

**NOTICE TO INSTALLER: Instructions must remain with installation.**

ZT0181\_Ec  
0818  
Supersedes  
0318

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Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.





**50/60 Hz**

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**INSTALLATION INSTRUCTIONS  
119 SYSTEM  
PREINSTALLATION CHECKLIST**

MODEL NO. _____
DATE CODE: _____
DATE INSTALLED: _____

1. Inspect all materials. Occasionally, products are damaged during shipment. If the unit is damaged, contact your dealer before using. **Do Not** remove the test plugs from the pump.
2. Carefully read all the literature provided to familiarize yourself with specific details regarding installation and use before attempting the installation. These materials should be retained for future reference.

 <div style="border: 1px solid black; padding: 2px; display: inline-block;"><b>WARNING</b></div> SEE BELOW FOR LIST OF WARNINGS	 <div style="border: 1px solid black; padding: 2px; display: inline-block;"><b>CAUTION</b></div> SEE BELOW FOR LIST OF CAUTIONS
<ol style="list-style-type: none"> <li>1. <b>Make sure there is a properly grounded receptacle available.</b> All pumps are furnished with provisions for proper grounding to protect you against the possibility of electrical shock. <b>(SEE WARNING BELOW)</b></li> <li>2. Make certain that the receptacle is within the reach of the pump's power supply cord. <b>DO NOT USE AN EXTENSION CORD.</b> Extension cords that are too long or too light do not deliver sufficient voltage to the pump motor. But, more important, they could present a safety hazard if the insulation were to become damaged or the connection end were to fall into the sump.</li> <li>3. <b>Make sure the pump electrical supply circuit is equipped with fuses or circuit breakers of proper capacity.</b> A separate branch circuit is recommended, sized according to governing electrical code for the current shown on the pump nameplate.</li> <li>4. <b>Testing for ground.</b> As a safety measure, each electrical outlet should be checked for ground using a circuit analyzer which will indicate if the power, neutral and ground wires are correctly connected to your outlet. If they are not, call a qualified licensed electrician.</li> <li>5. <b>For Added Safety.</b> Use of a residual current device with an operating current not higher than 30 mA is recommended.</li> <li>6. <b>FOR YOUR PROTECTION, ALWAYS DISCONNECT PUMP FROM ITS POWER SOURCE BEFORE HANDLING. DO NOT UNDER ANY CIRCUMSTANCES REMOVE THE GROUND PIN.</b> The 3-prong plug must be inserted into a mating 3-prong grounded receptacle. If the installation does not have such a receptacle, it must be changed to the proper type, wired and grounded in accordance with the governing electrical code and all applicable local codes and ordinances.</li> <li>7. <b>"Risk of electrical shock"</b> Do not remove power supply cord and strain relief or connect conduit directly to the pump.</li> <li>8. Installation and servicing of electrical circuits and hardware should be performed by a qualified licensed electrician.</li> <li>9. Pump installation and servicing should be performed by a qualified person.</li> <li>10. Risk of electric shock - These pumps have not been investigated for use in swimming pool and marine areas.</li> <li>11. If the supply cable is damaged, it must be replaced by the manufacturer or its technical service or similarly qualified persons in order to avoid a hazard.</li> <li>12. The appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction to concerning use of the appliance by a person responsible for their safety.</li> <li>13. Pump is not intended for potable water due to possible contamination by oil contained in the pump.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check to be sure your power source is adequate to handle the amperage requirements of the motor as indicated on the pump or unit I.D. tag.</li> <li>2. All plumbing (discharge and carbon filter vent) must be installed to meet local codes. <b>Unit must be vented. Do not use an automatic plumbing vent device.</b></li> <li>3. Maximum operating temperature must not exceed 104°F (40°C).</li> <li>4. <b>CHECK VALVE MUST BE USED TO REDUCE UNNECESSARY CYCLING OF PUMP.</b></li> <li>5. Dewatering pumps are not designed or intended for handling raw sewage.</li> <li>6. For health reasons, do not unplug, turn off, or disable pump and use pump tank system as a way to fill up a sink or laundry tray, etc.</li> </ol> <p style="text-align: center;"><b>REFER TO WARRANTY ON PAGE 2.</b></p>

