

How to Install an In-Line Fuse Holder



What Is an In-Line Fuse Holder?

An in-line fuse holder is a specialized fuse holder designed to accommodate fuses in automotive, marine, and electronic systems. It is integrated directly into the wire or cable, allowing the fuse to be installed "in-line" with the circuit it protects. This design enables easy installation and replacement of the fuse without disconnecting the entire circuit, providing a convenient way to use fuses that safeguard electrical components from overcurrents and short circuits.

Ideal for tight spaces and custom wiring, they are often used in trucks, vans, boats, construction equipment, utility vehicles, RVs, and off-road vehicles that require protection from harsh environments.

At OptiFuse, we offer various customization options for in-line fuse holders, allowing you to tailor the product to your exact needs. You can choose from different wire types, terminations, body styles, colors, gauges, and lengths. Explore our In-Line Fuse Holder Customization Guide

Tools and Materials for In-Line Fuse Holder Installation

Before beginning the installation, gather the following items:

- In-line fuse holder (compatible with your fuse type and amperage)
- Correct fuse (based on circuit requirements)
- Wire cutters/strippers
- Crimping tool or soldering kit (for making secure wire connections)
- Electrical tape (optional, for extra insulation)
- Multimeter (to test the circuit)

1. Turn Off Power

Disconnect the power to the circuit before starting the installation. For vehicles, be sure to remove the negative terminal from the battery to avoid accidental shorts.

2. Cut and Strip the Wire

Identify the wire in your circuit that needs protection and carefully cut it. This will create an open gap where the fuse holder will be installed. Use wire strippers to remove a small section of insulation from the ends of the wire. Be careful not to strip too much, as this can lead to accidental shorts.

3. Prepare the Fuse Holder

Most in-line fuse holders come with pre-attached pigtails (short wires on both ends). If your fuse holder doesn't have pigtails, cut and strip the ends of the wires so they can be securely connected to the circuit.

4. Connect the Fuse Holder to the Circuit

Now, connect one end of the fuse holder to each stripped end of the circuit's wire. You can do this by crimping or soldering the wire to the fuse holder's terminals. If you're using crimp connectors, ensure they're tightly crimped to avoid loose connections that could cause issues down the road.

5. Insert the Correct Fuse • • •

Insert the appropriate fuse into the holder based on the circuit's current rating. Make sure the fuse size and voltage rating match the specifications of both the fuse holder and the device you're protecting.

6. Secure the Fuse Hold

To prevent damage during use, secure the fuse holder in place. Depending on the installation area, you may need to use mounting clips or electrical tape to hold the fuse holder securely.

7. Restore Power and Test the Circuit

Reconnect the power to the circuit and use a multimeter to test the installation. Verify that power flows correctly through the fuse holder and that the device connected to the circuit is working as expected.

For more information on different types of fuse holders, to explore customization options, or to find the right fuse for your needs, refer to our In-Line Fuse Holder Customization Guide, or explore our automotive fuse holder and electronic fuse holder product pages.