

StormPro

Battery Back-Up Power Supply

OPERATION MANUAL

Dated: 12/12/08

Supersedes: None

Document No.: SP-OM

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General Information

Thank you for purchasing your StormPro product. To help insure years of trouble free operation, please read the following manual carefully.

Before Operation

Reasonable care and safe methods should be practiced. Check local codes and requirements before installation. This manual contains important information for the safe use of this product. Read this manual completely before using this product and refer to it often for continued safe product use. **DO NOT THROW AWAY OR LOSE THIS MANUAL.** Keep it in a safe place so that you may refer to it when needed.

Warning

Always disconnect the Unit from the receptacle power source and battery before handling or making any adjustments to the system.

Battery Backup Warning:

1. Risk of electrical shock this Unit has not been investigated for use in outdoor areas.
2. Risk of electrical shock connect only to a properly grounded, three pronged grounding type receptacle. Under any circumstances do not remove the grounding prong from the power cord.
3. Do not smoke, use sparkable electrical devices or open flame when working on this Unit!
4. Do not install Unit in locations classified as hazardous per N.E.C., ANSI/NFPA 70 - 1999.
**FAILURE TO HEED ABOVE CAUTIONS
COULD RESULT IN INJURY OR DEATH.**

ATTENTION:

The StormPro Back Up System is only to be used with the StormPro Pump supplied with the Unit. Using anything other than the Pump supplied with the system will cause damage to the Unit and void the warranty.

TOOLS NEEDED:

A pipe wrench, pliers, adjustable wrench, and screwdriver will be needed.

BATTERY REQUIREMENTS:

Your Unit operates on 12VDC battery power when in the power fail mode, a UL recognized deep cycle marine battery should be used.

We recommend:

Metropolitan Industries

Power + Battery

Model# 27-AGM

Factory Tel: 800-323-1665

Installation Instructions

1. Open the lid on the battery enclosure and place the lower half of the battery enclosure with the Unit in a suitable place where a 120V three prong outlet is within reach of the receptacle power cord, and where water will not drip or splash on the Unit. It is also important to make sure that the fan inlets on each side of the battery back-up enclosure are free from obstructions. It is also recommended that the Unit be placed on a board or cinder block to keep it off the moist floor and free from debris.
2. After the battery box has been put in a suitable location the battery can be installed.

BATTERY INSTALLATION

A battery can present a risk of severe burns and injury from high short circuit current. The following precautions should be observed when working on batteries.

1. Remove watches, rings, or other metal objects.
2. Use tools with insulated handles.
3. Do not lay tools or metal parts on top of batteries.



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After taking the above precautions, lower the 12V battery into the enclosure with the terminals facing the front of the Unit where the indicator lights and battery cables are located. At this time check the polarity of your marine battery. Facing the front of the Unit, the left battery terminal should be positive, and the right negative. If this is not the case do not continue until the proper battery can be obtained. (Do not try to correct this problem in any other way than by using the proper battery).

Now that the battery has been installed with the terminals nearest to the red and black wires. **PLUG THE UNIT INTO A 120V OUTLET BEFORE CONNECTING THE BATTERY LEADS.** With the Unit plugged into the 120v outlet connect the battery leads to the marine battery making sure the red wire is connected to the positive terminal and black wire is connected to the negative terminal. Make sure all battery connections are properly tightened to 75 inch pounds. Then place the battery box cover back on the Unit and strap it down so that children cannot tamper with the Unit. At this time you may plug the high efficiency pump supplied with the System into the back of the piggyback plug on the Unit.

DO NOT PLUG ANYTHING OTHER PUMP THAN THE STORMPRO MODEL#BA-33V PUMP SUPPLIED WITH THE SYSTEM INTO THE POWER SUPPLY. DOING SO WILL VOID THE WARRANTY!

FUNCTIONS AND LIGHTS:

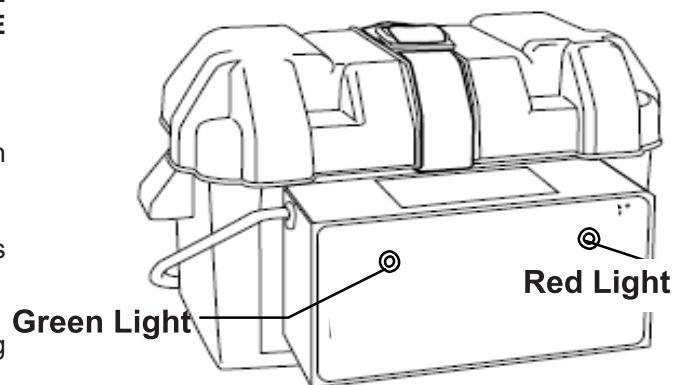
The **GREEN Power On** indicator light should remain on as long as standard line power is available.

1. Flashing **GREEN** light is normal and indicates that the battery is fully charged.
 - The green should remain flashing indicating that the system is ready for operation.
2. Continuously lit **GREEN** light indicates that the battery is charging.
 - The battery is charging due to normal discharge.
 - The system has run off of the battery and the

power supply is recharging the battery to its optimum level.

The **RED** Inverter/Battery On indicator light should only appear when the power is out or there is a problem with the system.

1. Single flashing **RED** light indicates a low battery.
 - The battery most likely needs to be replaced. Contact your installer or Metropolitan Industries for a compatible replacement battery.
2. Double Flashing **RED** light indicates the unit has overloaded.
 - The pump plugged into the power supply exceeds the power supply's rating of 5 amps. Only use a Stormpro 1/3HP pump Model # BA-33V with the StormPro power supply.
 - The pump is malfunctioning and is running at a higher amperage than normal. Most likely your pump will need to be repaired or replaced. Contact your installer or Metropolitan Industries for further assistance.



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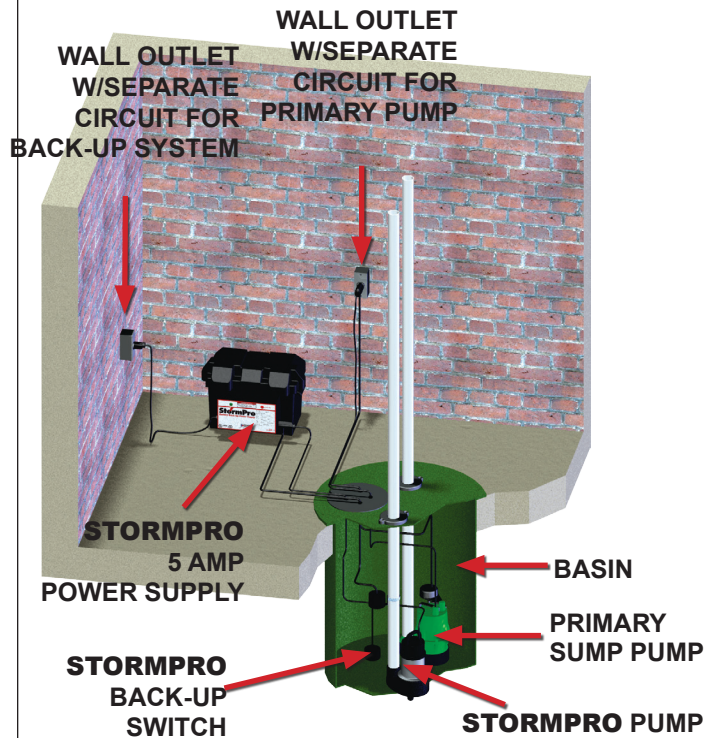
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Installation Diagram

Note: The StormPro backup system and existing primary pump must be plugged into separate dedicated outlets

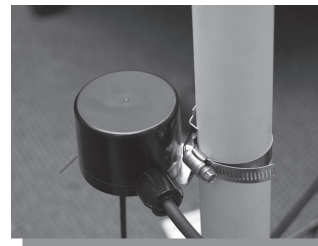


INSTALLING THE BACKUP PUMP:

Sump pump ON level must be lower than the back-up pump ON level. Set the backup pump switch higher than the primary switch.

