

Agriquip



Trenchmaster 150

OPERATING INSTRUCTIONS

Read carefully before operating machine



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Agriquip thanks you for buying this quality product and insists that you read this booklet. You will find all the information you require for the correct use of the product you have purchased. We would ask you to take special notice of the safety and of the other warnings and to read the whole booklet carefully. You should keep this booklet in a safe place that is also convenient for easy reference. Agriquip reserve the right to change the contents of this booklet without notice or without incurring additional liability for the purpose of making changes to, and improving the performance of products already delivered.

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1. Introduction

The Trenchmaster 150 Trenching Machine, built in Australia, encompasses new cutting technology to enable effortless trenching on an agricultural tractor in a wide variety of soil conditions. This operating guide and maintenance information will explain how to get the best performance results and life expectancy from your Trenchmaster.



2. Technical Specifications

Overall Dimensions	1.8 x 1.1 x 0.93 m
Gross Weight	285 kg
Maximum PTO Speed	1000 rpm
Optimum PTO Speed	520 rpm

3 Notes & Warnings

3.1 Power Source

This machine must be connected to the power take-off according to the instructions given by Agriquip, who are not responsible for the safety of the connection itself.

Connection to the tractor is by normal 3-point linkage and power take off shaft method:

- ★ Care should be taken when connecting lower link arms.

NOTE: The power take-off shaft must be cut to length to ensure no damage occurs to the tractor and the Trenchmaster. As the Trenchmaster digs down the shaft closes up so measure the shaft length with the Trenchmaster set at trenching depth.

The machine is only completely safe when it has been correctly connected to a PTO complying with the required safety precautions as provided for by the relevant regulations and current Department of Labour guidelines.

3.2 Operating

- ★ Do not attempt to perform repairs to the machine while operating or when connected to the PTO.
- ★ Ensure that the working area is clear of all obstacles at all times.
- ★ Keep spectators at a safe distance from the machine.
- ★ The machine should only be used by highly skilled operators and in areas not accessible to children.
- ★ The machine should be kept in a dry place protected from rainfall.
- ★ Do not walk over or put objects on PTO shaft cover.
- ★ In using compressed air to remove dust and detritus, wear protective glasses and dust mask to protect airways, also ensure that nobody else is close by.

3.3 Transporting.

- ★ Do not transport the machine with the PTO engaged.
- ★ If transporting for any distance on public roads, disconnect the drive shaft.
- ★ If transporting on public roads comply with all LTSA regulations.

4. Safe Operating Instructions

4.1 Installation and Preliminary Checks

- i. Connect the machine to the three-point linkage, securing with the appropriate pins.
- ii. Connect the PTO shaft first to the machine and then to the tractor.
- iii. When connection is complete adjust the top link so the top plate of the Trenchmaster slopes down toward the tractor at about 20° - 25°.
- iv. Check all PTO guards are intact and correctly secured.
- v. Check machine for damage or wear, replacing all damaged, missing or worn components with original manufacturer's parts before operating.
- vi. Check all bolts and machine components before and periodically during operation to ensure trouble free trenching.

4.2 Operation

Keep work area clear from obstructions and spectators at a safe distance from the machine

To commence trenching:

- i. Engage 1000 PTO speed
- ii. Select the lowest Gear
- iii. Lower the 3-point Linkage
- iv. Build up the engine speed to around 1200rpm and drive forward.

The Trenchmaster will cut its way into the ground and stop at the depth previously set on the spoil plow. It may be necessary to make several passes with the Trenchmaster to achieve the desired trench depth with some tractors that are not fitted with extra low gears. In this case the spoil plow should be adjusted for each pass. Ideally a tractor fitted with creeper gears or hydrostatic transmission is the perfect prime mover for the Trenchmaster.

When the Trenchmaster is operating the best possible cut performance is achieved when the top plate of the Trenchmaster is parallel to the ground. Forward speed can be increased depending on how heavy the ground conditions are, remembering that the Trenchmaster will either ride up out of the ground or stall the tractor if the forward speed is too great. In very good conditions the Trenchmaster is capable of up to 1 kph but will need to go slower the harder the ground conditions.

4.3 End of work

Carry out the following operations at end of work:

- i. Disengage the tractor PTO.
- ii. Switch off the tractor.
- iii. Disconnect the drive shaft, first from the tractor end, and secondly, from the machine.
- iv. Disconnect the three-point linkage.
- v. Clean off soil and detritus.

Carry out these operations even if the machine has not been operating for long.

5. Maintenance

Before carrying out maintenance work on the machine disconnect the PTO

5.1 General Maintenance

The trencher does not require any special maintenance operations; however, it is good practice to comply with the following advice:

- ★ After use wash the machine down to remove soil and detritus
- ★ Keep the machine in a dry place protected from bad weather conditions.
- ★ Replace all worn, damaged or missing components with original manufacturer's spare parts.
- ★ All bolts and machine components should be checked before and periodically during operation to ensure trouble free trenching.

5.2 Routine Lubrication

Gearbox: Oil level should be checked at regular intervals and periodically replaced with fresh 90-grade extreme pressure gear oil.

Driveshaft: Universal joints and the shaft slip joint should be greased regularly with an all purpose grease.

Cutter leg: Located in the bottom of the cutter leg is a grease nipple that can be accessed when the Trenchmaster is lifted on the 3-point linkage. **This grease point requires 2-3 shots of grease every hour** during heavy going, to ensure good service life of the cutter bearings.

5.3 Spare parts

In case you discover that the machine has been damaged but it keeps functioning (even after being repaired), please consult your closest Agriquip dealer ; he will take care of the replacement of that part with another original part. When ordering replacement parts, please specify the model of the machine ; it is to be found onto the ID plate, the year of construction (*also shown onto the same ID plate*), the description of the part and the quantity of parts requested.

Ensure skilled staff perform the replacement operations (*authorised dealers*).

In the event of the machine's frame has been seriously damaged, please avoid any repairs that may cause a hazard for the operators.

5.4 Warranty

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 the parts and operating manual;
 - (ii) The machine is correctly serviced and maintained as specified in your 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 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 material occur in the goods of Agriquip, within 12 months from the date of original purchase, or 1,000 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 \$60 (+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, tynes, flails, knives, tyres, tracks, 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 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.



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