Pond Stirrer

Operating Manual

Part Number: 11376

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Disclaimer

Although every endeavour has been made to compile as near to complete records as possible for the machine described, it is possible some information is incomplete or missing.

Giltrap Engineering request that you treat this book as a guide only, and offer any assistance necessary to procure the information or part you may require.

For parts or service enquires, please contact the applicable numbers on the previous page.
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Introduction

Thank you for purchasing a Giltrap product. Giltrap Engineering Ltd has enjoyed a long-standing success with their machinery. We would like you to enjoy the benefits of owning a Giltrap too. By following the guidelines laid out in this book, you will ensure trouble free, low maintenance operating for years.

Giltrap Engineering Ltd is a progressive company which continually strives to satisfy your needs, so we welcome any feedback which you can provide to help us improve our products and services and to ensure that they perform to your expectations. Any constructive comments about this operator’s manual are also welcome.

Your machine has been designed to perform its task efficiently and with a minimum of maintenance. This handbook provides safety guidelines, instructions, maintenance requirements and parts listings. We recommend that you read the entire handbook, before operating the machine as this will enable you to take full advantage of your new machine’s considerable potential.

Delivery and Warranty

Before you begin to use your machine, please check it to make sure there is no delivery damage. If damage is evident, contact the dealer who supplied the machine so that they can make the appropriate claims.

If you have any other queries, please contact your dealer or Giltrap Engineering Ltd (0800 80 GILTRAP).

All Giltrap products are covered by a 12-month warranty on parts and labour, subject to normal use.

Please fill in the details below for future reference.

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General Safety

For the safety of others and yourself, please read and follow the precautions in this operator’s manual. Pay particular attention to the following safety aspects of operating machinery.

Do not ride on or allow passengers on the machine.

Always use a recognised hitch pin with a safety clip to hook trailed implements on behind the tractor.

When pulling trailed implements or loads, be sure to use a tractor of greater or equal weight than the combined weight of the load and trailer.
Carry a suitable fire extinguisher. A fire can ignite under certain conditions, so please take the following precautions:

- After running your machine for a short time, check for defective bearings. A faulty bearing can become very hot, eventually discolouring, requiring immediate replacement.
- Do not allow combustible material to accumulate inside guards or around rollers and other moving parts.
- If your machine becomes blocked, stop immediately and remove the obstruction.
- Be careful when operating in hot or dry conditions or on extreme fire risk days.

Never operate your machine without the safety guards in place.

All chains should be properly adjusted and replaced when necessary.
Release all hydraulic pressure from implements before commencing service work. Never look for suspected oil leaks with your hands or body - use a piece of cardboard instead. Any fluid which penetrates the skin will have to be removed immediately by a medical expert. Seek specialist advice on this type of injury.

Never attempt to unblock equipment while it is still operating. Always disengage power take-off, hydraulics and shut down engine before removing materials, checking or servicing. Failure to follow these precautions is likely to result in serious injury.

Ensure that your PTO shaft is adequately guarded. Do not attempt to use a driveshaft without a cover.

Wear proper protective clothing. Loose attire can easily be snagged by rotating machinery resulting in serious injury or death.
Driveshaft Safety

When using the implement and driveline, do not exceed the speed or power limits given by the operator's manual.

Do not overload the implement or suddenly engage the PTO clutch. Any torque limiter or clutch should be installed on the implement end of the driveline.

All rotating parts must be guarded.

When operating, ensure that joint angles are equal. Disengage the PTO when the angle of the joints exceeds 35°.

Certain types of CONSTANT VELOCITY JOINTS may operate at angles up to 70° or 80° for brief periods (e.g., during turning).

Attach the safety chains, allowing sufficient slack for the driveline during turns and operation.

Never use the safety chains to support the driveline for storage. Always use the support on the implement.

Do not stand on the driveline. Do not step over, or go under the driveline.

Clear and grease the tractor PTO and the implement shaft before installing the driveline.

The tractor printed on the shield indicates the tractor end of the driveline. Any safety devices should be installed on the implement side.

