

LittleGIANT[®]



**STOCK No. 53DH04
MODEL 6EC-CIA-SFS**

**STOCK No. 53DH05
MODEL 6EC-CIM**


**STOCK No. 53DH06
MODEL 10EC-CIA-SFS**


Installation Guide


BEFORE GETTING STARTED


READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE, OR SERVICE YOUR PRODUCT. KNOW THE PRODUCT'S APPLICATION, LIMITATIONS, AND POTENTIAL HAZARDS. PROTECT YOURSELF AND OTHERS BY OBSERVING ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH THESE INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE!


Refer to product data plate(s) for additional operating instructions and specifications.

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 or property damage if ignored:


 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 major property damage if ignored.

 NOTICE indicates special instructions which are important but not related to hazards. Carefully read and follow all safety instructions in this manual and on pump.




 DANGER DO NOT USE TO PUMP FLAMMABLE OR EXPLOSIVE FLUIDS SUCH AS GASOLINE, FUEL OIL, KEROSENE, ETC. DO NOT USE IN EXPLOSIVE ATMOSPHERES OR HAZARDOUS LOCATIONS AS CLASSIFIED BY THE NEC, ANSI/NFPA70. FAILURE TO FOLLOW THIS WARNING CAN RESULT IN PROPERTY DAMAGE, PERSONAL INJURY OR DEATH. DO NOT HANDLE A PUMP OR PUMP MOTOR WITH WET HANDS OR WHEN STANDING ON A WET OR DAMP SURFACE, OR IN WATER. FAILURE TO FOLLOW THIS WARNING CAN RESULT IN FATAL ELECTRICAL SHOCK. PUMP SHOULD ONLY BE USED WITH LIQUIDS COMPATIBLE WITH PUMP COMPONENT MATERIALS.

 WARNING Make certain that the unit is disconnected from the power source before attempting to service or remove any component. If the power disconnect is out of sight, lock it in the open position and tag it to prevent unexpected application of power.

 WARNING This equipment should be installed and serviced by technically qualified personnel. Comply with national and local electrical and plumbing codes when installing this unit. Failure to install it in compliance with national and local electrical and plumbing codes and within Franklin Electric's recommendations may result in electrical shock or fire hazard, unsatisfactory performance, or equipment failure. Installation information is available through pump manufacturers and distributors, or directly from Franklin Electric at our toll-free number 1-800-701-7894.

This equipment must not be used by children or persons with reduced physical, sensory or mental abilities, or lacking in experience and expertise, unless supervised or instructed. Children may not use the equipment, nor may they play with the equipment or in the immediate vicinity.

 CAUTION In any installations where property damage and/or personal injury might result from an inoperative or leaking pump due to power outages, discharge line blockage, or any other reason, a backup system(s) and/or alarm should be used.

CAUTION

- Keep work area clean, well-lit, and uncluttered.
- Keep safety labels clean and in good condition.
- Do not run pump dry. For optimal cooling and to prolong the motor life, the liquid level being pumped should normally be above the top of the pump housing.
- Wear safety glasses while installing or performing maintenance on pump.
- Make sure all **ELECTRICAL POWER IS OFF** before connecting any electrical wires. Wire sump pump system for correct voltages. Follow all pump wiring instructions provided in the "Wiring" section of this manual

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INTRODUCTION

This is a submersible sump/effluent pump for use in basins or lift stations and is suitable for pumping clear water or effluent gray water with up to 1/2" spherical semi-solids. Do not use the pump in applications where sewage or any other debris (gravel, sand, floating debris, etc.) or corrosives are present.

This instruction sheet provides you with the information required to safely own and operate your product. Retain these instructions for future reference. The product you have purchased is of the highest quality workmanship and material, and has been engineered to give you long and reliable service. This product has been carefully tested, inspected, and packaged to ensure safe delivery and operation. Please examine your item(s) carefully to ensure that no damage occurred during shipment. If damage has occurred, please contact the place of purchase. They will assist you in replacement or repair, if required.

SAFETY GUIDELINES

⚠ DANGER When a pump is in a basin, etc., do not touch the motor, pipes or water until unit is unplugged or shut-off. If shut-off box is not accessible, call the electric company to shut off service to the house, or call your local fire department for instructions. Failure to follow this warning can result in fatal electrical shock



⚠ WARNING RISK OF ELECTRIC SHOCK

This product is supplied with a grounding conductor and grounding-type attachment plug. To reduce risk of electric shock, be certain that it is connected only to a properly grounded grounding-type receptacle. The third prong is to ground the pump to help to prevent possible electric shock hazard. Do not remove the third prong from the plug. Do not use an extension cord.

