

SEARS

OWNER'S MANUAL

MODEL NO.

390.2645

390.2655

CAUTION:

Read and Follow
All Safety Rules and
Operating Instructions
Before First Use of
This Product.

Save This Manual For
Future Reference.



CRAFTSMAN
Model No. 390.2645



CRAFTSMAN PROFESSIONAL
Model No. 390.2655

CRAFTSMAN® SUBMERSIBLE UTILITY PUMP

- Safety Instructions
- Installation
- Electrical
- Repair Parts

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.

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INTRODUCTION

Please read our instructions before you install and use your new pump; this will help you obtain full value and good service from it. It will also help you avoid needless service costs that result from causes we cannot control and cannot cover in our warranty.

LIMITED LIFETIME WARRANTY on CRAFTSMAN® PROFESSIONAL 1/4-HP SUBMERSIBLE PORTABLE UTILITY PUMP

Provided that it is installed and operated according to the instructions in the owner's manual, if this pump ever fails for the original purchaser due to a defect in material or workmanship, return it to your nearest Sears store, and Sears will replace it free of charge. You pay for labor if you choose to have Sears install the replacement pump.

FULL ONE YEAR WARRANTY ON CRAFTSMAN® SUBMERSIBLE PORTABLE UTILITY PUMPS

For one year from the date of purchase, Sears will repair or replace this pump, free of charge, if defective in material or workmanship.

Warranty service is available by calling Sears at 1-800-4-MY-HOME®.

LIABILITY LIMITATION

Sears is not liable for loss or damage to property, nor for any incidental or consequential loss or expense from property damage, that results directly or indirectly from the use of this product. Some states do not allow the exclusion or limitation of property, incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty applies only while this product is used in the United States.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears, Roebuck and Co., Dept. 817WA, Hoffman Estates, IL 60179

GENERAL SAFETY INFORMATION

NOTICE: This unit is not designed for applications involving salt water or brine! Use with salt water or brine will void warranty.

1. Know the pump application, limitations, and potential hazards.

▲ WARNING Do not use in explosive atmospheres. Pump water only with this pump. Failure to follow this warning can result in personal injury and/or property damage.

2. Disconnect power before servicing.
3. Release all pressure within the system before servicing any component.
4. Drain water from the system before servicing.
5. Secure the discharge line before starting the pump. An unsecured discharge line will whip, possibly causing personal injury and/or property damage.
6. Check hoses for weak or worn condition before each use, making certain that all connections are secure.
7. Periodically inspect pump and system components. Perform routine maintenance as required (See MAINTENANCE, Page 4).
8. Provide a means of pressure relief for pumps whose discharge line can be shut-off or obstructed.
9. Personal Safety:
 - a. Wear safety glasses at all times when working with pumps.

- b. Keep work area clean, uncluttered and properly lighted - replace all unused tools and equipment.
- c. Keep visitors at a safe distance from the work area.
- d. Make workshop child-proof - with padlocks, master switches, and by removing starter keys.

10. When wiring an electrically driven pump, follow electrical and safety codes, as well as the most recent National Electrical Code.

11. This equipment is only for use on 115 volt (single phase) and is equipped with an approved 3-conductor cord and 3-prong, grounding-type plug.

▲ WARNING To reduce the risk of electric shock, pull plug before servicing. This pump has not been investigated for use in swimming pool areas. This pump is supplied with a grounding conductor and grounding-type attachment plug. Be certain that it is connected only to a properly grounded grounding-type receptacle.

Where a 2-prong wall receptacle is encountered, it must be replaced with a properly grounded 3-prong receptacle installed in accordance with the National Electrical Code and local codes and ordinances.

12. All wiring should be performed by a qualified electrician.
13. Make certain that the power source conforms to the requirements of your equipment.

14. Protect electrical cord from sharp objects, hot surfaces, oil, and chemicals. Avoid kinking the cord. Replace or repair damaged or worn cords immediately.
15. Do not touch an operating motor. Modern motors can operate at high temperatures.
16. Do not handle a pump or pump motor with wet hands or when standing on a wet or damp surface, or in water.

▲WARNING Risk of electric shock. If your basement has water or moisture on the floor, do not walk on wet area until all power has been turned off. If shut-off box is in basement, call the electric company to shut-off service to the house, or call your local fire department for instructions. Remove pump and repair or replace. Failure to follow this warning can result in fatal electrical shock.

INSTALLATION

▲WARNING Do not use power cord to lift motor. Always use handle.

NOTICE: Do not use this pump in ponds containing plants or fish.

