

OWNER'S MANUAL

SUBMERSIBLE UTILITY PUMP RL160U



SAFETY WARNINGS



BEFORE OPERATING OR INSTALLING THIS PUMP, READ THIS MANUAL AND FOLLOW ALL SAFETY RULES AND OPERATING INSTRUCTIONS.

SAFETY CAREFULLY READ THESE SAFETY MESSAGES IN THIS MANUAL AND ON PUMP.

CAUTION

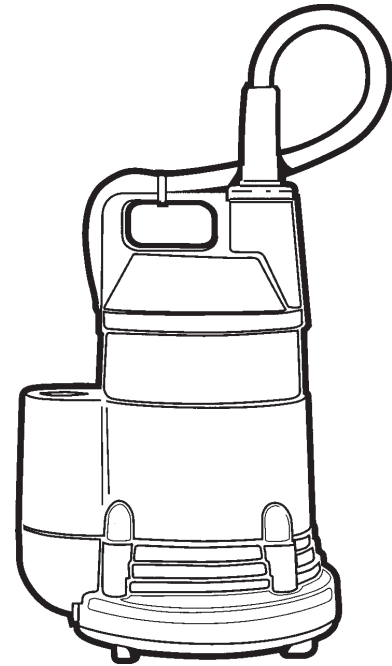
- Review instructions before operating.

WARNING - ELECTRICAL PRECAUTIONS

All wiring, electrical connections, and system grounding must comply with the National Electrical Code (NEC) and with any local codes and ordinances. Employ a licensed electrician.

WARNING - RISK OF ELECTRICAL SHOCK

- Have an electrician provide electrical power to the motor plug receptacle.
- Always disconnect plug from power source before handling.
- This product is furnished with a three prong plug for grounding, connect only to properly grounded receptacle.
- Do not under any circumstances remove ground plug.
- Keep electric plug dry.
- Do not lift pump using cord.
- Not investigated for use in swimming pool area.
- A ground fault interrupter (GFI) protected circuit is recommended for use with any electrical appliance operating in or near water.



RL160U

APPLICATION

This pump is suitable for portable applications where the total head requirement (including pipe friction losses) does not exceed the pump's maximum capability. Also, the maximum solids size must not be greater

than the pump capability. This pump is for use with water only, NOT FOR USE IN EFFLUENT OR SEWAGE APPLICATIONS!

INSTALLATION

Before installation, check your local electrical and plumbing codes. These regulations are for your safety.

1) Location:

The pump should be located on a solid level foundation.

- a) Do not suspend pump from electrical cord.
- b) Do not suspend pump from discharge pipe.
- c) Keep pump inlet screen clear.

2) WARNING

- RISK OF ELECTRICAL SHOCK

All connections must be made into a grounded outlet. A ground fault interrupter (GFI) protected circuit is recommended for use with any electrical appliance operating in or near water.

The electrical power outlet required for this pump is a separate 15 amp circuit of 115 volts, AC 60HZ, with a proper fused switch in the line. This must be located within 8 feet of the pump. The ground terminal on the plug is provided for your protection. Do not remove.

Plug the pump cord into the 115 volt grounded service and connect the discharge piping, your pump is then ready for operation.

3) Discharge Piping - Rigid Pipe:

- a) The pump has a threaded discharge opening.
- b) PVC or ABS adapters may be used to adapt to other sizes of pipe.
- c) We recommend that you not reduce the discharge pipe size, use as large as possible.
- d) Keep piping length to a minimum (extra length increases friction losses).

