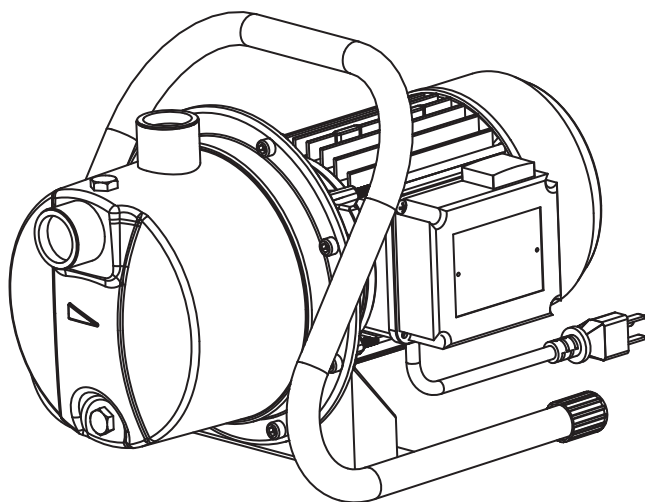


model no. 062-3413-2



Stainless Steel  
**IRRIGATION AND  
LAWN SPRINKLER PUMP**



**IMPORTANT:**

Please read this manual carefully before running this pump and save it for reference.

**INSTRUCTION  
MANUAL**



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#### NOTE:

If any parts are missing or damaged, or if you have any questions, please call our toll-free helpline at 1-800-689-9928.



#### SAVE THESE INSTRUCTIONS

This manual contains important safety and operating instructions.  
Read all instructions and follow them with use of this product.

model no. 062-3413-2 | contact us 1-800-689-9928

**TECHNICAL SPECIFICATIONS**

Model number	062-3413-2
Voltage	115 V/60 Hz
Horsepower	1 1/2 HP
Amps	10 A
Maximum head height	165' (50 m)
Maximum flow	1200 U.S. GPH (4542 L/h)
Discharge size	1" (2.5 cm) female national pipe thread (FNPT), ¾" (1.9 cm) garden hose adaptor (included)
Power cord length	6' 7" (2 m)

**PERFORMANCE**

0' (0 m)	50' (15.2 m)	100' (30.5 m)	150' (45.7 m)
1200 U.S. GPH (4542 L/h)	900 U.S. GPH (3407 L/h)	480 U.S. GPH (1817 L/h)	40 U.S. GPH (151 L/h)

## SAFETY

Please read and understand this entire manual before attempting to assemble, operate or install the product. If you have any questions regarding the product, please call customer service at 1-800-689-9928.

### WARNING

- Running the pump without sufficient water will damage the pump and void the pump's warranty.
- Do not pump flammable or explosive liquids such as oil gasoline kerosene ethanol, etc. Do not use in the presence of flammable or explosive vapours. Using this pump with or near flammable liquids can cause an explosion or fire, resulting in property damage, serious personal injury and/or death.
- Always disconnect the pump from its power source before inspection.
- Do not stand in water when the pump is connected. Do not handle pump with wet hands.
- Do not touch the pump housing while it is operating as the pump may be HOT and can cause serious skin burns.
- Do not disassemble the motor housing. This pump has NO repairable internal parts, and disassembling may cause dangerous electrical wiring issues.



### CAUTION:

- This pump is made of high-strength corrosion-resistant materials. It will provide trouble-free service for many years when properly installed, maintained, and used. However, inadequate electrical power or blockage by dirt could cause damage to the pump and void the warranty. To minimize the potential for water damage due to pump failure please read the section of this manual regarding common pump problems and remedies or call one of our pump experts at 1-800-689-9928.
- This pump is not designed to function as a permanently installed pump. It is also not engineered to be run continuously as a "fountain" or "waterfall" pump. The pump should be used with a 5/8" (1.6 cm) or larger inside diameter garden hose.
- For safety, the pump motor has an automatically resetting thermal protector that automatically will turn off the pump if it becomes too hot. Overuse of this feature will damage the pump and void the warranty.
- Once the thermal protector detects that the pump has cooled to a safe temperature, it will allow the pump to operate normally. If the pump is plugged in, it may restart unexpectedly.

