

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.

Teel® Portable Utility/Sprinkler Pump

Circulating pump

Description

Teel portable utility/sprinkler pump, Model Number 4RJ39, is used for pumping water from lakes, streams and ponds, boosting city water pressure, and for sprinkler applications. Corrosion-resistant pump is equipped with a 3-wire, grounded cord and plug, to be used in a 115 volt, 60 cycle outlet only. This 1/2 HP pump is used for suction lifts up to 25' and has a capacity of 9.3 GPM.

Unpacking and Inspection

Handle with care. Check items received against packing list to be sure that all equipment has been received. Inspect for shipping damage. If found, file claim with carrier immediately.

General Safety Information READ AND FOLLOW

SAFETY INSTRUCTIONS!

⚠ This is the safety alert symbol. When you see this symbol on your pump or in this manual, look for one of the following signal words and be alert to the potential for personal injury.

⚠ DANGER Warns about hazards that will cause serious personal injury, death or major property damage if ignored.

⚠ WARNING Warns about hazards that can cause serious personal injury, death or major property damage if ignored.

⚠ CAUTION Warns about hazards that will or can cause minor personal injury or property damage if ignored.

NOTE: Indicates special instructions which are important but not related to hazards.

To avoid risk of serious bodily injury and property damage, read safety instructions carefully before installing pump.

Follow local and/or national plumbing and electrical codes when installing pump.

⚠ WARNING To avoid fatal shocks, proceed as follows if pump needs servicing:

1. **Disconnect power to pump outlet box before pulling pump cord plug.** After plug is pulled, let pump cool for 20 minutes before attempting to work on it.
2. **Take extreme care when changing fuses.** To reduce chance of fatal electrical shocks, DO NOT stand in water or put your finger in the fuse socket.
3. **Ground electrical outlet box.**
4. **Use only Ground Fault Circuit Interrupter (GFCI) protected grounded outlet for cord plug.**

Never run pump dry. To do so can damage internal parts, overheat pump (which can cause burns to people handling or servicing pump), and will void warranty!

⚠ WARNING Risk of fire or explosion. Do not pump gasoline or any other flammable liquids with pump. Do not use pump in atmosphere that might contain flammable fumes or vapors.

Do not pump chemicals or corrosive liquids with pump.

Specifications

Length	Height	Width	Weight
14.0"	8.2"	6.5"	16 lbs.

Performance Chart

Suction Lift	Discharge Pressure in Pounds per Square Inch								Maximum Pressure
	5	10	15	20	25	30	35	40	
0'	9.3	8.9	8.5	7.0	5.4	3.3	2.3	1.5	41 psi
5	9.2	8.7	8.1	5.9	4.8	3.3	2.3	1.5	41
10	7.1	6.7	6.2	4.8	4.1	2.8	1.8	1.1	41
15	5.1	4.7	4.4	3.8	3.4	2.4	1.3	0.7	41
20	4.1	3.9	3.6	3.2	2.8	2.3	0.9	0.3	41
25	3.1	3.0	2.8	2.6	2.3	1.8	0.6	0.1	41

Feel® Portable Utility/Sprinkler Pump

General Safety Information (Continued)

⚠ WARNING *Hazardous voltage. Can shock, burn, or cause death. Ground pump before connecting to power supply.*

⚠ *Pump is supplied with 3-conductor grounding type cord. Connect only to properly grounded, GFCI protected outlet. Do not lift pump by electrical cord.*

⚠ *Pump is non-submersible. Keep motor dry at all times. Do not wash motor. Do not immerse. Protect motor from wet weather.*

⚠ *If using extension cord, use only UL approved indoor/outdoor, 3-wire, grounding type cord. Do not allow any part of cord or receptacle ends to sit in water or damp locations.*

⚠ *Unplug pump before servicing.*

⚠ WARNING *Explosion hazard. Never run pump with outlet shut off or blocked. If water is trapped in pump during operation, it may turn to steam, leading to explosion and burns.*

⚠ WARNING *Hazardous pressure. Pump body may explode if used as a booster pump unless relief valve capable of passing full pump flow at 75 psi (517 kPa) is installed.*

NOTE: Pump clean water only with pump. To avoid clogging pump and damaging shaft seal, do not pump water containing solids, foreign material, sand, silt, or abrasives. Always have suction strainer installed when pump is operating. Failure to use strainer may cause pump failure and void warranty.

