12 Volt Backup Sump Pump

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Operating Instructions and Parts Manual — ESP25n

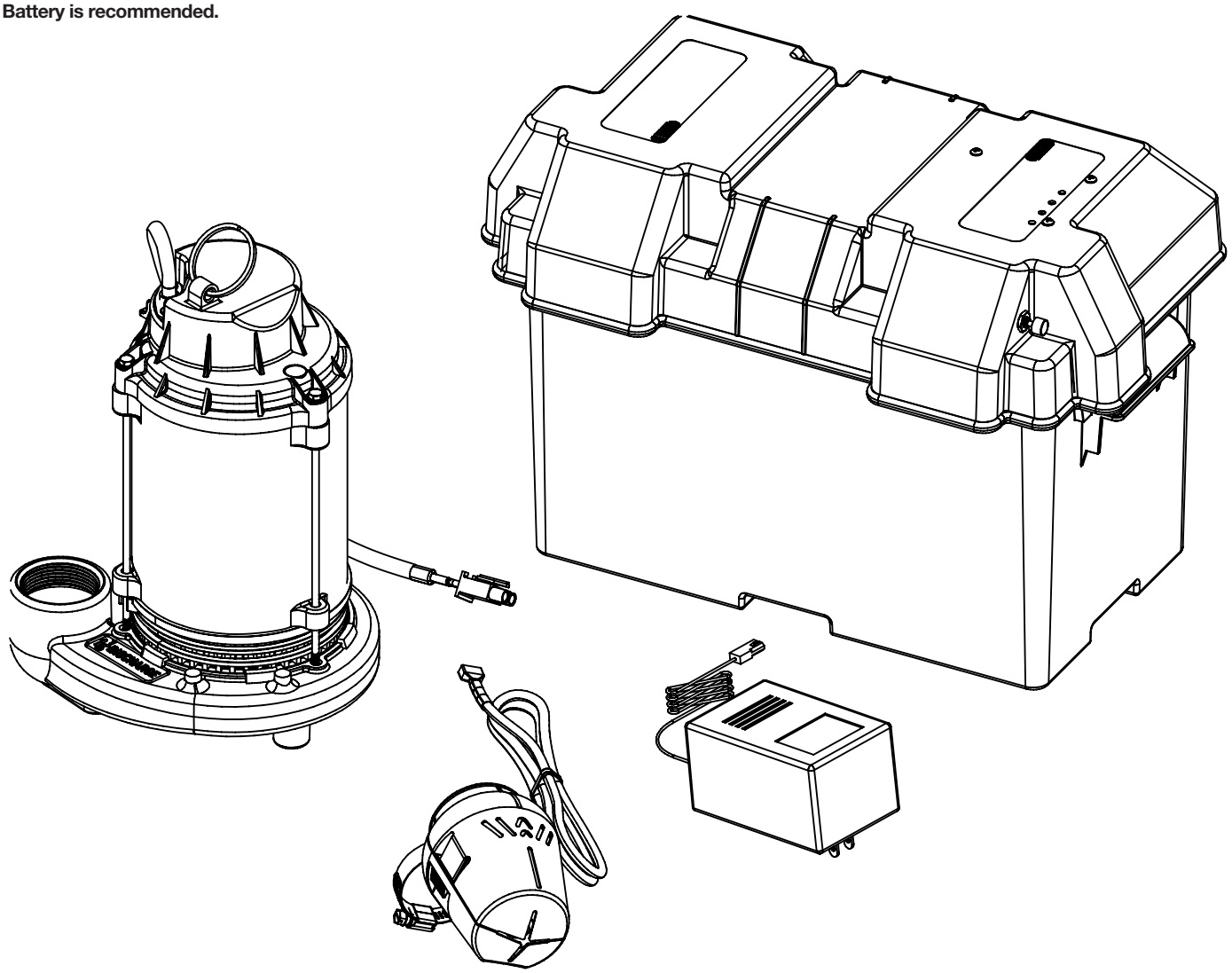
SPECIFICATIONS	
AC POWER SUPPLY REQUIREMENTS	120 V
MOTOR	100 W Permanent Magnet DC
DC POWER	12 V Battery

CONSTRUCTION	
MOTOR HOUSING	Coated Steel
MOTOR SHAFT	Stainless Steel
IMPELLER	Thermoplastic
VOLUTE	Cast Iron
PUMP DISCHARGE	1-1/2 in. NPT

PERFORMANCE GAL/HR

Model	HP	Discharge Head (Lift Distance)			
		0 ft	5 ft	10 ft	15 ft
ESP25n	12 V	2700	2100	1500	660

*** Battery not included. A Wayne WSB1275 75 Amp Hour Battery is recommended.**



Intended for Indoor Use

DESCRIPTION

The ESP25n is a battery operated backup sump pump. It does not replace a regular pump. It is designed to provide protection in the event household electrical power fails. This system is intended for indoor use only. This pump is intended for use with one 12 V battery.

