

March 09

Domestic Cold Water High Pressure Cleaner

Instruction Manual

Aussie Eco-Clean Concept F140



Please read this manual before using the machine.

# Let's Clean up Australia with an Aussie Eco-Clean Concept F140

Congratulations on your acquisition of a top quality Aussie Concept F140 2,000 psi high pressure water blaster. This machine offers users a wide range of features that make cleaning tasks a breeze.

**Pump** The axial piston pump is the heart of the machine, and

features a brass head and stainless steel pistons.

**Total Stop Protection** The Total Stop device fitted to this machine will automatically

turn your Concept F140 pressure cleaner off when the gun trigger is closed off. The machine will re-activate when you pull the trigger. This protects the pump from overheating

when machine is not in use.

Integrated Detergent Tank

This machine is fitted with a heavy duty, one piece

polypropylene chassis with large integrated detergent tank.

Electric Motor The Concept F140 is powered by a 2.2kW (3HP) single

phase, two pole induction motor, designed to give years of

service.

**Turbo Power**All Concept F140 machines come with a professional style

Aussie Turbo Master turbo lance that allows the operator to have the benefit of an effective working pressure of up to

3,000 psi! ... you'll feel the turbo difference.

Vario High/Low Lance Head The Vario lance enables the operator to vary the angle of the

jet from 0° (direct jet) to 35°, at the twist of the wrist.

High/Low Pressure Function The Vario nozzle allows the operator to apply detergent at

low pressure with a simple readjustment to high pressure

when required.



#### WARRANTY

**WARRANTY LIMITATIONS ON DOMESTIC MACHINES**: The Aussie Concept F140 is guaranteed for 12 months from original date for purchase. Australian Pump Industries warrants that the pressure cleaner will be free of defects in workmanship or material.

Domestic machines (i.e. Concept F140) which are used in commercial service are warranted for a period of three months from date of purchase. Commercial service is deemed to occur where the machine is owned or used by a corporation or an individual under a business name and/or where the machine is used in a full-time or part-time occupation from which the owner of the machine derives an income and/or where Australian Pump Industries Pty Ltd reasonably considers that the condition of the machine is not consistent with private household use only.

#### **WARRANTY DOES NOT COVER:**

- 1. Damage resulting from debris or mineral deposits within water supply to the machine.
- 2. Leaking hoses when the outer cover of the hose has been abraded or the hose has been kinked.
- 3. Damage to "O" rings or valves due to use of abrasive chemicals.
- 4. Damage caused to motor by low voltage from electricity provider or an incorrectly sized extension lead.
- 5. Replacements of parts damaged due to fair wear and tear.
- 6. Damage caused due to lack of regular maintenance as specified.
- 7. Any unauthorised modification to the equipment will automatically void any warranty.
- 8. Failure of the machine due to lack of normal maintenance. (The owner is responsible for the performance of regular maintenance as specified in this instruction manual)
- 9. Progressive damage caused by failure to inform Australian Pump Industries or authorised Aussie Pumps Service Agent of defect within seven days of defect becoming apparent.
- 10. Repair by an unauthorised service person.
- 11. On site servicing, loss of time, inconvenience, loss of use of machine, hire costs of a replacement machine or any other consequential loss or damage.

# DON'T CLEAN IT ... AUSSIE CLEAN IT



# **SAFETY PRECAUTIONS - IMPORTANT**

# **WARNING**

It is important that you read, fully understand and observe ALL of the following safety precautions and warnings. Careless or improper use of any high pressure cleaner may cause serious or even fatal injury.