Use the implement only with the original driveline, which is compatible in length, power capacity, safety devices, and shielding.

The drivelines and safety devices are designed specifically for the implement, and should be exclusively for this purpose.

Ensure that all driveline, tractor, and implement shields are functional and in place before operation. Damaged or missing parts must be replaced with original spare parts, correctly installed, before using drivelines.

Ensure that the driveline is securely attached to the tractor and the implement before operating.

Do not wear loose clothing, jewelry, hair, or anything which could get caught in the machine. Contact with rotating parts could cause serious injury or death.

Disengage the PTO, turn off the tractor engine and remove key before approaching the implement or performing maintenance work.

When used at night or in poor visibility, illuminate the driveline operating area during installation.

Keep the driveline horizontal during handling to prevent the halves from sliding apart, which could cause injury or damage the shielding.

Keep the profiles overlapped as much as possible during transport and operation. Telescoping tubes must overlap by at least 1/3 of their length during operation. Always hitch the tractor to STATIONARY MACHINERY (pumps, elevators, generators, driers, etc.), so that the telescoping tubes overlap by at least 1/3 of their length.
General Safe Use

(A) Read all warning labels on machine.
(B) Disengage drive and turn tractor off before removing drive shaft/s, or servicing.
(C) Make all operating adjustments, e.g. top link adjustments before engaging drive.
(D) Ensure propeller nut is tight before use.
(E) Ensure propeller is fully submerged whilst stirring.
(F) Stand well clear when stirrer is operating.
(G) Do not sit on or ride on machine.
General Operating Instructions

POND PREPARATION
To ensure as much solid animal waste is removed as possible, the pond should be prepared by application of the POND STIRRER for at least half an hour prior to and during withdrawal of effluent by the slurry tank. Any solid rubbish such as timber or concrete rubble or wire and rope must not be dumped in the ponds because of the possibility of damage to the pond stirrer. Remove any such debris before stirring.

OPERATION OF POND STIRRER
The stirrer, while ruggedly constructed, has no protection against damage caused by the impeller striking solid objects, such as concrete or wooden posts. Any solid debris, rope or wire should be removed before applying the stirrer to the pond. The impeller should be fully submerged when stirring. Check, after daily operation, that the right hand thread nut on the propeller shaft has not been loosened by any impact. Failure to keep the nut tight will allow the internal rotating parts to prematurely wear with eventual bearing failure.

It is important when positioning the stirrer that angles of the PTO universals are similar and at angles of less than 45 degrees from the shaft centre line. This prolongs the life of the universals and the Stirrer Drive End Bearing. It is important that the PTO drive shaft is not too long. The PTO drive shaft must be able to expand and contract as the stirrer is operated or the stirrer shaft will be forced down through its bearing and locking sleeve.

When operating the stirrer, please check your tractor's Operator's Manual for maximum working angles. Some transmissions are splash lubricated which may lead to failure if operated outside the prescribed limit. Ensure the transmission oil level is as per manufacturer's specification.

Do not operate the machine in any situation where a person can walk into or fall upon the spinning impeller. Experience will be the guide, but for initial use the stirrer will need at least 30 minutes application to the pond to ensure all solids are properly mixed in the slurry before removal for application to the pasture and maximum benefit.

Where any mechanical or operating problem arises quote the Serial Number on each machine when contacting your supplier.
MAINTENANCE

The top and bottom bearings should be given one or two pumps of the grease gun each day used. Do not overgrease. One or two pumps are sufficient. Use only a grease suitable for closed ball bearings.

The rotating shaft is supported at the middle of its length by a synthetic bush (two on 8m machines) which needs lubricating once or twice each operating day using a light lubricating grease of any reputable brand.

The shaft is held in place by a tapered locking sleeve at the drive end bearing. When operating the thrust generated pushes the impeller toward the driving tractor. Be aware that any wire or rope in the pond which wraps around will inevitably force the shaft down and cause damage to the bearings.

Operating Speed (RPM)

The pond stirrer is designed to operate at 540rpm.