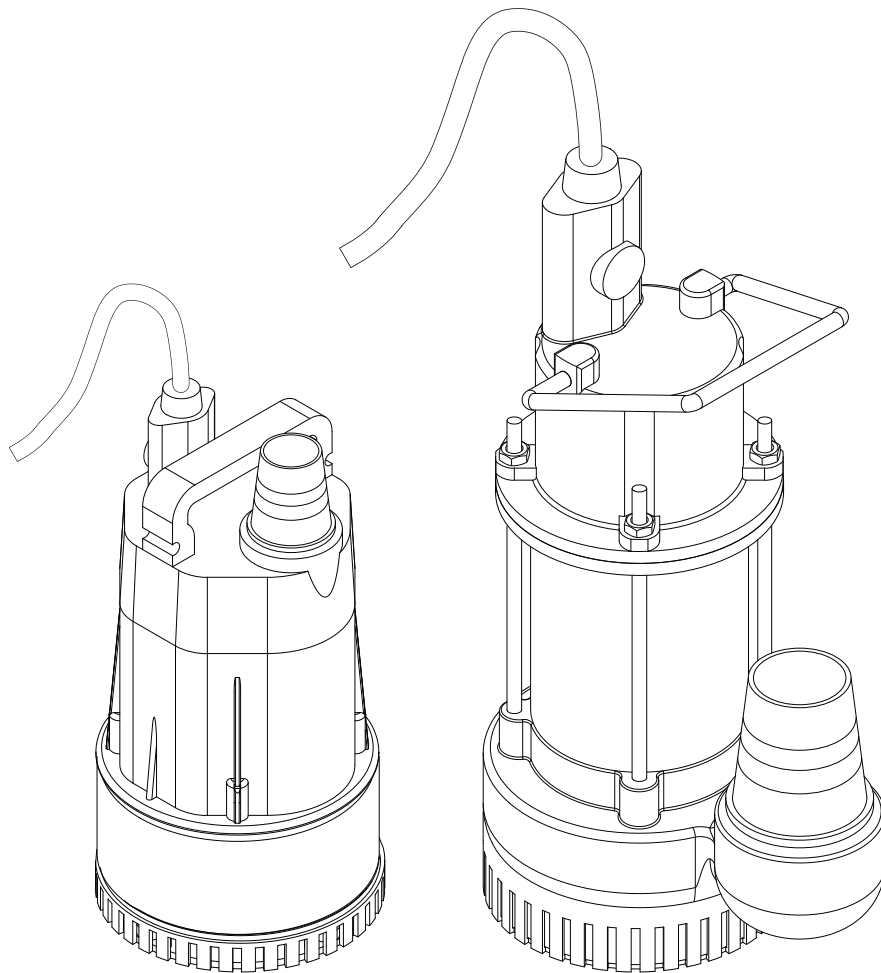




SUBMERSIBLE DEWATERING PUMP
MSD 1021 • MSD 1021/A • MSD 2051
MSD 2051/A



OPERATING/PARTS MANUAL

INTRODUCTION

This manual provides information and procedures to safely operate and maintain the pump. For your own safety and protection from physical injury, carefully read, understand, and observe the safety instructions described in this manual. Keep a copy of this manual with the unit at all times. Additional copies are available from Magnum Products LLC, or can be found at www.m-p-llc.com. *The information contained in this manual was based on machines in production at the time of publication. Magnum Products LLC reserves the right to change any portion of this information without notice.*

DO NOT MODIFY or use this equipment for any application other than which it was designed for.

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For technical or parts QUESTIONS, please contact Magnum Products' Customer Support or Technical Support team at 920-361-4442 or toll free at 1-800-926-9768. Please have your serial number available.

To ORDER SERVICE PARTS, please contact the dealer from which you purchased the unit, or call Magnum Products to locate a dealer in your area.

Unit Model Number: _____
Unit Serial Number: _____

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SAFETY NOTES



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

This manual contains DANGERS, WARNINGS, CAUTIONS, NOTICES and NOTES which must be followed to prevent the possibility of improper service, damage to the equipment, personal injury or death. The following formatting options will apply when calling the readers attention to the DANGERS, WARNINGS, CAUTIONS, NOTICES and NOTES.