1. Pump should be located and should rest on level solid foundation. Do not suspend pump by means of discharge pipe or power cord. Keep pump inlet screen clear.
2. Thread outlet pipe into pump body carefully to avoid stripping or crossing threads.
 - a. To install with 3/4" garden hose, install adapter provided with pump.
 - b. To install with rigid pipe, use plastic pipe. Wrap thread with Teflon tape or use Plasto Joint Stik*. Screw pipe into pump hand tight +1 - 1-1/2 turns.

NOTICE: Do not try to disassemble pump farther than removing inlet screen. Any evidence of tampering will void warranty.

3. Power Supply: Pump is designed for 115V, 60 Hz operation and requires a circuit of 15 amperes or more capacity. It is supplied with a 3-wire cord set with grounding-type plug for use in a 3-wire, grounded outlet. 3 wire extension cord, of at least 14 AWG (2mm²) size is suggested, with larger sizes for runs over 25 ft (7M). For safety, pump should always be electrically grounded to a suitable electrical ground such as a grounded water pipe or a properly grounded metallic raceway, or ground wire system. Do not cut off the round grounding prong.

▲WARNING The pump motor is equipped with automatic resetting thermal protector and may restart unexpectedly. Protector tripping is indication of motor overloading as a result of operating pump at low heads (low discharge restriction), excessively high or low voltage, inadequate wiring, incorrect motor connections, or a defective motor or pump.

ELECTRICAL CONNECTIONS

The Pump has a 3-prong electric plug. The third prong is used to ground the pump to prevent possible fatal shock. The third prong should never be removed. Your electrical outlet should be the 3-prong, polarized type with an internal ground.

A separate 15 amp GFCI branch electrical circuit is recommended. **DO NOT USE AN EXTENSION CORD.**

Testing for Ground

For your safety, check your outlet for ground using a Circuit Analyzer. (Figure A). A Circuit Analyzer will tell you by a pattern of lights if the power, neutral, and ground wires are correctly connected to your outlet. It can also be used to check other outlets in your home. A Circuit Analyzer is available in the Sears Electrical Department.

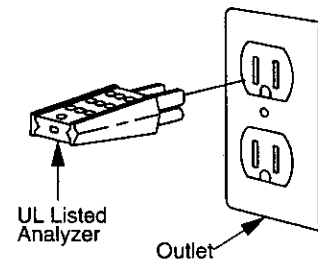


Figure A

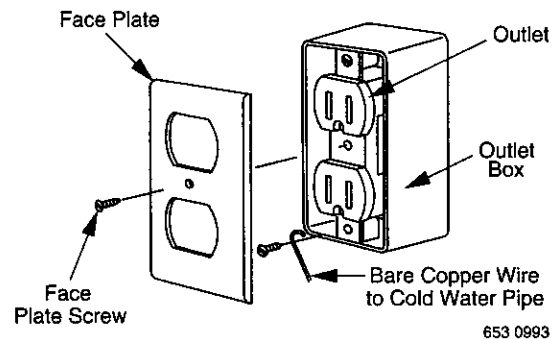


Figure B

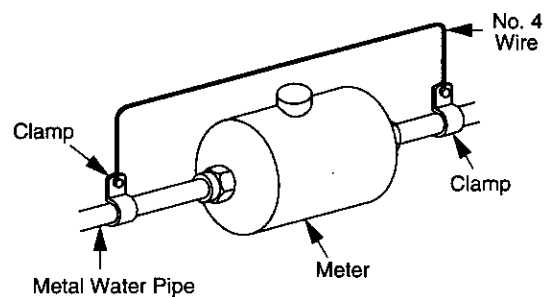


Figure C

*Lake Chemical Co., Chicago, IL

Grounding Outlet

If your outlet is not grounded, install a copper wire, at least 14 gauge (2mm²), from the outlet box, as shown in Figure B, to a metal cold water pipe. Use ground clamp on pipe.

IMPORTANT: The cold water pipe you use as a ground must have metal continuity to electrical ground. If continuity is interrupted by plastic, rubber, or other electrical insulators; such as hoses, fittings, washers or gaskets (including water meter or pump), a metal bypass must be used. Any electrically insulated connector should be jumped (as shown in Figure C), with a length of No. 4 wire clamped securely at both ends.

Automatic Thermal Overload Protection

This pump motor has a built-in automatic thermal overload protector. If the motor overheats, the protector will open and cut off power to the motor before the heat damages it internally. The overload will reset automatically and the pump will restart after the pump cools down below the danger point.

⚠ WARNING DO NOT attempt to work on the pump or motor if the overload seems to have tripped. The motor may restart without warning at any time. You could be injured and the pump damaged if it starts when you are working on it.

DO NOT attempt to repair a non-operational pump. Take it to Sears for service by a qualified technician.

