



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



Scan the QR code or visit www.waynepumps.com for the full manual in English and Español. If you are having trouble scanning the QR code, type the following URL into your internet browser to access the manual, www.waynepumps.com/wayne-operating-manuals/

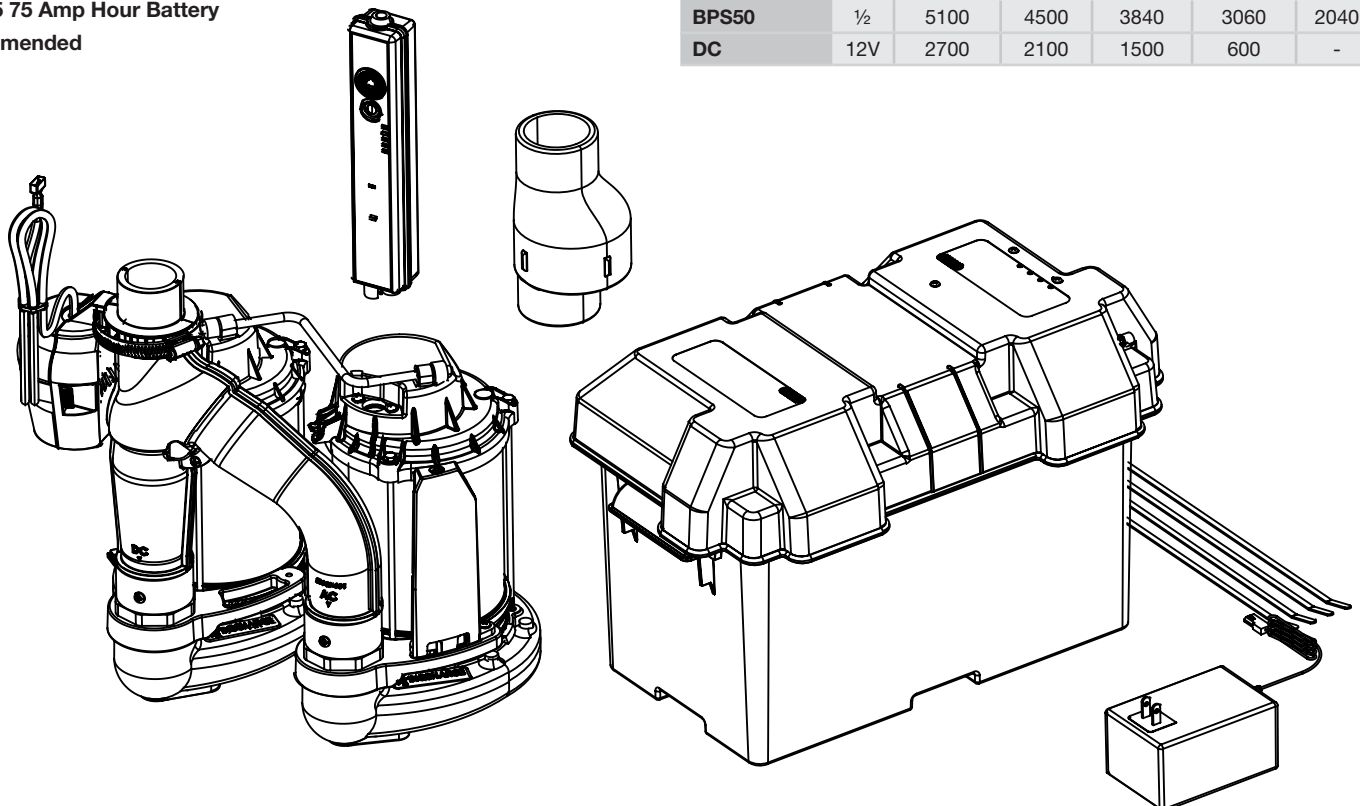
| SPECIFICATIONS | AC SPECIFICATIONS | DC SPECIFICATIONS |
|---------------------------|-------------------------------------|--------------------------|
| POWER SUPPLY REQUIREMENTS | 120 V, 60 Hz | 12 V, DC |
| MOTOR | Single Phase, Dielectric Oil Filled | Permanent Magnet Brushed |
| POWER | 1/2 HP | 100 Watts |
| CIRCUIT REQUIREMENTS | 15 A (minimum) | 15 A (minimum) |
| DIMENSIONS | 11 1/2 in. high x 9 3/4 in. base | |
| SUMP PIT DIMENSIONS | 13.5" or larger sump pit or basin | |
| PUMP ON LEVEL | Approximately 9 in. | 10-12 in. |
| PUMP OFF LEVEL | Approximately 4 in. | N/A |

| CONSTRUCTION | AC | DC |
|---------------|--------------------------------|-----------------|
| MOTOR HOUSING | Stainless Steel | |
| VOLUTE | Cast Iron | |
| IMPELLER | Glass Reinforced Thermoplastic | |
| SHAFT | Steel | Stainless Steel |

| AC CONTROLLER SPECIFICATIONS | |
|------------------------------|------------------------|
| SWITCH | Solid State Air Switch |
| CONNECTIVITY | Wi-Fi + BLE |
| AIR TUBE | PVC |

| PERFORMANCE GAL/HR | | | | | | |
|--------------------|-----|--------------------------------|------|-------|-------|-------|
| Model | HP | Discharge Head (Lift Distance) | | | | |
| | | 0 ft | 5 ft | 10 ft | 15 ft | 20 ft |
| BPS50 | 1/2 | 5100 | 4500 | 3840 | 3060 | 2040 |
| DC | 12V | 2700 | 2100 | 1500 | 600 | - |

