



Aussie Eco-Clean

AUSSIE MINI COBRA WATER JET



INSTRUCTION MANUAL

March 2009

DRAIN CLEANING WATER JETTER



ATTENTION: Operators must read this manual and understand it completely before using the machine.

Customer Details:

Unit Serial No.:

Date of Purchase:

WARNING

Please read the operating and safety instructions thoroughly before using your Aussie Eco-Clean product. Please note that drain and sewer cleaning procedures must be followed carefully, if not it can result in severe injury or even death. Appropriate safety clothing and equipment must be used at all times, the Owner's Manual for the engine and Aussie Cobra drain cleaning jetter unit must be read thoroughly before operation.

Petrol is extremely volatile and explosive under certain conditions. Please note the following:

- Refuelling of your unit must be done in a well-ventilated area and the unit must not be running. Sparks, flames or smoking is not permitted in the area where the unit is being refuelled.
- Refuelling of the unit must be done in a careful manner. Do not overfill the fuel tank; suitable equipment must be used for refuelling (suitable containers and funnels). Once the unit is refuelled, please ensure that the fuel tank lid is closed properly and securely.

Safety Clothing

Before your Aussie Cobra drain cleaning jetter is used, be sure that all persons operating the unit are wearing protective clothing such as safety goggles, face shields, gloves, overalls or raincoat, steel cap boots and ear protection equipment. Refer pages 10 and 11.

Exhaust Fumes

Fumes from the petrol engine exhaust of your Aussie Cobra drain cleaning jetter can create a dangerous atmosphere in confined spaces. For example, manholes, septic tanks, closed garages or small factory spaces that are not properly ventilated. Excessive petrol fumes can create an explosion in such atmospheres. This environment can cause severe injury or even death. Your Aussie Cobra drain cleaning jetter **must not** be operated in an area such as mentioned above without adequate ventilation. Your Aussie Cobra drain cleaning jetter unit is only to be operated outdoors in an open ventilated area.

Jetter Warning

Before operating your Aussie Cobra drain cleaning jetter, ensure that your high pressure jetting hose has been placed in the sewer line (minimum 2 metre). This must be done before starting and engaging pressure to hose reels. If this is not followed, severe injury or death may occur.

Before removing sewer hose from the sewer line or drain pipe, water flow to the nozzle must be shut off. It is recommended that you mark your sewer hose clearly 2 metres from the nozzle. This will ensure that the operator is aware that he is getting to the end of his sewer hose before it is removed from the drain or sewer line. Severe injury or death may occur if this procedure is not followed.

Wash Down Operation

Whilst using your wash down high pressure pump with gun and lance, please ensure that the gun and nozzle are not pointed to any persons or animal whilst in operation. Severe injury or death may result if this procedure is not followed. Refer page 9.

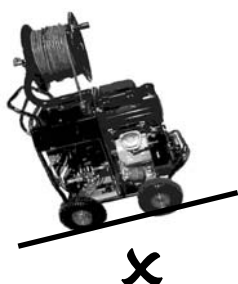
Bacteria Warning

Sewer lines and drainpipes can carry bacteria and other dangerous micro-organisms which may be infectious. These may cause severe illness or death if exposed to person's mouth, nose, ears, eyes, hands or open cuts and abrasions. To protect the operator against these infectious micro-organisms or bacteria, it is imperative that arms, hands and other areas of the body must be washed after working with sewer lines with hot soapy water. As a further protection against such bacteria, disinfectant can be used with hot soapy water.

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WARNING: Unit should only be operated on a level surface. Unit's wheels should be chocked before use.



Assembly and Preparation for Use

Pump / Gearbox / Engine

1. Check the oil in the pump, gearbox & engine
Note there are separate oil reservoirs for pump and gearbox.
With the machine on a level surface, the pump oil level should cover the red spot in the oil level sight glass on the side of the pump.
If necessary, top up with SAE 30W50 oil (non-foaming type). Do not mix different grades of oil as this may affect the machine's performance. If alternative oil is used, first empty out oil by unscrewing drain plug in bottom of machine.
2. Ensure breather plug is fitted to pump (red).
3. **WARNING:** Before operation ensure top mounted oil filler plug is replaced by breather. Failure to fit breather and keep clean can result in over-pressuring of oil chamber (crank case) and can "blow" oil seals. **This will void warranty.**
4. Note that the gearbox has a separate oil reservoir. Gearbox oil is SAE 80W90 gear oil.
5. Check engine oil level. Refer to engine manufacturer's separate handbook.



