MANUAL FOR 3-POINT SLASHER

INTRODUCTION:

This manual was developed specifically for the machine you have purchased. The information within is to assist you in preparing, operating and maintaining your machine. Please read and understand the contents of the manual completely before attempting to operate your machine, paying special attention to all safety details. With our policy of continuous improvement, products and specifications may change without notice and without incurring the obligation to install such changes on any unit previously delivered.

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Trouble Shooting

Defect	Component	Possible Cause
Vibration	P.T.O shaft	Twisted/bent shaft
		Universal joints damaged or worn
		Lifting slasher too high while P.T.O. engaged
	Rotor and blades	Damaged due to obstruction by Foreign object
		Blades not loose on bushes
Excessive noise	Gearbox	Worn or loose bearing
		No oil
	P.T.O.shaft	Lifting slasher too high while P.T.O. engaged
Leaking oil	Gearbox	Loose/damaged seals and/or Bearings
Excessive heat	Slip Clutch	Worn friction discs
		Incorrect spring adjustments
		Incorrect positioning of pressure Plate
	P.T.O.shaft	Needs lubrication

SAFETY

Farm machinery is dangerous if operated incorrectly so please read this manual in its entirety prior to operating the machine.

No operator, however experienced in farm machinery operation, should attempt to use any machine they have not been competently trained to use. Your local Department of Agriculture can help you with training, as can most Occupational Health and Safety offices, Agricultural schools and colleges and farm equipment dealerships.

All instructions relating to tractor safety as per the tractor operators manual should be followed. When making any machine adjustments stop the tractor engine first and wait for all moving parts to stop. Maintain the tractor to ensure it remains safe to use. Do not operate faulty or damaged equipment.

Extreme caution should be taken when fitting equipment to the tractor's three point linkage. Avoid standing between the implement and the tractor when coupling machinery.

All machines should be mounted and trained correctly. All guards must be kept in place and correctly maintained.P.T.O.shafts must be correctly attached and secured to both the tractor and the machine .Decals must be visible and legible at all times. Keep well clear of all moving parts.

Keep all people and animals at a safe distance form all moving parts. Children must not be allowed to operate this equipment and all passengers must have the same level of protection as the operator.

Wear protective clothing where appropriate.

Never operate when tire (not alert) or in poorly lit areas and stay alert for humps and other hidden hazards. Remove all timber, rocks and foreign objects prior to operation

Avoid operating the machine in wet conditions.

Exercise extreme caution when changing direction on hills. Avoid sudden movement, sudden breaking, high speeds, rough terrain and steep slopes.

If machine starts to vibrate, stop tractor, turn off engine and investigate.
After striking a foreign object or if there are doubts about the performance of the machine, stop the tractor as described and check if machine is making excessive noise.

Extreme caution must be taken when working in public areas (roadsides etc).It is

recommended that flaps and chains are fitted to slashes when operating in public areas. These are available as optional extras rear flaps are compulsory in public areas.

Watch overhead clearance and beware of underground pipes and cables.

Where fitted hydraulic hoses and fittings must be maintained so as to prevent damage.

Do not modify this equipment in anyway, or use it for any other purpose than it was designed to do.

Never work under unsupported machines or adjust unsupported machines. Do not enter the danger zone where a load being carried by a machine could fall on you, for example a round bale from a bale fork, a log from a carryall or material from a rear end loader.

These instructions should be used in conjunction with a local regulations regarding safety i.e. OHS.

Maintenance is essential for safe operation. Ensure maintenance is carried out regularly by people qualified to do so. This is of particular importance on P.T.O. drive machines where driven parts can fly off at high speed if wearing parts are not properly maintained.

FAILURE TO FOLLOW THESE INSTRUCTIONS AND PROCEDURES MAY RESULT IN EQUIPMENT MALFUNCTION OR DAMAGE SERIOUS INJURY OR EVEN DEATH.

