

物理農業機械股份有限公司

WULI AGRICULTURE MACHINE CO., LTD.

動力噴霧機、高壓洗淨機、微霧系統專業設計製造

HIGH PRESSURE CLEANER OPERATION MANUAL

高壓洗淨機操作手冊

MODEL

WH-2915M1

WH-3020M1

WH-3523M1

WH-5016M1

感謝您購買物理產品，使用前請詳閱本說明。




Thank You For Choosing Our Product.

Please Read The Operation Manual Before Use.

請詳閱警告標示及電源裝配的注意事項

每台機器均有貼上警告標示，請詳閱並遵守之，以確保您的安全。

●警告標示

 危險	在沒有接地線的情況下使用本機是有可能會發生重大事故。 移動機器時請先關閉電源方可將插頭或電源線拆除。 請勿用濕手碰觸機器，以免觸電導致危險。
 警告	運轉時請依機器正確電壓使用，錯誤電壓會引起馬達燒損及啟動不良。 使用延長電源線時電壓會下降，請多加注意。 機器運轉中嚴禁打開蓋子，運轉的部份禁止碰觸以免受傷。
 注意	請仔細閱讀使用說明書後正確的作業。 請確認安全裝置之作動，作動不良時有可能發生危險。 作業時，請著保護衣、安全眼鏡、手套、塑膠鞋。 噴槍絕對禁止對人或動物噴射。 在運轉時，請握緊噴槍。 除移動以外，運轉前請固定本機器，以免機身滑動。 請勿直接噴射本機。以避免短路、漏電之情形發生。 使用完畢請把高壓管及噴槍的水排除。 在離開本機時，請先將電源關掉。 高壓管損傷或是折到請勿繼續使用，請更換新品。



請特別注意以上所述的事項，以確保您的安全。

●電源裝配的注意事項



請務必使用規定電壓的電源，若要延長請依電工法規要求，選擇適合電線延長。



使用到錯誤電壓的電源，會導致機器的故障、火災或者漏電。






請注意接地線的使用，以避免發生重大事故。

Warning

For your safety, please read the labels on the machine carefully and follow the instructions.




●Warning Labels

 Danger	<ul style="list-style-type: none">● It is a safety risk to use this high pressure cleaner without the ground-fault circuit-interrupter (GFCI).● For your safety, please turn off the power before unplugging the machine. Do not touch the machine with wet hands to avoid the risk of electric shock.
 Warning	<ul style="list-style-type: none">● Please connect this high pressure cleaner to the correct voltage and frequency.● Operating using the wrong voltage will cause the motor to burn out, fail to start or cause personal injury.● Use of extension cords will reduce voltage to the motor.
 Attention	<ul style="list-style-type: none">● Please read the operation manual carefully before use.● Follow the safety instructions to operate this high pressure cleaner.● Please wear boiler suit, safety glasses, gloves and shoes with non-slip soles.● Secure the machine before use to prevent it from slipping.● Hold the Spray Gun firmly when using it.● Never use the Spray Gun to spray people or animals.● Do not spray the machine to avoid short circuit and electric leakage.● Please drain the water from the High Pressure Hose and Spray Gun after use.● Please turn off the power before leaving the machine.● If the High Pressure Hose is damaged or folded, please replace it with a new one.

