LED LIGHTING

HEADLIGHT BULB UPGRADE KITS



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LED Signalling Bulb Kits



LED LIGHTING IS THE FUTURE

THIS IS WHY YOU SHOUD CONSIDER IT

Power and precision

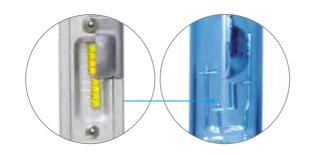
The LED's extremely accurate light source delivers a precision beam pattern which results in no glare for oncoming traffic and the spread of light is incredibly even meaning there are no hotspots or dark patches across the road.



Real white light

Halogen upgrade bulbs create a white light by applying a heavy blue coating to the glass. While this improves the light colour, it dramatically reduces the light output and the life expectancy.

LED delivers a much whiter light without these limitations. The LED chip actually generates the precise white colour while also benefiting from ultra long life and extremely high light output.

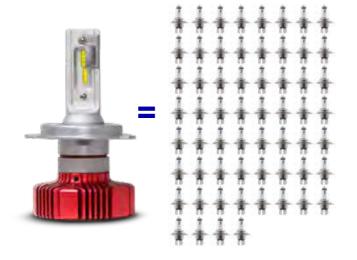


Ultra long life

LED bulbs have an ultra long life and are expected to last for up to 30,000 hours. Standard halogen is rated at 500 hours and halogen long life is rated at 1,500 hours in comparison.

LED is also resistant to physical and electrical shock which is a major cause for halogen bulbs failing

If you run the numbers you'll see that not only are the STARR LIGHTING LED Bulb Kits the ultimate upgrade performance wise but also incredibly good value!





REFLECTOR & PROJECTOR HEADLIGHTS

HOW TO CHOOSE THE CORRECT BULB

There are two types of headlight systems used in automotive vehicles and they both generate a beam pattern in very different ways.

It is important to know which type your vehicle uses when selecting an LED bulb as some bulbs perform best in a particular headlight system.

Use the images below to determine the headlight style/s of your vehicle and keep an eye out for the Reflector or Projector icons and terminology on each Evolution 4000 LED bulb kit product page to see if they are suitable for your vehicle.











LED Headlight Bulb Kits





Model Evolution 4000 Reflector Optimised

The Model Evolution 4000 is 180% brighter than standard halogen bulb, has an expected life span of up to 30,000 hours and comes in an ultra white light of 6000K. This powerful product is the premium halogen bulb replacement.

There are 15 products in this range (listed below) that are engineered and optimised to perform best in a reflector style headlight. The new product design means the LED chipson either side of the bulb are closer together, producing a sharper and fuller beam pattern on the road.

If you're looking for the ultimate in LED bulb performance, there is no better option than the new Evolution 4000 range.

Reflector Optimised

Part No.	Base
STARR-880LED4000V	880
STARR-881LED4000V	881
STARR-896LED4000V	896
STARR-9005LED4000V	9005 / HB3
STARR-9006LED4000V	9006 / HB4
STARR-9007LED4000V	9007 / HB5
STARR-9012LED4000V	9012 / HIR2
STARR-H1LED4000V	H1
STARR-H3LED4000V	H3
STARR-H4LED4000V	H4 / 9003
STARR-H7LED4000V	H7
STARR-H10LED4000V	H10
STARR-H11LED4000V	H8/H9/H11/H16
STARR-H13LED4000V	H13 / 9008
STARR-H15LED4000V	H15

Evolution 4000

Re-designed for ultimate performance

The Model Evolution 4000 offers the same technical specifications as the old Model 4000 but there are a couple of key improvements that make this Evolution 4000 model the superior option.

- Smaller bulb sizing means less fitment issues
- Side exit cabling (on most base types) means little to no dust cap fitment issues
- Smaller, less intrusive power module which is now hard wired in with no connector plugs
- Shorter overall length to help fit most headlights



External electronic driver

To deliver the extreme power of the Model Evolution 4000, the kit includes an externally wired LED driver module. The new braided cable is a lot more flexible than the previous version, making installation a breeze.



New Bulb Design



LED Headlight Bulb Kits

Model Evolution 4000 Projector Optimised

There are 2products in this range (listed below) that are engineered and optimised to perform best in aprojector style headlight.

The difference between this design and the standard reflector bulb design is the placement of the LED chip boards. The Vshape configuration works specifically with the projector style lens to produce the smoothest and most powerful beam pattern seen from an LED bulb.

The Evolution 4000 Projector range is an exciting and new addition to the LED Bulb Kit program.