UNPACKING

Inspect this unit before it is used. Occasionally, products are damaged during shipment. If the pump or components are damaged, return the unit to the place of purchase for replacement. Call Customer Support (800-237-0987).

SAFETY SIGNAL WORDS

This manual contains information that is very important to know and understand. This information is provided for SAFETY and to PREVENT EQUIPMENT PROBLEMS. To help recognize this information, observe the following symbols.

⚠ DANGER ***Danger indicates an imminently hazardous situation which, if NOT avoided, WILL result in death or serious injury.***

⚠ DANGER ***La mention Danger indique une situation dangereuse imminente qui, si elle n'est pas évitée, ENTRAÎNE la mort ou des blessures graves.***

⚠ WARNING ***Warning indicates a potentially hazardous situation which, if NOT avoided, COULD result in death or serious injury.***

⚠ AVERTISSEMENT ***La mention avertissement indique une situation potentiellement dangereuse qui, si elle n'est pas évitée, risque d'entraîner des lésions corporelles graves ou même la mort.***

⚠ CAUTION ***Caution indicates a potentially hazardous situation which, if NOT avoided, MAY result in minor or moderate injury.***

⚠ MISE EN GARDE ***La mention mise en garde indique une situation potentiellement dangereuse qui, si elle n'est pas évitée, pourrait entraîner des blessures mineures ou modérées.***

NOTICE ***Notice indicates important information, that if NOT followed, MAY cause damage to equipment.***

GENERAL SAFETY INFORMATION

CALIFORNIA PROPOSITION 65

⚠ WARNING

This product can expose you to chemicals, including DEHP, which is known to the State of California to cause cancer, birth defects and reproductive harm. For more information, go to www.P65Warnings.ca.gov.

⚠ AVERTISSEMENT

Ce produit peut vous exposer à des produits chimiques, notamment du DOP, reconnus par l'État de Californie comme étant cancérigènes et à l'origine d'anomalies congénitales et de problèmes de l'appareil reproductif. Pour plus de renseignements, visiter le site www.P65Warnings.ca.gov.

⚠ DANGER ***Do NOT use to pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. Do not use in a flammable and/or explosive atmosphere. Pump should only be used to pump clear water. Fatal injury and/or property damage could result and void warranty.***

⚠ DANGER ***Ne PAS utiliser pour pomper des fluides inflammables ou explosifs tels que l'essence, le mazout, le kérosène, etc. Ne pas utiliser dans un environnement inflammable et/ou explosif. La pompe ne doit être utilisée que pour pomper de l'eau claire. Des blessures corporelles et/ou des dégâts matériels pourraient en résulter et annuler la garantie.***

⚠ DANGER ***if the basement has water or moisture on the floor, do not walk on wet area until all power is turned off. If the shutoff box is in the basement, call an electrician. Remove pump and either repair or replace. Failure to follow this warning could result in fatal electric shock.***

⚠ DANGER ***Si le sous-sol a de l'eau ou de l'humidité sur le plancher, ne pas marcher aux endroits mouillés avant que le courant ne soit coupé. Si la boîte d'arrêt est au sous-sol, appeler un électricien. Enlever la pompe et la réparer ou la remplacer. Le non-respect de cet avertissement pourrait entraîner un choc électrique fatal.***

REMINDER: Keep your dated proof of purchase for warranty purposes! Attach it to this manual or file it for safekeeping.