- 1. Minors should never be allowed to operate this machine.
- 2. Never direct spray jet at any material that may contain asbestos.
- 3. Keep area where machine is in use clear of any bystanders or animals.
- 4. Never let this machine run unattended.
- 5. Do not lend this machine without this instruction manual.
- 6. Only operate this machine if all component parts are undamaged.
- 7. Pay particular attention to the sound condition of electric cable, high pressure hose, spray attachment and housing before use.
- 8. Electric cables should not be left in a position where water can come into contact with the electric cable.
- 9. The operator must be in good physical condition and mental health, free from the influence of any substance which may impair vision, dexterity or judgement.
- 10. Do not operate this machine when you are fatigued.
- 11. Ensure that you are wearing protective clothing, safety glasses with top and side protection and shoes with non-slip soles.
- 12. Never modify your machine in any way.
- 13. Before commencing use, check that your machine is completely assembled and in good condition.
- 14. Ensure you know how to stop machine and release pressure quickly.
- 15. Have a thorough knowledge of machine's controls.
- 16. The electrical power voltage must agree with the voltage specified on label on base of machine. [Note: Improper connection will damage machine and void warranty.]
- 17. The machine must be grounded. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- 18. Do not modify the plug provided with the machine. If plug does not fit your outlet have a proper outlet installed by a qualified electrician.
- 19. Do not use any type of double adaptor or multiple socket power board with this product.
- 20. Use only three wire extension cords that have three prong grounding type plugs and three pole cord connectors that accept the plug from the product. Use only extension cords that are intended for outdoor use. These are identified by a marking "Acceptable for use with outdoor appliances".
- 21. Use only extension cords having an electrical rating not less than the rating of the product (refer this manual). An improper gauged extension cord will cause drop in wire voltage resulting in loss of power and overheating.













# **Safety Precautions cont.**

- 22. Always keep electrical connections dry and off the ground.
- 23. Do not touch plug with wet hands.
- 24. To avoid damage to cable do not roll, crush or pull it.
- 25. Always inspect the power cable before and after use for any signs of damage or aging.
- 26. Always hold spray gun and lance firmly with both hands so you maintain full control.
- 27. Do not operate the machine whilst standing on ladders. Use scaffolding or a platform tower. Always keep good footing and balance.
- 28. Never spray the machine with pressure jet of water. You risk short-circuiting the machine.
- 29. To reduce risk of serious injury never point high pressure jet at either persons or animals, nor at any part of your body. In case of penetration seek medical attention immediately.
- 30. Do not cover machine. Always provide adequate air circulation in the work area.
- 31. Only use a high pressure hose which is approved for machine's operating pressure (see "Specifications" section).
- 32. The high pressure hose must never be crushed, stretched, kinked or twisted.
- 33. Never attempt to move the machine by pulling the high pressure hose.
- 34. To reduce risk of serious or fatal injury from electrocution, disconnect the plug from power supply and relieve pressure to hose before attempting any work on the machine.
- Only carry out maintenance or repairs described in this manual. ALL other work should be performed by your local authorised Aussie Pumps Service Agent.
- 36. The power cable may only be repaired or replaced by an authorised Aussie Pumps Service Agent.
- 37. Store the machine in a dry place and protect from freezing temperatures as exposure may damage the machine (follow storage instructions in this manual).
- 38. Use only chemical cleaning agents/detergents approved for power washing when using the chemical injection facility and never introduce solvents (i.e. acid, paint thinners, petrol, oil, etc.) into the detergent injection system.

#### WARNING - The appliance must be earthed.

We recommend that this machine is connected to the mains switch by a residual current circuit breaker (earth leakage protection device).

#### **WARNING - Extension Cables**

The use of an incorrectly sized extension lead can burn out the electric motor. Failures of this kind are NOT covered by the warranty.

We recommend the following YELLOW extension cables for high pressure cleaners which use **10 amp** plugs as standard:

- CLICK 10m lead P# CHL100 IN
- CLICK 10m lead w/integral safety switch P# CHL100 INS
- HPM 10m lead P# R2810
- HPM 2m safety switch P# R5102









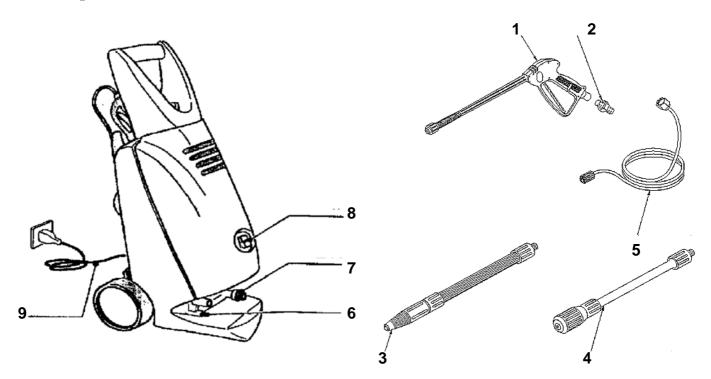
# **TECHNICAL SPECIFICATIONS**

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Working pressure	2000psi
Maximum water flow	9 lit/min
Supply voltage	240v 10amp
Power consumption	2.2 kW
Weight	29 kg
Pump head	brass
Maximum water temperature	50°C
Maximum inlet pressure	50psi
Minimum water pressure requirement	28psi
Detergent tank capacity	5 litres
Total Stop	Yes
Noise Level	76 dBA