Gearbox sight glass

Pump sight glass

Start Up

Water Supply Hose

Use a good quality hose of ¾" (25mm) diameter minimum (not supplied).

Fasten one end of the hose to the inlet hose connector fitted to the pump.

Water supply can be by means of either:

- A) Main water supply; or
- B) Siphon fed from a container or tank.

▪ Mains Supply

Secure the free end of the hose to your tap using a suitable tap adaptor (not supplied – available through all good hardware and garden supply stores).

▪ Siphon Feed Supply

Please refer to Aussie Pump Distributor or Australian Pump Industries.

Note: To prevent the ingress of foreign bodies into the pump we fit an Aussie Pump Saver Filter. Check filter regularly and rinse element. (See *Daily Checklist*.)



Start Up (continued)

Operation

- Turn on water supply. Note: Tap should be full on.
- Ensure break tank is full and float valve has shut off.
- Start the engine (refer to engine manual).
- Check that there are no leaks in the line connections, nozzle, gun or power lance.
- When using with a drain cleaning nozzle start unit with ball valve open without drain cleaning nozzle fitted to hose, this will release air from system, then shut ball valve to allow engine to warm up, and fit nozzle to end of hose.
- When using gun and lance pressure begins when the gun trigger is squeezed.

**** IMPORTANT ****

**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!**

Engine Operating Procedure

Please refer to the Engine Manual supplied for start-up procedures.

Please ensure that before engine is started that output drain cleaning hoses are placed in drain or sewer line, as mentioned previously on page 2.

ENGINE MAINTENANCE: Refer to separate engine manufacturer's handbook for full details.
Note to check engine oil daily.

ASP System ... Aussie Safety Protector System

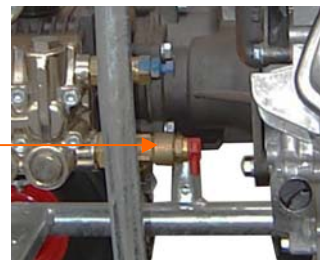
THERMAL DUMP: All Aussie Mini Cobra machines are fitted with this valve as of June 2000 production. This device protects the pump by dumping water to ground if the machine is left on "by-pass" running.

DO NOT allow machine to run on by-pass for more than 5 minutes.

ENGINE MAINTENANCE: Refer to separate engine manufacturer's handbook for full details. Note to check engine oil daily.

AUSSIE SAFETY VALVE (Optional Extra): This device "blows off" excess pressure if unloader has been tampered with, thus protecting the pump.

Do not tamper with pre-set unloader and safety valve. **(This will void your warranty.)**



Specifications

Cleaning Parameters

| | | |
|-----------------------------|---|----------------------|
| Drain sizes | : | Up to 6" in diameter |
| Max. Water Delivery (Pump) | : | 15 litres per minute |
| Max. Output pressure (Pump) | : | 4000 psi |

Petrol Engine Specs

| | | |
|-----------------|---|---------------------------------|
| Horsepower | : | 13HP electric start GX390 Honda |
| Fuel | : | Unleaded petrol |
| Cooling | : | Air cooled |
| Starting System | : | Electric via key start |
| Alternator | : | 20amp |
| Battery | : | 12 volt DC |

For further information please refer to Engine Owner's Manual.

Pump Identification

Pump

| | | |
|------------------------|---|---|
| Mini Cobra | : | Bertolini KKTV4040 high pressure piston pump. |
| Max. input temperature | : | 60°C |
| Max. RPM | : | 1725 |
| Pistons | : | 3 x solid ceramic |

Accessory Identification

Pump Accessories

Pump is equipped with the following output accessories:

- 1 x Aussie Reel Quick 4416 high pressure hose reel.
- 4416 hose reel fitted with 60 metres of ¼" ID R8 sewer cleaning hose with quick fit snap on connection on outlet (5000psi rated).
- 1 x Penetrator nozzle with 3 rear jets and 1 forward jet,
- 1 x Negotiator nozzle with 6 rear jets and 1 forward jet.
- 1 x Aussie Root Mulcher rear turbine root cutter.
- 1 x AL35 Heavy Duty Wash Down Gun.

