

# *Aussie Pumps* Cougar MkII Pressure Blaster OPERATION & MAINTENANCE MANUAL



Feb 2012



**IMPORTANT:**

TO REDUCE RISK OF INJURY, READ  
OPERATING INSTRUCTIONS CAREFULLY  
BEFORE USING EQUIPMENT



## AUSSIE PUMPS COUGAR MKII OPERATING AND MAINTENANCE INSTRUCTIONS

**\* \* WARNING \* \***  
**AUSSIE HIGH PRESSURE WATER BLASTERS ARE DESIGNED  
 FOR PROFESSIONAL OPERATORS ONLY**

## INTRODUCTION

Thank you for purchasing this Aussie Pumps Eco-clean pressure washers. For over 16 years cleaning professionals have relied on the superior quality of Australian Pump products for their pressure washing needs. This Aussie Eco Clean product is guaranteed against faults in manufacture for one year from purchase. This guarantee is invalid if the product is found to have been abused in any way, or not used for the purpose for which it was intended.

Routine maintenance is the owner's responsibility. Failure to maintain the machine in line with the services outlined on the back page will invalidate warranty. High pressure accessories carry a 3 month warranty.

**Aussie use only genuine Honda engines. Honda GC series engines are backed by a universal 1 year domestic warranty, 3 month commercial warranty, supported by Honda MPE in Australia.**

**N.B. Warranty is not transferrable to third parties in the event of sale of the machine within the warranty period. Please note that any parts used in warranty repairs are guaranteed for a period limited by the original warranty of the parent product.**

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

The benefits under the Aussie Pump warranty are in addition to other rights under Australian Consumer Law.

Before attempting to operate your machine please read this instruction manual and the engine manual thoroughly, following all directions carefully. By doing so you will ensure safe operation of the unit and will enjoy long and trouble free service from your Aussie high pressure water blaster.



## SAFETY PRECAUTIONS - IMPORTANT

1. **NEVER** direct the spray jet at any person or animal. Keep hands and feet clear of the cleaning nozzle at all times.
2. **NEVER** direct spray jet at any surface that may contain asbestos material.
3. **NEVER** hold a finger over the high pressure nozzle.
4. **NEVER** direct the spray jet at the machine itself or any electrical equipment.
5. After use release the pressure in the high pressure hose by operating the gun trigger.
6. **DO NOT** attempt any mechanical repair. If you have a problem with your machine contact your local Aussie Eco Clean Service Division, phone (02) 8865 3500.
7. **NEVER** supply any liquid other than water to the pump inlet.
8. **DO NOT** run dry; cold water re-entering a hot dry pump will result in cracked pump pistons.
9. **NEVER** pull the high pressure hose if it has formed kinks or nooses.
10. **NEVER** pull the hose over sharp objects.
11. **DO NOT** attempt to disconnect any hose or coupling with pressure still in the hose.
12. **DO NOT** operate the machine whilst standing on ladders, use a platform tower or scaffolding.
13. Operate in well ventilated areas only.
14. **DO NOT** fill the fuel tank while engine is running
15. **DO NOT** try to repair a leak in the hose or connection while the system is under pressure.
16. **DO NOT** substitute any component part on this machine. Use of incorrect parts could cause serious personal injury.
17. Children should **NOT** be allowed to use the machine.
18. We recommend the use of safety goggles and steel cap boots when using the machine, particularly with the sand blasting attachment (optional accessory) or any application where loose particles of stone or grit, etc. may be blown around by the pressure spray.



