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2.4M 3-BLADED SAW/CUTTING HEAD OPERATORS MANUAL



VEGETATION MANAGEMENT MACHINERY SPECIALISTS

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Dear Customer,

Thank you for having chosen our equipment and we advise you to read this manual thoroughly before operating your machine.

This manual will give you a better understanding of your Agriquip cutting equipment and enable you to get the best possible service from it for many years.

You will find in this manual instructions for the operation, maintenance and servicing of this tool.

We would particularly bring to your attention, advice regarding safety.

If necessary, do not hesitate to contact the AGRIQUIP company directly.



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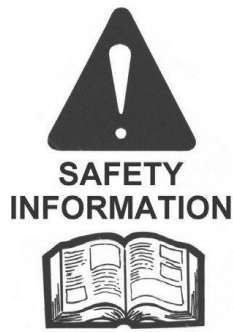
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WARRANTY POLICY

1. All Agriquip machinery is covered by a comprehensive warranty against faulty materials and workmanship provided that:
 - i) The machine is operated in normal use as set out in this operating manual;
 - ii) The machine is correctly serviced and maintained as specified in this operating manual;
 - iii) The machine is worked within its stated capacity (i.e. horsepower limit and P.T.O. speed)
 - iv) The machine is not subjected to any modifications, including non-genuine parts, or defects resulting from repair or alteration performed by anybody other than authorised Agriquip dealers;
 - v) Agriquip is in receipt of duly signed pre-delivery and installation certificate;
 - vi) The machine has not been damaged from improper use or by the use of non-genuine parts.
2. Agriquip guarantee, subject to the conditions mentioned above, that should any defect in workmanship or materials occur in the goods of Agriquip, within 12 months from the date of original purchase, or 1000 hours of machine operation (*whichever comes first*) we will repair or, at our option, replace the defective goods without making any charge for labour or materials. We will also allow provision within our terms and conditions a labour charge of \$45 (+GST) where repairs are to be carried out by an authorised dealer.
3. Machines sold into the hire industry shall be void of warranty.
4. The following items are not covered by Agriquip warranty:
 - i) Power take-off shafts and clutches;
 - ii) Blades, flails, knives, belts, etc.;
 - iii) Freight costs;
 - iv) Loss of income from the machine due to a warranty fault;
 - v) Use of non-genuine parts to re-instate the machine;
 - vi) Damage caused by loose bolts, nuts, or fittings.
- 5) Definition of Warranty Period

The warranty expiration date is determined by calendar months from the date of delivery to the first owner/user and is not affected or prolonged because the machine is idle for any part of the warranty period.
- 6) Agriquip Warranty Procedure:
 - i) Phone Agriquip and discuss problem before attempting any repair;
 - ii) Any parts required must be supplied by Agriquip unless authorised otherwise by Agriquip;
 - iii) Work can only be carried out after authorisation from Agriquip.

1 SAFETY INFORMATION



This machine has the potential to be extremely dangerous - in the wrong hands it can kill or maim; It is therefore imperative that both owner and operator of the machine reads and understands the following section to ensure they are fully aware of the dangers that do, or may exist, and their responsibilities surrounding the use and operation of the machine. The operator of this machine is responsible not only for their own safety but equally for the safety of others who may come into the close proximity of the machine, as the owner you are responsible for both. When the machine is not in use it should be lowered to rest on the ground. In the event of any fault being detected with the machine's operation it must be stopped immediately and not used again until the fault has been corrected by a qualified technician.

WARNING SIGNS



Beware of rotating blades.
Keep hands and feet clear.

Never work on the machine
when the engine of the tractor
or carrier is running



WARNING! Danger – flying objects.
Keep a safe distance from the
machine when the engine is running.

POTENTIAL DANGERS ASSOCIATED WITH THE USE OF THIS MACHINE:

- ▲ *Being hit by debris thrown by rotating components.*
- ▲ *Being hit by machine parts ejected through damage during use.*
- ▲ *Being caught on a rotating power take-off (PTO) shaft.*
- ▲ *Being caught in other moving parts i.e.: belts, pulleys and cutting heads.*
- ▲ *Electrocution from Overhead Power Lines (by contact with or 'flashover' from).*
- ▲ *Being hit by cutting heads or machine arms as they move.*
- ▲ *Becoming trapped between tractor and machine when hitching or unhitching.*
- ▲ *Tractor overbalancing when machine arm is extended.*
- ▲ *Injection of high-pressure oil from hydraulic hoses or couplings.*
- ▲ *Machine overbalancing when freestanding (out of use).*
- ▲ *Road traffic accidents due to collision or debris on the road.*