Generator Sizing

Below is the minimum Engine-Generator Watt rating required to power this pump motor. Any additional loads, such as lights, must be added to the listed load and the generator sized accordingly.

Pump Motor HP	Minimum Watt Rating of Generator
1/6	3000
1/4	3200

OPERATION

⚠ WARNING Risk of electric shock. Do not handle pump or pump motor with wet hands or when standing on wet or damp surface, or in water.

NOTICE: Do not use this pump in ponds containing plants or fish.

1. Shaft seal depends on water for lubrication. Do not operate pump unless it is in at least 3/16" (4.75mm) of water as seal may be damaged if allowed to run dry.
2. Motor is equipped with automatic reset thermal protector. If temperature in motor should rise unduly, switch will cut off all power before damage can be done to motor. When motor has cooled sufficiently, switch will reset automatically and restart motor. If protector trips repeatedly, pump should be checked as to cause of difficulty. Low voltage, long extension cords, clogged impeller, very low head or lift, etc., could cause cycling.
3. Pump will pump water down to 3/16" (4.75mm); this means that it will not remove all water. If unit has been operating and suddenly no water comes out of discharge hose, shut off unit immediately. Water level is probably very low and unit has broken prime. Use mop or squeegee to remove remaining water.

⚠ WARNING Risk of electric shock. Before attempting to check why unit has stopped operating, disconnect power from unit. Do not handle pump with wet hands or when standing on wet or damp surfaces, or in water. Failure to follow precaution can result in personal injury and/or property damage.

Airlocks

When a pump airlocks, it runs but does not move any water. An airlock will cause the pump to overheat and fail. This pump has an anti-airlock hole in the bottom of the pump body (see Page 7). If you suspect an airlock, unplug the pump, clean out the anti-airlock hole with a paper clip or piece of wire, and restart pump.

IMPORTANT: This hole allows the pump to start priming within 15 seconds in as little as 1/2" of water. NEVER restart pump in less than 1/2" of water. Leakage from the anti-airlock hole is normal.

MAINTENANCE

Make certain that the pump is unplugged before attempting to service or remove any component.

1. The motor in the unit is sealed in oil. No additional lubrication is necessary.
2. **IMPORTANT:** Disassembly of the motor assembly will void the warranty. It might also cause internal leakage and damage to the unit. If repairs are required, return the pump to the dealer from whom it was purchased.
3. Inlet screen should be kept clean and free of all foreign objects.

Pump Cleaning

NOTICE: Attempting to disassemble motor will void the warranty.

1. Disconnect power cord from electrical outlet before working on pump. The volute screen and shield may be removed to replace impeller or clean pump of mud or debris.

SERVICE

General

⚠ WARNING Risk of electric shock. When servicing pump always disconnect power to electrical outlet and remove pump electric cord from outlet.

1. If pump does not operate:
 - a. Check for loose plug at electric outlet.
 - b. Check for blown fuses or tripped circuit breakers at fuse box/circuit breaker box.
 - c. If a and b above check OK, plug in a light that you know works. If it lights, take your pump to Sears for service. If it doesn't light, the electrical circuit is faulty; consult a licensed electrician.
2. Pump starts, but blows fuses/trips circuit breakers:

After disconnecting power to pump, remove the screen and shield from the bottom of the pump and make sure that the impeller turns freely. Remove any debris obstructing impeller. If pump still does not operate correctly, return it to your nearest Sears Service Department for repairs.
3. Pump runs, but does not empty sump:
 - a. Clean pump intake screen.
 - b. Water may be entering sump faster than the pump can discharge it.
 - c. Be sure vertical distance from pump discharge outlet to discharge pipe outlet is 20 feet (6M) or less for Model 390.2645, and 22-1/2 feet (6.9M) or less for Model 390.2655.
 - d. Be sure discharge pipe is not plugged or frozen.
 - e. Unplug pump. Clean out anti-airlock hole. Restart pump.

PUMP PERFORMANCE

Model	Discharge Height in Feet Above Pumping Level					
	HP	3'	5'	10'	15'	20'
390.2645	1/6	26.0	25.0	21.5	17.5	11.0
390.2655	1/4	30.0	28.5	24.5	20.0	14.5

} GPM

For maximum performance, purchase Sump/Utility Hose Kit, SEARS Stock No. 27909.

