NARVA® NEWS

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H.I.D a new era in lighting

Also in this edition:

- The '*must have*' Globe Application Guide
- Narva X-Factor L.E.D
- Standard Globes now with Plus 30 technology
- Winnebago chooses Narva
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Welcome

In the previous issue of Narva News I promised you some more "old" stories about BWI. The following story will give you some insight into our unique history. In the late 70s, Brown & Watson International imported toys from East Germany and were in the toy game for some years importing dolls, go-karts, wooden toys, children's prams, and even won a "highly commended" commendation during the Sydney toy fair for our new game "Castle Cave In". We attended the famous toy fair in Nuremburg, Germany, and supplied all the "majors" with a variety of products. These were "fun" times but I am much happier with the structure of the company we have today with the very solid brands of Narva and Projecta leading the charge in their respective market segments in the automotive market.

We are now all facing very tough times with the uncertainty in the financial markets and have seen a slump in the Aussie dollar all in a matter of weeks. The uncertainty will flow through all market segments and the availability of funds or credit from a reputable institution will be in very short supply, and will only be accessible to companies with a AAA+ rating.

Our company entered into a building contract very late in 2007 to consolidate our various operations now located in 3 different buildings and we look forward to taking possession late in 2009. It is a sign of the strength of BWI to take on this very large commitment and to work through all the adverse situations we have encountered thus far in 2008.

We have very strong relationships with all our main distribution partners. We enjoy the enviable position of the acceptance of our products by respected Automotive OEM and Aftermarket companies in both Australia and New Zealand and, I can proudly add, an increasing number of markets overseas.

> ***"I am much happier with the structure of the company we have today with the very solid brands of Narva, Projecta and See Ezy leading the charge in their respective market segments in the automotive market."***

Whilst business relationships are sometimes tested and tried, in the long term an understanding of the needs of both the supplier (us) and the receiver (our customer) have served all of us well since our company was founded in 1953.

Steve Waterham
Chief Executive Officer

IN THIS EDITION

The brilliance of H.I.D driving lamps dramatically increases road vision as seen on Brent Curreys' B-Double'

H.I.D a new

H.I.D (High Intensity Discharge) lighting is fast becoming the technology of choice for many users. With multiple new additions to the range, Narva now has an offer to suit every application.

Not only is the Narva H.I.D range the largest in Australasia, but all lamps feature the highest quality components to ensure superior light output and long life. All Narva H.I.D lamps feature the latest Generation 5 Ballasts and D1 Globes, which are manufactured in Europe. This superior technology delivers instant start-up with light output that is closer to daylight for safer working and driving conditions.

H.I.D's resistance to vibration results in up to five times greater life compared with standard halogen globes. This makes H.I.D ideal for not just driving lamps fitted to trucks, 4WDs and off-road vehicles but also work lamps used in mining, construction and agriculture.

Testimony to the amazing light performance and reliability of the new H.I.D lamps, Brent Currey of B. Currey Ltd has fitted the Ultima 225 H.I.D driving lamps to his fleet of six trucks and utility vehicles.

Travelling more than 300,000 kilometres per year on the New Zealand South Island, Brent's trucks spend the majority of driving time in darkness. When questioned about the H.I.D lighting, Brent's comments were literally glowing. "I first tried these on one truck and found that there was just no

era in lighting

comparison with anything I had tried before in the way of light output," he said. "The light is whiter, brighter and throws much further down the road. We've had many halogen lamps over the years but nothing has given us as much reliability and performance as the Narva H.I.D. They're fantastic," he said.

Brent's comments on the H.I.D lamps are further supported by a group of leading transport and motoring journalists from Australia and New Zealand who experienced the lights at a special night demonstration in Northern Victoria earlier in the year. During this special event, the journalists reviewed a comprehensive range of H.I.D driving and work lamps from Narva. With light beams illuminating the road up to 1.2 kilometres ahead, it was not surprising that all lamps were endorsed as outstanding. Mark Allen, freelance journalist with regular columns in magazines such as Overlander and Truckin' Life commented, "The penetration of the H.I.D driving lamps was unlike anything I've seen in vehicle lighting before. Just as impressive was the immense flood of almost daylight output from the work lamps. H.I.D is without doubt a vast improvement over conventional lighting". **N**

High Beam

Ultima 225 Halogen

Ultima 225 H.I.D

As shown above, even the award winning performance of Ultima 225 halogen is trumped by the impressive penetration and light quality of its 225 H.I.D equivalent.