As a safety measure, each electrical outlet should be checked with an Underwriters Laboratory Listed circuit analyzer. This will indicate if the power, neutral and ground wires are properly connected. If they are not, call a qualified licensed electrician.

⚠ WARNING The pump motor is equipped with an automatic resetting thermal protector and may restart unexpectedly. Protector tripping is an indication of motor overloading/overheating, which can be caused by application issues such as an obstructed pump impeller, switch stuck in ON position, pump running dry, pump air-locked, pump short cycling, excessively high or low voltage supply, or possibly a pump, motor, bearings or seal that have reached the end of their useful life.

⚠ WARNING During normal operation the pump is immersed in water. Also, water may be present in the surrounding area of the pump. Caution must be used to prevent bodily injury when working near the pump:

- Electrical power should be disconnected prior to touching, servicing or repairing the pump.
- To minimize possible fatal electrical shock hazard, extreme care should be used when changing fuses. Do not stand in water while changing fuses or insert your finger into the fuse socket.

⚠ WARNING Do not run the pump in a dry basin. If the pump is run in a dry basin, the surface temperature of the pump will rise to a high level. This high level could cause skin burns if the pump is touched and will cause serious damage to your pump. For optimal cooling and to prolong the motor life, the liquid level being pumped should normally be above the top of the pump housing.

⚠ WARNING Do not oil the motor. The pump housing is sealed. A high-grade dielectric oil devoid of water has been put into the motor housing at the factory. Use of other oil could cause serious electric shock and/or permanent damage to the pump.

⚠ WARNING This pump's motor housing contains a dielectric oil for motor heat transfer and lifetime lubrication of the bearings. This oil is non-toxic to aquatic life. However, suffocation can occur if oil is left on the water surface. If oil escapes the motor housing, it can be removed from the surface quickly by placing newspapers on the water surface to soak up the oil.

⚠ CAUTION

THIS PUMP HAS BEEN EVALUATED FOR USE WITH WATER ONLY.

INSTALLATION

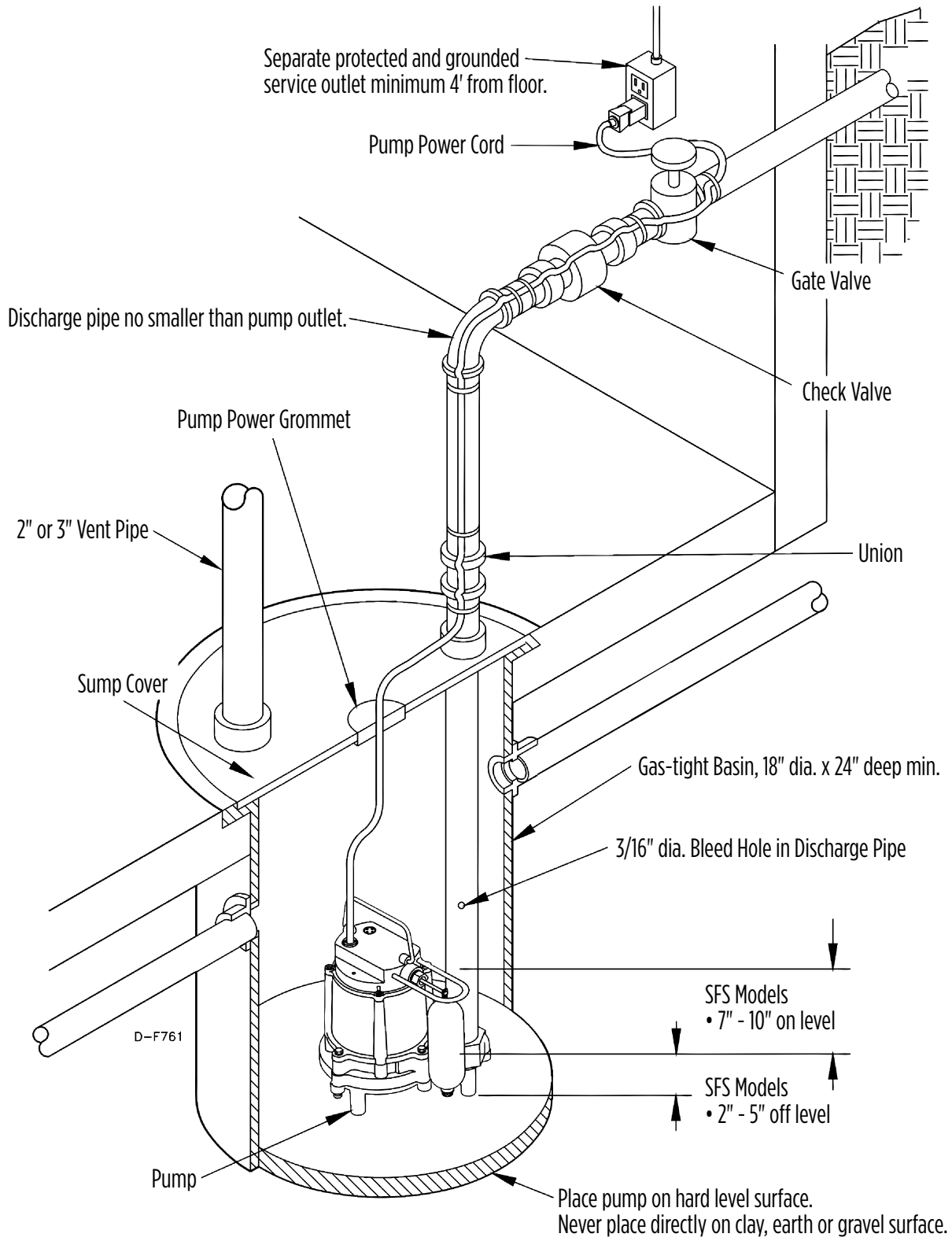
⚠ WARNING Check local electrical and building codes before installation. The installation must be in accordance with their regulations as well as the most recent National Electrical Code (NEC).