⚠ WARNING ***All wiring must be performed by a qualified electrician.***

⚠ AVERTISSEMENT ***L'ensemble du câblage doit être effectué par un électricien qualifié.***

⚠ DANGER ***Do not expose battery to sparks or flame as an explosion or fire could result.***

⚠ DANGER ***Ne pas exposer la batterie à des étincelles ou des flammes. Une explosion ou un incendie pourrait en résulter.***

⚠ DANGER ***Battery acid is corrosive. Avoid spilling on skin or clothing. Eye protection must be worn when handling the battery.***

⚠ DANGER ***L'acide de la batterie est corrosif. Évitez les éclaboussures sur la peau ou les vêtements. Toujours porter une protection oculaire pour manipuler la batterie.***

⚠ WARNING ***check valve must be used on both the primary and backup sump pump discharge.***

⚠ AVERTISSEMENT ***Un clapet de non-retour doit être utilisé sur le tuyau de décharge du puisard principal et de secours.***

⚠ WARNING ***A ground fault circuit interrupt er (gfci) is required.***

⚠ AVERTISSEMENT ***Un disjoncteur de fuite à la terre doit être installé.***

BATTERY INFORMATION

The system is designed to operate most efficiently with AGM batteries. AGM batteries cost slightly more, but they can last longer. The oversize battery case (included) will accommodate a 12 Volt AGM battery (up to a group 27-frame size).

NOTE: Batteries not to be wired parallel

⚠ DANGER ***Be certain that the area around the batteries is well ventilated. Before servicing the batteries, blow away gasses by waving a piece of cardboard near the battery.***

⚠ DANGER ***S'assurer que la zone autour des batteries est bien ventilée. Avant d'effectuer l'entretien des batteries, évacuer les gaz en agitant un morceau de carton près des batteries.***

⚠ DANGER ***Dangerous hydrogen gas can be released from the batteries while charging. Sparks can ignite the gas in an enclosed space. Wear safetly goggles when connecting batteries. Battery connections should be made in a well ventilated area.***

⚠ DANGER ***De l'hydrogène dangereux peut s'échapper des batteries pendant le chargement. Les étincelles peuvent enflammer le gaz dans un espace clos. Porter des lunettes de sécurité pour brancher les batteries. Les connexions de la batterie doivent être effectuées dans un endroit bien ventilé.***

⚠ DANGER ***Working in the vicinity of lead acid batteries can be dangerous. Before making the connections or servicing the batteries, read and follow instructions on all applicable instruction manuals. To reduce the risk of battery explosion, follow the instructions in this manual and those published by the battery manufacturer, as well as those of any other equipment used in the surrounding area.***

⚠ DANGER ***Travailler à proximité de batteries au plomb-acide peut être dangereux. Avant d'effectuer une connexion ou d'effectuer l'entretien des batteries, lire et suivre les instructions de tous les manuels d'instructions applicables. Afin de réduire le risque d'explosion de la batterie, suivre les instructions de ce manuel, celles publiées par le fabricant de la batterie, ainsi que celles de tout autre équipement utilisé à proximité.***

NOTICE ***An assistant should be present or close enough to come to your aid in the event of an emergency. Have a reliable source of fresh water and soap nearby in case batttery acid contacts skin or eyes.***

NOTICE ***Wear eye or clothing protection when working around lead acid batteries. Avoid touching your eyes when working around lead acid batteries.***

⚠ WARNING ***if battery acid contacts your eye(s), flush with cold running water for 10 minutes and seek immediate medical attention. If acid contacts your skin or clothing, wash immediately with soap and water.***

⚠ AVERTISSEMENT ***Si de l'acide de batterie entre en contact avec les yeux, les rincer avec de l'eau courante froide pendant 10 minutes et consulter immédiatement un médecin. Si l'acide entre en contact avec la peau ou les vêtements, les laver immédiatement avec de l'eau et du savon.***

⚠ WARNING ***Never smoke or allow a spark or flame in the vicinity of the battery.***

⚠ AVERTISSEMENT ***Ne jamais fumer ou laisser une étincelle ou une flamme près de la batterie.***

⚠ WARNING ***Avoid dropping metal tools on the battery posts because they may spark or short-circuit the system or battery, causing an explosion.***

⚠ AVERTISSEMENT ***Éviter de faire tomber des objets en métal sur les bornes de la batterie : cela pourrait créer des étincelles ou des courts-circuits du système ou de la batterie, provoquant une explosion.***

NOTICE ***Installation may take several hours. Have appropriate means of removing water while sump pumps are disabled.***

INSTALLATION

1. Turn power to main pump off.
2. Pump must be installed using 1-¼ in. or 1-1/2 in. rigid PVC piping.

The backup pump can be installed with a separate dedicated discharge line (Method 1), or tied into an existing sump pump line with a check valve (Method 2).

