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



**60 Hz**

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# INSTALLATION INSTRUCTIONS

## 910 Package System

SEWAGE

222, 422

### PREINSTALLATION CHECKLIST - ALL INSTALLATIONS

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



#### WARNING

SEE BELOW FOR LIST OF WARNINGS

1. To reduce the risk of electrical shock, a properly grounded receptacle or control box must be installed in accordance with the governing codes. Never remove ground pin from plug.
2. Make certain that the receptacle is within the reach of the pump's power supply cord. **DO NOT USE AN EXTENSION CORD.** Extension cords that are too long or too tight 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.
3. Make sure the pump's electrical supply circuit is equipped with fuses or circuit breakers of proper capacity. A separate branch circuit is recommended, sized according to the governing electrical codes for the current shown on the pump name plate.
4. **Testing for ground.** 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.
5. **FOR YOUR PROTECTION, ALWAYS DISCONNECT PUMP FROM ITS POWER SOURCE BEFORE HANDLING.** If pump is wired direct, de-energize the circuit at the control box. **DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE GROUND PIN.** Wear insulated protective shoes and do not stand in water. Pumps equipped with a grounded plug are designed to help protect against electrical shock. A properly grounded receptacle or control box must be installed in accordance with governing codes.
6. Installation and servicing of the pump's electrical circuits and hardware should only be performed by a qualified licensed electrician.
7. Installation and maintenance of this appliance is not intended for persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
8. **Risk of electrical shock.** Do not remove power supply cord and strain relief or connect conduit directly to the pump. If the supply cable is damaged, it must be replaced by an authorized Zoeller Representative.
9. Pump may contain oil which becomes pressurized and hot when operating. Allow 2-1/2 hours after disconnecting before attempting service.
10. Pump is not intended for potable water due to possible contamination by oil contained in the pump.
11. **Risk of electric shock.** These pumps have not been investigated for use in swimming pools and marine areas.



#### CAUTION

SEE BELOW FOR LIST OF WARNINGS

1. This unit is not designed to handle any material larger than the pump's solids-passing ability.
  - 422 series pumps are designed to pass 38 mm (1-1/2") spherical solids.
  - 222 series sewage pumps are designed to pass 50 mm (2") spherical solids.
2. Check to be sure your power source is capable of handling the voltage requirements of the motor, as indicated on the pump name plate.
3. All plumbing (discharge and vent lines) must be installed to meet local codes. Unit must be vented. **DO NOT USE AN AUTOMATIC PLUMBING VENT DEVICE SIMILAR TO A "PROVENT".** Some states require this product to be installed by a licensed plumber.
4. The installation of variable level float switches is the responsibility of the installing party, and care should be taken that the tethered float switch will not hang up on the pump apparatus or pit peculiarities and is secured so that the pump will shut off. It is recommended to use rigid piping and fittings and the pit be 45 cm (18") or larger in diameter.
5. Vent hole. It is necessary that all submersible sump, effluent, and sewage pumps capable of handling various sizes of solid waste be of the bottom intake design to reduce clogging and seal failures. If a check valve is incorporated in the installation, a 5 mm (3/16") vent hole must be drilled in the discharge pipe below the check valve and pit cover to purge the unit of trapped air. Vent hole should be checked periodically for clogging. The vent hole on a High Head application may cause too much turbulence. You may not want to drill one. If you choose not to drill a vent hole, be sure the pump case and impeller is covered with liquid before connecting the pipe to the check valve. **NOTE: THE HOLE MUST BE BELOW THE BASIN COVER AND CLEANED PERIODICALLY.** Water stream will be visible when pump is operating.
6. Pump should be checked frequently for debris and/or build up which may interfere with the float "on" or "off" position.
7. Maximum operating temperature for standard model pumps must not exceed 54 °C (130 °F) for cast iron pumps, or 40 °C (104 °F) for pumps with plastic motor housings.
8. Do not operate a pump in an application where the Total Dynamic Head is less than the minimum Total Dynamic Head listed on the Pump Performance Curves.
9. 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.
10. **CHECK VALVE MUST BE USED TO REDUCE UNNECESSARY CYCLING OF PUMP.**
11. This system must be installed above the water table. Groundwater outside the basin will cause it to collapse.

REFER TO WARRANTY ON PAGE 2.

# 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 two years from date of purchase by the end user, that inspections determine to be defective. Proof of purchase is required. 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. Fill and flush mechanism are guaranteed as per OEM warranty only and vitreous china are guaranteed only for a factory defect. 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 uncontrolled act of nature; 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 any other abusive entity, 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 jurisdictions do not allow limitations on the duration of an implied warranty, so the above limitation may not apply to you. Some jurisdictions 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 jurisdiction to jurisdiction.

**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.**

## EASY DO'S & DON'T'S FOR INSTALLING UNIT

- DO** read all installation material with the unit.
- DO** inspect unit for any visible damage caused by shipping. Contact dealer if unit appears to be damaged.
- DO** remove all debris from the basin. Be sure that the pump will have a hard, level surface beneath it. **DO NOT** install on sand, gravel or dirt.
- DO** be sure that the area is large enough to allow proper clearance for the level control switch(es) to operate properly.
- DO Always Disconnect Pump From Power Source Before Handling.** **DO** always connect to a separately protected and properly grounded circuit. **DO NOT** ever cut, splice, or damage power cord (only splice in a watertight junction box). **DO NOT** carry or lift pump by its power cord. **DO NOT** use an extension cord.
- DO** install a check valve and a union in the discharge line. **DO NOT** use a discharge pipe smaller than the pump discharge.
- DO NOT** utilize this unit for pumping gasoline or other hazardous liquids.
- DO** test pump immediately after installation to be sure the system is working properly.
- DO** review all applicable governing codes and verify that the installation conforms to each of them.
- DO** consult manufacturer for clarifications or questions.
- DO** inspect and test system for proper operations at least every 3 months.

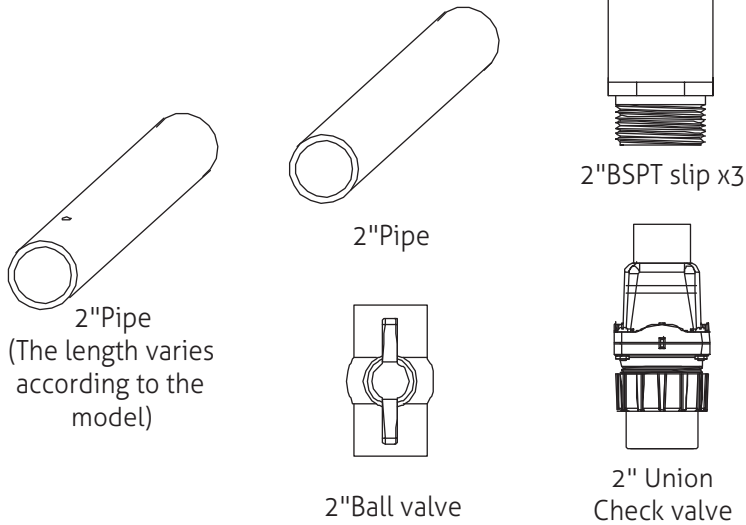
## SERVICE CHECKLIST

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, motor or wiring shorted. Float assembly held down. Switch, 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, motor shorted.
C. Pump starts and stops too often.	Float switch tether length too short, check valve stuck open, or none installed in long distance line, overload open, bidding, sump pit too small.
D. Pump will not shut off.	Debris under float assembly, float bound by basin sides or other, switch, damaged or out of adjustment.
E. Pump operates but delivers little or no water.	Check inlet, strainer housing, discharge pipe, and vent holes for obstructions. Discharge head exceeds pump capacity. Low or incorrect voltage. Incoming water containing air or causing air to enter pumping chamber. Incorrect motor rotation. (3 phase pumps only)
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.