Narva H.I.D, breaking the price barrier

Production improvements and an expanded range lead to impressive price reductions.

Few would dispute the outstanding performance of High Intensity Discharge (H.I.D) lighting compared with halogen lighting, but this new technology has traditionally come with a high price tag. However the price has been reducing as an increasing number of H.I.D products become available. Narva is now leading the market with aggressive new pricing without compromising quality. Substantial sales of H.I.D products at both an OEM and aftermarket level and a close partnership with Osram Germany, the leading manufacturer of both the D1S globe and Gen 5 ballast technology, has resulted in pricing that is more affordable. Traditionally H.I.D technology has been restricted to markets such as mining and forestry, where performance, as opposed to price was the prerequisite. Recently, the price of Narva H.I.D has nearly halved, making H.I.D available at a price more accessible for consumers and industry alike. **N**

Globe Catalogue & Application Guide – a 'must have' reference guide

Following two years of detailed research and development, Narva has introduced what is believed to be the most comprehensive globe catalogue and application guide available.

The new guide covers the most popular vehicles in the Australian and New Zealand markets, making it a valuable reference guide for the automotive industry in both countries.

Producing such an accurate in-depth application guide of this nature, with all its complexities, has meant painstaking research with information taken from multiple sources to minimise errors. This research is on-going to further improve the listing and to keep it continuously updated. New and updated listings will be placed on the Narva website www.narva.com.au, as research continues and is confirmed.

The format adopted in the design was developed to ensure the guide is easy to read and user friendly. The first 8 pages have been devoted to the details of the Narva globe range with images, packaging details, dimensions and full descriptions, allowing easy identification with an old globe in hand.

The remaining 25 pages have been devoted to detailed applications by vehicle, from Alfa Romeo to Volvo, with some listings going back to the 70's. The pages are colour coded, listing headlamp, front, side and rear indicators and the various tail lamp options.

The guide includes standard and incandescent globes, halogen globes and the latest Xenon H.I.D globes.

For your copy of this valuable reference guide, contact your Narva distributor or nearest state sales office. **N**

Plus 30 now standard in H1, H4 & H7 globes

Considered as cutting edge just a few years ago, Plus 30 technology has now been added to the standard H1, H4 and H7 halogen globes within the Narva range.

Simply order Narva standard globes (e.g. P/No. 48881 or 48881BL) and you will receive a globe with Plus 30 technology at no extra charge. 'Plus 30' produces improved performance with up to 30% more light on the road on low beam and up to 20% more on high beam. With no additional power consumption, the vehicle wiring can remain standard, therefore providing a practical upgrade and improved road safety at the cost of a standard globe.

Made in Germany, all specifications and pricing remain unchanged. The only difference is the improved light output, a feature not offered by the majority of competitive brands.

The standard globes with Plus 30 technology conform to ADR and ECE regulations and can be used as direct replacement in any vehicle with H1, H4 or H7 globes. **N**

X-Factor L.E.D delivers in New Zealand

With such intense light output from such a small source, the Narva X-Factor L.E.D warning lamp is proving a winner with electricity service provider North Power.

Servicing approximately 52,000 customers, North Power employ around 200 qualified linesmen responsible for power lines, transformers and substations throughout the north island of New Zealand. With this responsibility comes the need for vehicles equipped with the best in warning and safety lighting.

"We need our vehicles to stand out while we're working in the field. Our biggest challenge was to find a product that had the reliability of L.E.D with the intense brightness of halogen or Xenon lamps. We explored a few different options then found the Narva X-Factor L.E.D warning lamp," said Maintenance Manager John Unitt. "With the high powered L.E.Ds and different flash patterns, coupled with the competitive price, we found the X-Factor to be the best lamp available," he said.