Clean strainer and flush out pump after each use.

Make sure all hose and pipe connections in suction line are tight. An air leak in suction line will prevent priming and reduce performance. To prevent damage to pump materials, do not use pipe joint compounds on pump ports. Use only teflon tape or Plasto-Joint-Stik¹ to seal threads.

Tighten all piping joints to pump hand

tight +1½ turns only. Overtightening may break pump and will void warranty.

Installation PUMPING FROM LAKES, STREAMS, AND PONDS

Locate pump as near as possible (vertically) to water source, to keep suction lift (distance from water to pump) as low as possible. Place pump on level support. Protect against excess moisture and flooding.

Long pipe runs and many fittings increase friction and reduce flow. Use the smallest possible number of fittings and the shortest possible run for piping.

Support weight of pipe.

Be sure water is clear of debris which can clog pump, such as sand, dirt, or scale. Be sure foot valve and pipe are clean and in good condition; scale or dirt in foot valve can cause valve to leak. Valve leakage may cause pump to lose prime, which can result in pump failure.

PIPING

Both suction and discharge ports are tapped for 1" BSP (British Standard Pipe) threads. If using hoses, use hose adapter. Do not use a hose on the suction if pumping from lakes, streams, or ponds. Hose will collapse and cause pump failure. Install strainer with foot valve on end of suction line. Inspect and clean strainer frequently (See Figure 1).

NOTE: An air leak in suction pipe may draw air in although no water leaks out. Make sure there are no air leaks or air pockets in suction pipe.

¹Lake Chemical Co., Chicago, Illinois

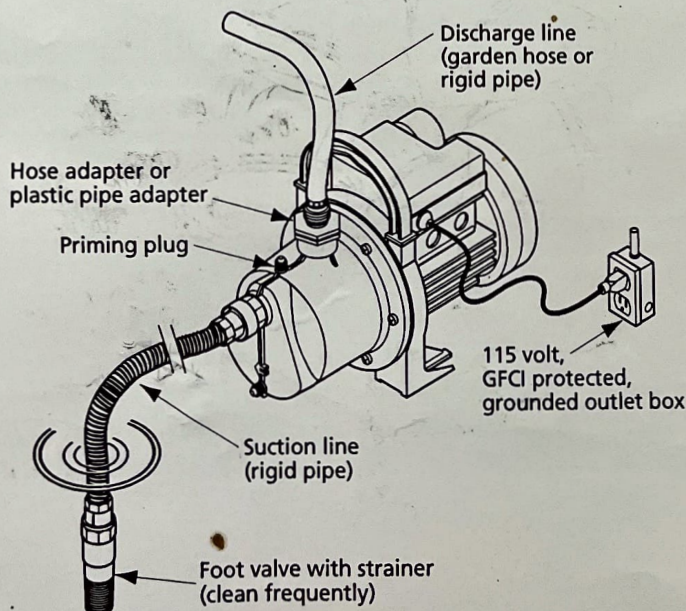


Figure 1 - Typical Installation

Model 4RJ39

Installation (Continued) BOOSTING CITY WATER PRESSURE

⚠ CAUTION *Hazardous pressure. When using garden hose as a discharge line, do not run pump with hose outlet or nozzle closed. Hose or nozzle may burst from excessive pressure. When using pump as a high-pressure washer, use only reinforced high pressure hose or pipe for discharge line. When using garden hose, install adapters to pump suction and discharge. Suction hose will require two female ends. Either use a standard washing machine supply hose or modify a short piece of standard 3/4" garden hose as a suction line (See Figures 2 and 3).*

