

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Dayton® Portable Utility/Sprinkler Pump

Description

This portable utility/sprinkler pump is intended for numerous applications, including sprinkler systems, pumping water from ponds, lakes, and streams, and increasing city water pressure. The unit operates efficiently on a 115V, 60 Hz, single phase, permanent split capacitor motor that includes a 10 feet long, 18 gauge, 3-prong power cord. The motor is maintenance-free. Neither the motor nor bearings require further lubrication. Additionally, the motor is protected from overheating and damage. It automatically shuts off with sudden rises in temperature and restarts after cooling down.

The unit has a corrosion-resistant pump with a 1/2 HP ODP motor capable of suction lifts up to 25' and flow rate up to 10.3 GPM at 90°F maximum water temperature.

Specifications

Power Supply	115V, 60 HZ
Full Load Amps	6.5
Motor Type	1/2 HP, ODP, PSC
Motor Duty	Continuous
RPM	3450
Inlet and Discharge Connections	1" MNPT
Discharge Adapters (2)	1" FNPT x 3/4" Male Garden Hose
Housing and Impeller Material	Thermoplastic
Temperature Range of Liquids Pumped	32°F to 90°F
Dimensions (H x W x L)	10 1/5" x 7 1/5" x 16 1/5"

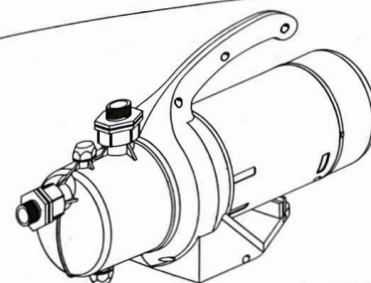
Unpacking and Inspection

Handle carefully. Check the packing list to account for all items. Visually inspect for shipping damage. If damaged, immediately file a claim with the carrier.

General Safety Information

READ AND FOLLOW SAFETY INSTRUCTIONS

CAUTION To avoid the risk of serious bodily injury and/or property damage, read these safety instructions before installing, operating, or servicing this pump.



Before turning on the pump, be sure to secure the discharge line. If it is not secured, the discharge line could flail erratically, potentially causing injury to you or others and/or property damage.

Before attempting service, unplug the power and release all pressure by draining all water within the system. Inspect and do routine maintenance on the pump and system on a regular basis. Keep debris and foreign objects away from the unit.

NOTE: This equipment is for use on 115 volt (single phase) only and is supplied with an approved 3-prong plug and grounding cord.

WARNING To reduce the risk of fatal electric shock when pump needs servicing, read the following:

- Follow all required electrical and plumbing codes when wiring or installing an electrically driven pump.
- Ensure the power source is compatible with the requirements of your equipment.

Performance

Suction Lift	Flow in GPM @ Discharge Pressure in PSI								Maximum Pressure
	5	10	15	20	25	30	35	40	
5'	10.3	9.9	9.8	9.6	8.1	6.8	5.1	4.2	58.0 psi
10	8.2	7.9	7.5	7.4	7.0	5.7	4.2	3.3	56.8 psi
15	7.1	6.7	6.5	6.5	6.3	5.1	3.6	2.5	52.3 psi
20	5.2	5.1	4.8	4.7	4.7	4.1	3.3	2.3	51.2 psi
25	3.6	3.5	3.4	3.4	3.3	3.2	3.2	2.1	50.4 psi

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Dayton®

Dayton® Portable Utility/Sprinkler Pump

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Operation (Continued)

AUTOMATIC THERMAL PROTECTION

The motor is supplied with an automatic reset thermal protector. If the temperature in the motor should rise too quickly, the switch will automatically shut off all power before motor can be damaged. When the motor has cooled sufficiently, the switch will automatically reset the unit and restart the motor.

NOTE: If the protector trips repeatedly, the pump should be inspected to determine the issue. A clogged impeller, low voltage, or long extension cords, etc., could cause the unit to cycle. See Troubleshooting Chart.

PRIMING THE PUMP

- Make sure all suction line connections are airtight and the suction lift does not exceed 25 feet.
- Before starting the pump, prime the pump by filling the pump body with water.

NOTE: Never operate the pump dry. Using the unit without water can damage the impeller and may damage the seal, causing the pump to leak or flood, and void the warranty.

Maintenance

PUMP DISASSEMBLY/ SEAL REPLACEMENT

Refer to Figure 4.

