# BINZRUZ - AQUATEK #THINK-DIFFERENT

## User Manual

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# Thank you for buying a Binzruz Aquatek machine.

In addition to any training you have received from Ryan, this guide will provide you with instructions of how to set up and operate the machine.

This manual can be used for both the Aquatek MkI, MkII & MkII Please read this entire manual before using this machine. This machine produces high-pressure water that can be dangerous if misused.

-Never direct the nozzle or lance towards any part of the body or face.

-We recommend using protective clothing such as waterproof jackets, ear defenders, gloves, glasses/goggles when operating this machinery.

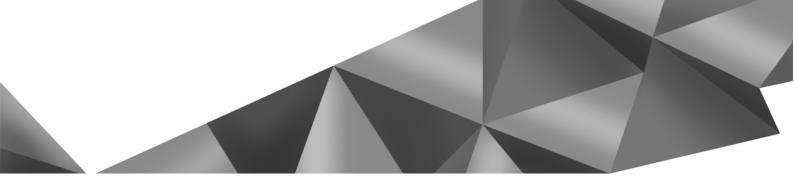
-This machine must be stationary while in use, never run this machine while moving.

-Every 8 weeks using a separate pressure washer, remove sink trays and filters and thoroughly clean the tank ensuring all lose debris is removed from the tank, this will keep your pump cleaner for longer.

-We recommend changing your engine every 3 years depending on use, weathering, salt etc causes corrosion of the engine components.

-2ltr of TFR should be added to your 500ltr of water bi-weekly to maintain cleanliness of your tank.

-Tyre pressures should be kept at 45psi and checked weekly.



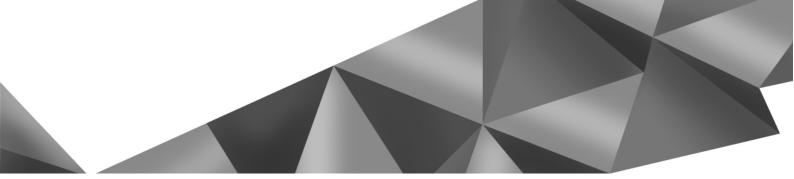
## **ESSENTIAL INFORMATION**

1) Sink filters MUST be cleaned at the end of the working day no matter how many bins were cleaned.

2) Inline filter must be cleaned as and when pressure drops or daily

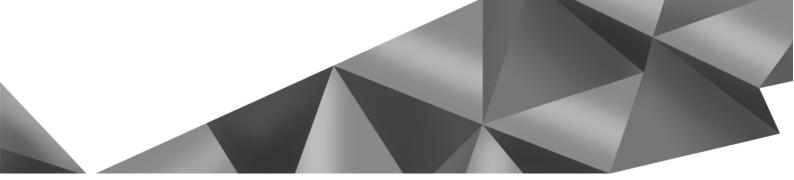
- 3) Loss in pressure means one of 3 things, valves blocked, inline filter blocked, or damaged unloader valve
  - 4) Unloader valves must be changed every 4 months (stock item at Binzruz limited)
  - 5) Valves must be changed every 4 months in service (stock item available at binzruz limited)
- 6) Hydraulic fluid to be checked and adjusted 6 monthly.
- 7) Tyre pressures to be checked weekly and kept at 45psi
- 8) Machine should be washed with warm soapy water daily
  - 9) If all electrics needs to be shut off in emergency, the red switch under the bonnet does this.
  - 10) Always pull and hold trigger while start the engine (releases pressure in the gun)

\*we advise a 6 monthly (minimum) full service to get the best out of your binzruz aquatek machine. (4 monthly if you clean over 750 bins per 4 weekly cycle) this includes unloader and valves replacement\*









- A Space for Toolkit Storage
- B Handbrake
- C Towbar Hitch
- D Concealed Loncin/Briggs & Straton Engine & Pump
- E Lance
- F Concealed Water Tank
- G Electric Engine Start
- H Tyres
- I LED Lights
- J Splash Panels
- K Bin Lift (MKI Manual/MKII Hydraulic)
- L Water Inlet

#### BEFORE SETTING OFF CHECK ALL LIGHTS ARE WORKING

- Fill the water tank via the tank inlet
- When stationary switch on the engine
- Before moving ensure the towing hitch is secure and locked
- Carefully place the bin(s) on the lift mechanism
- Use the switch (MKIII) or handle (MKI) to elevate the bin(s)
- Use the lance to wash the bins
- Wastewater will land in the waste catchment tray and filter
- Use the switch/lever to lower the bin
- Remove the bins from the lift
- Clear any waste caught in the filter tray and bag up
- After completing all bins drain the water tank
- Remove the filters to clean also cleaning the sink
- Use a water supply to re-fill the water tank via the inlet valve
- Clean the pump filters often
- Check your tyre tread and pressure weekly





#### CLEANING THE FILTER AND SINK

To clean the filters, remove each layer from the sink, and clean individualy, making note of the separate layers as the filters have different grades of mesh. Once the filters have been removed, rinse the sink of any dirt then you can place the filter trays back into position.