✓ **All nozzles suited for pump come with quick fit snap on tail for connection of hose.**

Optional Features

- a) Extra hose lengths including $\frac{1}{4}$ " , $\frac{3}{16}$ " & $\frac{1}{8}$ " .
- b) Extra nozzles (see below).
- c) Mobile hose reel fitted with either $\frac{1}{4}$ " high pressure sewer hose or $\frac{3}{16}$ " lightweight sewer hose.

Please check that all accessories are supplied carefully as claims will not be accepted seven (7) days after purchase date.

Drain Cleaning Applications

The Aussie Cobra drain cleaning jetter is designed to be used in many different applications. Listed below are a few examples:

- **Hotels/Motels** – Main lines and car park drains, for removal of all grease and debris from main drain lines under the building.
- **Factories** – Such places as food processing plants and industrial factories can have drain and sewer blockages frequently. Preventative maintenance contracts can be set up to avoid risk of total plant shutdown.
- **Rural Properties and Farms** – Septic systems, shed drainage systems.
- **Housing and Government Authorities** – Any sort of drains, including garage lines, laundry lines, etc, for removal of grease and debris.
- **Council** – The Cobra Drain cleaning jettors can be used for cleaning out culverts for proper drainage control, manhole wash down and also in wastewater treatment plants.

The above is just an example of a few applications where the Aussie Cobra drain cleaners can be very successful with its high pressure low flow pump operational benefits.

High Pressure Wash Down

The Aussie Cobra drain cleaning jetter can also be used as a high pressure wash down unit. Many applications such as graffiti removal, concrete cleaning and vehicle wash down are perfect for high pressure washing with the gun and lance.

High Pressure Piston Pumps And Plumbing

Your high pressure Bertolini pumping system is the heart of your drain cleaning jetter. The Pump has been specially designed to be used with cold water (max 60°C) for pipe water jetting and high pressure wash down applications. Your high pressure Bertolini piston pump is designed to move a certain amount of water per revolution by its three solid ceramic pistons.

High pressure is created once the pump outlet is restricted with a nozzle. All high pressure outlet connections, hosing and equipment is rated over and above the maximum operating pressures of the pump.

Do not adjust any valves on your pump; tampering will void warranty. For any malfunction of the high pressure pumping system, please contact Australian Pump Industries or authorised Aussie Pump Service Agent.

Because of safety/danger hazards with high pressure systems, only use approved genuine Aussie high pressure hoses and components when replacing or repairing your Aussie Cobra drain cleaning jetter. For guidance on this, please contact Australian Pump Industries or the Distributor you purchased the unit from.

IMPORTANT ... Nozzle Wear

Once drain cleaning nozzles or wash down nozzles have worn, pressure loss will occur. Replacement of nozzles is necessary to maintain constant and maximum efficiency of your Aussie Cobra drain cleaning jetter.

Using worn nozzles will reduce unloader valve service life.

WARNING

Altering of high pressure pumping system may result in severe injury or death. Warranty will be void if any high pressure equipment has been altered by unauthorised persons. Over-speeding or over-pressurizing of pumping system can be very dangerous and severely reduce the life of your Aussie Cobra drain cleaning jetter and may result in injury or death.



**LOOK AFTER YOUR AUSSIE COBRA
DRAIN CLEANING JETTER AND IT WILL LOOK AFTER YOU!**

Safety Precautions - Important

1. Never direct the spray jet at any person or animal.
2. Never direct spray jet at any surface that may contain asbestos.
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 pistol trigger.
6. When not in use always switch off the engine and disconnect from water supply.
7. Certain engine components become very hot when in use, e.g. exhaust muffler and cylinder head. Switch off the engine and **ALLOW TO COOL** before touching.
8. Do not attempt any mechanical repair. If you have a problem with your machine contact your local dealer or Aussie Pumps service division, phone 02 8865 3500.
9. Never supply any liquid other than clean water to the water inlet.
10. Never pull the high pressure hose if it has formed kinks or nooses. Never pull the hose over sharp objects.
11. Use only chemical cleaning agents (detergents) approved for power washing when using the chemical injection facility.
12. Do not attempt to disconnect any hose or coupling with pressure still in the hose.
13. Do not operate the machine whilst standing on ladders; use a platform tower or scaffolding.
14. Children should not be allowed to use the machine.
15. We recommend the use of safety goggles when using the machine, particularly with the sand blasting attachment, or any application where loose particles of stone or grit, etc, may be blown around by the high pressure spray.



