



YRPRO WATERBLASTER OPERATORS MANUAL

Congratulations on purchasing a YRPRO New Zealand assembled high pressure water blaster.

YRPRO®

Applies to the following models:

Portable: YR2700AR, YR3000AR, YR3500AR.HR, YR4000AR.HR, YR4000ARE

Trailer Mounted: YRTWB.3700.500.ECO, YRTWB.3000.500, YRTWB.3700.500, YRTWB.4000.500, YRTWB.3700.1000, YRTWB.3000.500.D



INDEX:

Version 1: September 2021

- 3-4. Technical data / Specifications
- 5. Installation, Last Checks & Start
- 6-7. Engine Start Ups & Shut down
- 8-9. Regular Checks & Operating Tips
- 10-11. Maintenance Schedule & Tips
- 12-14. Warnings & Safety Precautions
- 15. Warranty
- 15. Terms & Conditions of Sale

Assembled By:
Youngman Richardson
6-10 Parkway Drive
Mairangi Bay
Auckland 0632
Ph: +64(9)4432436
www.yrco.co.nz

Model:

Serial Number:

Date of Purchase:.....

Purchased From:

YRPRO Portable Waterblaster Specifications & Technical Data:

MODEL / ITEM	YR2700AR	YR3000AR	YR3500AR.HR	YR4000AR.HR	YR4000ARE
Frame Type	Powder Coated	Powder Coated	Powder Coated	Powder Coated	Powder Coated
Engine Model	GX160	GX200	GX270	GX390	IGX390
Engine HP	5hp	6.5hp	9hp	11hp	11.7hp
Start	Recoil	Recoil	Recoil	Recoil	Electric & Recoil
Gearbox	N/A	N/A	N/A	N/A	N/A
Battery	N/A	N/A	N/A	N/A	U1MF-X
Pump model	Annovi Reverberi RMV2.5G30	Annovi Reverberi RSV3G31	Annovi Reverberi RSV3.5G40	Annovi Reverberi RSV4G40H	Annovi Reverberi RSV4G40H
Set up Pressure & Flow	2200 psi, 9.5 LPM	2600 psi, 11 LPM	3000 psi, 13 LPM	3700 psi, 15 LPM	3700 psi, 15 LPM
Nozzle size at set-up pressure	0.25	0.25-0.30	0.35-0.40	0.35-0.40	0.35-0.40
Pump Speed RPM	3400	2800	3400	3400	3400
Hour Meter	N/A	N/A	N/A	N/A	YES
Low water engine shut-down	N/A	N/A	N/A	N/A	N/A
By- pass Valve	Yes	Yes	Yes	Yes	Yes
Thermal Dump Protection	N/A	Yes	Yes	Yes	Yes
Built-in Reel	N/A	N/A	Yes	Yes	N/A
Hose length	14 meters	14 meters	14 meters	14 meters	14 meters
Water Tank	N/A	N/A	N/A	N/A	N/A
Gun & 900 mm s/steel lance	Yes	Yes	Yes	Yes	Yes

YRPRO Trailered Waterblaster Specifications & Technical Data:

MODEL / ITEM	YRTWB.3700.500.ECO	YRTWB.3700.500 & YRTWB.3700.1000	YRTWB.3000.500	YRTWB.4000.500	YRTWB.3000.500.D
Frame Type	Trailer - Galvanised	Trailer - Galvanised	Trailer - Galvanised	Trailer - Galvanised	Trailer - Galvanised
Engine Model	GX390	IGX390	IGX390	GX690	KD625.2
Engine HP	11hp	11.7hp	11.7hp	22hp	28.5hp
Start	Recoil	Electric & Recoil	Electric & Recoil	Electric	Electric
Gearbox	N/A	N/A	2:1 Reduction	2:1 Reduction	2:1 Reduction
Battery	N/A	U1MF-X	U1MF-X	U1MF-X	DIN55
Pump model	Annovi Reverberi RSV4G40H	Annovi Reverberi RSV4G40H	Annovi Reverberi XWA55G40	Annovi Reverberi XWA55G40	Interpump W2030
Set up Pressure & Flow	3700 psi, 15 LPM	3700 psi, 15 LPM	3000 psi, 21 LPM	4000 psi, 21 LPM	2900 psi, 30 LPM
Nozzle size at set-up pressure	0.25-0.35	0.25-0.35	0.25-0.35	0.35-0.40	0.25-0.35
Pump Speed RPM	3400	3400	1450	1450	1450
Hour Meter	N/A	Yes	Yes	N/A	Yes
Low water engine shut-down	N/A	Yes	Yes	Yes	N/A
By-pass Valve	Yes	Yes	Yes	Yes	Yes
Thermal Dump Protection	Yes	Yes	Yes	Yes	Yes
Built-in Reel	Yes	Yes	Yes	Yes	N/A
Hose length	30 meters	30 meters	30 meters	30 meters	30 meters
Water Tank	500 Ltrs	500 /1000 Ltrs	500 Ltrs	500 Ltrs	500 Ltrs
Gun & 900 mm s/steel lance	Yes	Yes	Yes	Yes	Yes

INSTALLATION, LAST CHECKS & START

INSTALLATION:

- Inspect shipment for damages during transit and unpack
- Top engine fuel tank up with clean, fresh, Petrol or Diesel

WARNING – PLEASE READ SAFETY INSTRUCTIONS FIRST!

