

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-1711M1 WH-2112M1 WH-2512M1

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

<u> </u>	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。
\triangle	<u></u> 整生	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。
請仔細閱讀使用說明書 請確認安全裝置之作動 作業時,請著保護衣、 噴槍絕對禁止對人或動 在運轉時,請握緊噴槍 除移動以外,運轉前請 請勿直接噴射本機。以 使用完畢請把高壓管及 在離開本機時,請先將		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,請使用5.5mm²以上的電源線。

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

 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.
 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.
 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



Please use the appropriate power outlet. Extension cord size should exceed 5.5mm²



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



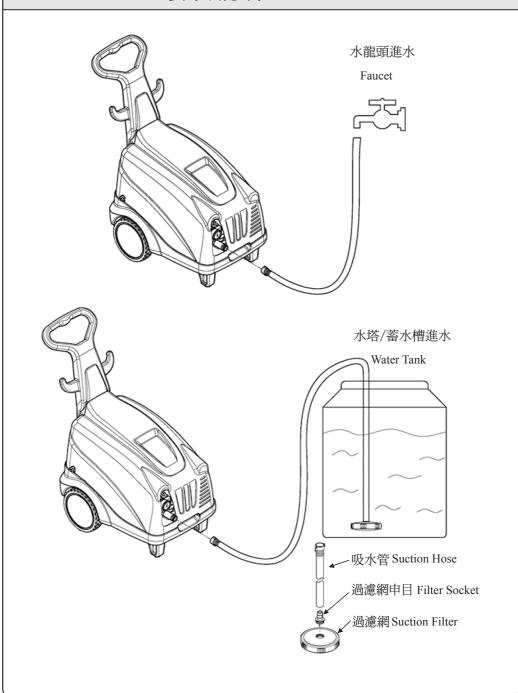


Suction Hose

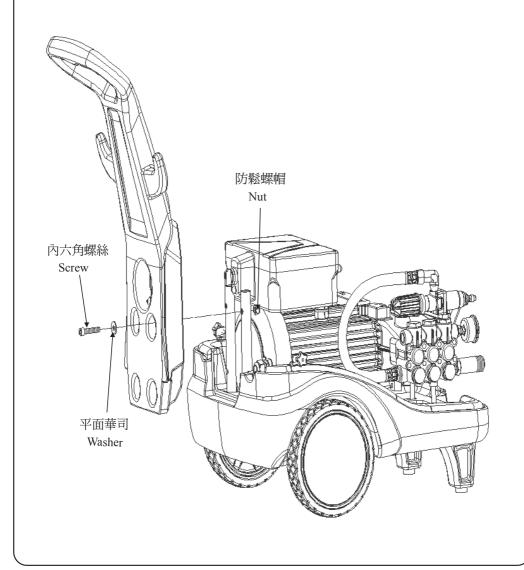
Suction Filter

High Pressure Hose

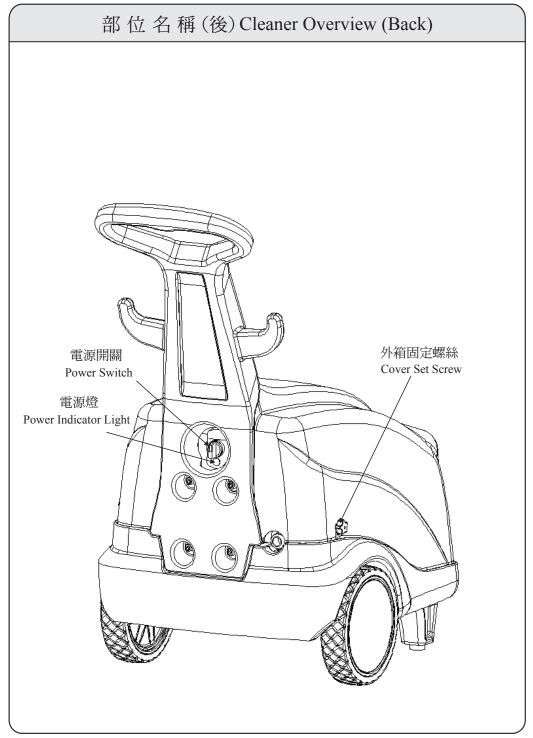
安裝說明 Installation



推把鎖合方式 The Handle Assembly Procedure



部位名稱(前) Cleaner Overview (Front) *電流斷路器位置: WH-1711M1/WH-2512M1: 在開關箱內側 WH-2112M1: 在開關箱外側 Circuit Breaker Location: WH-1711M1/WH-2512M1: inside of the Control Box WH-2112M1: outside of the Control Box 推把 Handle 電流斷路器* Circuit Breaker* 微動開關 開關箱 Micro Switch Control Box 自動洩壓總成 Unloading Valve Assembly 出水口 Water Outlet 壓力錶 Pressure Gauge 進水口 Water Inlet 洩油螺絲 加油蓋 Oil Drainage Screw Oil Inlet Cover 油鏡 Oil Window



