



Your Guide to Tailwell®

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Welcome

The Tailwell® tail trimmer was developed in New Zealand to simplify the tedious job of trimming tails of milking cows. Tail trimming is carried out to reduce faecal and urine contamination of the milker, and to reduce dirt around the rear quarters and udder of the cow. It is recommended that tail trimming is carried out twice per year to ensure milker safety and highest milk quality.



The Tailwell® power tail trimmer is secured by way of the chuck shank into any suitable cordless drill of 14 volts or better, and operating at approx 1,000rpm. Tailwell® is quiet in use, with a smooth and fast cutting action. Trimming takes only 3 or 4 seconds per tail, and is easily accomplished during milking. The outer blade oscillates over a stationary inner blade, so there is no risk of injury to the cow. Even dirty dag-ends feed smoothly over the trimmer. Pre-cutting the tail's switch is not necessary. This is a sturdy precision tool that will withstand considerable use. A neck strap is incorporated so the device can be hands-free between cows. Replacement blade sets are available.

The blades must be well lubricated.

Pre-cutting of the tail switch is not necessary, even if it is very dirty. A trimming collection apron is available as an accessory and is useful to prevent trimmings blocking pit drainage.



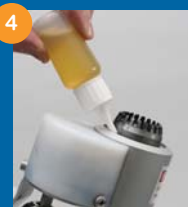
Tail Trimming Apron (accessory)



A recommended accessory for the Tailwell® is our specially designed apron. This garment incorporates a large bag with rigid plastic hooks which are hung on the pit rail where they can easily be slid along cow-to-cow. (The hooks are suitable for rails up to 50mm diameter.) When the bag needs emptying, the wearer simply steps out to the required place and pulls the Velcro bag attachment apart, letting the trimmings fall out. Bag will hold 50-100 tail trimmings.



Operating Instructions



Drill Choice

The recommended power drill is a standard 14-volt battery unit with an operating speed of up to 1,250 rpm. (Higher cutting speeds do not work better, and may damage the cutters, and will void any warranty.) A lightweight drill is easiest to use, and is recommended. A good quality drill battery should allow trimming of 80-100 tails per charge.

Attaching to your Drill

To attach the Tailwell[®] to your drill, you must loosen the drill chuck so that the trimmer drive shaft fits fully into the chuck, then tighten the chuck. The neck strap is designed for the drill chuck to fit through (see photo 1). This strap gives comfortable balance for the unit to hang from your neck, and allows work hands-free between tails.

Torque Arm

The fingers of the torque fork are designed to straddle the drill body to prevent the Tailwell[®] rotating about the drill (see photo 1).

Lubrication

Important: Before operating this machine, the cutters and gear set must be well-oiled using the oil supplied, or ordinary engine oil.

There is an oil hole in the side of the plastic gear set cover. Squirt 3 or 4 drops into this hole while the unit is running (photo 2), and also add 3 or 4 drops around the cutters (photo 3 & 4). This should be repeated every 50 tails, or more frequently if the tails are wet and dirty. An alternative method of oiling is to dip the cutter head frequently into a small bowl of oil, but separate frequent lubrication will still be required in the gear set.

The warranty is void if the tail trimmer has not been properly lubricated.

Safety

The inner cutter does not move, so cannot cut the animal. The outer cutter oscillates through only 18 degrees, so is also safe. The tail is fed into the cutters, and pulled through as required. Operate the drill at a suitable speed (up to 1,250 rpm) to ensure clean cutting.

Cutter Adjustment

Before adjusting - clean and lubricate the cutters.

There are two cutter-adjustment screws on the back-plate of the cutter housing. These screws have lock nuts that must be loosened a couple of turns (photo 5). The adjustment screws are then screwed in by hand, finger tight only (photo 6). Do not tighten these screws with an Allen key as this will cause cutter and gear failure, voiding the warranty. The lock nuts are then tightened with a spanner. Lubricate the cutters before use.

Tips

Do not force the cutter. Let it do the work, especially if tails are heavily daggged. Let the cutter chew slowly through badly matted hair. In worst cases, dags may have to be pulled apart to enable the cutter to work. If cutting is not even all around, the cutter tension screws may need adjusting.