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



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SYSTEM DESCRIPTION

This product is fully assembled and pre-plumbed as a ½ HP primary & 12 Volt backup sump pump system. The pumps are designed for use in residential applications to remove groundwater and prevent flooding. The pumps are designed for clear water only and not to be used with a portable generator. Installation of this system outdoors, unprotected from the weather, may cause hazardous conditions and will void warranty. Water inside the pump and plumbing may freeze, limiting the performance and damaging the pumps and plumbing. Uncontrollable environmental conditions can potentially cause damage to the unit and void warranty.

The AC pump is controlled with an innovative and reliable Air Switch, so the pump is no longer limited by the mechanical cycles of traditional float switch style pumps. The integrated controller and companion app for your iOS or Android device keeps you informed of the status of your pump; informing you whenever there is a problem and your basement is no longer protected. The battery backup pump has a controller mounted on the battery box with LED indicator lights to inform you of the charge status of the battery and the incoming current from your home. The Air Switch technology does not monitor the DC pump.

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, or 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.

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

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

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

IMPORTANT SAFETY INFORMATION

RISK OF ELECTRIC SHOCK. TO REDUCE THIS RISK, OBSERVE THE FOLLOWING WARNINGS:



MAKE SURE THERE IS A PROPERLY GROUNDED RECEPTACLE AVAILABLE. The AC pump is supplied with a grounding conductor and grounding-type attachment plug. To reduce the risk of electric shock, be certain that it is connected only to a properly grounded, grounding-type receptacle.

FOR ADDED SAFETY the receptacle must be protected with a ground fault circuit interrupter (GFCI). All wiring must be performed by a qualified licensed electrician and comply with the National Electric Code and all applicable local codes and ordinances.

NEVER REMOVE THE GROUND PRONG from the plug or bypass the grounding wires. This includes removal of the entire plug.

NOTICE THIS SYSTEM IS NOT DESIGNED TO HANDLE SALT WATER, BRINE, LAUNDRY DISCHARGE, WATER SOFTENER, SEWAGE, GREY WATER, POOL WATER, OR ANY OTHER APPLICATION WHICH MAY CONTAIN CAUSTIC CHEMICALS AND/OR FOREIGN MATERIALS. PUMP AND/OR PROPERTY DAMAGE COULD OCCUR IF USED IN THESE APPLICATIONS AND WILL VOID WARRANTY

DO NOT REMOVE POWER SUPPLY CORD and strain relief or connect conduit directly to the pump.

MAKE SURE THE POWER SUPPLY HAS A FUSE OR CIRCUIT BREAKER rated to handle the current (amps) noted on the pump nameplate in this manual or cord tag.

ALWAYS DISCONNECT THE PUMP from power supply before installing, servicing or making any adjustments.

DO NOT WALK on the floor when water is present until all power is turned off. If the electric panel is in the basement, call an electrician.

NEVER HANDLE A PUMP or motor with wet hands or when standing on a wet or damp floor while the pump is plugged into the power supply.

RISK OF ELECTRIC SHOCK. This system has not been investigated for use in swimming pool and marine areas.

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. System should only be used to pump clear water. Personal injury and/or property damage could result and void warranty.

PUMPS ARE NOT DESIGNED TO TRANSFER WATER INTENDED FOR DRINKING. Do not use the pumps for moving water that will be used for potable/drinking water. Pumps should only be used in applications for which it is designed.

⚠ WARNING DO NOT USE AN EXTENSION CORD OR SURGE PROTECTOR. Extension cords and/or surge protectors could present a safety hazard if not sized properly, become damaged or the connection falls into the sump. If receptacle is not within reach of the pump's power cord, contact a qualified licensed electrician to install a new receptacle.

TO REDUCE THE RISK OF HAZARDS THAT CAN CAUSE INJURY OR PROPERTY DAMAGE, OBSERVE THE FOLLOWING WARNINGS:



IT IS THE INSTALLER'S RESPONSIBILITY TO MAKE SURE THE PUMPS AUTOMATIC SWITCHES ARE ABLE TO OPERATE WITHOUT ANY OBSTRUCTIONS WITHIN THE BASIN. It is recommended that the installer test and observe the operation for several cycles after installation.

Operating Instructions and Parts Manual

IMPORTANT SAFETY INFORMATION (CONT'D)

IT IS REQUIRED TO USE RIGID PIPING AND FITTINGS to secure the system in the basin and reduce pump movement. Pump movement can prevent the switch from operating correctly. Do not use flexible hosing.

DO NOT INSTALL OR OPERATE THE PUMPS IF THEY HAVE BEEN DAMAGED IN ANY WAY.

DO NOT LIFT OR CARRY THE SYSTEM BY THE POWER CORDS. Use the strap provided.

DO NOT USE THIS SYSTEM IN MUD, SAND, CEMENT, OIL CHEMICALS, GREY WATER, OR ANY OTHER WATER THAT IS NOT CLEAR GROUND WATER.