1. Place the pump into the pit. Secure the discharge piping and attach the switch to the pipe. Make sure the switch ON level is at least 4 inches below the top of your pit and it is set at a level higher than the primary switch's ON level. Once in place, tighten the switch clamp securely to the pipe.
2. Once the switch is set in place and the discharge piping is properly installed, you can piggy back plug the pump and the switch into the receptacle located on the StormPro power supply. Then plug the power supply into the wall outlet.

3. Test run your system on AC power by activating the switch, then unplug the power supply from the electrical outlet and test the pump on DC power by activating the switch. Be sure to plug the power unit plug back into the wall outlet.



Switch
Clamped
Securely
To
Pipe

4. If battery voltage falls below a usable charge, PUMP WILL STOP:
 - Power loss (inverter on) light OFF
 - Battery charging light FLASH
 - Fully charged light OFF
5. Battery voltage may recover and allow brief periods of Operation.

Testing

To test the Unit simply unplug it from the receptacle add water to sump until pump pumps sump down. Only run the Pump supplied with the Battery Back-Up System for a few cycles. You can repeat this if you wish but it is not necessary. If the Unit works the first time it is sure to work time and time again. Be sure that you remember to plug the Unit back into the receptacle after you have completed the test. NOTE: If while testing the Unit the Pump does not turn on, the following steps should be taken:

1. Check the charger and inverter lights to see if they are on.
2. Check the circuit breaker.
3. Plug the Pump you have plugged into the Unit directly into a live building receptacle. If the Pump runs, recheck all the battery connections, and battery voltage.
4. Check sump water level to see that Pump is being required to run.



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5. If the above items have been thoroughly checked and your pump will still not run when plugged into the Unit, remove the battery from the battery box as described in the assembly instructions and return the Unit to the place of purchase for repair or replacement.

Battery Maintenance

1. Servicing of batteries should be performed or supervised by personnel knowledgeable of batteries and the required precautions.
2. When replacing the battery, use the same type of battery: (see battery requirements for ordering information)
3. CAUTION-Do not dispose of battery in a fire. The battery may explode.
4. CAUTION-Do not open or mutilate the battery. Released electrolyte is harmful to the skin and eyes. It may be toxic.
5. CAUTION-A battery can present a risk of severe burn and injury from high short circuit current. The following precautions should be observed when working on batteries.
 - a. Wear full eye protection and clothing.
 - b. If electrolyte contacts the skin, wash it off immediately.
 - c. If electrolyte contacts the eyes, flush thoroughly and immediately with water. Seek medical attention.
 - d. Spilled electrolyte should be washed down with a suitable acid neutralizing agent. A common practice is to use a solution of approximately one pound (500 grams) bicarbonate of soda to approximately
6. Use tools with insulated handles.
7. Do not lay tools or metal objects on top of batteries.
8. CAUTION-The electrolyte is a dilute sulfuric acid that is harmful to the skin and eyes. It is electrically conductive and corrosive. The following procedures should be observed:
 - a. Wear full eye protection and clothing.
 - b. If electrolyte contacts the skin, wash it off immediately.
 - c. If electrolyte contacts the eyes, flush thoroughly and immediately with water. Seek medical attention.
 - d. Spilled electrolyte should be washed down with a suitable acid neutralizing agent. A common practice is to use a solution of approximately one pound (500 grams) bicarbonate of soda to approximately

one gallon (4 liters) of water. The bicarbonate of soda solution be added until the evidence of reaction (foaming) has ceased. The resulting liquid should be flushed with water and the area dried.

e. CAUTION- Lead acid batteries can present a risk of fire because they generate hydrogen gas. The following procedures should be followed:

f. DO NOT SMOKE when near batteries.

g. DO NOT cause flame or spark in battery area.

h. Discharge static electricity from body before touching batteries by first touching a grounded metal surface.

9. See battery manufacturers installation manual for additional battery installation and maintenance instructions. You're Unit has been designed to be virtually maintenance free. Just make sure it is kept clean and dry and that the Unit is periodically tested.

Warranty is VOID if...

1. Power cord has been cut or the grounding prong has been removed.
2. Unit has been used in an outdoor application.
3. Batteries not meeting the above specifications have been used.
4. Unit has been submerged in water.
5. Unit has been tampered with in any manor not described in the above instructions.
6. Unit has been disassembled by customer.
7. Unit has been applied to products exceeding the maximum capacity of the Unit.
8. Unit has been applied to the wrong voltage.
9. The StormPro Back-Up System is used with any other pump than the StormPro BA-33V 1/3hp pump.



Warranty

1. Coverage and Term. Metropolitan Industries, Inc. (“**Metropolitan**”) warrants to the original purchaser (the “Buyer”) of each Metropolitan product (the “product”), that any part thereof which proves to be defective in material or workmanship within one (1) year from date of installation or 18 months from the date of manufacture, whichever comes first, will be replaced at no charge with a new or remanufactured part, F.O.B. factory. Buyer shall be responsible for all freight charges and all costs of field labor or other charges incurred in the removal and/or reinstallation of any product, part or component thereof.
2. Exclusions. **THE WARRANTY IS SUBJECT TO THE FOLLOWING CONDITIONS AND EXCLUSIONS:**
 - (a) The Warranty excludes products or workmanship which becomes defective as a result of: (i) earthquake, fire, storms, the elements or any other acts of God; (ii) normal wear and tear from use; (iii) accident, misuse, abuse or neglect ; (iv) modifications made by Buyer or any third party, other than **Metropolitan**; and (v) Buyer’s failure to properly install, maintain, service and/or operate the product under normal conditions and according to manufacturer’s instructions.
 - (b) **Metropolitan** shall not be responsible for, and the Warranty shall not cover, extended damage which occurs because of Buyer’s failure to notify **Metropolitan** promptly in writing of apparent defects.
 - (c) Any part or component designated as manufactured by anyone other than **Metropolitan** shall be covered only by the express warranty of the manufacturer thereof.
 - (d) The Warranty shall lapse upon Buyer’s failure to fully comply with the terms and conditions of its contract with **Metropolitan**, including Buyer’s failure to pay the purchase price for the product or any portion thereof. Buyer’s subsequent compliance with the terms and conditions of any such contract, will not cause the term of the Warranty to extend beyond the time period set forth above.
 - (e) No actions taken by **Metropolitan** to correct a defect in a product shall extend the Warranty beyond the period set forth above. **Metropolitan** shall not be obligated to remedy any defect, where otherwise required pursuant to the Warranty unless and until Buyer notifies **Metropolitan** in writing of the defect and then only if such notification is made prior to the expiration of the period set forth above.
3. Process of Claims and Repairs. **Metropolitan** agrees that if the product or any part or component thereof shall fail to conform to the terms of this Warranty, **Metropolitan** shall replace such nonconforming product, part or component at the original point of delivery and furnish instruction for its disposition. Any transportation charges involved in such disposition and all costs of field labor or other charges incurred in the removal and/or reinstallation of any product, part or component thereof shall be the responsibility of Buyer.
4. Limitation on Liability. Notwithstanding any provision to the contrary, **Metropolitan’s** entire liability under this Warranty shall not in the aggregate exceed, and Buyer’s exclusive and sole remedies are, to the extent permitted by law, shall be to secure replacement of the defective product. **UNDER NO CIRCUMSTANCES SHALL METROPOLITAN BE LIABLE UNDER THE WARRANTY FOR ANY INDIRECT, PUNITIVE, SPECIAL, EXEMPLARY, CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING LOST PROFITS, REVENUE, USE OR ECONOMIC ADVANTAGE).**
5. Express Waiver of Any Other Warranties. **THE EXPRESS WARRANTY SET FORTH IN THIS WRITTEN WARRANTY IS THE ONLY WARRANTY MADE BY METROPOLITAN, OR ANY OTHER PARTY, IN CONNECTION WITH ANY PRODUCT PURCHASED FROM METROPOLITAN. NEITHER METROPOLITAN, NOR ANY OTHER PARTY, MAKES ANY OTHER EXPRESS OR IMPLIED WARRANTY WHICH IS NOT SET FORTH HEREIN, AND METROPOLITAN HEREBY DISCLAIMS AND BUYER HEREBY WAIVES ALL IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.**
6. Not Transferable. The Warranty may not be transferred and shall be void on the sale or other transfer of the product.
7. Products and Warranty Subject to Change. **Metropolitan** reserves the right to make revisions to its products and their specifications, and to revise this Warranty and related information without notice.