Storage

It is imperative to carefully clean and thoroughly relubricate the gears and blade set, prior to storage in a clean and dry environment. The blades are manufactured from high quality tool steel but will rust and potentially seize if not stored well lubricated. To do this correctly the blade set must be removed (following our instructions supplied) and packed with grease between inner and outer blades, and also around the gear set. Blades and gears should also be checked for wear at this time. Reassemble and check all body screws for tightness.

Blade Set Sharpening Instructions

Depending on the conditions of use, but generally after somewhere between 500 and 1,000 tails, your Tailwell® blade set may need sharpening. This can be done by a professional clipper blade sharpening service, or by following the instructions below.

1. Remove the cutter head backing plate (part 7), by unscrewing the four Allen-head screws. The inner cutter can then be removed (see photo 1)
2. The outer cutter can then be sharpened in-place (see photo 2) by filing two teeth at a time. To do this at the correct angle keep seven teeth to the right of the file. File on the left side. This will give the correct cutting edge bevel. Work all the way around the cutter to sharpen all the edges of all the teeth.
3. With the inner cutter removed from the cutter head, file two teeth at a time (see photo 3) keeping ten teeth (half the teeth) to the right of the file. File on the left or right side. This will give the correct cutting edge bevel. Work all the way around the cutter to sharpen all the edges of all the teeth.
4. Carefully clean all filings from both cutters, lubricate, and reassemble ensuring inner cutter key (part 6) is correctly in place. Reattach the cutter head backing plate (part 7) but only after first backing-off slightly the two cutter tension adjusting screws (part 19).
5. After reassembly, the cutter tension adjusting screws (part 19) must be reset, using fingers only, to give the correct and evenly-balanced pressure on the cutters (see photo 4). The tension screws lock nuts should then be gently tightened with a spanner (see photo 5). Your Tailwell® should then be ready for relubrication and use.



Warranty - IMPORTANT

The Tailwell® warranty is against any faulty manufacturing, materials or workmanship. It is not a warranty against failures involving normal wear and tear, or failures occurring from normal farmer use. It does not cover failures caused by inadequate lubrication, servicing or maintenance, and does not cover failure caused by use on a non-recommended power drill. The warranty is void if the machine is used for contracting work, excepting in the case of failure caused by faulty manufacture or parts. Sales agents for the tail trimmer are not authorised to replace a failed machine, even if the device is near new, or is required urgently for use. The manufacturer will repair or replace parts at its own discretion. Any parts or repairs will be considered part of the original product in regard to their warranty. The warranty is for a period of six months from date of purchase. Proof of purchase will be required for any warranty claim.

Removal of Blade for Service or Cleaning

From time to time, depending on the conditions of use, the blade set will need to be removed from the cutter head for cleaning. Any build up of dirt or grime around the outer cutter, will affect the machine's performance.

1. Remove the gear set cover (part 4).
2. Remove the conrod pin split pin (see photo 1) and then lift out the conrod pin (see photo 2).
3. Swing back the conrod (part 16). The cutter set drive pin can then be unscrewed (see photo 3) and removed.
4. Remove the cutter head backing plate (4 screws), but only after first backing-off slightly the two cutter tension adjusting screws (part 19).
5. The cutter blades can then both be removed (photo 4). Wash blades and cutter head housing thoroughly with kerosene or similar. Check for any dirt build up inside the cutter head.
6. Apply a liberal coating of oil or grease to the cutter blades and replace into the head. Take care to align the thread hole on the outer cutter with the slot in the cutter head. Re-insert the cutter drive pin, leaving the head aligned to fit the conrod. Re-attach the conrod and re-insert conrod pin and split pin.
7. The cutter tension adjusting screws (part 19) will now need resetting, using fingers only, to give the correct and evenly-balanced pressure on the cutters (photo 5). The tension screws lock nuts should then be gently tightened with a spanner (see photo 6). Your Tailwell[®] should then be ready for lubrication and use.



How to fit the Torque Arm Extender

On some power drills the Tailwell® torque arms may be too short to prevent rotation of the machine. In these cases the nylon Torque Arm Extender tube should be used.

Fit the Tailwell® to your drill and adjust the torque arm position to give good access to the drill trigger. You can make this adjustment by bending the arm up or down and opening or closing the fingers to suit your drill.

The nylon tube is pushed over one of the fingers all the way to the end, and then wrapped around the back of the drill grip, and pushed onto the other finger. Cut any excess tube with a knife if necessary. (Putting the nylon tube in hot water for a few moments will help the fitting.)

