

6EN-CIA-SFS 6EN-CIA-RF 6EN-CIM

EN ENGLISH

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.

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!

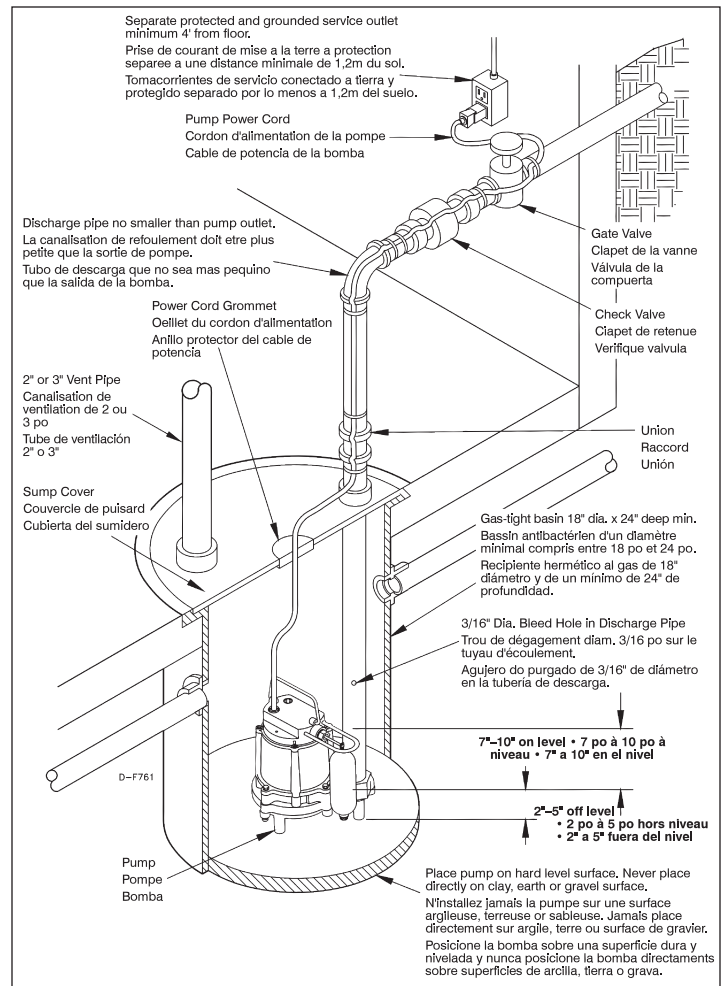
DESCRIPTION

This is a submersible effluent pump for use in basins or lift stations, and is suitable for pumping sewage, effluent, wastewater, and other non-explosive, non-corrosive liquids with up to 1/2" spherical solids.

SAFETY GUIDELINES



1. Make certain pump is disconnected from power source before attempting to service or remove any component.
2. 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 NEC, ANSI/NFPA. Pump should be used with liquids compatible with pump component materials.
3. Do not handle the pump with wet hands or when standing on a wet or damp surface or in water.
4. Do not pull the pump out of the water by the power cord when the pump is operating or connected to power source.
5. This pump is supplied with a grounding conductor and/or grounding type attachment plug. To reduce the risk of electrical shock, be certain that it is connected to a properly grounded grounding type receptacle.
6. The National Electric Code requires a ground fault circuit interrupter (GFCI) be installed in the branch circuit supplying fountain equipment, pools, etc.
7. In any installation 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.
8. 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.
9. This pump's motor housing is filled with 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.



**FIG. 1 - TYPICAL INSTALLATION • INSTALLATION TYPE •
INSTALACION TIPICA (6EN-CIA-SFS SHOWN)**

10. The pump motor is equipped with an automatic resetting thermal protector and may restart unexpectedly. Protector tripping is an indication of motor overloading as a result of excessively high or low voltage, inadequate wiring, incorrect motor connections, or a defective motor or pump.

ELECTRICAL CONNECTIONS



1. Check the pump label for proper voltage required. Do not connect to voltage other than that shown.
2. If pump is supplied with a 3-prong electrical plug, the third prong is to ground the pump to prevent possible electrical shock hazard. **DO NOT REMOVE** the third prong from the plug. A separate branch circuit is recommended.

Do not use an extension cord. Do not cut plug from the cord. If the plug is cut or the cord is shortened, then this action will void the warranty.
3. If the cord is equipped with stripped lead wires, such as on 230V models, be sure that the lead wires are connected to a power source correctly. The green/yellow wire is the ground. The blue (or white) and brown (or black) are live.
4. 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).
5. To conform to the National Electrical Code all pumps must be wired with 14 AWG or larger wire. For runs to 250', 14 AWG wire is sufficient. For longer runs, consult a qualified electrician or the factory.
6. Pump should be connected or wired to its own circuit with no

other outlets or equipment in the circuit line. Fuses and circuit breaker should be of ample capacity in the electrical circuit.

