



WINTON POWER HARROW

WPH SERIES



OWNERS MANUAL

PLEASE READ THIS MANUAL BEFORE OPERATING THE MACHINE

Congratulations on purchasing your new **Winton** power harrow!

Before you get started, we have provided a helpful space to jot down a few important details about your new Winton machine.

Model Number: **WPH130 / WPH170**

Serial Number:

Date of purchase:

Factory Reference: **LXG130 / LXG170**

This manual should be considered a permanent part of this machine and should remain with it even if the machine is subsequently sold.

Winton continually seeks advancements in its product design and quality. Therefore, while this manual contains the most current product information available at the time of printing, there may be minor discrepancies between your machine and this manual.

If you have any questions concerning this manual, please consult your local dealer.

First Published: February 2020

General Safety Information

Ensure all potential operators read this manual thoroughly before using the machine.

Safety: Ensure tractor and machine is stationary and keys out of ignition before set-up/maintenance.

Safety: Failure to follow good safety standards could result in severe injury or even death.

Misuse: This machine is designed for use with compact tractors, and should be used only for the indicated purpose. Winton does not take responsibility if the machine is used for any other purpose. Children must not operate the machine under any circumstance.

Modification: Do not modify equipment in any way. This may impair the operation and overall safety of the machine.

Tractor requirements: Use only with compact tractors within power range specified.

Misuse transport: Do not use machinery to transport personnel or livestock.

Condition: For the safety of personnel and optimum performance of the machine, you should check the condition of the machine and the tractor before starting. Before use check all nuts and bolts are tight.

Spatial awareness: Always check the operating area is safe before starting machinery.

Operator clothing: The operator should not wear loose clothing while operating machinery.

Safety wear: Always use appropriate ear protection when running a tractor and machinery. Ensure you are wearing protective gloves when servicing and using machinery.

Bystander safety: Ensure bystanders keep away from the machine when it is in use. Do not touch moving parts when the machine is at work.

Public places: When travelling on the road/public places, always keep the PTO turned off.

Maintenance: Always keep the machine maintained and in a good state. Where necessary, repair or replace any defective parts. Do not modify the machine.

Sharp objects: Pay attention to the sharp/pointed parts while servicing the machine.

Safety guards: All protective parts should be in good condition before operating machinery.

Safety signs/stickers: Keep all safety signs clean and legible. Replace any which are missing or illegible. If a component with safety sign(s) is replaced, make sure new safety sign(s) are attached in the same locations.

Operating speeds: Machinery and PTO should be operated at the recommended speed at all times.

Safety awareness: Good safety requires that you familiarise yourself with various safety signs, the type of warning and the area, or particular function related to that area.

Alertness: Never consume alcohol or drugs as these can hinder alertness/coordination. Consult your doctor about using this machine while taking prescription medications.

General Safety Information (Continued)

Machinery Pre-Use Checks

On receipt of your new Winton machine and again within the first 4 hours of use, or the 'shake in period', we always recommend checking over the machine.

- Check all bolts, nuts and screws are tight on the unit.
- Tighten/check any bolts and nuts securing blades.
- If your machine has belts check the tension and adjust if required.
- Apply grease to grease points if necessary.
- Check gear oil level and top up if needed. Do not overfill.

Tractor Pre-Use Checks

Check that the machine is properly attached to the tractor. Ensure that secure pins are used on the linkage mounting pins.

Be sure to add extra weights to the front of the tractor or add wheel weights if required.

Check that the tractor PTO shaft turns freely and that the machines PTO drive shaft can extend easily. Grease the PTO drive shaft using the grease points.

The chain on the PTO shaft should be checked and in a good condition. The universal joints installed should be in a good state, with proper protective parts.

Before installing the PTO shaft, the tractor and machine should be stopped and the key removed.

Install and secure all safety guards, doors and covers before starting.

Bystanders should leave the immediate area before connecting the drive to the tractor.

Running/Operating Checks

- Always keep the PTO output from the tractor at **540 RPM** when running machinery.

Post-Use Regular Checks

Check blades, belts and wearing parts. Be sure they are not damaged and blades swing freely in their mount. Repair or replace as required.