⚠ WARNING *Risk of electric shock, personal injury, or death. Unplug the pump before servicing unit.*

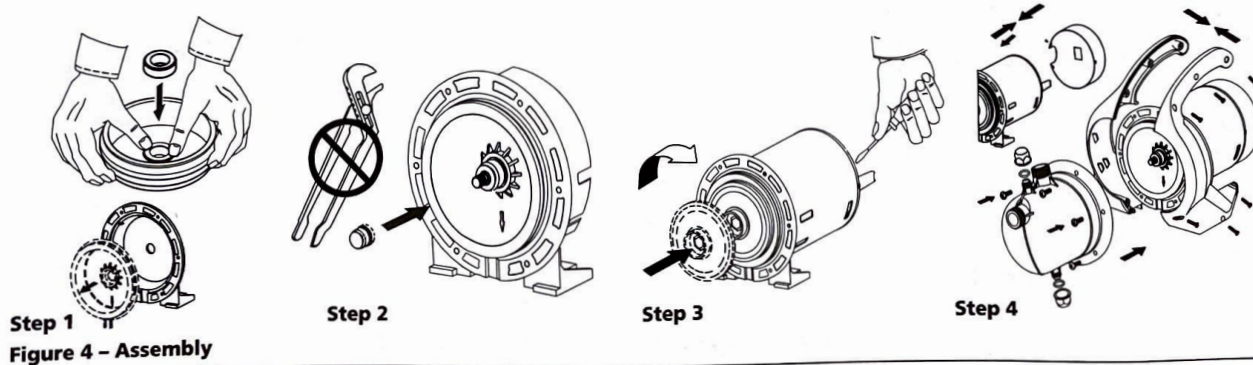
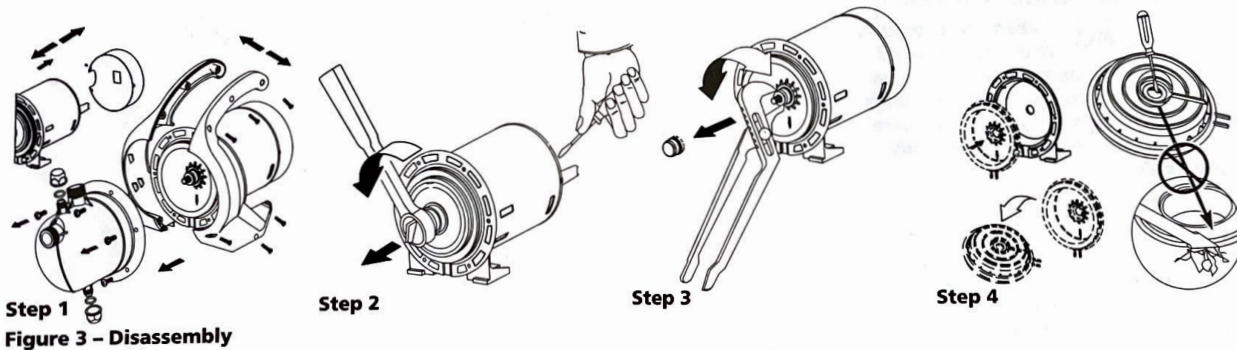
Avoid scratching, nicking, or cracking the new seal. Never scratch or gouge the pump shaft. When installing a new seal, check that the seal faces are clean.

REPAIR PARTS

Consult page 6 for repair parts illustration and list.

LUBRICATION

Motor and bearings are lubricated for life at the factory. Pump seal is water cooled and self-lubricating.



Model 3YU60A

Troubleshooting Chart

Symptom	Possible Cause(s)	Corrective Action
Fails to pump water	1. Pump was not primed properly	1. Be sure the pump body is full of water (See priming instructions), add more water to the pump body and/or suction line, if necessary
	2. Pump speed is too slow	2. Check the voltage at the motor terminals and at the meter when the pump is running. If the reading is low, check with your local electric company. Also double check for loose connections
	3. Total head is too high	3. A pump that is intended for higher head service is required
	4. Suction lift is excessive	4. Place the pump closer (vertically) to the water source. Ensure the suction line is long enough
	5. Air leaking into suction line	5. Inspect and repair the suction line
	6. Water level drops when pumping, exposing suction inlet	6. Check the water supply. Add more suction line to keep the inlet submerged and under water
Reduced flow capacity and/or head pressure	1. Air pockets or leaks in suction line or connections	1. Inspect and repair the suction line and connections
	2. Clogged impeller	2. Remove and clean the impeller
	3. Foot valve strainer is clogged or too small	3. Use a larger foot valve, or clean the strainer
	4. Suction pipe not submerged deep enough	4. Add onto the suction line to keep it submerged and below the water level
	5. Suction lift is too great	5. Place the pump closer (vertically) to the water level; pump is too high
	6. Pressure/head required exceeds capacity of pump	6. A larger pump is required
	7. Worm impeller or defective parts	7. Order replacement parts, using the repair parts list on Page 6

⚠ WARNING

Hazardous voltage; risk of electric shock, personal injury, or death. Unplug the pump before attempting to clean or service the unit.