ASSEMBLY

Line up the lower linkage arms with the linkage pins of the slasher, slide the linkage arms onto the pins and secure with lynch pins. Attach the top link to the slashed. Raise the slasher from the ground and adjust stabilizer bars or chains if required.

CAUTION:

Check the length of the P.T.O. shaft before connecting to the tractor by raising the shaft to a position where it would be horizontal when connected. If necessary have the shaft shortened by cutting the same amount off both metal tubes and both plastic covers

(Refer to P.T.O. SHAFT SECTION P.9)

FITTING AND REMOVAL OF P.T.O. SHAFT

The clutch end of the P.T.O. shaft is located in the groove on the slasher input shaft with a quick release pin. This is similar to the quick release pin on the tractor end. The P.T.O. Shaft can be fitted or removed by depressing the pin. To avoid difficulties latet it is advisable to apply some grease to the input shaft prior to fitting the P.T.O.shaft.

OPERATION

Once all safety procedures have been followed, start the tractor and raise the slasher approximately 100-200mm (4-6inches) off the ground

CAUTION:
Depending on the model of the slasher and the tractor it may be possible to lift the slasher too high and the P.T.O.shaft may hit the slasher body. Set the adjustment on your hydraulics before operation; do not depend on your memory.

Engage P.T.O.drive and put the tractor into gear. Build up revolutions to 540 rpm and edge slowly forward while lowering the slasher.To minimize wear and tear on both tractor and slasher the P.T.O.speed should be maintained at 540 rpm. Lower speeds continuously due to low centrifugal force. If the operator is not certain of the condition of the area to be slashed, a prior inspection is recommended, particularly as vacant blocks, sides of roads and channels can hold hazardous surprises. Remove all timber, rocks and foreign objects. If the cutting is extremely heavy and the tractor has difficulty handling it, take a narrower cut which requires less horsepower and creates more space for the cut material to form a windrow. All machines are fitted with adjustable clutches.

CAUTION
Continuous slipping can burn the clutch plates. If this happens there is no alternative but to replace the clutch plates. These are not covered by warranty.
When slashing, always drive the tractor clockwise, so the cut material is not thrown into the standing material. Always allow for the effect the weight of the slasher has on the performance of the tractor, particularly on sloping hillsides and unstable areas. If working under extreme conditions, in particular where rocks or stumps may be present, the top link may be replaced with a piece of chain or alternatively a toggle link may be fitted(available as an optional extra).This enables the slasher to lift at the rear without lifting the front.

STOPPING
Lower the machine, stop the tractor engine (removing the ignition key) and apply the park brake. Remain clear until the machine has stopped its rotation completely. Disengage the P.T.O.prior to any maintenance, transporting or when not in use.

MAINTENANCE

When doing any type of maintenance on this machine, always follow the safety steps described in this manual. Service should only be carried out by qualified personnel. Use only authorized genuine parts for replacement.

The slasher must be adequately supported under its body-do not rely on the tractor to hold it in position.After1-2hours work, check all bolts and nuts and tighten if necessary. Check all fasteners and guards are installed(Refer to page 6).

Gearbox

It is recommended the first oil change occur after 50 working hours; subsequent change should take place after 500-800working hours. Periodically check the oil level and top up if necessary. Use EP80/90 or HD140 gearbox oil. Regularly check for leaks by lifting the slasher, turning off the engine and looking underneath the slasher for any oil.

Blades

Check slasher bolts and blades every 8 working g hours. Check the blades are not jammed, are sharp and evenly women and are free of nicks and cracks. If too much movement is apparent, replace the bolts and blusher. When replacing blades, make sure they are correctly.

Rotor

Remove any foreign material wrapped around the rotor and ensure the rotorspoiine freely without any vertical play.

Adjustable skids

Check for any damage and make sure they are set to the require cutting height and secured.

Stays

Check for damage (e.g. twisting)

Wheel kit

Check tire pressure .Wheel must run freely on axle and yoke must be lubricated .Note: Bearings are replaceable if necessary.