Clean machinery and check for/clear any entangled material which may have got stuck around the rotating parts.

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1. Dimensions & Specifications

Model	WPH130	
Weight	274kg	345kg
Working Width	130cm	170cm
Number Of Blades	12 (6L+6R)	16 (8L + 8R)
Blade Type		
Tilling depth	18cm	18cm
Recommended Tractor HP	25-40 HP	36-50 HP
Width	170cm	210cm
Depth	125cm	125cm
Height	95cm	95cm
Drive Type	Gears	Gears
PTO Speed	540 RPM	540 RPM
PTO Shaft Size	70-90cm	70-90cm
Linkage Size	Category 1	Category 1

2. Installation & Set-Up

Safety: Ensure tractor and machine is stationary and keys out of ignition before set-up/maintenance.

Safety: Before attaching/detaching machinery ensure the hydraulic lift system is in a neutral position.

Safety: Make sure the PTO drive isn't connected at any point until instructed to do so.

You will need:

Your tractor, tractor top link arm (adjustable), linkage pins, and PTO shaft.

Attaching The Machine

Start by finding a flat piece of ground. Lower the three point linkage on your tractor to its lowest position and attach the machine to the tractor using the three point linkage pins and linch pins. Then attach the top linkage arm to the top link point on the machine and tractor. Extend the linkage arm to ensure the machine sits level and the a frame is vertical.

The working depth can be set by lifting the hydraulic arms on the tractor to increase or decrease the blade tine depth as required.

The working speed of the machine should always be at a slow walking pace (approx. 1 to 3 mph) depending on the working conditions. Always remove large stone/obstacles from the soil before operating. Areas with denser stones and soils should be worked at a much slower pace. The finish can be adjusted using the rear roller [see section on adjusting the roller].

Check your PTO shaft's grease points and apply grease if needed. Then attach the PTO drive shaft and ensure the locking pin is secure on both the tractor and mower sides. Attach the chain to a secure point on the tractor/implement.

Operate the machine with tractor in low range gear and the PTO delivering **540 RPM**.

Pre-Use Checklist

Before starting the machine, always check and adjust the following:

- Blade condition. [Section 4]
- Height adjustment and roller. [Section 5]
- Oil level of the gearbox. [Section 6]
- Gears and lubrication. [Section 7]
- Lubrication/grease points. [Section 8]
- Ensure ground is clear of any obstructions (bricks, rocks, wire etc.)
- Tightness of all bolts, nuts and screws.
- All protective guards are in place before operating.

3. Operating Advice

Safety: Ensure tractor and machine is stationary and keys out of ignition before set-up/maintenance.

Working Conditions

This harrow is designed for tilling soil and seed bed preparation. Moisture remains in the soil and the water balance of the soil is maintained since the soil is not turned up as it is tilled. The vertically rotating cutters also prevent compaction of the soil, thus resulting in optimum preparation of the seedbeds.

The working speed of the machine should always be at a slow walking pace (approx. 1 to 3 mph) depending on the working conditions. Compacted ground and denser soil types should be covered at a slower pace for the best finish and to avoid any damage to the machine. The speed of the tractor also effects the finish on the soil.

Working Depth

The working depth should be adjusted in line with the ground conditions in order to obtain the best possible results. Large objects should be removed from the ground beforehand so the soil can be tilled correctly and to prevent damage or premature wear on the blades.

Getting the working depth right is the key to creating the best cut and finish. The depth can be set by simply by using the tractor's hydraulic lift arms. The rear roller can be adjusted as a guide and creating a neat finish, but shouldn't bear the weight of the machine.

General Safety Tips

Always raise the implement from the ground during manoeuvres and around bends. Do not reverse with the machine unless this is strictly necessary. If unavoidable, first disengage the PTO, then lift the implement from the soil and make sure that the manoeuvre area is clear. If a reversing manoeuvre is required at the end of the row being tilled, the tractor PTO must be switched off. The rotary harrow should come to a complete standstill before it is lifted out of the ground for the manoeuvre otherwise there is a risk of clods of earth or debris being hurled off by the blades.

