Yavor XM-EX90

Yavor Replacement Laser Lens Assembly for JVC XM-EX90 CD Player

Instruction Manual

1. Introduction

This instruction manual provides essential information for the proper installation, function, and maintenance of the Yavor replacement laser lens assembly for the JVC XM-EX90 CD Player. Please read this manual thoroughly before attempting any installation or repair to ensure correct procedure and prevent damage to the component or your device.

2. Product Overview

The Yavor replacement laser lens assembly is an optical pick-up unit designed to restore disc reading capabilities to compatible JVC XM-EX90 CD players. This component is crucial for reading data from CDs, enabling audio playback.

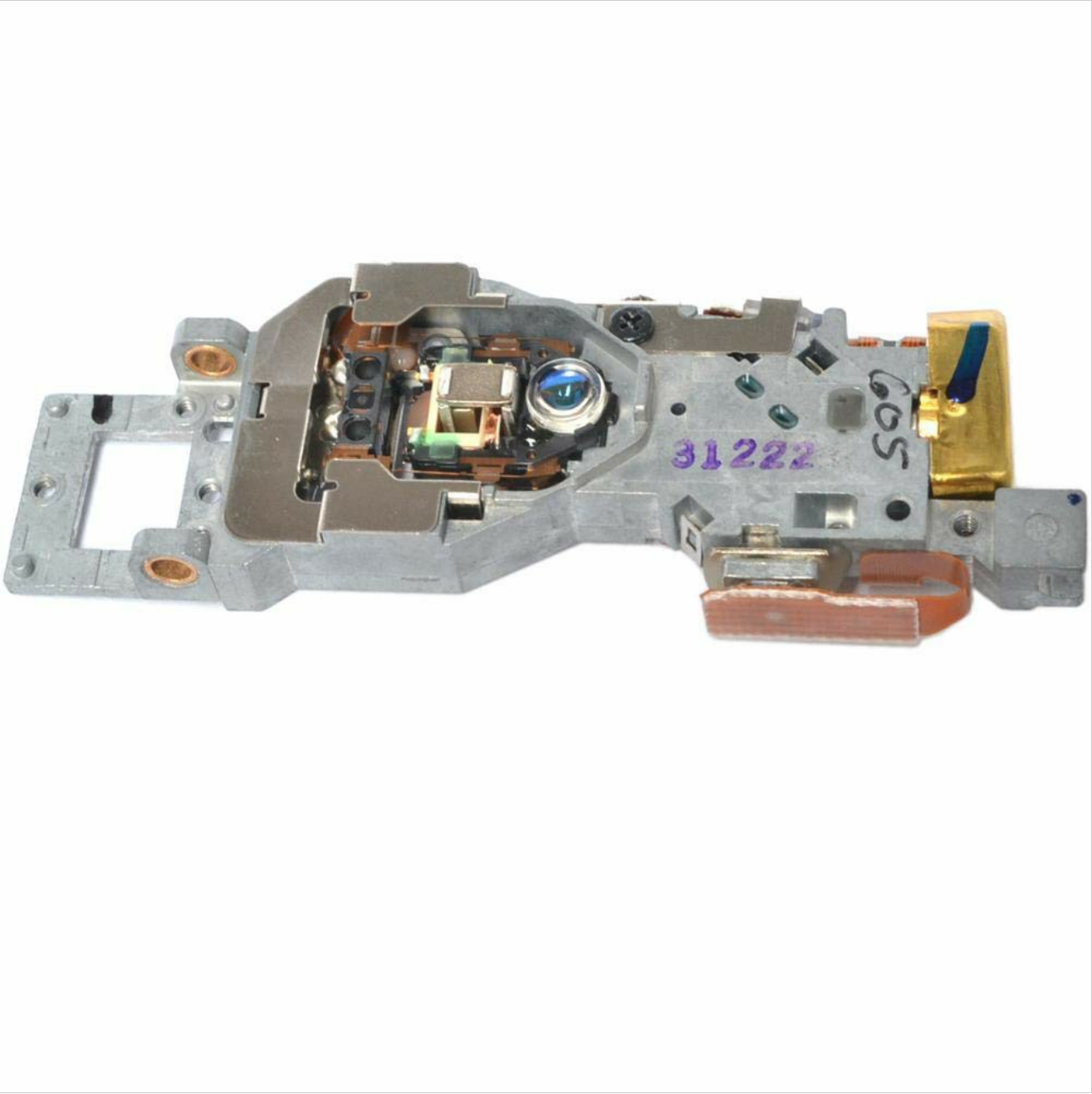


Figure 1: Yavor Replacement Laser Lens Assembly. This image shows the complete optical pick-up unit, including the laser diode, lens, and associated circuitry on a flexible PCB, mounted on a metal chassis.