- **For portable machines:** Connection supply hose to water supply:
 - Important: Use hose with minimum 20 mm inside diameter
 - Required pressurised water supply (not gravity) with minimum of 10 PSI and ~20% more flow than pump flow rate (litres per minute)
 - Turn on the water supply (open tap fully).
- **Trailer-mounted units:** – Ensure tank is half full with water. This will ensure the float switch is activated otherwise the engine won't start
- Unroll the hose fully ensuring there are no kinks in it
- Trigger gun to expel any air in the system

LAST CHECKS & START:

- Check all hoses are connected and check for damage or water leaks
- Check oil level in the pump & engine. The oil sight glass on the pump should be no more than HALF full! If oil needs to be topped up, use SAE10W40 or SAE 15W40 or SAE30

READ WARNINGS & SAFETY INSTRUCTIONS BEFORE OPERATING MACHINERY

ENGINE START UPS AND SHUT DOWN

FOR THE HONDA GX160 GX200 GX270 GX 390 PETROL ENGINES

To Start:

- Ensure that the main RED ON/OFF switch is switched to OFF.
- Ensure the Choke is ON (Moved fully to the left) when engine is cold
- Ensure Fuel is OPEN (Fuel lever moved all the way to the right)
- Now take the recoil start handle attached to the recoil rope and give it 2 slow pulls to prime engine.
- Now switch the main RED ON/OFF switch to ON and give the recoil handle firmly and fast, fully extended pull. The engine should fire up.
- As soon as the engine fires up, turn Choke to the OFF position by pushing the choke lever all the way to the left.
- NOTE: engine RPM is locked. Do not attempt to unlock or change this. It will void your warranty! Engine is set to run at top torque curve – set up to optimal revs for the pressure and flow.
- The engine is now running, pump is pumping and water is running in by-pass.
- Pull the trigger on the gun by pointing the lance in a safe direction.
- When the trigger is released, the pump is still pumping and water is in by-pass.

To Shut down:

- Flick the main red ON/OFF switch back to the OFF position
- Turn the fuel supply off by pushing the fuel supply lever all the way to the LEFT.
- Turn water supply off and disconnect (Portable units)
- Squeeze trigger a few times to ensure no pressure is stored in the hose.
- Roll out the hose and then roll it up avoiding any kinks

FOR THE HONDA IGX390 PETROL ENGINE:

To Start:

- Ensure Fuel is OPEN (Fuel lever moved all the way to the right)
- Turn the ignition key clockwise to the START position
- The engine is now running, pump is pumping and water is running in by-pass.
- Pull the trigger on the gun by pointing the lance in a safe direction.
- When the trigger is released, the pump is still pumping and water is in by-pass.

To Shut down:

- Turn the ignition key to the OFF position and remove for safe keeping
- Turn the fuel supply off by pushing the fuel supply lever all the way to the LEFT.
- Squeeze the trigger a few times to release any stored pressure.
- Roll out the hose and then roll it up avoiding any kinks

FOR THE KOHLER KD625.2 DIESEL ENGINE:

To Start:

- Turn the ignition key clockwise to the START position
- The engine is now running, pump is pumping and water is running in by-pass.
- Pull the trigger on the gun by pointing the lance in a safe direction.
- When the trigger is released, the pump is still pumping and water is in by-pass.
- NOTE: engine RPM is locked. Do not attempt to unlock or change this. It will void your warranty! Engine is set to run at top torque curve – set up to optimal revs for the pressure and flow.

To Shut down:

- Turn the ignition key to the OFF position and remove for safe keeping
- Squeeze the trigger a few times to release any stored pressure.
- Roll out the hose and then roll it up avoiding any kinks