Never lift the implement more than 25cm from the ground with the PTO driveline engaged or the driveline could be damaged.

The maximum angle for the driveline with the PTO engaged is 20°. A greater angle may cause strong vibrations and/or damage to the machine.

The machine should only be used when there is no-one close to the machine or working hazard area (10m or more from the rotary harrow) due to the risk of objects, such as stones, being hurled away from the machine.

3. Operating Advice (Continued)

Safety: Ensure tractor and machine is stationary and keys out of ignition before set-up/maintenance.

Stones & Obstructions

Before any harrowing can take place the areas to be tilled should be inspected for visible large obstacles so they can be removed and prevent damage to the blades and drive elements.

The machine is not generally suitable for work on very stony soil. A few small stones are usually tolerated and will create no difficulties. On the other hand, working on excessively stony soils can damage the blades and the machine itself.

First Use Advice

Lower the tractor lift arms until the blades are near the ground without touching the ground. When working with the machine the lift arms must always be fully lowered and locked into position to sustain the working depth of the machine. The horizontal position of the rotary power harrow can be corrected by means of the top linkage arm. Then engage the PTO drive to the rated speed (540 RPM).

Slowly lower the lift arms to the ground to allow the blades to gradually cut into the soil (do not drop the machine suddenly to the ground). When the machine is working the soil then move away slowly in a low gear. If you find the machine is struggling on the surface then lower your speed or raise the working depth.

After having worked for a few meters, stop and check whether the desired result is being obtained. Make any adjustments which may be necessary and then continue with the job. The worked soil should always be kept to the driver's right side.

Ground Conditions & Working on Gradients

Always avoid working on sloping surfaces if possible. If you chose to work on a gradient always take care, it is preferable to work upwards or downwards rather than across the gradient to minimise the risk of overturning.

Always check and comply with the tractor manufacturer's instructions, particularly in relation to the maximum gradient for working. When working on slopes the working speed should always be reduced, gradually varying the speed and direction of the vehicle when manoeuvring.

Never operate on wet, slippery grass or soil or where the tyres are struggling to grip. If this is unavoidable, always work at a low speed and take care.

4. Blade Replacement

Safety: Ensure tractor and machine is stationary and keys out of ignition before set-up/maintenance.

Safety: Always take care when handling and changing sharp blades .

Each blade carrier has the same directional blade, so either 2x left blades or 2x right blades dependent on whether the carrier spins clockwise or anti-clockwise underneath the machine.

Each blade tine unit under the machine comprises of a tine flange, guard plate, two tines, bearing housing, bearing and connecting elements. The tines are mounted underneath the guard plate and serve to loosen the soil. They are secured with bushings, washers, bolts and lock nuts, always check blades are secure when changing or checking condition.

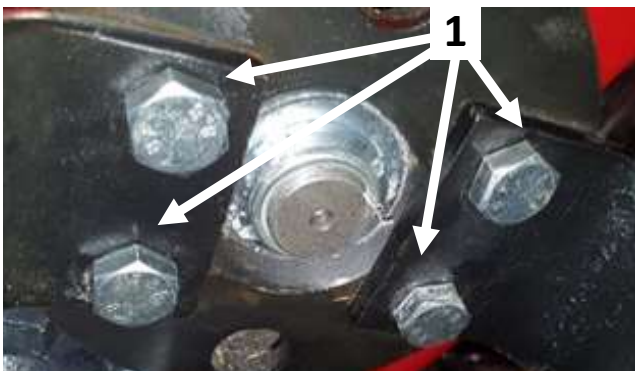
The blades must always be replaced if they are damaged, bent, worn or blunt. Take care to ensure that the new blades are mounted in the same position to ensure the sharp side of the blades point in the same direction as the old blade.

Sufficiently lift the machine so that the blades and rotor can be accessed easily. Always support the machine on rigid supports and ensure it is stable before carrying out any work.



Changing Blades

1. Remove the fastening bolts & nuts **(1)** (there are 2 bolts per blade).
2. Remove the old blade and replace with new blades.
3. Replace the fastening bolts and nuts **(1)**.
4. Check tightness of the bolts.