Projector Optimised

Part No.	Base
STARR-H7LED4000P	H7
STARR-H11LED4000P	H8 / H9 / H11 / H16



Evolution 4000 Specifications

Lumen: 2000 per bulb
Colour Temp: 6000K
Power: 25W Per Beam
Voltage: DC12–24V

• Operating temperatures: -40°/ +130°C

• IP Rating: IP65

• Lifetime: Up to 30,000 hours

Warranty

3 Year – Standard Driving Conditions: For normal day to day driving & recreational 4X4.

1 Year –Off-Highway: For mining and industrial applications.

Kit Contains

2 xLED Headlight Bulbs

This product range is not approved for SAE, ECE or DOT



Standard halogen – Low Beam



Model Evolution 4000 - Low Beam







LED Headlight Bulb Kits

Model 4000

Low Beam Optimised



Vehicle & Beam Specific

The H7LED4000VW is unique in that it is designed specifically to replace Volkswagen H7 low beam bulbs that use a very specific clip-in system. This system has been used in other vehicles by other manufacturers but it has been predominantly used by Volkswagen.

A key feature with this range is that it has built in CANbus technology, meaning the LED bulb will be able to communicate with the vehicle without causing any errors or fault codes.

It is recommended to consult a qualified auto electrician before installing this product to make sure it is suitable for your vehicle. See below for the list of Volkswagen models that this product is suitable for.

Vehicle Fitting Guide

Vehicles from 2010 onwards

EOSGolf VIGolf VIITiguan 1Tiguan 2

Product Specifications

Lumen: 2000 per bulb
Colour Temp: 6200K
Power: 25W Per Beam
Voltage: DC12V

• Operating temperatures: -40°/ +130°C

• IP Rating: IP65

Built In CANbus

Warranty

3 Year –Standard Driving Conditions: For normal day to day driving & recreational 4X4.

Kit Contains

2 x LED Headlight Bulbs

This product range is not approved for SAE, ECE or DOT





Vehicle & Beam Specific

Part No.	Base
STARR-H7LED4000VW	H7 with built-in adaptor base

Canadian Aftermarket LED Product Warranty Statement

STARR Lighting's aftermarket LED products come with a Limited Warranty against defects in materials, components and workmanship. This Limited Warranty is not transferable and applies to the original installation of the STARR Lighting LED light as long as the original consumer/purchaser owns the vehicle.

Please note that this warranty does not cover claims resulting from:

- Abuse, neglect and/or accidents
- Modifications and/or alterations
- Improper installation and/or use
- · Chemicals and/or cleaners
- Voltage transients and/or spikes

lighting technology

In the unlikely event that you experience a problem that falls within the terms of the Limited Warranty, Pacesetter Products, on behalf of STARR Lighting will, at its discretion, either replace the defective product, or refund the purchase price of the product.

To make a warranty claim, simply return the product (along with all of the factory-issued components and proof of purchase) to the STARR Lighting authorized dealer where the product was originally purchased and they will assist you with completing the claim process.

Note: Pacesetter Products and STARR Lighting do not cover the expense for removal or transportation of product to be claimed under this warranty statement.

This aftermarket product warranty is exclusive. STARR Lighting and Pacesetter Products has no other liability or obligation related to these products. No other warranties are made; either expressed or implied, including without limitation, any implied warranties of title, non-infringement, merchantability or fitness for a particular purpose.

Limited Warranty Period:

- Model Evolution 4000V LED Headlight Bulb Kits = 3 Years. (Mining & Industrial applications = 1 Year)
- Direct Fit LED Headlight Bulb Kits = 2 Years.
 (Mining and Industrial applications = 1 year)
- LED Signaling range = 2 Years. (Mining and Industrial applications = 1 year)







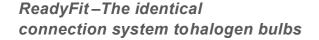






LED Headlight Bulb Kits





The ReadyFit range has an identical connection system to the existing halogen bulb they are going to replace. It's the ideal DIY solution that's as easy as removing the old halogen bulb and replacing it with the new LED bulb.

The range includes built-in CANbus technology so the bulbs are installed without the need for additional wiring harnesses.

There are 15 products in this range (listed below) that are engineered and optimised to perform best in a reflector style headlight.

The whole Ready Fit range are an excellent upgrade over traditional halogen with 1800 Lumens per bulb and a pure white light rated at a colour temperature of 6000K.

Some vehicles' electrical systems may require the installation of CANbus kits even though the bulbs CANbus compatible.

Please see page 11 for available CANbus kits.