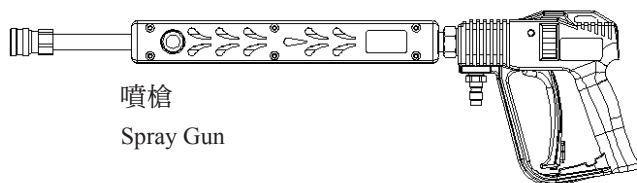
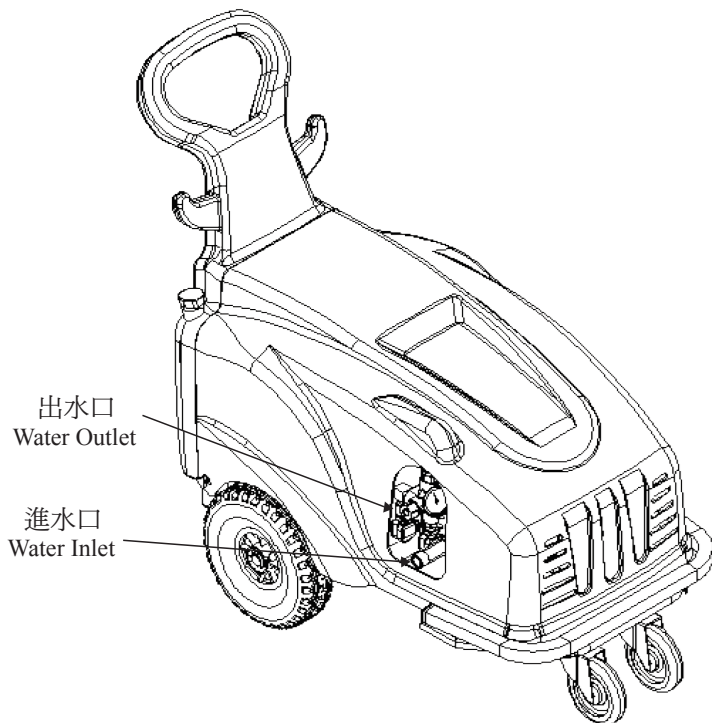


For your safety, please pay attention to the instructions above!

● Electrical Safety Instructions

	Make sure the power supply is the correct voltage and frequency. If using an extension cord, please follow the electrical regulations and select the appropriate power cord diameter.
	It may cause a fire or personal injuries if the voltage does not match the voltage specified on the machine.
	Please use the ground-fault circuit-interrupter (GFCI).