# **PRODUCT INFORMATION**

# Concept F-140

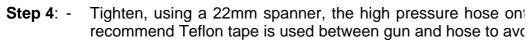


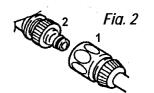
- 1. Pro gun (AL9)
- 2. 3/8 male/male nipple (joins high pressure hose to gun)
- 3. Vario nozzle
- 4. Turbo nozzle
- 5. High pressure hose
- 6. High pressure hose connection (outlet)
- 7. Water inlet (mains connection)
- 8. On/off switch for pump motor group
- 9. Electrical cable

## **ASSEMBLY/PREPARATION & USE**

WARNING: When the machine is new it requires a brief running in of motor/pump unit. Running in consists of running the machine for no longer than one hour and letting it cool for at least one hour. This operation should be repeated at least three or four times.

- **Step 1**: Remove plastic travel caps from both inlet and outlet (if supplied).
  - Fit inlet and outlet hoses as described below.
- **Step 2:** Connect water hose (garden hose). (Ensure fittings are clean.)
  - Provided with your machine is a hose adaptor which allows Item No. 1 to connect onto Item No. 2 as illustrated.
  - Item No. 2 also comes complete with a mesh filter as standard.
  - If you do not receive the mesh filter inside the hose connector, do not operate machine as this filter protects the pump against debris entering into the system.
  - Push inlet hose (1) onto hose connector (2):
- **Step 3**: Connect high pressure hose to pump outlet.
  - Insert high pressure hose into machine outlet as pictured (1)
  - Tighten union nut (black coupling) by hand (2).
  - Turn on water





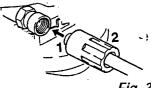
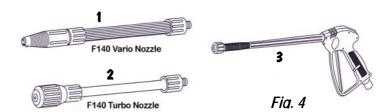


Fig. 3

<u>Please Note</u>: If there are any leaks on the high pressure accessories, including hose, gun and lances, this can cause the Total Stop function on your pressure cleaner to not operate correctly. Any leaks will cause the machine to pulsate. LEAKING ACCESSORIES MUST BE REPLACED IMMEDIATELY.

#### Assembly of spray attachment for Concept F140

 Screw, by hand, the vario nozzle (1) or turbo nozzle (2) into the high pressure gun (3) until black coupling is tight.



**IMPORTANT**: The machine must only be operated in an upright position.



## START UP PROCEDURE

#### **BLEEDING PUMP**

- Turn water supply on (accessories must be assembled as described above)
- Bleeding of pump requires the operator to have the high pressure gun trigger pulled while the machine is turned off.
- When the trigger is pulled and the water supply is turned on, this should give a constant water supply coming through the machine while it is turned off.
- Only switch machine on after water supply is turned on and the operator has bled water through the pump.
- Please note this procedure should be performed on each initial use.

#### **SWITCHING ON MACHINE**

- Set black switch to ON position (Fig. 5A). (Switch types may vary.)
- Point gun at object to be cleaned.
- Press safety latch to unlock spray gun.
- Point nozzle down.
- Squeeze trigger, adjust vario nozzle to desired pressure.
- Motor switches off when trigger released, motor will re-engage when trigger is pulled.
- (This safety feature is called the Total Stop function.)

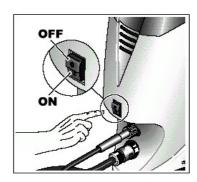


Fig. 5A

#### **SWITCH OFF MACHINE**

- Turn switch to OFF position. (Fig 5A.)
- Turn off water.
- Release pressure in spray gun by pressing trigger until water only drips from the spray head.
- Release trigger on gun.
- Press safety latch on gun (Fig. 5B). This locks gun trigger and prevents accidental triggering.
- Unplug machine from power point.
- Disconnect water supply hose from machine.

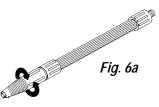
# Fig. 5B

#### **NOZZLE ATTACHMENTS**

Each Aussie Eco-Clean pressure cleaner receives 2 nozzle attachments.