5. Roller Adjustment

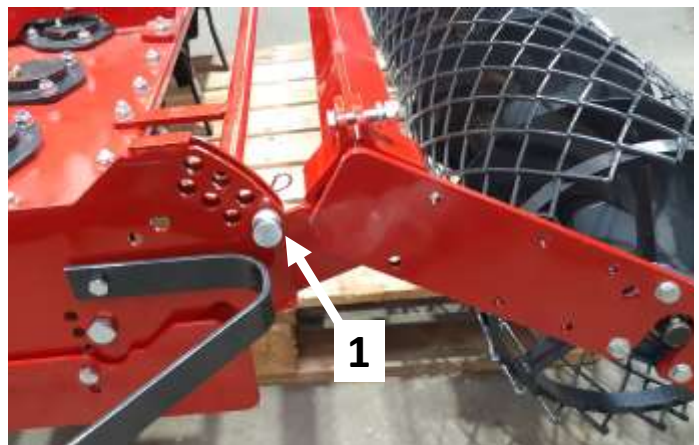
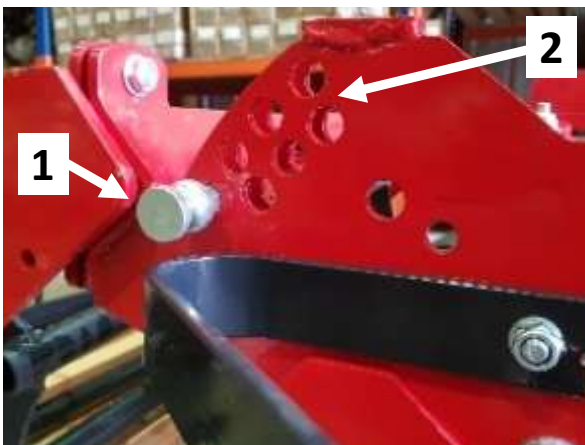
Safety: Ensure tractor and machine is stationary and keys out of ignition before set-up/maintenance.

The working depth can be adjusted through the rear roller on the unit. This should be adjusted to suit working ground conditions. For denser or more compacted areas of soil the tiller should be set higher for a reduced working depth. The harrow can be used in two or more passes increasing the working depth if required.



Roller Adjustment

The roller has seven set holes with a pin and R clip holding it in place either side. The height can be adjusted by removing pin and R clip on both sides and setting to desired height.



1. Remove pin and R clip **(1)** on both sides of the roller bracket.
2. Move the roller into position and align bracket with the corresponding hole **(2)**.
3. Replace pin and R clip **(1)** on both sides.

6. Gearbox Maintenance

Safety: Ensure tractor and machine is stationary and keys out of ignition before set-up/maintenance.

Safety: Always follow manufacturer’s instructions for oils and lubricants.

Important Information

Gear Oil Grade	80w90 gear oil for all conditions (or equivalent)
Gearbox Oil Level	Approx. 1.5L
First Oil Change	120 hours use
Oil Change Frequency	250 hours/yearly (whichever is first)

Do not mix old and new oils together or mix different types of oil. Always dispose of old oils safely and in the correct manner. Always make sure the machine is on a flat and level surface when checking oil levels. The machine should be left at a standstill to cool down for at least 10 minutes. Ensure the machine is stable before carrying out work and will not upturn. Make sure all fluids are level before using the machine.

Oil in Gearbox

Check gear oil in the gearbox by unscrewing and removing filler plug/breather **(1)**. Use a dipstick or similar to check the oil level and ideally this should be half full. The gearbox can be topped up using the filler plug on the top of the unit. Then replace filler plug/breather **(1)**.

Draining oil: Use an oil pump to remove old oil and any debris when changing oil.



Oil Change Log

Oil Change #1	Oil Change #2	Oil Change #3	Oil Change #4	Oil Change #5	Oil Change #6
/ /	/ /	/ /	/ /	/ /	/ /

7. Gear Reservoir Maintenance

Safety: Ensure tractor and machine is stationary and keys out of ignition before set-up/maintenance.