REGULAR CHECKS & OPERATING TIPS

- **Check all oil levels:**
 - Honda & KOHLER engine oil level – check. Use manufacturer’s recommendations.
 - Gearbox oil level (sight glass should be half) SAE80W90 Gearbox oil.
 - Pump oil level (sight glass should be half full) SAE 15W40 / SAE 10W/40 SAE 30
- **Water Supply** - Low water supply can cause cavitation and/or pump running dry causing expensive pump failure. Always check to ensure supply is:
 - Uninterrupted
 - Pressure is good (10 PSI / 30 LPM)
 - There are no kinks in supply hose
 - Fittings are in good condition and not leaking
- **Worn Jets** - System will function okay, but with oversized, worn jets, the pressure will be much lower and cleaning ability reduced. Always use new jets to check operation efficiency
- **Operating Pressure** - Check operating pressure to see if it within 10% of units specified operating pressure. If pressure drops over time it may indicate general wear and tear and a service is recommended.
- **Air Leaks** - Especially in suction to pump hoses. Repair immediately if found. Check for cuts & abrasions
- **Lance & Gun Assemblies** - Check for damage and leaks. If leaking/damaged DO NOT use & get repaired/replaced immediately
- **Filters** - Check to ensure filters are clean, filter heads/tops are not cracked, seals are not worn and sealed air tight and mesh tube is unblocked
- **Safety** - Ensure safety protective gear is used and in good state of repair.
- **Prolonged by-pass** - Leaving the unit in prolonged by-pass (machine is switched on but trigger is not depressed) can cause excess wear & tear due to water over-heating which damages seals. Portable units have a safety mechanism built-in to prevent damage:
 - Automatic dumping of hot water when water temp rises above 63 deg C

- **Worn By-Pass Valves** - Soft-Acting By-Pass valves should NOT store high pressure water in hose down-stream between by-pass valve and high pressure gun.
- **Water Leaks** - Excessive hammering can cause damage. Fix leaks when they occur
- **Water Condition** - Ensure water source is clean (potable water). Not recycled water or bore water which can damage pumps.
- **Tyre Pressure** – Check Trailer mounted units only
- **Mechanical Brake System (Trailers)** – Check all bolts and nuts – tighten if necessary

**REMEMBER – CHECK FOR ANY HIGH PRESSURE
WATER OR OIL LEAKS**

MAINTENANCE SCHEDULE AND TIPS

MAINTENANCE SCHEDULE:

This maintenance schedule does not include the **Engine** Maintenance Schedule. Please refer to Honda Operators Manual or the Honda website or Kohler Operators Manual or Kohler website.

	ACTION REQUIRED	DAILY	50 HRS	250 HRS	500 HRS	ANNUAL
1	Replace High pressure nozzle/jet	N/A	As required	YES	YES	YES
2	Check Water Filters - clean or replace if damaged	YES	YES	YES	YES	YES
3	Inspect for leaks and repair all HP Accessories like gun, hose, swivel, hose reel swivel, nozzle	YES	YES	YES	YES	YES
4	Check Oil level in Pump (sight glass half full)	YES	YES	YES	YES	YES
5	Check engine oil	YES	YES	YES	YES	YES
6	Check Oil level in Gearbox (sight glass half full) and fill up with SAE 80W90 Gearbox Oil	YES	YES	YES	YES	YES
7	Check By-Pass valve function test - re-kit or replace if required	N/A	N/A	YES	YES	YES
8	Function test all Safety Shutdowns & By-Pass timed shut-down	N/A	N/A	YES	YES	YES
9	Check engine sub-frame vibrate mounts	N/A	N/A	YES	YES	YES
10	CHANGE pump oil - SAE 15W40 / SAE30	N/A	YES	YES	YES	YES
11	Change engine oil	As per manufacturer's instructions				
12	Change air and fuel filters	As per manufacturer's instructions				
TRAILERS						
13	Check wheel nut indicators, bolts on spring suspension, tow-bar hitch, mechanical brakes. Check tension on mechanical brake cable.	YES	YES	YES	YES	YES
14	Check Tyre Pressure – inflate if necessary	DAILY CHECK				

MAINTENANCE TIPS:

USE THE FOLLOWING GUIDE WHEN CONSIDERING MAINTENANCE:

Always test your machine using a new high-pressure nozzle - correctly sized for set-up pressure and flow.

Before you start pulling pumps apart, do obvious checks first:

- Worn /blocked Jets
- Air Leaks
- Engine Speed (Not too low)
- Suction Filters (Blocked?)
- Water supply volume (Not too low)

Remember to check filters regularly (if fitted) and clean under running water.

The correct procedure for replacing the filter mesh is to first put the mesh into the cup after rinsing under running water and then screw it back onto the filter head.



TRAILERISED UNITS ONLY

Correct procedure of replacing the filter cartridges

- Always put the filter mesh tube into the 'head' first ensuring it is square and tight.
- Now screw on the cup part of the filter.

Doing it the opposite way may result in a crushing of the filter mesh!

WARNINGS & SAFETY PRECAUTIONS

READ WARNINGS & SAFETY INSTRUCTIONS BEFORE OPERATING MACHINE.

HIGH PRESSURE, HIGH VELOCITY WATER IS DANGEROUS!

