

Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.



Never dispose of electrical equipment or batteries in with your domestic waste. If your supplier offers a disposal facility please use it or alternatively use a recognised re-cycling agent. This will allow the recycling of raw materials and help protect the environment.

FOR HELP OR ADVICE ON THIS PRODUCT PLEASE CONTACT YOUR DISTRIBUTOR,
OR SIP DIRECTLY ON:
TEL: 01509500400
EMAIL: sales@sip-group.com or technical@sip-group.com
www.sip-group.com



TP420/130 Petrol Pressure Washer



08912

Please read and fully understand the instructions in this manual before operation. Keep this manual safe for future reference.

DECLARATION OF CONFORMITY

Declaration of Conformity

We

SIP (Industrial Products) Ltd Gelders Hall Road Shepshed Loughborough Leicestershire LE12 9NH England

As the manufacturer's authorised representative within the EC declare that the

SIP TP420/130 Petrol Pressure washer - SIP Part No. 08912

Conforms to the requirements of the following directive(s), as indicated.

2006/42/EC
2014/30/EU
97/68/EC
As Amended By
2012/46/EU
2000/14/EC
Machinery Directive
EMC Directive
Emissions (NRMM) Directive
Noise Directive

2000/14/EC As Amended By 2005/88/EC

EN 60335-1:2012+A11:2014 EN 60335-2-79:2012 EN 1679-1: 1998 EN ISO 12100:2010 EN ISO 14982:2009 EN ISO 3744:1995

And the relevant standard(s), including:

Signed:

Mr P. Ippaso - Managing Director - SIP (Industrial Products) Ltd

Date: 01/12/2016.



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SAFETY SYMBOLS USED THROUGHOUT THIS MANUAL



Danger / Caution: Indicates risk of personal injury and/or the possibility of damage.



Warning: Risk of electrical injury or damage!



Hot Surfaces: Indicates risk of possible burning due to hot surfaces created during normal operation.



Flammable! A warning that there is a risk of fire if not handled safely.



Caution: A warning that the pressure washer produces poisonous gases etc. during normal operation.



Note: Supplementary information.

SAFETY INSTRUCTIONS



Important: Please read the following instructions carefully, failure to do so could lead to serious personal injury and / or damage to the pressure washer.

Every SIP pressure washer is carefully packed after assembly; On receiving the pressure washer, check that it has not been damaged during transportation. If the pressure washer is damaged, inform your distributor immediately, and, do not put the pressure washer into operation until the damage has been repaired or the item/part replaced. When using your pressure washer, basic safety precautions should always be followed to reduce the risk of personal injury and / or damage to the machine.

Read all of these instructions before operating the pressure washer and save this user

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PARTS LIST

ENGINE

Ref. No.	Description	SIP Part No.	Ref. No.	Description	SIP Part No.
67.	Governor Gear Mounting Plate	WD02-00580	75.	Governor Gear Shaft	WD02-00588
68.	Governor Gear	WD02-00581	76.	Governor Lever	WD02-00589
69.	Earth Bolt	WD02-00582	77.	Governor Spring	WD02-00590
70.	Washer, φ 10×1.5× φ 16	WD02-00583	78.	Governor Gear Bracket Assembly	WD02-00591
71.	Pin, φ 7×20	WD02-00584	79.	Stop Switch	WD02-00592
72.	Crankcase Cover	WD02-00585	80.	Nut, M6	WD02-00593
73.	Throttle Linkage	WD02-00586	81.	Oil Seal, φ5×φ10×4	WD02-00594
74.	Idle Spring	WD02-00587	82.	Cotter Pin	WD02-00595

EXTRAS

Ref. I	No.	Description	SIP Part No.	Ref. No.	Description	SIP Part No.
N/A	A	Pistol	WD02-00596	N/A	Detergent Pipe	WD02-00613
N/A	A	Lance	WD02-00597	N/A	High Pressure Hose	WD02-00599
N/A	A	Hose Hook	WD02-00598			