⚠ DANGER ***Unplug the existing AC pump. Failure to follow this warning could result in fatal electric shock.***

⚠ DANGER ***Débrancher la pompe c.A. Ne pas respecter cet avertissement pourrait entraîner un choc électrique mortel.***

1. Verify that the existing AC pump is in good working order. If the AC pump is questionable, it is typically recommended that the unit be replaced with a 1/3 HP or 1/2 HP pump.
2. Remove any silt or accumulated debris from the sump pit and surrounding area.

METHOD 1 (PREFERRED)

1. Locate the backup pump on a solid, level surface in the sump pit. Do not place the pump on a loose or sandy surface. Small stones or sand may damage the pump resulting in potential pump failure.
2. This pump has a 1-1/2 in. NPT discharge. If a 1-1/4 in. dis charge pipe is desired, an adapter (not included) will be necessary. Smaller diameter piping will reduce pump flow, rate and performance.
3. Cut a 4 ft. section of 1-1/2 in. or 1-1/4 in. diameter rigid PVC pipe. Cement pipe to a threaded fitting. Cement pipe into pipe coupling. Attach pipe section to the backup pump discharge adapter.
4. Screw on to pump discharge.

NOTICE ***Be careful NOT to strip or cross thread plastic fittings or check valves. Flex hose is prohibited. Rigid PVC or metal pipe is required for permanent installation.***

5. Place the pump with the 4 ft. section of PVC pipe on a solid, level surface in the sump pit on an elevated surface.
6. Attach the required rubber check valve (sold separately) to the top of the discharge pipe. This will allow the pump or check valve to be removed easily for servicing.

NOTE: Check valves can be placed directly in the pump discharge if desired. However, for ease of disassembly, it is recommended that check valves be placed above the sump as shown in Figure 1.

The remainder of the discharge pipe installation will vary depending on individual circumstances. Using sound plumbing practices, route the discharge pipe to an exterior wall by the shortest path. Keep turns to a minimum because they reduce flow output of the pump. The pipe that exits the building structure should be sloped downward so that water will not freeze in the pipe.

When installing the separate discharge pipe, drill through the outside wall with appropriate drilling equipment. Seal the hole to prevent water from entering.

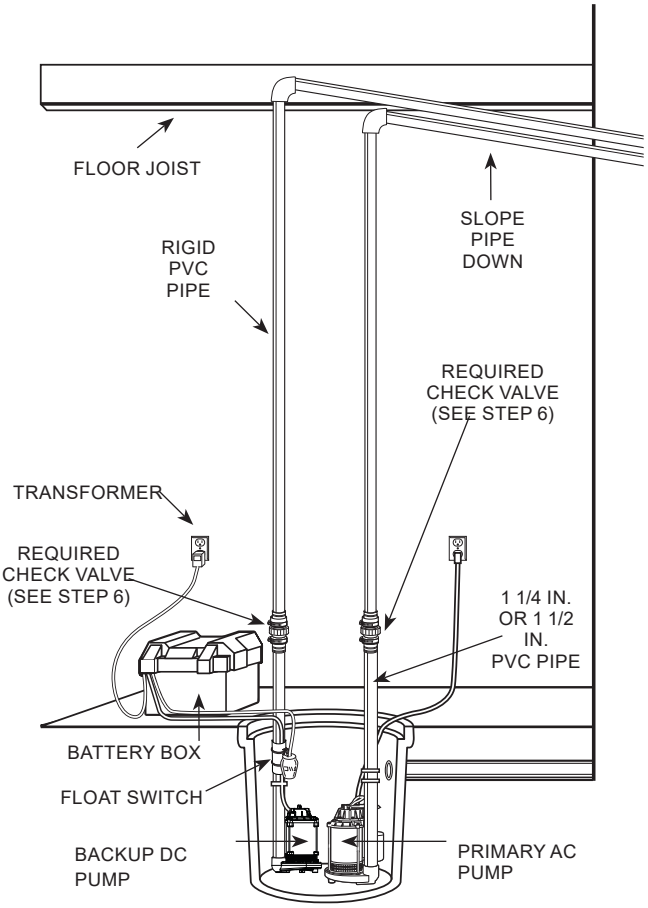


Figure 1- Method 1

INSTALLATION CONT'D

Method 2

If a separate, dedicated discharge is not possible as in Method 1, the backup pump can be tied into the AC operated pump's discharge pipe by installing a "Y" connector. Two check valves will be required.