洗淨機及配件介紹 The Cleaner & Accessories



High Pressure Hose



Suction Hose



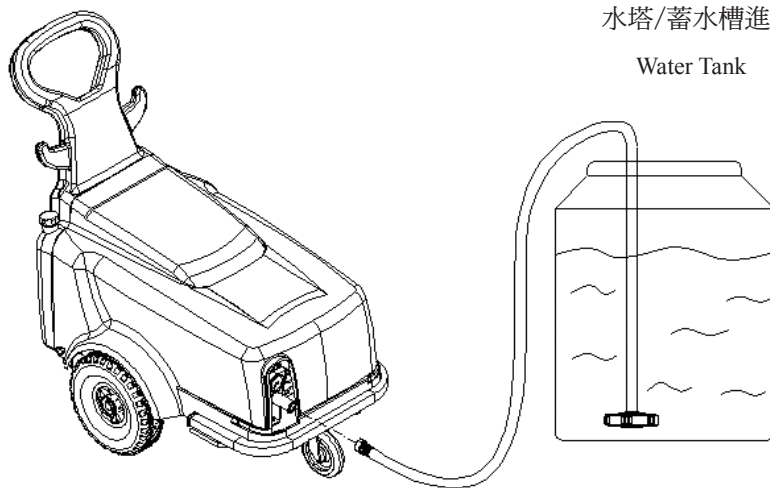
Suction Filter

安裝說明 Installation

WH-2915M1

水塔/蓄水槽進水

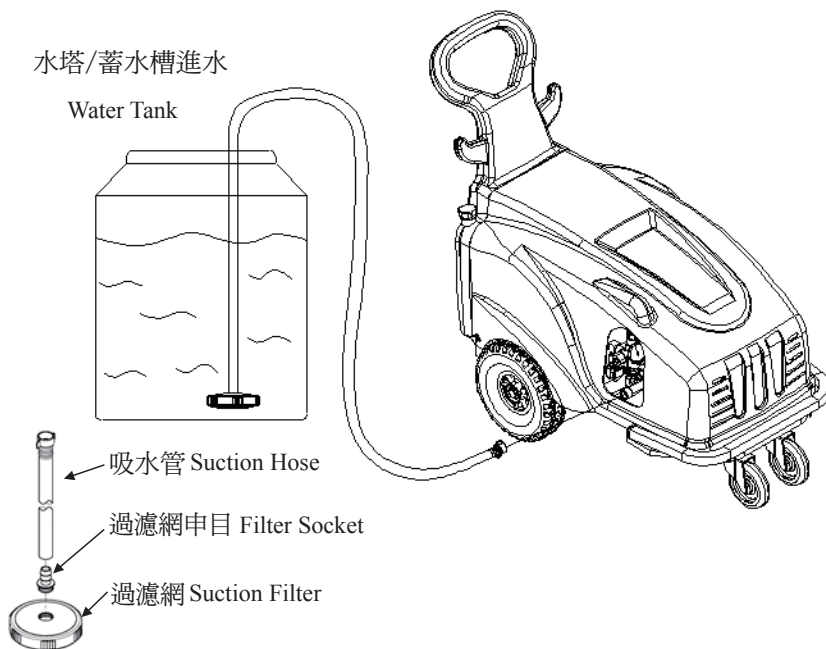