1. Pump must be installed in a suitable gas-tight basin that is at least 18" in diameter and 24" deep, and vented in accordance with local plumbing codes.
2. Clean any debris from sump pit and set pump in center of pit (Figure 2). A solid bottom will prevent clogging of the pump from sand and dirt.
3. The pump must be placed on a hard, level surface. Never place the pump directly on clay, earth or gravel surfaces. These surfaces contain small stones, gravel, sand etc. that may clog or damage the pump and cause pump failure.
4. Do not attempt to restrict the intake side of these pumps. Restricting the intake may cause damage to the seal and may starve the pump. If you require reduced flow rates, place a valve on the discharge side of the pump. Or, if flexible vinyl tubing is used, a clamp can be used on the tubing to restrict the flow.
5. Connect discharge piping. Use pipe joint compound at all connections. Sump pumps can be piped to discharge into the house drainage system, to a dry well, splash block or to a storm drain, depending on local plumbing codes. The discharge pipe should be as short as possible and contain as few elbows as possible. The discharge pipe should be the same diameter as the discharge size to reduce pipe friction losses. Smaller pipe will restrict capacity and reduce pump performance. The sump/effluent pump comes with 1-1/2" female pipe thread discharge.
 - a. Support pump and piping when assembling and when installed. Failure to do so may cause piping to break, pump to fail, motor bearing failures, etc.
 - b. Always install a union in the discharge line, just above the sump pit, to allow for easy removal of the pump for cleaning or repair.

6. A check valve must be used in the discharge line to prevent back flow of liquid into the basin. The check valve should be a free flow valve that will easily pass solids.
 - a. **⚠ CAUTION** For best performance of check valve when handling solids, install in a horizontal position or at an angle of no more than 45°. Do not install check valve in a vertical position, as solids may settle in valve and prevent opening on start-up.
 - b. When a check valve is used, drill a relief hole (1/8" or 3/16" diameter) in the discharge pipe. This hole should be located below the floor line between the pump discharge and the check valve. Unless such a relief hole is provided, the pump could "air lock" and will not pump water even though it will run.
7. Tape pump and switch cords to discharge line with electrician's tape. This will protect the cord from damage.
8. Test operation of the sump system following the instructions outlined in the "Sump System Operation Testing" section of this manual. Do not attempt to operate the pump without water; this will damage the seals and bearings and could result in permanent damage to the pump.
9. Place cover over sump. This cover will help prevent debris from entering the pit and will guard against accidental injury.

⚠ WARNING Always disconnect the electrical power before touching the pump or discharge when water is present in the sump. Failure to do so can result in hazardous electrical shock.

TYPICAL INSTALLATION



WIRING



WARNING Check local electrical and building codes before installation. The installation must be in accordance with their regulations as well as the most recent National Electrical Code (NEC).

Check the pump label for proper voltage required. Do not connect to voltage other than that shown.

A ground fault circuit interrupter (GFCI) is required.