#### CLEANING THE INLINE FILTER

The filter is located underneath at one side (Long Black Filter) Turn off the water flow via the stop tap, unless the water tank is empty. Unscrew the filter case and the pump filter will be inside this casing, empty any water and once removed from the case clean the filter with clean water until all debris is removed.

Place the filter back inside the case and fill up with water (this avoids airlocks), before reattaching the filter case back into position.

CHECKING AND CHANGING THE ENGINE OIL AND HYDRAULIC LIFT (MKIII Hydraulic Model Only) Remove dipstick and check the level. If required drain the oil via a hand pump. Replace the oil and dipstick and again check the levels.

> BATTERY MAINTENANCE Charge daily unless using the Anderson Cable connection

MAINTAINING THE ALUMINIUM GRAPHICS PANELS The panels on the each side of the trailer which were logo'd up should be tightened once per week using an allen key.

> LIFTING FRAME MAINTENANCE The rear bearings on the lifting frame must be greased once per month using required grease.

# HOW OFTEN SHOULD I SERVICE MY BINZRUZ AQUATEK MACHINE AND WHAT DO I NEED TO DO THIS?

The answer to this will vary depending on how much your machines get used. Here at Binzruz Ltd, we service our machine every 4-6 month's dependant on use. There are three parts to consider when servicing your machine **Pump service - Engine service - General Maintenance service** 

#### Engine & Pump service

A pump service can be the most noticeable service of the three, as over time the valves will wear with use. The valves can be found on eBay or using a local pressure washer supplier or stocked here at Binzruz Ltd. The valve kits usually needed are for the interpump W154 pump. (Subject to vary on the machine so please get full spec off the top of your pump before ordering) The valves are simple to change, as you look at your pump you will see 6 brass nuts (26-28mm Approx) simply loosen these and gently pull out your old valves, replacing them with the new ones, we strongly suggest if not mechanically minded giving the task to someone who is professionally trained to avoid damaging your pump. Once the valves are done, next steps to servicing pump are gearbox oil (recommended is a good quality 80w 90) and in the pump its self, along with the engine a good quality 10w 40. Final steps to complete the engine side of the service is by adding a new air filter, these can be found on eBay too or local supplier, simply ask for Honda gx200/Loncin G200 air filter, a very universal part priced at usually around £6 each. Lastly, a spark plug using the same search as the air filter these can also be picked up for under £10 as a universal part. Once these are done the pressure washer and engine is fully serviced.

Please note: we strongly suggest replacing your unloader valve every 4-6 Months minimum, the unloader takes a lot of wear especially with recycling systems. The unloaders are the main source of pressure the unloader valves are usually 15lpm K5.1(subject to change depending on the progression of the machine so please read full spec off the side of the unloader valve).

Simply changing these regularly can save you a lot of time off the road if they go. (Always keep a spare one on the shelf). The unloaders are the brass part shaped like a 'T' almost, attached to the pump with 3 pipes coming off, simply unscrew the old one and fit the new one, we suggest someone experienced doing this as setting up pressure correctly is paramount.

General Maintenance service This service is something we advise doing as often as you feel necessary. Complete the following steps to ensure full care is taken of your machine.

Using bearing grease to fill your lifting frame bearings up, this will ensure the lifting frame doesn't seize up, please remember it gets wet, dry all day every day. Ensure the nuts holding the graphic panels on are tightly secured (weekly) with the vibration during driving and use it's possible they can loosen slightly. Ensure removable filters in the sink area are cleaned down daily, this will ensure tank stays clean and prolong the life of the unloader valve. Charging your battery once per week ensures it is topped up, despite the trickle charge as you drive. If your jobs are close your machine will naturally use more power than you're putting back in, putting on a charge via the mains once per week for 6 hours will ensure no issues on the power front. Check your hydraulic oil level 6 monthly (MkIII owners only)

What spares should I keep in stock to avoid problems down the line? -Replacement unloader valve

-Service kit, oils, spark plugs, Grease. Being prepared can't do any harm -A spare wheel is always a beneficial spare (please contact us if you wish to buy one of visit a local trailer supplier)

-Always carry in your van or trailer a small toolbox (ensure that you have essential spanners, PTFE tape, spare nozel for the tip of your lance, duct tape, Allen keys, spare spark plug

-O ring kit (a variety of size kits can be found on eBay for £15) Replacement pull start (another easy to source part on eBay approx £1/

-Replacement pull start (another easy to source part on eBay approx £15)

#### HINTS & TIPS

•Ensure the bin wash is on reasonably level ground while operating to ensure the bins can be lifted properly by the mechanism and the water can fall into the waste filter tray.