Nozzle Attachment 1 – Vario Nozzle

The vario nozzle can be twisted in either a clockwise or anti-clockwise d either give a pin jet spray pattern or a fan jet spray pattern. The fan regulate the pressure of the machine.



#### Nozzle Attachment 2 – Turbo Nozzle

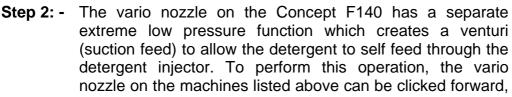
The turbo nozzle is a non-adjustable nozzle pattern which comes out in a conical (cone shaped style pattern). This different style of pattern allows quicker cleaning of large surface areas including paved areas, concrete areas, driveways, etc.

Fig. 6b

#### **DETERGENT APPLICATOR (CLEANING AGENTS)**

#### **Step 1: - Fill detergent tank with detergent:**

The Concept F140 detergent tank is incorporated into the chassis of the machine. When filling the detergent tank never pour detergent into the tank unless it has been diluted down. If the detergent is too thick, this will cause blockage through the detergent injector (*Fig. 7*).





creating the venturi. The nozzle should click forward approximately 2cm. The detergent will only operate when the unit is on its extreme low pressure function.

- **Step 3. -** Once operator has finished with the detergent, then warm water should be filled into the detergent tank and Step 2 should be repeated to avoid the detergent sticking inside the detergent injector of the machine.
- \* Never let detergent dry on objects.
- ★ Never use caustic or acidic materials through detergent function facility.

## **TOTAL STOP ADJUSTMENT**

Total Stop is a unique device that automatically turns the machine off when the operator releases the trigger. Total Stop can move out of adjustment through wear or being knocked or jarred.

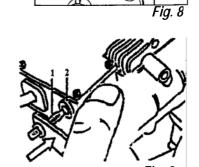
**IMPORTANT:** Aussie Eco-Clean recommend o-rings must be replaced when carrying out any maintenance and repair work. All moving parts, screws and sealing rings must be coated in marine grease prior to use. Water leaks internally in the pump or on the high pressure accessories can cause the Total Stop function not to work (this will cause the machine to pulsate).

NOTE: The machine's permissible working pressure has been set on the safety unloader by the manufacturer and MUST NOT BE CHANGED. The unloader is sealed for this reason. The permissible working pressure must be re-set after all repairs and the unloader resealed with paint on unloader lead.

#### REMOVAL AND INSTALLATION

- Remove motor and pump group from chassis and covers.
- Unscrew hex bolts (Fig. 8).
- Take note of adjusting screw for micro switch, the o-rings and the delivery valves.
- To replace unloader remove bypass valve.
- Insert adjusting screw (*Fig. 9*) in the opening of the micro switch (Total Stop).
- Fix fastening screws and torque to 7NM, working crosswise.
- Set working pressure when machine cuts off when the trigger is released.
- Repaint unloader seal.

If you do not feel confident to carry out this adjustment, take your machine to your local authorised Aussie Pumps Service Agent.



#### **CARE AND MAINTENANCE**

**MARNING:** Ensure the plug is removed from socket before carrying out any maintenance, adjustment or servicing.

- Storage: Store your Aussie-Eco Clean blaster in an upright position. If there is a danger of freezing have your local authorised Aussie Pumps Service Agent inspect unit before next operation.
- 2. **Long Storage**: If you plan to store your machine for a long period it is recommended that you run antifreeze through the machine before storage. If fan seizes after long storage period, turn nut which holds in fan to loosen fan assembly. (This must be done while power is turned off.) (*Refer Fig. 10.*)

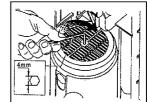


Fig. 10

3. Water Inlet Filter: Located in the garden hose connector, this mesh filter should be cleaned after a minimum of five hours use. Also ensure that nothing is blocking the filter as this will restrict water flow going to your pump which can be harmful to your machine.

#### **MAINTAIN YOUR DOMESTIC PRESSURE CLEANER**

A small investment in time maintaining your hobby or professional cleaner will result in long trouble-free use.

#### DAILY OPERATIONAL CHECK LIST

- 1. Check for gun or hose leaks.
- 2. Check for pump oil leaks.
- 3. Check nozzle for wear.
- 4. Check water filter and clean if necessary. (Water filter is located in water inlet mains connection.)
- 5. If unit is used with detergent injector system, check to make sure detergent injector system is flushed with clean water after use.