John also commented that, "daytime visibility was very good. The wide angle optic meant that only one unit was required each side of the vehicle for a good visual effect. The size and construction, with the integrated gasket, made the lamp simple to mount onto the lower beam of the roof rack, preventing the lamp from getting damaged while loading ladders and other overhead equipment," John stated.

Narva X-factor L.E.Ds are made from a die-cast alloy housing that acts as a heat sink to drive light output to an extraordinary level of brightness. This technology, combined with a faceted wide angle optic makes this warning lamp one of the most powerful performers available.

For North Power, the requirement for an efficient and reliable lamp has been met and exceeded with the Narva 85220A X-Factor lamp.

The full range of Narva L.E.D warning lamp systems can be found in the 2008 Narva catalogue or online at www.narva.com.au

Winnebago chooses Narva for luxury Longreach model

Emu Plains based Winnebago Industries, Australia's largest manufacturer of Motorhomes, has introduced stylish new Narva lamps to its top of the range 2008 Longreach model.

Established in 1965, Winnebago is an Australian owned company with more than 43 years manufacturing experience in Australia for Australian conditions.

The uncompromising lifestyle offered by the Winnebago Motorhome extends to every aspect of the vehicle and the challenge presented to Narva was to meet their requirements for modern, high quality lighting with a very distinctive look.

Rear Combination Stop, Tail, Direction Indicator, Reverse Lamp Assembly

Available soon for general release, the distinctive looking rear combination lamp meeting the criteria of this important customer is now supplied by Narva. One combination lamp (as shown) with full compliance to ADR covering Stop, Tail, Direction Indicator and Reverse Lamp functions fulfils the requirements for application to both left and right hand rear of the Motorhome. The new lamp has been styled into the rear of the vehicle to complement the attractive overall appearance.

Model 8 Front End Outline Marker Lamps

Fitted to the front of the vehicle are five of the latest Model 8 L.E.D White and Amber End Outline Marker lamps in compliance with ADR 49/00. These attractive flush mounting lamps feature multi-voltage circuitry and are hard wired to simplify installation. The lamps incorporate four new generation L.E.D's rated at 100,000 hours of L.E.D life and covered by the 5 year Narva L.E.D warranty.

"The Longreach model is very popular and one of our best selling models," said Winnebago Business Development Manager, Max Mayo. "We are very happy with the performance of the Narva lamps and they've done extremely well to keep up supply with our increasing requirements," he said. **N**

Narva Lamp construction equal to L.E.D life

Over the past decade, lighting solutions for the transport industry have advanced in leaps and bounds. Prior to the mid 90's, when Narva introduced sealed lighting with long life globes and polycarbonate lenses, truck and trailer lighting was limited to conventional lamps with incandescent globes and acrylic lenses.

The acrylic lenses could be easily broken, usually well before the globe or copper contacts failed. Replacement lenses could be found for sale in all automotive outlets due to such high demand. This trend was reversed with the introduction of the sealed lighting range where virtually unbreakable polycarbonate lenses were first introduced. Although using long life globes, the sealed lamps could no longer be used once the globe failed, with the complete lamp needing to be replaced.

With the introduction of L.E.D (Light Emitting Diode) technology, the issue of globe failure has been all but eradicated. With more than 100,000 hours of operational life in modern L.E.Ds, the lamps are often referred to as 'life time' lighting. This improvement however, meant that the lamp construction needed to equal the longevity of the L.E.D's. The obvious solution, providing long term protection for the long life light source, was the use of virtually unbreakable polycarbonate construction.

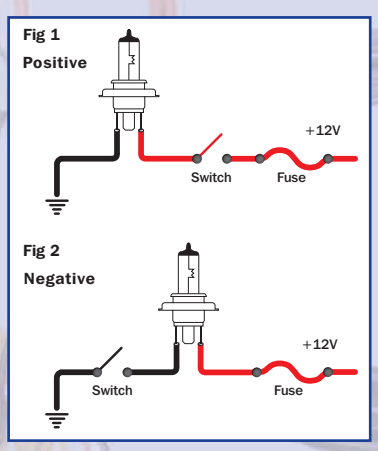
Polycarbonate, a particular group of thermoplastic polymers, has played an important part in enabling Narva to achieve its market leading position in the supply of L.E.D truck and trailer lighting. 99% of all Narva L.E.D lamps utilize polycarbonate materials in their construction. In an effort to reduce costs, many competitors continue to use acrylic materials, risking premature failure from damage and negating the long life advantages of L.E.D technology.