7. The flexible PVC 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.
8. The 6EN-CIA-RF pumps have automatic switches with piggy-back plugs on the switch cords. Pump must be plugged into piggy-back switch cord for automatic operation.

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

OPERATION

1. Pump must be installed in a suitable gas tight basin which is at least 18" in diameter and 24" deep, and vented in accordance with local plumbing codes.
2. Pump features a 1-1/2" female NPT discharge.
3. Pump must be placed on a hard level surface. Never place pump directly on clay, earth or gravel surfaces.
4. 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.
CAUTION: For best performance of check valves, 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.
5. 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, then 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.
6. 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.
7. 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 in the wintertime. This may cause cracking or distortion that may destroy the unit.

TESTING PUMP OPERATION

CIA SERIES EFFLUENT PUMPS

1. These pumps are equipped with a float operated mechanical switch.
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 that is plugged with a rubber plug. This plug can be removed and switch operation can be observed.
3. Plug power cord into a grounded receptacle with voltage consistent with pump voltage as indicated on pump nameplate.
4. Run water into pump until pump starts.
5. Be sure gate valve in discharge line is open.
6. Allow pump to operate through several on off cycles.

CIM SERIES EFFLUENT PUMPS

1. 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.

CAUTION: This type of operation should be used only for emergency use or when a large volume of water is to be pumped. Pump must not be allowed to run dry. If pump is run dry, it may damage pump and void the warranty.

SERVICE INSTRUCTIONS



MAKE CERTAIN THE UNIT IS DISCONNECTED FROM THE POWER SOURCE BEFORE ATTEMPTING TO SERVICE OR REMOVE ANY COMPONENT!

1. If pump does not operate properly, consult TROUBLESHOOTING section. If trouble still cannot be located, consult your pump dealer or take pump to a Little Giant authorized service center.
2. 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.
3. 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.
4. Remove screws that hold base to volute and clean impeller and volute passage. Do not use strong solvents on impeller.
5. Be sure impeller turns freely after cleaning.
6. **WARNING:** DO NOT REMOVE IMPELLER. REMOVAL OF IMPELLER REQUIRES SPECIAL TOOLS AND IS TO BE DONE ONLY BY AN AUTHORIZED SERVICE CENTER.
DO NOT REMOVE MOTOR HOUSING COVER. WARRANTY IS VOID IF MOTOR HOUSING COVER, IMPELLER OR SEALS HAVE BEEN REMOVED. ANY REPAIR ON MOTOR MUST BE DONE BY AN AUTHORIZED LITTLE GIANT SERVICE CENTER.
7. Be certain power cord is in good condition and contains no nicks or cuts.

FR FRANÇAIS

Cette feuille d'instructions vous fournit les informations nécessaires pour entretenir et faire fonctionner votre produit. Conserver ces directives afin de pouvoir les consulter plus tard.

Le produit que vous avez acheté a été soigneusement fabriqué avec des matériaux de la plus haute qualité et a été conçu pour durer longtemps et offrir un service fiable. Les produits sont soigneusement testés, inspectés et emballés afin d'en assurer la sécurité de fonctionnement et une livraison en bonne condition. Vérifier attentivement le produit afin de vous assurer qu'il n'a pas été endommagé pendant le transport. S'il est endommagé, veuillez contacter l'entreprise qui vous l'a vendu. Si une réparation ou un remplacement est requis, elle vous prêter assistance.

LIRE ATTENTIVEMENT CES DIRECTIVES AVANT DE PROCÉDER À L'INSTALLATION, À L'UTILISATION OU À L'ENTRETIEN DU PRODUIT. SE FAMILIARISER AVEC LES APPLICATIONS, LES LIMITES ET LES RISQUES POTENTIELS DU PRODUIT. ASSURER SA PROPRE PROTECTION ET CELLE DES AUTRES EN SUIVANT TOUTES LES RÈGLES DE SÉCURITÉ. LE NON-RESPECT DE CES DIRECTIVES PEUT ENTRAÎNER DES BLESSURES ET/OU DES DOMMAGES MATÉRIELS!

DESCRIPTION

Vous avez acheté une pompe pour effluent submersible pouvant être utilisée dans des bassins ou dans des stations de pompage des eaux usées. Elle permet de pomper les eaux d'égout, l'effluent, les eaux usées et d'autres liquides non explosifs et non corrosifs pouvant contenir des solides d'un diamètre de 1/2 po.

DIRECTIVES DE SÉCURITÉ



1. Veiller à débrancher l'appareil de sa source d'alimentation électrique avant l'entretien ou la dépose d'une ou de plusieurs pièces.
2. Ne pas utiliser pour pomper des liquides explosifs ou inflammables (essence, huile, kérosène, etc.) **NE PAS** utiliser dans des environnements explosifs ou des lieux considérés comme dangereux (voir Code nat. de l'Élect., ANSI/NFPA). Ne pas utiliser dans un environnement propice aux explosions. Utiliser avec des liquides compatibles avec les matériaux de la pompe.