DO NOT USE SUMP PUMPS TO HANDLE RAW SEWAGE.

The pump must be plugged in to a GFCI outlet. Failure to may result in electrical shock. Keep plug connection and controller protected from contact with water or snow, including splashing water. Plug connection and controller must be kept dry and away from moisture. Failure to follow these instructions can result in death or serious injury.

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.

CAUTION AIR SWITCH. This Air Switch is not adjustable. Any modifications or alterations will void the warranty and/or cause premature failure of the pump, which could lead to property damage.

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).

NOTICE 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 batteries. The transformer / charger should always be unplugged when installing or servicing the battery.

DANGER Dangerous hydrogen gas can be released from the batteries while charging. Sparks can ignite the gas in an enclosed space. Wear hand and eye protection when connecting batteries. Battery connections should be made in a well ventilated area.

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 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 using the surrounding area.

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 battery 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.

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

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

FCC INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to connect the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions.
1. This device may not cause harmful interference, and
 2. This device must accept any interference received, including interference that may cause undesired operation.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF EXPOSURE

To comply with FCC/IC RF exposure requirements for mobile transmitting devices, this transmitter should only be used or installed at locations where there is at least 20 cm separation distance between the antenna and all persons.

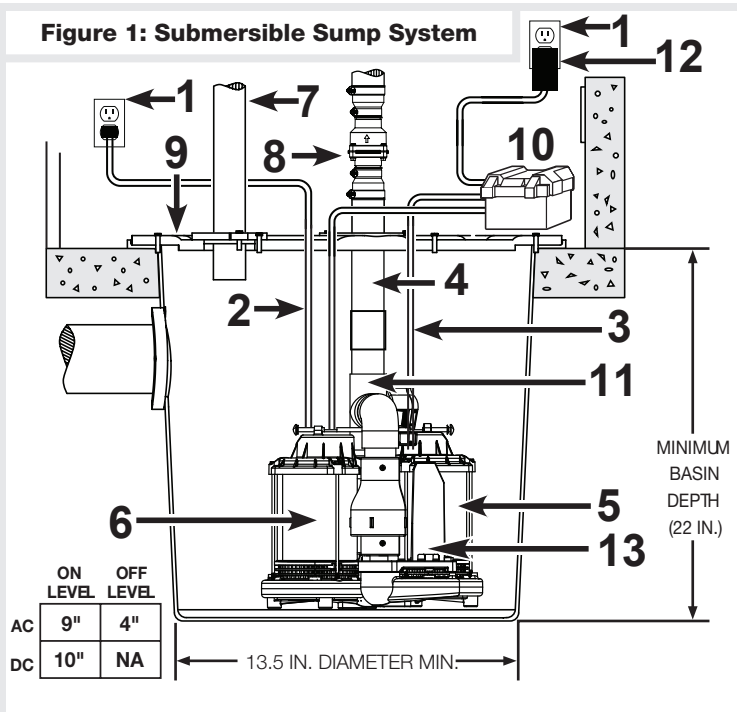
Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication. This Device complies with Industry Canada License-exempt RSS standards(s). Operation is subject to the following two conditions: 1) this device may not cause interference, and 2) this device must accept any interference, including interference that may cause undesired operation of the device.

Operating Instructions and Parts Manual

TYPICAL INSTALLATION

NOTICE INSTALLATION OF THIS UNIT MAY TAKE SEVERAL HOURS. BEFORE DISABLING YOUR MAIN PUMP, HAVE READY AN APPROPRIATE MEANS OF EVACUATING THE SUMP.

1. Unplug and remove existing pump.



- | | |
|--------------------------|----------------------------|
| 1. GFCI GROUNDED OUTLETS | 8. REMOVABLE CHECK VALVE |
| 2. AC PUMP POWER CORD | 9. GASKET/BASIN LID |
| 3. DC PUMP POWER CORD | 10. BATTERY BOX CONTROLLER |
| 4. DISCHARGE PIPE | 11. DC FLOAT SWITCH |
| 5. AC PUMP (Primary) | 12. TRANSFORMER |
| 6. DC PUMP (Secondary) | 13. AIR SWITCH HOUSING |
| 7. VENT PIPE | |

NOTICE THIS INSTALLATION MUST BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND ALL APPLICABLE LOCAL CODES AND ORDINANCES.

NOTE: DO NOT PLUG POWER CORDS INTO GFCI OUTLET UNTIL STEP 8.

2. Pump must be installed using 1-1/4 in. or 1-1/2 in. rigid PVC piping.
3. Use a basin (purchased separately) or pit that is large enough to accommodate the system. The minimum requirements for the sump system are:

| Basin/Pit Size Specifications | Minimum Basin Diameter | Minimum Basin Height |
|-------------------------------|------------------------|----------------------|
| System | 13.5 in. | 22 in. |

4. Clean the basin/pit of all debris.
5. If using a basin, place the system directly on the bottom of the basin. To prevent damage set the system on a solid, level surface. Do not place units directly on clay, earth, gravel, or sand. A brick, sump liner, or blocks can be installed under the pumps to provide a solid base.
6. Install discharge plumbing according to local, regional and state codes. Rigid PVC pipe is required. Do not use flexible hose in a permanent application.
7. Install removable check valve (8) (Wayne Part Number: 28349-001) positioned just above the basin to allow easy removal of the system for cleaning and service.

