

Fill-Rite RD812NN

Fill-Rite RD812NN Portable Fuel Transfer Pump User Manual

Model: RD812NN | Brand: Fill-Rite

1. PRODUCT OVERVIEW

The Fill-Rite RD812NN is a robust and portable 12V DC fuel transfer pump, engineered for efficient and safe transfer of various fuels. Its rotary vane technology ensures consistent performance across different fluid types, including gasoline, diesel, biodiesel up to B20, kerosene, E15, methanol blends, and light oils. Weighing under 8 pounds, this pump is designed for easy transport and flexible mounting options, making it an ideal solution for on-the-go fueling needs.

- **Fluid Flexibility:** Compatible with gasoline, diesel, biodiesel up to B20, kerosene, E15, and light oils.
- **Compact Size:** Weighs under 8 pounds for easy portability and handling.
- **Multiple Configurations:** Adjustable flanges allow for flexible inlet/outlet positioning.
- **Quick Connect:** Detachable power cable for convenient setup.
- **Ready Out of the Box:** Battery clips pre-installed for immediate use.



Figure 1.1: Fill-Rite RD812NN Portable Fuel Transfer Pump with included accessories.

2. SAFETY INFORMATION

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

- Always read and understand the entire manual before operating the pump.
- Ensure proper ventilation when operating to prevent accumulation of flammable vapors.
- Do not smoke or use open flames near the pump or fuel.
- Always connect the green ground clamp first to a suitable earth/chassis ground point before connecting power.
- Ensure all connections are secure and leak-free before operation.
- Do not overfill tanks.
- Use only with compatible fluids as specified in the product overview.
- Keep children and unauthorized personnel away from the operating area.