Reflector Optimised

Part No.	Base
STARR-881LED3600R	880 / 881
STARR-9004LED3600R	9004 / HB1
STARR-9005LED3600R	9005 / HB3
STARR-9006LED3600R	9006 / HB4
STARR-9007LED3600R	9007 / HB5
STARR-9012LED3600R	9012 / HIR2
STARR-H1LED3600R	H1
STARR-H3LED3600R	H3
STARR-H4LED3600R	H4 / 9003
STARR-H7LED3600R	H7
STARR-H10LED3600R	H10
STARR-H11LED3600R	H8/H9/H11/H16
STARR-H13LED3600R	H13 / 9008
STARR-H15LED3600R	H15
STARR-H15LED3600FR	H15 Ford Ranger

Direct Fit Specifications

Lumen: 1800 per bulb
Colour Temp: 6000K
Power: 18W Per Beam
Voltage: DC12-24V

• Operating temperatures: -40°/ +130°C

• IP Rating: IP65

• Lifetime: Up to 30,000 hours

Warrant

2 Year –Standard Driving Conditions: For normal day to day driving &recreational 4X4.

Kit Contains

2 x LED Headlight Bulbs

This product range is not approved for SAE, ECE or DOT



LED Fog Light Bulb Kits

Fog Light Bulbs –Be prepared for extreme weather conditions

Improve your safety while driving through poor weather conditions with these Ready Fit style LED fog light bulbs. Designed to illuminate the road and reflective markers beneath low lying fog, these are the perfect fog light bulbs to compliment your LED headlights at an entry level price.

Fog Light

Part No.	Base
STARR-9006LED3600F	9006 / HB4
STARR-H10LED3600F	H10
STARR-H11LED3600F	H8 / H9 / H11 / H16
STARR-PSLED3600F	PS19 / PS24 / PSX24





LED Multi Function Bulb Kits

H15 Multi Function Bulb

The H15 bulb type has become very popular with vehicle manufacturers in recent years, with its dual filament system offering a high beam and lower output daytime running light beam from the same bulb. Due to the nature of the way it's locked into the headlight, the Ready Fit system is the only high quality H15 option on the market.

The H15LED3600MF is considered a halogen replacement compared to the higher output H15LED3600R which is more of a performance upgrade.





Multi Function

Part No.	Base
STARR-H15LED3600MF	H15

Fog & Multi-Function Specifications

• Lumen: 550 per bulb (Fog) 80/600 per bulb (H15)

Colour Temp: 6000KPower: 30W Per BeamVoltage: DC12-24V

• Operating temperatures: -40°/ +130°C

• IP Rating: IP65

• Lifetime: Up to 30,000 hours

Warranty

2 Year – Standard Driving Conditions: For normal day to day driving & recreational 4X4.

1 Year – Off-Highway: For mining and industrial applications.

Kit Contains

2 x LED Bulbs

This product range is **not approved for SAE, ECE or DOT**







CANbus Kits

Kits are suitable for both the Model Evolution 4000 and Ready Fit

Some vehicle electronic systems may conflict with the LED bulb. There are a limited number of vehicles who's electronic systems may require the addition of a CANbus unit during installation. The CANbus unit will allow the vehicles electronics to accept the LED bulb into its system.

One simple way of checking if your vehicle is monitoring your headlight bulbs is to:

- 1. Carefully disconnect one of your headlight bulbs
- 2. Start your vehicle and turn on your headlights
- If you are receiving a 'globe out' warning light anywhere inside your vehicle, you will likely require an Electronic style CANbus product.

Resistor style CANbus is typically required when additional lights are fitted to a vehicle and wired into high beam which is common for 4X4 vehicles using light bars and driving lights.

Before fitting the LED headlight conversion kit, we suggest you consult a qualified Auto Electrician or call Invision Sales to see if your vehicle is listed as requiring a CANbus product. The majority of vehicles will not require any CANbus products.

All in One Complete CANbus

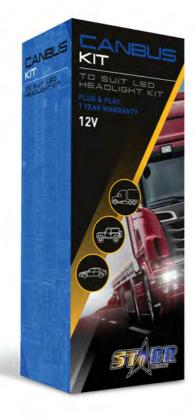
Part No.	Base	Voltage
STARR-9005CB	9005 / 9006 / 9012 / H10	12V
STARR-H1H3CB	H1 / H3	12V
STARR-H4CB12V	H4 / 9003 12V	12V
STARR-H4CB24V	H4 / 9003 24V	24V
STARR-H7CB12V	H7 12V	12V
STARR-H7CB24V	H7 24V	24V
STARR-H11CB	H8 / H9 / H11 / H16	12V
STARR-H13CB	H13/9008	12V

Electronic Only CANbus - Stronger Electronics

STARR-9005ECB	9005 / 9006 / HB3 / HB4	12V
STARR-9012ECB	9012 / HIR2	12V
STARR-H4ECB	H4	12V
STARR-H7ECB	H7	12V
STARR-H11ECB	H8 / H9 / H11 / H16	12V

Resistor Only CANbus - Stronger Resistors

STARR-9005RCB	9005	12V
STARR-9006RCB	9006	12V
STARR-H4RCB	H4	12V
STARR-H4RCB24V	H4	24V
STARR-H7RCB	H7	12V
STARR-H11RCB	H11	12V









Electronic CANbus example



Resistor CANbus example

LED BULB KIT SUMMARY & BUYING GUIDE

A SIMPLE BREAKDOWN OFYOUR OPTIONS

Picking the right product/s for you and your vehicle doesn't need to be stressful and confusing. Use the below key questions to filter through the jargon and begin driving with your brand new LED headlights!