⚠ DANGER

INDICATES A HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, WILL RESULT IN DEATH OR SERIOUS INJURY.

⚠ WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

Indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE

Indicates a hazardous situation which, if not avoided, may result in property or equipment damage.

***Note:** Notes contain additional information important to a procedure and will be found within the regular text body of this manual.*

OPERATING SAFETY



Before using the pump be sure to read and understand all of the instructions! This equipment was designed for specific applications; DO NOT modify or use this equipment for any application other than which it was designed for. Equipment operated improperly or by untrained personnel can be dangerous! Read the operating instructions and familiarize yourself with the location and proper use of all instruments and controls. Inexperienced operators should receive instruction from someone familiar with the equipment before being allowed to operate the pump. The following points should be practiced at all times:

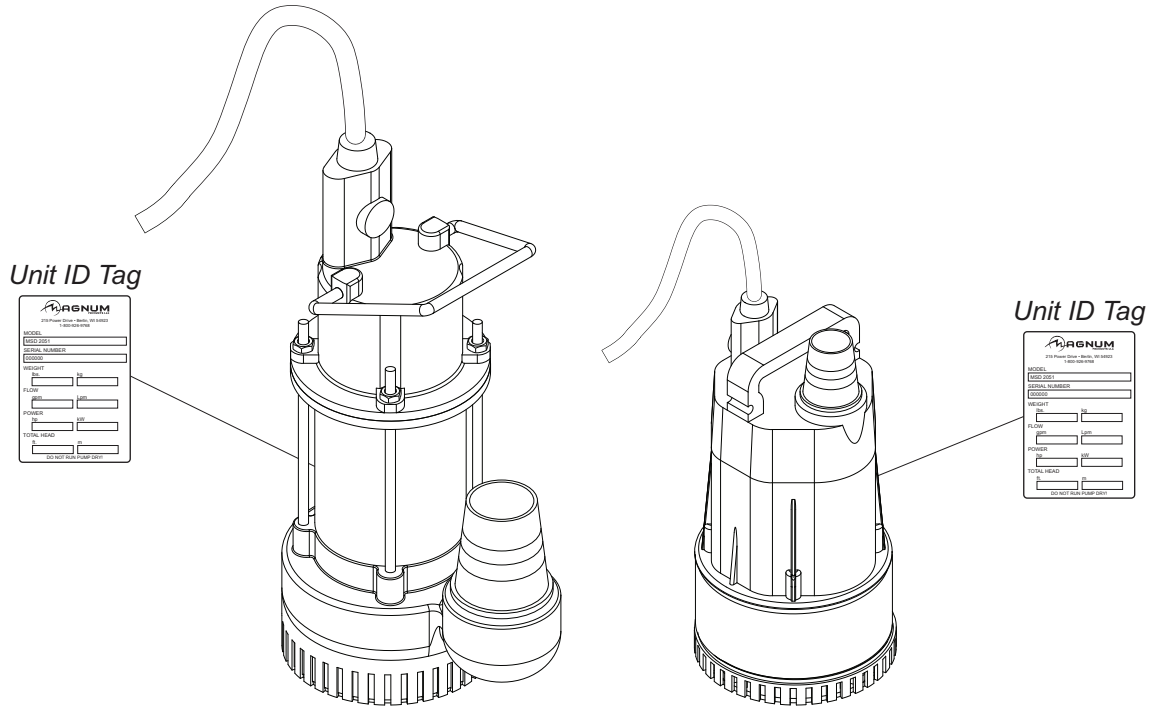
- **NEVER** start a unit in need of repair.
- **NEVER** operate the pump if any of the following conditions exist during operation:
 1. Sparking occurs.
 2. Combustible surface is present.
 3. Protective covers are loose or missing.

⚠ WARNING

Never pump volatile or corrosive chemicals or solutions with this pump. These fluids could create serious health and environmental hazards. High pressure increases the chance of pump explosion which may result in serious personal injury.