PARTS LIST

ENGINE

Ref. No.	Description	SIP Part No.	Ref. No.	Description	SIP Part No.
1.	Bolt, M6×14	WD02-00514	34.	Breather Valve	WD02-00547
2.	Valve Cover	WD02-00515	35.	Oil Seal, φ20×φ42×7	WD02-00548
3.	Rocker Arm Assembly	WD02-00516	36.	Crankcase	WD02-00549
4.	Valve Spring Seat	WD02-00517	3 <i>7</i> .	Stud, M6×59.5	WD02-00550
5.	Rocker Arm Base	WD02-00518	38.	Breather Hose	WD02-00551
6.	Valve Spring	WD02-00519	39.	Bolt, M6×16	WD02-00552
7.	Push Rod	WD02-00520	40.	Bolt, M6×80	WD02-00553
8.	Tappet	WD02-00521	41.	Gasket, Carburettor Insulator	WD02-00554
9.	Intake Valve Seal	WD02-00522	42.	Insulator	WD02-00555
10.	Exhaust Valve	WD02-00523	43.	Bolt, M6×20	WD02-00556
11.	Intake Valve	WD02-00524	44.	Gasket, Air Filter	WD02-00557
12.	Piston Ring Set	WD02-00525	45.	Gasket, Carburettor	WD02-00558
13.	Piston	WD02-00526	46.	Carburettor	WD02-00559
14.	Circlip	WD02-00527	47.	Choke Lever	WD02-00560
15.	Connecting Rod Assembly	WD02-00528	48.	Choke Lever Bracket	WD02-00561
16.	Piston Pin	WD02-00529	49.	Damping Pad	WD02-00562
17.	Muffler Guard	WD02-00530	50.	Air Filter Assembly	WD02-00563
18.	Muffler	WD02-00531	51.	Air Filter Cover	WD02-00564
19.	Spark Plug	WD02-00532	52.	Air Filter Base	WD02-00565
20.	Nut, M6	WD02-00533	53.	Air Filter Element	WD02-00566
21.	Recoil Starter	WD02-00534	54.	Fuel Cap	WD02-00567
22.	Blower Housing	WD02-00535	55.	Fuel Tank	WD02-00568
23.	Nut, M14×1.5	WD02-00536	56.	Fuel Filter	WD02-00569
24.	Starter Cup	WD02-00537	<i>57.</i>	Fuel Hose, φ 6.3× φ 12.5×75	WD02-00570
25.	Flywheel	WD02-00538	58.	Clamp	WD02-00571
26.	Stud, M6×75	WD02-00539	59.	Crankshaft	WD02-00572
27.	Bolt, M6×25	WD02-00540	60.	Woodruff Key	WD02-00573
28.	Stud, M6×73	WD02-00541	61.	Drive Timing Gear	WD02-00574
29.	Ignition Module	WD02-00542	62.	Washer, φ 25.4×1× φ 34	WD02-00575
30.	Choke Plate	WD02-00543	63.	Oil Seal, φ 25 $\times \varphi$ 38 $ imes$ 7	WD02-00576
31.	Breather Cover	WD02-00544	64.	Dipstick	WD02-00577
32.	Gasket, Oil Filter	WD02-00545	65.	O-Ring, Dipstick	WD02-00578
33.	One-way Valve Spring	WD02-00546	66.	Camshaft	WD02-00579

SAFETY INSTRUCTIONS....cont

manual for future reference.

The pressure washer should **not** be modified or used for any application other than that for which it was designed.

This pressure washer was designed to supply high pressure water for the purpose of cleaning mainly inanimate objects.

If you are unsure of its relative applications do not hesitate to contact us and we will be more than happy to advise you.

Before each use of the pressure washer always check no parts are broken and that no parts are missing.

Always operate the pressure washer safely and correctly.

KNOW YOUR PRESSURE WASHER: Read and understand the owner's manual and labels affixed to the machine. Learn its applications and limitations, as well as the potential hazards specific to it.

KEEP WORK AREA CLEAN AND WELL LIT: Cluttered and dark areas invite accidents.

DO NOT USE THE PRESSURE WASHER IN DANGEROUS ENVIRONMENTS: Provide adequate space surrounding the work area. Do not use in environments with a potentially explosive atmosphere.

KEEP CHILDREN AND UNTRAINED PERSONNEL AWAY FROM THE WORK AREA: All visitors should be kept at a safe distance from the work area.

STORE THE PRESSURE WASHER SAFELY WHEN NOT IN USE: The pressure washer should be stored in a dry location, drained of any water and fuel, out of the reach of children and in a frost free environment.

USE SAFETY CLOTHING / EQUIPMENT: Use CE approved safety glasses during operation.

STAY ALERT: Always watch what you are doing and use common sense. Do not operate the pressure washer when you are tired or under the influence of alcohol or drugs.