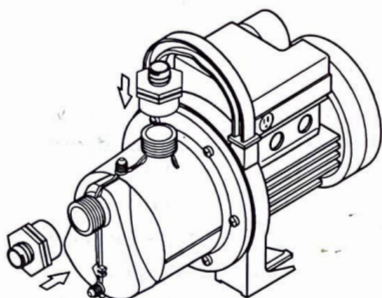


Figure 2 – When using pump as a booster pump with hose-connected suction and discharge, install adapters to pump suction and discharge ports.

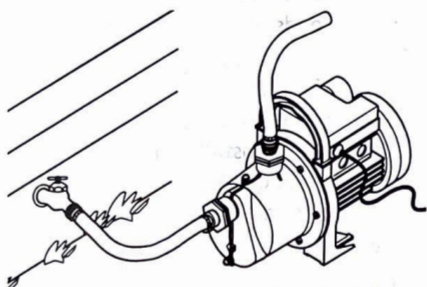


Figure 3 – Connect pump to spigot for use with sprinklers. Connect with adapters supplied with pump.

Connect suction hose to faucet on outside of house (See Figure 4) and to pump suction. Use 3/4" standard garden hose for discharge. Pump can supply up to 3 sprinklers (depending on GPM output of sprinklers).

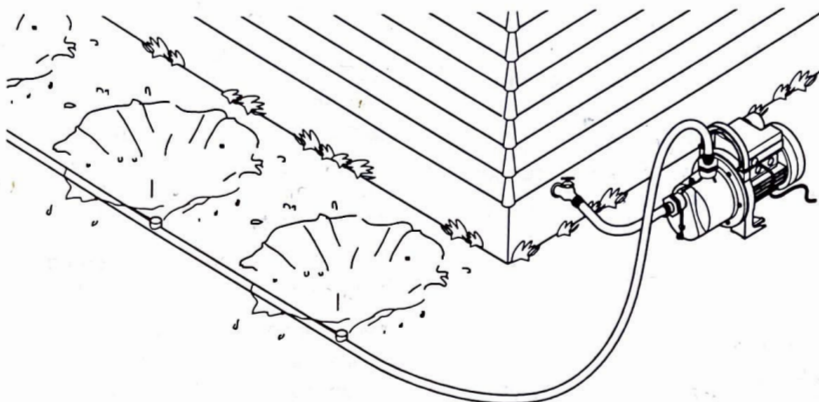


Figure 4 – Typical sprinkler application. Pump can supply up to 3 sprinklers.

⚠ CAUTION *Hazardous pressure. Do not shut off hose or sprinklers while pump is running. Hose or sprinkler head may explode.*

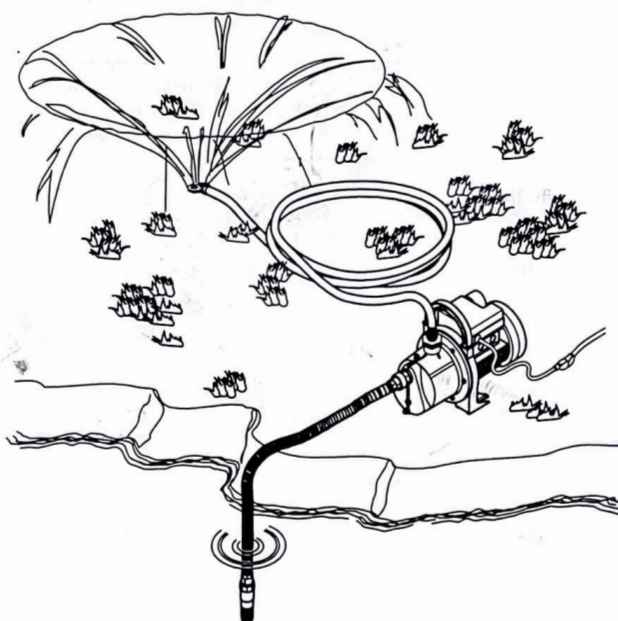


Figure 5 – Sprinkler pumping from pond. Pump can supply one sprinkler.