Personal Protective Equipment

General

'Wear protective clothing'

Appropriate personal protective equipment should be worn where:

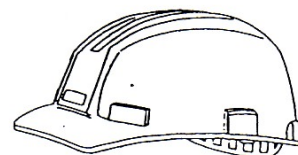
- hazards cannot be otherwise prevented or suitably controlled, e.g. by engineering or administration controls, total enclosure or substitution; and/or
- complete protection is essential, e.g. in some occupational environments with uncertain levels of hazards.



The provision and use of personal protective equipment does not reduce or replace the need for proper Occupational Health and Safety prevention measures, such as engineering or administrative controls to be undertaken. Recommendations of such preventative measures should always be fully explored before considering issue of personal protective equipment. Where personal protective equipment is issued, instruction and training should be provided regarding its correct use and maintenance.

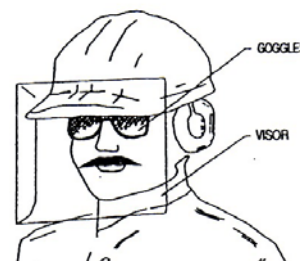
▣ Head Protection.

Where appropriate suitable head protection complying with AS/NZS 1808 should be worn.



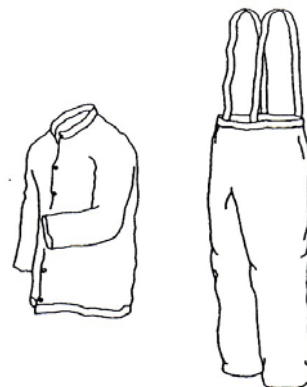
▣ Eye Protection.

Eye protection complying with AS/NZS 1337 (adequate for the purpose and of adequate fit on the person) should be worn at all times when in the vicinity of water blasting operations. Where liquid is liable to cause eye damage, full visor and goggles are recommended.



▣ Body Protection.

All persons should wear suitable waterproof clothing complying with AS 3765.1 or AS 3765.2 as appropriate, having regard to the type of work being undertaken. Liquid or chemical-resistant suits should be worn where there is an assessed risk to health or of injury that can be prevented by such equipment.



▣ Hand Protection.

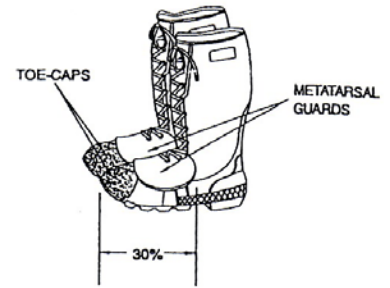
Adequate hand protection complying with the recommendation/s of AS/NZS 2161.2, AS/NZS 2161.3 or AS/NZS 2161.5 should be worn when there is an assessed risk of injury that can be prevented by such equipment.



Personal Protective Equipment (continued)

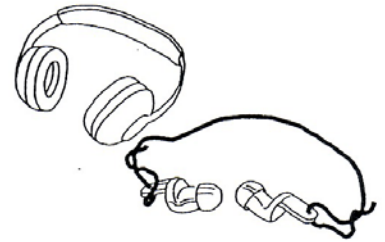
■ Foot Protection.

All persons should wear appropriate occupational protective footwear complying with AS/NZS 2210.2. A metatarsal and lower leg guard should be used by water blasting operators where it is assessed that the risk of foot injury could be prevented by such equipment. AS/NZS 2210.1 provides guidance for the selection of footwear.



■ Hearing Protection.

Suitable hearing protection complying with AS 1270 should be worn at all times when the noise levels exceed limits set by regulatory authorities. All personnel and operators should receive instruction in the correct use and maintenance of hearing protectors so that noise exposure lies within the limits as recommended by the regulatory authority.



Operating Tips

These are some of the tips and techniques that have been tried and tested over the years to make jetting easier.

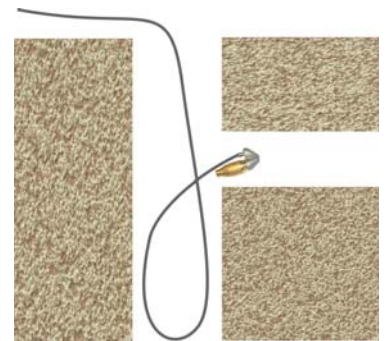
Always protect your jet hose before putting it down the drain, with a conduit or flexible Ag pipe. More damage is done to a hose on the entry and exit point of the drain than anywhere else.