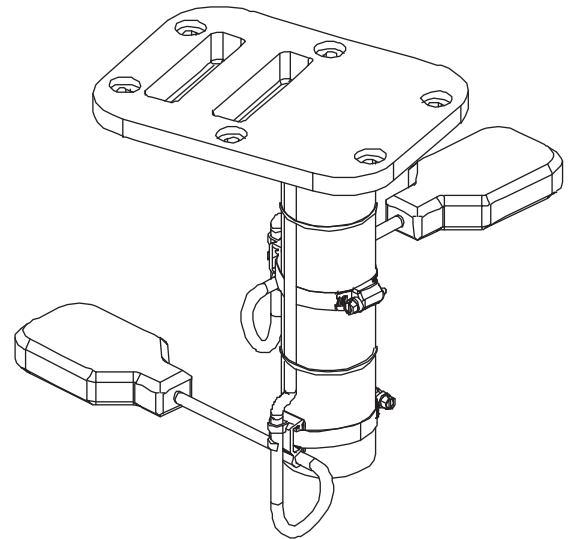
**If the above checklist does not reveal the problem, consult the factory. Do not attempt to service or otherwise disassemble pump. Service must be performed by an authorized Zoeller Company representative.**

# ACCESSORIES DESCRIPTION (Basin 550x400x450 mm)

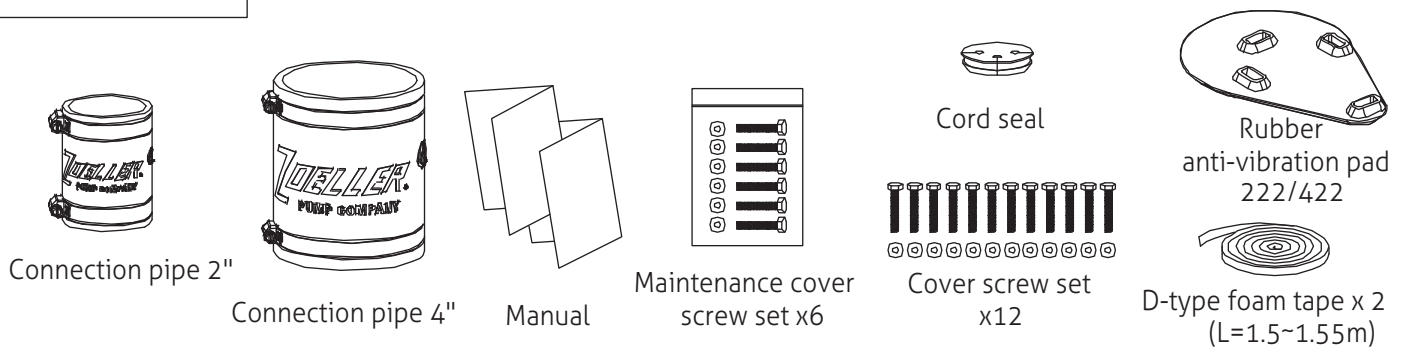
## Accessories for water outlet/vent



## Float group



## External accessories

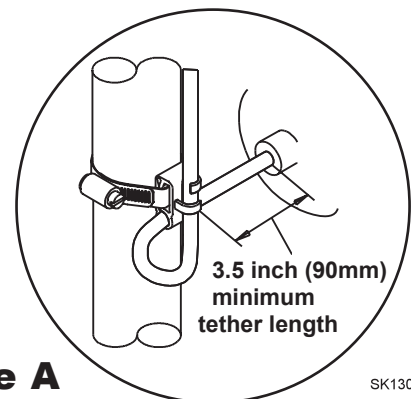


## MOUNTING THE SWITCH

1. Place the cord into the clamp as shown as shown in Figure A.
2. Locate clamp at desired activation level and secure the clamp to the discharge pipe as shown in Figure A.

**Note:** Do not install cord under hose clamp.

3. Tighten the hose clamp using screwdriver. Over tightening may result in damage to the plastic clamp. Make sure the float cable is not allowed to touch the excess hose clamp band during operation.



**Figure A**

SK1301D

**WARNING:** Tethering switches below minimum tether length can effect switch operation and will reduce the fatigue life of the cable.

## WARNING



## ELECTRICAL SHOCK HAZARD

Disconnect power before installing or servicing this product. A qualified service person must install and service this product according to applicable electrical and plumbing codes.

## WARNING



## EXPLOSION OR FIRE HAZARD

Do not use this product with flammable liquids. Do not install in hazardous locations as defined by National Electrical Code, ANSI/NFPA 70.

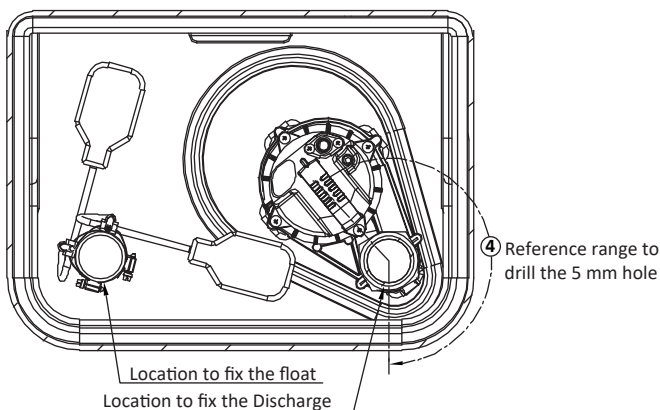
Failure to follow these precautions could result in serious injury or death. Replace product immediately if switch cable becomes damaged or severed. Keep these instructions with warranty after installation. This product must be installed in accordance with National Electric Code, ANSI/NFPA 70 so as to prevent moisture from entering or accumulating within boxes, conduit bodies, fittings, float housing, or cable.