Power takes off (p.t.o.) shaft

Before operating the machine, check that the P.T.O. shaft is securely attached to the tractor and to the slasher.

Confirm the minimum and maximum working lengths of the P.T.O. shaft. The telescopic tube must be overlapping at least 150mm.If it is necessary to shorten the shaft, contact your implement dealer.

Check that the tube guards aware not damaged and rotate freely on the P.T.O. shaft.

Safety chains must be sufficiently looses to allow free turning of the tube guards.

Check that the angles of the joints on the P.T.O.shaft do not exceed 35 degrees.

When machine is not in use, protect or cove the P.T.O. shaft from the weather.

Check all components are fully lubricated before use.

Slip clutch setting

Slip Clutch need to be set if one of the following occurs:

The clutch has been repaired (including replacing the friction discs).

The clutch is slipping in work (clutch getting hot, burning out friction discs, machine slowing down in work).

The clutch is slipping when the machine hits an obstruction (tractor stalls, P.T.O.breaks).

The clutch has been freed up after a period of storage (see “how to free up clutch “).

How to set the clutch

The setting of the clutch is dependent on many variables-the work, the size of the tractor, the size of the machine and so on. It is best to set each clutch individually if possible. The aims to start with a loose clutch and tighten it up to the exact point where it stops slipping in normal work. If set in this way the clutch will slip if any load exceeds this point , protecting both tractor and machine .It is best to set up the clutch with the machine on the tractor which will normally be used, and in conditions

which approximate to the normal work the machine does. The bolts which go through the springs and hold tension on the clutch determine the point at which the clutch slips. These must all be set evenly, either by measuring spring length or counting the number of turns the nut has been tightened. The clutch must be quite loose initially to ensure it will slip. Slipping can be identified by the clutch getting very hot. The clutch will always be quiet warm in work as the gearbox gets warm. Run the machine for a short distance (20 meters) in work and check the clutch slips. Then tighten each tension bolt up a turn (more if the clutch was very loose) event and run a short distance aginn. Keep repeating this procedure until the clutch is not slipping – it should only take a few stops. As you get to the point at which the clutch is slipping tighten the tension bolts half a turn instead of a full turn.

Never tighten the clutch beyond one full turn out from fully tightened (springs coil-bound),or the clutch will not operate as a clutch and will fail to protect the machine .If the clutch still slips when you get to one turn out from coil-bound reduce the load. Reduce your ground-speed or take less cut. Otherwise you risk damaging with zero load .Continuing operations with a slipping clutch results in clutch damage.

Continue to work the machine checking the clutch regularly to see how to it is performing. You may want to adjust it for varying conditions. If the clutch is too loose it will slip, wearing out the friction discs, getting hot and possibly damaging the clutch pressure surfaces as well. Remember as the plates wear, the tension on them is reduced. If the clutch is too tight it will fail to protect the tractor and machine when an overload occurs.