GARDEN HOSE PERFORMANCE

Model No. 390.2645

Type of Hose	Length of Hose	Vertical Pumping Distance				
		3'	5'	10'	15'	20'
1/2" HOSE	25'	8.5	8.2	7.0	5.7	4.3
	50'	6.1	5.8	5.1	4.3	3.0
	75'	5.0	4.8	4.4	3.5	2.4
	100'	4.5	4.3	3.6	2.9	1.7
5/8" HOSE	25'	11.4	10.8	9.2	7.4	5.1
	50'	8.6	8.3	6.9	5.6	4.0
	75'	7.0	6.6	5.7	4.6	3.1
	100'	6.1	5.9	5.0	4.2	2.9

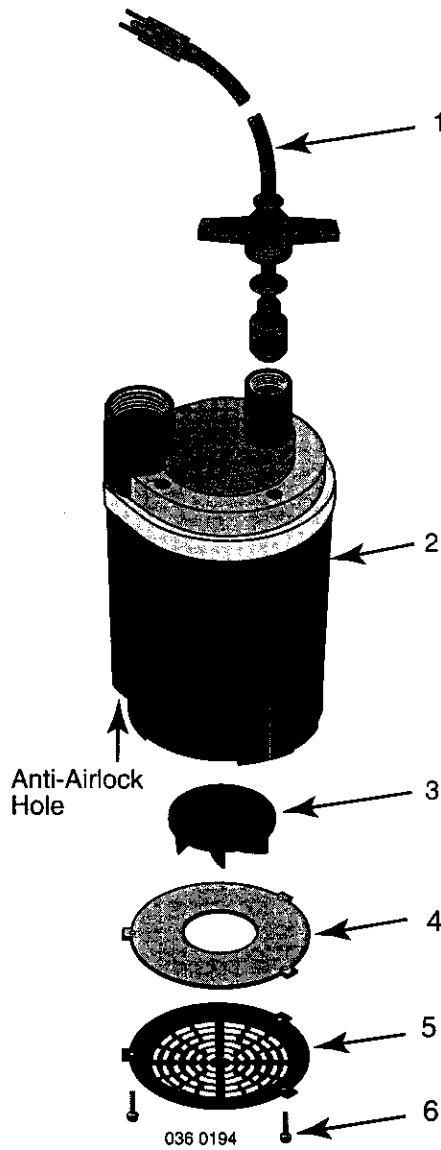
Model No. 390.2655

Type of Hose	Length of Hose	Vertical Pumping Distance				
		3'	5'	10'	15'	20'
1/2" HOSE	25'	9.0	8.7	7.5	6.7	5.2
	50'	6.8	6.5	5.9	5.0	4.0
	75'	5.2	5.0	4.6	3.7	3.1
	100'	4.9	4.7	4.3	3.3	2.9
5/8" HOSE	25'	12.3	11.7	10.3	8.9	6.8
	50'	9.0	8.7	7.6	6.5	4.9
	75'	7.2	7.0	6.4	5.4	4.1
	100'	6.4	6.2	5.5	4.9	3.8

Performance shown in gallons per minute.

REPAIR PARTS

To Order Parts Call
Sears Product Service,
1-800-366-7278



Repair Parts

Key No.	Part Description	Qty.	Model Number	
			390.2645 1/6 HP	390.2655 1/4 HP
1	Power Cord	1	PS117-54-TSU	PS117-51-TSU
2	Motor	1	*	*
3	Impeller	1	PS5-24P	PS5-25P
4	Shield	1	PS70-3P	PS70-3P
5	Screen	1	PS8-5P	PS8-5P
6	#8 x 5/8 Pan Head Screw	3	**	**
•	Garden Hose Adapter	1	FT0013-43	FT0013-43

• Not illustrated.

* If motor fails, replace entire pump.

** Standard hardware item; purchase locally.

SEARS

OWNER'S MANUAL

Model No.

390.2645

390.2655

The model number of your Submersible Utility Pump will be found on the pump label.

When requesting service or ordering parts, always give the following information:

- Product Type
- Model Number
- Part Number
- Part Description

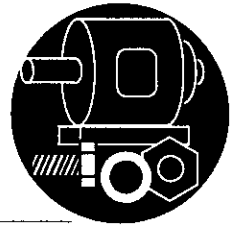
CRAFTSMAN® SUBMERSIBLE UTILITY PUMP

For the repair or replacement parts you need

Call 7 am - 7 pm, 7 days a week

1-800-366-PART

(1-800-366-7278)



For in-home major brand repair service

Call 24 hours a day, 7 days a week

1-800-4-REPAIR

(1-800-473-7247)



For the location of a
Sears Repair Service Center in your area

Call 24 hours a day, 7 days a week

1-800-488-1222



For information on purchasing a Sears
Maintenance Agreement or to inquire
about an existing Agreement

call 9 am - 5 pm, Monday-Saturday

1-800-827-6655



SEARS
REPAIR SERVICES

America's Repair Specialists

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.