**ADDITIONAL SAFETY PRECAUTIONS**

1. Know the pump applications, limitations, and potential hazards.
2. Make certain the electrical power source is adequate for the requirements of the pump.
3. ALWAYS disconnect the power to the pump and drain all water from the system before servicing.
4. Secure the pump on a solid base as close to the source of water as possible.
5. Secure the discharge hose before starting the pump. Pump torque may cause an unsecured discharge hose to "whip", possibly causing personal injury and/or property damage.
6. Before using the pump, check the hose for holes or excess wear, which could cause leaks, and ensure the hose is not kinked or making sharp angles. A straight hose allows the pump to move the greatest amount of water quickly.
7. Check that all hose connections are tight to minimize leaks.
8. Connect the pump directly to a grounded GFCI outlet.
9. Extension cords may not deliver sufficient voltage to the pump motor. Extension cords present a life-threatening safety hazard if the insulation becomes damaged or the connection ends fall into the water. If using a 50' (15 m) cord, use 16-gauge wire. If using a 100' (30 m) cord, use 14-gauge wire.
10. Make certain the electrical circuit to the pump is protected by a 10 A or larger fuse or circuit breaker.
11. Periodically inspect pump and system components to ensure that the pump inlets are free of mud, sand, and debris. DISCONNECT THE PUMP FROM THE POWER SUPPLY BEFORE INSPECTING.
12. Wear safety glasses at all times when working with pumps.
13. Follow all electrical and safety codes, particularly the National Electrical Code (NEC) or the Canadian Electrical Code (CEC), and in the workplace, the Occupational Safety and Health Act (OSHA) or the Canadian Centre for Occupational Health and Safety (CCOHS).
14. This unit is designed only for use on 115 V (single phase), 60 Hz, and is equipped with an approved 3-conductor cord and 3-prong, grounding-type receptacle. Do not use the pump with a 2-prong wall outlet. Replace the 2-prong outlet with a properly grounded 3-prong receptacle (a GFCI outlet) installed in accordance with the NEC or CEC and local codes and ordinances. All wiring should be performed by a qualified electrician.
15. Protect the electrical cord from sharp objects, hot surfaces, oil, and chemicals. Avoid kinking the cord. Do not use damaged or worn cords.

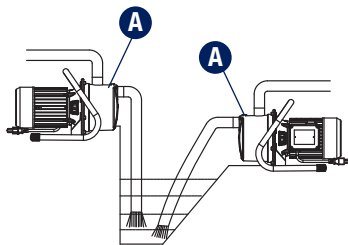
### INSTALLATION INSTRUCTIONS

Estimated Assembly Time: 5 minutes

Materials Required for Assembly (sold separately): 3/4" (1.9 cm) foot valve, 1" (2.5 cm) discharge tee, 100# pressure gauge, thread tape, 3/4" (1.9 cm) standard garden hose (for discharge), 3/4" (1.9 cm) heavy-duty garden hose (for suction).

#### 1 Positioning the Pump

- Place the pump as close as possible to the water source, keeping the vertical distance from the water to the pump as small as possible (maximum lift is 25' (7.6 m)).
- Place the pump (A) on a level support.
- Install a 3/4" (1.9 cm) foot valve (sold separately). When the suction lift is over 10' (3 m) or when the suction line is more than 10' (3 m) long, the foot valve will keep the pump primed when it is turned off.
- You can use a regular garden hose (sold separately) as the discharge line.



Note: The inlet line may be PVC or reinforced hose. Small leaks in the suction line greatly reduce the efficiency of the pump and may prevent priming.



#### WARNING:

- Always use the handle to lift pump. Never use a power cord to lift pump. To avoid skin burns, unplug and allow time for the pump to cool after periods of extended use. Before beginning assembly of the product, make sure all parts are present. Compare parts with package contents list. If any part is missing or damaged do not attempt to assemble the product. Contact customer service for replacement parts.
- Place the pump on level support before operation.

#### NOTE:

- If a standard garden hose is used for suction line, the hose could collapse, allowing the pump to run dry. This could cause permanent damage and void warranty. This pump is designed to sprinkle lawns and small gardens from lakes, ponds, or rivers, empty or fill stock tanks, remove standing water from flooded areas or transfer water. Flammable liquids such as gasoline, chemicals, or corrosive liquids should never be used with this pump.
- This pump is not intended for permanent installation or long, extended periods of continuous operation.
- This pump is not to be used with pop-up sprinklers.