NOTE: A check valve is required to prevent back-flow.

8. Connect pump power supply cord (2) to a ground fault circuit interrupter (GFCI) receptacle. Separate circuits are recommended to ensure functionality of the duplicate systems.

NOTE: The AC pump will initially run when plugged in to calibrate Air Switch.

9. Fill the basin/pit with water. The pump will activate when the water level has reached level 4 on the controller.
10. The pump will stop when the water level has reached the switch-off level.
11. Fill the basin/pit with water again. While the pump is draining the basin/pit, verify the discharge pipe is carrying the water to a point at least 3 ft. away from the foundation. If the discharge line is exposed to freezing temperatures, the pipe must be positioned in a downward slope away from the foundation so any remaining water will drain away and not freeze.

CONTROL BOX INSTALLATION

12. Place battery in box, attach red cable to positive battery post and black cable to negative battery post. There may be a small spark when doing this. It is normal.

CAUTION If cables are reversed, damage to the control box or battery will result, and warranty will be void.

13. Plug the float pump system, back up pump and transformer into the appropriate connectors. The connections are all unique and cannot be interchanged.
14. 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.

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BACK UP PUMP CHECK

1. Unplug the AC main pump from the GFCI protected outlet.
2. Unplug the transformer/charger from the GFCI protected outlet. A 30 second tone will sound.
3. Test system operation by filling the sump with water while the main pump is unplugged. If the pump operates properly, plug the transformer back into the GFCI protected outlet to begin charging the battery.
4. Protect electrical cord from sharp objects, hot surfaces, oil and chemicals. Avoid kinking the cord.
5. Secure power supply cord to discharge pipe using cable or zip ties to prevent possible switch entanglement.
6. After the backup pump check, secure the basin cover and gasket to the basin or pit to prevent debris from falling into the basin, prevent personal injury, and contain gases and/or odors.

NOTE: Do not pinch or constrict Air Tube connected to Air Switch housing (Item 13 on Figure 1)

DEVICE ACTIVATION INSTRUCTIONS

NOTE: Make sure your Wi-Fi and Bluetooth is connected.

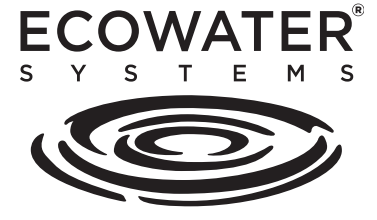
1. Download the Basement Guardian® App from your device's app store.
2. Open the Basement Guardian App. Login or create an account if needed.
3. Click "+ Add Device" to begin device activation.
4. Select your ECOWATER device.
5. Verify that the status LED on the device is blinking yellow. Click Next to continue.
6. Allow access to your devices camera and use your camera to scan the QR code located on the front of your device. NOTE: camera will automatically scan QR code when brought into view.
7. After the app "Finds" your device, a network list of local connections will be displayed. Select your network and enter your password credentials. Click Send.
8. Once connected to Wi-Fi, your device will be registered.
9. The app will now ask for your zip code. By collecting your zip code, we can link your local weather data with your pump data in the future.

ALEXA SKILLS SETUP:

NOTE: To use Alexa®, download the WAYNE Skill for your enabled device.

1. Open the Alexa App and Login. Create Account if needed.
2. On the Home Screen, select MORE icon, and then SKILLS & GAMES.
3. Search for "Wayne Halo" on the DISCOVER ALEXA screen, then select the WAYNE Skill.
4. Select Launch to add skill to your Alexa device, and then settings to link your Halo controller App to your Alexa device.
5. After receiving notice - "Wayne has been successfully linked," close the notice page and start using your Alexa with the Wayne Skill.
6. Using voice commands, say "Alexa, ask Wayne Pumps how my pump is doing."

ECOWATER PRODUCTS

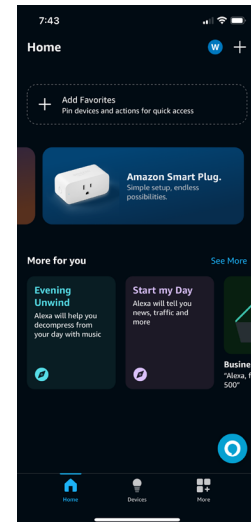


ALEXA SKILLS USER GUIDE

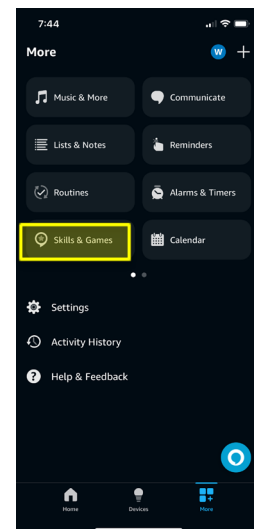
Alexa Skills are available for your pump using an iOS or Android mobile device. To connect a pump to an Alexa device, you will need your connected pump credentials, the Alexa App loaded on your mobile device, and an Alexa device such as an Echo. This process will guide you through installing and linking the Alexa Skills for the pump.