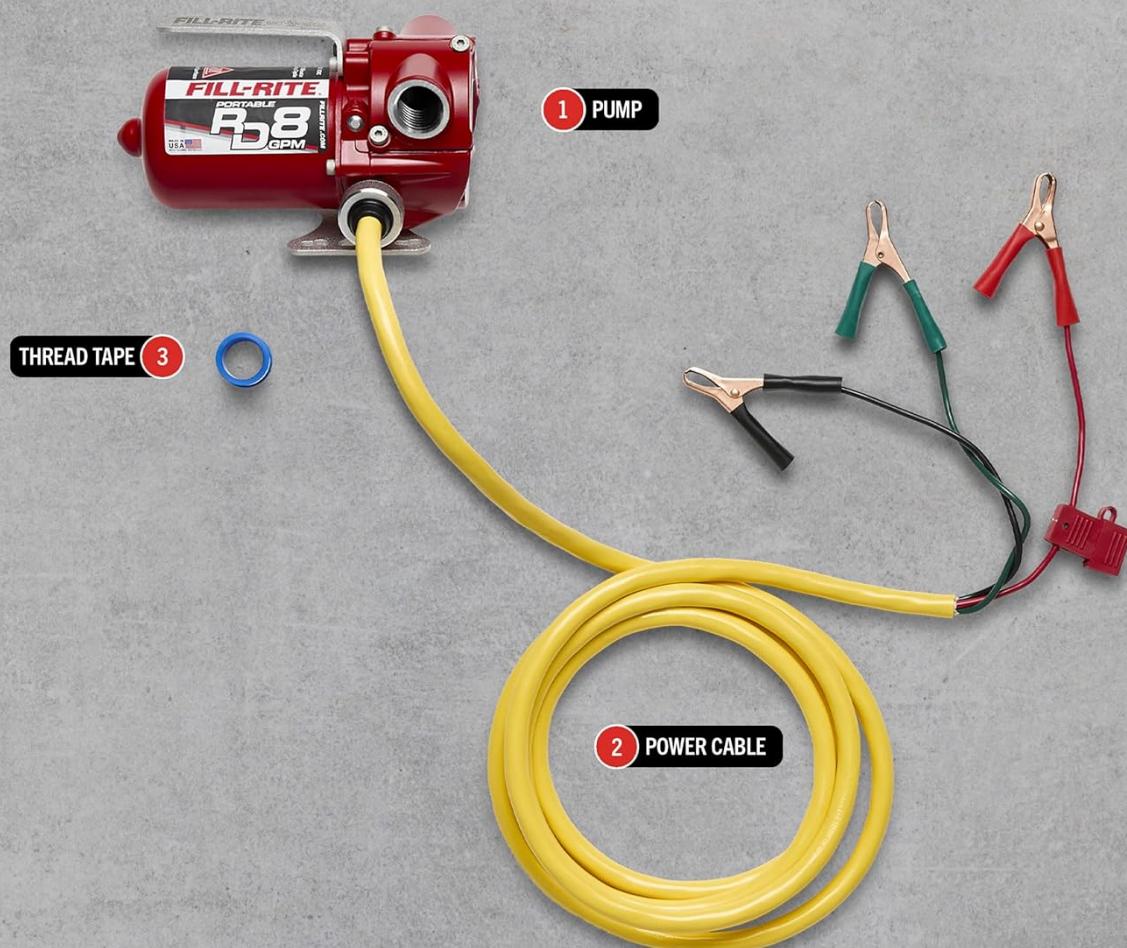
3. WHAT'S IN THE BOX

Your Fill-Rite RD812NN Portable Fuel Transfer Pump package includes the following components:

- Fill-Rite RD812NN 12V DC Portable Fuel Transfer Pump
- Power Cable with Battery Clips (pre-installed)
- Discharge Hose (typically 3/4" ID fuel transfer hose with static wire)
- Suction Hose (typically 5/8" ID fuel hose with static wire)
- Manual Nozzle (aluminum)
- Thread Tape
- User Manual (PDF link available in product documents)

WHAT'S INCLUDED

FILL-RITE
A GORMAN-RUPP COMPANY



RD812NN

Figure 3.1: Included components: Pump, Power Cable, and Thread Tape.

4. SETUP AND INSTALLATION

4.1 Power Connection

The pump features a quick-connect power cable with pre-installed battery clips for easy connection to a 12V DC power source (e.g., vehicle battery).

1. Ensure the pump's ON/OFF switch is in the 'OFF' position.
2. Connect the green ground clamp to a suitable earth/chassis ground point on your vehicle or power source. This is critical for safety.
3. Connect the black (negative) clamp to the negative terminal of the 12V DC power source.
4. Connect the red (positive) clamp to the positive terminal of the 12V DC power source.

Your browser does not support the video tag. This video demonstrates the quick-connect power cable and battery clip connection for the Fill-Rite portable fuel transfer pump.

Video 4.1: Connecting the power cable to a 12V DC source.

4.2 Hose and Nozzle Connection

Attach the provided hoses and nozzle to the pump. Use the included thread tape on all threaded connections to ensure a leak-free seal.

1. Apply thread tape to the male threads of the pump's inlet and outlet ports.
2. Connect the suction hose to the pump's inlet port.
3. Connect the discharge hose to the pump's outlet port.
4. Attach the manual nozzle to the end of the discharge hose.

4.3 Mounting Options

The RD812NN pump offers multiple mounting configurations to suit your application:

- **Handheld:** The pump's compact size and integrated handle allow for easy manual operation.
- **Bung Mounted:** Can be mounted directly onto a drum or tank opening using an appropriate bung adapter (not included).
- **Foot Mounted:** The pump features a mounting foot for secure attachment to a flat surface.

The pump's flanges are configurable, allowing you to adjust the orientation of the inlet and outlet ports. To change the orientation, simply remove the two bolts securing the flange, rotate it to the desired position, and re-secure the bolts.



Figure 4.1: Example of pump in use for fueling a tractor.



***PRODUCT SHOWN IN PICTURE MAY NOT BE EXACT ACCESSORY CONFIGURATION.**

Figure 4.2: Portable pump used for fueling an ATV.

