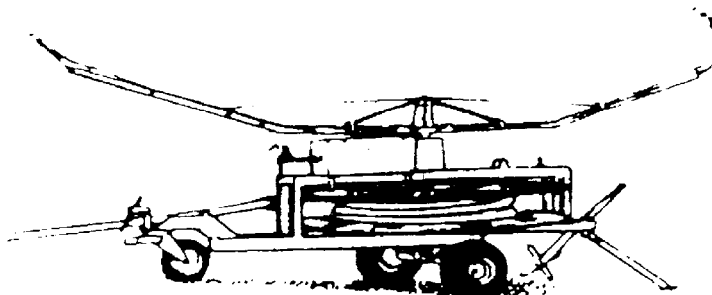


Owner's Manual



Ideal for the Hog and Dairy Farmer, the Aquareel is probably the neatest solution to waste water disposal available on the market today. Aquareel's compacted size and simple operation disguise a high performance machine of great versatility and excellent reliability. Compared to other systems on the market, Aquareel ensures that slurry is applied at the correct rate, at the right time with a minimum of effort and operator input, reliably, consistently and extremely cost effectively.

It couldn't be easier. The Aquareel is simply connected to its anchor and towed across the field laying out its hose. The spray arms are unfolded and when pumping commences a simple drive mechanism is automatically activated. The Aquareel then pulls itself back, applying a gentle and even application, picking up and storing its hose as it goes. When the run is finished all the hose is neatly wound onto the machine and it is ready to be moved to its next position - no dirty hose or cable to mess with.

Important Notice

The following instructions must be read by the operator and be fully understood. ABI will be pleased to answer any questions that may arise.

ABI has taken great care to ensure that the machine is constructed in such a way that it is safe to use and easy to maintain. Follow these instructions carefully and it will remain so. Careless use and poor maintenance could lead to accidents and a reduced working life for the machine.

Important Safety

As with all farm equipment,

- Do Not** – allow children to climb on or otherwise tamper with the machine.
- Do Not** – allow anyone to ride on the machine during transport.
- Do Not** – pull faster than walking pace on road or in the field.
- Do Not** – operate on severe slopes as this can cause 'run-off'.

Do – ensure that the anchor plate is securely staked before operation.

Never – try to unblock nozzle while machine is in operation. In the unlikely event of a blocked nozzle, ensure ALL PRESSURE is out of the system before removing nozzle.

Operating Instructions

The Aqua-Reel irrigator provides an efficient, labor saving method of distributing dirty water. A few moments reading the instructions will ensure that your Aqua-Reel will give you years of trouble-free service.

Equipment

Your machine is provided with:

- Two sets of nozzles. 6mm & 8mm for A & B model Aquareels.
10mm & 12mm for C & D model Aquareels.
- Standard anchor plates with four stakes.

Available as options are:

- Automatic shutdown valve and anchor plate.
- Adapters to suit existing pipework.

For purposes of identification in the following instructions we refer to the single bogey wheel as being at the front of the machine.

Figures in brackets e.g. (1).

Towing

Ensure drive arms are folded and resting in their brackets with holding chain and hook engaged with metal channel of the drive arm.

Ensure holding pawl is engaged and drum brake is on (1). (Note. Model A Aquareel does not have a brake).

Ensure leading length of machine hose and its coupler is secured in the body of the machine so it does not drag on the ground, and the ground brake is fully up and held on its chains.

Connect drawbar to clevis at front of machine then and tow machine at a steady walking pace.

Connecting to supply pipe or hydrant

Connect supply pipe to anchor plate, which should be in line with direction machine is to be towed across the field.

Tow Aquareel to anchor plate with front of machine facing the anchor plate.

Disconnect tractor and reverse to rear of machine.

Take drawbar from front and attach to rear of machine and connect to tractor.

Take holding pawl out of gear (1).

Release drums brake (1) (Models B, C and D).

Disengage machine drive by raising clutch lever so it is held by the 'latch' 940.

Engage 'R' clip in latch so that it is locked in place.

Pull leading length of machine hose off machine and connect lever coupling to anchor plate, making sure it is firmly connected.

N.B. Ensure collar on machine hose is firmly bolted in position two meters from end of hose (6).

Once connection is made, check for smooth line of supply pipe through anchor plate to machine hose, making sure there are no kinks. Insert the four stakes through holes of anchor plate and knock firmly into ground (5).