If you already have an Alexa App, please skip to step 4.

1. Open the **App Store** or **Google Play** on your mobile device.
2. Search for the **Alexa App** and select install.
3. Open the **Alexa App** and sign in with your Amazon Account or create an account if needed.
4. On the Alexa App **Home** screen, select the **More** icon in the lower right corner of the app (three squares and a + sign).

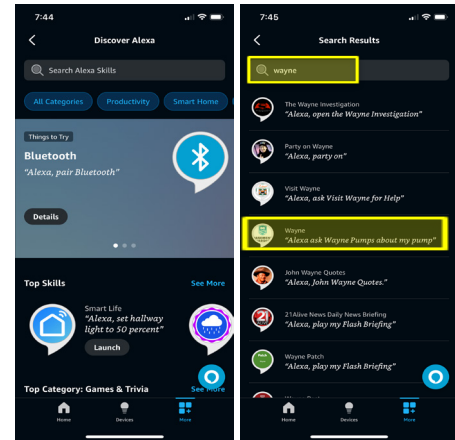


5. On the **More** screen, select **Skills & Games** from the menu. This will take you to the Alexa Skills Store.



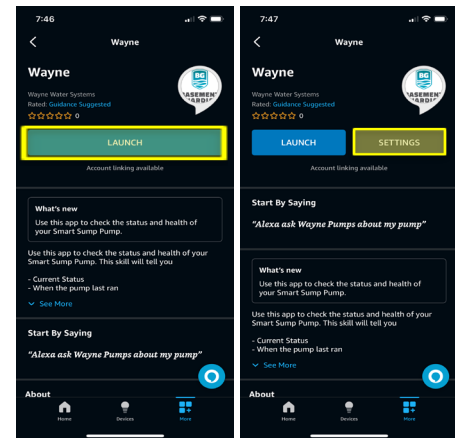
6. On the **Discover Alexa** screen, search for **Wayne Halo**.

7. On the **Search Results** screen, select **Wayne Skill**.



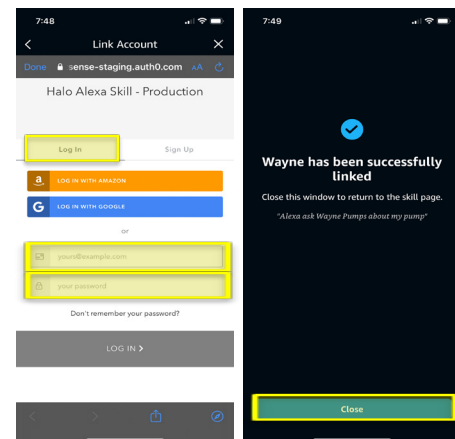
8. On the **Wayne** Screen, tap the Launch button to add the skill to your Alexa-enabled devices.

9. Return to the **Wayne** Screen and tap the Settings button. To use this skill, you must log into your Wayne Account, click on settings, and then click on Link Account.

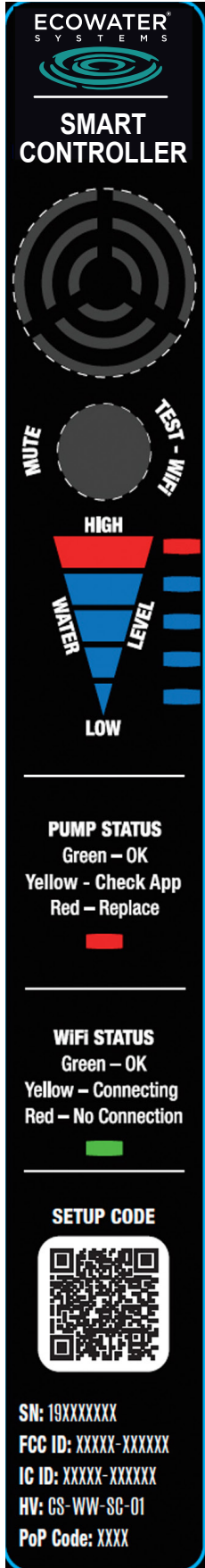


10. On the **Link Account** screen, enter your Halo Account credentials you used to set up your pump.

11. After the account is linked, you will see the following screen confirming that it has been successfully linked - **Wayne has been successfully linked**. Click the close button at the bottom of this page to start using Alexa.



12. You can now use voice commands on your Alexa-enabled device by saying “Alexa, ask Wayne pumps about my pump.”



LED LIGHT DISPLAY (CHECK YOUR APP FOR SPECIFIC REAL TIME PUMP INFORMATION)

| Color | Symptom/Possible Cause(s) | Suggested Remedies |
|--------|--|---|
| Green | 1. Good | 1. Your pump is good, there is nothing needed |
| Yellow | 1. A clogged pump inlet 2. Electrical voltage or polarity issue detected 3. Water level in your pit is not dropping 4. Your motor is showing signs of aging | 1. Open your sump pit and inspect the pump. Make sure the inlet screen is free of debris and there is nothing blocking the flow of water into the pump. 2. Contact an electrician and have them check the voltage and wiring of the outlet. 3. Check your pump to be sure it is properly connected. Then check your discharge pipe for obstructions or leaks that allow water back into the pit. 4. Consider replacing your pump soon to stay protected. |
| Red | 1. There is a critical issue with your pump | 1. Replace your pump immediately. |

DIGITAL CONTROLLER BUTTON

| Function | Action to Take |
|--------------------------------------|---|
| Mute Alarm | Short press (at least 1 second) |
| System Test | Hold for 5 seconds (pump health LED will flash blue) and release |
| Reboot | Hold for 10 seconds (pump health LED will flash green) and release |
| Reset WiFi Connection and Reboot | Hold for 15 seconds (pump health LED will flash yellow), release and short press (at least 1 second) again to confirm |
| Reset to Factory Settings and Reboot | Hold for 20 seconds (pump health LED will flash red), release and short press (at least 1 second) again to confirm |

A Button Hold Legend can be found on the back of the controller for your convenience.