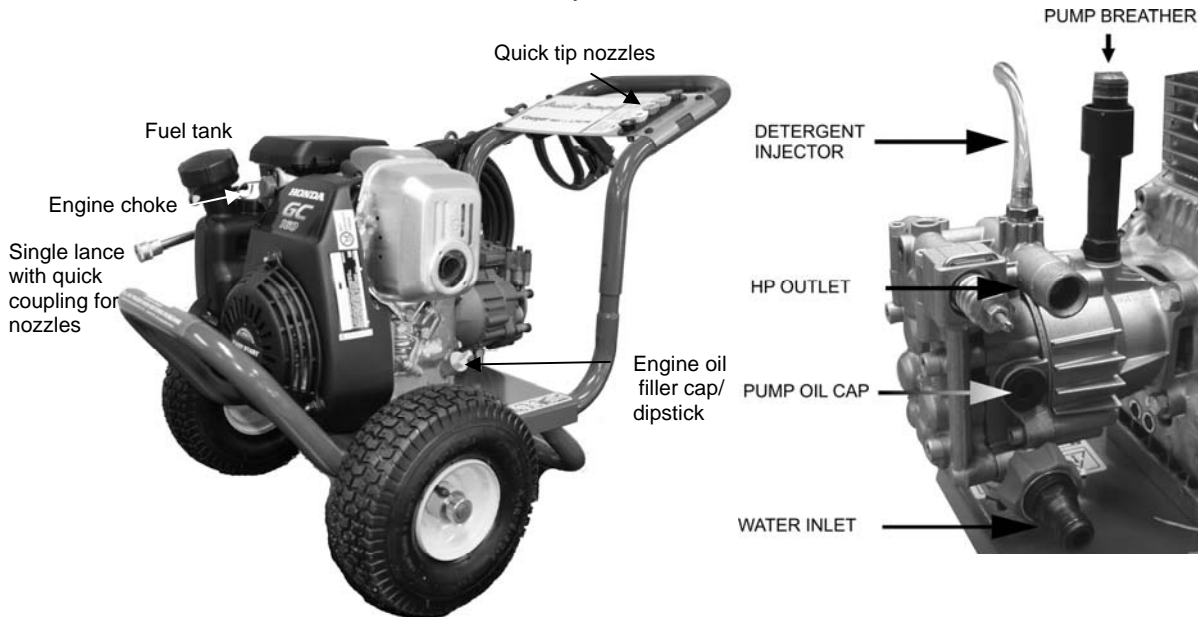
## SPECIFICATIONS:

Model	Pump Pressure (psi)	Pump Model	Flow rate (lpm)	Engine	Pump rpm
<b>Cougar MkII</b>	2750	MTPO93525 (Jan 2012)	9	Honda GC160 5HP	3200

## ASSEMBLY AND PREPARATION FOR USE

Before proceeding with assembly of your new Aussie Eco-clean AB high pressure blaster, check that all parts listed below are included.

- 1 Gun handle assembly
- 1 High pressure hose
- 1 Lance and nozzle assembly



## A. Machine Preparation (initial start-up)

1. Check oil level in the pump (remove pump oil cap) and fill with Renolin 100B non detergent oil if necessary. Do not tip pump to fill, oil is sufficient when it starts to trickle out of chamber.
2. Check oil level in engine and fill with proper grade oil if necessary. (SAE 10W-30)
3. Remove label and cap from top of pump breather.
4. Check fuel level and fill if necessary. (unleaded petrol)
5. Assemble gun/lance assembly.

## B. Hose Connections

1. Connect high pressure hose to machine HP outlet.
2. If optional low pressure downstream, in-line chemical injector is to be used, connect the injector tube to the detergent inlet and place the other end of the tube, with the strainer attached, in the chemical container (not supplied).
3. Connect gun/lance assembly to high pressure hose. Quick coupler sleeves must be pushed into locked position to prevent accidental uncoupling.
4. Check inlet water filter is clean then connect water supply hose to machine. Use a 18mm (minimum) hose .



Incoming water supply must deliver double the flow of the machine. If questionable, check supply at machine. If supply is insufficient, do not operate from this outlet. For residential use, the outlet closest to the meter will usually deliver the highest flow rate. Connect only to clean town water supply.

**Warning:** Do not operate from tank or pond. Doing so will cavitate the pump causing damage. Cavitation or pump starvation is not covered by warranty. Cavitation is a phenomenon causing vacuum pockets to form within the pump that eventually implode under pressure pitting the internal pump surfaces. It will eventually result in pump failure.

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C. Before starting the machine

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**OPERATE IN WELL VENTILATED AREAS ONLY.**

1. Ensure machine is level
2. Turn on water supply.
3. Pull gun trigger until water starts to flow in a steady stream then release trigger.

