

## Diode Dynamics DD0003P

# Diode Dynamics 1156 HP11 Backup LED Bulbs Instruction Manual

## 1. PRODUCT OVERVIEW

The Diode Dynamics 1156 HP11 Backup LED Bulbs are engineered to replace your vehicle's factory incandescent bulbs, providing significantly enhanced brightness and a modern, cool white appearance for your backup lights. These bulbs are designed for reliable, long-lasting performance.

### Key Features:

- Direct replacement for factory 1156 incandescent bulbs.
- Increased light output with advanced LED technology.
- Plug-and-play installation, requiring no vehicle modifications.
- Features four COB (Chip-on-Board) type LEDs with a high-power chip mounted at the top for optimal light distribution.
- Built with constant-current inductive circuitry and transient suppression for consistent performance and longevity.



Image 1.1: A pair of Diode Dynamics 1156 HP11 LED bulbs.



Image 1.2: Visual comparison demonstrating the increased brightness and cool white output of the HP11 LED bulb compared to a stock incandescent bulb in a vehicle's backup light.

## 2. PACKAGE CONTENTS

Please verify that all items are present in your package:

- Two (2) Diode Dynamics 1156 HP11 LED Bulbs (Cool White)

## 3. SPECIFICATIONS

Specification	Value
Brand	Diode Dynamics
Model Number	DD0003P
Bulb Size	1156
Application	Backup Lights
Operating Voltage	9-16V
Color Temperature	Cool White (6000K)
Lumen Output	310 lumens
Power Consumption	2.89 watts
Typical Current Draw	219 mA
Bulb Length	56.3 mm (2.2 in)
Top Diameter	18.5 mm (0.7 in)
Base Diameter	15.3 mm (0.6 in)

# HP11 LED Bulb

Size: 1156

Color Options



DIODE DYNAMICS  
PERFORMANCE LIGHTING TECHNOLOGY

## OPTICS

Side-firing LEDs fill housing, while projector lens on top focuses light outwards.

## OUTPUT

Quality high-power LEDs, driven at optimal power level for longevity and extreme brightness.

## INSTALLATION

Sturdy aluminum stamped base terminal to ensure a correct and secure fitment.



## OPERATION

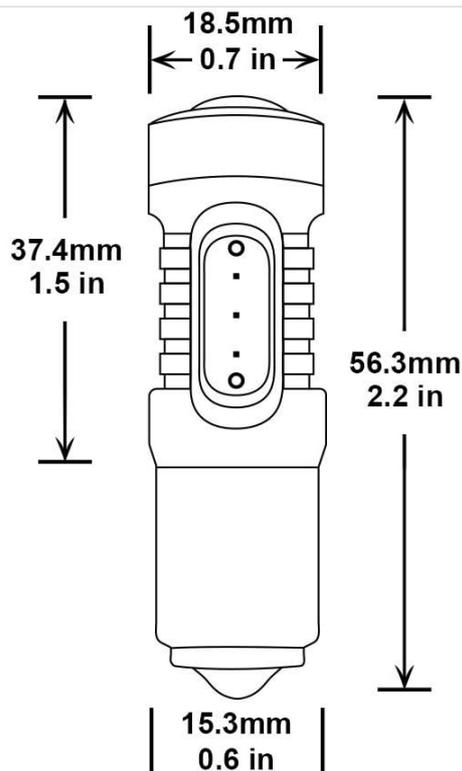
Aluminum casing with textured finish for maximum heatsinking properties.

## RELIABILITY

Advanced integrated inductive drive circuit for superior performance and reliability.

TruLux™	310 lumens
Power Consumption:	2.89 watt
Typical Draw:	219 mA

Image 3.1: Detailed diagram of the HP11 LED bulb's construction and features.



DIODE DYNAMICS

1156 HP11

Image 3.2: Technical drawing showing the exact dimensions of the 1156 HP11 LED bulb.

## 4. INSTALLATION INSTRUCTIONS (SETUP)

These Diode Dynamics 1156 HP11 LED bulbs are designed for direct, plug-and-play replacement of your vehicle's existing 1156 incandescent backup bulbs. No modifications are typically required. Always ensure the vehicle is safely parked and powered off before beginning any installation.

## Installation Steps:

1. **Preparation:** Ensure the vehicle's ignition is off, the engine is cool, and the parking brake is engaged.
2. **Locate Bulb Housing:** Identify the location of your vehicle's backup light housing. This is typically accessed from the rear of the vehicle, often behind a removable panel in the trunk or tailgate, or by removing the tail light assembly. Consult your vehicle's owner's manual for specific access instructions.
3. **Remove Old Bulb:** Carefully twist or unclip the bulb socket from the housing. Then, remove the existing 1156 incandescent bulb from its socket by pushing it in and twisting counter-clockwise.
4. **Install LED Bulb:** Insert the Diode Dynamics 1156 HP11 LED bulb into the socket. Push it in and twist clockwise until it locks securely into place.
5. **Test Functionality:** Before reassembling, turn on your vehicle's ignition (without starting the engine) and engage reverse gear (with the parking brake still engaged) to confirm the new LED bulbs illuminate properly. If a bulb does not light up, refer to the Troubleshooting section.
6. **Reassemble:** Once proper operation is confirmed, reattach the bulb socket to the light housing and reassemble any panels or components that were removed.