Teel® Portable Utility/Sprinkler Pump

Operation

PRIMING THE PUMP

NOTE: Do not run pump dry. Running pump without water can damage impeller and may damage seal, causing leaking or flooding, and will void warranty.

All suction connections must be airtight. Make sure suction lift is not more than 25 feet (7.6M). Fill pump body through priming port before starting pump. Start pump; it should pump water in under 10 minutes (depending on length of suction hose and height of pump above water).

Maintenance

PUMP SERVICE

⚠ WARNING

Hazardous voltage. Can shock, burn, or cause death. Disconnect motor from electrical power before servicing pump.

Motor has auto-reset thermal overload. If motor overheats, overload will cut off power to prevent damage and will reset after motor cools. If overload trips repeatedly, check pump for cause (low voltage, clogged impeller, etc.).

ELECTRICAL

⚠ WARNING

Hazardous voltage. Risk of dangerous or fatal electric shock. Unplug pump before servicing it. Do not handle pump or attempt to work on pump with wet hands or while standing on wet or damp floor.

Plug pump into 115 Volt, 60 Cycle outlet only. Pump is equipped with 3-wire, grounded, cord and plug. Do not modify or remove plug. Plug in to properly grounded, grounding type outlet only. Make sure pump circuit meets National Electrical Code (in USA) or Canadian Electrical Code (in Canada). To avoid dangerous electrical shock hazard, keep cord dry at all times.

LUBRICATION

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

Limited Warranty

DAYTON ONE-YEAR LIMITED WARRANTY. Teel® portable utility/sprinkler pump, Model covered in this manual, is 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.

LIMITATION OF LIABILITY. To the extent allowable under applicable law, Dayton's liability for consequential and incidental damages is expressly disclaimed. Dayton's liability in all events is limited to and shall not exceed the purchase price paid.

WARRANTY DISCLAIMER. Dayton has made a diligent effort to provide product information and illustrate the products in this literature accurately; however, such information and illustrations are for the sole purpose of identification, and do not express or imply a warranty that the products are MERCHANTABLE, or FIT FOR A PARTICULAR PURPOSE, or that the products will necessarily conform to the illustrations or descriptions.

Except as provided below, no warranty or affirmation of fact, expressed or implied, other than as stated in the "LIMITED WARRANTY" above is made or authorized by Dayton.

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 Dayton attempts to assure that its products comply with such codes, it 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.

Certain aspects of disclaimers are not applicable to consumer products; e.g., (a) some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you; (b) also, some jurisdictions do not allow a limitation on how long an implied warranty lasts, consequently the above limitation may not apply to you; and (c) by law, during the period of this Limited Warranty, any implied warranties of implied merchantability or fitness for a particular purpose applicable to consumer products purchased by consumers, may not be excluded or otherwise disclaimed.

PROMPT DISPOSITION. Dayton will make a good faith effort 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., 5959 W. Howard St., Niles, Illinois 60714 U.S.A.

Model 4RJ39

Operation (Continued) PUMP DISASSEMBLY/SEAL REPLACEMENT

⚠ WARNING Risk of electric shock. Unplug pump before working on it.

Make sure that you do not scratch, nick, or crack new seal. Do not scratch or gouge pump shaft. Make sure seal faces are clean when installing new seal.