BEFORE USING THIS MACHINE YOU MUST:

- ▲ *Ensure you read all sections of the operator handbook.*
- ▲ *Ensure the operator is, or has been, properly trained to use the machine.*
- ▲ *Ensure the operator has been issued with and reads the operator handbook.*
- ▲ *Ensure the operator understands and follows the instructions in operator handbook.*
- ▲ *Ensure the tractor front, rear and sides are fitted with metal mesh or polycarbonate guards of suitable size and strength to protect the operator against thrown debris or parts.*
- ▲ *Ensure tractor guards are fitted correctly, are undamaged and kept properly maintained.*
- ▲ *Ensure that all machine guards are in position, are undamaged, and are kept maintained in accordance with the manufacturer's recommendations.*
- ▲ *Ensure blades and their fixings are of a type recommended by the manufacturer, are securely attached and that none are missing or damaged.*
- ▲ *Ensure hydraulic pipes are carefully and correctly routed to avoid damage by chaffing, stretching or pinching and that they are held in place with the correct fittings.*
- ▲ *Always follow the manufacturer's instructions for attachment and removal of the machine from the tractor.*
- ▲ *Check that the machine fittings and couplings are in good condition.*
- ▲ *Ensure the tractor meets the minimum weight recommendations of the machine's manufacturer and that ballast is used as necessary.*
- ▲ *Always inspect the work area thoroughly before starting to note obstacles and remove wire, bottles, cans and other debris.*
- ▲ *Use clear suitably sized warning signs to alert others to the nature of the machine working within that area. Signs should be placed at both ends of the work site. (It is recommended that signs used are of a size and type specified by the Department of Transport and positioned in accordance with their, and the Local Highways Authority, guidelines).*
- ▲ *Ensure the operator is protected from noise. Ear defenders should be worn and tractor cab doors and windows must be kept closed. Machine controls should be routed through proprietary openings in the cab to enable all windows to be shut fully.*
- ▲ *Always work at a safe speed taking account of the conditions i.e.: terrain, highway proximity and obstacles around and above the machine. Extra special attention should be applied to Overhead Power Lines. Some of our machines are capable of reach in excess of 8 metres (26 feet) this means they have the potential to well exceed, by possibly 3 metres (9' 9"), the lowest legal minimum height of 5.2 metres from the ground for 11,000 and 33,000 volt power lines. It cannot be stressed enough the dangers that surround this capability, it is therefore vital that the operator is fully aware of the maximum height and reach of the machine, and that they are fully conversant with all aspects regarding the safe minimum distances that apply when working with machines in close proximity to Power Lines. (Further information on this subject can be obtained from the Health & Safety Executive or your Local Power Company).*
- ▲ *Always disengage the machine, kill the tractor engine, remove and pocket the key before dismounting for any reason.*
- ▲ *Always clear up all debris left at the work area, it may cause hazard to others.*
- ▲ *Always ensure when you remove your machine from the tractor that it is left in a safe and stable position using the stands and props provided and secured if necessary.*

WHEN NOT TO USE THIS MACHINE:

- ▲ *Never attempt to use this machine if you have not been trained to do so.*
- ▲ *Never use a machine until you have read and understood the operator handbook, are familiar with it, and practiced the controls.*
- ▲ *Never use a machine that is poorly maintained.*
- ▲ *Never use a machine if guards are missing or damaged.*
- ▲ *Never use a machine on which the hydraulic system shows signs of wear or damage.*
- ▲ *Never fit, or use, a machine on a tractor that does not meet the manufacturer's minimum specification level.*
- ▲ *Never use a machine fitted to a tractor that does not have suitable front, rear and side(s) cab guarding made of metal mesh or polycarbonate.*
- ▲ *Never use the machine if the tractor cab guarding is damaged, deteriorating or badly fitted.*
- ▲ *Never turn a machine cutting head to an angle that causes debris to be ejected towards the cab.*
- ▲ *Never start or continue to work a machine if people are nearby or approaching - Stop and wait until they are at a safe distance before continuing. WARNING: Some cutting heads may continue to 'freewheel' for up to 40 seconds or more after being stopped.*
- ▲ *Never attempt to use a machine on materials in excess of its capability.*
- ▲ *Never use a machine to perform a task it has not been designed to do.*
- ▲ *Never operate the tractor or machine controls from any position other than from the driving seat, especially whilst hitching or unhitching the machine.*
- ▲ *Never carry out maintenance of a machine or a tractor whilst the engine is running – the engine should be switched off, the key removed and pocketed.*
- ▲ *Never leave a machine unattended in a raised position – it should be lowered to the ground in a safe position on a level firm site.*
- ▲ *Never leave a tractor with the key in or the engine running.*
- ▲ *Never carry out maintenance on any part or component of a machine that is raised unless that part or component has been properly substantially braced or supported.*
- ▲ *Never attempt to detect a hydraulic leak with your hand – use a piece of cardboard.*
- ▲ *Never allow children near to, or play on, a tractor or machine under any circumstances.*