While acrylic lenses are likely to require frequent replacement through breakages in harsh environments, the combination of L.E.D technology and polycarbonate materials is the reason Narva can stand proud of its 5 year L.E.D warranty. **N**

TECH TALK

Positive and Negative Switching? Problem – Solution!

With the exception of some Japanese models, the vast majority of vehicles have always used Positively Switched headlight systems.



Positive Switching means that the headlamp globe is permanently connected to earth, with the positive side connected via a switch to the battery, hence 'Positive switching' (see Fig 1). Over recent years, negative switching has become more common, particularly for the headlight Hi/Lo dip function. As the name suggests, negative switching is where the switch is between the globe and the earth (Negative) while the positive side is permanently connected (via fuse) to the battery (see Fig 2).

So why use Negative Switching? The technical reason sighted is that a modern electrical system will be more efficient and use less copper where Negative Switching is used. From a functional point of view, both systems operate equally well.

This issue however creates a challenge for the consumer when wishing to fit accessories such as driving lights. Traditionally, driving lights have always been switched from the positive side, the majority of consumers will install lamps in this manner without a second thought. Negative Switching is changing this ideal. Without prior knowledge of the vehicles electrical system, the incorrect installation of driving lights could cause malfunction (e.g – lights remaining on) or possible electrical damage to the circuit. Installing a set of driving lights is no longer a simple task, if negatively switched the installation could be confusing and lead to errors that can be difficult to correct. However, there is a solution at hand.

Narva has addressed the Positive/ Negative problem by designing a plug & play wiring harness that can be easily installed and operates on both Positive and Negative headlamp systems. The key component is the patented 'Smart switching box', allowing the fitter to change the configuration with the flick of a switch. No prior knowledge of the vehicle being Positively or Negatively Switched is required. The loom also includes in-built fuse protection, if incorrectly wired no harm will come to the vehicle or the harness.

The harness is available under part number 74400 (12V) and 74400-24 (24V). It is also supplied as standard with all Ultima 225 driving light kits. **N**

Team Narva wins 4WD Challenge series

A double victory was achieved for Team Narva in the Engel 4WD Challenge Series.

The Engel 4WD Challenge Series kicked off in March in Gippsland, followed by the Snowy Mountain Challenge in Cooma and the Ateco Warn Winch Challenge in July, with the final event held on private property in Bulla.

After the completion of the 4 rounds, the two Narva teams had each achieved an overall victory for both the Modified and Production classes. In each of these events the drivers skills and equipment were tested to the limit with intense driving conditions and heavy winching in an environment dominated by steep hills, large rocks and plenty of mud.

With each event commencing with three night stages, Narva's 'Extreme' Driving Lamps have come into their own with the two winning teams of Trent Leen and Steve (Huddy) Hudson each using Halogen and H.I.D versions for a competitive advantage. Both teams stated that the Extreme lamps provided the ultimate light output while absorbing the punishment provided by the demanding conditions. "We couldn't be happier with the H.I.D Broad Beam lamps," commented Trent. "There are no dark spots and we now have so much light all around the vehicle that it gives us a great advantage. With this amount of light, people commented that they don't know whether we are coming or going on the course – there's light everywhere!" he said. "In the 1st round a bog hole formed and whilst negotiating this, the roof lights hit an overhanging gum tree branch. With the impact we were sure the lights had broken, however the roof rack they were mounted on sustained the damage and the lights were left intact".

Another severe test of the lamps' durability occurred during the 3rd round where Trent laid the vehicle on its side. While righting the vehicle, the lamps were once again expected to be written off. However, "After the incident we were amazed that once again the lights, although covered in mud and debris, had sustained no damage at all," reported Trent. These events and results, especially during the night stages, are testament to the reliability, performance and exceptional durability of the Narva 'Extreme' driving lamps. **N**