Twist your jet hose to help get it around tight bends and traps.

When using the Root Ranger Turbine, the hose must be twisted to thoroughly clear the root choke from all sides of the pipe.

If your hose becomes jammed, try pulling the hose hard, and then letting it go quickly so it can snap back and loosen itself. Also, try turning the jet off then pull on the hose, then turn jet back on again.

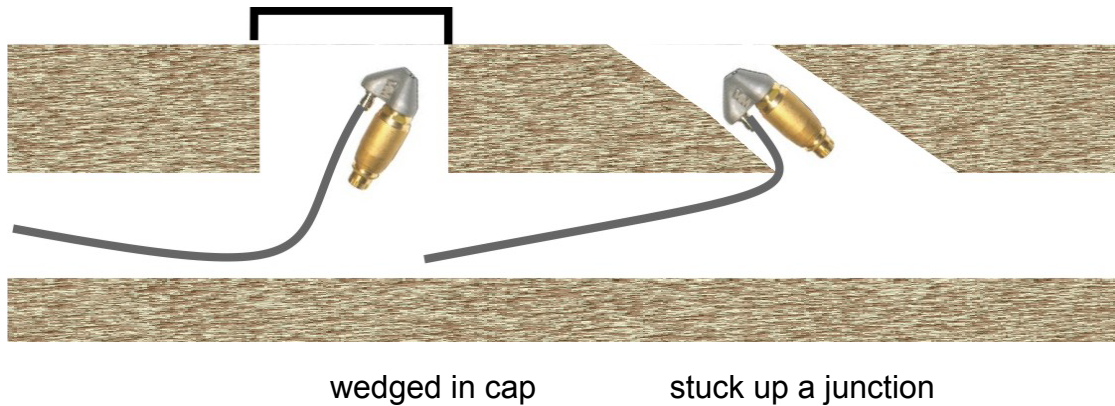
When jetting down a shaft in an attempt to get your hose up a junction, try bending the hose back on itself so the nozzle is pointing back towards you. Push the hose down the shaft until the nozzle lines up with the junction. When nozzle is in the junction, turn the jet on slowly until nozzle pulls itself up the pipe. If the nozzle does not go up the junction, it will come back up the shaft, so take extreme caution when using this method to access junction.



As good as the Root Ranger is it likes to get stuck wherever possible.

Try running the RR straight to the blockage without twisting the hose.

Leave the hose twist for when you are actually cutting the roots or retrieving the hose from the blockage. This will keep it from heading up any branch drains, toilet pans and PVC capped inspection openings!



NOZZLE SELECTION

There are 3 main types of penetrating nozzles; the Predator, the Negotiator, and the Compressor. These 3 nozzles come in different configuration options – 3 rear 1 forward, 6 rear 1 forward, and 6 rear only. The beaver has 6 rear jets and 2 forward jets.

The Predator is a good starting choice for general drain cleaning. It has a long pointed nose for penetrating deep into a choke and blasting out the debris.

The Negotiator has been designed shorter to get around tight bends and traps. It is a good multi purpose nozzle for any drain cleaning application.

The Compressor is smaller again, and assists with smaller blockages. A new extension can also be purchased for the Compressor nozzle.

The Beaver has 2 forward firing jets, with 6 reverse thrusting jets. The 2 front jets bore deep into the choke. Ideal for dry chokes.

The Root Rat is extremely popular. It features 1 front jet with 6 rear jets, 3 behind the tip of the nozzle at 45° and 3 at the rear of the nozzle at 30°, enabling it to quickly penetrate the choke.

The Bullet is a small, but powerful nozzle used when all else fails. Although it is very effective, it should only be used on difficult chokes. It is so small it has a habit of leaving the drain.

The Root Ranger is used to clear what the Penetrator nozzles leave behind. It has 1 rear thrust port and an optional front jet. This nozzle will clear just about anything from the drain and is the primary root cutter used by plumbers worldwide.



Using worn nozzles will reduce unloader valve service life.

Operator's Hand Signals

'Aussie Eco-Clean...
Safety First!'



This section provides a set of hand signals for communication when carrying out water blasting operations.