## 5. OPERATION

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Once correctly installed, the Diode Dynamics 1156 HP11 LED bulbs will function automatically as your vehicle's backup lights. When reverse gear is engaged, the bulbs will provide a bright, cool white light, significantly improving visibility behind your vehicle compared to standard incandescent bulbs. This enhanced illumination aids in safer reversing maneuvers, especially in low-light conditions.

## 6. MAINTENANCE

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Diode Dynamics LED bulbs are designed for durability and long-term performance, requiring minimal maintenance. The robust construction and advanced circuitry contribute to their extended lifespan.

- **Cleaning:** Periodically inspect the bulb's lens for any accumulation of dirt or debris. Gently clean with a soft, damp cloth if necessary to ensure optimal light output. Avoid using harsh chemicals or abrasive materials, as these can damage the bulb's surface.
- **Inspection:** No regular internal maintenance is required. If you notice any changes in light output or performance, refer to the Troubleshooting section.

## 7. TROUBLESHOOTING

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If you encounter any issues with your Diode Dynamics 1156 HP11 LED bulbs, please refer to the following common troubleshooting steps:

### Bulb Does Not Light Up:

- **Check Seating:** Ensure the LED bulb is fully and securely seated in the vehicle's socket. A loose connection can prevent illumination.
- **Verify Power:** Confirm that the vehicle's backup light circuit is receiving power. You can test this by temporarily reinstalling a known working incandescent bulb or using a multimeter.
- **Check Fuse:** Inspect the vehicle's fuse box for any blown fuses related to the backup lights. Replace if necessary according to your vehicle's owner's manual.
- **Polarity:** LED bulbs are polarity sensitive. If the bulb does not light up, remove it from the socket, rotate it

180 degrees, and reinsert it. This often resolves the issue.

## Flickering:

- The HP11 bulbs are designed with constant-current inductive circuitry and transient suppression to prevent flickering. If flickering occurs, ensure the operating voltage supplied to the bulb is consistently within the specified 9-16V range.
- If flickering persists after verifying voltage, contact Diode Dynamics customer support for further assistance.

## 8. WARRANTY AND SUPPORT

Your Diode Dynamics 1156 HP11 LED Bulbs are backed by a **3-year warranty**, covering defects in materials and workmanship under normal use. Additionally, a **30-day return policy** with no restocking fee is offered for purchases.

For warranty claims, technical assistance, or any product-related inquiries, please contact Diode Dynamics customer support directly. You can typically find contact information on the official Diode Dynamics website or through your original point of purchase.

Please retain your proof of purchase for warranty validation.

## Related Documents - DD0003P

	<p><a href="#">2015+ Dodge Charger LED Sidemarker Installation Guide   Diode Dynamics</a></p> <p>Step-by-step installation guide for Diode Dynamics 2015+ Dodge Charger LED Sidemarkers (SKUs DD5110, DD5111, DD5112). Learn how to replace your factory sidemarkers with brighter, modern LED units. Includes tools needed, detailed instructions for front and rear installation, and support contact information.</p>
	<p><a href="#">Ford F-150/Raptor LED Pod Ditch Light Kit Installation Guide</a></p> <p>Comprehensive installation guide for the Diode Dynamics LED Pod Ditch Light Kit for Ford F-150 (2015-2020) and Ford Raptor (2017-2020). Includes step-by-step instructions, SKU details, and support information.</p>
	<p><a href="#">Diode Dynamics SS3 Ram Horizontal Foglight Kit Installation Guide</a></p> <p>Detailed installation instructions for the Diode Dynamics SS3 3" LED Pod Ram Horizontal Foglight Kit for Ram 1500 (2009-2012) and Ram HD (2010-2018) vehicles with plastic or steel bumpers.</p>
	<p><a href="#">Diode Dynamics SS3 Ram Vertical Foglight Kit Installation Guide</a></p> <p>Step-by-step installation guide for the Diode Dynamics SS3 3" LED Pod Ram Vertical Foglight Kit, compatible with 2013-2018 Ram 1500. Includes installation and aiming instructions, SKU details, and support information.</p>

	<p><a href="#">Stage Series SS3 LED Pod Foglight Kit Installation Guide</a></p> <p>Comprehensive installation guide for the Stage Series SS3 Type SV2 Foglight Kit, including aiming instructions and compatibility information for 2019-2021 Chevy Silverado 1500 and 2020-2021 Chevy Silverado HD 2500/3500 models.</p>
	<p><a href="#">Velossa Tech Genesis G70 BIG MOUTH "LIT KIT" Ram Air Intake Installation Guide</a></p> <p>Comprehensive installation guide for the Velossa Tech Genesis G70 3.3T and 2.0T BIG MOUTH "LIT KIT" Ram Air Intake system, detailing component contents and step-by-step assembly for enhanced vehicle performance and integrated lighting.</p>