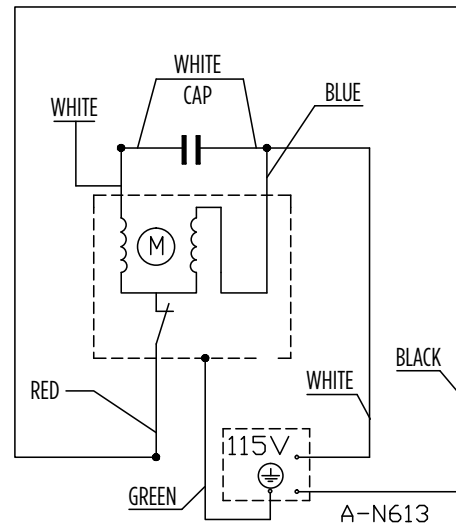
The pump should be connected or wired to its own circuit with no other outlets or equipment in the circuit line. The fuses and circuit breaker should be of ample capacity in the electrical circuit. See table below:

Pump	HP	Voltage	Breaker Amps
6EC	1/3	115 V	15
10EC	1/2	115 V	15

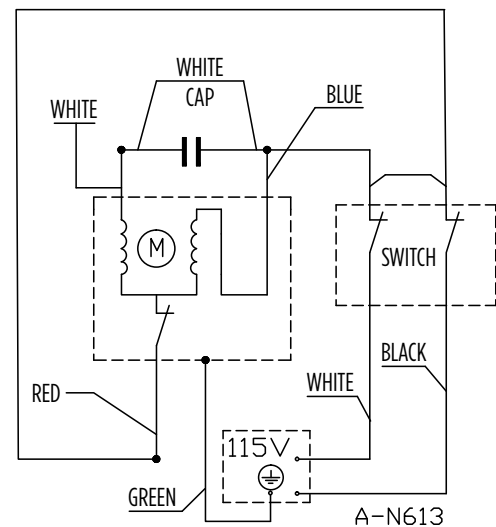
WARNING The flexible jacketed cord assembly mounted to the pump must not be modified in any way, with the exception of shortening the cord to fit into a control panel. Any splice between the pump and the control panel must be made within a junction box and mounted outside of the basin, and comply with the National Electrical Code. Do not use the power cord for lifting the pump.

SPECIFICATIONS

	Gallons Per Minute, at Height Liters Per Minute, at Height					Shut-Off
	5' 1.5 m	10' 3 m	15' 4.5 m	20' 6.1 m	30' 9.1 m	
6EC	53	50	42	34	-	28'
	201	189	159	129		8.5 m
10EC	67	57	47	42	24	36'
	254	216	178	159	91	11 m



MANUAL



AUTOMATIC

SUMP SYSTEM OPERATION TESTING

TESTING AUTOMATIC PUMP OPERATION

1. The 6EC-CIA-SFS and 10EC-CIA-SFS automatic pumps are equipped with an integral float-operated mechanical switch. Automatic operation is achieved through the pump cord.
2. When these pumps are installed in a basin with a sealed cover, switch operation cannot be observed. The sump cover usually will have a spare hole that is plugged with a rubber plug. This plug can be removed and switch operation can be observed.
3. Plug the power cord into a grounded receptacle with voltage consistent with the pump voltage, as indicated on the pump nameplate.
4. Be sure the gate valve in the discharge line is open.
5. Run water into the sump basin until the primary pump is activated.
 - a. Do not attempt to run the pump without water; this could result in permanent damage to the pump.
6. Confirm that primary pump and its control switch are functioning as intended.
7. Confirm that ON-OFF levels are within specification and confirm that no potential obstructions exist that could inhibit switch operation.
8. Confirm that there are no leaks in the primary pump discharge plumbing and main home drain pipe plumbing.
 - a. It is normal for a stream of water to spray from the air bleed hole in the primary pump's plumbing. Confirm that this spray is captured within the sump basin.
9. Allow the pump to operate through several on/off cycles.

TESTING MANUAL PUMP OPERATION

1. The 6EC-CIM manual pumps do not include an automatic liquid level control. The pump cord for these pumps can be plugged directly into a properly grounded receptacle with voltage consistent with pump nameplate for continuous pump operation.
 - a. **CAUTION** This type of operation should be used only for emergency use or when a large volume of water is to be pumped. The pump must be continuously monitored during operation and disconnected from power before the pump runs dry.
 - b. Pump must not be allowed to run dry. If pump is run dry, it may damage pump and void the warranty.
2. For automatic operation of a manual pump, a separate float switch or other liquid level control must be used.
 - a. **CAUTION** Refer to float switch or other liquid level control manufacturer's instructions when installing. Failure to install it in compliance with national and local electrical and plumbing codes and within manufacturer's recommendations may result in electrical shock or fire hazard, unsatisfactory performance, or equipment failure.
 - b. After installing separate float switch or other liquid level control, test operation following the steps shown in the "Testing Automatic Pump Operation" section.