BUTTON HOLD LEGEND

- System Test: 5 seconds
- Reboot: 10 seconds
- Reset Wifi*: 15 seconds
- Factory Reset*: 20 seconds

* Requires confirmation press

IC ID: 21098-ESPWROVERE
FCC ID: 2AC7Z-ESP32WROVERE
HV: CS-WW-SC-01

FC IC UL

USING YOUR DIGITAL CONTROLLER

MUTE ALARM:

Will silence alarm for 12 hours. For custom mute times, open the companion app while the alarm is active and press the alarm icon next to the alert pop-up.

SYSTEM TEST:

While your pump will automatically run periodic system tests; you can always force a system test via the controller or the companion app. A complete System Test which analyzes all aspects of Pump Health will be performed at Water Level 2 or higher. A partial System Test may be initiated at Water Level 1 or lower but will not be able to analyze all aspects of Pump Health.

REBOOT:

Will perform a Reboot of your device.

CHANGE WI-FI CREDENTIALS:

Use this function to change the Wi-Fi password or SSID used by your device.

NOTE: Follow the directions in the app for changing Wi-Fi credentials in device settings.

RESET TO FACTORY SETTINGS AND REBOOT:

NOTE: It is highly recommended that a Factory Reset be initiated from the device settings for your pump within the companion app while the device is connected to Wi-Fi. A Factory Reset can be initiated from the app by navigating to the setting for your pump and selecting "Deactivate Pump". Confirming will remove data for this pump from your account and will prompt the Pump Controller to perform a Factory Reset and Reboot.

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OPERATION

⚠ DANGER 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 surfaces or in water. Fatal electric shock could occur.

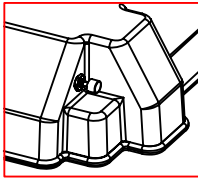
⚠ DANGER Risk of electrical shock! Use a GFCI receptacle to reduce the risk of fatal electric shock. Cutting the cord will void the warranty and make the pump inoperable.

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 accurate reading, steps "a" through "d" must be followed.

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



- a. After main pump and transformer are unplugged, a power off alert tone will sound for 30 seconds. The Power Failure Light should be illuminated.



- b. Press and release the self test button to activate the back up pump.
- c. When the pump stops, read the charge indicator lights:
Green: Indicates the battery is fully charged.
Yellow: Indicates battery partially charged, 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 sufficiently charged to run pump.

NOTE: Repeat steps B and C 2-3 times to ensure battery health and pump operation.

- d. Plug in transformer and main AC pump. The Power Failure light should go out.

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 power failure light will illuminate. The unit will reset and the light will go out automatically when the power is restored.
6. A three (3) second tone will sound every time the pump starts.

⚠ CAUTION Secure the basin cover and gasket to the basin to prevent debris from falling into the basin, prevent personal injury, and to contain gases and/ or odors.

AC TROUBLESHOOTING CHART

| Symptoms | Possible Cause(s) | Suggested Remedies |
|---|--|--|
| Pump will not start or run | <ol style="list-style-type: none"> 1. Water level too low 2. Blown fuse or tripped circuit breaker 3. Low supply voltage 4. Motor 5. Switch 6. Inlet screen clogged 7. Switch obstruction | <ol style="list-style-type: none"> 1. Water must be at the appropriate level to activate switch 2. If blown, determine cause and then either replace with proper sized fuse or reset breaker 3. Contact an electrician 4. Replace pump 5. Replace DC switch or replace unit if AC switch is broken 6. Remove debris 7. Remove obstruction to ensure free motion of switch |
| Pump starts and stops too often | <ol style="list-style-type: none"> 1. Back-flow of water from discharge pipe 2. Switch 3. Check valve not functioning properly or leaking | <ol style="list-style-type: none"> 1. Install check valve 2. Replace DC switch or replace unit if AC switch is broken 3. Remove and examine check valve for proper installation and free operation. Replace check valve if necessary. |
| Pump shuts off and turns on independently of switch (trips thermal overload protection) | <ol style="list-style-type: none"> 1. Excessive water temperature 2. Switch 3. Switch obstruction 4. Obstruction in discharge pipe 5. Low supply voltage | <ol style="list-style-type: none"> 1. Pump should not be used for water above 120° F 2. Replace DC switch or replace unit if AC switch is broken 3. Remove obstruction to ensure free motion of switch 4. Remove obstruction in discharge piping 5. Contact an electrician. |
| Pump trips GFCI | <ol style="list-style-type: none"> 1. Bad GFCI 2. Bad pump | <ol style="list-style-type: none"> 1. Contact an electrician to replace GFCI 2. Replace pump |
| Pump operates noisily or vibrates excessively | <ol style="list-style-type: none"> 1. Worn bearings 2. Impeller broken 3. Piping attachments to building structure too rigid or too loose | <ol style="list-style-type: none"> 1. Replace pump 2. Replace pump 3. Install rubber coupling (available at local hardware stores) to isolate pump vibration from discharge plumbing |
| Pump will not shut off | <ol style="list-style-type: none"> 1. Switch 2. Switch obstructions 3. Restricted discharge (obstruction in piping) 4. Excessive inflow or pump not properly sized for application | <ol style="list-style-type: none"> 1. Run system test. Also, make sure your Air Tube is not constricted or punctured. 2. Remove obstruction to ensure operation of switch 3. Remove obstruction from discharge piping 4. Recheck all sizing calculations to determine proper pump size |
| Pump operates but delivers little or no water | <ol style="list-style-type: none"> 1. Low supply voltage 2. Inlet screen clogged 3. Pump not properly sized for application 4. Check valve stuck closed or installed backwards 5. Shut off valve closed | <ol style="list-style-type: none"> 1. Contact an electrician 2. Remove debris 3. Recheck all sizing calculations to determine proper pump size 4. Remove and examine check valve for proper installation and free operation 5. Open valve |