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)放入蓄水槽內或連接水龍頭;連接水龍頭時請確保水龍頭每分鐘出水量大於13公升並保持水管暢通;放入蓄水槽時,吸水過濾網需放置水槽底部上方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. 每次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,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. 若使用延長線請勿超過10公尺;若超過10公尺,請使用電源線徑大於 5.5mm²。
- 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	◎沒有接上電源	◎確認是否有接上電源	
	◎電壓過低	◎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	
	◎天氣太冷,馬達凍結	◎等待馬達回暖,或洽經銷商	
運轉聲音異常	◎電源有問題	◎檢查電壓	
	◎泵浦中有空氣	◎拔掉噴槍,待出水正常後再接上	
	◎活門總成異物阻塞	◎清潔活門總成	
	◎吸水量不足(缺水)	◎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	◎馬達過熱	◎檢查電壓	
停止	◎電流斷路器跳脫	◎檢查延長線	
		◎調降壓力	
		◎以上檢查完畢後,等待溫度下降再按	
East were to date to		壓電流斷路器	
無法吸水/出水	◎泵浦內部損壞或阻塞	◎清潔或維修泵浦、清潔吸水過濾網 ◎ ☆☆☆	
	◎噴槍或噴嘴阻塞	◎清潔或維修噴槍/噴嘴	
	◎活門總成異物阻塞或磨損	◎清潔活門總成或更換零件	
	◎泵浦與水槽距離與高度超	◎改善水槽或泵浦位置,清洗機與吸水	
	出範圍	網之高度差(揚程)請勿超過1.3公尺	
American Carlo	◎泵浦吸入空氣	◎拔掉噴槍,待出水正常後再接上	
調壓問題或	◎壓力閥或閥座磨損	◎更換零件	
壓力無法上升	□○迫緊磨損	◎更換零件	
	◎活門塞與活門座沾黏	◎拆解後清洗活門總成或更換零件	
	◎閥座上有異物	◎清潔閥座	
	◎活門總成磨損	◎更換零件	
	◎活門總成異物阻塞	◎清潔活門總成	
	◎噴嘴磨損導致壓力下降	◎更換噴嘴	
	◎泵浦吸入空氣	◎檢查吸水管接頭鎖合或吸水管破裂	
	◎自動洩壓總成損壞	◎送回經銷商更換	

Operation Instructions

A. Operating Instructions

- 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 or connect the Suction Hose to a faucet. When using the faucet, make sure that faucet flow rate is higher than 13 liters per minute and that the water flows smoothly. When using a water tank, 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

<u>** Attention: When replacing the oil, please turn off the power and make sure that the oil temperature has cooled before replacing.</u>

C. Reminders

- 1. Always use clean water with the cleaner.
- 2. If using an extension cord, the length of it should not exceed 10 meters. If its length is longer than 10 meters, please make sure it is thicker than 5.5mm².
- 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	The power cord is not	Make sure the power cord is		
starts and	plugged in.	plugged in properly.		
runs rough	The power outlet does not			
	supply adequate power.	Check or replace the extension		
	The motor freezes due to	cord.		
	the cold weather.	Move the unit into a warmer place		
		or contact your local dealer.		
Unusual noise		Check the voltage.		
	problem.	Disconnect the Spray Gun until the		
	There is air in the pump.	water flow is stable.		
		O Clean the valve assembly.		
	blocked.	Check the Suction Hose and		
		fittings; make sure they are well		
	enough.	connected and in good condition.		
		© Clean the Suction Filter.		
Motor stops running		Check the voltage.		
Tulling	Tripped circuit breaker.	© Check the extension cord.		
	Tripped circuit oreaker.	O Lower the operating pressure.		
		After completing all the above		
		checks, wait for the motor to cool		
		down then press the Circuit		
		Breaker.		

^{**} Continues on page 12 **

Troubleshooting

Problem		Cause		Solution
The pump fails to	0	The pump is blocked or	0	Clean or maintain the pump and
deliver water		damaged.		Suction Filter.
or produce pressure	0	The Spray Gun or nozzle	0	Check and clean the Spray Gun
pressure		is blocked.		and nozzle.
	0	The valve assemblies	0	Clean or replace the valve
		are stuck or worn out		assemblies.
	0	The distance or height	0	Make sure the pump's location
		between the pump and		is no more than 1.3m higher
		the water tank/faucet		than the Suction Filter.
		exceeds the limit.	0	Disconnect the Spray Gun until
	0	Air in the pump.		the water flow is stable.
Pressure	0	The pressure valve or	0	Clean the pressure valve or
adjustment problem		the pressure valve seat is		replace the worn out or damaged
1		worn out, damaged or		spare parts.
		blocked.		
		The packings are worn		Replace the packings.
		out.	0	Clean or replace the valve
	0	The valve assemblies are		assemblies.
		worn out or blocked.	0	Replace the nozzle.
	0	The pressure decreases	0	Check the Suction Hose and
		due to nozzle wear.		fittings; make sure they are well
	0	Air in the pump.		connected and in good condition.
	0	The unloading valve	0	Return the product to your local
		assembly is damaged.		dealer to replace the spare parts.