#### CAUTION:

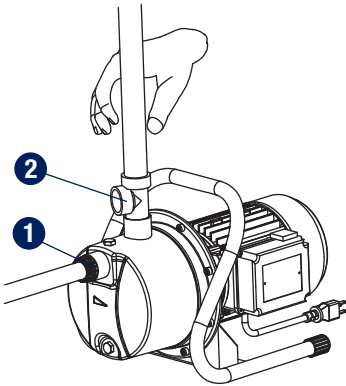
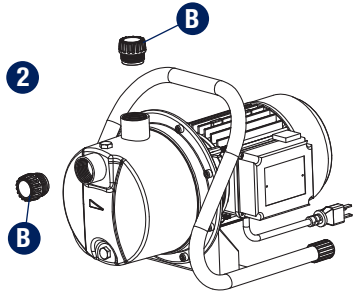
- Never install a shutoff valve in the suction or discharge of this pump. This will cause excessive friction loss and will damage the pump and void the warranty.
- All connections must be airtight. A single leak will prevent proper operation of the pump and may cause the pump to run dry. If the pump runs dry, this will void the warranty.

**2 Positioning the Hose Adaptors**

- Wrap threads of discharge tee (sold separately) with thread tape.
- Thread a 1" (2.5 cm) discharge tee (2) into the outlet of the pump.
- Thread hose adaptors (B) into pump outlet and into the discharge tee (2).

Note: Discharge tee is optional.

**CAUTION:** All connections must be airtight. A single leak will prevent proper operation of the pump and may cause the pump to run dry. This will void the warranty.

**3 Installing the Pump:**

- Connect a 3/4" (1.9 cm) heavy-duty garden hose (sold separately) to the pump inlet (1). The inlet connection can also be used with 1" (2.5 cm) PVC pipe (Note: If you are using a PVC pipe, you will need a 1" (2.5 cm) male NPT X slip adaptor).

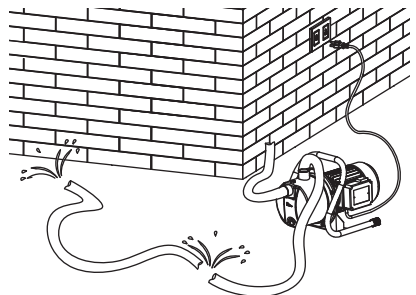
**Notice:** The inlet hose must be a reinforced type when pumping from lakes, ponds, or small streams. A regular garden hose will collapse and lead to pump failure.

**Note:** A foot valve **MUST** be used to maintain prime during operation. Foot valves are sold separately.

- Connect an outlet pipe or 3/4" (1.9 cm) standard garden hose (sold separately) to the discharge tee (2). The outlet connection is designed for a 1" (2.5 cm) NPT thread. Rigid pipes such as PVC or a garden hose may be used.

- Connect your discharge hose to a standard lawn sprinkler (maximum 2 sprinklers).

**Note:** This pump (A) is not designed to be used with underground, pop-up sprinklers (zoned systems). If you have this type of system, purchase a higher-capacity lawn or irrigation pump.



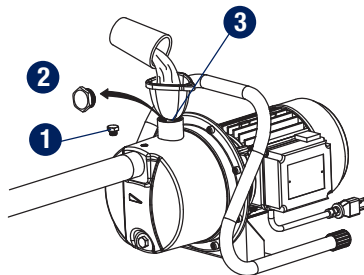


## OPERATION INSTRUCTIONS

### 1 Priming the Pump:

Note:

- The pump must be filled with water before operation. Running the pump dry will cause damage to the shaft seal and will void the warranty.
- Add thread tape on the discharge tee cap (2). If discharge tee is not connected:  
Remove the discharge tee cap (2). Fill water into top of discharge tee (3) until pump overflows with water. If discharge tee is connected, remove the prime plug (1). Fill water into top of discharge tee (3) until pump overflows with water. Reinstall the prime plug (1) or the discharge tee cap (2) when finished priming.
- This pump is not designed to be used with under-ground pop-up sprinklers (zoned systems). If you have this type of system purchase a higher-capacity lawn or irrigation pump.