UNIT SERIAL NUMBER LOCATION

Refer to the location illustrated below to find the unit ID tag. Important information, such as the unit serial number and model number are found on this tag. Record the information from this tag, so it is available if the tag is lost or damaged. When ordering parts or requesting technical service information, you may be asked to specify this information.



SPECIFICATIONS

Read this manual carefully before attempting to use this pump. The potential for property damage, personal injury or death exists if this equipment is misused or installed incorrectly.

MAGNUM MODEL	MSD 1021	MSD 1021/A	MSD 2051	MSD 2051/A
Motor Type	1 Ø, 60 hz	1 Ø, 60 hz	1 Ø, 60 hz	1 Ø, 60 hz
Amperage Range (Min. - Max.)*	2.3 - 3.1A	2.3 - 3.1A	2.8 - 4.5A	2.8 - 4.5A
Voltage	120V	120V	120V	120V

Pump Output

Discharge Diameter	1.25 in. (32 mm)	1.25 in. (32 mm)	2 in. (50 mm)	2 in. (50 mm)
Maximum Head	16 ft. (5 m)	16 ft. (5 m)	33 ft. (10 m)	33 ft. (10 m)
Maximum Discharge	37 gpm (140 Lpm)	37 gpm (140 Lpm)	63.4 gpm (239 Lpm)	63.4 gpm (239 Lpm)
Power	27 hp (200 W)	27 hp (200 W)	5 hp (373 W)	5 hp (373 W)
Solids Handling Capacity	.2x.5 in. (5x12 mm)	.2x.5 in. (5x12 mm)	.2x.9 in. (4x20 mm)	.2x.9 in. (4x20 mm)

Weights and Dimensions

Dry Weight	11 lbs. (5 kg)	11.5 lbs. (5.2 kg)	21.5 lbs. (9.8 kg)	22 lbs. (10 kg)
Shipping Weight	11.5 lbs. (5.2 kg)	12 lbs. (5.4 kg)	23 lbs. (10.4 kg)	23.5 lbs. (10.7 kg)
Maximum Diameter	6.25 in. (159 mm)	6.25 in. (159 mm)	8.46 in. (215 mm)	8.46 in. (215 mm)
Maximum Height	11.45 in. (291 mm)	11.45 in. (291 mm)	13.97 in. (355 mm)	13.97 in. (355 mm)
Maximum Box Height	14.5 in. (368 mm)	14.5 in. (368 mm)	14.9 in. (378 mm)	14.9 in. (378 mm)
Maximum Box Width	7.13 in. (181 mm)	7.13 in. (181 mm)	9 in. (229 mm)	9 in. (229 mm)
Cable Length	13 ft. (4 m)	13 ft. (4 m)	20 ft. (6 m)	20 ft. (6 m)

Other Specifications

Cable Diameter	18AWG	18AWG	16 AWG	16 AWG
Impeller Material	Plastic	Plastic	Cast Iron	Cast Iron
Impeller Type	Semi-open	Semi-open	Semi-open	Semi-open
Strainer Material	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Seal	Carbon Ceramic	Carbon Ceramic	Carbon Ceramic	Carbon Ceramic
Automatic Float	No	Yes	No	Yes

*Amperage varies upon head and flow.

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

OPERATING THE PUMP

1. Connect the discharge hose with the proper fittings.
2. Place the pump in the water. Lower by attaching a strong rope to the handle. The pump should be placed on a flat, hard surface in at least 2 inches of water.

⚠ WARNING

Never lower or move the pump with the electrical cord. Damage to the cord or cord seal could result in equipment damage and/or electrocution.

NOTICE

Do not install the pump on clay, dirt, or sand surfaces. Small stones, gravel, sand, and mud can clog the pump and reduce the performance or cause malfunction of the pump. If necessary, place the pump on a concrete block or slab to prevent the pump from sinking.

3. Connect the grounding-type plug to an outlet.
4. The pump should begin to cycle. To ensure proper operation, observe the pump to make sure it has enough water to avoid cavitation.

