

Bosch 1 987 301 078

Bosch Automotive H7 Plus 90 Headlight Bulb User Manual

Model: 1 987 301 078

INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Bosch Automotive H7 Plus 90 Headlight Bulb. Designed for optimal visibility and safety, this halogen bulb delivers up to 90% more light on the road compared to standard bulbs, providing a brighter and more comfortable driving experience, especially during night driving or in low visibility conditions. Please read this manual thoroughly before installation and use.

SAFETY INFORMATION

Always prioritize safety when handling and installing automotive components. Failure to follow these instructions may result in personal injury or damage to your vehicle.

- **Disconnect Power:** Before attempting any installation or maintenance, ensure your vehicle's ignition is off and the battery is disconnected to prevent electrical shock.
- **Wear Protective Gear:** Always wear appropriate safety glasses and gloves when handling light bulbs.
- **Avoid Touching Glass:** Do not touch the glass part of the bulb with bare hands. Oils from your skin can create hot spots, leading to premature bulb failure. If touched, clean with rubbing alcohol.
- **Allow Cooling:** Headlight bulbs can become extremely hot during operation. Allow sufficient time for the bulb to cool down before handling.
- **Proper Disposal:** Dispose of old bulbs according to local regulations.
- **Vehicle Manual:** Always refer to your vehicle's owner's manual for specific instructions regarding headlight bulb replacement and vehicle compatibility.



Figure 1: Proper handling of the bulb. Always hold by the base, avoid touching the glass.

PRODUCT OVERVIEW

The Bosch H7 Plus 90 headlight bulb is a high-performance halogen lamp designed for various automotive lighting applications.

Key Features:

- Up to 90% more light on the road for enhanced safety.
- Produces white light for comfortable, fatigue-free vision.
- Ideal for night driving and low visibility conditions.
- ECE approved for road use.

Applications:

- Low Beam Headlights
- High Beam Headlights
- Fog Lights
- Daytime Running Lights (DRL)



Figure 2: Bosch H7 Plus 90 Headlight Bulb and its packaging.

INSTALLATION

The installation process for headlight bulbs can vary significantly between vehicle models. Always consult your vehicle's owner's manual for specific instructions and diagrams relevant to your car. The following are general steps.

1. **Prepare Vehicle:** Park your vehicle on a level surface, turn off the engine, engage the parking brake, and turn off all lights. Disconnect the negative terminal of the car battery for safety.
2. **Access Headlight Assembly:** Depending on your vehicle, you may need to open the hood, remove a plastic cover, or even partially remove the headlight assembly to access the bulb.
3. **Locate Bulb Socket:** Identify the H7 bulb socket. It usually has wires connected to it.
4. **Disconnect Wiring:** Carefully disconnect the electrical connector from the back of the old bulb.
5. **Remove Old Bulb:** Release any retaining clips, springs, or twist-lock mechanisms holding the old bulb in place. Gently pull the old bulb straight out.
6. **Install New Bulb:** Holding the new Bosch H7 Plus 90 bulb by its base (*do not touch the glass*), carefully insert it into the headlight housing. Ensure it is seated correctly and securely.
7. **Secure Bulb:** Re-engage the retaining clips, springs, or twist-lock mechanism to hold the new bulb firmly.
8. **Reconnect Wiring:** Reconnect the electrical connector to the new bulb.
9. **Test Lights:** Reconnect the car battery. Turn on your vehicle's lights to ensure the new bulb is functioning correctly. Check both low and high beams.
10. **Reassemble:** Reinstall any covers or components that were removed to access the headlight assembly.



Figure 3: Detailed views of the Bosch H7 Plus 90 bulb, showing its structure and base.

OPERATING INSTRUCTIONS

The Bosch H7 Plus 90 headlight bulb operates as a direct replacement for standard H7 halogen bulbs. Its operation is controlled by your vehicle's existing lighting system.

- **Activation:** Turn on your vehicle's headlights using the standard controls (e.g., headlight switch on the dashboard or steering column).
- **Beam Selection:** Switch between low beam and high beam as required by driving conditions and traffic laws. The Plus 90 bulb enhances both.
- **Optimal Performance:** For best performance, ensure your vehicle's electrical system is in good working order. Consistent voltage supply is crucial for bulb longevity and brightness.