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D. Starting the engine

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1. Ensure fuel valve is open
2. Move the choke on the engine to the closed position. If engine is warm, move choke half-way.
3. Turn engine ON/OFF switch to ON
4. Hold the gun trigger on.
5. Pull the recoil starter grip lightly until resistance is felt, then pull briskly.
6. After engine starts, release the gun trigger and slowly open the choke.
7. Warm up engine for 3 minutes without load.

**HIGH PRESSURE SPRAY CAN PENETRATE THE SKIN AND CAUSE SERIOUS INJURY!  
NEVER POINT THE SPRAY GUN AT YOURSELF, OTHER PEOPLE OR ANIMALS.  
SHOULD SPRAY PENETRATE THE SKIN, SEEK MEDICAL ATTENTION IMMEDIATELY!**

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E. Pressure washing

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**WEAR PROPER FACE PROTECTION WHEN OPERATING PRESSURE WASHER!**

Single lance with quick fit nozzles

1. Select the cleaning nozzle or accessory best suited for the cleaning job.  
NOTE: some accessory nozzles function as both a high pressure cleaning nozzle and low pressure chemical injector nozzle.
2. LOCK THE GUN VALVE SAFETY TRIGGER (prevents accidental activation)
3. Connect the required nozzle.
4. Push quick coupler sleeve into LOCKED position to prevent accidental loss of nozzle.  
The unlock gun trigger.

NOTE: Check the system for water leaks, fuel leaks, oil leaks, hose kinks, etc. Correct any problems before proceeding.

Machine is now ready for operation.

IMPORTANT: Use detergents designed specifically for pressure washers. Household detergents could damage pump. **DO NOT use caustic cleaning chemicals as this will void warranty.**

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F. Applying detergent

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1. Prepare pressure washer detergent solution as required by manufacturer.
2. Place detergent siphon tub/filter into solution.
3. Make sure "DETERGENT" nozzle (Black) is installed .
4. Apply cleaning solution to a dry surface, starting at lower portion of areas to be washed and work upward, using long overlapping strokes.
5. Allow time to detergent to activate and then rinse off. DO NOT allow detergent to dry on.

IMPORTANT; You must flush the injection system after each use by placing siphon hose into a bucket of clean water, then run pressure washer in low pressure (black nozzle) for 2 minutes.

**WARNING .... DO NOT RUN EXCESSIVE BY-PASS  
SWITCH MACHINE OFF WITHIN TWO MINUTES OF CEASING OPERATION AS EXCESSIVE BY-PASS  
CAN CAUSE HEAT BUILD UP IN PUMP AND SUBSEQUENT DAMAGE.  
EXCESSIVE BY PASS RUNNING VOIDS WARRANTY!!**

**UNLOADER SETTING**

**The high pressure unloader on the machine is factory set to operate the pump at it's rated pressure. DO NOT ADJUST. Tampering with the unloader will void warranty and can be dangerous.**

**G. Stopping the machine**

1. If using the detergent injector, flush out the chemical by running clean water through the system.
2. Allow machine to run for 1 minute without load to cool before stopping.
3. Turn engine ON/OFF switch to OFF
4. Pull recoil start until compression resistance is felt. Store the machine in this position to help prevent valve warpage or sticking.
5. Close fuel valve.



**FAILURE TO CLOSE THE FUEL VALVE ON THE ENGINE CAN CAUSE FUEL LEAKAGE WHEN THE MACHINE IS BEING TRANSPORTED!**

6. Turn off water supply.
7. Remove the cleaning nozzle or accessory from the extension quick coupler (if applicable).
8. Pull gun trigger to release all pressure in the system, then LOCK THE TRIGGER.
9. Hoses may now be disconnected from the machine.

Failure to release pressure before disconnecting the hose quick coupler will result in the quick coupler o-ring seal blowing out. This o-ring must be replaced before operating machine.

Warning: check nozzles and replace of worn

**If pressure drops off, check nozzle for wear. Nozzles should be replaced on a regular basis (every month for machines in regular use, every 3 months for machines used intermittently. Using the machine with the incorrect nozzle size or worn nozzle will void warranty and can be dangerous to the operator.**

**CARE AND MAINTENANCE:****AFTER EACH USE**

If cleaning agents have been mixed with the incoming water, it is essential to flush the machine with clean water after use.