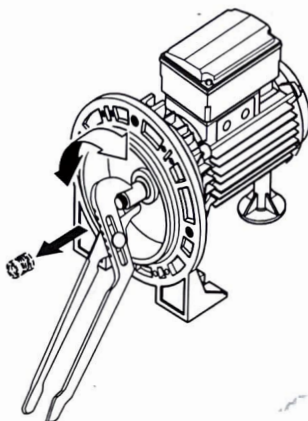


Figure 8 - Step 3

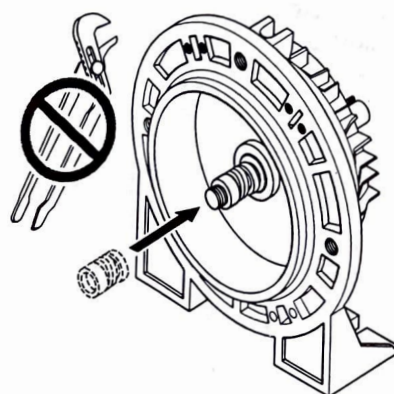


Figure 11 - Step 6

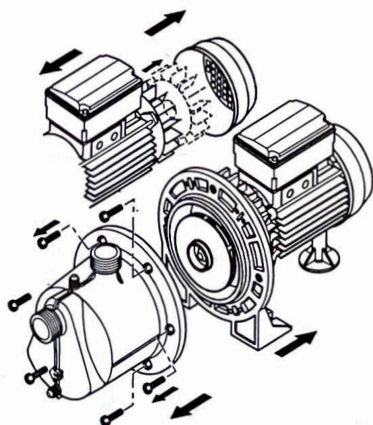


Figure 6 - Step 1

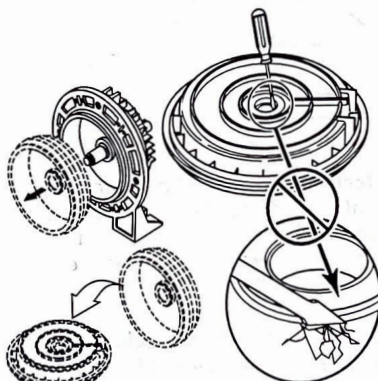


Figure 9 - Step 4

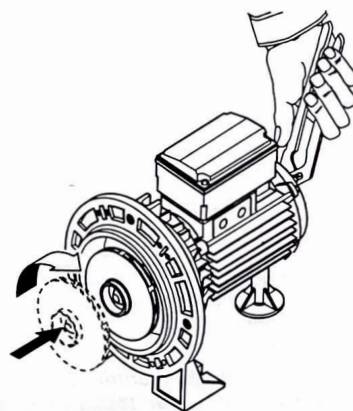


Figure 12 - Step 7

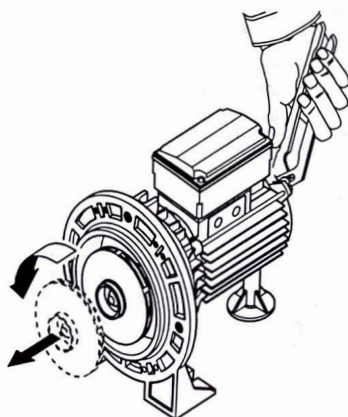


Figure 7 - Step 2

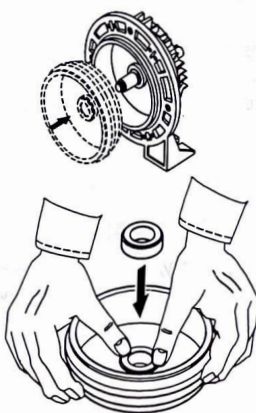


Figure 10 - Step 5

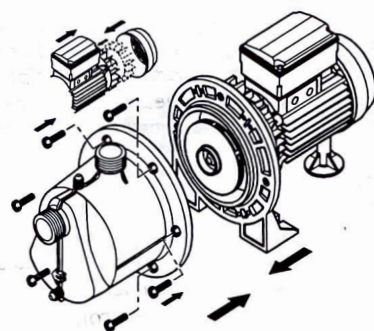


Figure 13 - Step 8

NOTE: Impeller must not bind on diffuser (inside pump body) at reassembly (Step 8). Turn shaft by hand before tightening pump body bolts to make sure that shaft and impeller are clear of diffuser.