If the pump does not operate properly, consult the Troubleshooting table. If the trouble still cannot be found, consult your pump dealer or take the pump to a Little Giant authorized service center.

Do not let the unit run dry (without liquid). It is designed to be cooled by pumping fluid. You may damage the seal and the motor may fail if the pump is allowed to run dry.

If the unit is going to be idle for a period of time, follow the cleaning instructions outlined in the next section. Do not let the unit freeze. This may cause cracking or distortion that may destroy the unit.

MAINTENANCE



CAUTION When working on the pump or switch, always unplug the pump power cord in addition to removing the fuse or shutting off the circuit breaker before working on the pump.

This unit is permanently lubricated. Oiling is not required. Do not, in any case, open the sealed portion of the unit or remove housing screws.

NOTICE Inspect and test the sump system condition and operation every 3 months (more frequently in heavy use applications).

1. LET PUMP COOL FOR A MINIMUM OF 2 HOURS BEFORE ATTEMPTING TO SERVICE.
 - a. Submersible pumps contain oil that becomes pressurized and hot under normal operating conditions.
2. Check the power cords and electrical outlet for damage or corrosion.
 - a. The power cord on these units cannot be replaced. In case of damage the whole unit must be replaced.
3. Remove all debris (gravel, sand, floating debris, etc.) from the sump basin.
4. Review sump system components for any build-up (minerals, etc.) that would inhibit functionality of the components.
 - a. If significant, remove build-up or replace affected components.
5. Confirm that all flexible coupling hose clamps are fully engaged with plumbing and fully tightened.
6. Test operation of the sump system following the instructions outlined in the “Sump System Operation Testing” section of this manual.
7. While the pump is running, make sure a stream of water is escaping from the air bleed hole.
 - a. If not, clear the hole of any deposits or debris.

CLEANING IMPELLER AND VOLUTE

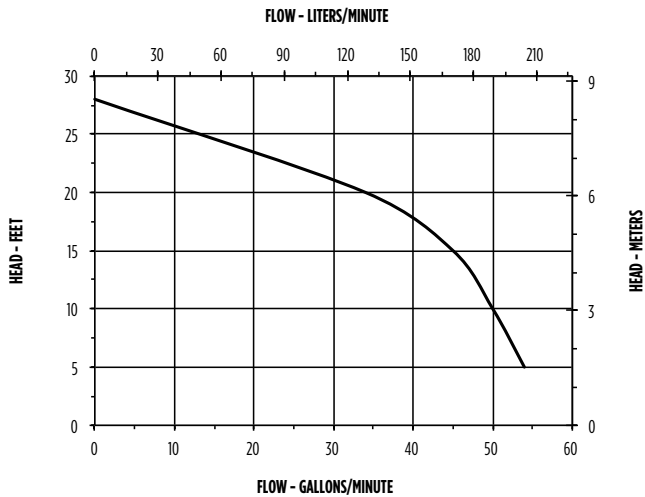
Periodic cleaning of the pump parts will prolong the life and efficiency of the pump. Refer to the assembly and disassembly of the pumping head.

1. Remove the 5 screws that hold the base to the volute, then separate the base from the volute.
2. **WARNING** Do not remove the motor housing cover. Warranty is void if the motor housing cover, impeller or seals have been removed.
 - a. Any repair on the motor must be done by an authorized Little Giant service center.
3. Remove the base and clean the impeller and the volute passage. Do not use strong solvents on the impeller.
 - a. **CAUTION** Do not remove the impeller. Removal of the impeller requires special tools and is to be done only by an authorized service center.
4. Be sure the impeller turns freely after cleaning.
5. Attach the base to the volute and secure it with the 5 screws.

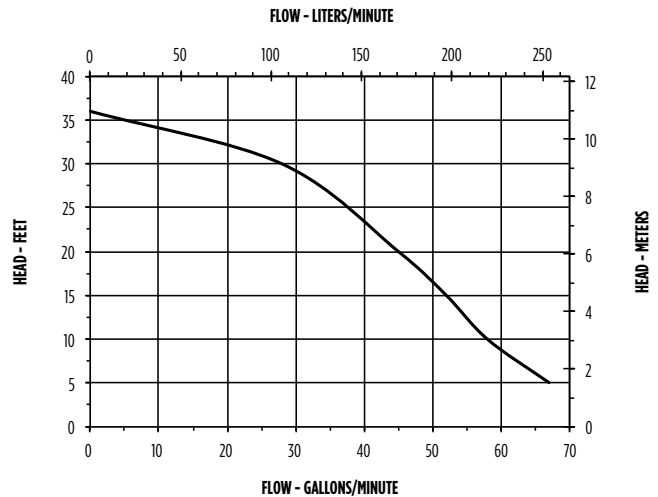
CONSULT INSTRUCTION SHEET ILLUSTRATIONS FOR PROPER ASSEMBLY AND DISASSEMBLY OF YOUR LITTLE GIANT PUMP.