Towing Aqua-Reel to its working position

Check that holding pawl is out of gear (1).

Check that machine drive is disengaged (4).

Apply drum brake (1), release brake holding screw and brake pad will be tensioned automatically on the drum by means of the spring.

Tow machine at a steady waling pace avoiding any jerks. Always leave at least one complete coil of hose on the hose drum. With short work, the machine need only be towed out as far is required.

Preparing the Aqua-Reel for work

Disconnect tractor (drawbar can be left attached to the machine trailing on the ground (3)).

Engage holding pawl (1).

Release drum brake (1) (Models B, C & D only).

Turn drum by hand to tidy up any slack hose.

Engage drive gear (4) ensuring shut-off fork (6) is in forward position.

Unfold drive arms and disconnect arm-securing chain. Angle of arms can be adjusted by extending or reducing number of links in arm support chins. If machine is to operate downhill, apply rear ground brake by releasing holding chins and allowing brake 'harrow' to rest on the ground.

When Aquareel is operated uphill or over level ground, no ground brake is required.

The pump can now be operated and, when pope system is fully primed, the Aquareel will automatically start to move across the field.

End of run

When the Aquareel arrives at the anchor plate, the shut-off collar on the machine hose engages and trips the shut-off fork assembly (6) disengaging the drive. A long as the pump continues to operate, the arms will rotate and distribute dirty water. To prevent over-watering, a time clock can be installed at the pump unit. This needs to be manually set once the Aquareel has started its run.

A combined anchor plate and shut-off valve is available as an optional extra (7). When the Aquareel finished its run, the valve is automatically closed and water distribution ceases. In this case it is most important to have safety equipment to turn off the pump when the Aquareel has finished its run.

Important! After first and fourth runs check and, if required, retention primary drive chain (8).

Changing the pull-in speed

Aquareel pull-in speed is controlled by adjusting the angle of the drive nozzles (10).

Slacken nut holding metal bend with nozzle and turn bend to alter angle in relation to boom arm. Re-tighten nut.

By increasing angle, an increase in speed will occur. By decreasing angle, the machine will be slowed down.

General Service

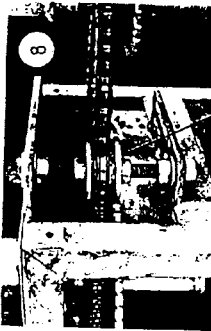
Every four weeks of use:

- grease the drum bearings
- grease the caster wheel assembly
- grease the drive shaft bearings

Regularly check tire inflation – 1.5 bar/20psi – and tightness of wheel studs.

When changing nozzles, secure hand tight and use grease on threads.

Primary Chain Tensioner



chain guide

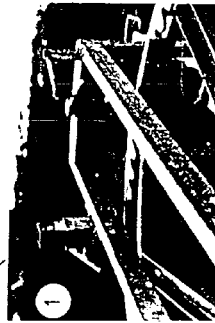
Drive Assembly



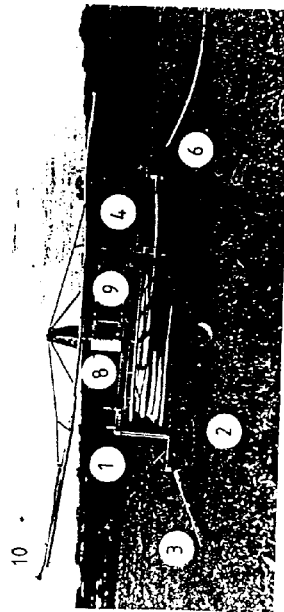
drive gear
holding bolts



brake



holding pawl



Anchor Plate



Shut-off Valve

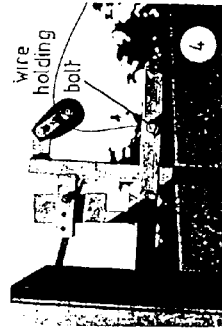


Shut-off Fork

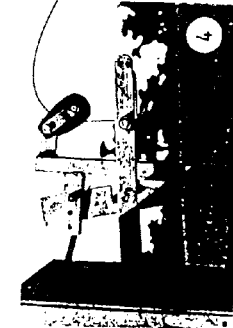


collar

Clutch Lever



engaged



disengaged