1. Locate the backup pump on a solid, level surface in the sump pit. Do not place the pump on a loose or sandy surface. Small stones or sand may damage the pump resulting on potential pump failure.
2. This pump has a 1-1/2 in. NPT discharge. If a 1-1/4 in. discharge pipe is desired, an adapter (not included) will be necessary. Smaller piping will reduce pump flow, rate and performance.
3. A check valve is required in the discharge line of BOTH the Main AC pump and the backup pump to prevent recirculation of water into the sump pit.
4. Cut a 4 ft. section of 1-1/2 in. or 1-1/4 in. diameter rigid PVC pipe. Cement pipe to a threaded fitting. Cement pipe into pipe coupling. Attach pipe section to the back-up pump discharge adapter.
5. Screw on to pump discharge.

NOTICE ***Be careful NOT to strip or cross thread plastic fittings or check valves. Flex hose is prohibited. Rigid PVC or metal pipe is required for permanent installation.***

6. Place the pump with the 4 ft. section of PVC pipe on the sump floor or on an elevated surface if required.
7. Attach the required rubber check valve (sold separately) to the top of the discharge pipe. This will allow the pump or check valve to be removed easily for servicing.
8. Duplicate the discharge piping arrangement for the primary AC pump if the discharge line has to be adjusted to accomodate a second pump.
9. Glue a 45º elbow to the short pipe on the back-up pump. Glue a "Y" adapter to the short pipe on the existing pump, as shown in illustration for Method 2.
10. Glue a short piece of PVC pipe between the 45º elbow and the "Y".

NOTE: Check valves can be placed directly in the pump discharge if desired. However, for ease of disassembly, it is recommended that check valves be placed above the sump as shown in Figure 2.

The remainder of the discharge pipe installation will vary depending on individual circumstances. Using sound plumbing practices, route the discharge pipe to an exterior wall by the shortest distance.

Methods 1 and 2

Install float switch at least 10 in.-12 in. above bottom of sump pit so that backup unit turns on only when the water level is higher than the normal "on" level for main pump. Use the hose clamp provided to secure the switch to the discharge pipe. Make sure power wires do not interfere with float switch, pump inlet, or main pump operation. Backup pump must not be allowed to run dry.

Control Box Installation

1. Place battery in box, attach red cable to positive battery post and black cable to negative battery post.

⚠ CAUTION ***if cables are reversed, damage to the control box or battery will result, and void warranty .***

⚠ MISE EN GARDE ***Si les câbles sont inversés, la boîte de contrôle ou la batterie pourrait être endommagée et la garantie annulée.***

2. Plug the float switch, pump and transformer into the appropriate connectors. The connections are all unique and cannot be interchanged.
3. Put lid on box, and place the battery within six feet of the sump and a 115 VAC separately fused outlet. The outlet must be protected by a ground fault circuit interrupter (GFCI). The area must also be clean, dry and well ventilated.

⚠ CAUTION ***Do not allow battery box to get wet, or expose it to moisture. Electronics will be damaged and void warranty.***

⚠ MISE EN GARDE ***Ne pas laisser le coffre de la batterie être mouillé ou exposé à l'humidité. Les appareils électroniques seront endommagés et la garantie sera annulée.***

4. Test pump operation by filling the sump with water while the main pump is unplugged. If the pump operates properly, plug the transformer into the GFCI protected outlet to begin charg ing the battery.
5. Protect electrical cord from sharp objects, hot surfaces, oil and chemicals. Avoid kinking the cord. DO NOT USE PUMP WITH DAMAGED CORD.