For Replacement Parts, call 1-800-323-0620

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

Address parts correspondence to:
Grainger Parts Operations
P.O. Box 3074
1657 Shermer Road
Northbrook, IL 60065-3074 U.S.A.

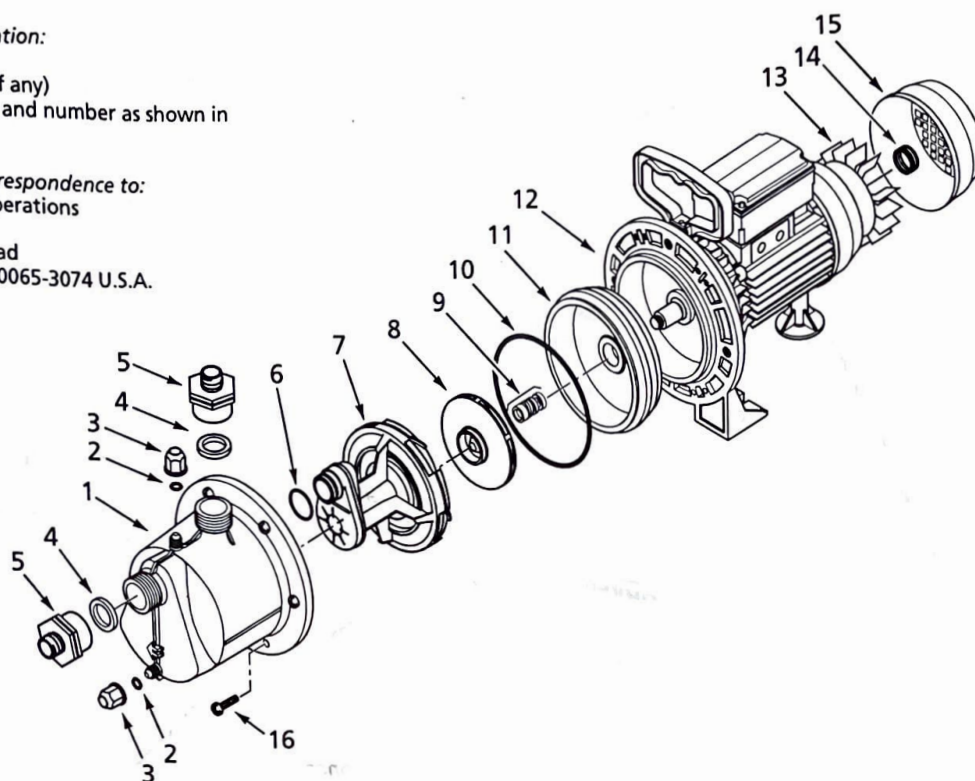


Figure 14 – Replacement Parts Illustration

Replacement Parts List

Ref. No.	Description	Model 4RJ39	Qty.
1	Pump body	742S0130	1
2	Drain/priming port O-Ring	111P0710	2
3	Drain/fill cap	102P1030	2
4	Hose adapter O-Ring	111P0790	2
5	Garden hose adapter	742S0590	2
6	Venturi O-Ring	111P0480	1
7	Venturi/diffuser	742S0140	1
8	Impeller	731S2260	1
9	Shaft seal	ZBR00010	1
10	Pump body O-Ring	111P0700	1
11	Seal plate	101P1290	1
12	Motor	†	1
13	Fan	102P2010	1
14	Fan clip	121R2240	1
15	Fan cover	102P1020	1
16	M6 x 20 Phillips head capscrew	121P1940	6
△	Suction hose kit with 1" BSP foot valve and strainer	ZB400960	1
△	Foot valve and strainer – 1" BSP	ZA000020	1

(△) Not shown.

(†) If motor fails, replace entire pump.

(*) Standard hardware item, purchase locally.