If there is a danger of freezing anti-freeze should be mixed with the flush water or the machine must be completely drained.

After the final flush stop the machine. DO NOT allow the machine to idle for more than 15 seconds. This is particularly important when there is a danger of freezing. Do not run for longer without water supply.

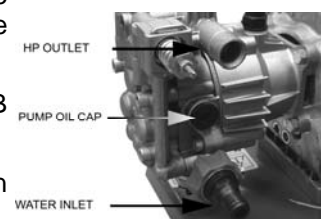
**STORAGE**

Store the washer in an upright position, preferably drained of water if there is a danger of freezing.

**PUMP CRANKCASE LUBRICATION**

Proper pressure washer pump crankcase lubrication will help extend the working life of the machine. Follow these important guidelines. We recommend keeping a simple service log book.

- Change oil in pump after initial 50 hour run-in period. (Renolin 100B non-detergent oil)
- Change pump oil every 3 months, use high quality oil. (Renolin 100B non-detergent oil)
- Pump oil level can only be checked by removing the oil cap located on the side of the pump. Fill the chamber until oil starts to trickle out. Do not tip the pump to fill. DO NOT over-fill the crankcase.



**PREVENTATIVE MAINTENANCE**

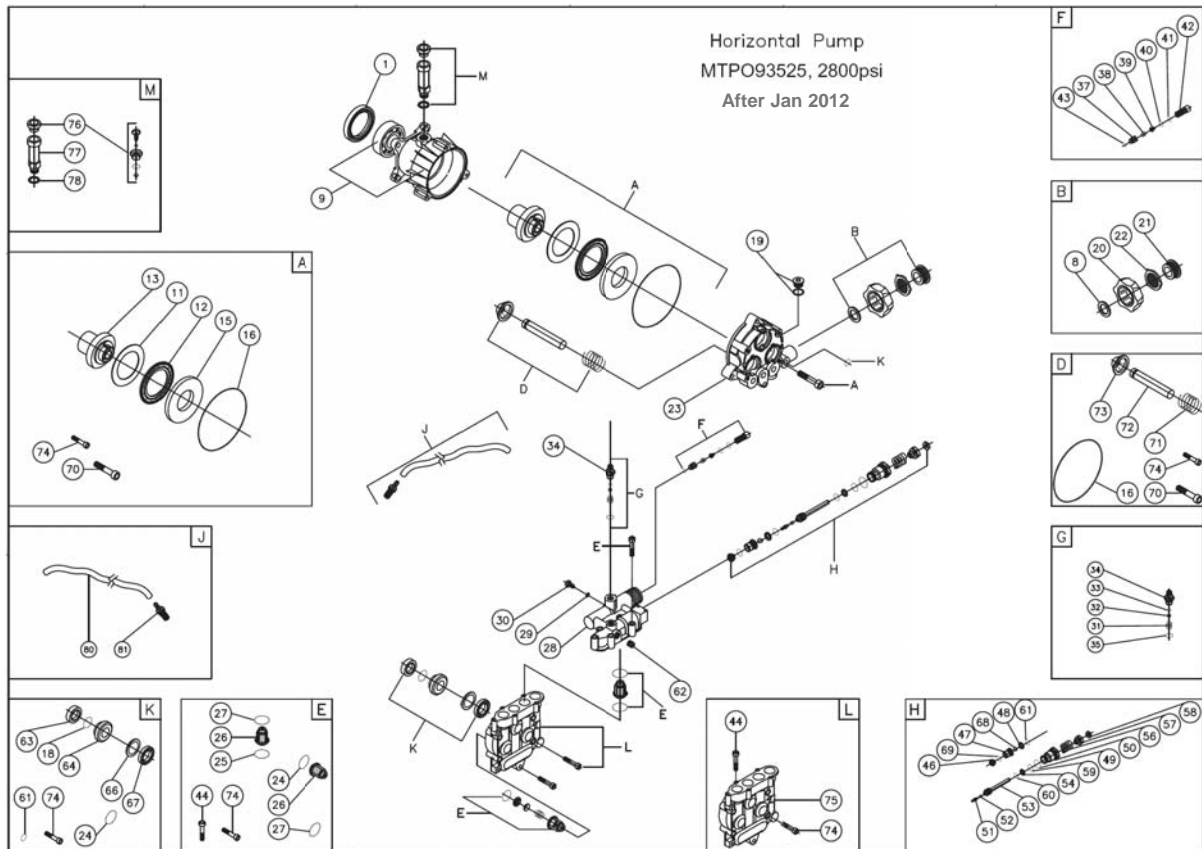
- Keep filter in supply hose connection clean, rinse regularly.
- Use correct size nozzles for machine and replace when worn, check serial tag for correct size.
- Drain water from pressure hoses, gun/lance assembly and accessories after use.
- Protect pump from freezing. Failure to remove water from the pump in freezing temperatures will result in damaged pump manifold.
- Use ONLY injector of the size and type designed for this model.
- **DO NOT** tamper with unloader valve adjustment or alter engine speed.
- **DO NOT** siphon chemicals through the pump, it is designed for water only.
- Incoming water supply must not exceed 60°C, otherwise pumps seal damage could result
- Follow engine manufactures guidelines for engine maintenance. (see engine manual)

