

REID LINE EAST, RD 5 FEILDING 4775, New Zealand Phone (06)323 2509 Fax (06)323 2709 Email info@Harvesterconcepts.co.nz

1/2014

HT-Aqua Harvester User Manual



HT-Aqua Introduction

Congratulations on the purchase of your *Harvester Concepts Ltd HT*—*Aqua Harvester*. This machine is of high quality and will reward you with reduced effort and greater efficiency in your harvesting.

Learning to operate your *HT-Aqua* won't take long. You will soon find it to be an invaluable tool.

Important Safety Note

Read and understand all the instructions before using the HT-Aqua

- The HT-Aqua should only be used for the purposes for which it was designed. Use it for no other purpose (e.g. it is <u>not</u> a grader blade or battering ram!). We have manufactured the HT-Aqua using quality materials and manufacturing techniques however if faults do occur please have them corrected before you use it.
- Please read the Power Head instruction book before use. Pay particular attention to running in and safety notes.
- Please read this instruction book before use and retain it for future reference.
- It requires only one person to operate the HT-Aqua keep all others away!
- Immediately after turning the power head off, fit the cutter bar cover.
 It should be removed last, before restarting the power head.

12

<u>Index</u>

Page

- 1 Introduction / Safety notes
- 2 Index / Specifications
- 3 Conditions of sale and guarantee
- 4 Your HT-Aqua Harvester Consists Of
- 5 Uses of the HT-Aqua Assembly / dismantling Cut Height Adjustment Starting Up
- 6 Fault Finding
- 7 Maintenance
- 8 Freighting
- 9 Options
- 10 Parts Diagram/Parts List

Specifications

Cutting height above bed: 55 to 120mm in 6 steps

Cut width:- 460mm Weight, dry:- 23.5 Kg Wheel track:- 470mm Dimensions:-Ready to use:- width 630mm Length 1400mm Height 1080mm

 $\label{eq:Freighting In crate 610x1035x1100H=0.7 m^3 / Kg$

Specifications subject to change without notice

HT-Aqua Parts List

HT-Aqua Parts

Conditions of Sale and Guarantee

Your *HARVESTER CONCEPTS LTD* product is guaranteed to be free from defects in materials and/or workmanship under normal use and service for a period of 6 months from date of initial purchase.

HARVESTER CONCEPTS LTD'S liability and obligation is limited to problems which HARVESTER CONCEPTS LTD acknowledges to be defective under the guarantee conditions either to

- the free replacement or repair (where practicable) at the
- HARVESTER CONCEPTS LTD premises of any parts returned within the guarantee period
- or shipment of replacement parts to the customer, as mutually agreed to.

Supply of non standard parts or services from other than *HARVESTER CONCEPTS LTD* are not covered under the guarantee conditions unless prearranged, in writing, with *HARVESTER CONCEPTS LTD*.

Shipment of product to *HARVESTER CONCEPTS LTD* is the consumers responsibility and cost Guarantee conditions are void for any of the following reasons:-

Abnormal use of the product Accident damage or vandalism Modifications or unauthorised repairs to the product or its components Where component "seconds" have been supplied Normal wear and tear

HARVESTER CONCEPTS LTD cannot be held liable for any damage caused to people or other property during use of the product or as a result of any defect or malfunction of product or components supplied by HARVESTER CONCEPTS LTD. Use of the product is solely the users responsibility. Other losses such as delays in work, incorrect or misleading information, omissions and errors, HARVESTER CONCEPTS LTD is not liable for.

This guarantee is expressed in lieu of all other guarantees expressed or implied and all other obligations and liabilities on *HARVESTER CONCEPTS LTD's* part and specifically excluding consequential damage. *HARVESTER CONCEPTS LTD* makes no guarantee of merchantability or fitness for purpose and is not responsible to any purchaser of its products for any undertaking, representation or guarantee, except those stated in these terms, made by any person, dealer or body corporate selling or dealing with its products in any manner whatsoever.

Your HT-Aqua Harvester Consists Of:-

- Main HT-Aqua harvester
- Handlebar / tray frame (c/w 4 x bolts)
- HT– Aqua-BD instruction book
- Power Head instruction book and spanners

Optional

• Extra baskets

Options

Extra baskets can be supplied if required. These are a common design available from many home supply stores. Select a robust basket with correct dimensions and cut the side away as per original basket.



low, clearance is good; hot - readjust turning (2) back a little and retest.