•Keep the filter tray clear of debris and bag up any waste that collects in the filter tray as you work.

•When preparing bins to be washed for the first time you may need to scrape any debris out manually to avoid waste building up in the main filter.

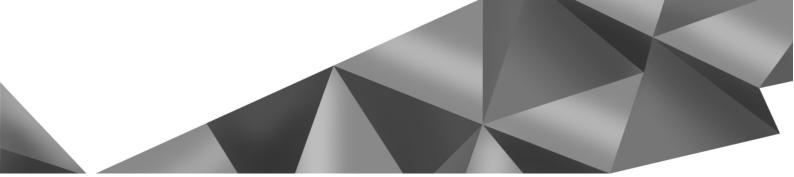
•A hand operated sanitiser spray can be used after washing to leave the bins smelling fresh.

•It is advisable that you contact your local Authority to determine if you require a permit to operate or trade on the street or if a license is required to trade on a public highway.

•You should check with the DVLA with regards to driver licensing and your entitlement to tow trailers.

The DVLA booklet INF30 should explain the requirements for towing trailers in Great Britain. Or for more information go to www.direct.gov.uk/driving or telephone the DVLA Customer Enquiries on 0800 7906801.





#### ENGINE

You should refer to the owners manual for the engine fitted to this bin wash, especially with regards to:

- Safety Information
- Safe Operation
- Precautions
- Starting and stopping the engine
- Servicing the engine
- Lubrications and oil levels
- Storage and transporting
- Technical and consumer information

#### SAFETY

•Always think safety for yourself, motorists and the public and put safety first. •Always wear goggles, ear defenders and a face mask when using the machinery.

•The machine produces high pressure water which can be dangerous if misused.

•Never point the lance in the direction of the machine or another person.

•Never use the lance during an electrical storm.

•Never allow the lance to come into contact with electrical cables.

•Always secure the lance onto its locating points before driving off.

•Always switch on the warning beacon when working.

•Clear any loose debris from the collection tray before driving off.

•Ensure the collection tray/lid is in its correct position and locked down.

•Always ensure that the bin lift is clear before operating.

•Never lift a bin unless the machine is hitched to a tow vehicle or is firmly anchored down and never stand underneath a raised bin.

•Do not move the machine when full of water without using the tow vehicle. (The shifting of water could destabilise the unit causing it to tip up).

•When attaching the machine to your tow vehicle always ensure that it is hitched correctly to the tow bar i.e. the breakaway strap should be hooked around the vehicle tow ball, the electrical connection

should be connected and all lights checked before driving off.

•Regularly check the tyre pressures.

•Have the trailer parts serviced by a specialist trailer engineer at least once per year.

•Service in accordance with recommendations (normally service every 4 months). •Regularly check the oil levels on the gearbox and pump and service in a ccordance with the manufacturer's recommendations (normally service every 4 months).

•All operators must be trained to use the pressure washer in accordance with the manual.

SAFETY CONT.

•All risk assessments should be carried out for each water jetting operation before commencement of works.

•We recommend that all operators should maintain a log book of use of the jetting unit.

•The information can be relatively simple and completed on a daily basis and of sufficient information to provide useful operating data.

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•All maintenance must only be carried out by authorised repair personnel.

•The pressure washer must not be used when there is a clear fault or damage to it.

•Do not use the pressure washer while tired or under the influence of alcohol or drugs.

•Heat exchange exhausts emit hot fumes, keep face, body and hands clear; ensure it is clear of any obstruction at all times.

•Always ensure you safely route all hoses to the mains cable to minimise trip hazards and keep them away from the jetting area.

•All cleaning products used must be in accordance with your MSDS sheet (Material Safety Data Sheet).

•Never attempt to start the pump if there is a possibility that there is freezing in any part of the system.

•Never start the pump if any filtration devices have been removed.

•You may experience a kick back from the gun. Hold the gun and lance with both hands at all times during cleaning operation.

•The pressure washer must never be run with the cover open.

•The pressure washer must be used in open air, not inside a building and at least 1m away from any building.

•Always wear hi-visibility clothing while on the public highway.

TROUBLESHOOTING

•TOW HITCH WILL NOT CONNECT Check ball hitch is correct size, ensure there are no locks or other devices fitted. !DO NOT ATTEMPT TO DRIVE IF NOT SECURE!

•MAIN TRAY WILL NOT ELEVATE The lift is fitted with hydraulic rams which will operate slowly, do not force.