**TROUBLE SHOOTING GUIDE**

<b>PROBLEM</b>	<b>PROBABLE CAUSE</b>	<b>SOLUTION</b>
No Pressure	Unloader sticking. Worn Piston U-Cup. Debris In Valves of Pump.	Remove unloader, flush with water. Clean parts & replace. Rebuild Unloader Valve (Service Centre). Remove Valves and clean. Flush Manifold. Install Inlet Water Filter.
Not Unloading	Leak in gun/lance assembly or hose. Debris or wear in Check Valve. Check O-Ring. Damaged Piston U-Cup.	Replace leaking accessories. Remove Check Valve parts and clean. Reface with emery cloth, or replace check valve. Rebuild Unloader Valve (Service Centre).
Low Pressure	Worn or incorrect nozzle size. Improper engine R.P.M. Inadequate water supply. Cracked pistons as result of dry running	Replace nozzle with proper size. Adjust R.P.M. with Tachometer. Check supply. Clean or replace Inlet Water Filter. Replace pistons
Pulsation or Hoses Shaking.	Inadequate water supply. Debris in valves of pump. Worn high pressure packings. Damaged manifold head.	Check supply. Clean or replace Inlet Water Filter. Clean Debris from valves. Install Inlet Water Filter. Install Plunger Seal Repair Kit. Check Manifold head for wear or cracks.
Water Leak Under Manifold.	Worn Plunger Seals. Worn or damaged plungers. Sand or dirt entering system. Running pump dry.	Replace seals with Plunger Seal Repair Kit. Check for wear or cracks. Replace. Check or install Inlet Water Filter. Do not use well water. Check water supply and Inlet Water Filter.
Water in Pump Oil.	Worn Plunger Seals. Worn or damaged Plungers Sand or dirt entering system. Running Pump dry.	Replace seals with Plunger Seal Repair Kit. Check for wear or cracks. Replace. Check or install Inlet Water Filter. Do not use well water. Check water supply and Inlet Water Filter.
Pump Oil Leak.	Travel plug in use i Oil level too high. Wrong oil type. Water in oil. Engine R.P.M. too high. Operating on unlevel surface.	Replace travel plug with breather plug Consult Owner's Manual. Consult Owner's Manual. Damaged Plunger Seals or Plungers. Adjust engine R.P.M. with Tachometer. Move to level surface.
Recoil Hard to Pull.	Broken unloader spring.	Replace unloader spring. Note: unloader spring should be replaced every year or after every 500 hours.

For engine troubleshooting refer to the Honda engine handbook.

