

Safe Work Instruction - Harben High Pressure Water Jetting Machine

DO NOT use this plant* or complete the task unless you have been inducted in its safe use and operation by an Authorised Experienced Operator **(Note: 2 Worker Operation Only)**

This SWI may not cover all possible hazards and risks and should be referred to as a control measure in the risk assessment process. Additional training may be required for high risk plant. Site and task may change required PPE.

PERSONAL PROTECTIVE EQUIPMENT



Eye protection must be worn



Hand protection must be worn



Hearing protection must be worn



Foot protection must be worn



Protective body clothing must be worn



High visibility clothing must be worn



Long and loose hair must be contained or covered.



Minimum P2 face mask or respirator must be worn when airborne dust or fumes are created

POTENTIAL HAZARDS AND RISKS

- Exposure to high pressure fluid**
Injury from exposure to high pressure fluids
- Cutting, Stabbing or Puncturing**
Injury from sharp or flying object
Injury from contact with moving parts
- Slips, Trips, Falls**
Slip, trip, fall due to uneven or slippery work surfaces
- Electrical shock or burn**
Electrical shock or burn from water near electrical equipment
- Manual Task Injury**
Manual task injury from repetitive movements
Manual task injury from incorrect manual handling techniques
- Other**
Hearing damage from excessive noise
Exposure to atmospheric contamination
- Explosion**
Explosion of gases, vapours or liquids
- Struck by Moving Object**
Struck by moving object due to work pieces being ejected

PRE-OPERATIONAL SAFETY CHECKS

- ✓ Complete site specific risk assessment
- ✓ Complete the appropriate pre-operational plant checklist if applicable
- ✓ Ensure all workers are familiar with plant operations and controls, including emergency stop
- ✓ Ensure that guards are fitted, secured and functional in accordance with manufacturers guidelines
- ✓ Ensure all equipment is in good working condition
- ✓ Ensure plant is placed on stable ground
- ✓ Ensure means of communication are agreed upon before operating machine
- ✓ Ensure appropriate signage/barriers are in place around worksite **DANGER: HIGH PRESSURE WATER JETTING EQUIPMENT IN USE**
- ✓ Check oil, water in radiator and fuel and that the water filter is clean
- ✓ Refer to plant manual for all levels and bleed point information

- ✓ Ensure no person or animal is nearby or endangered when operating plant

OPERATING PROCEDURES

- ✓ Connect water tank filler hose to suitable water source and run for a short period to clear line of any sediment before filling water tank (especially when using a hydrant).
- ✓ Feed pressure hose through the "Tiger Tail" hose protector
- ✓ Select nozzle or cutter required and attach to pressure hose, small Penetrator nozzle to be used initially on all chokes to relieve build-up prior to using the cutter attachment
- ✓ Insert nozzle or cutter into pipe until orange part of hose is completely inside pipe
- ✓ **Note: Tiger tail hose protector (or equivalent) to be used at all times**
- ✓ Always operate machine from the downstream manhole back up the main whether line washing or clearing chokes (where possible)

- ✓ **Note:** If the pressure pump attendant and hose attendant cannot make visual contact with each other, two-way communication or a third worker should be used
- ✓ Only start motor when the cutter or nozzle is completely inside the pipe and the High Pressure selector is in the recycle (dump) position **otherwise severe injury or death** could occur – run at pressure required **Note: Do not exceed 3500 P.S.I. (or 2000 PSI when operating the root cutter)**
- ✓ When cutter reaches a blockage (this will be indicated when the cutter stops moving up the line) gently pull the hose back and forward until choke is cleared
- ✓ If pressure hose begins to twist, stop unit immediately by lowering revs to idle speed, move High Pressure Selector to **dump** position and turn off ignition as both the cutter and hose could be damaged
- ✓ Try to avoid cutter entering next manhole
- ✓ **Note: Pressure hose winch is not to be used to remove cutter from pipeline. It is only to assist in rolling the hose onto the reel. Hose should not be under pressure when coiled back onto reel**
- ✓ Safety glasses and hearing protection are to be worn at all times when using all gun attachment
- ✓ If plant is not operating correctly, turn off immediately
- ✓ In a dangerous situation, stop machine using the emergency stop button
- ✓ **Warning: Please be cautious when using the High-pressure Water Egg Jetter nozzle as it may get caught in the pipeline resulting in jolting. Care is always to be taken with operator having firm footing and focus on hose line during operation.**



ENDING OPERATIONS

- ✓ Turn high pressure Jetter off at the machine
- ✓ Press the trigger to release any remaining pressure in the system
- ✓ Grease cutter after each use
- ✓ Thoroughly wash hands and face after use
- ✓ Allow plant to cool before performing any maintenance, refuelling or cleaning
- ✓ Ensure plant is in good working order and stored in the appropriate location
- ✓ Ensure trailers GVM is not exceeded by transporting excess water (If so release water before leaving site)

DO NOT

- ✗ Do not use the gun attachment with the trigger locked on
- ✗ Do not point the gun at anyone, even if switched off
- ✗ Do not change fittings on gun or hose unless machine is switched off and pressure has been released from hose

- ✗ Do not start motor or open stop valve unless the cutter is completely inside the pipe
- ✗ Do not use if plant is faulty. Attach an Out of Service tag and report fault to your supervisor

 SAFETY ALWAYS MATTERS 	Shoalhaven City Council
	MEDICAL ALERT CARD
	High Pressure Water Jetting
<p>This card must be carried or easily accessible by all workers operating high pressure water jetters, Class A and Class B</p>	

- ✗ Do not use mobile phone while operating plant

If an accident occurs where the pressurised water penetrates or appears to have penetrated the skin, medical assistance must be sought immediately. **Call 000**

Immediate First Aid Treatment is:-

- 1) Gentle cleaning of the injured area
- 2) Immobilise and elevate the injured area
- 3) Keep the injured person calm
- 4) Do Not give food or fluids

WARNING – failure to act quickly may result in DEATH or AMPUTATION of the affected limb.

- The water entry point may be very small, with little or no bleeding. An injury can result in post injury infection
- Injuries can cause serious damage to organs and deeper tissue, even if the injury appears as a small hole.
- Serious organ damage can still occur even if protective equipment is worn

*Plant in this SWI refers to any machinery, equipment, appliance, container, implement and tool.