⚠ WARNING

Never operate a pump or pump motor with wet hands. Never stand on a wet or damp surface when operating the pump. Doing so could result in equipment damage or personal injury.

⚠ WARNING

To prevent overheating, always keep the pump completely submerged when running continuously. Running the pump continuously while not submerged could result in equipment damage.

CLEANING THE PUMP

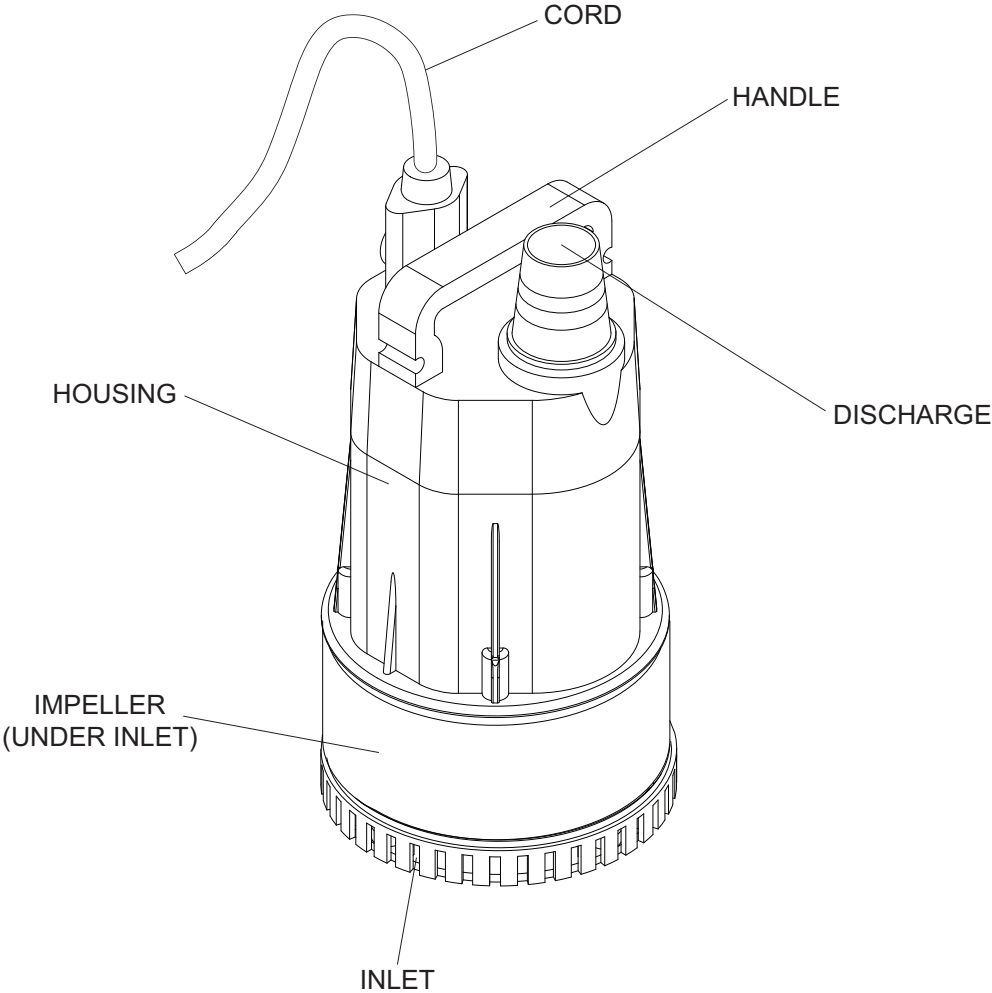
After running the pump, wash the pump in clean water. Keep inlet screens clean at all times, and always check the screens before each use.

