



OPERATORS MANUAL



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About your machine

Manufactured for:

Wellington Water Limited

Water Pump Model Number:	HFR 80FR
Water Pump Serial Number:	
Water pump flow/pressure	80 L/M
Water Blaster Pressure:	4100
Water tank capacity:	750 L

Safety

Precautions

- Never let the high pressure water blaster run unattended.
- Do not load any vehicles beyond the GVM rating.
- Do not ride on any part of the unit other than designated.
- Do not operate unit without proper attire and safety glasses.
- Do not operate unless hose reel has been locked in place.
- Do not exceed maximum RPM or water pressure during operation.
- Provide traffic cones at all work areas and manholes
- Do not preform repairs on this unit while it is running
- Do not perform maintenance under your vehicle while the engine is running.
- Do not do any maintenance on the hydraulic system while the system is under pressure.

- Prior to operation, inspect the unit according to daily maintenance checklist.
- Do not touch or grab the driveshaft while the engine is running.
- Bystanders, especially children and animals should not be allowed in the area where the high pressure cleaner is in use.
- Never modify your machine in anyway unless permitted by manufacture as this could be extremely dangerous.

Safety Use of a high pressure cleaner involves:

- 1: Trainer operators/s.
- 2: Knowledge of unit operations and risk.
- 3: Proper safety protection gear.

Reactive Forces

Warning!

The use of drain cleaning hose while not down a drain is dangerous. Never engage clutch with hose exposed.

Warning!

The high pressure stream of fluid causes reactive forces on the gun or wand/lance if used. Always hold the spray gun or wand with both hands so that you can control these forces, including those which may push the gun or wand/lance back towards your face or body. Do not overreach or stand on unstable support. Keep good footing and balance at all times.

Warning!

In order to reduce the risk of serious injury from impact or injection, never point the high pressure jet at persons or animals. Never direct the nozzle or fluid stream at any part of your body.

Warning!

The machine's operating pressure is printed in this manual. Only use a high pressure hose which is designed and approved for the machines operating pressure and temperature.

Working Conditions

Warning!

An underrated, damaged or improperly used hose can explode from high pressure and may result in serious injury from exploding material or loss of control.

Water System Safety

- Do not place your hands or any other body part into the jet stream of nozzle, handgun or sewer cleaning hose.
- Do not remove sewer cleaning nozzle from pipe while it is under pressure.
- Do not point jet stream towards anyone.
- Do not operate hose reel if the hose is cut, split or worn.
- Do not exceed recommended pressure when operating handgun.
- Always inspect condition of your sewer cleaning hose when reeling out during cleaning process.
- Handgun grip should be kept clean at all times to maintain firm a grip.
- Do not place your hand in the hose reel while in operation.
- Maintain a firm grip and stance while operating the hand gun. As pressure and engine throttle increases, so does the force the handgun creates.
- Use extreme caution when working with a manhole that is filled with water due to the risk of the nozzle reversing its intended direction.
- Never engage water pressure while sewer cleaning hose and nozzle are hanging into the manhole.
- Do not pull hose with vehicle.
- Always use a leader hose to avoid direct wear and tear on your sewer cleaning hose.
- At all times the operator should be aware of the location of the nozzle while cleaning. Here are three suggested methods for tracking how far the nozzle is from the manhole.
 1. Footage Counter
 2. Duct tape at specific marks on the sewer cleaning hose.
 3. Leader hose.

Sewer/Storm Drain Nozzle Safety

The Following conditions must be met to ensure a safe working environment:

- A tiger tail should be utilised while jetting
- A leader hose must be utilised while jetting operations.
- Duct tape or any other marking should be used on the hose to determine nozzle location.
- The operator must be aware of where the nozzle is located in reference to the entrance point of the pipe being jetted.
- The operator must observe the hose during cleaning operation (While under pressure) to prevent injury or death.
- The operator must never leave the operators station while the sewer cleaner is under pressure.

Pump Requirements

Never exceed maximum pressure or RPM

Maximum pressure, flusher4810psi (280 bar)

Maximum pressure, water blaster.....2000psi (138 bar)

Maximum rpm.....2200rpm

Minimum rpm.....1100rpm

Maximum water temp.....40 C

Pump Oil.....220 Grade or SAE 85W-90

Daily maintenance (performed by operator)

- Top up water tank. Never drive with this full.
- Check hoses and reels for any damage.
- Check for any hydraulic oil leaks.
- Drain filters at filter taps to flush out debris.

Maintenance Schedule

First Service at 6 hours operations (free) running in.

Second service at 20 hours operation visual.

Third Service at 50 hours operation visual.

Forth Service at 250 hours operation.

Serviced every 250 hours thereafter.

Service Requirements

- **Pump Oil**
 1. Check level every service.
 2. Replace every 1500 hours or at least yearly.
- **Pump drive belt**
 1. Check alignment every service.
 2. Replace retention every 1500 hours.
- **General**
 1. Check for loose bolts and nuts.
 2. Check for oil/water leaks
 3. Grease clutch shaft (x2 bearings)
 4. Grease drive belt guard bearing.
 5. Check correct operation Estops.

Unit Motor Operation

To Engage:

1. Make sure Clutch is free run.
2. Turn on motor and check belts and pump remain still.
3. Bring to fast idle to warm up.
4. Engage clutch lever.

Free Run (Lean to RIGHT)



Engaged (Lean to Left)



To Disengage:

1. Slow Revs down
2. Disengage clutch lever (**Free Run lean RIGHT**)
3. Turn control to off.

Hose Reel Operation

- **To engage hose reel only**
 1. Follow procedure for Unit Motor Operation
 2. Hose reel in/out and hose guide will now operate.
 3. To increase engine RPM the throttle control lever at rear panel can be selected. **Throttle Control**



- **To disengage hose reel operation**
 1. Slow to fast idle

2. Turn motor off

Flusher Operation

- **To operate flusher**
 1. Make sure ball valve is directed to flusher.
 2. Ensure control lever is in neutral.
 3. Free wheel hose down manhole and ensure nozzle has entered drain by approx. 2 meters.
 4. Double check water in tank and release clutch.
 5. To increase water flow Bring reeves up via accelerator.



Forward and back for reverse

Water Blaster Operation

- **To operate water blaster**
 1. Unlatch water blaster hose from stow.
 2. Connect wand.
 3. Turn manual ball valve at hose reel to Waterblast.
 4. Turn revs up to approx. 1100 Via Throttle Control
 5. Follow precaution and operate wand.



Rev Counter

Manhole set up guidelines

Note: daily maintenance check should be performed prior to operation of equipment. **All safety measures should be taken to prevent injury or death.**

Operator Position

The operator should be positioned at the operators station in front of the control panel.

Unit and hose reel Position

The unit should be positioned with the operators safety first. The use of cones and lighting is highly recommended. Observe all workplace laws when setting up unit.

Warranty

Factory parts warranty on new parts
12 months warranty on all rebuilt components
24 months warranty on workmanship