CHECK FOR DAMAGED PARTS: Before every use of the pressure washer, any damage found should be carefully checked to determine that it will operate correctly, safely and perform its intended function. Any damaged, split or missing parts that may affect its operation should be correctly repaired or replaced by an authorised service centre unless otherwise indicated in this instruction manual.

KEEP ALL COVERS / PANELS IN PLACE: Never operate the pressure washer with any covers / panels removed, this is extremely dangerous.

USE ONLY RECOMMENDED ACCESSORIES: Consult this user manual, your distributor or SIP directly for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards and will invalidate any warranty you may have.

HAVE YOUR PRESSURE WASHER REPAIRED BY A QUALIFIED PERSON: The pressure washer is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

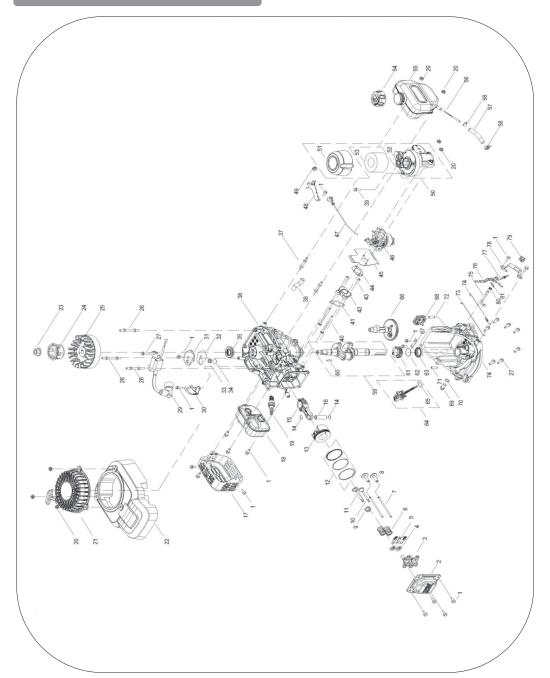
•Be alert at all times, especially during repetitive, monotonous operations; Don't be lulled into a false sense of security.

SAFETY INSTRUCTIONS....cont

- •Stop operation immediately if you notice anything abnormal.
- •Before starting or servicing the Pressure washer, read and understand all instructions. Failure to follow safety precautions or instructions can cause equipment damage and/or serious personal injury. Retain all manuals for future reference.
- •Never attempt to modify this Pressure washer to perform in any manner not intended by the manufacturer.
- •Use only products and parts recommended by the manufacturer For maintenance and repairs.
- •Be sure that the Pressure washer is operated only by persons who have read and who understand these instructions.
- •Be sure that the Pressure washer is placed on a flat level surface prior to and during operation. The Pressure washer must not slide or shift during operation.
- •Keep all untrained persons away from the Pressure washer during operation.
- •Do not allow persons wearing loose clothing or jewellery to start or operate the Pressure washer. Loose clothing or jewellery may become entangled in moving components, causing equipment damage and/or personal injury.
- •Be aware of moving parts and hot surfaces that occur during normal operation of this Pressure washer.
- •Never operate the Pressure washer with damaged, broken or missing parts, or with any guards or covers removed.
- •Do not refill the fuel tank while the engine is running.
- •Allow engine to cool before refuelling.
- •Be careful to prevent fuel spillage during refills.
- •Be sure the fuel tank cap is securely in place before starting the engine.
- •Never refuel whilst smoking or in the vicinity of a naked flame, or other sources of ignition.
- •Take care not to spill any fuel on the engine, exhaust or any part of the Pressure washer.
- •Should any fuel make contact with your clothes; change and wash them immediately.
- •Read the safety data sheet for the fuel; Ensure the operator is aware of the risks and precautions related to the fuel.
- •If any fuel makes contact with your skin wash with soap and water immediately.
- •Be sure to store petrol in clean containers that do not contain water, dirt or rust as these contaminants could enter the engine which will reduce the life of the engine, and may void your warranty.
- •Always follow local laws / regulations regarding the storage of fuels.
- •Never operate this Pressure washer in an explosive atmosphere or near any flammable sources.
- •Always operate this Pressure washer in a well ventilated area to reduce the risk of suffocation.
- •Shut off the Pressure washer engine and disconnect the spark plug before perform-

EXPLODED DRAWING

ENGINE



PARTS LIST....cont

PUMP

Ref. No.	Description	SIP Part No.	Ref. No.	Description	SIP Part No.
67.	Inlet Dust Cover	WD02-00508	70.	O-Ring 4 x 1.5	WD02-00511
68.	Drainage Nozzle	WD02-00509	71.	Needle Valve	WD02-00512
69.	Exhaust Valve Body	WD02-00510	72.	Plum Nuts	WD02-00513

SAFETY INSTRUCTIONS....cont

ing any service or maintenance to the unit.