NOTE: If connected to the app you can check for troubleshooting codes with recommendations for resolution.

DC TROUBLESHOOTING CHART

| Symptoms | Possible Cause(s) | Suggested Remedies |
|---|---|---|
| Pump will not start or run | <ol style="list-style-type: none"> 1. Connections not secure 2. Low or defective battery 3. Float switch stuck 4. Defective or blown fuse 5. Battery voltage below threshold, motor locked out | <ol style="list-style-type: none"> 1. Check all connections 2. Check battery and replace if low or defective 3. Make sure nothing is interfering with operation of switch 4. Check internal fuse located inside the box. Pull the transformer from the wall outlet and remove. If the fuse is blown, replace it with a 20 amp automotive type fuse 5. Wait for battery to recharge or replace with fresh battery |
| Motor hums but won't run | <ol style="list-style-type: none"> 1. Defective battery 2. Locked pump rotor | <ol style="list-style-type: none"> 1. Check battery and replace if low or defective 2. Check pump inlet for debris |
| Pump runs but pumps very little or no water | <ol style="list-style-type: none"> 1. Check valve missing or improperly installed 2. Obstruction in discharge pipe 3. Discharge length and/or height exceeds capacity of pump 4. Low or defective battery | <ol style="list-style-type: none"> 1. Check to make sure valves installed between primary pump discharge and backup sump pump are functioning properly 2. Check for obstruction and clear if necessary 3. If discharge is too high, a separate line may be required with a lower discharge height 4. Check battery and replace if low or defective |
| Pump cycles too frequently | <ol style="list-style-type: none"> 1. Check valve problem | <ol style="list-style-type: none"> 1. Check to make sure valves installed between primary pump discharge and backup sump pump are functioning properly |

ROUTINE SUMP MAINTENANCE

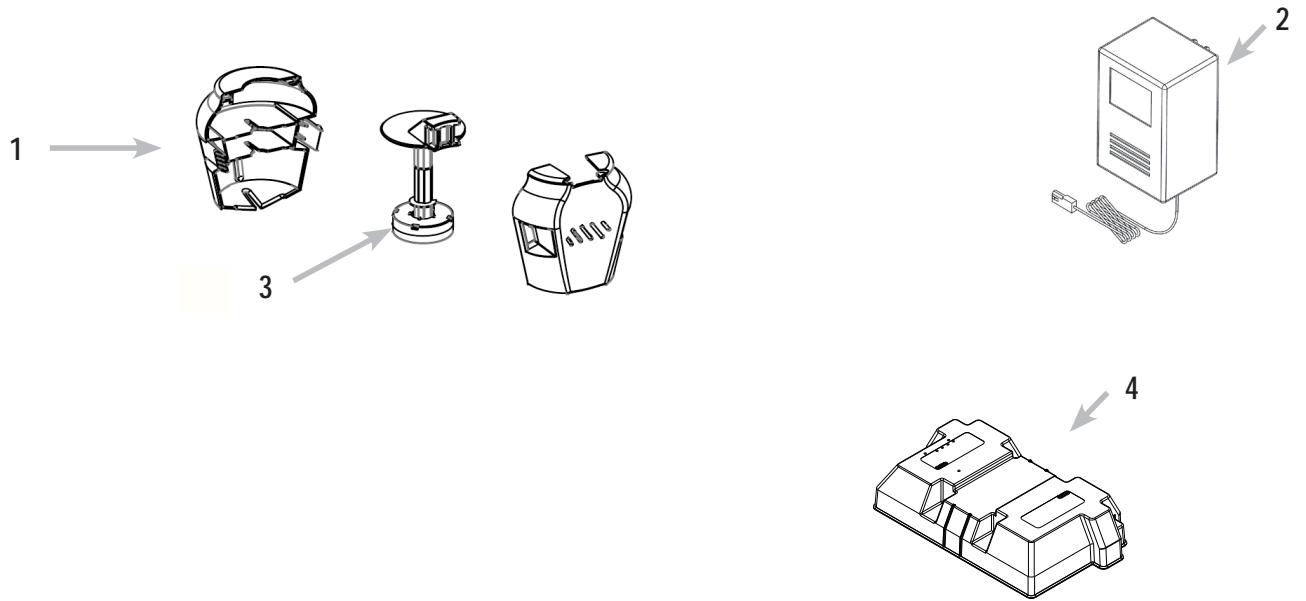
The pump should be inspected 3-4 times per year for pump movement or buildup of debris on the switch. Reposition pump if it has moved. Remove any debris that could interfere with the operation of the switch. Lack of proper routine maintenance will void warranty.