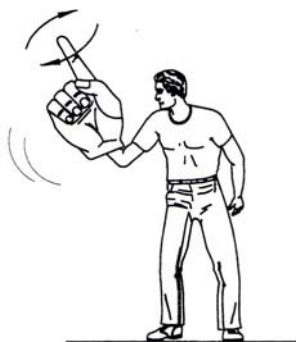
- ▣ **Pressurise System.**
Thumb pointing upwards, the rest of the hand closed. From the shoulder height the arm moves up and down.



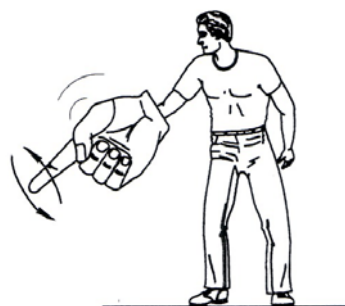
- ▣ **Depressure System.**
Form a fist. Move the arm back and forth at shoulder height.



- ▣ **Raise Pressure.**
First finger pointing up, the rest of the hand closed. The hand is moved in a circular motion.



- ▣ **Lower Pressure.**
First finger pointing down, the rest of the hand closed. The hand is moved in a circular motion.



Maintenance, Service and Spares

Your Aussie Eco-Clean drain cleaning jetter has been designed to give you long and trouble-free service.

If, however, having carefully followed the instructions in this booklet, you have a problem which cannot be resolved by referring to the Troubleshooting Guide below, or if you require spare parts or servicing, contact your local dealer (check the website for list; www.aussiepump.com.au) or call **Australian Pump Industries** on **(02) 9894 4144**.



Troubleshooting Guide

| FAULT | CAUSE | REMEDY |
|---|---|--|
| Pump running normally but pressure low on installation | Pump sucking air Valves sticking, dirt in valves Unloader valve seat faulty Nozzle incorrectly sized Worn piston packing | Check water supply and possibility of air ingress Check and clean or replace if necessary Check and replace Check and replace Check and replace |
| Fluctuating pressure | Valves worn Valves blocked Pump sucking air Worn piston packing | Check and replace Check and clean out if necessary Check water supply and air ingress at joints in suction line Check and replace |
| Pressure low after period of normal use | Nozzle worn Suction or delivery valves worn Suction or delivery valves blocked Unloader valve seat worn Worn piston packing | Check and replace Check and replace Check and clean if necessary Check and replace if necessary Check and replace if necessary |
| Pump noisy | Air in suction Broken or weak suction or delivery valve spring Foreign matter in valves Worn bearings Excessive temperature of liquid | Check water supply and connections on suction line Check and replace if necessary Check and clean if necessary Check and replace if necessary Reduce temperature |
| Presence of water in oil | Oil seal worn High humidity in air Piston packing worn | Check and replace Check and change oil twice as often Check and replace if necessary |
| Water dripping from under pump | Piston packing worn Plunger retainer worn | Check and replace Check and replace |
| Oil dripping | Oil seal worn | Check and replace if necessary |
| Valves switches repeatedly when gun is off | Leaking gun and/or pressure pipe Leaky sleeve Worn out kick-back valve body Leaky seals | Renew gun, seal pressure pipe Renew sleeve Check and renew as necessary kick-back valve plate and seat Renew seals |
| Leaky piston rod | Defective o-ring/support ring | Renew piston rod seals and examine surfaces in guide case |
| Leaky by-pass at nominal pressure | Nozzle too small, too much water Worn out by-pass valve | Install larger nozzle Examine and renew as necessary, poppet (16 for APR-11 for VD Valves – 10 for ADV-8 for Unifit valves); Valve set (14 or APR-12 for VD Valves – 11 for AVD valves – 7 for Unifit) and by-pass valve body |
| Pressure gauge shows high pressure fluctuations when shutting off gun | Valve set too high above operating pressure Dirty valve | Adjust the unloader at the operating pressure Clean valve (removing lime deposits, etc) Grease parts before installing |
| Engine will not start | Out of petrol Engine defect | Fill tank with petrol Return to engine service agent |

* * * * **WARNING** * * * *

CHECK OIL LEVEL IN PUMP REGULARLY. DO NOT OVERFILL.

Warning

❖ OVERSPEEDING

Do not operate machine at over 3200rpm (engine speed - preset).
Over-speeding can cause serious pump damage and will void warranty.