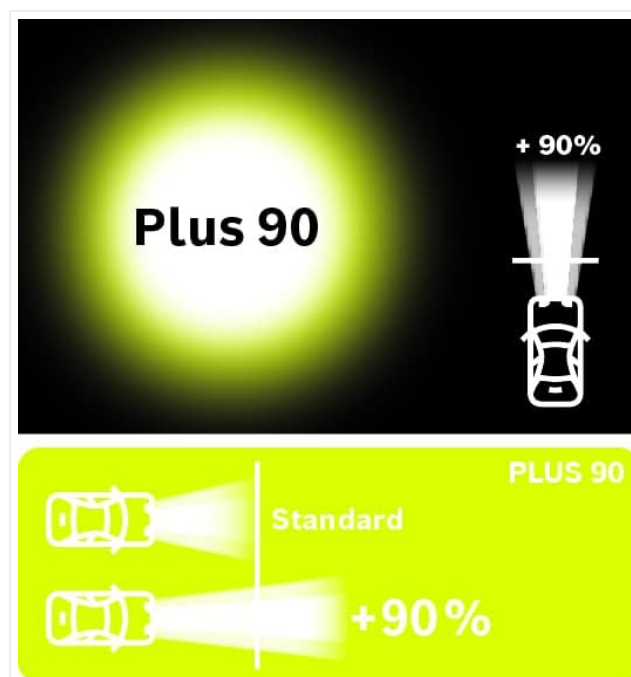


Figure 4: Visual representation of the increased light output from the Plus 90 bulb compared to a standard bulb.

MAINTENANCE

Halogen bulbs generally require minimal maintenance. However, following these guidelines can help ensure their longevity and optimal performance.

- **Regular Inspection:** Periodically check your headlights for proper function. Replace bulbs in pairs if possible, as bulbs from the same batch tend to fail around the same time.
- **Clean Headlight Lenses:** Keep your vehicle's headlight lenses clean from dirt, grime, and oxidation. A clean lens allows maximum light output.
- **Avoid Contamination:** As mentioned in safety, avoid touching the glass of the bulb. If you need to handle it, use clean gloves or a lint-free cloth.
- **Voltage Stability:** Ensure your vehicle's electrical system is stable. Voltage spikes or drops can shorten bulb life.

TROUBLESHOOTING

If you encounter issues with your Bosch H7 Plus 90 headlight bulb, consider the following common problems and solutions:

Problem	Possible Cause	Solution
Bulb does not light up.	◦ Blown fuse. ◦ Loose or corroded electrical connection. ◦ Defective bulb. ◦ Faulty headlight switch or wiring.	◦ Check and replace the relevant fuse in your vehicle's fuse box. ◦ Inspect and clean electrical connectors. Ensure they are securely attached. ◦ Replace the bulb. ◦ Consult a qualified mechanic for electrical system diagnosis.
Bulb flickers or is dim.	◦ Poor electrical connection. ◦ Low voltage from vehicle's electrical system (e.g., weak alternator). ◦ Bulb nearing end of life.	◦ Check and secure all connections. ◦ Have your vehicle's charging system inspected by a mechanic. ◦ Replace the bulb.
Short bulb lifespan.	◦ Touching the glass during installation. ◦ Excessive vibration. ◦ Voltage spikes or over-voltage. ◦ Frequent on/off cycling.	◦ Ensure proper handling during installation (use gloves). ◦ Check if the bulb is securely seated in its housing. ◦ Have vehicle's electrical system checked. ◦ This is normal for some driving habits.

SPECIFICATIONS

Technical specifications for the Bosch Automotive H7 Plus 90 Headlight Bulb:

Attribute	Value
Manufacturer	Bosch
Model Number	1 987 301 078
Bulb Type	Halogen
Bulb Size/Fitting	H7 (PX26d base)
Voltage	12 Volts
Wattage	55 Watts
Light Output Enhancement	Up to 90% more light
Color Temperature	3500 Kelvin (White Light)
Product Dimensions	9.5 x 3.6 x 13.5 cm
Item Weight	11 grams
Safety Approval	ECE Approved, INMETRO: 006951/2017
Quantity in Package	1 Bulb

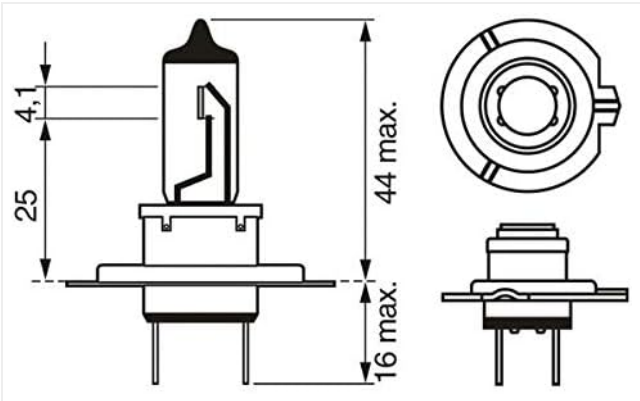


Figure 5: Technical dimensions of the H7 bulb.

WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Bosch Automotive website or contact Bosch customer service in your region. Keep your proof of purchase for any warranty claims.

Bosch Official Website: www.bosch.com