# RECOMMENDED INSTALLATION FOR ALL APPLICATIONS

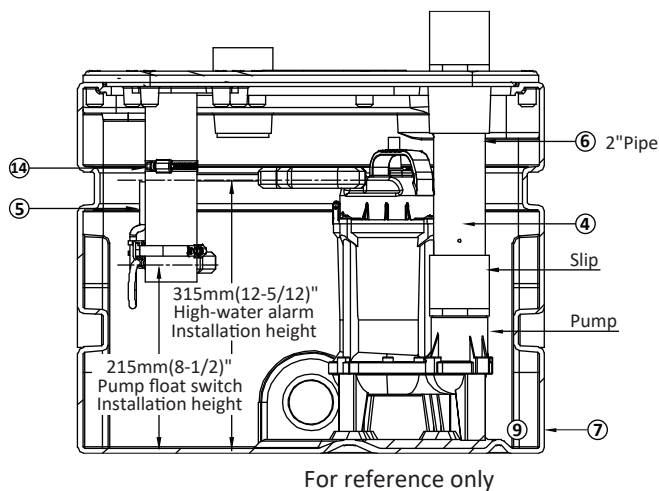
## (Basin 550x400x450 mm)

- ① Electrical wiring and protection must be in accordance with governing electrical code and any other applicable local electrical requirements.
- ② Install proper Zoeller unichek (combination union and check valve), preferably just above the basin to allow easy removal of the pump for cleaning or repair.
- ③ All installations require a basin cover to prevent debris from falling into the basin and to prevent accidental injury.
- ④ When a Unichek is installed, drill a 5 mm dia. hole in the discharge pipe even with the top of the pump. To avoid the water stream impact on the float operation, the hole location should avoid facing the float. To reduce the voice from water stream hitting basin, drill the hole below "off" point is recommended.  
**NOTE: THE HOLE MUST ALSO BE BELOW THE BASIN COVER AND CLEANED PERIODICALLY.** (High Head unit see #3 under "Caution" on front page). Water stream will be visible from this hole during pump run periods.
- ⑤ Securely tape or clamp power cord to discharge pipe, clear of the float mechanism(s).
- ⑥ Use full-size discharge pipe.
- ⑦ Basin must be in accordance with applicable codes and specifications.
- ⑧ Pump must be level and float mechanism(s) clear of sides of basin before starting pump.
- ⑨ Basin must be clean and free of debris after installation.
- ⑩ Gate Valve or Ball Valve to be supplied by installer and installed according to any and all codes.
- ⑪ Locate float switches as shown in sketches. The best place for the "off" point is above the motor housing and positioned 180° from the inlet. Never put "off" point below discharge on pump (Sewage & Effluent only). **NOTE: FOR AUTOMATIC PUMPS, USE DEWATERING INSTALLATION SKETCH.**
- ⑫ Gas tight seals required to contain gases and odors.
- ⑬ Vent gases and odors to the atmosphere through vent pipe.
- ⑭ **Keep switch cable outside hose clamp.**

### STEP 1

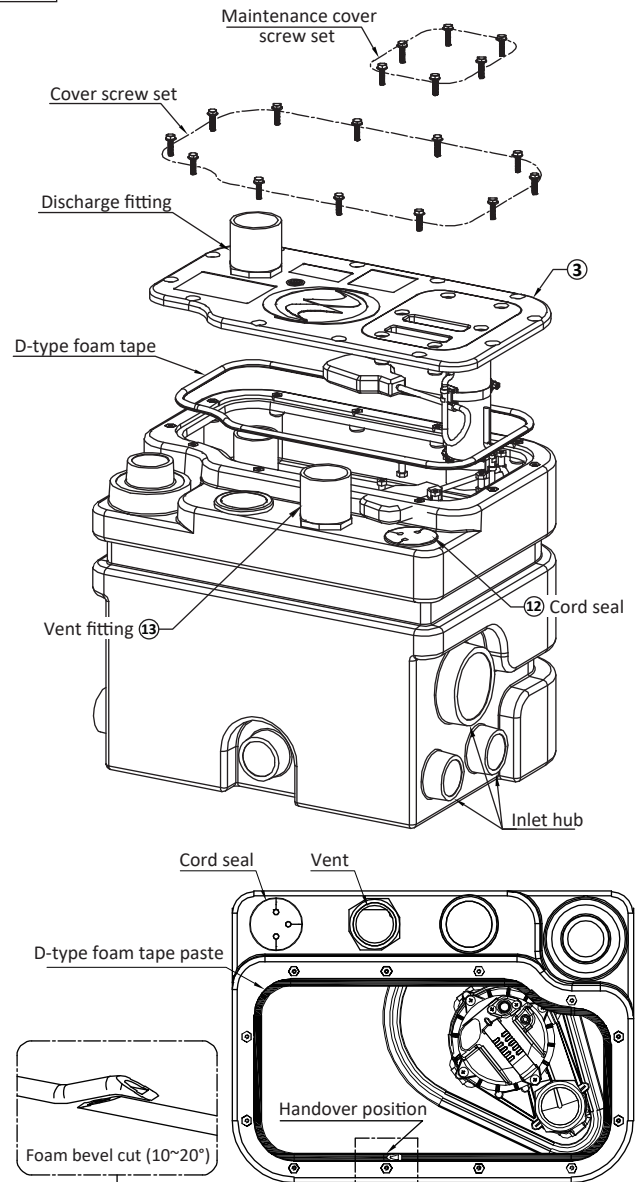


Apply glue on every piping connection.



EA0171

### STEP 2



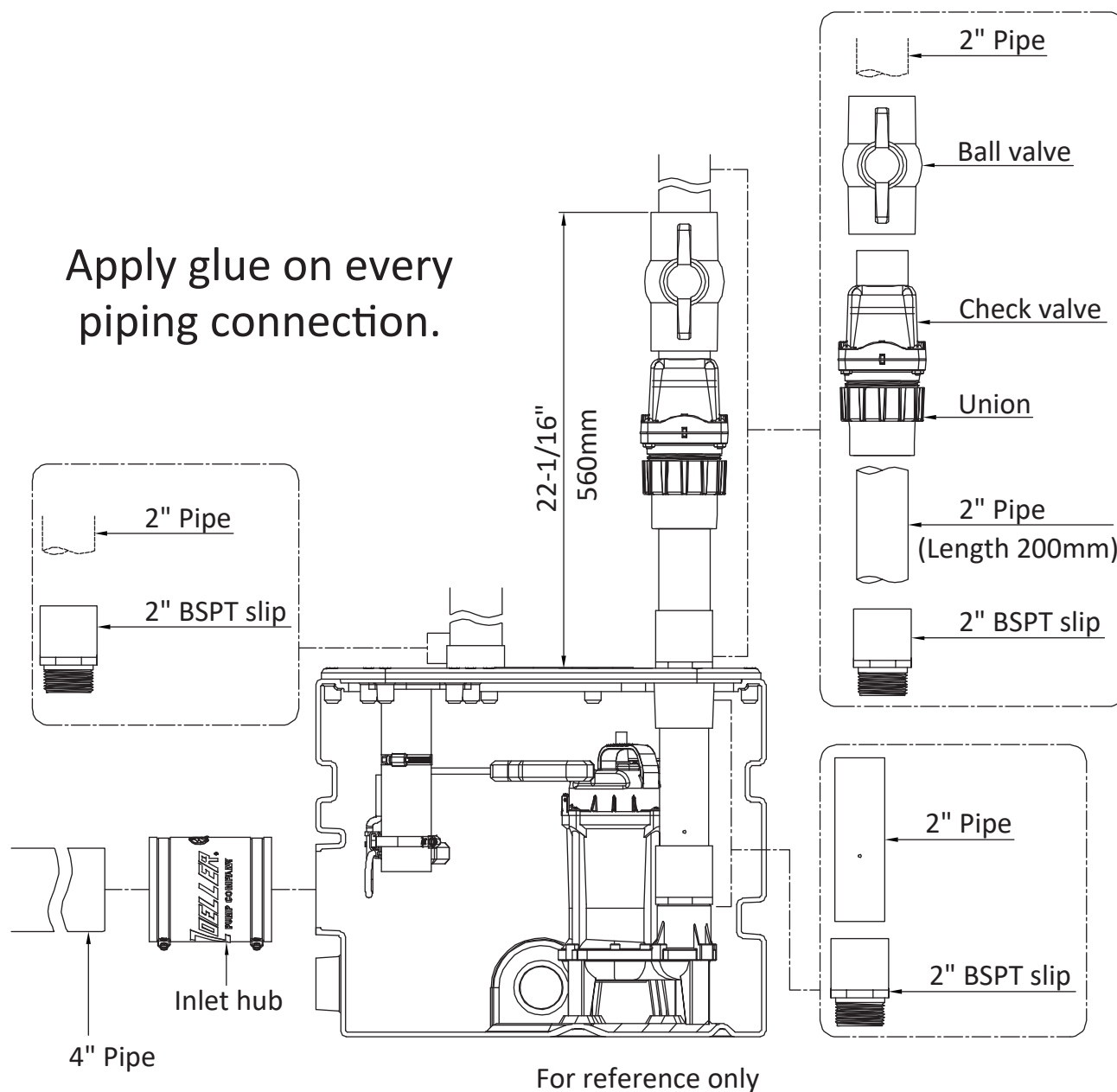
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# RECOMMENDED INSTALLATION FOR ALL APPLICATIONS