- •Never cover the Pressure washer or restrict the exhaust or air flow in any way.
- •Always ensure that the Pressure washer is at least 1m (3ft) away from any walls or buildings to allow correct air flow.
- •Never drag the pressure washer with the hose in order to move it.
- •Only connect the pressure washer to a **cold** water supply; **never** connect to a hot water supply.
- •To prevent accidental water spray, the pistol trigger should be placed in the locked position when not in use.
- •When not in use, always ensure that the pressure washer is fully drained of any water and stored in a warm environment to protect it from frost damage.
- •Never direct the flow of water at other persons or animals.
- •Never direct the flow of water at electrical or electronic items.
- •Never direct the flow of water towards the pressure washer itself.
- •Keep hands and other body parts away from high pressure water stream as water pressure will cause severe bodily harm.
- •Do not stand or sit on the pressure washer, it was not designed for this purpose.
- •Never run the pressure washer without a clean water supply connected to it.
- •Never run the pressure washer for more than 3 minutes without depressing the trigger.
- •Do not operate this pressure washer in temperatures below 5°C. Operating pressure washer under the temperature of 5°C may cause damage to pump and other pressure washer parts.
- •Do not hold the water outlet (nozzle) too close to the surface being cleaned or damage could occur.
- •Only use recommended detergents for pressure washers. Using detergents not specifically recommended for use with pressure washers can cause damage to pump and other pressure washer components.
- •This pressure washer is equipped with a low oil shut-off system. If the engine oil level goes below the recommended oil level, the pressure washer will automatically shut-off. This protects your engine and prevents operating without proper lubrication.
- •Understand the operating environment; Before each use the operator should assess, understand and where possible reduce the specific risks and dangers associated with the operating environment. Bystanders should also be made aware of any risks associated with the operating environment.

SAFETY INSTRUCTIONS....cont



Caution: anyone who operates this pressure washer should read and fully understand all of the instructions and warnings in this manual.



Hot Surfaces: During normal operation certain parts of this pressure washer will become hot. **ALWAYS** stay alert and be aware of hot components / surfaces. Allow the engine to cool before attempting to move, clean or maintain the pressure washer.



Poisonous Fumes: Exhaust fumes produced during normal operation are poisonous. **Do not** operate this pressure washer in enclosed areas.



Flammable: The fuel used to run this pressure washer (unleaded petrol) is highly flammable. Never re-fuel the pressure washer whilst it is still running. Store unused fuel safely and away from children and in accordance with local regulations / laws.



CAUTION: The warnings and cautions mentioned in this user manual can not cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be applied.