REMEMBER TO RETURN YOUR WARRANTY CARD...



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FRENCH VERSION



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Informations générales

Merci d'acheter votre produit de StormPro. Pour aider à assurer des années d'opération sans panne, lisez svp le manuel suivant soigneusement.

Avant opération

Le soin raisonnable et les méthodes sûres devraient être pratiqués. Vérifiez les codes locaux et les conditions avant installation. Ce manuel contient l'information importante pour l'usage sûr de ce produit. Lisez ce manuel complètement avant utilisation ce produit et se rapportent à lui souvent pour l'usage sûr continu de produit. **NE JETEZ PAS OU PERDEZ CE MANUEL.** Maintenez-le dans un endroit sûr de sorte que vous puissiez se référer à lui une fois nécessaire.

Avertissement

Démontez toujours l'unité de la source d'énergie de réceptacle et la batterie avant de traiter ou faire tous les ajustements au système.

Avertissement de support de batterie :

1. Risquez du choc électrique que cette unité n'a pas été étudiée pour l'usage dans des secteurs extérieurs.
2. Le risque de choc électrique mettent seulement correctement à une terre, trois le type au sol en plusieurs directions réceptacle. Dans aucune circonstance n'enlevez pas la fourche fondante du cordon de secteur.
3. Ne fumez pas, n'employez pas les dispositifs électriques sparkable ou la flamme nue en travaillant à cette unité !
4. N'installez pas l'unité dans les endroits classifiés comme dangereux par N.E.C., ANSI/ NFPA 70 - 1999. **FAILURE À L'ATTENTION AU-DESSUS DES ATTENTIONS POURRAIT AVOIR COMME CONSÉQUENCE LES DOMMAGES OU LA MORT.**

ATTENTION:

Le système de secours de StormPro doit être employé seulement avec la pompe de StormPro fournie avec l'unité. Utilisant n'importe quoi autre que la pompe fournie avec le système endommagera

l'unité et videra la garantie.

LES OUTILS ONT EU BESOIN : Une clé à tube, des pinces, la clé réglable, et le tournevis seront nécessaires.

CONDITIONS DE BATTERIE :

Votre unité opère la puissance de la batterie 12VDC quand en mode d'échouer de puissance, une UL. la batterie marine identifiée de cycle profond devrait être utilisée.

Nous recommandons :

Puissance métropolitaine

+ batterie d'industries

Model# 27-AGM

Téléphone d'usine : 800-323-1665

Instructions d'installation

1. Ouvrez le couvercle sur la clôture de batterie et placez la moitié inférieure de la clôture de batterie avec l'unité dans un endroit approprié étaient une sortie de la fourche 120V trois est dans la portée du cordon de secteur de réceptacle, et était l'eau ne s'égouttera pas ou n'éclaboussera pas sur l'unité. Il est également important de s'assurer que les admissions de ventilateur de chaque côté de la clôture de support de batterie sont exemptes des obstructions. On lui recommande également que l'unité soit placée sur un bloc de conseil ou de cendre pour le garder outre du plancher moite et exempt des débris.
2. Après que la boîte de batterie ait été mise dans un endroit approprié la batterie peut être installée.

INSTALLATION DE BATTERIE

Une batterie peut présenter un risque de brûlures graves et des dommages du courant élevé de court-circuit. On devrait observer les précautions suivantes en travaillant aux batteries.

1. Enlevez les montres, les anneaux, ou d'autres objets en métal.
2. Utilisez les outils avec les poignées isolées.
3. N'étendez pas les outils ou les pièces en métal sur des batteries.



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Après la prise des précautions ci-dessus, abaissez le 12V batterie dans la clôture avec les bornes faisant face à l'avant de l'unité où les voyants de signalisation et les câbles de batterie sont localisés. Actuellement contrôle la polarité de votre batterie marine. Faisant face à l'avant de l'unité, la borne gauche de batterie devrait être positive, et le bon négatif. Si ce n'est pas le cas ne continuez pas jusqu'à ce que la batterie appropriée puisse être obtenue. (N'essayez pas de corriger ce problème d'aucune autre manière qu'en utilisant la batterie appropriée).

Maintenant que la batterie a été installée avec les bornes les plus proches des fils rouges et noirs. BRANCHEZ L'UNITÉ À une SORTIE 120V AVANT DE RELIER Les CÂBLES DE BATTERIE. L'unité étant branché à la sortie 120v reliez câble de batterie à la batterie marine en veillant que le fil rouge est relié au positif le fil terminal et noir est relié à la borne négative. Assurez-vous que tous les raccordements de batterie sont correctement serrés à 75 livres -pouce. Placez alors la couverture de boîte de batterie en arrière sur l'unité et attachez-la vers le bas de sorte que les enfants ne puissent pas trifouiller l'unité. Actuellement vous peut brancher la pompe de rendement élevé fournie avec le système au dos de la prise de ferroutage sur l'unité.

NE BRANCHEZ RIEN L'AUTRE POMPE QUE LA POMPE DE STORMPRO MODEL#BA-33V FOURNIE AVEC LE SYSTÈME À L'ALIMENTATION D'ÉNERGIE. FAIRE AINSI VIDERA LA GARANTIE !

FONCTIONS ET LUMIÈRES :

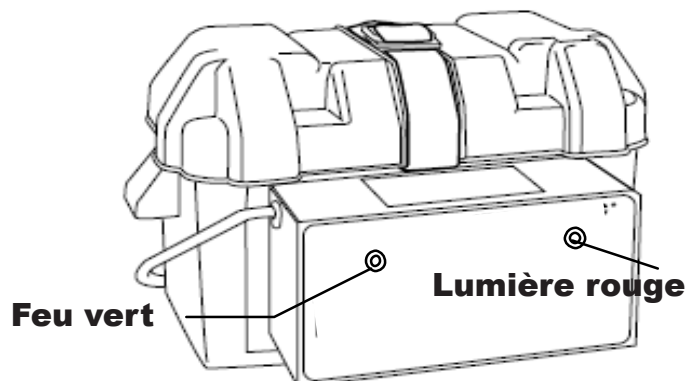
La lumière **VERTE** d'indicateur de mise en marche devrait rester allumée tant que la ligne standard puissance est disponible.

- Le feu **VERT** de clignotant est normal et indique que la batterie est entièrement chargée.
- Le **vert** devrait demeurer clignotant indiquant que le système est prêt pour l'opération.
- 1. Le feu **VERT** sans interruption allumé indique que la batterie charge.
- La batterie est remplissage dû à la décharge normale.

- Le système a coulé de la batterie et l'alimentation d'énergie recharge la batterie à son niveau optimum.

L'inverseur/batterie **ROUGES** sur le voyant de signalisation devrait seulement apparaître quand la puissance est dehors ou il y a un problème avec le système.