REPLACEMENT PARTS



Replacement Pump Kits

KIT	Stock Code	Alt Part Number	Description	Qty
A	n/a	FKTRI94012	KIT F 15-081 SEAL KIT 2800	1
B	F7001803	FKTRI83477	KIT 672 GARDEN HOSE KIT MTP 2500 GN190670	1
D	F7001052	FKTRI91121	KIT F 15-004 PISTON KIT MTP2500 M7 GN	1
E	F7002149	FKTRI94014	KIT F 15-083 SMALL VALVE KIT MTP2800	1
F	F7001701	FKTRI83462	KIT 657 VALVE KIT MTP GN190592	1
G	F7001058	FKTRI91351	KIT F 15-012 ASP. DETERGENT SUCTION KIT. MTP GN-----	1
H	F7002147	FKTRI92404	KIT F 15-021 BY-PASS VALVE KIT MTPO3000	1
K	F7002148	FKTRI94013	KIT F 15-082 PACKING KIT. MTP2800	1
L	n/a	FKTRI94011	KIT F 15-080 PUMP HEAD MTP2800	1
M	F7001465	FKTRI83478	KIT 673 BREATHER CAP KIT GN190669	1
	F7102060	FMTPO93581	COMPLETE REPLACEMENT PUMP	1
		tba	THERMAL DUMP	
28		FMFVR93859	MANIFOLD	1

Accessories

C3930.00	400MM SS SINGLE LANCE	1
M212003540	3/8 G-M M22X1.5F COUPLING REDUCER (TO CONNECT GUN TO LANCE)	1
CD10002	M22 X 1/4M COUPLER BETWEEN LANCE & NOZZLE	1
CTN140-035	TURBO LANCE	1
R105K2214FB6X8	8 METRE HOSE	1
M212003540	3/8 G-M M22X1.5F COUPLING REDUCER (FOR HOSE)	1
M200019050	GUN AL12 WITH QUICK COUPLER	1
M212003540	3/8 G-M M22X1.5F COUPLING REDUCER (FOR HOSE)	1
C900040Q	0° NOZZLE, TIP SIZE 40 (RED)	1
C915040Q	15° NOZZLE, TIP SIZE 40 (YELLOW)	1
C925040Q	25° NOZZLE, TIP SIZE 40 (GREEN)	1
C940040Q	40° NOZZLE, TIP SIZE 40 (WHITE)	1



Pump oil: Renonlin 100B

**WARNING****OVERSPEEDING**

Do not operate machine at over 3200rpm (engine speed). Over speeding can cause serious pump damage.

**EXCESSIVE BYPASS**

Do not run on excessive by-pass. Switch machine off within two minutes of ceasing operation as excessive by-pass can cause heat build up in pump and subsequent damage. Excessive bypass running voids warranty.

**HIGH PRESSURE SETTING**

The high pressure pump is factory set to operate at its rated pressure. **DO NOT ADJUST.** Tampering with the pressure regulator will void warranty and can be **DANGEROUS.**

**CHECK NOZZLE MONTHLY**

If pressure drops off check nozzle for wear. Nozzles should be replaced on a regular basis (every month for machines in regular use, every three months for machines used intermittently). Using the machine with the incorrect nozzle size or worn nozzle will void warranty and can be **DANGEROUS** to the operator.

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**PRESSURE CLEANER DAILY CHECK LIST**


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- . Check pump oil level
- . Check engine oil level
- . Check nozzle for wear
- . Check all high pressure components for leaks:
  - . gun/lance
  - . HP hose
  - . all fittings
- . Check water filter and clean regularly
- . Check unloader, safety valve and thermal dump for leaks

**NOTE: YOUR FAILURE TO SERVICE YOUR MACHINE REGULARLY MAY VOID WARRANTY**

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**THREE MONTHLY REGULAR SERVICE**


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All machines need to be thoroughly serviced every three months. The service involved should include the engine manufacturer's recommendations (see separate Engine Manual) and the following;

- . Change pump oil
- . Check filter for foreign debris
- . Check unloader and thermal dump for leaks
- . Check all HP components for leaks: Gun/lance, HP hose and all fittings
- . Replace nozzles
- . Check pump mounting to engine key for wear, if key is worn see your local Aussie Eco Clean Service agent. NB Damage generated by worn keys is not covered by warranty!

**LOOK AFTER YOUR MACHINE AND IT WILL LOOK AFTER YOU!**



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