P/N 082960

## Limited Warranty

Manufacturer warrants, to the purchaser and subsequent owner during the warranty period, every new product to be free from defects in material and workmanship under normal use and service, when properly used and maintained, for a period of one year from date of purchase by the end user, or 18 months from date of original manufacture of the product, whichever comes first. Parts that fail within the warranty period, one year from date of purchase by the end user, or 18 months from the date of original manufacture of the product, whichever comes first, that inspections determine to be defective in material or workmanship, will be repaired, replaced or remanufactured at Manufacturer's option, provided however, that by so doing we will not be obligated to replace an entire assembly, the entire mechanism or the complete unit. No allowance will be made for shipping charges, damages, labor or other charges that may occur due to product failure, repair or replacement.

This warranty does not apply to and there shall be no warranty for any material or product that has been disassembled without prior approval of Manufacturer, subjected to misuse, misapplication, neglect, alteration, accident or act of God; that has not been installed, operated or maintained in accordance with Manufacturer's installation instructions; that has been exposed to outside substances including but not limited to the following: sand, gravel, cement, mud, tar, hydrocarbons, hydrocarbon derivatives (oil, gasoline, solvents, etc.), or other abrasive or corrosive substances, wash towels or feminine sanitary products,

etc. in all pumping applications. The warranty set out in the paragraph above is in lieu of all other warranties expressed or implied; and we do not authorize any representative or other person to assume for us any other liability in connection with our products.

Contact authorized distributors to obtain any needed repair or replacement of part(s) or additional information pertaining to our warranty.

**MANUFACTURER EXPRESSLY DISCLAIMS LIABILITY FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES OR BREACH OF EXPRESSED OR IMPLIED WARRANTY; AND ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND OF MERCHANTABILITY SHALL BE LIMITED TO THE DURATION OF THE EXPRESSED WARRANTY.**

Some country do not allow limitations on the duration of an implied warranty, so the above limitation may not apply to you. Some country do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from country to country.

**In those instances where damages are incurred as a result of an alleged pump failure, the Homeowner must retain possession of the pump for investigation purposes.**

## Service Checklist



**▲ WARNING** ELECTRICAL PRECAUTIONS- Before servicing a pump, always shut off the main power breaker and then unplug the pump - making sure you are not standing in water and 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.

**▲ WARNING** Submersible pumps can become pressurized under normal operating conditions — allow 2½ hours after disconnecting before attempting service.

CONDITION	COMMON CAUSES
A. Pump will not start or run.	Check fuse, low voltage, overload open, open or incorrect wiring, open switch, impeller or seal bound mechanically, defective capacitor or relay when used, motor or wiring shorted. Float assembly held down. Switch defective, damaged, or out of adjustment.
B. Motor overheats and trips overload or blows fuse.	Incorrect voltage, negative head (discharge open lower than normal) impeller or seal bound mechanically, defective capacitor or relay, motor shorted.
C. Pump starts and stops too often.	Float switch tether length too short, float too tight on rod, check valve stuck, or none installed in long distance line, overload open, switch defective.
D. Pump will not shut off.	Debris under float assembly, float or float rod bound by basin sides or other, switch defective, damaged or out of adjustment.
E. Pump operates but delivers little or no water.	Check strainer housing, discharge pipe, or if check valve is used, the vent hole must be clear. Discharge head exceeds pump capacity. Low or incorrect voltage. Incorrect motor rotation. Capacitor defective. Incoming water containing air or causing air to enter pumping chamber.
F. Drop in head and/or capacity after a period of use.	Increased pipe friction, clogged line or check valve. Abrasive material and adverse chemicals could possibly deteriorate impeller and pump housing. Check line. Remove base and inspect.
G. If tank or fittings leak.	Carefully tighten pipe joints (use pipe dope) and screws. Check gasket location, tighten lid evenly. Do not over tighten fittings or screws.

**If the above checklist does not uncover the problem, consult the factory - Do not attempt to service or otherwise disassemble pump. Service must be by Zoeller Authorized Service Stations.**

## Helpful Hints For Easy Installation

1. Read all instructions before beginning installation.
2. Be certain that basin is on a firm level surface.
3. Do not use an automatic plumbing vent device.
4. Always use a check valve on the discharge line.
5. Test operation of pump per STEP 3.
6. Always provide some means to disconnect basin from plumbing for maintenance purposes.
7. Run unit at least once a month to verify proper operation.
8. The model number and date code can be found on the lid warning label.
9. Plug pump into a properly grounded GFCI receptacle.