1. La lumière **ROUGE** simple instantané indique une basse batterie.
- La batterie doit très probablement être remplacée. Entrez en contact avec votre installateur ou industries métropolitaines pour une batterie compatible de rechange.
2. La double lumière **ROUGE** instantané indique que l'unité a surchargé.
- La pompe branchée à l'alimentation d'énergie dépasse l'estimation de l'alimentation d'énergie de 5 ampères. Employez seulement un modèle de pompe de Stormpro 1/3HP # BA-33V avec l'alimentation d'énergie de StormPro.
 - La pompe fonctionne mal et fonctionne à un ampérage plus élevé que la normale. Très probablement votre pompe devra être réparé ou remplacée. Entrez en contact avec votre installateur ou industries métropolitaines pour davantage d'aide.



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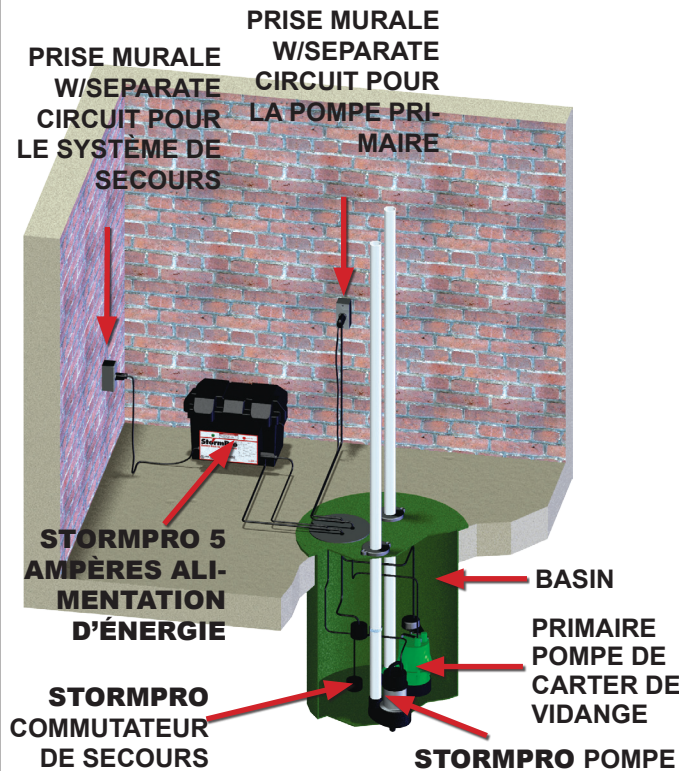
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Diagramme d'installation

Note : Le réseau de réserve de StormPro et la pompe primaire existante doivent être branchés aux sorties consacrées séparées



INSTALLATION DE LA POMPE DE SECOURS :

La pompe de carter de vidange au niveau doit être inférieure à la pompe de secours au niveau. Placez le commutateur de secours de pompe plus haut que le commutateur primaire.

1. Placez la pompe dans le puits. Fixez la tuyauterie de décharge et attachez le commutateur dans la pipe. Assurez-vous que le commutateur au niveau est au moins de 4 pouces au-dessous du dessus de votre puits et il est placé à un plus haut de niveau que le commutateur primaire au niveau. Une fois qu'en place, serrez la bride de commutateur solidement dans la pipe.

Une fois que le commutateur est placé en place et la tuyauterie de charge de DI est correctement installée, vous pouvez ferouter la prise la pompe et le commutateur dans le réceptacle a placé sur l'alimentation d'énergie de StormPro. Branchez alors l'alimentation d'énergie à la prise murale.

2. L'essai votre système sur le courant alternatif En actionnant le commutateur, débranchent alors l'alimentation d'énergie de la sortie électrique et examinent la pompe sur l'alimentation CC En actionnant le commutateur. Soyez sûr de brancher la prise d'unité de puissance de nouveau dans la prise murale.



Commutateur Maintenu Solidement à Pipe

3. Si la tension de batterie tombe au-dessous d'une charge utilisable, POMPEZ WILLSTOP :
 - Lumière de perte de puissance (inverseur dessus)
 - OUTRE de Battey chargeant le FLASH léger Lumière
 - entièrement chargée AU LOIN
4. La tension de batterie peut récupérer et accorder de brèves périodes d'opération.

Essai

Pour examiner l'unité débranchez simplement la du réceptacle ajoutent l'eau au carter de vidange jusqu'à ce que la pompe pompe le carter de vidange vers le bas. Courez seulement la pompe fournie avec le système de secours de batterie pour quelques cycles. Vous pouvez répéter ce si vous souhaitez mais lui n'est pas nécessaire. Si l'unité fonctionne la première fois il est sûr de travailler à maintes reprises. Soyez sûr que vous vous rappelez de brancher l'unité de nouveau dans le réceptacle après que vous ayez accompli l'essai. NOTE : Si tandis que l'examen de l'unité que la pompe ne s'allume pas, les étapes suivantes devrait être passé :

1. Vérifiez les lumières de chargeur et d'inverseur pour voir si elles sont allumées.
2. Vérifiez le disjoncteur
3. Branchez la pompe que vous avez branchée à l'unité directement dans un réceptacle de phase de bâtiment. Si la pompe fonctionne, revérifiez tous les raccordements de batterie, et la tension de batterie.



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4. Vérifiez le niveau d'eau de carter de vidange pour voir que la pompe est bien exigé pour courir.
5. Si les articles ci-dessus ont été complètement vérifiés et votre pompe néanmoins non couru quand branché à l'unité, enlevez la batterie de la boîte de batterie comme décrit dans les instructions d'assemblage et renvoyez l'unité à l'endroit de l'achat pour la réparation ou le remplacement.

Entretien de batterie

1. L'entretien des batteries devrait être assuré ou dirigé par le personnel bien informé des batteries et des précautions exigées.
2. En remplaçant la batterie, employez le même type de batterie : (voir les conditions de batterie pour l'information de commande)
 - Attention-ne vous débarrassez pas de la batterie dans un feu. La batterie peut éclater.
1. Attention-n'ouvrez pas ou ne mutilez pas la batterie. L'électrolyte libéré est nocif à la peau et aux yeux. Il peut être toxique.
2. La batterie de CAUTION-A peut présenter un risque de brûlure grave et des dommages du courant élevé de court-circuit. On devrait observer les précautions suivantes en travaillant aux batteries.
3. Utilisez les outils avec les poignées isolées.
4. Neatez pas les outils ou les objets en métal sur des batteries.
5. L'électrolyte d'Attention-Le est un acide sulfurique dilué qui est nocif à la peau et aux yeux. Il est électriquement conducteur et corrosif. On devrait observer les procédures suivantes :
 - a. Pleine protection et habillement d'oeil d'usage.
 - b. Si l'électrolyte entre en contact avec la peau, enlevez-la immédiatement.
 - c. Si l'électrolyte entre en contact avec les yeux, éclat complètement et immédiatement avec de l'eau. Attention médicale de recherche.
 - d. L'électrolyte renversé devrait être lavé vers le

bas avec un agent neutralisant acide approprié. Une pratique commune est d'employer une solution d'approximativement un bicarbonate de livre (500 grammes) de soude à approximativement un gallon (4 litres) de l'eau. Le bicarbonate de solution de soude soit ajouté jusqu'à l'évidence de la réaction (écumer) a cessé. Le liquide en résultant devrait être rincé avec l'eau et le secteur sec.

e. Les batteries d'acide de plomb d'ATTENTION peuvent présenter un risque du feu parce qu'elles produisent du gaz d'hydrogène. Les procédures suivantes devraient être suivies :

f. NE FUMEZ PAS quand près des batteries.

g. Ne causez pas la flamme ou n'étincelez pas dans le secteur de batterie.

h. Déchargez l'électricité statique du corps avant les batteries émouvantes en touchant d'abord une surface au sol en métal.