For Repair Parts, call 1-800-Grainger

24 hours a day – 365 days a year

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

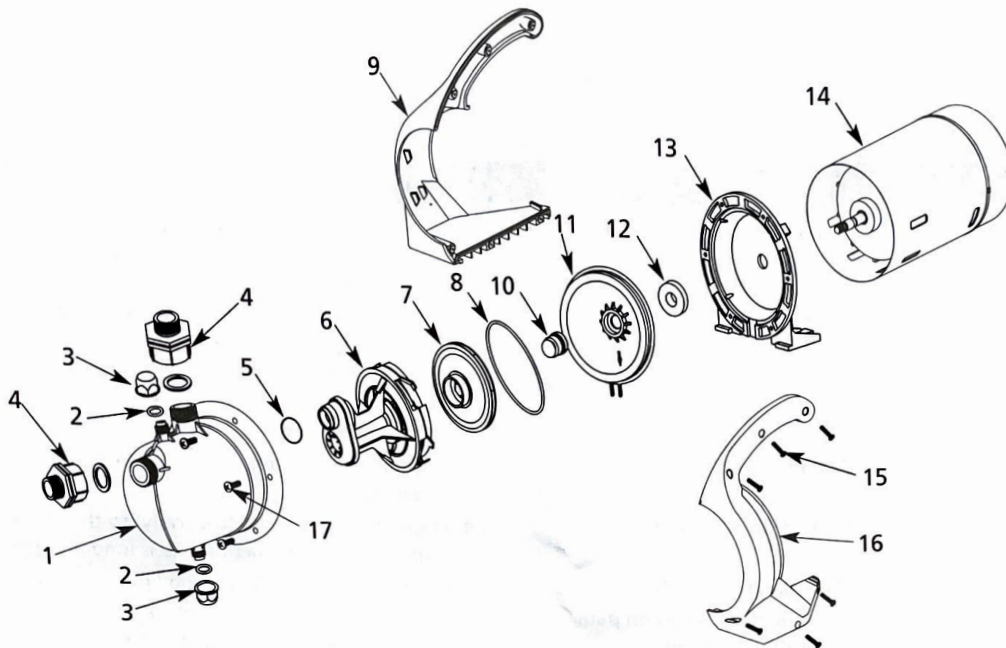


Figure 5 – Repair Parts Illustration for Portable Utility/Sprinkler Pump

Repair Parts List for Portable Utility/Sprinkler Pump

Reference Number	Description	Part Number	Quantity
1	Pump Body	PP60001G	1
2	Pipe Plug O-Ring	PP60002G	2
3	Pipe Plug	PP60003G	2
4	Hose Adapters	PP60004G	2
5	Nozzle O-Ring	PP60005G	1
6	Diffuser Assembly	PP60006G	1
7	Impeller	PP60007G	1
8	Pump Body O-Ring	PP60008G	1
9	Right Hand Handle	PP60009G	1
10	Mechanical Seal	PP60010G	1
11	Seal Plate	PP60011G	1
12	Water Slinger	PP60012G	1
13	Intermediate Support	PP60013G	1
14	Motor	PP60014G	1
15	Handle Screw	PP60015G	6
16	Left Hand Handle	PP60016G	1
17	Pump Body Screw	PP60017G	6

Model 3YU60A

LIMITED WARRANTY

DAYTON ONE-YEAR LIMITED WARRANTY. DAYTON® PORTABLE UTILITY SPRINKLER PUMP, MODELS COVERED IN THIS MANUAL, ARE WARRANTED BY DAYTON ELECTRIC MFG. CO. (DAYTON) TO THE ORIGINAL USER AGAINST DEFECTS IN WORKMANSHIP OR MATERIALS UNDER NORMAL USE FOR ONE YEAR AFTER DATE OF PURCHASE. ANY PART WHICH IS DETERMINED TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP AND RETURNED TO AN AUTHORIZED SERVICE LOCATION, AS DAYTON DESIGNATES, SHIPPING COSTS PREPAID, WILL BE, AS THE EXCLUSIVE REMEDY, REPAIRED OR REPLACED AT DAYTON'S OPTION. FOR LIMITED WARRANTY CLAIM PROCEDURES, SEE "PROMPT DISPOSITION" BELOW. THIS LIMITED WARRANTY GIVES PURCHASERS SPECIFIC LEGAL RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION.

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Product Suitability. Many jurisdictions have codes and regulations governing sales, construction, installation, and/or use of products for certain purposes, which may vary from those in neighboring areas. While attempts are made to assure that Dayton products comply with such codes, Dayton cannot guarantee compliance, and cannot be responsible for how the product is installed or used. Before purchase and use of a product, review the product applications, and all applicable national and local codes and regulations, and be sure that the product, installation, and use will comply with them.

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Prompt Disposition. A good faith effort will be made for prompt correction or other adjustment with respect to any product which proves to be defective within limited warranty. For any product believed to be defective within limited warranty, first write or call dealer from whom the product was purchased. Dealer will give additional directions. If unable to resolve satisfactorily, write to Dayton at address below, giving dealer's name, address, date, and number of dealer's invoice, and describing the nature of the defect. Title and risk of loss pass to buyer on delivery to common carrier. If product was damaged in transit to you, file claim with carrier.

Manufactured for Dayton Electric Mfg. Co., 100 Grainger Parkway, Lake Forest, IL 60045 USA