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PARTS LIST

PUMP

Ref. No.	Description	SIP Part No.	Ref. No.	Description	SIP Part No.
1.	Retaining Ring	WD02-00442	34.	O-Ring 6.07x1.8	WD02-00475
2.	Rotary Shaft Lip Seal	WD02-00443	35.	Relief Valve Spool	WD02-00476
3.	Transmission Box	WD02-00444	36.	O-Ring 8.6x1.8	WD02-00477
4.	O-Ring 15.4x1.8	WD02-00445	37.	Split Ring	WD02-00478
5.	Screw Plug	WD02-00446	38.	Spool Spring	WD02-00479
6.	Bearings 51307	WD02-00447	39.	Top Pin	WD02-00480
7.	Steel Sleeve	WD02-00448	40.	Upper Seat	WD02-00481
8.	Cam	WD02-00449	41.	O-Ring 9.5x1.8	WD02-00482
9.	Bearing 51307	WD02-00450	42.	Stainless Steel Ball	WD02-00483
10.	Spring Seat	WD02-00451	43.	Seat	WD02-00484
11.	Piston Spring	WD02-00452	44.	Ball Valve Switch	WD02-00485
12.	Piston	WD02-00453	45.	U-shaped Pin	WD02-00486
13.	O-Ring 87x2.5	WD02-00454	46.	Seal	WD02-00487
14.	Inlet Valve Body	WD02-00455	47.	Support Ring	WD02-00488
15.	O-Ring 4x1.5	WD02-00456	48.	Washers	WD02-00489
16.	Stainless Steel Ball	WD02-00457	49.	Teflon Gasket	WD02-00490
17.	Conical Spring	WD02-00458	50.	Y-Ring	WD02-00491
18.	Outlet Dust Cover	WD02-00459	51.	O-Ring 11.1x2	WD02-00492
19.	T Connection	WD02-00460	52.	Water Support Pad	WD02-00493
20.	O-Ring 15x1.8	WD02-00461	53.	O-Ring 12.4x1.8	WD02-00494
21.	Reverse Spring	WD02-00462	54.	Inlet Check Valve Spool	WD02-00495
22.	Check Valve Rod	WD02-00463	55.	Return Spring	WD02-00496
23.	O-Ring 5x2	WD02-00464	56.	O-Ring 10 x 2.65	WD02-00497
24.	Pump Base	WD02-00465	57.	Pressure Gasket	WD02-00498
25.	Nuts	WD02-00466	58.	Water Inlet Valve Bracket	WD02-00499
26.	Relief Valve Cover	WD02-00467	59.	Outlet Check Valve Bracket	WD02-00500
27.	Pressure Regulating Nut	WD02-00468	60.	Check Valve Spool	WD02-00501
28.	Regulating Spring	WD02-00469	61.	Support Pad	WD02-00502
29.	Regulating Gasket	WD02-00470	62.	Pump Cover	WD02-00503
30.	Valve Sleeve	WD02-00471	63.	Hexagon Socket Screws	WD02-00504
31.	O-Ring 14x1.8	WD02-00472	64.	Spring Washers	WD02-00505
32.	O-Ring 12.5x1.6	WD02-00473	65.	Thermal Protection	WD02-00506
33.	Split Ring	WD02-00474	66.	Filtrate Network	WD02-00507

EXPLODED DRAWING

PUMP



TECHNICAL SPECIFICATIONS

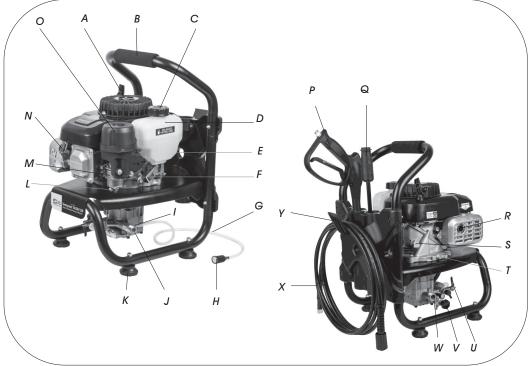
Name	TP420/130 Petrol Pressure Washer
Part Number	08912
Engine Type	4-stroke, single cylinder, air cooled, OHV
Engine Capacity	149cc
Engine Power	2.5Kw @ 3600rpm
Fuel Type	Unleaded petrol
Fuel tank capacity	750 ml (approx.)
Oil Type	SAE 10W-30
Oil Capacity	400 ml (approx.)
Starting System	Recoil
Maximum Output Pressure	130 bar (1885 psi)
Maximum Flow Rate	7 L/Min
Hose Length	5 Metres
Sound power (LwA)	106 dB(A)
Min. Ambient Temperature	5°C
Max. Ambient Temperature	50°C

CONTENTS & ACCESSORIES

Pressure Washer
Hose Hook
Hose
Pistol & Lance
Instruction Manual
Box Spanner (for spark plug removal)
O-Ring Set

If any of these items are missing contact your distributor immediately.

GETTING TO KNOW YOUR PRESSURE WASHER



_			
Ref:	Description	Ref:	Description
A.	Recoil Starter	N.	Spark Plug
В.	Handle	O.	Air Filter Assembly
C.	Fuel Cap	P.	Pistol
D.	Fuel Tank	Q.	Lance
E.	Choke	R.	Exhaust
F.	Engine On/Off Switch	S.	Oil Filler / Oil Gauge
G.	Detergent Pipe	T.	Oil Drain Bung
H.	Detergent Filter	U.	*Priming Inlet (water)
I.	Detergent Inlet	V.	*Priming Exhaust (air)
J.	Water Outlet	W.	Water Inlet
K.	Rubber Foot	X.	Hose
L.	Carburettor Bowl Drain	Υ.	Hose Hook
M.	Carburettor		

^{*} For use with optional suction kit SIP part number 08901; These valves should be kept closed at all times unless using the suction kit.