6. Voir le manuel d'installation de fabricants de batterie pour des instructions additionnelles d'installation et d'entretien de batterie. Vous êtes unité a été conçu pour être pratiquement exempt d'entretien. Assurez-vous juste qu'on le maintient propre et sec et que l'unité est périodiquement examinée.

La garantie est VIDE si...

1. Le cordon de secteur a été coupé ou la fourche fondante a été enlevée.
2. L'unité a été employée dans une application extérieure.
3. Des batteries ne répondant pas aux caractéristiques ci-dessus ont été utilisées.
4. L'unité a été submergée dans l'eau.
5. L'unité a été trifouillée dans n'importe quel manoir non décrit dans les instructions ci-dessus.
6. L'unité a été démontée par le client.
7. L'unité a été appliquée aux produits dépassant la capacité maximum de l'unité.
8. L'unité a été appliquée à la tension fausse.
9. Le système de secours de StormPro est employé avec n'importe quelle autre pompe que la pompe de StormPro BA-33V 1/3hp.



Garantie

1. Assurance et limite. Garanties de Metropolitan Industries, Inc. (la « métropolitaine ») à l'acheteur original (« l'acheteur ») de chaque produit métropolitain (le « produit »), que n'importe quelle partie en qui s'avère défectueuse dans le matériel ou l'exécution dans un délai d'un (1) an de date d'installation ou de 18 mois de la date de la fabrication, celui qui vient d'abord, sera remplacé à aucune charge par une nouvelle ou remanufactured partie, FRANCO À BORD usine. L'acheteur sera responsable de tout le coût du fret et de tous les coûts de travail de champ ou d'autres frais encourus dans le déplacement et/ou la réinstallation de n'importe quelle produit, partie ou composant en. 2. Exclusions. LA GARANTIE EST SUJETTE AUX CONDITIONS ET AUX EXCLUSIONS SUIVANTES : (a) La garantie exclut les produits ou l'exécution en raison dont devient défectueux : (i) tremblement de terre, feu, orages, les éléments ou toutes autres forces majeure ; (ii) usage normal et larme d'utilisation ; (iii) accident, abus, abus ou négligence ; (iv) modifications apportées par Buyer ou tout tiers, autre que la métropolitaine ; et (v) le manque de l'acheteur d'installer correctement, maintiennent, entretiennent et/ou actionnent le produit dans des conditions normales et selon les instructions du fabricant. (b) La métropolitaine ne sera pas responsable de, et la garantie ne couvrira pas, les dommages prolongés qui se produisent en raison du manque de l'acheteur d'informer la métropolitaine promptly par écrit des défauts apparents. (c) N'importe quelle partie ou composant indiqué en tant que manufacturé par n'importe qui autre que la métropolitaine sera couverte seulement par la garantie exprès du fabricant en. (d) La garantie passera sur le manque de l'acheteur de se conformer entièrement aux termes et conditions générales de son contrat avec la métropolitaine, y compris le manque de l'acheteur de payer le prix d'achat le produit ou n'importe quelle partie en. La conformité suivante de l'acheteur aux termes et conditions générales d'un tel contrat, ne fera pas prolonger la limite de la garantie au delà de la période de temps déterminée ci-dessus. (e) Une mesure prise par la métropolitaine pour corriger un défaut dans un produit ne prolongera pas la garantie au delà de la période déterminée ci-dessus. La métropolitaine ne sera pas obligée de ne remédier à d'aucun défaut, où autrement requis conformément à la garantie à moins qu'et jusqu'à l'acheteur informe la métropolitaine par écrit du défaut et puis seulement si un tel avis est fait avant l'expiration de la période déterminée ci-dessus. 3. Processus des réclamations et des réparations. La métropolitaine convient que si le produit ou n'importe quelle partie ou composant en ne se conformeront pas aux limites de cette garantie, la métropolitaine remplacera une telle produit, partie ou composant non conforme au point original de livraison et fournira l'instruction pour sa disposition. Tous les frais de transport impliqués dans une telle disposition et tous les coûts de travail de champ ou d'autres frais encourus dans le déplacement et/ou la réinstallation de n'importe quel produit, la partie ou le composant en seront la responsabilité de l'acheteur. 4. Limitation sur la responsabilité. Malgré aucune disposition à l'effet contraire, la responsabilité entière de la métropolitaine sous cette garantie dans l'agrégat ne dépassera pas, et l'acheteur exclusif et les remèdes uniques sont, jusqu'au degré autorisé par loi, devront fixer le remplacement du produit défectueux. EN AUCUN CAS LA MÉTROPOLITAINE SERA EXPOSÉE SOUS LA GARANTIE POUR DES DOMMAGES INDIRECTS, PUNITIFS, SPÉCIAUX, EXEMPLAIRES, CONSÉCUTIFS OU FORTUITS (BÉNÉFICES PERDUS Y COMPRIS, REVENU, UTILISATION OU AVANTAGE ÉCONOMIQUE). 5. Levée exprès de toutes autres garanties. LA GARANTIE EXPRÈS A DÉTERMINÉ DANS CETTE GARANTIE ÉCRITE EST LA SEULE GARANTIE FAITE PAR LA MÉTROPOLITAINE, OU N'IMPORTE QUELLE AUTRE PARTIE, EN LIAISON AVEC N'IMPORTE QUEL PRODUIT ACHETÉ À PARTIR DE LA MÉTROPOLITAINE. NI LA MÉTROPOLITAINE, NI N'IMPORTE QUELLE AUTRE PARTIE, NE FAIT N'IMPORTE QUELLE AUTRE GARANTIE EXPRÈS OU IMPLICITE QUI N'EST PAS DÉTERMINÉE CI-DESSUS, ET LA MÉTROPOLITAINE DÉMENT PAR CECI ET L'ACHETEUR ÉCARTE PAR CECI TOUTES LES GARANTIES IMPLICITES, Y COMPRIS LA GARANTIE IMPLICITE DE LA VALEUR MARCHANDE ET LA GARANTIE IMPLICITE DE LA FORME PHYSIQUE POUR UN BUT PARTICULIER. 6. Non transmissible. La garantie ne peut être transférée et sera vide en vente ou tout autre transfert du produit. 7. Produits et garantie sujet au changement. La métropolitaine se réserve le droit de faire des révisions à ses produits et à leurs caractéristiques, et de mettre à jour ces garantie et information relative sans communication préalable.





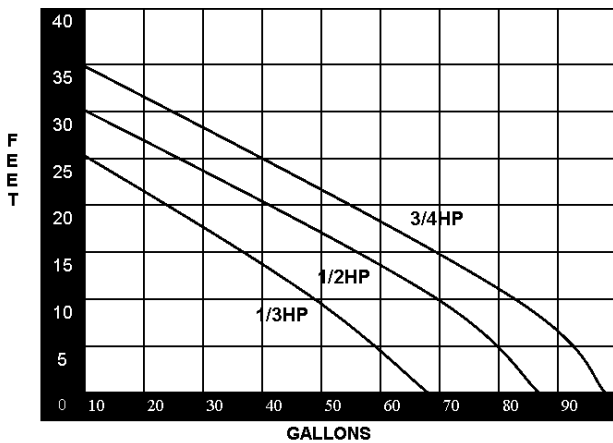
PZM-EP PUMP SERIES

Thank you for purchasing an EnergyPro pump. Take the time to read the instructions carefully before using this appliance. We strongly recommend that you keep this instruction manual in a safe place for future reference

SPECIFICATIONS

Model	Output		Discharge		Rated		Maximum		Dimension L x W x H	Weight Lbs.
	(Hp)	(Amp)	(mm)	(Inch)	Head(ft)	Flow(GPM)	Head(ft)	Flow(GPM)		
PZM-EP-33	1/3	250	40	1-1/2"	10	50	25	68@0'ft	7.9" x 5.5" x 12.6"	13.5
PZM-EP-50	1/2	400	50	2"	10	70	30	87@0'ft	9.1" x 6.3" x 13.8"	14.5
PZM-EP-75	3/4	550	50	2"	10	84	35	97@0'ft	9.1" x 6.3" x 15"	22.5

- Check the nameplate for your pump's specification, refer to the table list.
- Be careful not to exceed the given specifications in the use of your pump.