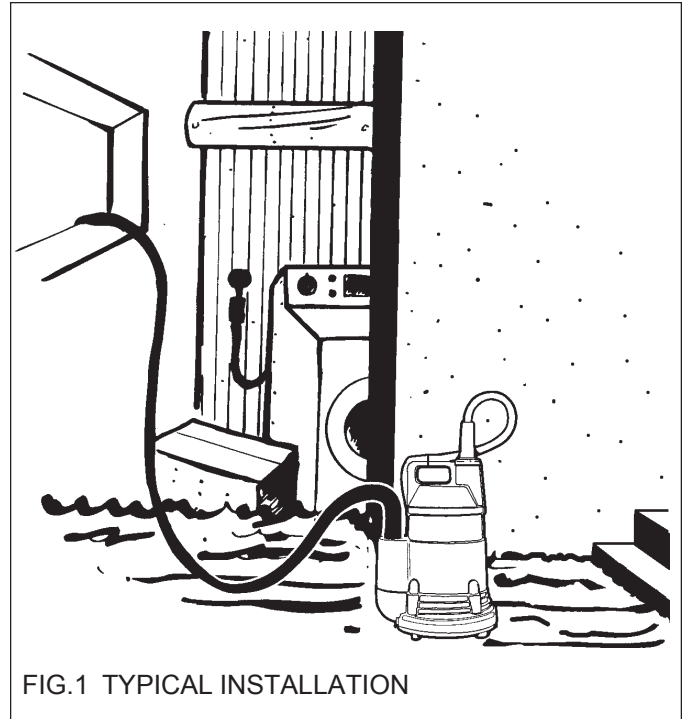


FIG.1 TYPICAL INSTALLATION

4) Discharge Piping - Garden Hose:

- a) Thread garden hose adapter into pump. Note: Fine threads go into pump, coarse threads are for garden hose.
- b) Attach garden hose, shorter hose lengths will allow better flow from the pump.

AIR LOCKING

If the pump is placed into the water while running, it will air lock. This means that air is trapped in the pump, preventing it from pumping water. To avoid this, always

place the pump in the water when it is off, and then plug it in. If the pump does air lock, simply unplug it and then plug it back in.

MAINTENANCE

Your pump has been built to give many years of satisfactory service. No regular maintenance is required since the pump is completely self lubricating. The following routine checking procedure is recommended to be carried out once a year and is especially important for occasional use applications.

- a) Check the power cords and electrical outlet for damage or corrosion.

TROUBLE SHOOTING GUIDE

Trouble	Probable Cause	Corrective Action
Motor does not run	Blown fuse Tripped circuit Disconnected plug Corroded plug Tripped overload Defective switch Defective motor Float-improper position	Replace fuse Reset Reinstall Clean prongs Allow pump to cool, investigate cause (jammed impeller) Replace switch Replace pump/repair Check for freedom of movement
Motor hums but flow reduced or none at all	Impeller jammed Plugged check valve Partially blocked inlet Line leak Worn impeller Defective motor	Remove bottom plate and clean. Remove valve, clean or replace Clean inlet Repair Replace pump/repair Replace pump/repair

SAFETY TIPS (ELECTRICAL)

- 1) Never make adjustments with the power connected. Always disconnect your pump from the electrical outlet before beginning any service procedures.
- 2) Do not stand on wet floor when servicing.
- 3) Do not put your finger into the fuse socket - it could be fatal.
- 4) Never remove the round pin from your plug; this is the ground and is there for your safety.

Red Lion
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 Pump Hotline (1-800-667-1457)

www.redlionproducts.com

LIMITED RED LION WARRANTY

For 1 year from date of purchase, Red Lion will replace or repair for the original purchaser, free of charge, any part or parts, found upon examination by any Red Lion Authorized Service Depot or by the Red Lion factory, to be defective in material or workmanship or both. Equipment and accessories not manufactured by Red Lion are warranted only to the extent of the original manufacturer's warranty. All transportation charges on parts submitted for replacement or repair under this warranty must be borne by the purchaser. For warranty service see your nearest Red Lion Authorized Service Depot. THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO 1 YEAR FROM PURCHASE AND TO THE EXTENT PERMITTED BY LAW. LIABILITY FOR CONSEQUENTIAL DAMAGES UNDER ANY AND ALL WARRANTIES ARE EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW.

This warranty is an addition to any statutory warranty.