❖ EXCESSIVE BY-PASS

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 by-pass running voids warranty. This does not apply to machines fitted with supply tanks.

❖ 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 NOZZLES & COUPLINGS WEEKLY, clean after each use.

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.

Pressure Cleaner Daily Check List

IMPORTANT

- ❶ Check pump oil level.
- ❷ Check engine oil level.
- ❸ Check nozzle for wear.
- ❹ Check all high pressure components for leaks:
 - (a) Gun/Lance.
 - (b) HP hose & connections.
 - (c) All fittings.
- ❺ Check water filter and clean if necessary.
- ❻ Check unloader & safety valve for leaks.

Three Monthly Regular Service

All professional 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:

- ❶ Change pump oil
- ❷ Change gearbox oil (if applicable).
- ❸ Check filter for foreign debris.
- ❹ Check unloader & safety valve for leaks.
- ❺ Check all HP components for leaks: Gun/Lance, HP hose and all fittings.
- ❻ Replace nozzles.
- ❼ Check gearbox to engine key for wear, if key is worn see your local Aussie Eco-Clean Service Department.

NB. Damage generated by worn keys is not covered by warranty!

LOOK AFTER YOUR MACHINE AND IT WILL LOOK AFTER YOU.

Accident Reporting

For Industrial Applications

▣ Reporting.

All accidents or injuries, whether resulting in “lost time” or “no lost time” injuries, should be recorded in accordance with the recommendations of AS 1885.1.

Incidents that result in “near misses” should also be recorded as a means of providing a record of significant incidents that have the potential to result in serious injury at the workplace, so appropriate measures can be implemented to minimise or eliminate these potential hazards.

▣ Personal Injuries.

In the event that a person is injured by the impact of a water jet, the injury caused may appear insignificant and give little indication of the extent of the injury beneath the skin and the damage to deeper tissues. Although only a small hole may be present, quantities of water may have penetrated the skin and entered the flesh and organs causing serious injury.

▣ Medical Recommendation.

If an accident occurs where pressurised water penetrates or appears to have penetrated the skin, medical assistance should be sought immediately.

▣ Immediate First Aid.

Where medical examination is not immediately possible (e.g. in remote situations), appropriate basic first aid measures should be applied and the patient observed closely until medical treatment is available.

▣ Medical Alert Card.

All operators engaged in commercial and industrial water blasting operations should carry out an immediately accessible, waterproof medical alert card. This card should:

- outline the possible nature of injuries and post-accident infections that can be caused by high pressure water blasting;
- provide details of immediate first-aid treatment until medical treatment can be arranged; and
- provide the name or names of medicos (and contact phone numbers) who should be contacted for expert medical advice for the treatment of high pressure water blasting injuries.

In addition, the card may also:

- identify the worker; and
- outline medical information about the worker; e.g. blood type, allergies and conditions, such as asthma.

**WEAR PROTECTIVE GOGGLES
AND CLOTHING!**

Emergency Medical Information

'Aussie Eco-Clean...
Safety First!'

IMPORTANT



Immediate hospital attention should be given to personnel who sustain equipment related injuries while operating the system. In such cases, it is vital that medical personnel be apprised of all facts relevant to such injuries. Therefore, all operating personnel should be provided with waterproof emergency medical tags or cards describing the nature of their work and the possibility of injury inherent in the use of a water blasting device. The tag or card should also bear the following standard notice:

MEDICAL ALERT

This card is to be carried by personnel working with high pressure water blasting equipment. Obtain medical treatment immediately for ANY high pressure water blasting injuries.



AUSTRALIAN PUMP INDUSTRIES PTY LTD
7 Gladstone Road, CASTLE HILL NSW 2154
PO Box 6164, BAULKHAM HILLS NSW 2153
Ph: (02) 9894 4144 Fax: (02) 9894 4240

AUSTRALIAN PUMP INDUSTRIES PTY LTD

This person has been working with water blasting equipment at pressures to 5000psi (350bar) with a jet velocity of 3000fps (914mps). This should be taken into account during diagnosis. Unusual infections with microaerophilic organisms occurring at lower temperatures have been reported. These may be gram-negative pathogens, such as are found in sewage. Bacterial swabs and blood cultures may therefore be helpful. A local poison control centre should be contacted for additional treatment information.



AUSTRALIAN PUMP INDUSTRIES

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