MARKS AND MEANING:



DANGER

DANGER

Keep the pump equipment out of the reach of children!
Warns that the failure to follow the directions given could cause serious risk to individuals or objects.



WARNING

WARNING

This sign warns the operator that the failure to follow an instruction may damage the pump and/or the system.

LIMITATIONS:

This pump series is suitable to pump water and also can be used both for permanent and temporary installation. The pump can be placed in a sump pit that means it could pump rain water containing suspended solid particles 6-10mm in diameter.



WARNING

The pump can be used for sea water but not inflammable, corrosive, explosive or dangerous liquids. Make sure that the pump never runs without liquids.

INSTALLATION:

Do not work on pump until power is unplugged.
Do not cut off ground pin or use an adapter fitting.
Do not use an extension cord.

The pump power cord should be connected to a separately fused, grounded line with a minimum capacity of 15 amps. It can be connected to non-fuse breaker as the recommended amperes.

Never touch the pump when it is connected to electrical power.

1. Before installing or servicing this pump, be certain pump power source is disconnected.
2. Installation and electrical wiring must adhere to state and local codes and must be completed before priming pump. Check appropriate community agencies, or contact local electrical and pump professionals.
3. Call an electrician when in doubt. Pump should be connected to a separate 15 amps circuit breaker or 15 amp fuse block. Note that, plugging into existing outlets may cause low voltage at motor, causing blown fuses, tripping of motor overload, or burned out motor.
4. A permanent ground connection from pump to the grounding bar at the service panel is mandatory, EnergyPro sump pumps come with a grounding conductor and a grounding-type attachment plug. Do not connect pump to a power supply until permanently grounded. For maximum safety, connect pump to a circuit equipped with a fault interrupter device when you position the pump's grounding wire.
5. Voltage of power supply must match the voltage of the pump.
6. Before installing pump, clear sump basin of any water, debris or sediment.
Warning: Sump basin must be vented in accordance with local plumbing codes. EnergyPro Sump pumps are not designed for and CANNOT be installed in locations classified as hazardous
7. The following may cause severe damage to pump and will void the warranty:
 - (a) Using an extension cord.
 - (b) Cutting off the ground pin or using an adapter fitting.
 - (c) Working on pump or switch while plugged in.
 - (d) Removing motor housing, unscrewing impeller, or otherwise removing impeller seal
 - (e) Running the pump continuously.
 - (f) Pumping chemicals or corrosive liquids.
 - (g) Pumping gasoline or other flammable liquids.
 - (h) Piping, plastic PVC pipe could be installed in the outlet piping, but drain hose, galvanized steel or copper pipe may be used if desired. All piping must be clean and free of all foreign matter to prevent clogging. Use thread compound on all threaded joints unless specified otherwise. Be sure to seal the thread connection with tape when your using the pipe fitting to connect the flange.
 - (i) Pump will be inadequate if suspension liquids contain solid particles larger than the strainer's holes.



ELECTRICAL WIRE CONNECTION:



Verify that the voltage and frequency of the pump shown on the nameplate correspond to those available on the mains.

The installer must make sure that the electric system is grounded in accordance with the law in force.

- It is necessary to use cable with a length of 10m for outdoors. The plug and connections should be protected from water splashes. Before using the pump, always inspect it visually (especially power cable and plug).
- Do not use the pump if it is damaged.
- If the pump is damaged, have it inspected by an authorized service center only.
- Make sure that electric connections are protected from inundation. Protect the plug and the power cable from heat, oil or sharp edges.



The power cable must be replaced by qualified personnel only.

Grounding: The plug of the power cable has a double grounding contact, so that grounding can be performed by simply inserting the plug

OVERLOAD PROTECTION:

This pump series has a built in thermal protection switch. The pump stops if an overload condition occurs. The motor restarts automatically after it has cooled down

TROUBLESHOOTING CHECKLIST (CAUTION: SHUT OFF POWER TO PUMP)

PROBLEMS	POSSIBLE CAUSES
Pump does not run and hums	<ul style="list-style-type: none"> ● Line circuit breaker is off, or fuse is burned or loose. ● Water level in sump has not reached turn-on level as indicated in installation drawing. ● Pump cord is not making contact in receptacle. ● Float is stuck. It should operate freely in basin. ● If all of the above are OK, then the motor could be malfunctioning.
Pump runs but does not deliver water.	<ul style="list-style-type: none"> ● Check valve is installed backwards. Arrow on valve should point in direction of flow. ● Discharge shut-off valve (if used) may be closed. ● Impeller or volute openings are fully or partially clogged. Remove pump and clean. ● Pump is air-locked. Start and stop several times by plugging and unplugging cord. Check for clogged vent hole in pump case. ● Inlet holes in pump base are clogged. Remove pump and clean the openings. ● Vertical pumping distance is too high. Reduce distance or change the discharge fittings of the pump.
Pump runs and pumps out sump, but does not stop	<ul style="list-style-type: none"> ● Float is stuck in up position. Be sure float operates freely in basin. ● Defective float switch. Replace with float switch. ● Defective vertical switch. Replace with vertical switch.
Pump runs but delivers only a small amount of water.	<ul style="list-style-type: none"> ● Pump is air-locked. Start and stop several times by plugging and unplugging cord. Check for clogged vent hole in pump case. ● Vertical pumping distance is too high. Reduce distance or change the discharge fitting of the pump. Inlet holes in pump base are clogged. Remove pump and clean the strainer and openings. ● Impeller or volute openings are fully or partially clogged. Remove pump and clean. ● Pump impeller is partially clogged with tar or paint, causing motor to run slow and overload. Remove pump and clean.
Fuse blows or circuit breaker trips when pump starts.	<ul style="list-style-type: none"> ● Pump impeller is partially clogged with tar or paint, causing motor to run slow and overload. Remove pump and clean. ● Motor stator may be defective. ● Fuse size or circuit breaker may be too small. (Must be 15 amps). ● Impeller or volute opening are fully or partially clogged. Remove pump and clean
Motor runs for a short time, then stops.	<ul style="list-style-type: none"> ● Inlet holes in pump base are clogged. Remove pump and clean the openings. ● Pump impeller is partially clogged with tar or paint, causing motor to run slow and overload. Remove pump and clean. ● Motor stator may be defective. ● Impeller or volute openings are fully or partially clogged. Remove pump and clean also clean the strainer if you had installed.

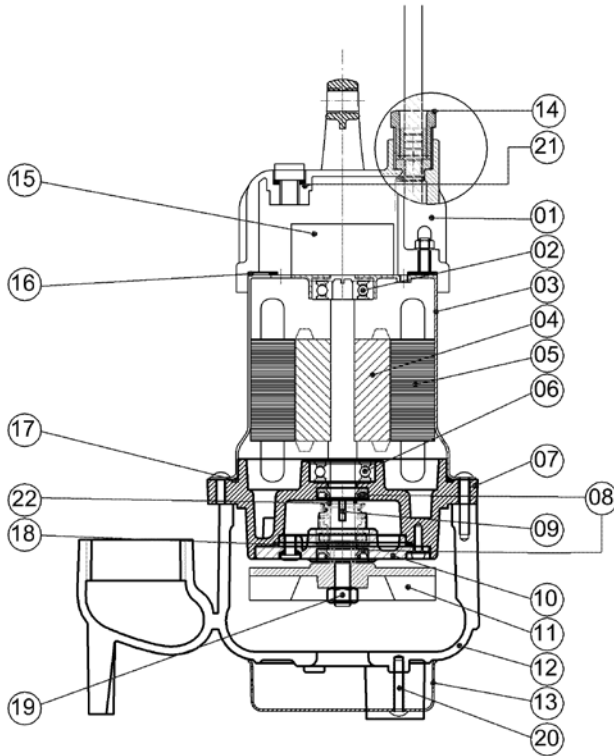


WARNING

ELECTRICAL PRECAUTIONS—

Before servicing a pump, always shut off the main power breaker and then unplug the pump. Make sure you are not standing in water and are wearing insulated protective sole shoes, under flooded conditions, Contact your local electric company or a qualified licensed electrician for disconnecting electrical service prior to pump removal.