5. OPERATING INSTRUCTIONS

5.1 Fueling Operation

1. Ensure all connections are secure and the pump is properly grounded.
2. Place the suction hose into the fuel source (e.g., fuel drum, tank).
3. Insert the nozzle into the receiving tank's fill port.
4. Flip the pump's ON/OFF switch to the 'ON' position.
5. Squeeze the nozzle handle to begin fuel transfer.
6. Monitor the fuel level in the receiving tank to prevent overfilling.
7. Once fueling is complete, release the nozzle handle and flip the pump's ON/OFF switch to the 'OFF' position.
8. Remove the nozzle from the receiving tank and the suction hose from the fuel source.



***PRODUCT SHOWN IN PICTURE MAY NOT BE EXACT ACCESSORY CONFIGURATION.**

Figure 5.1: Fueling a jet ski using the Fill-Rite portable pump.

5.2 Emptying Operation

The Fill-Rite RD812NN can also be used to empty containers. Follow the fueling operation steps, but ensure the suction hose is placed in the container to be emptied and the discharge hose directs fuel to a suitable, empty receiving container.

Your browser does not support the video tag. This video features a customer testimonial from Bailey Trucking, showcasing the Fill-Rite pump in a commercial setting for fuel transfer.

Video 5.2: Fill-Rite pump in action for commercial fuel transfer.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Fill-Rite pump.

- Regular Inspection:** Periodically inspect hoses, connections, and the pump body for any signs of wear, damage, or leaks. Replace worn components immediately.
- Cleanliness:** Keep the pump and accessories clean and free from dirt, debris, and fuel residue.

- **Storage:** When not in use, store the pump in a clean, dry place, away from direct sunlight and extreme temperatures. Ensure all fuel is drained from the pump and hoses before storage.
- **Electrical Connections:** Check battery clips and power cable for corrosion or damage. Clean terminals as needed.

7. TROUBLESHOOTING

If you encounter issues with your Fill-Rite RD812NN pump, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Pump does not turn on	No power to pump; Loose electrical connections; Blown fuse	Check battery connections; Ensure ON/OFF switch is 'ON'; Check and replace fuse if necessary; Verify 12V DC power source.
Reduced flow rate	Clogged suction hose or filter; Air leak in suction line; Low battery voltage	Inspect and clear suction hose/filter; Check all connections for tightness; Recharge or replace battery.
Pump runs but no fuel transfers	Suction hose not submerged; Air in the system; Pump not primed	Ensure suction hose is fully submerged in fuel; Check for air leaks; Prime the pump by ensuring fuel is present at the inlet.
Fuel leaks	Loose connections; Damaged hoses or seals	Tighten all threaded connections; Inspect hoses and seals for cracks or damage and replace as needed.

8. SPECIFICATIONS

Feature	Specification
Brand	Fill-Rite
Model	RD812NN
Voltage	12 Volts DC
Flow Rate	8 Gallons Per Minute (GPM)
Amperage	14 Amps
Compatible Fluids	Diesel, Gasoline, Kerosene, Ethanol Blends, Methanol Blends, Light Oils
Material	Aluminum
Item Weight	9.42 pounds (approx. 4.28 kg)
Product Dimensions (L x W x H)	8 x 5 x 5 inches (approx. 20.3 x 12.7 x 12.7 cm)
Inlet Connection Size	3/4 Inches
Outlet Connection Size	3/4 Inches
Mounting Type	Foot Mount

9. WARRANTY AND SUPPORT

Fill-Rite products are known for their ruggedness, durability, and performance. For specific warranty details and terms, please refer to the warranty card included with your product or visit the official Fill-Rite website. For technical support, parts, or service inquiries, please contact Fill-Rite customer service through the contact information provided in your product documentation.

You can also find additional resources and support on the official Fill-Rite brand store on Amazon [Fill-Rite Brand Store](#)