Although the information stated here covers a wide range of safety subjects it is impossible to predict every eventuality that can occur under differing circumstances whilst operating this machine. No advice given here can replace 'good common sense' and 'total awareness' at all times, but will go a long way towards the safe use of your Agriquip machine.

2

STARTING THE MACHINE

SETTING UP AND STARTING PROCEDURE

a) Fix the adapting bracket to the arm

Ensure the bracket complies with the make and type of hedgecutter. This piece supports the cutting tool and must therefore be checked by the user.

b) Fix the cutting head onto the bracket

The cutting head is held by the mounting bracket.

c) Connect the flexible hoses

Ensure the flexible hose kit complies with the make and type of hedgecutter. The kit assures the feed between the cutter and the hedgecutter.

d) Check the running of the components

Check by stages the security of the pivot clamps and the cutting components, also the nuts and bolts of the cutting head.

e) Starting the blades

Slowly and progressively increase the RPM of the engine until the correct tractor PTO RPM is reached.

MAXIMUM PTO RPM = 540rpm

MAXIMUM BLADE RPM = 2000rpm

f) Stopping the blades

Do not cut the flow to the hydraulic motor at full power, better to slow down the engine progressively which will allow a reduction in the phenomenon of inertia.

3

MAINTENANCE

MAINTENANCE

NEVER SERVICE WHEN MACHINE IS RUNNING

Lubrication

Grease the lubrication points on machine on the following basis;

Daily prior to use.

Always prior to storage.

Always after it has been washed.

		MAINTENANCE	
MAINTENANCE AND SERVICE INTERVALS	FREQUENCY OF SERVICE	By User	By Specialist
Check the cutting blades	Every 1 Hour	X	
Check for movement in blades	Every 2 Hours	X	
Check hoses, nuts and bolts	Every 2 Hours	X	
Clean exterior and interior completely	Every 8 Hours	X	
Check belt tension	Every 8 Hours	X	
Lubricate the pulleys	Every 10 Hours	X	
Check general blade condition	After 10 Sharpenings		X

Machine Storage

Before the machine is placed into storage, it should be thoroughly washed. Remove all traces of grass, leaves and dirt. Take care if using high pressure jet hoses or steam cleaners as these can quickly damage paintwork and decals. Remove all cleaning products thoroughly to avoid them from staining or damaging the paint. Grease lubrication points until fresh grease comes out. Where applicable, rotor drive belts should be loosened to remove tension and 'relax' the belts. Ideally, the machine should be stored in a clean dry environment where it is protected from the elements; if the machine has to be stored outside it is advisable to keep it covered over to protect it from rain and sunlight. Control units should be stored clear of the ground and protected from the damp. It is recommended that canvas tarpaulin or similar coverings are used to cover the machine rather than plastic sheeting which would harbor condensation and promote rapid corrosion.

REPAIRS

Failure identification

POSSIBLE FAILURES	CAUSES AND REMEDIES
Hydraulic motor joint leaking	Change the joint after checking the drainage circuit.
Belt jumping	Tension belt
Regular Purr	Check lubrications Change bearings
Irregular “tac tac” with speed variations depending on rotation speed.	Check pulleys, check bearings
Numerous stops of the cutter while working	Check blade sharpness Check pressure on limiter Check blade rotation speed See following page for detail
Heating up of the bearing blocks	Check that there are no foreign bodies in bearing blocks.
Noisy hydraulic motor with starting or stopping the cutter bar.	Engage and disengage the motor at low speed.

This list is not exhaustive, nevertheless the aim is to facilitate detection of technical problems. Do not hesitate to contact our technical department.



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