CONSTRUCTION AND PARTS LIST



22	C Retaining Ring	SUS
21	Plug Screw	COATED STEEL
20	Setting Screw	SUS
19	Nut	SUS
18	O-Ring	NBR
17	O-Ring	NBR
16	Cap Packing	NBR
15	Capacitor	PP
14	Power cord set	H05RNF/H07RNF
13	Strainer	SUS304
12	Pump Casing	FC200
11	Impeller	FC200
10	Seal Cover	FC200
09	Me.Seal	CA/CE
08	Oil Seal	NBR
07	Seal Plate	FC200
06	Lower Bearing	CNM5K
05	Stator	SUS304
04	Shaft	SUS410
03	Motor Housing	SUS304
02	Upper Bearing	CNM5K
01	Top Cover	NL66+30%GF
NO.	Name	Description

LIMITED WARRANTY

This EnergyPro pump is warranted to be free from defects in material and workmanship and to perform within applicable specifications for a period of Two (2) years. Obligation under this warranty is limited to repairing or replacing any part thereof, which shall within two years be returned to us with transportation charges prepaid, and prove to be defective.

The above limited warranty takes the place of all other warranties, express or implied and correction of such defects by replacement or repair shall constitute a fulfillment of all obligations under the terms of the warranty, which specifically EXCLUDES any incidental damages caused by or associated with this product or its use. The warranty does not cover any unit which has been damaged either in transit or by misuse, accident or negligence. No warranty or representation not contained herein shall be binding.



JIM MURRAY, INC.
Your Partners in Pumping Since 1958

N116 W18455 Morse Drive
Germantown, WI 53022
262-253-1353 / 800-234-5490
Fax 262-253-1248

Installation Instructions

USC3 Ultimate Solid State Controller with Ultimate Sensor

Ultimate Sensor

The Ultimate Sensor uses a unique, patented, smart sensor that has no moving floats. A single 3.5" corrosion proof, stainless steel, sensor rod will detect virtually any liquid. It's imbedded smart sensing software adjusts to the harshest conditions regardless of any accumulated coating. The ball shaped sensor has a 10' cord that includes a connector that can be separated from the controller when the cord needs to be threaded through small openings.

Note: When mounting the Ultimate Sensor, position the bottom of the sensor rod at the height you want the pump to activate.

Installing the Ultimate Sensor

The PHCC Pro Series Ultimate Sensor is easy to install by using the enclosed stainless steel hose clamp.

1. Hold the ball shaped sensor to the discharge pipe so that the sensor rod is below the ball.
2. Secure the sensor rod to the pipe with the enclosed hose clamp, but do not completely tighten the clamp at this time. Be sure to place the drive mechanism of the clamp on the opposite side of the sensor. This will allow the extra material of the clamp to be as close as possible to the sensor once it is completely tightened.
3. Position the sensor to a level where the bottom of the sensor rod is no lower than 3" above the bottom of the pump. To avoid debris pouring onto the sensor, it should be positioned on the side opposite the drain tile.

Note: It is important to mount the sensor below the drain tile that empties into the pit. Mounting it above the drain tile would allow water to fill the drain tile before the pump is activated to pump out the water.

4. Once the sensor is in the desired position, tighten the clamp. Do not over tighten.

Note: Do not attempt to use sensors or float switches other than the Ultimate Sensor with this controller.

The Ultimate Solid State Controller Model # USC3

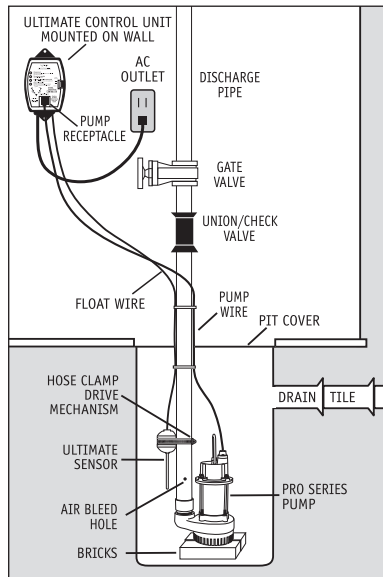
The benefit of this controller is that it will sound an alarm when problems exist or maintenance is needed. The controller will also run the pump once a week for approximately four (4) seconds. This test will exercise the pump and help ensure the pump is working properly.

The PHCC Pro Series Ultimate Solid State Controller features a series of warnings (audible and visual) that pinpoint potential problems with the pump, sensor and power conditions. The controller will sound an alarm when power has been interrupted, when the pump has run for more than 10 minutes continuously, when the 9V battery is low or if the controller detects a weak or no signal from the sensor. The 9V battery (sold separately) runs the controller during a power outage, allowing it to sound an alarm if the circuit breaker trips, the controller is not plugged in securely, or the home's power is interrupted.

Note: The 9V battery will only power the controller, not the pump.

Installing the Ultimate Solid State Controller

1. Mount the controller to the wall through the 2 holes on the cabinet using the proper mounting hardware for the application. The controller should be mounted at least 4' from the floor and within 4' of the outlet.
2. Open the plastic door on the top of the unit and using a flat head screwdriver adjust the dial to select the number of seconds that the pump will run after the water falls below the sensor. The timer can be adjusted from 5-45 seconds. The manufacturer default is about 10 seconds. Install a 9V alkaline battery and replace the plastic door.
3. Plug the control box into a properly grounded, 3-prong receptacle (preferably with ground fault circuit interrupt). Then, plug the pump into the receptacle on the control box. Do not use an extension cord.
4. Make sure the Power Failure Alarm slide switch is in the ON position.



Completing the Installation

1. After the initial installation, be sure to check the pump operation by filling the sump with water and observing the pump through one full cycle. When using the Ultimate Sensor, the pump should run for 10 seconds after the water level reaches the bottom of the sensor rod.
2. Replace the pit cover making sure not to pinch or crimp the pump wire with the cover. The pit cover either has a 'hole punch' that will allow the cord to be passed through it, or a hole can be drilled in the cover.

Understanding the Warnings & Alarms

AC power is out

There are several causes for power failure. The most common causes are a power outage by the electric company or a tripped circuit breaker. Although the Ultimate Controller can not run the pump, it will sound an alarm indicating the loss of power. This will allow the homeowner to address the problem.

If this warning light and alarm are on, the control box is not receiving AC power for one of many reasons:

1. The control box is not plugged in
2. The power to the house is out
3. The circuit breaker to that outlet has been tripped
4. The ground fault interrupter on that outlet has been tripped
5. A power brownout is taking place

Power Failure Alarm slide switch

When the controller is not receiving AC power, the monitoring features and the audible alarms are powered by the 9-volt battery. This type of battery will power the controller for many hours, but not indefinitely. Once the source of the AC power alarm is determined, it is suggested that the Power Failure Alarm slide switch be turned to the **OFF** position until the power is restored. This will preserve the battery and silence the alarm. When AC power is restored, slide this switch back to the **ON** position.