Water Tank



WH-3020M1、WH-3523M1、WH-5016M1

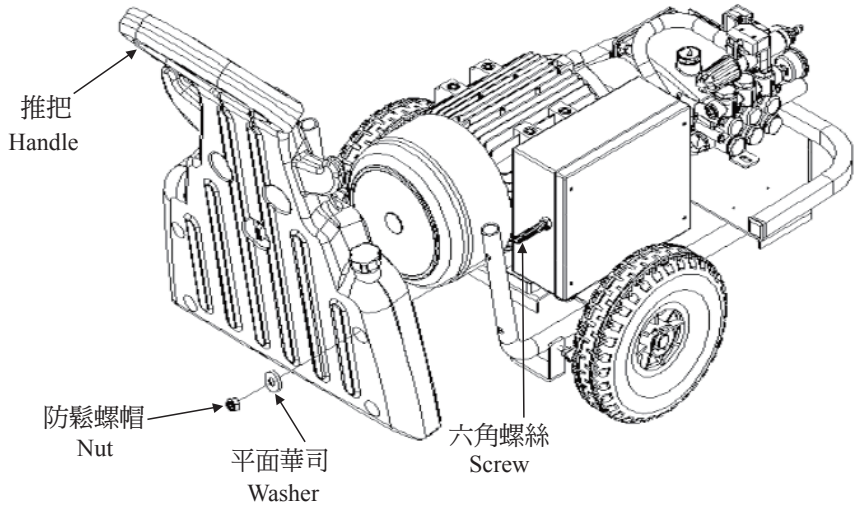
水塔/蓄水槽進水

Water Tank

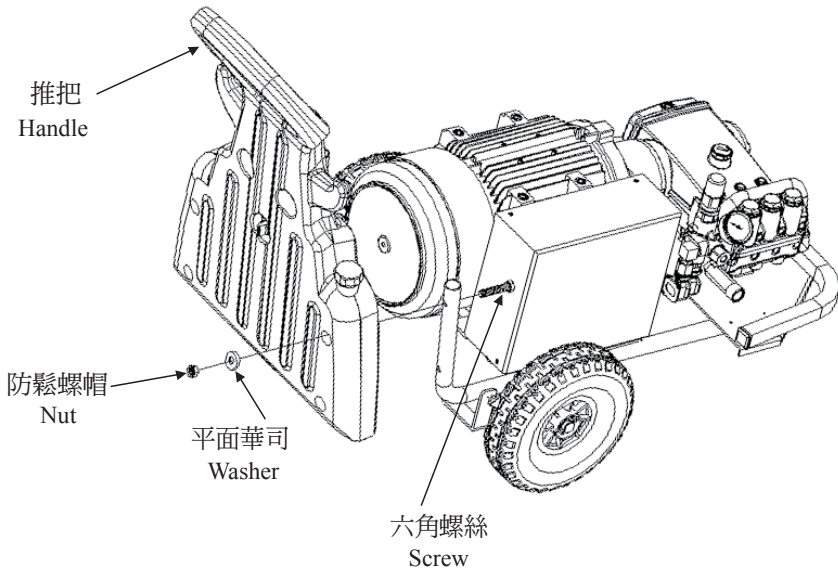


推把鎖合方式 The Handle Assembly Procedure

WH-2915M1