TROUBLESHOOTING....cont

⇒	Noisy operation.	Worn bearings.Air mixed with water	 Change the bearing. Check inlet lines for restrictions, leaks and/or correct sizing.
\Rightarrow	High crankcase tem- peratures.	Wrong grade of oil.Incorrect amount of oil in crankcase.	Use SAE 10W-30 oil.Adjust oil level to correct amount.
⇒	Rough/pulsating operating with pressure drop.		 Check system for stoppages, air leaks, correctly sized inlet, plumbing to pump. Check inlet lines for restrictions, leaks and/or correct sizing.



Caution: Any repairs / adjustments should only be attempted by a suitably qualified person; if you are unsure call the help-line number on the back page for your nearest technician.



Note: If none of the above solutions work then contact your local distributor for repair, or contact SIP technical for more advise.

TROUBLESHOOTING

Symptom	Possible Cause	Corrective Action
⇒ Engine will not start (or stops during oper- ation).	 Low-oil shutdown. Engine switch not in the "ON" position. Pressure built up in the hose 	 Fill engine with SAE 10W-30 oil. Turn switch to the "ON" position. Squeeze trigger while starting
⇒ Engine sounds abnor- mal, it could be over- loaded.	 Nozzle partially blocked. Pressure built up in the hose. 	 Clean nozzle using nozzle cleaning tool or similar e.g. a paper clip. Squeeze trigger to release the pressure.
⇒ Engine is running but pump won't build maximum pressure or has irregular pres- sure.	 Supply tap closed or no water supply. Unit has been stored in freezing temperatures. Water inlet filter blocked. Kink in inlet hose. Lance tip worn or damaged. Air in pump. 	 Open tap or check water supply. Thaw out unit completely including hose, gun and lance. Clean filter. Straighten inlet hose. Replace lance. Run the pressure washer with pistol trigger pressed and lance removed until steady stream of water is released.
⇒ No intake of detergent.	 Detergent pipe not securely fitted to the unit. Pipe cracked or split. Lance set to high pressure. Nozzle blocked. Detergent too thick. 	 Push firmly into injector fitting. Replace pipe. Switch lance to low pressure mode. Clean nozzle. Dilute detergent.
\Rightarrow Trigger will not move.	Gun safety lock engaged.	Release safety lock.
⇒ Water in crankcase.	High humidity.Worn seals.	Change oil more frequently.Change the oil seals.

GUARANTEE

Guarantee:

This SIP pressure washer is covered by a 12 month parts and labour warranty covering failure due to manufacturers defects. This does not cover failure due to misuse or operating the pressure washer outside the scope of this manual - any claims deemed to be outside the scope of the warranty may be subject to charges Including, but not limited to parts, labour and carriage costs, failure to regularly clean and maintain your pressure washer will shorten its working life, reduce performance and may invalidate the warranty.

The warranty does not cover consumable items such as spark plugs, filters etc.

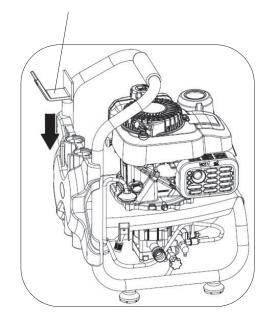


Note: Proof of purchase will be required before any warranty can be honoured.

ASSEMBLY INSTRUCTIONS

FITTING THE HOSE HOOK

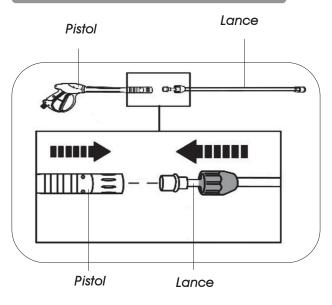
Hose Hook



 Slide the hose hook into the fitting on the front of the pressure washer.

ASSEMBLY INSTRUCTIONS....conf

CONNECTING THE HOSE / PISTOL / LANCE



- Push the lance into the fitting in the pistol.
- Turn the fitting on the pistol to secure the pistol / lance together.



- Fit the end of the hose over the fitting on the pistol.
- Tighten the fitting on the hose with a spanner or similar (not supplied) to secure.

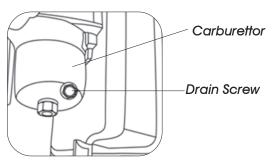
MAINTENANCE....cont

TRANSPORTATION AND STORAGE

To prevent fuel spillage when transporting or during temporary storage, the pressure washer should be stored upright in its normal operating position, ideally with all of the fuel removed and with the engine switch off.

Long Term Storage (1 month or greater).