- Make sure the pump is plugged in to a working ground fault circuit interrupter (GFCI) outlet and the cord is in good shape. In damp areas, GFCI breakers may trip, effectively shutting off the sump pump. Check in on your sump pump and reset the GFCI if necessary.
- Ensure the pump is standing upright. Vibrations during operation can cause it to fall or tilt onto one side.
- Pour a bucket of water into the pit to make sure the pump starts automatically and the water drains quickly once the pump is on. If the pump doesn't start, have it serviced or replaced.
- Check the inlet screen and clear away any small stones or debris.

⚠ WARNING

LET PUMP COOL FOR A MINIMUM OF 2 HOURS BEFORE ATTEMPTING TO SERVICE. Submersible pumps contain oil that becomes pressurized and hot under normal operating conditions.

1. Submersible pump models have permanently lubricated bearings and require no additional lubrication.
2. Submersible pump contains dielectric oil for cooling. Dielectric oil can be harmful to the environment. Follow state environmental laws when disposing of oil.
3. The AC pump motor is equipped with automatic resetting thermal protector and may restart unexpectedly. Protector tripping is an indication of motor overloading as a result of operating the pump at low heads, excessively high water temperature, excessively high or low voltage, inadequate wiring, incorrect motor conditions or at the end of its life.



| REPAIR KITS | | |
|-------------|-----------------------------|------------|
| REF. NO. | DESCRIPTION | MODELS |
| 1 | FLOAT CAGE | 60187-001 |
| 2 | DC POWER TRANSFORMER | 60194-WYN1 |
| 3 | BACKUP PUMP FLOAT SWITCH | 30070-001 |
| 4 | LID ASSEMBLY | 60184-WYN1 |

**FOR REPLACEMENT
PARTS OR CUSTOMER SUPPORT,
CALL 1-800-237-0987**

Please provide following information:

- Model number
- Serial number on cord tag (not to be removed)
- Part description and number as shown in parts list

LIMITED WARRANTY

This Limited Warranty can also be found online at www.waynepumps.com and in the documentation we provide with the Product.

WHAT DOES THIS WARRANTY COVER?

This Limited Warranty covers defects in materials and workmanship of The EcoWater Basement Protection System (a "Product") manufactured by Wayne Water ("we") for the Warranty Period as defined below.

WHO MAY USE THIS WARRANTY?

This Limited Warranty is extended only to the consumer who originally purchased the Product ("you"). It does not extend to any subsequent owner or other transferee of the Product.

HOW LONG DOES THE COVERAGE LAST?

This Limited Warranty starts on the date of your purchase and lasts for ten years; however, if you cannot establish proof of purchase from an authorized dealer in the form of a sales receipt or other documents that establish proof purchase from an authorized dealer ("Proof of Purchase"), then this Limited Warranty will start on the date the Product was manufactured and last for ten years (the "Warranty Period"). The Warranty Period is not extended if we repair or replace the Product.

We limit the duration and remedies of all implied warranties, including without limitation the warranties of merchantability and fitness for a particular purpose to the duration of the Warranty Period. Some states do not allow limitations on how long an implied warranty lasts so this limitation may not apply to you.

WHAT ARE YOUR REMEDIES?

With respect to any defective Product during the Warranty Period, we will repair or replace such Product (or the defective part) free of charge. We will also pay for shipping fees to return the repaired or replacement Product to you.

WHAT DOES THIS WARRANTY NOT COVER?

This Limited Warranty does not cover any damage arising from (a) external causes such as accident, abuse, misuse, neglect, or other events beyond our reasonable control, (b) improper installation, improper maintenance, improper use, or failure to follow the Product instructions, (c) modifications, or (d) normal wear and tear.

The remedies described in this Limited Warranty above are your sole and exclusive remedies for any breach of this Limited Warranty. Also, consequential and incidental damages are not recoverable under this Limited Warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

HOW DO YOU OBTAIN WARRANTY SERVICE?

To obtain warranty service, you must call 1-800-237-0987 during the Warranty Period to obtain a Return Authorization Number ("RAN") and instructions to return the Product to us or an authorized dealer. Be prepared to provide the Product's model number and serial number and Proof of Purchase. No warranty service will be provided without an RAN. You will be responsible for all shipping fees required to deliver the Product to us or our authorized dealer.

HOW DOES STATE LAW APPLY?

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

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

MODEL NO. _____ SERIAL NO. _____ INSTALLATION DATE _____

NOTES