•BIN LIFT MECHANISM WILL NOT LIFT Check battery power and charge and levels of hydraulic oil.

•BIN MECHANISM WILL NOT LOWER Check battery power and charge and levels of hydraulic oil. !DO NOT FORCE THE MECHANISM DOWN!

#### •NO PRESSURE FROM LANCE

Firstly ensure all filters are cleaned, then the nozzle tip in the lance is clear. Its 99% of the time the unloader valve, the first way to check is to disconnect the hose from the pump and start the engine up. If there's water coming from the pump you know it's from the unloader to the lance which eliminates a blockage in the pump. If the pumps not forcing water out at this stage you know there's a blockage in the pump. Changing the unloader should be the first step. If the blockage is the pump, take the valves out of the 6 ports carefully as explained above and free any trapped dirt in them and fit back together, these simple steps should fix your issue, if not we suggest contacting a local professional to take a look, we are here to offer help and guidance but can only advise the above steps.

•PULSATING PRESSURE FROM LANCE Check filters and water tank or check for debris in lance nozzle.

•UNEVEN PRESSURE FOR SPRAY PATTERN Check for debris in lance nozzle and clean if necessary.

#### •ENGINE WILL NOT START ON THE BUTTON START

Check petrol and oil levels, if in doubt refer to Operators Manual. Always pull trigger to release pressure before starting.

If it sounds like its struggling to start, always start by checking firstly the fuel level ensuring the tank is full, second thing to check is the battery level, and if needed top this up via mains charger. If it sounds full of battery power and turns over and sounds healthy, it's likely to not be getting a spark. Simply fit a new spark plug and try this. If further problems occur please consult a local professional.

If there is no noise on the started button press at all, it is 99% certain to be one of the 3 fuses situated behind the engine that has blown. Please replace the fuse and re-try. Usually when the engine is running with no trigger pulled, if the engine sounds rough it might need a new air filter. This should be rare though if changing every 4-6 months.

#### •I HAVE A LEAK

Leaks are a common thing with anything under pressure, the main places are the bottom of the gun where the hose meets the bottom of the gun, this can usually be fixed using PTFE tape (Thread tape). Leaks can occur on the swivel on the top of the trailer, this can usually be fixed by replacement o ring. O rings and PTFE tape will be all that's needed to fix leaks simply unscrew fittings and apply relevant method.

#### •HYDRAULICS AREN'T WORKING

This is rare but a possible fault if the hydraulics have stopped working and you've noticed them slowing down then its most likely the lack of power in the battery. Place the battery on charge for 6-8hrs and try hydraulics again.

If suddenly the hydraulics fail it sounds like a wire has come loose, take a look for anything obvious but if not mechanically minded please contact an electrician to look at your machine.

# •MY BINZRUZ AQUATEK MKIII KEEPS PUSHING AWAY THE COMMERCIAL BINS SO I CAN'T HOOK THEM ON

The Binzruz Aquatek range was designed with many factors considered, one being that other manufacturer's machines are lower and often don't grab the commercial bins, by designing the Aquatek range higher this allows the customer to lift one side at a time onto the machine to avoid the lifting frame pushing away the bin during the lifting stage. In order for this method to work the machine must be higher than the bin, having designed the machines ensuring no bin is higher than the machine we can assure you that if it appears that the bin is in fact higher it's almost a certainty that you're on uneven ground, position your machine so the rear of the trailer is higher than the bin so the theory stays the same, on the odd occasion this can be hard to achieve, terrain dependent, please adopt this theory to ensure no issues lifting the bins on uneven surfaces.

#### NO PRESSURE? DIAGNOSTICS ADVICE (ELIMINATION)

If machine has no pressure but the engine is running you can check a few things first.

1. Disconnect the main high-pressure hose from the pump. If water flows from here then you know the pump is operating.

 If the machine still does not operate then switch off and disconnect the lance from the trigger. If water flows from here then you know the pump is operating.
If the machine still does not operate then it is likely the nozzle (tip) is blocked.

DO NOT LOOK AT THE NOZZLE FROM THE FRONT TO CHECK. Stop the machine and remove the nozzle to clean out any debris. A blocked nozzle is one of the most common apparent faults.



FAQ & Trouble Shooting

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- -Pump service
- -Engine service
- -General maintenance service

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Please remember, if any issues occur and customer wish to have this fixed under warranty terms, customer must book this in allowing **7days** maximum turn around and **must bring the machine to our Thirsk based workshop** and collect at their own admission when Binzruz Limited have completed repairs, Warranty covers all repairs free of charge providing they meet warranty conditions and are a result of failure in workmanship. Binzruz limited **will not** pay for 3rd party companies fixing or altering machines, any modifications void your warranty instantly