## Do's And Don'ts For Installing A Unit

1. DO read all installation material included with the pump.
2. DO inspect unit for any visible damage caused by shipping. Contact dealer if unit appears to be damaged.
3. DO always disconnect pump from power source before handling. DO always connect to a separately protected and properly grounded ground fault protected circuit. DO NOT ever cut, splice or damage power cord. DO NOT carry or lift pump by its power cord. DO NOT use an extension cord.
4. DONOT use a discharge pipe smaller than the pump discharge size.
5. DO test pump immediately after installation to be sure that the system is working properly.
6. DO review all applicable local and national codes and verify that the installation conforms to each of them.

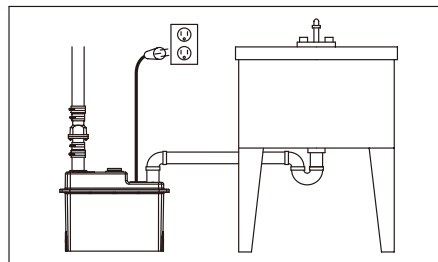
## STEP 1

## Determine Installation Configuration

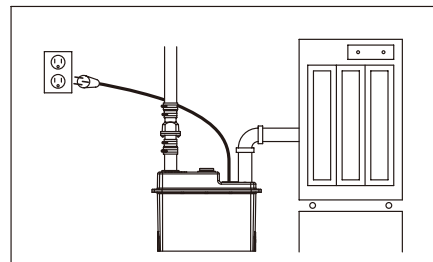
**NOTE: This preassembled unit is designed for use with an external trap.**

Figure 1 is a typical configuration for installation of the drain system.

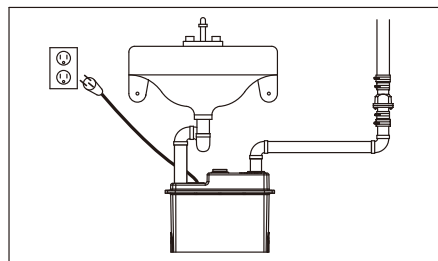
The actual configuration will vary depending on your cabinet and sink configuration.



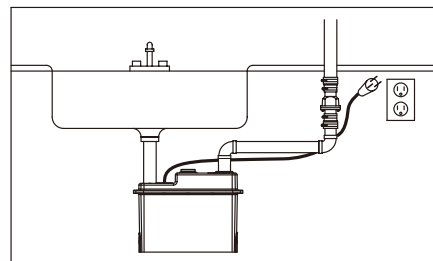
Laundry Tray Pump



Dehumidifier or Air Conditioner

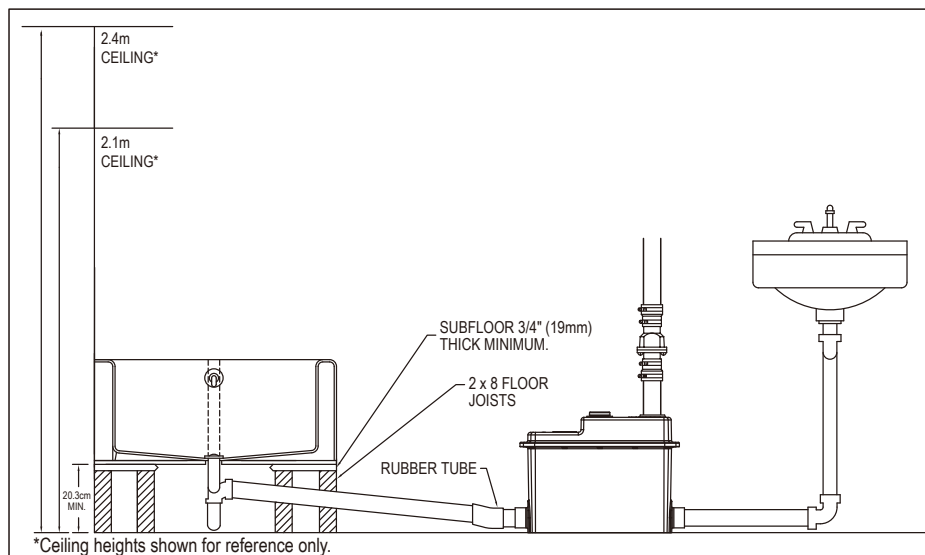


Lavatory Sink



Wet Bar with Sink

EA0085



\*Ceiling heights shown for reference only.