Usage: You can install a 100# pressure gauge (sold separately) on top of the discharge tee cap in order to monitor pressure.



### WARNING:

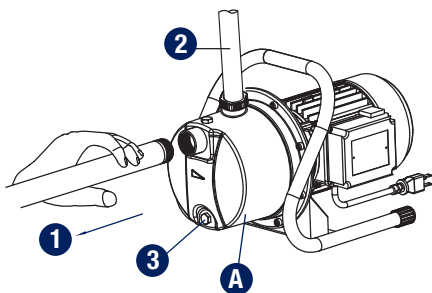
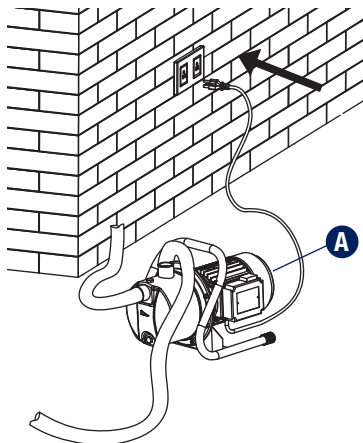
- Do not run the pump with the outlet pipe or hose nozzle closed. This will cause damage to the pump, or burst the hose from excessive pressure. This could result in death or serious injury. Use only reinforced high-pressure hoses or pipes for the outlet connection or pipes for the inlet (suction) connection.
- Never remove the ground prong on the power cord. Never hardwire the power cord. Cutting the cord, hardwiring, or removing the ground prong can result in death or serious injury and will void the warranty.

**2 Running the Pump**

Plug the power cord into a GFCI-protected electrical outlet and press the power switch to the On position. If the pump does not pump water within 2 minutes, turn the pump (A) off. Refill with clean water and make sure all connections are airtight. To turn the pump off, press the power switch to the off position.

**DANGER:** Risk of electric shock. Always disconnect the electrical supply before attempting to install, service, or perform any maintenance. If the power source is out of sight, lock and tag in the open (off) position to prevent unexpected power application. Failure to do so could result in fatal electrical shock. Only qualified electricians should repair this unit. Improper repair could result in fatal electric shock.

**WARNING:** Let the pump cool for at least 20 minutes before attempting to service. The motor may be extremely hot. Personal injury may result.

**3 Storing the Pump:**

Protect against flooding and excessive moisture by storing in a dry place.

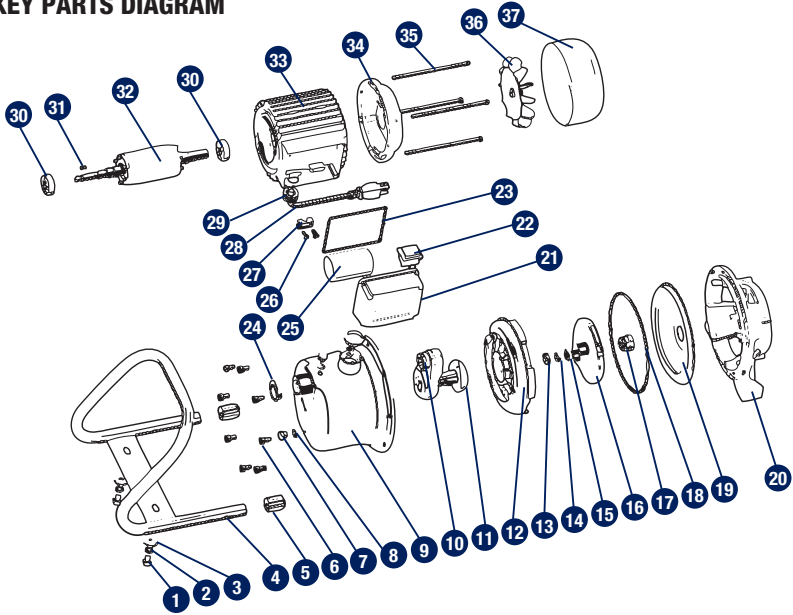
**Draining the Pump for Winter:**

- Disconnect the suction (1) and discharge (2) lines from the pump (A).
- Remove the water drain plug (3) from the pump (A).
- Drain all piping below the frost line or store the piping indoors.
- Store the pump indoors.