STORING THE PUMP

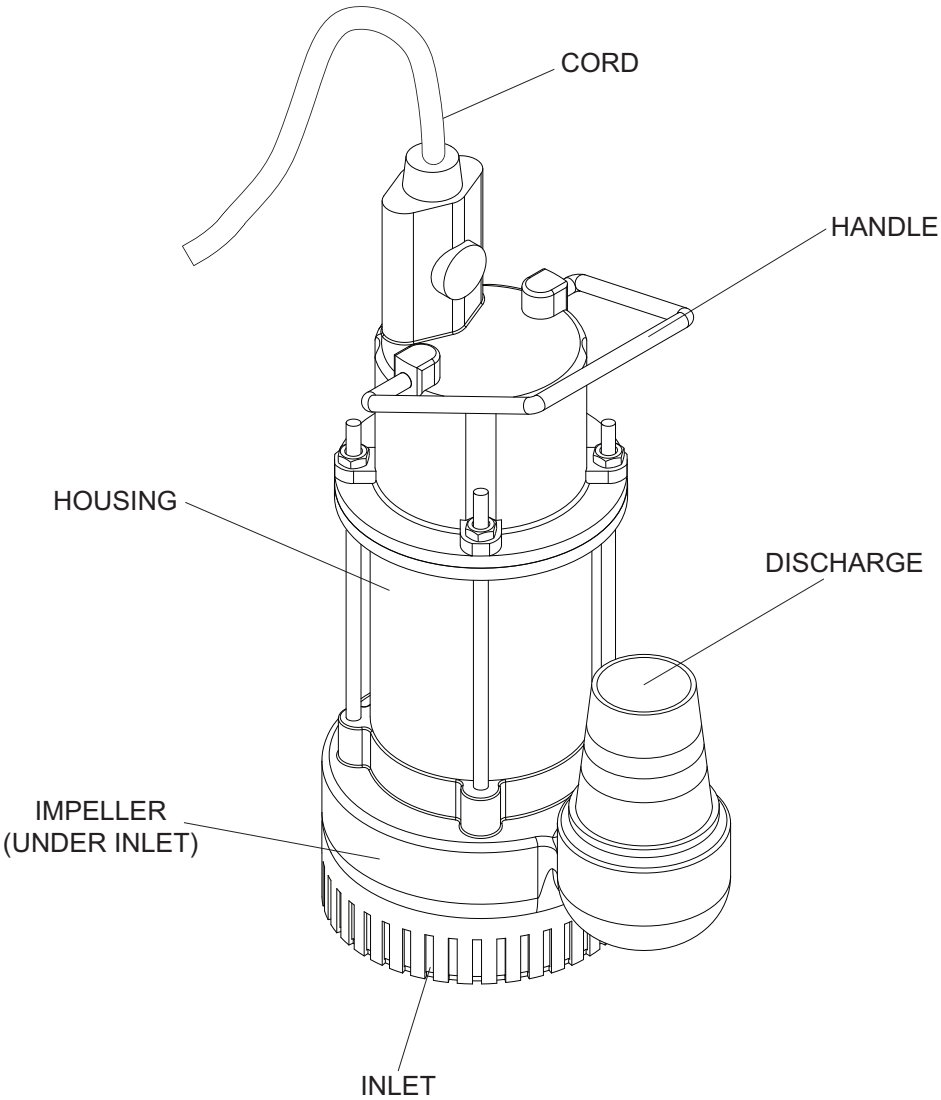
Please take the following actions in preparing the unit for storage.

1. Remove pump impeller cover and clean inside of pump housing. Coat inside of pump with a light film of oil to reduce corrosion.
2. Tape up ports to prevent anything from falling into pump.
3. Store in a clean, dry area.