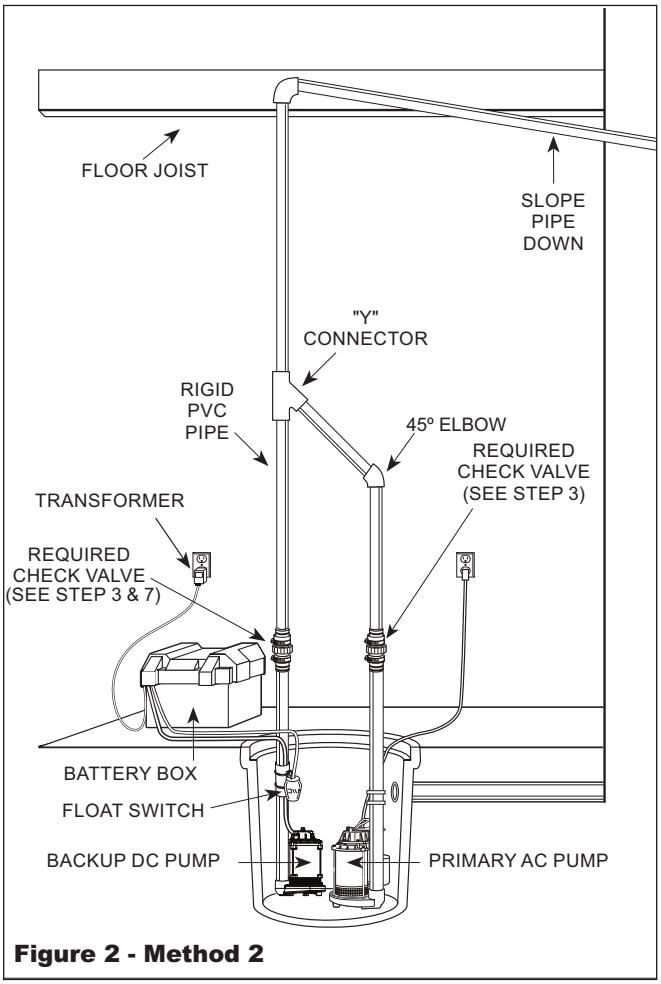


Figure 2 - Method 2

OPERATION

⚠ DANGER ***Always disconnect the power source before attempting to install, service, relocate or maintain the pump. Never touch sump pump motor, water or discharge piping when pump is connected to electrical power. Never handle a pump or pump motor with wet hands or when standing on wet or damp surface or in water. Fatal electric shock could occur.***

⚠ DANGER ***Toujours débrancher le cordon d'alimentation avant d'essayer d'installer, de réparer, de déplacer ou de faire l'entretien de la pompe. Ne jamais toucher le moteur de la pompe de puisard, l'eau ou les tuyaux d'évacuation lorsque la pompe est branchée à une source d'alimentation électrique. Ne jamais manipuler une pompe ou le moteur d'une pompe avec les mains humides, ou debout sur une surface mouillée ou humide ou dans l'eau. Cela pourrait occasionner un choc électrique.***

⚠ DANGER ***Risk of electrical shock! Use a GFCI receptacle to reduce the risk of fatal electric shock. Cutting the cord will void the warranty and make the pump inoperable.***

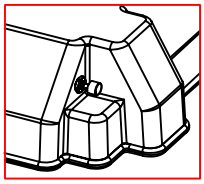
⚠ DANGER ***Risque de choc électrique! Utiliser une prise avec disjoncteur de fuite à la terre pour réduire le risque de choc électrique. Couper le cordon annulera la garantie et rendra la pompe inutilisable.***

1. After installation, the backup pump will start when the water level rises above the backup float switch.
2. The control box has a DC charger designed to shorten the recharging time of your battery, and to prevent overcharging. In addition, the control box has a time delay which keeps the pump from repeated, short cycles when it shuts off. The time delay feature will allow the pump to run 20-25 seconds after the switch reaches the off position.
3. The control box contains multi-colored indicator lights. When AC power is present, the lights will indicate the charging state, and not reflect actual battery voltage, particularly with a defective battery. In order for the indicator light to provide an accu rate reading, steps "a" through "d" must be followed.

⚠ DANGER ***Unplug main ac pump and the transformer. Risk of electrical shock!***

⚠ DANGER ***Débrancher la pompe principale et le transformateur de courant c.A. Risque de choc électrique!***

a. After main pump and transformer are unplugged, a power off alert tone will sound for 30 seconds.



b. Press and release the self test button to activate the backup pump.

c. When the pump stops, read the charge indicator lights:

Green: Indicates the battery is fully charged.
Yellow: Indicates battery is partially charged, but still operable.
Red: Battery is completely discharged or defective.

Red blinking: Battery discharged below level where pumping can occur. Motor is locked out by controller until battery is suficiently charged to run pump.

d. Plug in transformer and main AC pump. When main AC power is out, and when pump has been running, the lights will indicate battery status.

4. A chirping sound from the control box will accompany the red light, indicating that the battery may require attention or replacement. Voltage is only an indicator of battery condition and may not reflect the true condition of the battery. See maintenance for instruction on assessing battery condition.
5. A single thirty (30) second tone will sound when power to the system is interrupted and the bottom power failure light will illuminate. The unit will reset and the light will go out automatically when power is restored.
6. A three (3) second tone will sound every time the pump starts.