Note: If the AC power is restored and the slide switch is in the OFF position, the alarm and light for the 9-volt battery warning will activate, even if the battery is good. This is a reminder to reset the alarm. Slide the switch to the ON position. If the battery is good, the light will go out. If the alarm continues to sound, replace the battery.

The system is operating

This light should be **ON** and flashing at all times. It is included to indicate that the system is monitoring the sump conditions. This light will not illuminate when:

1. The power is out and the Power Failure Alarm slide switch is in the **OFF** position
2. The power is out and the 9V battery is discharged
3. The controller is not functioning. Contact the Glentronics service department

The 9-volt battery is low

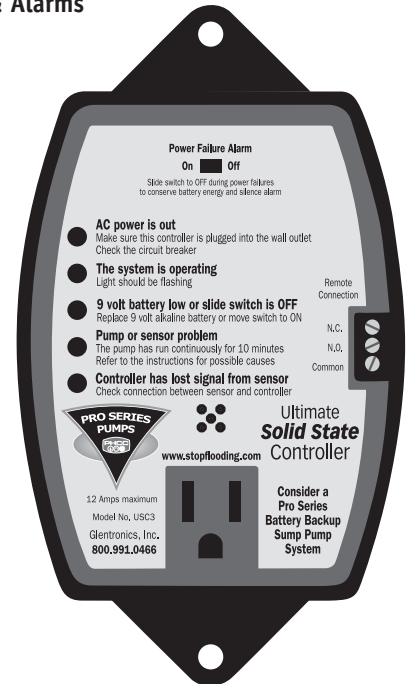
1. The 9-volt battery located in the top of the control box is coming to the end of its useful life. Replace it with a new 9-volt alkaline battery.
2. The Power Failure Alarm switch is in the **OFF** position. It must be in the **ON** position at all times, except when silencing an actual power failure condition.

Pump or sensor problem

This key feature monitors the time that the sensor has been activated. It is unusual for a pump to run for 10 or more minutes continuously. This can occur for many different reasons. Either the sensor has a large amount of debris stuck to it, there is a mechanical problem with the pump, or there is a problem with the plumbing connections. Please refer to the Troubleshooting Guide.

Controller has lost signal from sensor

This alarm will sound if the controller has detected a weak signal or has lost the signal from the sensor. Check for a secure connection between controller and sensor wire or clean the sensor rod.



Glentronics, Inc.
Lincolnshire, IL 60069
800-991-0466

www.stopflooding.com

Troubleshooting (Always unplug the pump from the controller before performing any maintenance)

The pump will not start or run	Pump is not plugged in	Plug pump in properly (see instructions)
	Water is not high enough to activate the pump	Make sure float switch is positioned properly
	Open circuit	Check circuit breaker or fuse, and GFI reset button
	Poor power source	Check circuit line wires and cable*
	Low voltage	Check line wires and source voltage*
	Bad power cable	Replace with new cable*
	Locked impeller	Remove strainer and clear obstruction
	Defective float switch	Replace float switch with new float switch
	Defective pump	Replace pump with new pump
Thermal protector tripping or not functioning	Locked impeller	Remove strainer and clear obstruction
	Incorrect power supply	Check power supply source and voltage
	Overburdened due to heavy sand content in the water Pump running continuously with no water present	Use water filter or replace with a higher wattage pump Check sensor rod
Pump starts and stops too frequently	Sensor is mounted too low	Raise sensor or adjust timer
	Water flowing back from pipe	Install or replace check valve
	Malfunctioning sensor rod	Replace sensor rod with new sensor
Pump will not shut off	Clogged or frozen discharge	Clear blockage or thaw frozen line
	Blocked intake strainer	Clear debris from intake strainer
	Check valve installed with no air bleed hole in pipe or pump	Drill a bleed hole in the discharge pipe, or clean debris from the existing hole in the pipe or pump
	Check valve is stuck or installed upside down	Reverse or replace check valve. Make sure the check valve is installed with the flow arrow pointing up and out of the pit.
	Sensor rod is obstructed with large amount of debris	Clean debris from sensor rod
Insufficient or no water volume	Check valve on secondary pump will not close and water re-circulates within the system	Replace the check valve on the secondary pump
	Worn impeller	Replace impeller & adjust spacing between impeller and cover
	Partially blocked impeller	Remove strainer and clear obstruction
	Clogged or frozen discharge	Clear blockage or thaw frozen line
	Broken or leaking pipe	Repair piping
	Low power voltage	Check power voltage, wires and cable condition
	Check valve installed with no air bleed hole in pipe or pump	Drill a bleed hole in the discharge pipe, or clean debris from the existing hole in the pipe or pump
	Check valve is stuck or installed upside down	Reverse or replace the check valve. Be sure check valve is installed with flow arrow pointing up and out of the pit
Abnormal sound or vibration	Pump is air locked	Remove debris from the air bleed hole
	Check valve on secondary pump will not close and water re-circulates within the system	Replace the check valve on the secondary pump
	Blocked intake screen	Clear debris from intake screen
Pump unexpectedly turns off for 5 seconds	Broken impeller	Replace impeller with new one
	Pump is experiencing an anti air lock safety feature	Pump is frequently cycling on and off. The controller has a safety feature that turns the pump off for 5 seconds if it detects a possible air lock. This is normal. No action is required.

*Consult a licensed electrician.

If the above solutions do not solve the problem, contact Glentronics customer service 800-991-0466, option 3.

Warranty

GLENTRONICS, INC. warrants to the end purchaser that its switch and control unit products are free from defective materials and workmanship for the periods indicated below: All parts and labor (excluding installation) for a period of:

- 1 year from the date of purchase, when purchased individually for use with another brand of pump
- 3 years from the date of purchase, when purchased with the PHCC Pro Series S3 Series pumps
- 5 years from the date of purchase, when purchased with the PHCC Pro Series S5 Series pumps

The defective product must be returned directly to the factory, postage prepaid with the original bill of sale or receipt to the address listed below. GLENTRONICS, INC., at its option, will either repair or replace the product and return it postage prepaid.

Conditions

The unit must be shipped, freight prepaid, or delivered to GLENTRONICS, INC. to provide the services described hereunder in either its original carton and inserts, or a similar package affording an equal degree of protection.

The unit must not have been previously altered, repaired or serviced by anyone other than GLENTRONICS, INC., or its agent; the serial number on the unit must not have been altered or removed; the unit must not have been subject to accident, misuse, abuse or operated contrary to the instructions contained in the accompanying manual.

The dealer's dated bill of sale, or installers invoice must be retained as evidence of the date of purchase and to establish warranty eligibility.

This warranty does not cover product problems resulting from handling liquids hotter than 104 degrees Fahrenheit, handling inflammable liquids, solvents, strong chemicals or severe abrasive solutions; user abuse; misuse, neglect, improper maintenance, commercial or industrial use; improper connection or installation, damages caused by lightning strikes; excessive surges in AC line voltage; water damage to the controller; other acts of nature, or failure to operate in accordance with the enclosed written instructions.

GLENTRONICS, INC. WILL NOT BE LIABLE FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTIES ON THIS PRODUCT. SOME STATES DO NOT ALLOW FOR THE EXCLUSION OR LIMITATION OF CONSEQUENTIAL OR INDIRECT DAMAGE. THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS EXPRESS WARRANTY SHALL BE EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS CUSTOMER'S EXCLUSIVE REMEDY FOR BREACH OF THIS WARRANTY, OR OF ANY IMPLIED WARRANTY NOT EXCLUDED HEREIN, SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT.

For information or service contact:

Glentronics, Inc., 645 Heathrow Drive, Lincolnshire, IL 60069 800-991-0466

Model No. USC3

Serial No. _____

Purchase Date _____