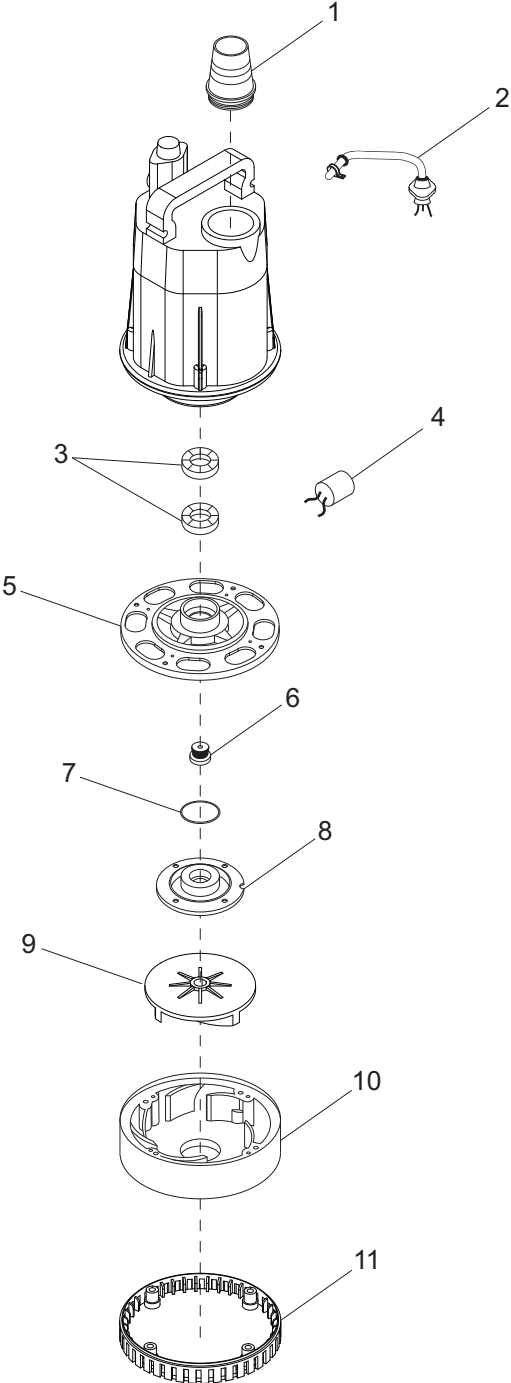
COMPONENT LOCATIONS - MSD 1021 & MSD 1021/A