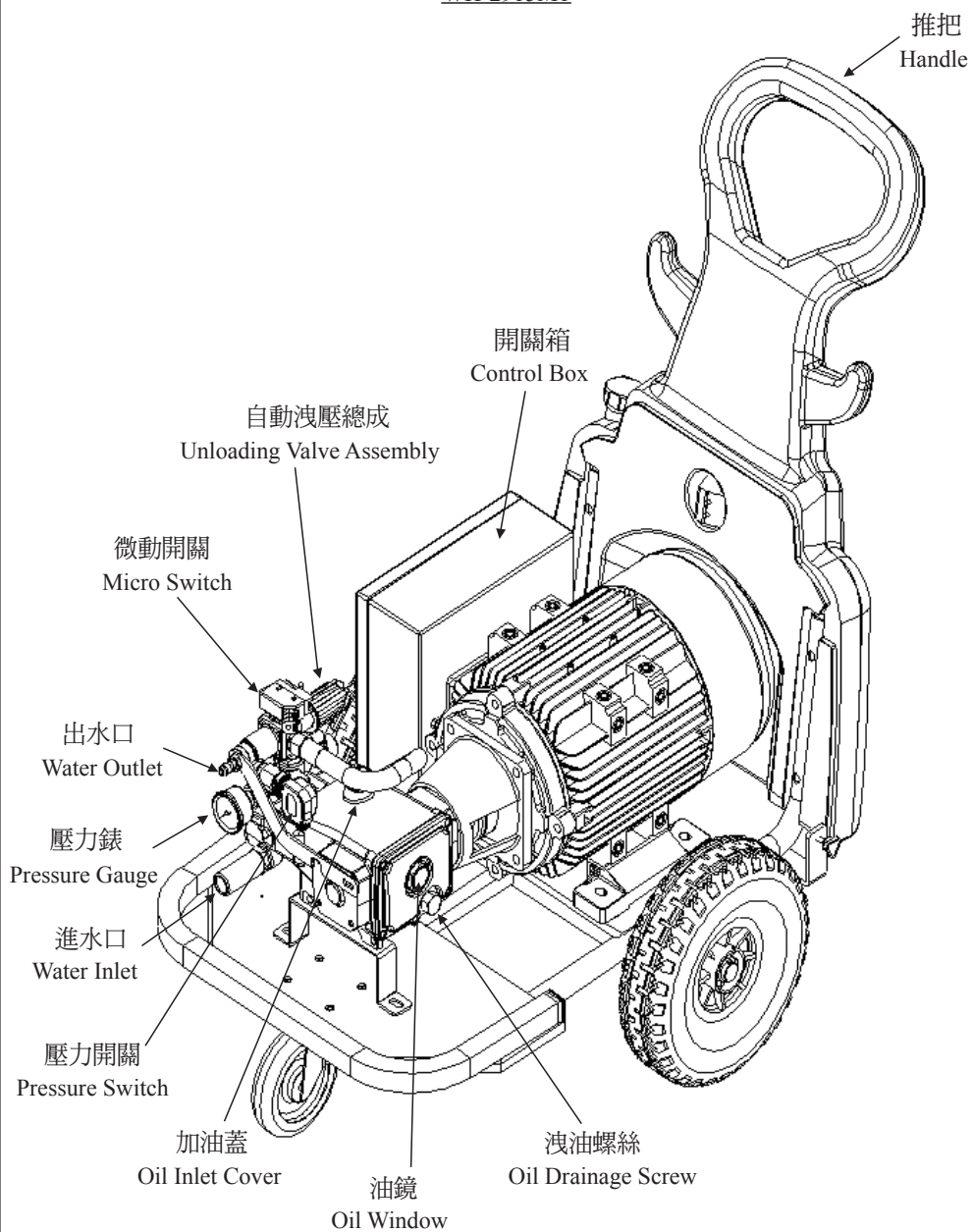


WH-3020M1、WH-3523M1、WH-5016M1



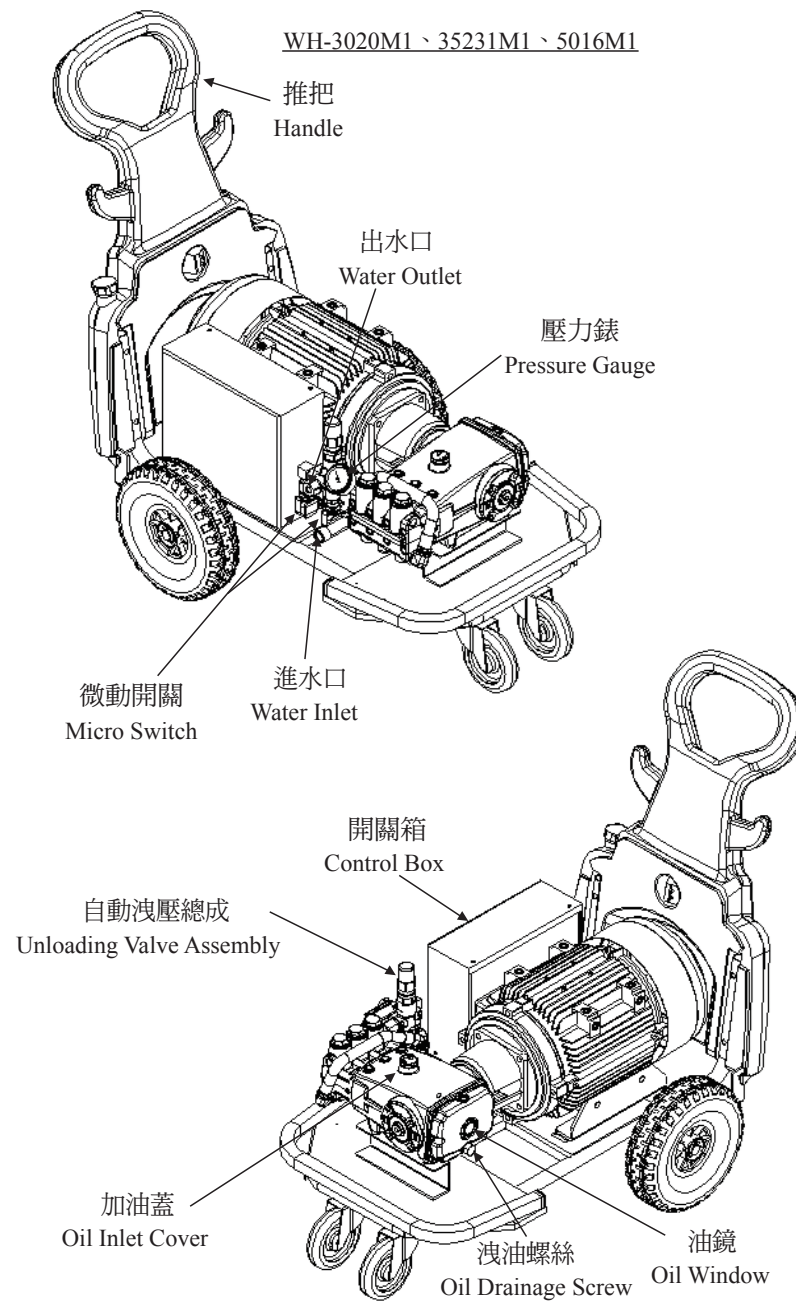
部位名稱 (前) Cleaner Overview (Front)

WH-2915M1



部位名稱 (前) Cleaner Overview (Front)