#### DOMESTIC MACHINE QUARTERLY SERVICE

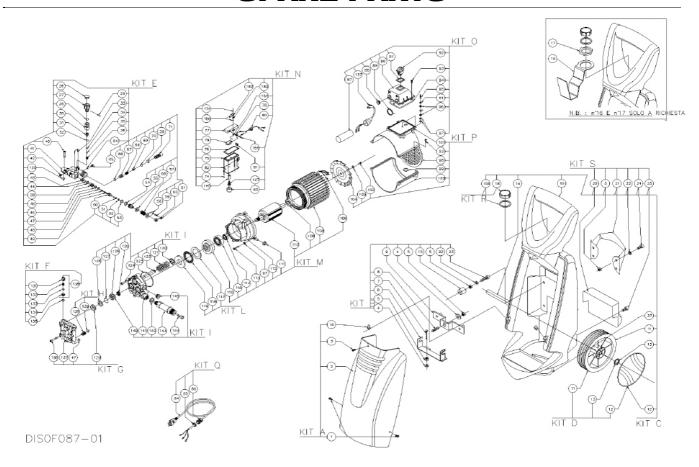
- 1. All of the above in Daily Check plus the following:
- 2. Change pump oil, use non-foaming, non-detergent SAE30-100 Grade oil.
- 3. Check unloader and Total Stop for adjustment or leaks.
- 4. Check high pressure hose for general condition and leaks (replace kinked hoses).
- 5. Replace nozzle head on lance if worn.

ATTENTION USERS: If you are not confident about carrying out routine service, take your machine to an authorised Australian Pump Industries' Service Agent for their expert attention. Oil change procedures are available through Australian Pump Industries or an Australian Pump Industries dealer.

#### REGULAR SERVICING

Regular servicing pays. Both hobby and professional machines need regular servicing. Take your machine to an authorised Aussie Pumps Service Agent at regular intervals, depending on the amount of use. Hobby machines should be serviced annually. Professional machines, used in commercial applications, should be serviced quarterly by an authorised Aussie Pumps Service Agent. All pumps require an oil change by an authorised Aussie Pumps Service Agent after every 30 hours of use or 3 monthly intervals, whichever occurs first. Recommended oil is SAE30 non-foaming hydraulic oil.

# SPARE PARTS



## Commonly used parts:

Valve kit	FKTRI64672
Minor seal kit	FKTRI64746
Major seal kit	FKTRI64832
Manifold kit (Kit E)	FKTRI83733
T10 vario zoom nozzle & lance	C4723.45.115
Aussie Turbo master turbo lance	CTN140-035
Gun	C4333.13
Hose	AHOSEABB100
Switch	FMECI90213

# TROUBLESHOOTING

Before starting any work on the machine unplug the power cable, turn off the water supply and activate the spray gun until the pressure has been relieved completely.

FAULT	CAUSE	REMEDY
Pressure fluctuates or drops	Lack of water	Check water supply; ensure tap is turned on to max.
	Water filter clogged	Clean water filter
	Nozzle orifice worn	Replace turbo or vario head
Motor hums when	Mains voltage too low	Check electrical connection
switched on but does not start	Cross-section of extension lead to small	Use correct dimensions extension lead. See page 5.
Motor will not start when switched on	Power supply not OK	Check plug, cable and switch
	Mains fuse tripped	Replace mains fuse by qualified electrician
Motor stops	Motor thermal overload protection safety switch tripped due to motor overheating	Check that power supply matches appliance voltage. Wait 20 minutes then switch machine on again.
No detergent function	Detergent container is empty	Refill detergent container
	Detergent pick-up body clogged	Clear blockage
	Injector clogged	Clean injector
	Vario nozzle not set to low- pressure operation	Set pressure control to low-pressure operation
Jet is ineffective, ragged, unsteady, spraying incorrectly	High pressure nozzle in spray head clogged	Clean high-pressure nozzle with metal nozzle cleaner provided

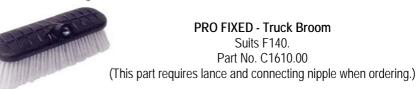
# OPTIONAL ACCESSORIES - to make work easier!







ROTARY – Pro-Rotox pro. rotary brush Suits F140. Part No. C1610.02 (When ordering also order C1500.05 connecting nipple.)





AUSSIE PUMP SAVER - Line Strainer Suits all units. Part No. MPA28030020P

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