COMPONENT LOCATIONS - MSD 2051 & MSD 2051/A

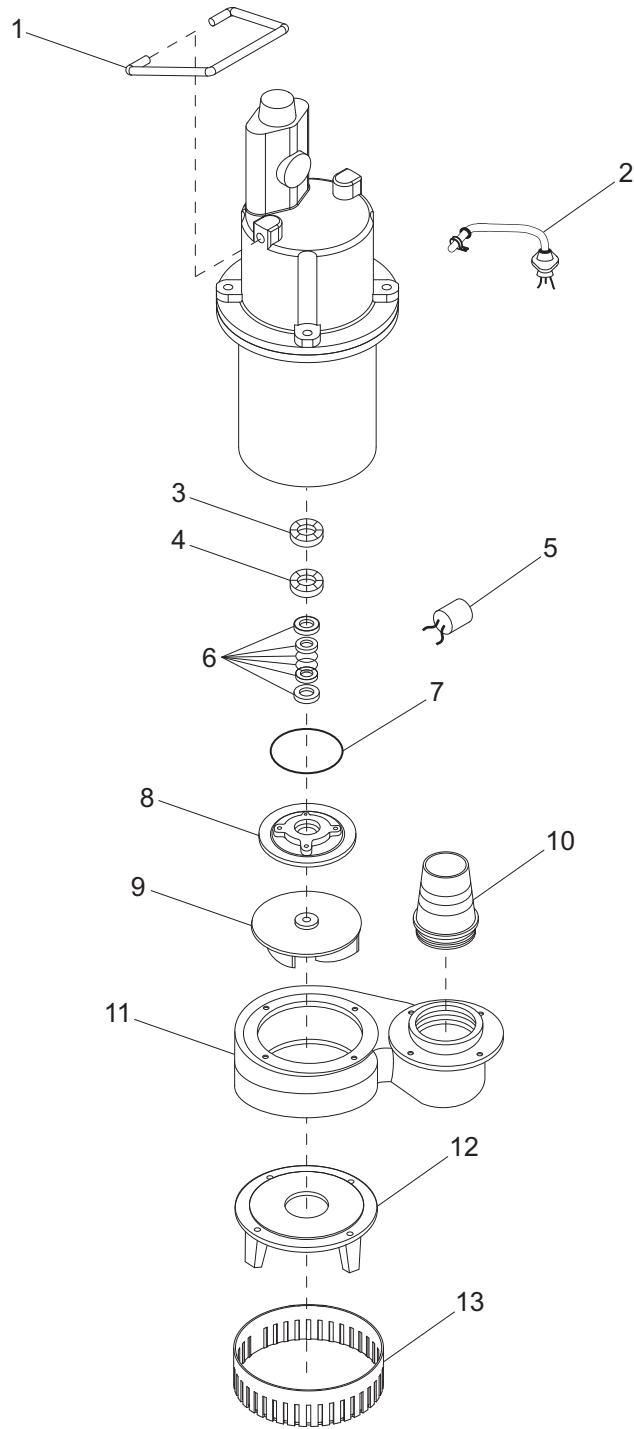


UNIT ASSEMBLY AND PARTS - MSD 1021 & MSD 1021/A



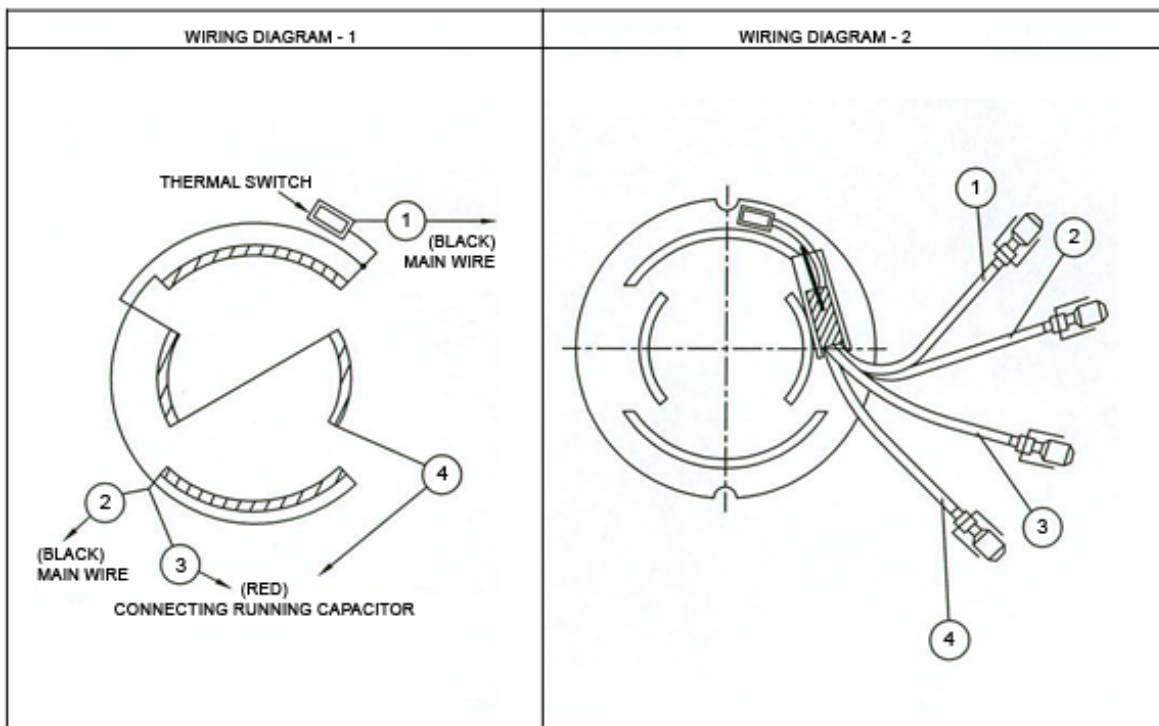
ITEM NO.	PART NO.	QTY	DESCRIPTION	NOTES
1	41668	1	Hose coupling	
2	41609	1	Power cord	
3	41633	1	Upper bearing	
4	41623	1	Capacitor - run	
5	41656	1	Motor lower cover	
6	41647	1	Mechanical seal	
7	41750	1	O-ring - 2"	
8	41657	1	Seal plate	
9	41688	1	Impeller	
10	41683	1	Pump casing	
11	41708	1	Strainer	
-	41663	1	Oil seal	Not shown
-	41675	1	Float switch	Not shown
-	41737	1	Bolt - M4-.70 x 12	Not shown

