that this earth return is disconnected during electric welding.

# Warranty Statement

**Congratulations!** The product you have selected comes from Hella - one of the world's leading manufacturers of lighting products. The product comes with a 5 year warranty from end user purchase covering faults in materials, components or workmanship.

In the unlikely event that you should experience a confirmed warranty related problem with your purchase, Hella will, at its discretion, either repair, replace or refund the purchase price of the product.

Warranty services may be obtained by returning the product within the warranty period to the Hella Dealer where the product was originally purchased. This warranty is in addition to and does not preclude any other rights or remedies available to the consumer under any local legislation related to the provision of goods or services.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

This warranty does not cover:

- 1.) Claim/s as a result of normal wear and tear or of any modifications and / or alterations to the product in any shape or form.
- 2.) Claim/s as a result of non-compliance of the assembly, service and operating instructions and/or any unfit or improper use.
- 3.) Any expenses incurred in the process of making the claim.

Note: For lamps sold in Australia, warranty services are provided by Hella Australia Pty. Ltd., 4 Hargrave Place, P.O. Box 89, Mentone, Victoria, 3194 Australia. Customer Service 1800 061 729 email: custservice@hella.com https://www.hella.com/hella-au/assets/media\_global/IAM\_Statement\_of\_Warranty.pdf

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

#### **INSTRUCTION SHEET**

# for: 2VA 980 720-0xx / 2394



# ADR - APPLICATION AND MOUNTING INSTRUCTIONS

# LED COMBINATION TRAILER LAMP STOP, REAR POSITION, REAR INDICATOR LAMP WITH REFLECTOR 12 / 24V DC

#### Lens Marking and ADR 13/00 Installation Requirements

This Stop / Rear Position / Rear Indicator Lamp with Reflector, identified by lens marking 0720 and the was manufactured to comply with:

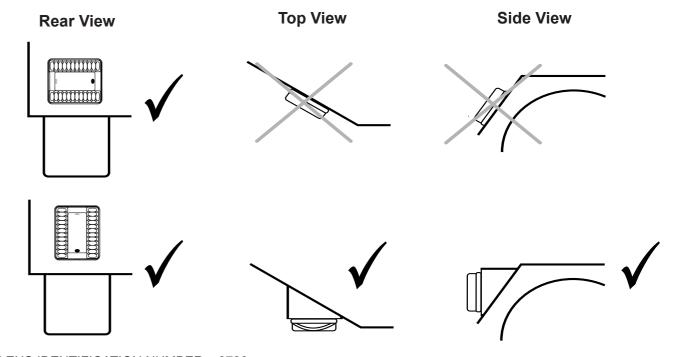
ADR 6/00 Cat 2a Rear Direction Indicator Lamps

ADR 47/00 Reflex Reflector

ADR 49/00 Rear Position (Side) / Stop Lamps

- A tolerance of +/-3° applies on all mounting details.
- Lamp mounting surface must be vertical to the ground, and at right angles to the longitudinal axis of the vehicle.
- Lamp must be visible from 45° inboard and 80° outboard, as well as from 15° above and below the horizontal axis.
- · Lamp is approved to be mounted horizontally or vertically.

Please refer to ADR 13/00 for more details.



## LENS IDENTIFICATION NUMBER: 0720

CATALOGUE NUMBER	E ENGINEERING NUMBER		CRN NUMBER		COMPLIANCE NUMBER		ADR 51/00 GLOBE	ADR APPLICABLE
2394	2VA 980 720-00		42034 46508 42036 & 42037		DI*2394*B 2395*RR*C RP*2394*A & SL*2394*A		N/A LED	ADR 6/00 Cat 2a ADR 47/00 ADR 49/00
AMENDMENTS					ADR VERII	-	ISSUE DATE:	
10/09		02/10			07/12		101	10/09
08/14						/	Lam	980 703-20

Hella-New Zealand Limited, Auckland

980 703-20 / 03.20

# INSTRUCTION SHEET for: **2VA 980 720-0xx / 2394**



## **Lamp Mounting**

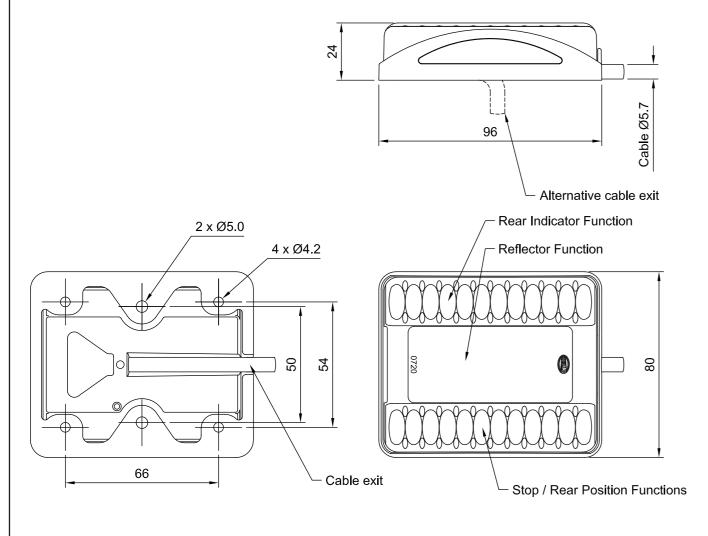
Drill the required number of holes through the mounting surface using the mounting frame as a template. Secure the mounting frame using low profile bolts or screws of the correct diameter. Check relevant hole diameters in the general dimension drawing below.

The mounting frame is designed so that the lamp module can be fitted with the cable exiting in one direction only. Confirm cable direction is correct before assembling the mounting frame.

Alternatively, the cable may be routed through a hole in the mounting surface. If passing the cable through a hole, ensure that there are no sharp edges to cut or chafe the cable.

Connect lamp as per wiring table to the right. Clip the lamp module into the mounting base ensuring that the clips have secured the lamp module. Try to keep the cable as long as possible, preferably join the cable inside a sealed cable junction box.

### **General Dimensions (mm)**



#### **INSTRUCTION SHEET**

# for: 2VA 980 720-0xx / 2394



## Wiring Colour Coding

This lamp allows full light output on both 12 and 24 volt vehicles and trailers.

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.

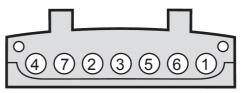
Lamp Cable Colours	Connect to	Power Consumption
White	Earth (-)	-
Red	Stop (+)	2 watts
Brown	Rear Position (+)	1 watt
Blue	Rear Indicator (+)	2 watts

**NB:** Lamp must be protected by a fuse rated at 5 amperes maximum.

#### **Additional Information for Connection to Trailer Connectors**

The table and diagram below shows the typical wiring specification for a 7-Pole Flat Plug Connector (as per AS4177.5 - 2004). Hella part number 4921.

Terminal No.	Connect to	Typical 7-Core Cable Colours
1	Left-hand Rear Indicator	Yellow
2	Reversing Lamps	Black
3	Earth	White
4	Right-hand Rear Indicator	Green
5	Service brakes (or Auxillary)	Blue
6	Stop	Red
7	Rear Position / Number Plate / Clearance	Brown



Cable Side View