



## Project M Topper Pre-Wire & System Requirements Guide

### Camper Types: Project M Toppers

This guide covers the basics of Project M Topper wiring, power components and minimum system requirements for all Project M toppers. For further support please contact the FWC Service Department (530) 666-1442 or your local dealer.

- **Warning!** 12V DC power source is required. Never connect camper pre-wiring directly to an AC power source. Damage to wiring, power source or other connected components may occur.
- **Warning!** If attempting to self-install a power or solar system in a Four Wheel Camper, the customer assumes all responsibility for the correct power current, wiring, polarity of wiring, circuit protection and installation. Four Wheel Campers, LLC will not be responsible for damages to wiring, solar panels, power stations, appliances or other power components related to DIY modification to the existing power components & wiring by the customer.

### Pre-Wire

- All Project M's are pre-wired for power to roof lights, roof fans and flood lights as well as pre-wired for solar.
  - 2024 or Newer
    - Pre-Wire (raceway located at rear drivers side corner)
      - 8awg Red & Black Wires = Camper Load Wire (at exit of raceway)
      - 8awg Red & Black Wires = Solar Panel Pre-Wire (inside raceway if not ordered w/ solar)
      - 16awg Purple & Black Wires = Roof Pre-Wire
    - Fuse Panel
      - Roof Light & Fan Fuse – 7.5amp
      - Flood Light Fuse – 15amp (optional, but still wired)
  - 2023 and Older
    - Pre-Wire (loose wires bundled at rear drivers side corner)
      - 8awg Red & Black Wires = Solar Panel Pre-Wire
      - 16awg Yellow & Black Wires = Roof Light & Fan Pre-Wire
      - 16awg Green & Black Wires = Flood Light Pre-Wire
      - 16awg Purple & Black Wires = 3<sup>rd</sup> Brake Light Pre-Wire (connected during installation)
    - No Fuse Panel

- A fuse panel will need to be added (automotive or marine) with correctly sized fuses for roof light/fan (7.5amps) and flood lights (15amps) as well as a ground bus bar.

### **Power System Requirements**

- Power Source: 12V DC only
- Power Output: Minimum 25amp output is recommended to run max camper power draw in addition to other accessories. Consider what else will be powered (Ex: device charging, portable refrigerator).
- Circuit Protection: Ensure adequate circuit protection between power source output and camper with a fuse or circuit breaker that is rated at 25amps.
- Power Source Examples
  - FWC Lithium Power Solution (132ah): Comes connect to the camper with truck charging and is solar ready. Can also be added later by a dealer.
  - Power Station: Various off the shelf power stations meet the minimum 25amp power output and will typically have other charging capabilities. (Ex: Redarc, Goal Zero, Bluetti, Aferiy)
  - DIY System: Involves hooking up a battery and controller to the 12v camper power. Research & knowledge of electrical systems required.
- If connecting an aftermarket power supply, follow all manufacturer specifications and instructions.

### **Solar System Requirements**

- Mid-2024 or Newer
  - Total Solar Output: Total solar output should not exceed 25amps total from roof and rear plugs combined.
  - There are 2 pre-wired solar connectors:
    - Roof MC4 Plug
      - Solar output not to exceed 25amps.
    - Rear SAE Plug
      - Solar output amperage not to exceed 10amps.
      - NOTE: Check the + and - polarity of the solar panel to ensure it matches with SAE plug polarity.
- Early 2024 or Older
  - Total Solar Output: Total solar output should not exceed 15amps total from both roof and rear SAE plugs combined.
  - There will be 1 or 2 pre-wired connectors:
    - Roof SAE Plug
      - Solar output not to exceed 10amps.
    - Rear SAE Plug (only on campers mid-2023 or newer)
      - Solar output amperage not to exceed 10amps.
    - NOTE: Check the + and - polarity of the solar panel to ensure it matches with SAE plug polarity.
- An MPPT solar controller (integrated or stand-alone) is required to connect solar into a power system.
- If connecting to an aftermarket power supply, follow all manufacturer specifications and instructions.