WH-3020M1、35231M1、5016M1

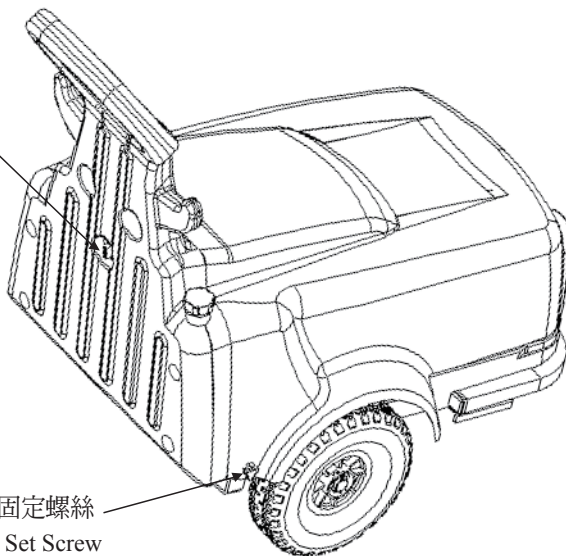


部位名稱(後) Cleaner Overview (Back)

WH-2915M1

電源開關
Power Switch

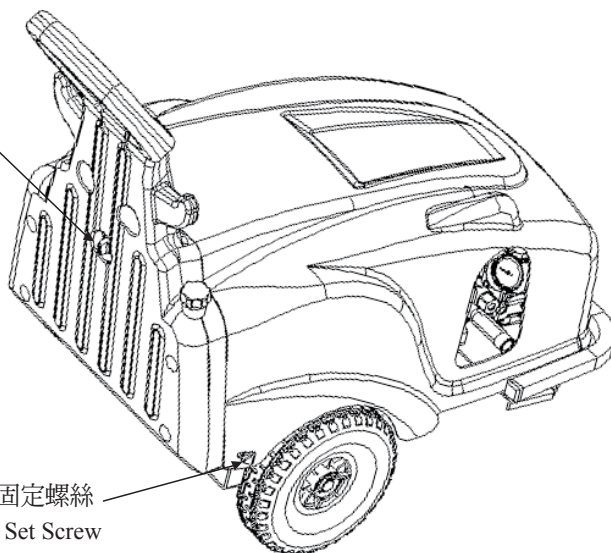
外箱固定螺絲
Cover Set Screw



WH-3020M1、WH-3523M1、WH-5016M1

電源開關
Power Switch

外箱固定螺絲
Cover Set Screw



使用說明

一、 操作說明

1. 使用前請先檢查泵浦是否有裝機油並注意機油品質是否良好；將吸水管接於洗淨機的進水口鎖緊；並將高壓管接於出水口。
2. 將吸水管(網)放入蓄水槽或水塔內，請確保吸水管(網)是否有沉入水中以免吸到空氣。請注意，吸水過濾網須放置蓄水槽或水塔底部上方20公分處，預防吸進底部泥沙，確保泵浦壽命。
3. 檢查洗淨機的電源是否配接正確電壓。
4. 啟動洗淨機前請先拿下噴槍的噴嘴，打開噴槍將泵浦內空氣排出，待出水正常後將噴槍關閉，再次裝上噴嘴方可使用。
5. 使用完時，請先關閉洗淨機再作動噴槍一次，以避免壓力蓄存於高壓管中。

二、 泵浦的潤滑

1. 初次使用100小時應更換機油，以後每使用300小時應更換一次。
2. 更換機油時，請旋開洩油螺絲排出使用過之機油。
3. 將洩油螺絲鎖緊後，打開加油蓋注入SAE#30~#40車輛用清潔機油，機油應保持在油鏡2/3的位置。

※請注意：更換機油時請將電源關閉，並確認油溫冷卻後，方可更換。

三、 特別注意事項

1. 使用自來水作為洗淨機的水源。
2. 若使用延長線請注意是否符合電工法規，選擇適合的電源線徑。
3. 確實的更換機油以保持泵浦的潤滑，降低機械損耗。
4. 洗淨機與吸水網之高度差(揚程)請勿超過1.3公尺。
5. 水溫請勿超過攝氏60度。
6. 若使用的水源中加入藥劑、肥皂或其他物質，請在使用完畢後以清水操作洗淨機1分鐘，以延長使用壽命。
7. 請將洗淨機放置於乾燥的地方，以避免電線短路造成危險。