(Basin 550x400x450 mm)

STEP 3

Apply glue on every  
piping connection.

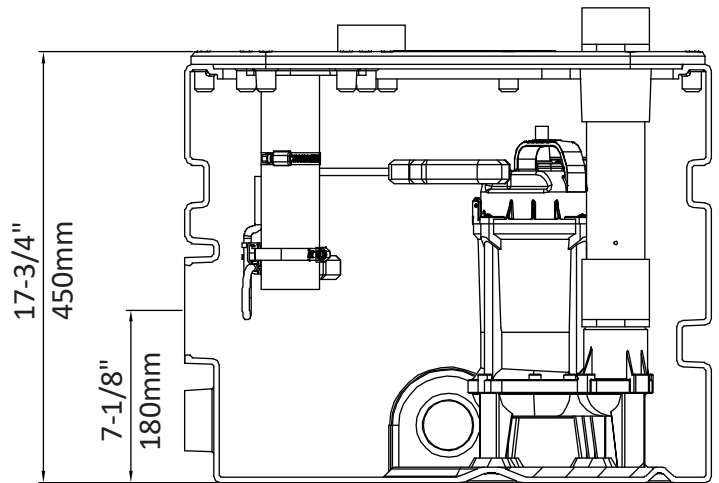
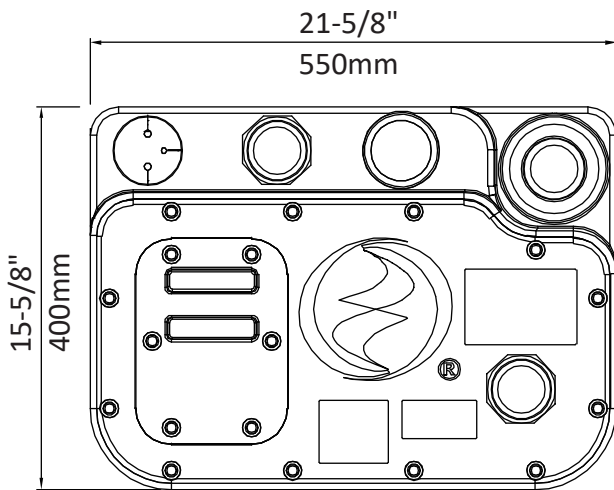


EA0171



# DIMENSIONAL DATA

Basin  
550x400x450mm



EA0171



**WARNING**

## PUMP WIRING INSTRUCTIONS

**FOR YOUR PROTECTION, ALWAYS DISCONNECT PUMP FROM ITS POWER SOURCE BEFORE HANDLING.** For single phase pumps supplied with a grounded plug, **DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE GROUND PIN.** The plug **must** be inserted into a mating 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 all applicable local codes and ordinances.

All three phase pumps require motor starting devices with motor overload protection. Three phase pumps must be installed in accordance with all applicable local codes and ordinances. Pumps are not to be installed in locations classified as hazardous.

**Risk of electrical shock.** Do not remove power supply cord and strain relief or connect conduit directly to the pump. Installation and checking of electrical circuits and hardware should be performed by a qualified licensed electrician.

### Single Phase Installation

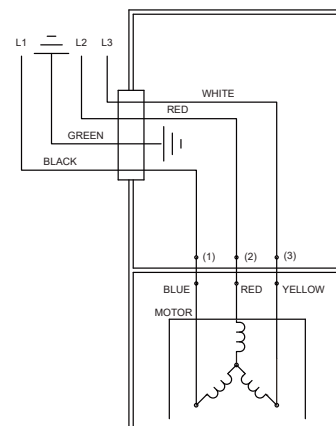
To operate a non-automatic pump automatically, a control panel or 20 amp control switch (P/N 10-0748) must be added to the power circuit. Follow the instructions provided with the panel or float switch to wire the system.

### Three Phase Installation

Three phase pumps are nonautomatic. To operate automatically, a control panel is required. Follow the instructions provided with the panel to wire the system.

Before installing a pump, check the pump rotation to insure that wiring has been connected properly to power source, and that the green lead of power cord, is connected to a valid ground, momentarily energize the pump, observing the directions of kick back due to starting torque. Rotation is correct if kick back is in the opposite direction of rotation arrow on the pump casing. If rotation is not correct, switching of any two power leads other than ground, should provide the proper rotation.

### NONAUTOMATIC 3 PHASE



006848

# 安裝前務必詳讀說明書

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文件僅供參考  
若有任何修改  
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60 Hz

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## 安裝說明書 910非預組式污物提升器

污物

222, 422

### 安裝前檢查

- 安裝前請仔細檢查所有零件。產品如果在運送中受損，請儘快聯絡經銷商。
- 安裝前仔細閱讀所有提供的文件，熟悉安裝細節，並保存資料以供未來參考。
- 請依照國內電工法規標準進行安裝。國內法規允許，污物泵浦可用在污水系統上，非自動型泵浦應用在化糞池，建議搭配外接式水位控制。



警告

1. 為防範使用者觸電，本公司所有產品皆配有包含接地功能的電線及三插插頭。為確保安全，請勿將插頭的接地插銷拔除。
2. 為確保安全請勿使用延長線。加裝延長線容易使泵浦馬達接收不到足夠的電壓。更重要的是，若延長線的絕緣遭破壞、或插頭鬆脫掉入水中，將可能造成危險。
3. 請確認在供給泵浦電源的電路中加裝適當規格的保險絲或斷路器。在此建議依照泵浦銘牌上的電流值，並參照國內電工法則來選擇及安裝獨立的斷路器。
4. 請在安裝前測試插座的漏電保護功能。為了安全考量，請使用符合國內電工法規的電路測試儀器來檢查插座中的火線、中性線及地線是否配置正確。若發現異常，請聯絡合格的水電技師來為您解決問題。
5. 為了保護您的安全，接觸泵浦前請先拔除電源。如果泵浦使用電線直接連接，需在電控箱內斷電。任何情況下都不允許移除接地插銷。確保人未站在水中，且穿上絕緣鞋。泵配有接地插頭的設計，以幫助防止觸電。必須按國內法規，正確安裝接地的插座或控制箱。
6. 僅得由持有證照的合格水電技師來進行泵浦安裝、管路搭配及電路配線。
7. 若無監督本產品不適合給兒童、心智不健全或經驗不足者使用，前述條件者使用本產品時，監督者應負全部安全責任。
8. 為避免觸電，請勿移除電纜線。如果電纜線受損，請聯絡經銷商或本公司認可的服務單位維修。
9. 本泵浦含冷卻油，在運作狀態下會受壓變熱——請在斷電2.5小時後再進行維修。
10. 泵浦不可使用於飲用水，冷卻油有可能會污染水質。
11. 為防範觸電，本產品勿用於游泳池。

