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| Step-by-step guide for installing LED lights  With a three 3-pin rocker switches, integrating a fuse tap and an additional circuit fuse board. |

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## Components Needed:

**1x Fuse Tap**: For safely tapping into an existing fuse in your vehicle.

**3x Rocker Switches (3-pin)**: These will control the LED lights.

**1x Roll of Black Wire**: For ground connections.

**1x Roll of Red Wire**: For power connections.

**1x Wire Strippers**: For preparing the wires.

**1x Soldering Iron & Solder**: To ensure secure and durable wire connections.

**1x Circuit Fuse Board**: An additional fuse board to organize power distribution and fuse protection.

## Steps to Follow:

### Step 1: Preparation

* **Disconnect the vehicle's battery**: This prevents any accidental short circuits or power surges.
* **Choose the mounting location**: Decide where to install the 3-pin rocker switches and additional fuse board (usually in an accessible area).
* **Measure wire lengths**: Ensure your red and black wires are long enough to reach between the LED lights, switches, and fuse board.

### Step 2: Wiring the Rocker Switches

A 3-pin rocker switch typically has:

* **Pin 1 (Ground/Negative)**: Connect to a ground (black wire).
* **Pin 2 (Load/Output)**: Connect to the LED lights.
* **Pin 3 (Power/Input)**: Connect to a power source (red wire).

1. **Mount the rocker switches**: Secure them in their desired location.
2. **Connect the ground (Pin 1)**:
   * Use black wire to connect all the rocker switches' Pin 1 to the vehicle chassis or a reliable ground point.
   * You can use a daisy chain setup, running one ground wire across all switches.
3. **Connect the load (Pin 2)**:
   * Use red wire to connect each rocker switch’s Pin 2 to the positive terminal of the LED lights. Each switch should correspond to one set of LED lights.
4. **Connect the power (Pin 3)**:
   * Each switch needs to be connected to the fuse board. Use red wires to connect Pin 3 of each rocker switch to a separate fused slot on the circuit fuse board.

### Step 3: Installing the Additional Fuse Board

1. **Mount the fuse board** in an accessible location (e.g., under the dashboard or near the battery).
2. **Power input to the fuse board**:
   * Use the **fuse tap** to draw power from an existing fuse in the vehicle's fuse box.
   * The fuse tap will have two connections: one to the fuse box and one to your new circuit fuse board.
   * Run a red wire from the output of the fuse tap to the input terminal of the new circuit fuse board.
3. **Ground the fuse board**:
   * Connect the ground terminal of the fuse board to the vehicle chassis using black wire.

### Step 4: Connecting the LEDs to the Fuse Board

1. **Run power to the LEDs**: For each LED light, connect the positive terminal to the load terminal (Pin 2) on its corresponding rocker switch.
2. **Ground the LEDs**: Connect the negative terminal of each LED light to a ground point (chassis) using black wire.

### Step 5: Soldering and Securing Connections

1. **Strip the wires** using your wire strippers before making connections.
2. **Solder** all wire connections to ensure they’re secure and durable, especially for the switch pins and LED connections.
3. Use **heat shrink** or electrical tape to insulate any exposed wires.

### Step 6: Testing

1. **Reconnect the battery** and test each rocker switch to ensure the LEDs turn on and off properly.
2. Ensure the fuse tap provides power when the vehicle ignition is on if you’re using an ignition-controlled fuse.

### Step 7: Final Touches

1. **Bundle and secure the wires**: Use zip ties or loom tubing to clean up the wiring and prevent tangling.
2. **Check all connections**: Ensure everything is tight and insulated properly to avoid short circuits.