The nylon tube will protect the drill from chafing on the torque arm and help to prevent the drill from accidental disconnection from the tail trimmer and falling to the ground.



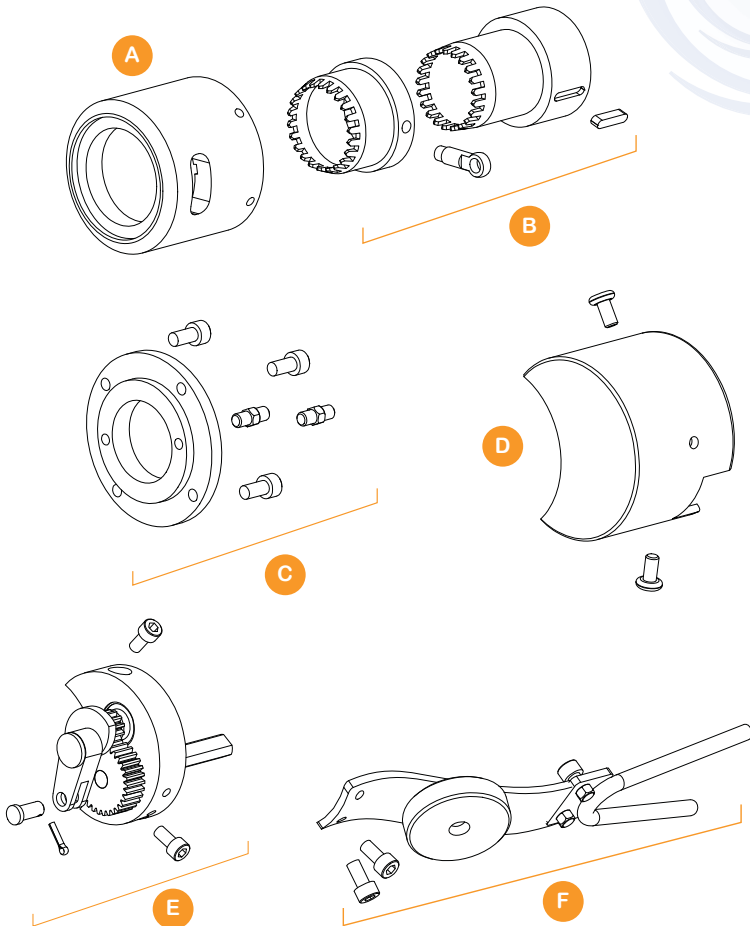
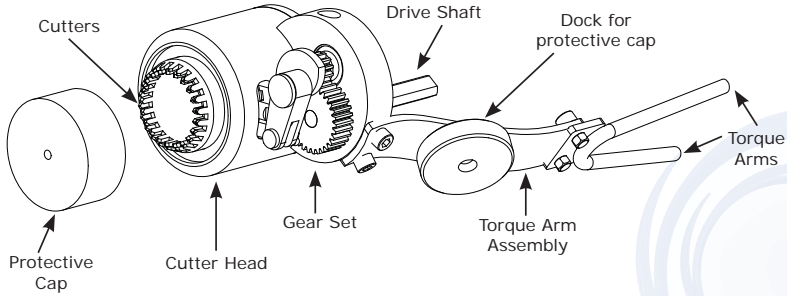
Parts List

1. Cutter Head Body
2. Gear Set Chassis with Bearings
3. Cutter Set with Drive Pin
4. Gear Set Cover
5. Cutter Protective Cap
6. Cutter Set Key
7. Backing Plate with Adjustment Screws
8. Gear Set Cover Mount Screws (2)
9. Shaft Cap Screws (2)
10. Back Plate Mount Screws (4)
11. Gear Set Chassis Mount Screws (2)
12. Drive Shaft Circlip
13. Drive Shaft
14. Gear Spacer 10mm
15. Conrod Pin and Split Pin
16. Conrod
17. Crankshaft Assembly
18. Gear Spacer 8mm
19. Cutter Tension Adjustment Screws (2)
20. Cutter Set Drive Pin



Parts Diagram

Complete Tailwell® Power Tail Trimmer



- A** Cutter Head Body
- B** Cutter Set, Drive Pin and Key
- C** Backing Plate with Adjustment Screws
- D** Gear Set Cover and Mount Screws
- E** Gear Set Complete and Mount Screws
- F** Torque Arm Assembly Complete



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