請勿使用於油類、汽油、石油產品或含任何化學成分的液體。



注意

1. 本機泵浦的固體通過能力如下，請勿用來處理任何大於泵浦的固體通過能力。
  - 422 系列可通過固粒直徑 38 mm。
  - 222 系列可通過固粒直徑 50 mm。
2. 檢查並確認使用的電源符合泵浦銘牌上的規格需求。
3. 需依當地法令規章安裝所有的配管(出口水管及通氣管)。本裝置必須有通氣。請勿使用自動管路通氣設備。
4. 安裝含自動浮球開關或外接式自動浮球開關的自動型產品時，安裝者有責任確保浮球擺放於正確位置，且不會卡在泵浦機組或機坑壁邊，以確保本產品能正常運作。建議使用硬水管做為配管。
5. 排氣孔的目的：  
一般潛水型污物泵浦都是從底部抽水，以防止泵浦阻塞和洩漏。空氣會因此容易積在泵浦或管路內，造成氣鎖。排氣孔是為了將這些空氣排出。因此，必須在逆止閥與機坑蓋下的管路鑿一排氣孔(直徑約5 mm)，用以排出來自底部入水口的積存空氣。積存的空氣可能源自於泵浦運作時的攪動，或在水槽乾涸時進入泵浦。排氣孔應定期檢驗，排除阻塞。本產品運轉時看見水從排氣孔流出，為正常現象。
6. 時常檢查是否有雜物卡住浮球。維修請聯絡本公司認可的維修站。
7. 鑄鐵泵浦最高環境溫度不得超過華氏130度(攝氏54度)，塑膠馬達外殼的泵浦最高環境溫度不得超過華氏104度(攝氏40度)。
8. 請勿在總動力揚程低於性能曲線中揚程下限的場合使用。運轉時需保持直立。請勿傾斜泵浦。
9. 基於健康理由，不要使用泵浦系統來注入水槽或洗衣機的水等。
10. 務必安裝止回閥減少水回流，以免造成不必要的泵浦持續運轉。
11. 本套裝系統需安裝在平均地下水位以上，避免損壞箱體。

保修請參閱第2頁。

## 保修說明

製造商在保修期內向購買者和隨後擁有者的保證，每個新產品不會有材料或工藝的瑕疵，在正常使用和維護的情況下，本產品的保固為自購買日起算的兩年。需具備購買證明。在保修期內出現故障的零件，經查驗若產品的缺陷是由材料或製造過程造成，本公司將負責維修或更換。本公司保留決定是否維修或更換產品、零件或配件的權利。馬桶水箱注水、沖水機制受原廠保固，而馬桶陶瓷保固僅限於工廠瑕疵。維修或更換期間買方所產生的費用或損失不在保固範圍內。對於因產品故障、維修或更換而可能產生的運費、損壞、人工費或其他費用，我們將不予授予。

保修不適用於：

- (1)未依照說明書安裝、操作或維護所造成的故障或損壞。
- (2)不當操作、意外或疏忽所造成故障或損壞。

(3)加裝不屬於本產品的零、配件。

(4)未依照當地法規進行安裝所造成的危害。

(5)將產品用在非原本設計的用途上所造成的損壞。(例：抽取沙、碎石、水泥、泥巴、瀝青、碳氫化合物及其衍生物、汽油、化學溶劑或其他有腐蝕性的液體、毛巾、女性衛生用品等。)

保修零、配件的退回:在本保修之下任何修理或更換需送回本公司或其他本公司所指定的維修服務點，運費需自付。在任何情況下本公司不負擔其他責任，包含資產或設備的損壞、利潤損失、等。

本公司的責任不超過產品的實售價格。上述為本產品唯一的保修說明，任何人的修改或另做承諾皆為無效。在因涉嫌產品故障而招致損害的情況下，財產擁有人必須保留該產品以供調查之用。

## 安裝注意事項

1. 請務必閱讀本裝置之所有安裝資料。
2. 請務必檢查裝置是否在運送中產生可見的損壞。若裝置顯示受損，請聯繫經銷商。
3. 請務必清除水坑中的雜物。將泵浦放置在堅固地面上。切勿將泵浦放置在泥沙上。
4. 請務必確認水坑大小足以允許浮球自由活動。
5. 處理前切斷泵浦電源。連結到獨立受保護的接地漏電電流斷路器。請勿切斷、拼接或損壞電源線。請勿用電源線拉動或舉起泵浦。請勿使用延長線。
6. 請務必在出水管線安裝止回閥和管接頭。切勿使用小於出水口徑尺寸的水管安裝。
7. 切勿使用汙泵浦抽取沙礫、污物或危險液體。
8. 請務必在安裝後立即測試泵浦，以確認系統正常運作。
9. 請務必以適合的蓋子覆蓋水坑。
10. 請務必詳閱所有適用當地及國家規則，確認安裝符合各項規定。
11. 若有疑問，請務必聯繫製造商查明。
12. 請務必考慮電池備用系統，以防停電或故障造成的財產損失。
13. 請務必每3個月檢查一次系統是否正常運作。