簡易的故障排除

以下提供簡易的故障排除方式，若有任何問題，請您向當地之經銷商洽詢，同時記得提供您所購買的機器型號與製造編號。

故障的現象	原因	解決方式
無法啟動馬達	<ul style="list-style-type: none"> ◎沒有接上電源 ◎電壓過低 ◎天氣太冷，馬達凍結 	<ul style="list-style-type: none"> ◎確認是否有接上電源 ◎檢查電壓，啟動後量測需符合規定的電壓 ◎檢查延長線是否過長 ◎等待馬達回暖，或洽經銷商
運轉聲音異常	<ul style="list-style-type: none"> ◎電源有問題 ◎泵浦中有空氣 ◎活門總成異物阻塞 ◎吸水量不足(缺水) 	<ul style="list-style-type: none"> ◎檢查電壓 ◎拔掉噴槍，待出水正常後再接上 ◎清潔活門總成 ◎檢查吸水管是否破裂，或扭曲無法進水 ◎清潔吸水管過濾網
運轉中馬達異常停止	<ul style="list-style-type: none"> ◎馬達過熱 ◎過載保護開關跳脫 	<ul style="list-style-type: none"> ◎檢查電壓 ◎檢查延長線 ◎調降壓力 ◎檢查完後，等待機械溫度下降再按下復歸鍵
無法吸水/出水	<ul style="list-style-type: none"> ◎泵浦內部損壞或阻塞 ◎噴槍或噴嘴阻塞 ◎活門總成異物阻塞或磨損 ◎泵浦與水槽距離與高度超出範圍 ◎泵浦吸入空氣 	<ul style="list-style-type: none"> ◎清潔或維修泵浦、清潔吸水過濾網 ◎清潔或維修噴槍/噴嘴 ◎清潔活門總成或更換零件 ◎改善水槽或泵浦位置，清洗機與吸水網之高度差(揚程)請勿超過1.3公尺 ◎拔掉噴槍，待出水正常後再接上
調壓問題或壓力無法上升	<ul style="list-style-type: none"> ◎壓力閥或閥座磨損 ◎迫緊磨損 ◎活門塞與活門座沾黏 ◎閥座上有異物 ◎活門總成磨損 ◎活門總成異物阻塞 ◎噴嘴磨損導致壓力下降 ◎泵浦吸入空氣 ◎自動洩壓總成損壞 	<ul style="list-style-type: none"> ◎更換零件 ◎更換零件 ◎拆解後清洗活門總成或更換零件 ◎清潔閥座 ◎更換零件 ◎清潔活門總成 ◎更換噴嘴 ◎檢查吸水管接頭鎖合或吸水管破裂 ◎送回經銷商更換

Operation Instructions

A. Operating Instructions

1. Make sure the oil in the pump is sufficient and in good condition before use. Connect the Suction Hose to the Water Inlet of the cleaner and secure the hose; connect the High Pressure Hose to the Water Outlet.
2. Put the Suction Hose with Filter into the water tank and make sure the suction is sufficient. Suspend the Suction Filter around 20cm above the bottom of the water tank to avoid suctioning residue which might reduce the product's life.
3. Make sure the power supply voltage and frequency matches the cleaner requirement.
4. Using the High Pressure Hose to connect the Spray Gun to the cleaner, remove the Spray Gun nozzle and squeeze the trigger of the Spray Gun to release air from the cleaner when first starting. After the outlet is normal, put the Spray Gun nozzle back and start operating.
5. When finished using the cleaner, turn off the Power Switch and squeeze the Spray Gun trigger again to release the pressure stored in the High Pressure Hose.