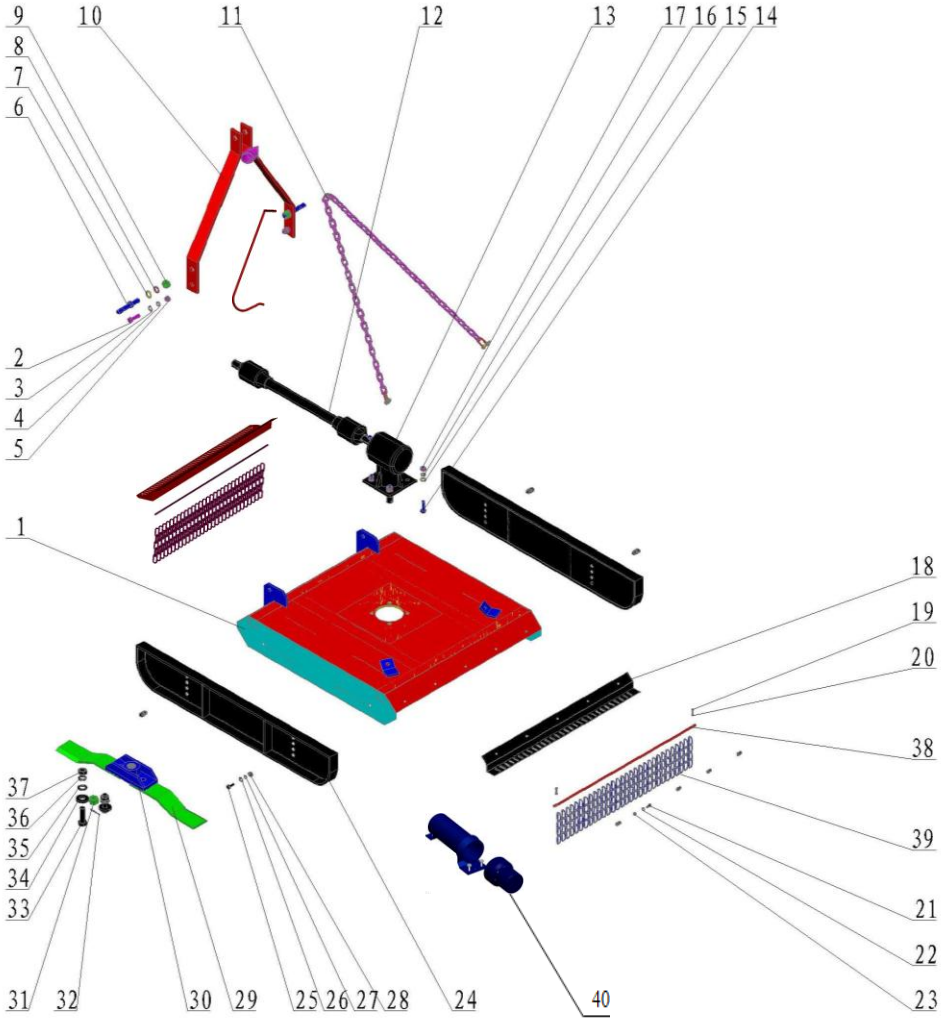
How to free up the clutch after a period of storage

Slip clutch can seize up if left for long periods without use. To free up the clutch loose all the tension bolts until the springs are free of any tension. Then run the machine into normal work so the clutch slips. With the clutch set in this way the machine will fail to work at all, clutch slip being 100%. Run the machine in this way for 30seconds to one minute. This cleans the surfaces of the clutch .An alternative to this is dismantling the clutch and cleaning it.

SPARE PARTS

ORDER SPARE PARTS THROUGH YOUR ORIGINAL SUPPLIER.

Light Duty Slasher Parts Assembly



Parts List

Parts #	Description	Quantity
1	Slash Body	1
2	Bolt M18×55	2
3	Flat Washer 18	2
4	Spring Washer 18	2
5	Nut M18	2
6	Lift Pin	2
7	Flat Washer 22	2

8	Spring Washer 22	2
9	Nut M22	2
10	A Frame	1
11	Chain	1
12	PTO Shaft	1
13	Gearbox	1
14	Bolt M16×50	4
15	Flat Washer 16	4
16	Spring Washer 16	4
17	Nut M16	4
18	Back Plate	2
19	Bolt M6×25	4
20	Lock Nut M6	4
21	Bolt M10×25	8
22	Flat Washer 10	8
23	Lock Nut M10	8
24	Adjustable Skid	2
25	Bolt M14×45	4
26	Flat Washer 14	4
27	Spring Washer 14	4
28	Nut M14	4
29	Blade	2
30	Blade Carrier	1
31	Bolt M27×2	1
32	Pin	1
33	Bolt M24×65	2
34	Strength Washer	2
35	Flat Washer 24	2
36	Spring Washer 24	2
37	Nut M24	2
38	Chain Shaft	2
39	Chain	Vary
40	Manual Box	1