



## **SAFE OPERATING PROCEDURES**

### **BAR SEWER CLEANING REELS**



# SEWER CLEANING REEL OPERATING INSTRUCTIONS

These instructions are offered as a guide to the safe and effective use of your Sewer Cleaning Reel and should be read and fully understood before using the Reel.

## SAFETY

The use of high pressure water jets is a fast and effective way of cleaning sewer lines, however the operator must be aware of the inherent risks associated with this work.

**Personal Injury** - Sewer Cleaning Jets operate at very high pressure (Depending on version – see your unit to confirm Maximum pressures) and so contact with the Jet or the water stream from the Jet **will cause serious injury**.

Accordingly appropriate Personal Protective Equipment (PPE) **MUST** be worn including:

FULL FACE SHIELD AND EYE PROTECTION

HEAVY WATER PROOF GLOVES SUITABLE FOR A SEWAGE ENVIRONMENT

APPROPRIATE PROTECTIVE, NON-SLIP FOOTWEAR

HEARING PROTECTION AS APPROPRIATE.

**Work area – Keep the work area clear.** Keep the work area free of obstructions and ensure that unauthorised persons do not enter the work area which should be maintained as a minimum of 10 meters radius from the point of operation.

**Risk Of Infection** – The operator should be fully aware of the risk of infection associated with working with raw sewage. A Material Safety Data Sheet (MSDS) covering raw sewage is attached as appendix “C” which must be read and fully understood before working in an environment where exposure to raw sewage is expected.

(2)

**Checks Before Starting** – An adequate clean, cold water supply must be provided to the high pressure pump. Check inlet hose, high pressure link hose and all fittings for leakage or damage.

### **Remote reel – P/n 85.402.001D or 85.402.002 D**

Ensure the correct jetting head is selected and that it is calibrated for the unit. The BAR Sewer Cleaning Reel is designed to operate at a maximum pressure of 4000 psi (275 bar).

### **Remote reel – P/n PW134-MRB**

Ensure the correct jetting head is selected and that it is calibrated for the unit. The BAR Sewer Cleaning Reel p/n PW134-MRB is designed to operate at a maximum pressure of 4500 psi (310 bar).

**Sewer Cleaning Hose** – Before each use ensure that the high pressure hose is checked for wear or damage. A high pressure hose should not be used if any of the following have occurred:

Hose covering is loose with blisters or bulges

Hose is badly kinked or crushed

Hose has been run over by a heavy vehicle

Hose has been stretched

Leakage on the hose or at the joint between coupling and hose

Hose end fixtures are damaged or crushed

Before using ensure that the hose is tagged at 3m and 2m from its end with clearly visible tape to provide warning that the end of the hose is close when withdrawing from the sewer line.

### **REEL OPERATION**

After carrying out the above checks and ensuring safety recommendations are adhered to, position the reel at a location close to and convenient to the inspection port that is to be used.

**ENSURE THAT YOU HAVE READ AND UNDERSTAND THE OPERATION AND SAFETY INSTRUCTIONS THAT ARE PROVIDED WITH YOUR PRESSURE WASHER.**

Connect the pressure washers high pressure hose to the reel inlet and open the Emergency Shut Down Valve (inlet ball valve).

**NOTE** – Valve is closed when handle is in line with inlet pipe and open when turned at 90 degrees to the pipe axis.

(3)

Connect water supply to pressure washer and turn on mains water flow. Water will flow through the pressure washer and through the sewer cleaning reel and exit from the jetting nozzle on the end of the sewer hose at low (mains) pressure. Ensure all jets are free flowing, 3 rear firing and one forward firing jet on the fixed nozzle or 3 rear firing jets on the spinning nozzle.

Insert the jet into the sewer line by at least 1.5 m. **Ensure Reel brake is engaged (if fitted).** Turn on / start the pressure washer. Return to reel and release brake (if fitted). Hose will be drawn up the line by the jet clearing debris as it goes. Do not allow hose to travel up the line too fast or you may risk the jet going through a blockage without fully clearing it which will result in the jet being “jammed” in the line. Please see following “Drain Cleaning Techniques”.

Run the jet back and forth up the line to flush debris back to the inspection point. Once line is free flowing gradually withdraw hose giving the line a final flush being very careful not to allow the jet to exit the sewer line whilst operating under high pressure. Watch for your 3m and 2m warning marks and do not withdraw past a minimum of 1.5 m whilst under full pressure.

## **SHUTTING DOWN**

Once line is clean and hose has been withdrawn so that jet is an absolute minimum of 1.5 m from the inspection port and so is still well inside sewer, engage the reel brake (if fitted), close valve and shut down pressure washer. Once pressure washer is shut down open valve to release system pressure, withdraw sewer hose, disconnect hose from pressure washer to reel and leave sewer reel valve in open position to allow reel to drain.

## **EMERGENCY SHUTDOWN**

If it is necessary to shut down the jet immediately turn off at the sewer reel inlet valve. As soon as is practical shut down the pressure washer to avoid the machine running in by-pass for too long which may damage the pump. Once the situation is clear and whilst the jet is still in the sewer line open the reel inlet valve to release the pressure between the pressure washer and reel.

When ready to continue jetting re-start machine as per starting instructions above.

## **ACCIDENTS AND INJURIES**

Should an accident occur whilst sewer jetting medical attention must be sought immediately. The injury may appear small on the surface and may not even bleed however there is the possibility of more extensive damage beneath the skin or to deeper tissue.

To ensure nothing is overlooked, operators must have access to a waterproof information card such as the medical advice card shown below which points out possible injuries and provides medical advice. These are available through your local BAR distributor.

### **MEDICAL ADVICE CARD**

**THIS PERSON HAS BEEN INVOLVED WITH HIGH PRESSURE  
WATER JETTING AT PRESSURES UP TO 36,000 PSI / 2500 bar  
WITH A WATER JET VELOCITY OF UP TO 1536 MPH / 680 MPS**

Please take this into account when making your diagnosis.  
Unusual infections with micro-aerophilic organisms occurring at  
lower temperatures have been reported. These may be gram  
negative pathogens such as found in sewage. Bacterial swabs  
and blood cultures may therefore be helpful.

Another particular hazard is Wells Disease (leptospirosis). This may  
cause serious and even fatal illness which presents itself in the early stages  
as a flu-like illness with severe headaches and sometimes aseptic meningitis.  
Early treatment may prevent the onset of more serious symptoms.

We hope you find the following Drain Cleaning Techniques helpful but if you are unsure of any aspect of using your BAR Sewer Cleaning Reel please contact us on 1800 459 442 (Sydney 02 4577 2144) or by email to [sales@bargroup.com.au](mailto:sales@bargroup.com.au)

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