1 Headlights

- I want better headlight performance than my current bulbs but simply want to plug them in and start driving.
- Go directly to page 9 to pick out your new ReadyFit LED headlight bulbs!
- I want maximum headlight performance and am OK with some more advanced installation.

 Use the diagrams on page 4 (or below) to establish your headlight style and then proceed to pages 5 & 6 to pick out your new Evolution 4000 LED headlight bulbs!





2 Fog Lights

- I want better fog light performance than my current bulbs but simply want to plug them in and start driving.
 - Go directly to page 10 to pick out your new Direct Fit LED fog light bulbs!
- I want maximum fog light performance and am OK with some more advanced installation. Proceed to page 6 to pick out your new Evolution 4000 LED fog light bulbs.

Please note: Evolution 4000 bulb installation may not be possible on some fog light assemblies due to the limited space at the back of some designs.. We strongly recommend consulting a qualified auto electrician for advice prior to purchase.

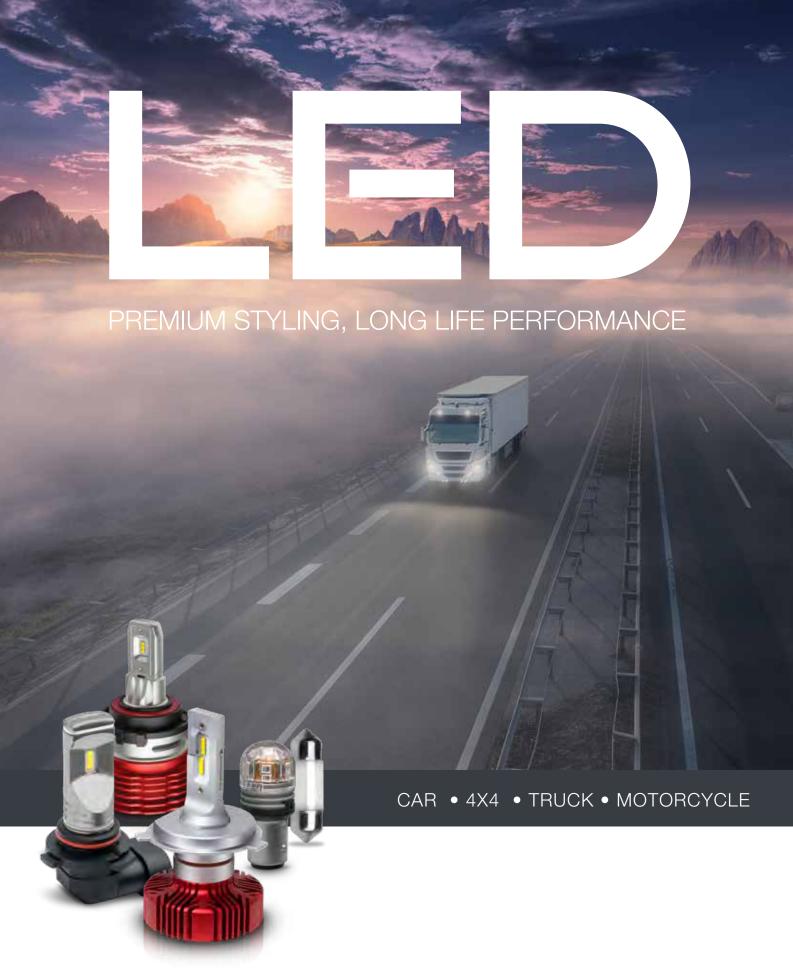
3 CANbus

Most vehicles will not require a CANbus module to be installed along with your new LED bulb kits. However, there are a few vehicles that have been confirmed to require something to allow the bulbs to function properly. If you have a vehicle that may fall under one of these listed, please call **Pacesetter Products** prior to purchase and installation for CANbus advice.

- Ford Ranger Most models
- Audi Q7 & TT
- BMW 5 Series & X3
- Pontiac G8
- Nissan Frontier Most models
- Nissan Armada Most models
- Toyota Tacoma Some models
- Lexus LX570– Some models
- Volkswagen Most models
- Jeep Most models









For more information about the STARR Lighting range of LED products, contact Pacesetter Products. Pacesetter is the North American Distributor for STARR Lighting Products.

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