EA0086

Figure 1 STANDARD INSTALLATION

## STEP 2

## Final Assembly

**NOTE: External plumbing configuration will vary depending on the location of basin, location of main stack and available space.**

Place the basin assembly in its final position and complete plumbing.

Secure all connections shown in Figure 2.

### CAUTION

The two optional side inlets are available for connecting 1" pipe. Simply reverse the pipe adaptor, if provided, and cut out the molded-in plug at the provided indentation.

Cut cleanly and remove burrs and rough edges to avoid clogging.

Hand tight only for plastic nut. No wrench allows. If leakage occurred, please replace the o-ring.

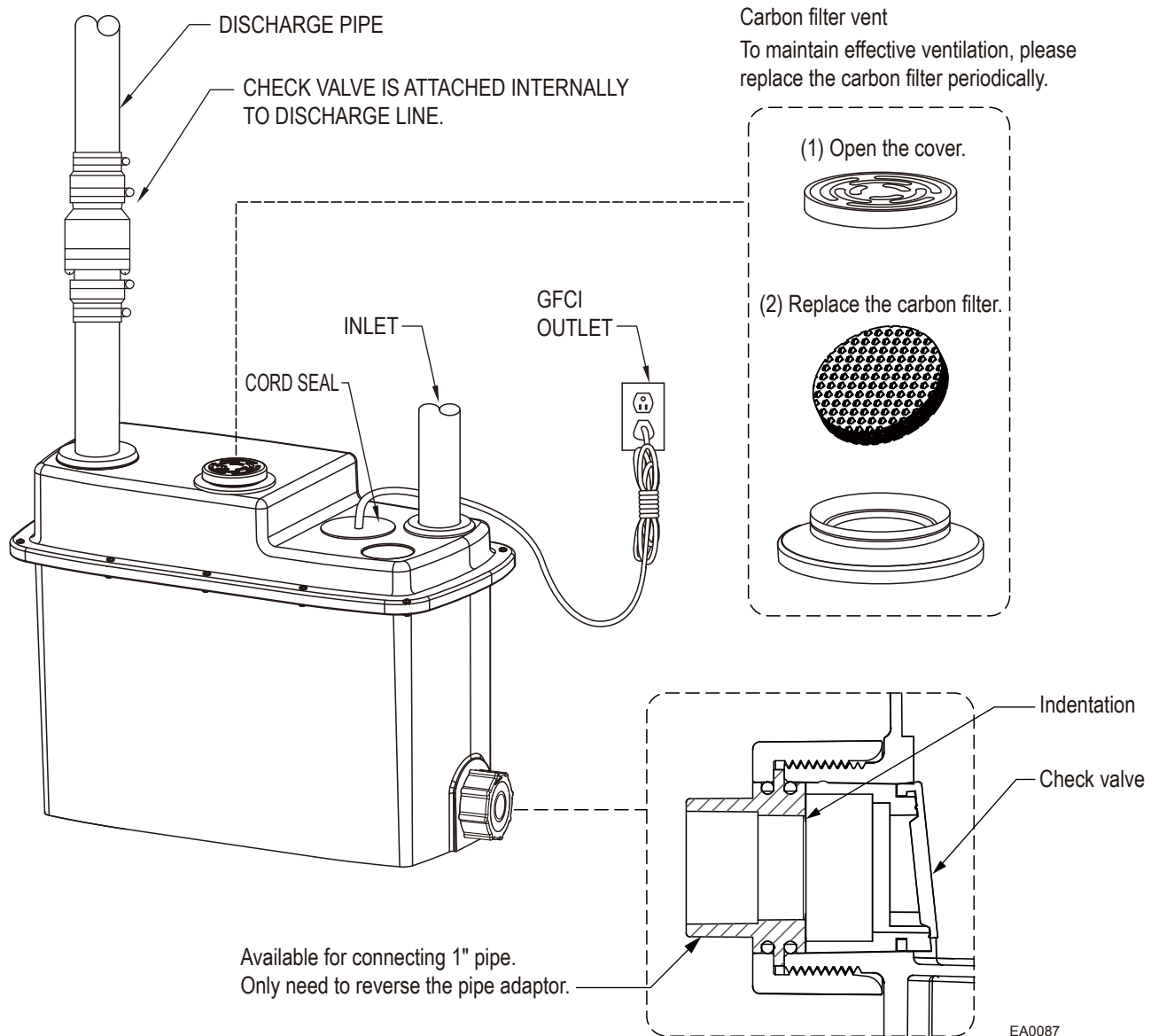


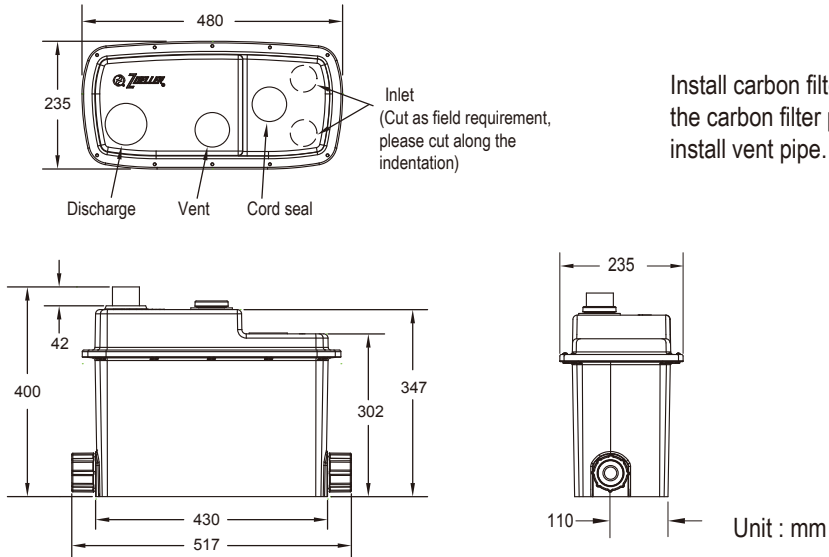
Figure 2 STANDARD INSTALLATION

## STEP 3

## Initial Testing of Drain Basin System

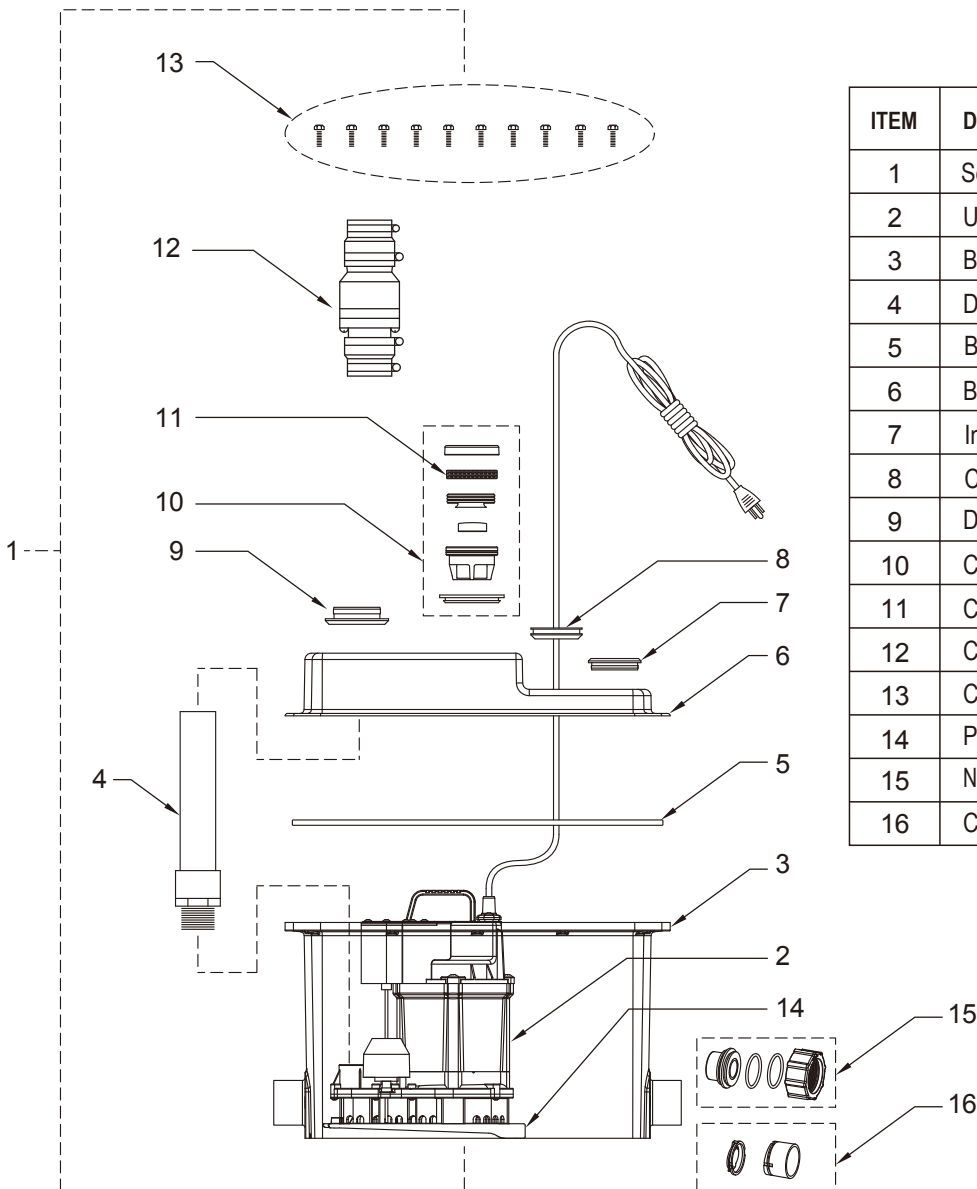
1. Plug the cord into a properly grounded GFCI receptacle.
2. Fill with water until the pump is running.
3. Verify that the pump starts and stops.
4. Check the discharge line for leaks as the pump empties the basin.
5. Unplug the cord.
6. Slowly fill the basin with water until full.
7. Check all plumbing for leaks as the basin fills.
8. Repeat steps 1 through 7 as necessary to ensure proper operation.
9. If problems persist, refer to the troubleshooting guide located on page 2 of this manual.