MAINTENANCE

⚠ DANGER ***Always disconnect the electrical supply before attempting to install, service or relocate or perform any maintenance. If the power source is out of sight, lock and tag in the open (off) position to prevent unexpected power application. Failure to do so could result in fatal electric shock. Only qualified electricians should repair this unit. Improper repair could result in fatal electric shock.***

⚠ DANGER ***Toujours couper le courant avant d'essayer d'installer, de réparer, de déplacer ou de procéder à l'entretien. Si la source d'alimentation est hors de vue, verrouiller et étiqueter en position ouverte (off) pour éviter tout rétablissement de l'électricité inattendu. Le non-respect de ces instructions pourrait entraîner un choc électric mortel. Seuls des électriciens qualitifés devraient réparer cet appareil. Une mauvaise réparation pourrait entraîner un choc électrique mortel.***

NOTICE ***Once a month, check the battery condition. To check battery condition follow steps listed below:***

1. Unplug the transformer.
2. Inspect the terminals and clamps for corrosion and tightness. Clean and tighten as required.
3. Unplug the main pump and fill sump with water until backup pump turns on. Repeat process two times to make sure pump is operating normally.
4. If pump operates normally, plug transformer into GFCI wall outlet, turn on main pump. If pump fails to operate normally, see Troubleshooting guide and correct problem.

NOTES

Thank you for making Wayne Water Systems a key part of your home maintenance program. If properly installed, maintained and operated in accordance with Wayne Water Systems' written instructions, your pump should provide you with approximately (*) years of service.

Product Warranty	(*) Expected Life
1	3
2	3
3	6
5	6

TROUBLESHOOTING CHART

Symptoms	*Possible Cause(s)*	*Suggested Remedies*
Pump will not start or run	1. Connections not secure	1. Check all connections
	2. Low or defective battery	2. Check battery and replace if low or defective
	3. Float switch stuck	3. Make sure nothing is interfering with operation of switch
	4. Defective or blown fuse	4. Pull the transformer from the wall outlet and remove. Check internal fuse located inside the control box. If the fuse is blown, replace it with a 20 amp automotive type fuse
	5. Battery voltage below threshold, motor locked out	5. Wait for battery to recharge or replace with fresh battery
Motor hums but will not run	1. Defective battery	1. Check battery and replace if low or defective
Pump runs but pumps very little or no water	1. Check valve missing or improperly installed	1. Check to make sure check valves are installed between primary pump discharge and backup sump pump are functioning properly
	2. Obstruction in discharge pipe	2. Check for obstruction and clear if necessary
	3. Discharge length and/or height exceeds capacity of pump	3. If discharge is too high, a seperate line may be required with a lower discharge height
	4. Low or defective battery	4. Check battery and replace if needed
Pump cycles too frequently	1. Check valve problem	1. Make sure check valves are installed correctly between primary pump discharge and backup sump pump. Verify they are functioning properly
Power failure light is on but A/C power is available	1. Transformer is bad	1. Replace transformer
	2. Bad or no connection	2. Check that A/C plug and transformer connections under lid are secure
	3. Branch circuit breaker/fuse blown	3. Reset breaker or replace fuse

LIMITED WARRANTY

For two years for ESP25n model from the date of purchase, from an authorized dealer, Wayne Water Systems will repair or replace, at its option for the original purchaser, any part or parts of its Sump Pumps or Water Pumps ("Product") found upon examination by Wayne Water Systems to be defective in materials or workmanship. To obtain warranty service, you must call 1-800-237-0987 during the Warranty Period. We will provide you with a Return Authorization Number ("RAN") and instructions to return the Product to us, or we will direct you to an authorized dealer (where a RAN is not required). Be prepared to provide the Product's model number, serial number, and Proof of Purchase. An RAN is required for all returns made directly to us. You will be responsible for all shipping fees required to deliver the Product to us or our authorized dealer. This Limited Warranty is not transferrable.This Limited Warranty does not cover Products which have been damaged as a result of accident, abuse, misuse, neglect, improper installation, improper maintenance, or failure to operate in accordance with WAYNE's written instructions.

This Limited Warranty does not cover Products which have been damaged as a result of accident, abuse, misuse, neglect, improper installation, improper maintenance, or failure to operate in accordance with Wayne Water Systems' written instructions.

THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM THE DATE OF PURCHASE. THIS IS THE EXCLUSIVE REMEDY AND ANY LIABILITY FOR ANY AND ALL INDIRECT OR CONSEQUENTIAL DAMAGES OR EXPENSES WHATSOEVER IS EXCLUDED.