B. Oil Change

1. Replace the oil in the pump after the first 100 hours of use. After this, the oil should be changed after every 300 hours of use.
2. Unscrew the Oil Drainage Screw and drain the oil from the pump.
3. Tighten the Oil Drainage Screw before refilling with clean motor oil SAE #30~#40 up to the level of 2/3 of the Oil Window

※ Attention: When replacing the oil, please turn off the power and make sure that the oil temperature has cooled before replacing.

C. Reminders

1. Always use clean water with the cleaner.
2. If using an extension cord, please follow the electrical regulations and select the appropriate power cord diameter.
3. Be sure to change the oil according to the Oil Change section or the pump might be damaged.
4. The cleaner's location should be no more than 1.3 meters higher than the Suction Filter.
5. The water temperature should not exceed 60°C.
6. If using water containing chemicals, detergents or other substances, please run the cleaner with clean water for one minute after use to prolong the life of the cleaner.
7. Store the cleaner in a dry place to avoid the risk of short circuit.

Troubleshooting

The following are simple troubleshooting methods. If you have any questions, please contact your local dealer and remember to provide the model and serial number of the cleaner you purchased.

Problem	Cause	Solution
Motor does not start; or starts and runs rough	<ul style="list-style-type: none"> ⊙ The power cord is not plugged in. ⊙ The power outlet does not supply adequate power. ⊙ The motor freezes due to the cold weather. 	<ul style="list-style-type: none"> ⊙ Make sure the power cord is plugged in properly. ⊙ Make sure the power is adequate. ⊙ Check or replace the extension cord. ⊙ Move the unit into a warmer place or contact your local dealer.
Unusual noise	<ul style="list-style-type: none"> ⊙ There is a power supply problem. ⊙ There is air in the pump. ⊙ The valve assemblies are blocked. ⊙ The water supply is not enough. 	<ul style="list-style-type: none"> ⊙ Check the voltage. ⊙ Disconnect the Spray Gun until the water flow is stable. ⊙ Clean the valve assemblies. ⊙ Check the Suction Hose and fittings; make sure they are well connected and in good condition. ⊙ Clean the Suction Filter.
Motor stops running	<ul style="list-style-type: none"> ⊙ The motor is over heated. ⊙ Tripped overload protection switch. 	<ul style="list-style-type: none"> ⊙ Check the voltage. ⊙ Check the extension cord. ⊙ Lower the operating pressure. ⊙ After completing all the above checks, wait for the motor to cool down then press the Reset.

** Continues on page 13 **

Troubleshooting

Problem	Cause	Solution
<p>The pump fails to deliver water or produce pressure</p>	<ul style="list-style-type: none"> ⊙ The pump is blocked or damaged. ⊙ The Spray Gun or nozzle is blocked. ⊙ The valve assemblies are stuck or worn out ⊙ The distance or height between the pump and the water tank/faucet exceeds the limit. ⊙ Air in the pump. 	<ul style="list-style-type: none"> ⊙ Clean or maintain the pump and Suction Filter. ⊙ Check and clean the Spray Gun and nozzle. ⊙ Clean or replace the valve assemblies. ⊙ Make sure the pump's location is no more than 1.3m higher than the Suction Filter. ⊙ Disconnect the Spray Gun until the water flow is stable.
<p>Pressure adjustment problem</p>	<ul style="list-style-type: none"> ⊙ The pressure valve or the pressure valve seat is worn out, damaged or blocked. ⊙ The packings are worn out. ⊙ The valve assemblies are worn out or blocked. ⊙ The pressure decreases due to nozzle wear. ⊙ Air in the pump. ⊙ The unloading valve assembly is damaged. 	<ul style="list-style-type: none"> ⊙ Clean the pressure valve or replace the worn out or damaged spare parts. ⊙ Replace the packings. ⊙ Clean or replace the valve assemblies. ⊙ Replace the nozzle. ⊙ Check the Suction Hose and fittings; make sure they are well connected and in good condition. ⊙ Return the product to your local dealer to replace the spare parts.