## Dimensions



EA0075

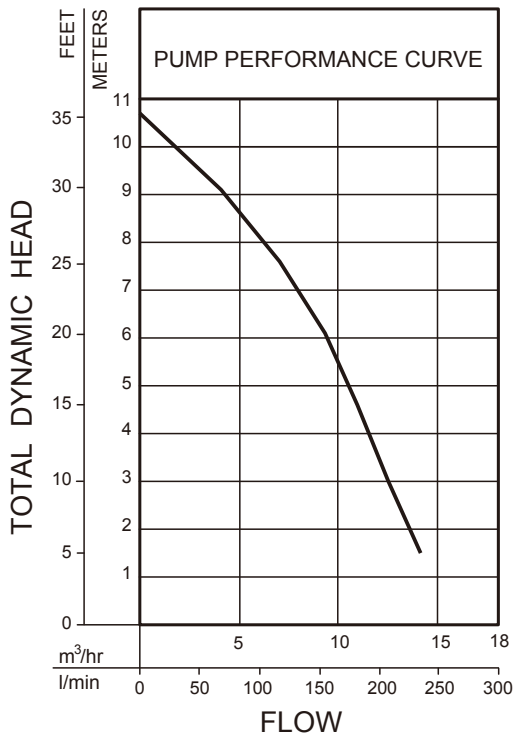
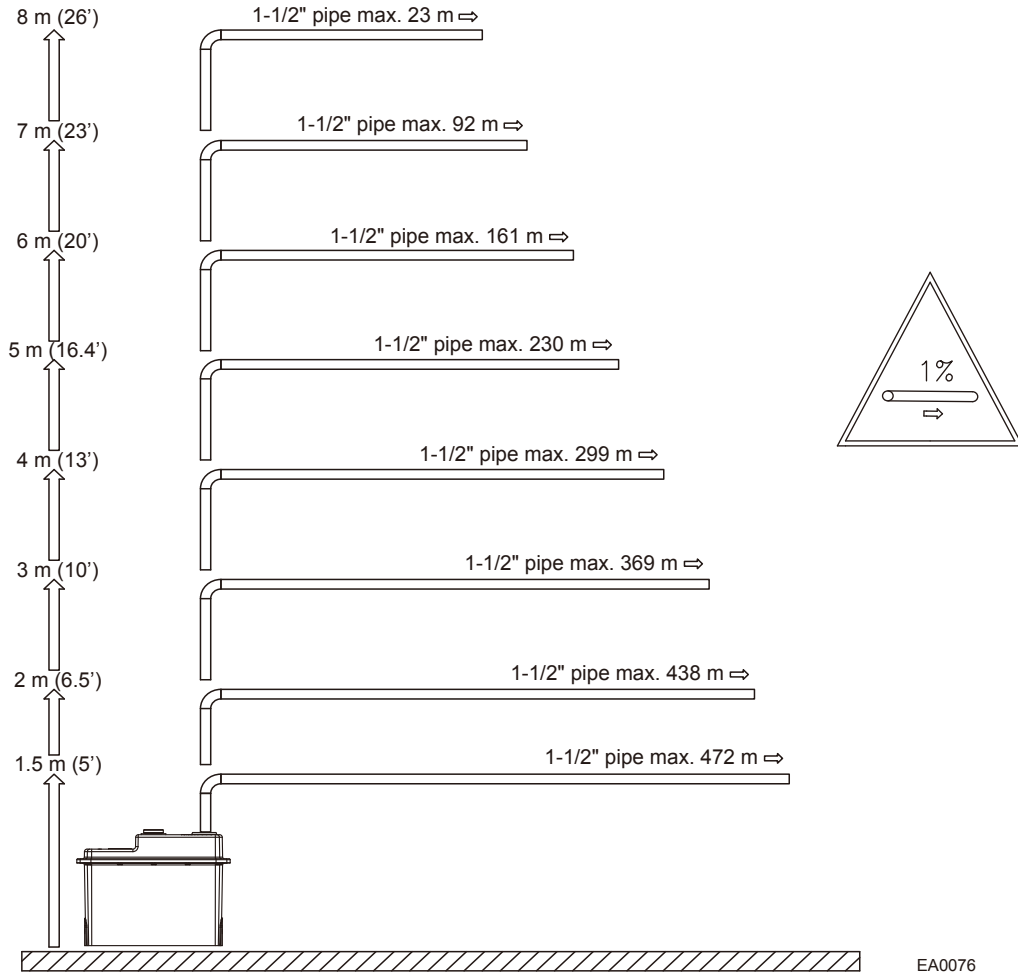
## Illustrated Parts Breakdown



ITEM	DESCRIPTION	QTY
1	Sewage Removal System	1
2	U88	1
3	Basin - Tank	1
4	Discharge Pipe	1
5	Basin Seal	1
6	Basin - Lid	1
7	Inlet seal	1
8	Cord seal	1
9	Discharge seal	1
10	Carbon filter vent	1
11	Carbon filter	1
12	Check valve	1
13	Cover screw	10
14	Pump rubber fixture	1
15	Nut with straight pipe adapter	2
16	Check valve	2