PUMP PERFORMANCE CURVES

6EC



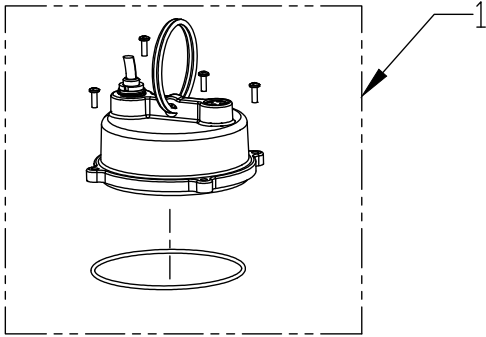
10EC



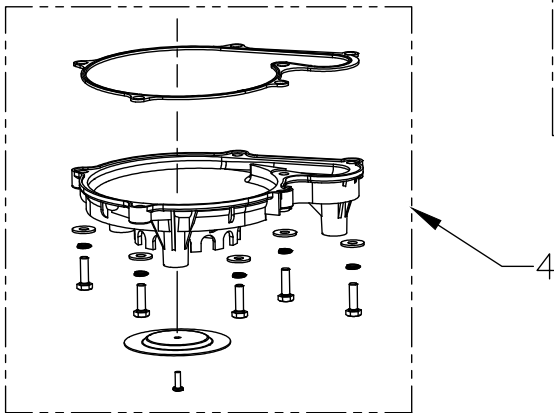
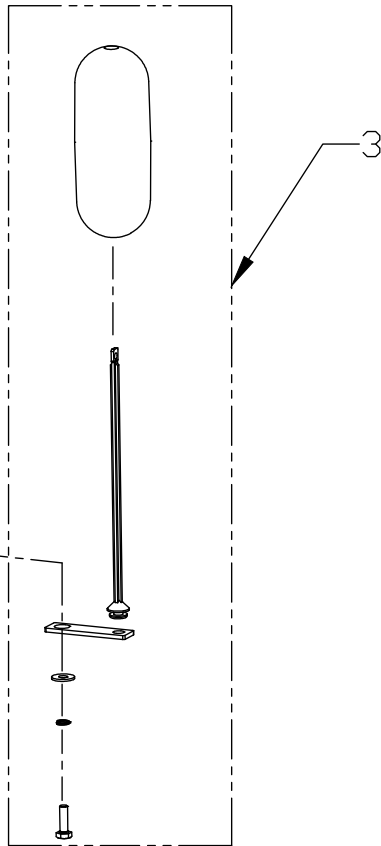
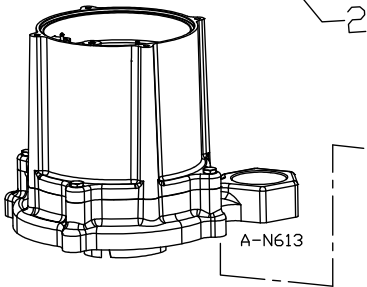
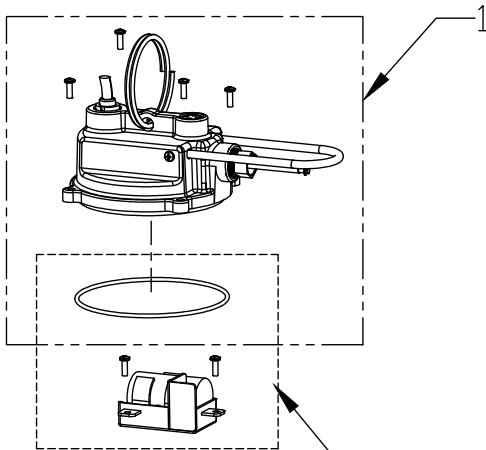
TROUBLESHOOTING