- Apply a drop of oil to the throttle cable adjacent to the carburettor
- Sharpen the cutter bar if required. Always file in the direction of the cutting edge (and lift file off blade to return to start position). Remove as little material as possible. After all filing is complete, remove burrs from the edge of the blade with a slip stone.

Monthly

Remove cutter blades and inspect all components. Replace / lubricate parts as required. The blades should be fully coated in a food grade oil before reassembling.

Preventative Maintenance

You will become reliant on the harvester to do its job and if a breakdown was to occur you could find yourself in an awkward predicament. We recommend regular maintenance especially to the cutter bar, to help avoid breakdowns

Freighting

Freighting on the back of a utility vehicle is preferred. The HT-Aqua is very light and if transporting on a trailer it is not heavy enough by itself to make the trailer springs work i.e. it will get badly shaken about. On rough road / tracks this could cause structural damage. One solution is to put an extra weight on the trailer as well as the harvester so the springs actually work! The HT-Aqua is designed for cutting underwater, in water up to 400mm deep.

Assembly

•

- Unpack the harvester ensuring you receive all the parts and that they have not been damaged in transit.
- Layout the components on the ground in their rough position.
- Fit the handlebar / tray to the mounting arms. (4 bolts and washers)

<u>Dismantling</u> is in reverse of assembly.

Cut Height Adjustment

This is easiest done on a flat surface but can be done in the field. Cut height is adjusted at the wheel mounting points. Adjust the 2 front wheels first followed by the rear wheels:-

- Remove the "R" pin and each axle and refit through the frame plates / wheel to achieve correct cutting height
- Ensure all wheels are adjusted to the same height position

<u>Start Up</u>

NOTE:- The cutter bar should not be operated out of water! Overheating and premature failure of components may occur

1. The power head should be refuelled and started in accordance with the manufacturers handbook. **Note:** Especially during running in , vary the throttle setting - don't rev continuously.



Mounting arms, Tray

- 2. With the machine adjusted ready for harvesting, remove the cutter bar cover.
- 3. The engine must be stopped and the cutter bar cover fitted before any adjustments or transporting of the harvester is undertaken.
 - ar adng errderfor the
- 4. Start the engine in accordance with the engine operating guide
- 5. Let the engine warm up for a minute. Use the throttle control to rev the engine up. As the engine is revved up the cutter bar will start.

To stop the cutter bar, throttle the engine back with the throttle lever. The engine stop switch is adjacent to the throttle

Fault Finding

Engine will not start - Refer to manufacturers handbook

- Check ignition switch is on and safety bar is in forward position
- Fuel in tank?
- Correct use of choke? Primed Carburettor? Fouled spark plug?

Cutter bar will not move—(Stop engine before investigating!)

- Something caught between cutter bar teeth jamming it?
- Blades corroded and stuck together? Slacken tensioning screws, lubri-

cate and see if it can now operate with engine running

• Gearbox components damaged

If you require further assistance or spare parts, please call *Harvester Concepts Ltd*

Maintenance

Daily-after use

- Wash down the HT-Aqua harvester after use. Only wash enough to remove dirt and contamination.
- Dry the cutter bar as much as possible—in the sun is best. Operate the cutter bar so teeth are offset and all exposed. A few seconds operation out of the water is OK but continuous use can cause heat damage to some components.
- The cutter bar should be lubricated with a spray on food compatible lubricant. Spray from underneath. Apply extra lubricant in the slots by the tension screws



• At the end of the day give each of the grease nipples 1 pump each from a grease gun (use food grade grease). There is 1 grease nipple on each of the top and bottom gearboxes.

• Weekly

• Check the cutter blades for looseness. If necessary adjust as follows. Loosen nut (1)

Tighten screw (2) and turn back 1/2-3/4 turn

Tighten nut (1)

Lubricate blades, start engine and run blades under water for 1 minute at full speed. Stop the engine, quickly remove from water and carefully touch each bolt (2) in turn. If temperature