UNIT ASSEMBLY AND PARTS - MSD 2051 & MSD 2051/A

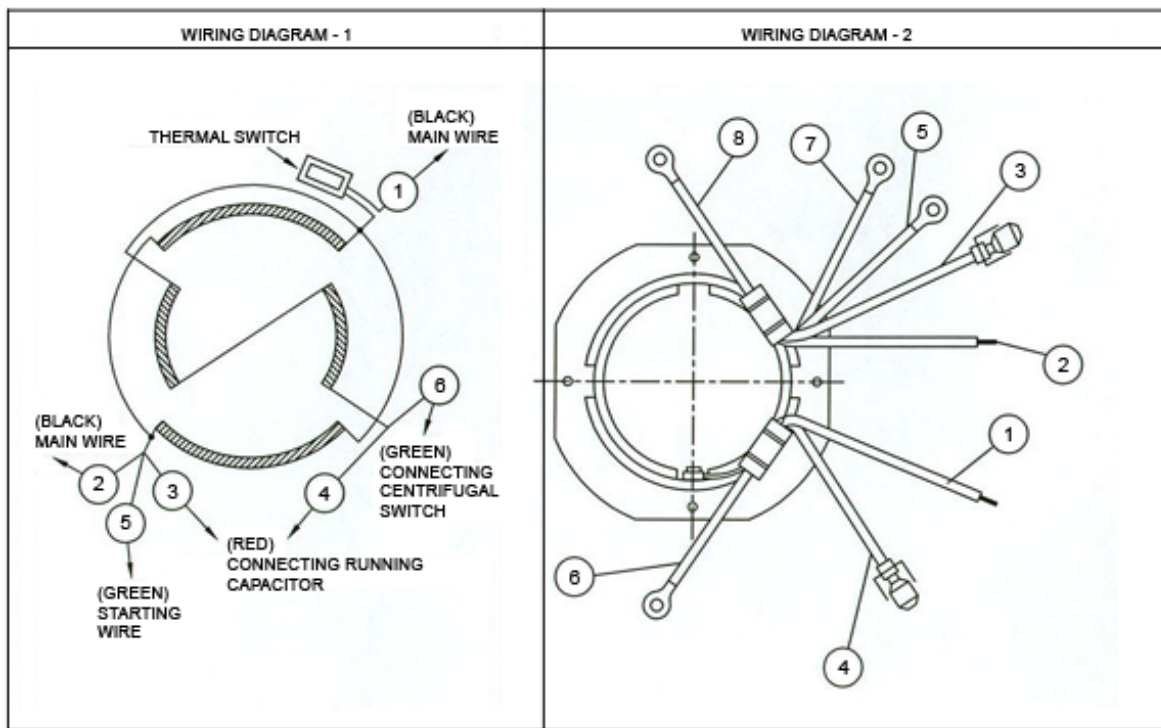


ITEM NO.	PART NO.	QTY	DESCRIPTION	NOTES
1	41617	1	Handle	
2	41610	1	Power cord	
3	41634	1	Upper bearing	
4	41641	1	Lower bearing	
5	41624	1	Capacitor - run	
6	41648	1	Mechanical seal	
7	41750	1	O-ring - 2"	
8	41658	1	Seal plate	
9	41689	1	Impeller	
10	41669	1	Hose coupling	
11	41684	1	Pump casing	
12	41699	1	Suction cover	
13	41709	1	Strainer	
-	41664	1	Oil seal - lower	Not shown - attaches to seal plate
-	41674	1	Oil seal - upper	Not shown
-	41675	1	Float switch	Not shown
-	41725	1	Band cable - fixed	Not shown

WIRING DIAGRAM - MSD 1021 & MSD 1021/A



WIRING DIAGRAM - MSD 2051 & MSD 2051/A



REV: B
PART NO: 41864
01.28.09