- Ensure the storage area is free of excessive humidity and dust, and is well ventilated.
- Completely drain the fuel from the tank:
- ⇒ Remove the drain screw from the carburettor (see below).
- ⇒ Drain the fuel from the tank, carburettor and hose into a suitable container.
- ⇒ Refit the carburettor drain screw once the fuel is completely drained.



- Discharge the oil (see 'Replacing The Engine Oil' on page 20).
- Remove the spark plug and fill the cylinder with 1 tablespoon of fresh oil. Refit the spark plug. Pull the starting cord slowly until the resistance is strong, this indicates that the piston is moving to the top of the compression stoke and the valves will be closed.
- Ensure that there is no water left in the system by holding the trigger open and blowing compressed air through the water inlet until all of the water has been removed from the system.



Note: PTFE tape (not supplied), or similar thread seal may be needed on the threads of the pistol if the joint leaks water.

MAINTENANCE



Caution: Always turn off the pressure washer and allow to fully cool before carrying out any maintenance procedures.

REPLACING THE ENGINE OIL

Replace the engine oil after the first 5 hours of operation, then every 100 hours, or yearly, whichever is first, thereafter.

- 1. Turn the oil filler cap counter clockwise and remove from the crankcase.
- 2. Loosen and remove the oil drain bung (see page 15) and allow the oil to drain into a suitable container.
- 3. Refit and tighten the oil drain bung once all of the oil has drained.
- 4. Fill the crankcase to the max level with fresh oil (see page 14/15); we recommend the use of SAE 10W30 oil.
- 5. Refit the oil filler cap.

CLEAN OR REPLACE THE AIR FILTER

Clean or Replace The Air Filter (every 50 hours of use, or less if used in a dusty environment).

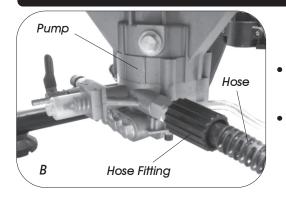
- 1. Remove the air filter cover by turning it.
- 2. Remove the air filter sponge element.
- 3. If the air filter is damaged contact your local distributor to purchase a replacement, If the filter is dirty wash the filter in a solution of warm water and mild detergent and rinse thoroughly. Leave the filter to dry completely, once dried immerse the filter in clean engine oil and squeeze the filter to remove excess oil the filter should only be damp with oil.
- 4. Put the filter back into its original position and refit the air filter cover.

CLEAN OR REPLACE THE SPARK PLUG

Clean or Replace The Spark Plug (every 100 hours of use).

- 1. Pull the spark plug cap to remove it from the spark plug.
- 2. Use the supplied spark plug spanner to remove the spark plug.
- 3. Check for discoloration and remove any carbon build up.
- 4. Check the spark plug gap, it should be between 0.7 and 0.8mm; Adjust / replace if necessary.
- 5. Check the overall condition of the plug and replace if damaged.
- 6. Reinstall the plug and spark plug cap.

ASSEMBLY INSTRUCTIONS....cont



- Push the opposite end of the hose over the water outlet on the pressure washer pump.
- Tighten the fitting on the hose to secure.

CONNECTING TO A WATER SUPPLY

The pressure washer is supplied with an equivalent hozelock type adaptor. The easiest way to connect to a water supply is to fit the equivalent female fitting to the end of the supply hose.



FITTING THE DETERGENT HOSE

Simply push the detergent hose over the detergent inlet.



Detergent Inlet

Detergent Hose

OPERATING INSTRUCTIONS



Caution: Before you operate the pressure washer **ALWAYS** check that no damage is present and that everything that should be, is tight and secure.



Hot Surfaces: Always ensure that the pressure washer is turned off and allowed to fully cool before any refuelling or maintenance procedures are carried out.

FILLING THE CRANKCASE WITH OIL / CHECKING THE OIL LEVEL



Note: When checking the oil level; always ensure that the pressure washer is placed on a firm level surface.

This pressure washer is shipped from the factory without oil in the crankcase.

- Engine oil is a major factor affecting engine performance and service life. Nondetergent oils and vegetable oils are not recommended.
- Use premium quality 10W30 4-stroke engine oil.
- Do not add commercial additives to the recommended oil and do not mix petrol with the oil.
- SAE 10W-30 is recommended for general, all-temperature use.





- Check the oil level in the crankcase of the engine before each start.
- The oil level should be positioned between the lower and upper level marks on the oil filler cap (oil gauge) (see above right).