3. Setup and Installation

Installation of this component requires technical expertise and should ideally be performed by a qualified technician. Improper installation can damage the laser lens or the CD player.

3.1 Safety Precautions

- Always disconnect the CD player from the power source before beginning any work.
- Wear an anti-static wrist strap to prevent electrostatic discharge (ESD), which can damage sensitive electronic components.
- Handle the laser lens assembly by its edges or metal frame; avoid touching the lens surface or internal components.

3.2 Required Tools

- Small Phillips head screwdriver
- Flathead screwdriver (for prying, if necessary)
- Anti-static wrist strap
- Soldering iron and desoldering wick/pump (for anti-static point removal)

3.3 Installation Steps

1. **Disassembly:** Carefully open the JVC XM-EX90 CD player casing according to its service manual or common disassembly procedures for similar devices. Locate the existing optical pick-up unit.
2. **Disconnect Cables:** Gently disconnect the flexible ribbon cable(s) and any other connectors attached to the old laser lens assembly. Note their orientation for reassembly.
3. **Remove Old Unit:** Unscrew and remove the old laser lens assembly from its mounting points.
4. **Install New Unit:** Position the new Yavor laser lens assembly in place and secure it with the screws removed earlier.
5. **Reconnect Cables:** Carefully reattach the flexible ribbon cable(s) and other connectors to the new assembly, ensuring they are seated correctly and securely.
6. **Remove Anti-Static Solder Point:** **CRITICAL STEP:** Most new laser lens assemblies come with an anti-static solder shorting point (often a small solder blob connecting two pads) to protect the laser diode during shipping. This point **MUST** be carefully removed (desoldered) before powering on the device. Failure to do so will prevent the unit from functioning and may cause damage. Refer to the specific product's markings for the exact location of this point.
7. **Reassembly:** Carefully reassemble the CD player casing.

4. Operating Principles

Once correctly installed, the laser lens assembly functions automatically within the JVC XM-EX90 CD player. When a disc is inserted, the laser diode emits a focused beam of light onto the disc's surface. The lens focuses this beam and collects the reflected light, which is then converted into electrical signals by a photodetector. These signals are processed by the CD player's circuitry to reproduce audio.

5. Maintenance

The laser lens assembly is a delicate component and generally requires minimal user maintenance. However, proper care of the CD player can extend its lifespan:

- Keep the CD player in a clean, dust-free environment.
- Avoid exposing the device to extreme temperatures or humidity.
- Do not attempt to clean the laser lens directly unless specifically instructed by a qualified technician, as improper cleaning can scratch the lens or misalign the optical components.
- Use only clean, scratch-free CDs.

6. Troubleshooting

If the CD player does not function correctly after installing the new laser lens assembly, consider the following:

- **No Disc Detected / Skipping:** Ensure the anti-static solder point has been removed. Verify all ribbon cables and connectors are securely attached and correctly oriented. Check for any visible damage to the ribbon cable or the lens itself.
- **Disc Not Spinning:** This is typically not related to the laser lens assembly but rather the disc motor or spindle.

- **Intermittent Playback:** Could indicate a loose connection or a faulty component. Recheck all connections.

If issues persist after verifying installation steps, professional diagnosis and repair are recommended.

7. Specifications

Feature	Detail
Model Compatibility	JVC XM-EX90 CD Player
Manufacturer	Yavor
Item Weight	200 Grams
ASIN	B09YS1225S
First Available Date	April 25, 2022

8. Warranty and Support

For warranty information regarding this replacement part, please refer to the terms and conditions provided by your seller at the time of purchase. For technical support or further assistance with installation, it is recommended to contact a qualified electronics repair professional or the seller directly.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question