In no event, whether as a result of breach of contract warranty, tort (including negligence) or otherwise, shall Wayne Water Systems or its suppliers be liable for any special, consequential, incidental or penal damages.

You *MUST* keep your purchase receipt with this form. If you need to file a warranty claim, you must include a copy of the receipt with your materials or correspondence. If you do not provide proof of purchase with your warranty claim, the warranty period will begin on the date of manufacture shown by the serial number.

***DO NOT MAIL THIS FORM TO Wayne Water Systems.* Use this form only to maintain your records.**

MODEL NO._____ SERIAL NO._____ INSTALLATION DATE _____

ATTACH YOUR RECEIPT HERE

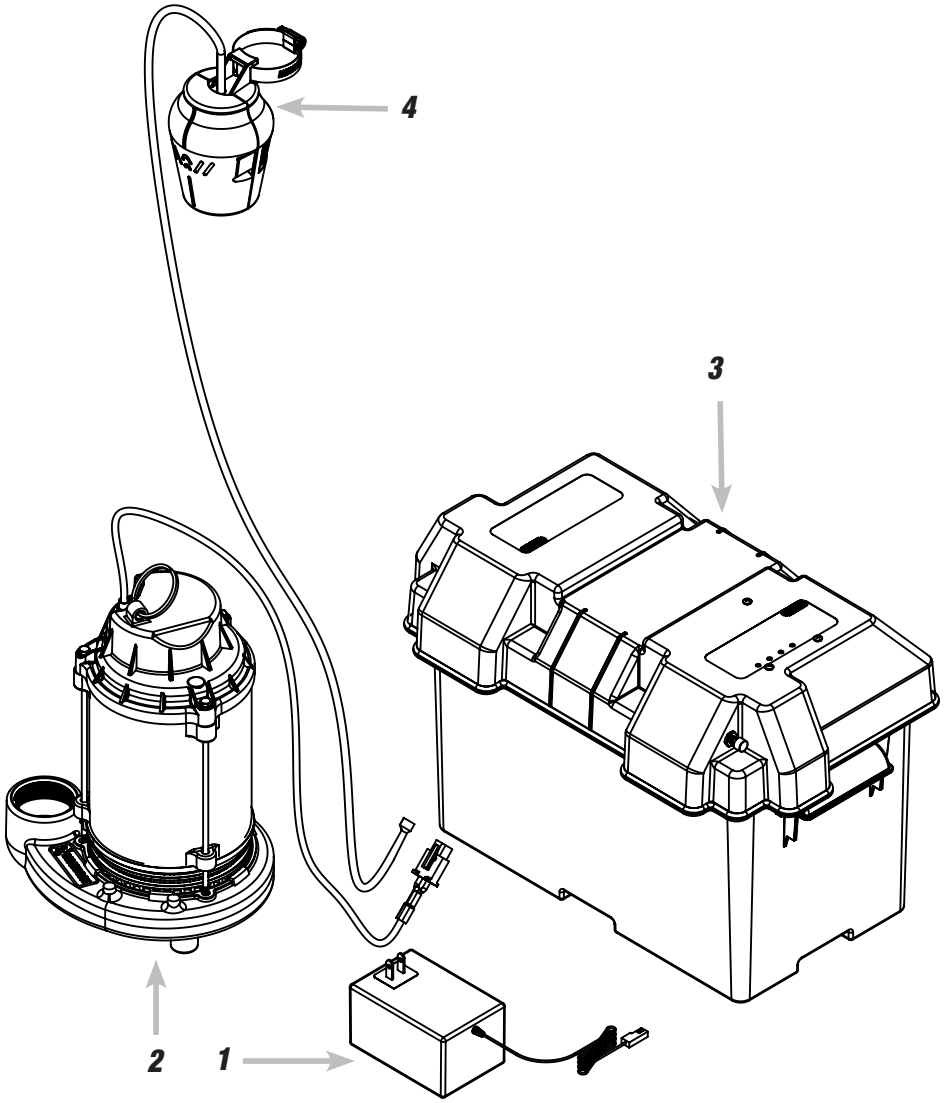
For Replacement Parts or Customer Support, Call 1-800-237-0987

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Address any correspondence to:

Wayne Water Systems
101 Production Drive
Harrison, OH 45030 U.S.A.



Reference Number	Description	Part Number	Quantity
1	Transformer	60194-WYN1	1
2	Pump	60198-WYN1	1
3	Lid Assembly	60184-WYN1	1
4	Float Switch Assembly	30070-WYN1	1

NOTES