EA0088

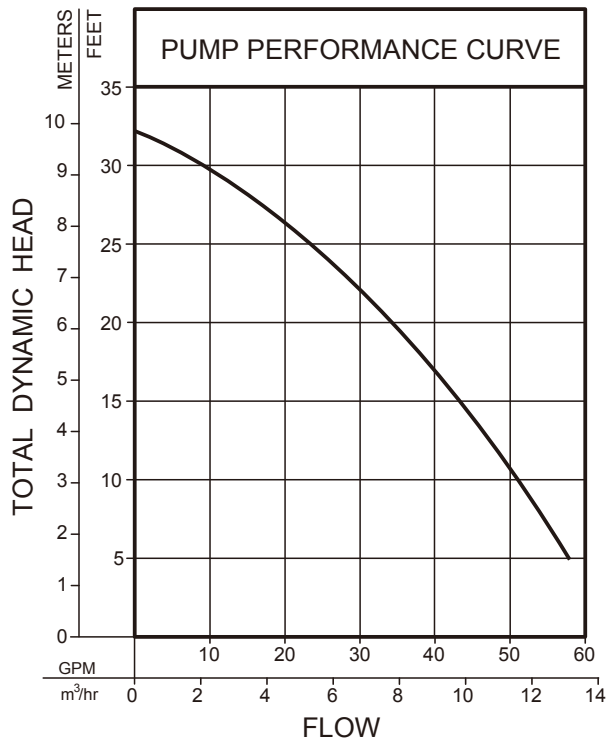
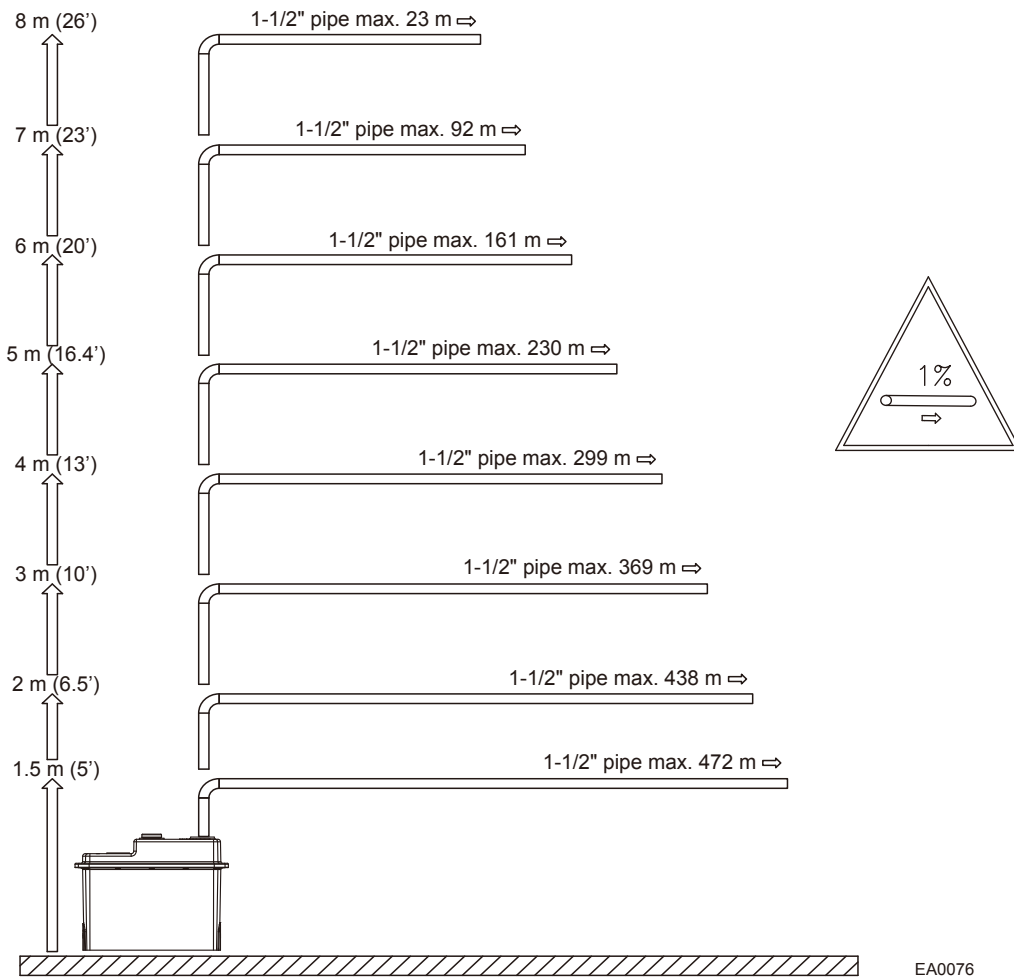
# Performance Characteristics (50Hz)



MODEL		119	
Meters	Feet	m <sup>3</sup> /hr	L/min
1.5	5	14.1	235
3.0	10	12.5	208
4.6	15	10.9	182
6.1	20	9.3	155
7.6	25	7.0	117
9.1	30	4.0	68
Shut-off Head:		10.7m (35 ft.)	

081185

# Performance Characteristics (60Hz)



MODEL		119	
Meters	Feet	m <sup>3</sup> /hr	L/min
1.5	5	13.2	220
3.0	10	11.8	197
4.6	15	10	167
6.1	20	7.7	129
7.6	25	5.5	91
9.1	30	2.3	38
Shut-off Head:		9.76m (32 ft.)	

082887