## 檢查清單

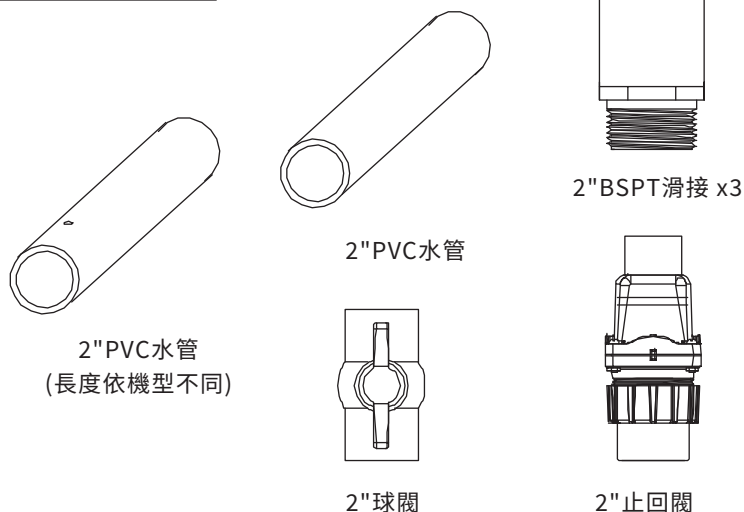
異常狀況	可能原因	補救措施
<b>A. 泵浦未開始運作。</b>	低電壓、保險絲燒斷、電路中斷。	由合格電氣技師檢查保險絲和電路。
	葉輪卡住。	聯絡經銷商。
	馬達或電線短路。	
	浮球開關上有雜物。	去除雜物
<b>B. 馬達過熱造成跳電或保險絲燒斷。</b>	電壓錯誤、負揚程(出水口高度低於泵浦)、葉輪或軸封卡死、電容器、繼電器或馬達短路。	聯絡經銷商。
<b>C. 泵浦啟動停止次數太頻繁。</b>	止回閥阻塞、無止回閥、熱過載保護器啟動或浮球有瑕疵。	聯絡經銷商。
<b>D. 泵浦不停止。</b>	浮球下方有雜物。	去除浮球周圍的雜物。
	浮球開關故障。	聯絡經銷商。
<b>E. 泵浦運轉正常，但抽不到水或水流量太少。</b>	進水口周圍有雜物。	清理進水口附近區域。
	排放管堵塞。	必要時卸除排放管，沖走雜物。
	電壓太低或不當電壓。	由合格電氣技師檢查家庭管線。
	葉輪受損。	聯絡經銷商。
	馬達運轉不當、電容器瑕疵、入水含空氣或造成空氣進入水機室。	聯絡經銷商。
	泵浦氣鎖。	確保排放管中的通氣孔暢通。
	安裝揚程超過系統設計的揚程。	更換排放管或聯絡經銷商。
<b>F. 揚程或流量使用一般時間後降低。</b>	管路或止回閥阻塞。磨蝕性物質及有害的化學物質造成葉輪及水機損壞。	檢查管路、打開並檢查水機。
<b>G. 如果桶子或接頭漏水。</b>	管配件或螺絲鎖過緊或太鬆，或墊圈沒有平均的鎖緊。	小心鎖緊管接頭(使用管路密封膠)和螺絲。 檢查墊圈的位置，均勻地鎖緊蓋子。 不要將管接頭或螺絲鎖的過緊。

如果檢查後仍無法排除問題，請與Zoeller公司授權的經銷商聯絡，切勿自行拆卸泵浦。

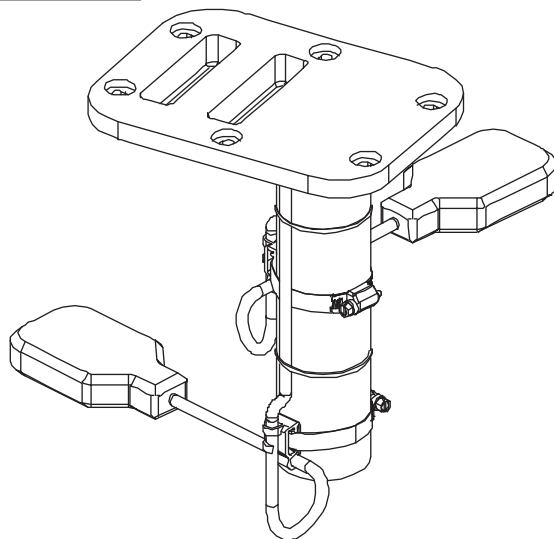


# 配件及電纜式浮球安裝說明 ( 550x400x450mm 箱體尺寸 )

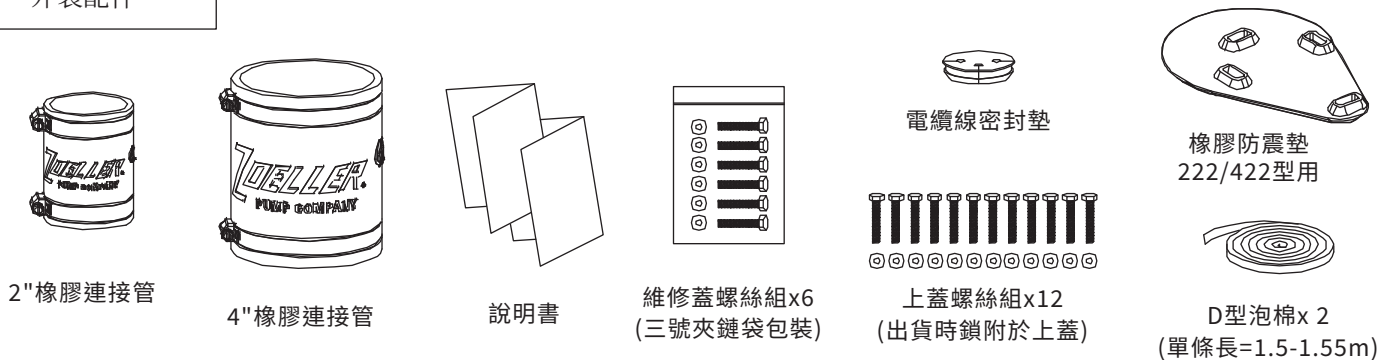
## 出口/通氣口用配件



## 預組浮球組



## 外裝配件



## 架設浮球步驟

1. 如圖1，將電纜線置入塑膠扣環。
2. 如圖1，將金屬管束調整至所需位置並固定於水管上。  
(所需位置高度請見安裝說明)  
注意：不可將電纜線直接束於金屬管束上。
3. 以螺絲起子將金屬管束束緊。勿過度施壓避免傷害塑膠扣環，並確認浮球線運作時，不會受扣環末端束線干擾。