Problem	Probable Causes	Corrective Action
Pump does not turn on	Pump not plugged in.	Plug in pump.
	Circuit breaker shut-off or fuse removed.	Turn on circuit breaker or replace fuse.
	Accumulation of trash on float.	Clean float.
	Float obstruction.	Check float path and provide clearance.
	Defective switch.	Have pump serviced by authorized service center.
	Defective motor.	Have pump serviced by authorized service center.
Pump will not shut off	Float or float rod obstruction.	Check float and float rod path and provide clearance.
	Pump is air locked.	Shut power off for approximately 1 minute, then restart. Repeat several times to clear air from pump.
	Liquid inflow matches pump capacity.	Larger pump required.
	Defective switch.	Disconnect switch, check ohmmeter, open-infinite resistance, closed-zero.
Pump runs but does not discharge liquid	Check valve installed backwards.	Check flow-indicating arrow on check valve body to ensure it is installed properly.
	Check valve stuck or plugged.	Remove check valve and inspect for proper operation.
	Lift too high for pump.	Check rating table.
	Inlet to impeller plugged.	Pull pump and clean.
	Pump is air locked.	Pull pump and clean.
Pump does not deliver rated capacity	Lift too high for pump.	Check rated pump performance.
	Low voltage, speed too slow.	Check for proper supply voltage to make certain it corresponds to nameplate voltage.
	Impeller or discharge pipe is clogged.	Pull pump and clean. Check pipe for scale or corrosion.
	Impeller wear due to abrasives.	Replace worn impeller.
Pump cycles continually	No check valve in long discharge pipe allowing liquid to drain back into sump.	Install a check valve in discharge line.
	Check valve leaking.	Inspect check valve for correct operation.
	Basin too small for inflow.	Install larger basin.

REPLACEMENT PARTS



Part No.	Description	Item No.
110970101	Cover Assembly, 115 V, Automatic, with Switch, 20' Cord	1
110970103	Cover Assembly, 115 V, Manual, 20' Cord	1
110970201	Capacitor Kit, 115 V, with Bracket, Seal Ring	2
110970301	Float Assembly with Stem Strap	3
110970401	Volute Base, Plastic, with Gasket for 6E	4
110970403	Volute Base, Plastic, with Gasket for 10EC	4



NOTES

NOTES

SEWAGE & EFFLUENT 2 YEAR WARRANTY STATEMENT

LIMITED WARRANTY

THIS WARRANTY SETS FORTH THE COMPANY'S SOLE OBLIGATION AND PURCHASER'S EXCLUSIVE REMEDY FOR DEFECTIVE PRODUCT.

Franklin Electric Company, Inc. and its subsidiaries (hereafter "the Company") warrants that the products accompanied by this warranty are free from defects in materials or workmanship of the Company that exist at the time of sale by the Company and which occur or exist within the applicable warranty period. Any distributor, sub-distributor, recipient, end-user and/or consumer agrees that by accepting the receipt of the products, the distributor, sub-distributor, recipient, end user and/or consumer expressly agrees to be bound by the terms of the warranty set forth herein.

I. Applicable Warranty Period

The products accompanied by this warranty shall be covered by this Limited Warranty for a period of 24 months from the date of original purchase by the consumer. In the absence of suitable proof of purchase date, the warranty period of this product will begin to run on the product's date of manufacture.

II. Instructions Applicable to this Limited Warranty

1. Consumers wishing to submit a warranty claim must return the products accompanied by this warranty to the point of purchase for warranty consideration.
2. Upon discovery of a defect, any personal injury, property damage or any other type of resulting damage, if applicable, shall be reasonably mitigated to the extent possible.
3. At its discretion, the Company may inspect products either at its facilities or in the field, and after determination of a warranty claim, will, at its option, repair or replace defective parts. Repaired or replaced parts will be returned freight prepaid by the Company.
4. This warranty policy does not cover any labor or shipping charges. The Company shall not be liable for any costs or charges attributable to any product testing, maintenance, installation, repair or removal, or for any tools, supplies, or equipment needed to install, repair, or remove any product.

III. Limitations Applicable to this Limited Warranty

THIS WARRANTY DOES NOT APPLY TO ANY OF THE FOLLOWING:

1. Brushes, impeller or cam on models with brush-type motors and/or flex-vane impellers.
2. Any product that is not installed, applied, maintained, and used in accordance with the Company's published instructions, applicable codes, applicable ordinances and/or with generally accepted industry standards.
3. Any product that has been subject to misuse, misapplication, neglect, alteration, accident, abuse, tampering, acts of God (including lightning), acts of terrorism, acts of war, fire, improper storage or installation, improper use, improper maintenance or repair, damage or casualty, or to an excess of the recommended maximums as set forth in the product instructions.
4. Any product that is operated with any accessory, equipment, component, or part not specifically approved by the Company.
5. Use of replacement parts not sold by the Company, the unauthorized addition of non-Company products to other Company products, and the unauthorized alteration of Company products.
6. Products damaged by normal wear and tear, normal maintenance services and the parts used in connection with such service, or any other conditions beyond the control of the Company.
7. Any product that has been used for purposes other than those for which it was designed and manufactured.
8. Any use of the product where installation instructions and/or instructions for use were not followed.
9. Products connected to voltage other than indicated on nameplate.
10. Products where the pump was exposed to any of the following: sand, gravel, cement, grease, plaster, mud, tar, hydrocarbons, hydrocarbon derivatives (oil, gasoline, solvents, etc.) or other abrasive or corrosive substances.
11. Products in which the pump has been used for pumping of liquids above 140 °F.
12. Products in which the pump was allowed to operate dry (fluid supply cut off).
13. Products in which the sealed motor housing has been opened or the product has been otherwise dismantled by customer.
14. Products in which the cord has been cut to a length of less than three feet.

The Company reserves the right at any time, and from time to time, to make changes in the design and/or improvements upon its product without thereby imposing any obligation upon itself to make corresponding changes or improvements in or upon its products already manufactured and/or previously sold. The Company further reserves the right to substitute parts or components of substantially equal quality in any warranty service required by operation of this Limited Warranty.

This written Limited Warranty is the entire warranty authorized and offered by the Company. There are no warranties or representations beyond those expressed in this document.

THIS WARRANTY AND REMEDY IS IN LIEU OF ALL OTHER WARRANTIES AND REMEDIES INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY SPECIFICALLY DISCLAIMED AND EXPRESSLY EXCLUDED. CORRECTION OF NON-CONFORMITIES, IN THE MANNER AND FOR THE PERIOD OF TIME AS SET FORTH ABOVE, SHALL CONSTITUTE FULFILLMENT OF ALL LIABILITY OF THE COMPANY TO THE PURCHASER WHETHER BASED ON CONTRACT, NEGLIGENCE, OR OTHERWISE.

THE COMPANY SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES SUCH AS, BUT NOT LIMITED TO:

DAMAGE TO OR LOSS OF OTHER PROPERTY OR EQUIPMENT, LOSS OF USE OF EQUIPMENT, FACILITIES OR SERVICE, LOSS OF PROFIT OR SALES, COST OF PURCHASES OR REPLACEMENT GOODS, CLAIMS OF CUSTOMERS OF THE PURCHASER, FAILURE TO WARN AND/OR INSTRUCT, LOSS OF OTHER PRODUCTS, OR COSTS OF ENVIRONMENTAL REMEDIATION, OR DIMINUTION IN PROPERTY VALUE. THE REMEDIES OF THE PURCHASER SET FORTH HEREIN ARE EXCLUSIVE, AND THE LIABILITY OF THE COMPANY SHALL NOT, EXCEPT AS EXPRESSLY PROVIDED HEREIN, EXCEED THE PRICE OF THE PRODUCTS UPON WHICH SUCH LIABILITY IS BASED. DAMAGES AS SET FORTH IN THIS PARAGRAPH SHALL BE REASONABLY MITIGATED TO THE EXTENT POSSIBLE. THIS PARAGRAPH SHALL ALSO APPLY TO ALL DAMAGES RESULTING FROM CONDITIONS SET FORTH IN SECTION III ABOVE AND (1) DEFECTS IN PRODUCT PROTOTYPES OR REPLACEMENT PART PROTOTYPES THAT HAVE NOT BEEN PUT INTO PRODUCTION, CIRCULATED AND SOLD BY THE COMPANY, AND/OR (2) DEFECTS THAT WERE NOT FOUND AT THE TIME OF SALE DUE TO SCIENTIFIC AND TECHNOLOGICAL REASONS.

This Limited Warranty gives you specific legal rights. You may have other rights, which vary according to the applicable laws and regulations. Where any term of this warranty is prohibited by such laws, it shall be null and void, but the remainder of this warranty shall remain in full force and effect.

DISCLAIMER: Any oral statements about the product made by the seller, the Company, the representatives or any other parties, do not constitute warranties, shall not be relied upon by the user, and are not part of the contract for sale. Seller's and the Company's only obligation, and buyer's only remedy, shall be the replacement and/or repair by the Company of the product as described above. Before using, the user shall determine the suitability of the product for his intended use, and user assumes all risk and liability whatsoever in connection therewith.

For replacement parts, contact:

Grainger Parts
1657 Shermer Road
North Brook, IL 60062-5362

Phone: 800.323.0620 | Fax: 847.498.3402