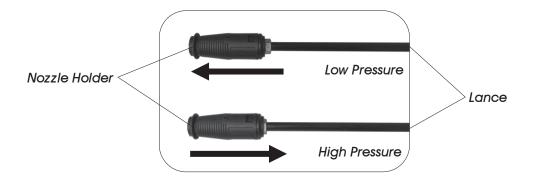
The oil capacity is approximately 0.4L.

OPERATING INSTRUCTIONS....cont

Operating high/low pressure and fan mode:

Pull the nozzle holder away from the lance for low pressure operation; Push the nozzle holder towards the lance for high pressure operation.

Turn the nozzle holder to adjust the spray pattern.



USING DETERGENT

To use the detergent function, the lance will need to be set to *low pressure*. Ensure that the detergent hose is fitted to the detergent inlet.

Place the filter end of the detergent hose into the detergent container (not supplied). The detergent will flow through the hose/pistol/lance when the trigger is pressed.

OPERATING INSTRUCTIONS....cont

STOPPING THE PRESSURE WASHER

In an emergency:

Simply turn the engine switch to the off position.

In normal conditions:

- Press the engine switch to the off position.
- Remove the water supply.
- Press the trigger to allow as much water as possible out of the system.



Note: As much water as possible should be removed from the pressure washer, particularly if the pressure washer will not be used for an extended period such as when it is in long term storage.



Note: Hold the trigger open and blow compressed air through the water inlet until all of the water has been removed from the system.

OPERATING THE PISTOL / LANCE FUNCTIONS

Trigger Lock:

The trigger can be locked off to stop it functioning unintentionally (see below).





OPERATING INSTRUCTIONS....cont



Caution: Be sure oil level is maintained. Failure to do so will invalidate any warranty you may have.



To fill the crankcase with oil proceed as follows:

- Ensure that the pressure washer is on a flat level surface.
- Remove the filler cap (oil gauge) by turning it anti-clockwise.
- Slowly pour the oil into the crankcase.
- Check the oil level by pushing the filler cap back into its hole up to the bottom of the threads (do not screw the cap in).
- Once the oil level is between the upper and the lower marks on the oil gauge (see page 14), replace it and turn clockwise to fully tighten.

The oil level should be checked every 8 hours or daily.

The oil should be *changed* after the first 5 hours of operation; thereafter change the oil after 100 hours of operation or yearly (less if the pressure washer is operated under constant heavy loads or in high ambient temperatures.)

FUELLING / RE-FUELLING THE PRESSURE WASHER



Caution: Petrol is highly flammable; never re-fuel the pressure washer whilst it is running. Do not re-fuel near naked flames or other possible ignition sources.

OPERATING INSTRUCTIONS....cont



Never overfill the fuel tank; leave a small air gap at the top. *Fuel capacity: approx. 750 ml.*



Petrol is highly flammable. Never re-fuel the pressure washer whilst it is still running; allow it to cool for a few minutes and avoid other ignition sources that may be present. Only re-fuel in a well ventilated area as petrol fumes can be dangerous if inhaled or ignited.

To re-fuel the pressure washer:

- 1. Remove the fuel cap.
- 2. Carefully pour the petrol into the tank to the desired level and replace the fuel cap.
- 3. Remove any spilt fuel from the pressure washer and surrounding area to avoid any risk of fire.

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The pressure washer should now be ready to run.

STARTING THE ENGINE



Note: Always set the lance to low pressure (see page 19) and hold the pistols trigger 'open' every time the engine is started; This will ensure that the operator is not trying to start the engine against back pressure.

Step 1:

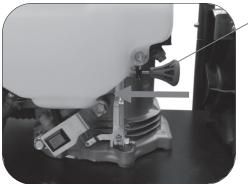
 \Rightarrow Turn the main engine switch to the on (1) position.



Engine Switch

OPERATING INSTRUCTIONS....cont

STARTING THE ENGINE



Choke

Step 2:

Move the choke lever to the "choke" position.



Note: The choke may not be needed if the engine is already warm or the ambient temperature is hot.



Step 3:

- ⇒ Grip the recoil start handle and slowly pull the cord until it engages, then pull sharply until the engine starts.
- Once the engine has started slowly release the recoil and allow the cord to be retracted.



Note: It may take a few sharp pulls to get the engine started.



Note: If the recoil becomes hard to pull during starting; Press and hold the trigger of the high pressure pistol. This will mean that the operator is not trying to start the engine with back pressure in the water supply.

Step 4:

Once the engine is running and warm enough, slide the choke lever out to the 'RUN' position.