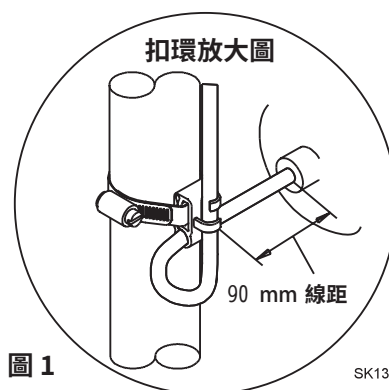


圖 1

SK1301D

**警告：**浮球開關低於90mm長度，會影響開關操作，減少電纜壽命。

## 警告

### 電擊的危險

安裝或維修前請先切斷電源。合格的維修人員必須在安裝或維修產品時依照合適的電機和配管法規。

## 警告

### 爆炸或火災危險

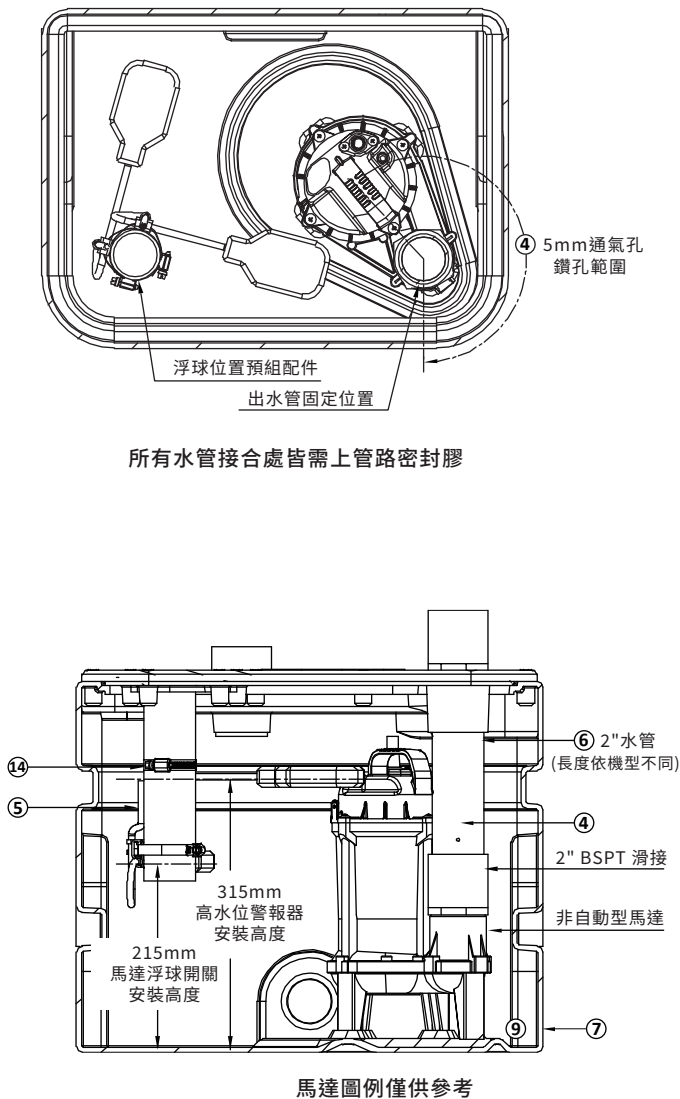
請勿將本產品與易燃液體一起使用。不要安裝在危險場所，須符合國家電器法規。

未能遵守這些預防措施，可能會導致嚴重的人身傷害或死亡。如果開關的電纜損壞或斷裂請立即更換產品。安裝後妥善保存說明書。請依照國家電器規範安裝本產品，防止水分由外殼，水管件，配件，浮球或電纜進入或聚積。

# 安裝說明 ( 550x400x450mm 箱體尺寸 )

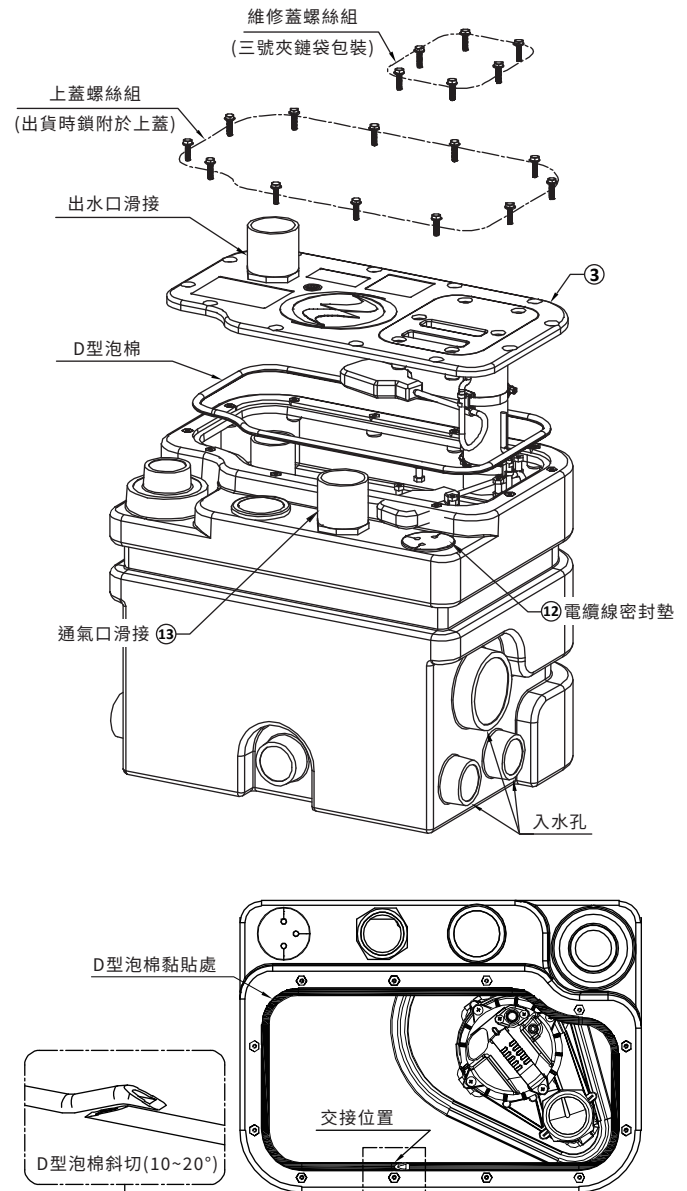
- ① 電氣配線及保護措施需符合相關電氣規範與當地其他應用慣例的需求。
- ② 請在水槽稍高處安裝適當的活接與止回閥組合組件，以便於拆卸泵浦供清潔整理或維修。於汙水、汙物或排水應用時若需高揚程或安裝於蓋板下。
- ③ 所有安裝需使用水槽蓋板防止雜物掉入水槽，並防止人員意外受傷。
- ④ 請在泵浦水管鑽一直徑5mm小孔，為避免通氣孔水流影響對浮球的正常運作，通氣孔的位置請避免面向浮球。建議鑽孔位置低於”停止”水位，建議向下45度角可降低水流撞擊桶子產生的噪音。註：該孔需低於水槽蓋板，並需定期清理，泵浦運轉時可看見該小孔有水流出。
- ⑤ 用束帶將電源線在出水管上固定牢靠，並使其避開浮球開關機構。
- ⑥ 出水管管徑不可小於泵浦出口口徑。
- ⑦ 水槽需符合適用規範及規格。
- ⑧ 啟動泵浦前確認泵浦水平，且浮球開關機構與水槽邊牆保持淨空距離，並確認浮球開關機構不被入水水流干擾。
- ⑨ 完成安裝後必須清理水槽內所有雜物碎屑。
- ⑩ 閘閥或球閥由安裝者提供，並需依照所有相關規範安裝。
- ⑪ 如圖示安裝浮球開關。「停止」點的最佳位置為馬達外殼上方、與入口成180°的方位。切勿將「停止」點配置在泵浦出口以下。
- ⑫ 應使用氣密密封圈隔絕氣體與氣味。
- ⑬ 利用通氣管將氣體與氣味排出。
- ⑭ 勿將電纜線固定在鐵箍內。