## TROUBLESHOOTING

Problem	Possible Cause	Corrective Action
The pump will not start or run	<ol style="list-style-type: none"> <li>1. There is a blown fuse or tripped circuit breaker in your home's breaker/fuse box.</li> <li>2. The voltage is low.</li> <li>3. The impeller is blocked.</li> <li>4. The motor is defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. If blown, replace with a proper sized fuse or reset the breaker.</li> <li>2. If the voltage is less than 108 V, check the wiring size or use a shorter extension cord.</li> <li>3. Remove the blockage.</li> <li>4. Contact customer service at 1-800-689-9928.</li> </ol>
The pump will not prime or retain prime after operating	<ol style="list-style-type: none"> <li>1. There is an air leak in the suction line.</li> <li>2. The impeller is blocked.</li> <li>3. The seal is worn.</li> <li>4. The suction lift is too high.</li> <li>5. The hose is kinked or looped.</li> <li>6. The fittings are not tight.</li> <li>7. The suction hose is out of water.</li> <li>8. The inlet is clogged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Repair or replace the suction line.</li> <li>2. Remove the blockage.</li> <li>3. Replace the seal.</li> <li>4. Lower the pump.</li> <li>5. Straighten the hose.</li> <li>6. Tighten the fittings.</li> <li>7. Submerge the suction hose end.</li> <li>8. Clean the inlet.</li> </ol>
Flow rate too low	<ol style="list-style-type: none"> <li>1. The piping or hose is fouled or damaged.</li> <li>2. The voltage is low.</li> <li>3. The hose diameter is too small.</li> <li>4. The discharge hose is too small.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean or replace the piping or hose.</li> <li>2. If the voltage is less than 108 V, check the wiring size or use a shorter extension cord.</li> <li>3. Use a minimum 3/4" (1.9 cm) heavy-duty garden hose.</li> <li>4. Use as short a hose as possible (maximum of 50' (15 m)).</li> </ol>
The seal leaks	<ol style="list-style-type: none"> <li>1. The seal is worn.</li> <li>2. The shaft is grooved.</li> <li>3. The pump head is loose on the motor.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace the seal. Call for replacements.</li> <li>2. Replace the rotor. Call for replacements.</li> <li>3. Ensure the pump is assembled properly and that there is no obstruction.</li> </ol>

## KEY PARTS DIAGRAM



## PART LIST

No.	Description	Quantity	No.	Description	Quantity
1	Bolt M8*4	2	20	Pump support	1
2	Spring washer 8	2	21	Terminal box	1
3	Washer 8	2	22	Power switch	1
4	Pump support	1	23	Sealing ring for terminal	1
5	Bracket for pump support	2	24	Cover	2
6	Column tie bolt M6*12	8	25	Capacitor 40Mf/250V	1
7	Priming plug	2	26	Bolt M4*8	2
8	O-ring 8.2*1.9	2	27	Cord clip	1
9	Pump casing	1	28	Power cord	1
10	O-ring 26.3*2.2	1	29	Cable holder	1
11	Venturi tube	1	30	Ball bearing 6202-Zz/Z2	2
12	Diffuser	1	31	Shaft key A4*10	1
13	Hex nut 10	1	32	Rotor	1
14	Spring washer 10	1	33	Motor stator	1
15	Washer 10	1	34	End plate	1
16	Impeller	1	35	Bolt M5*138	4
17	Mechanical seal	1	36	Fan	1
18	O-ring 163*3.55	1	37	Fan cover	1
19	Seal holder	1			

## WARRANTY

PLEASE DO NOT ATTEMPT TO OPEN OR REPAIR THE PUMP YOURSELF. DOING SO COULD VOID THE WARRANTY AND CAUSE DAMAGE OR PERSONAL INJURY.

This Mastercraft product carries a three (3) year LIMITED warranty against defects in workmanship and materials. This product is not guaranteed against wear or breakage due to misuse and/or abuse.

Made in China

Imported by

Mastercraft Canada Toronto, Canada M4S 2B8