GENERAL PRESSURE CLEANER WARNINGS AND SAFETY PRECAUTIONS

- When shutting down, always turn off machine, turn off water at the source and trigger the gun pointing the lance in a safe direction to release any in-line stored pressure - before disconnecting hoses or working on machine.
- Never aim high pressure water jet at anyone, at animals or at fragile items - injury or damage could result.
- **Always be aware of overhead cables, run-off water, slippery surfaces and by-standers!**
- Never allow untrained adults or minors use of the equipment.
- Never use the machine if there are any leaks on the high pressure delivery side of the pump.
- Read and observe the manufacturer's instructions if chemicals are being used.
- The "recoil" on larger machines is positive - lean forwards and brace yourself to take it up!!!
- **NEVER HIGH PRESSURE BLAST THE FOLLOWING:** any electrical components, motors / switchgear or electrical boxes as injury or death may result.
- Never water blast any fuel caps or oil caps and water can get into breather holes and contaminate fuel or water. Never blast water directly into seals / bearings on shafts where water penetration would be detrimental.
- **NEVER WATER BLAST:** fragile items / surfaces that may be damaged by high velocity water. Always carefully test on a small area first.

- **ALWAYS WEAR PROTECTIVE GEAR (PPE)** i.e. head, face, eye protection, wet weather gear, boots and gloves - which is particularly important where hot water or aggressive chemicals are being used or where wet sandblasting is used.



- Keep hands, feet and hair away from all moving parts.
- Never leave machine running unattended.
- **EXTREME DANGER** - never adjust engine speed (RPM) or safety by-pass valve in an attempt to increase pressure!
- Barricade off immediate work area - restrict access - erect hazard warning signs.
- Prior to high pressure water blasting, check location's level of emergency /first aid.

EXPLOSION RISK – Petrol is explosive! Never re-fuel when the engine is hot – Petrol fumes can ignite and explode leading to severe burns and even death! Do not smoke when re-fueling! Keep away from fire, sparks, heat or static electricity.

WARNINGS & SAFETY PRECAUTIONS SPECIFIC TO THIS MACHINE:

- **Never re-fuel when the engine is hot – Petrol fumes can ignite and explode leading to severe burns and even death!**
- Use only Clean / Fresh POTABLE Water
- Always be conscious of High Velocity Water from this machine which can cause serious injury
- Run up and test all safety shutdowns regularly i.e. Monthly.
- NEVER attempt to modify levels of performance by:
 - Adjusting By-Pass Valve to increase P.S.I.
 - Use Under-sized High Pressure Nozzles.

EXTREME DANGER!

- Beware of HOT engines (particularly Mufflers)
- Store fuels in approved containers in a well ventilated area away from heat.
- Ensure enough air flow around engine to keep it cool and to void any fumes / exhaust gasses.
- Use Specified and approved Personal Protection Equipment (PPE) for High Pressure Cleaners. This is a High Performance High Pressure Cleaner.



An injury by high pressure water jets can be serious!

In the event of any water jet injury:

- Seek medical attention immediately – do not delay
- Inform the doctor of the cause of the injury
- Tell the doctor what type of project/task was being performed at the time of the injury making special note of any chemicals that were used and the quality of the water is important in deciding on initial, empiric antibiotic treatment and broad-spectrum intravenous antibiotics should be administered. Cultures should be obtained.

WARRANTY / TERMS AND CONDITIONS OF SALE

WARRANTY PERIOD/S:

- 2 year Manufacturer's Warranty on Build (Defects in material and workmanship)
- 2 year Warranty on Pressure Pump (Note: Maintenance is not warranty. Excludes service and consumables required at scheduled maintenance intervals)
- 3-year Manufacturer's Warranty on HONDA engines (see Honda Owner's Manual and website for details).
- 2-year or 2000 hours Manufacturer's Warranty on KOHLER engines, whichever comes first (See KOHLER Owner's Manual and website for details)

Responsibility of the Consumer under this Limited Warranty:

- Only clean, potable water should be used through our pressure cleaners with a flow rate at least 15% more than the pump requirements (e.g. an 18 LPM pump requires at minimum a water supply of 21 LPM to prevent pump cavitation)
- Regular maintenance of the engine and pump using genuine parts as per manufacturer's scheduled maintenance intervals (proof required).





Auckland Head Office
6-10 Parkway Drive,
Mairangi Bay, Auckland
Phone: (+64) 09 443 2436
Email: sales@yrco.co.nz

Auckland, Mt Wellington
20L Sylvia Park Road,
Mt Wellington, Auckland
Phone: (+64) 09 553 5470
Email: salesmtwell@yrco.co.nz
(Open January 2022)

Wellington
8 Broken Hill Road,
Porirua, Wellington
Phone: (+64) 04 212 2456
Email: saleswell@yrco.co.nz

Christchurch
20 Nga Mahi Road,
Sockburn, Christchurch
Phone: (+64) 03 341 6923
Email: saleschch@yrco.co.nz

YR Youngman
Richardson