## 步驟 1



EA0171

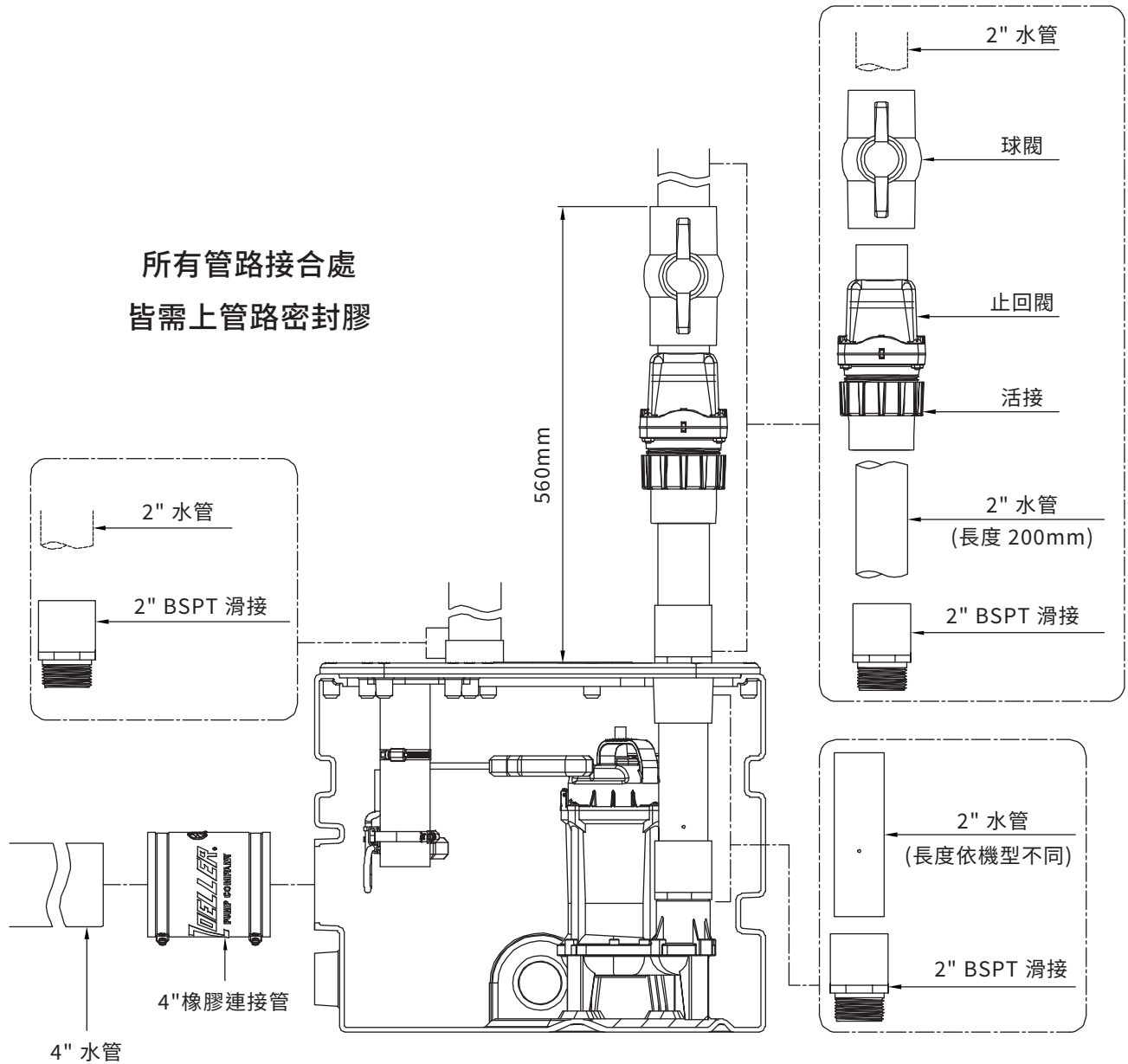
## 步驟 2



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## 安裝說明 ( 550x400x450mm 箱體尺寸 )

### 步驟 3

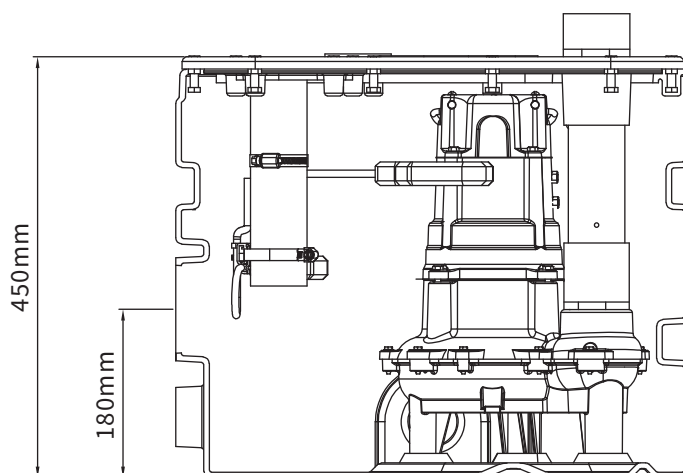
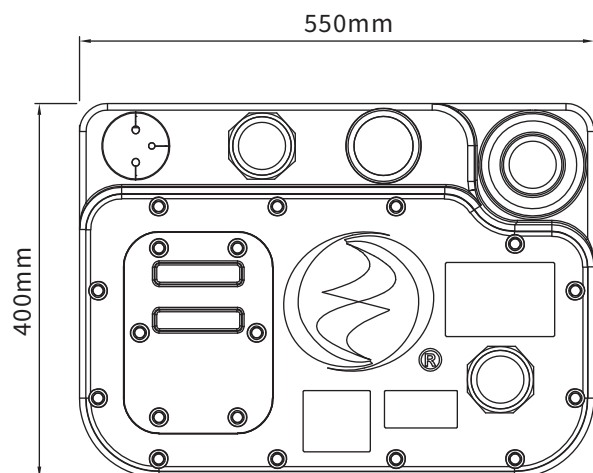


馬達圖例僅供參考

## 產品尺寸

箱體尺寸

550x400x450mm



EA0171



▲ 注意

### 泵浦配線注意事項

為您的安全著想，處理泵浦前務必先切斷電源。單相泵浦均附帶 3 芯接地插頭以防止觸電的可能性。任何情況下都不允許移除接地插銷。3 插插頭必須插入 3 插用插座。如果無法提供 3 插用插座，也必須要更改為有接地功能按照國家電氣法規和所有適用當地的法規和條例的安裝方式。

所有三相泵浦需配備有電機啟動的設備與電機超載保護。安裝泵浦必須按照國家電氣法規和所有適用當地的法規和條例。泵浦不得安裝在美國國家電氣規範 ANSI/NFPA 70 列為危險環境的位置。

「觸電危險」切勿拆卸電源線或拉扯直接連接在泵浦上的釋壓管或接線管路。電器電路及五金配件的安裝與檢查必須由合格專業電工執行。



▲ 注意

### 單相配線注意事項

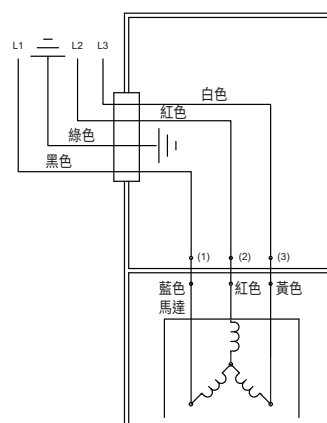
要使非自動泵浦運轉，需配置控制箱或 20 安培的浮球開關 (P/N 10-0748) 在電路上。按照面板提供的電路系統說明安裝。

### 三相配線注意事項

三相非自動泵浦自動運轉必須搭配控制櫃。按照面板提供的電路系統說明安裝。

安裝泵浦之前，請檢查以確保線路已正確連接到電源，綠色接地線（請參見配線圖）已連接到有效的接地面。臨時充電，觀察啟動扭矩造成的旋轉，旋轉方向如果是與水機上的箭頭相反即為正確。如果旋轉不是正確的，交換地線以外的兩條接線安裝，即可成為正確的安裝。

非自動型  
三相



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