Safety: Always follow manufacturer’s instructions for oils and lubricants.

Important Information

Gear Oil Grade	EPO semi-fluid grease (or equivalent)
Gear Reservoir Oil Level	Approx. 10mm
First Oil Change	120 hours use
Oil Change Frequency	250 hours/yearly (whichever is first)

Oil in Gear Reservoir

The lubricant in the gear reservoir ensures each of the gears driving the blades work smoothly. Always ensure the level is checked prior to use and routinely (every 4 hours use).

Always make sure the machine is on a flat and level surface when checking oil level. As the reservoir spans the length of the machine if machine is not level you will be unable to identify the correct amount of lubricant in the reservoir.

Unscrew and remove the filler cap **(1)**. Use a dipstick or by eye check the level. Top up as required. Replace and screw in the filler cap **(1)**.



Lubricant Change Log

Oil Change #1	Oil Change #2	Oil Change #3	Oil Change #4	Oil Change #5	Oil Change #6
/ /	/ /	/ /	/ /	/ /	/ /

8. Servicing & Maintenance

Safety: Store all lubricants away from excessive heat, dust, moisture and contaminants.

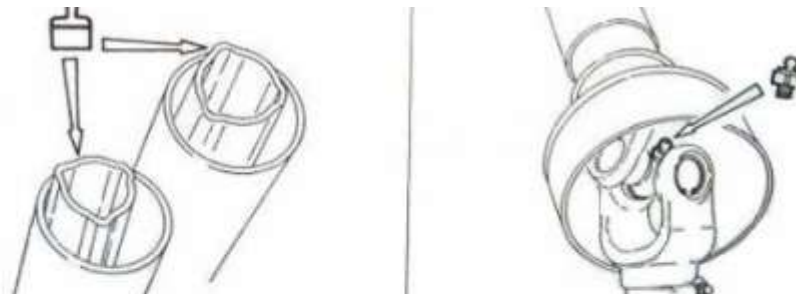
Safety: Ensure tractor and machine is stationary and keys out of ignition before set-up/maintenance.

Grease Type	Multi-purpose lithium based grease
Grease Frequency	Check every 4-8 hours (top up if required)

Greasing & Lubrication Points

Wipe grease nipples with a clean cloth before greasing to avoid injecting any dirt or grit. Press grease into each grease nipple three to five times. We recommend using a hand-held grease gun for best results.

If grease nipples will not take grease, remove and clean thoroughly. Also clean lubricant passageway. If you notice any grease points are broken replace or repair them immediately.



Greasing The PTO Shaft x2

Grease both grease points on either end of the PTO shaft and apply grease to the inner shaft.



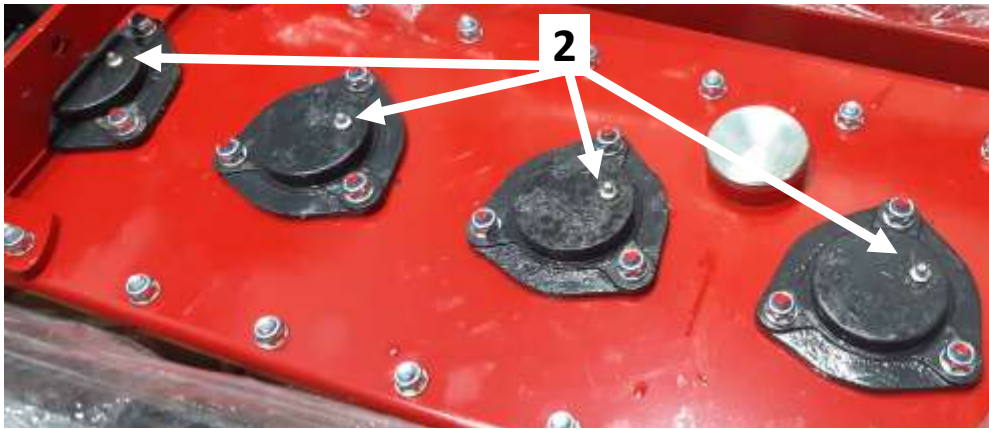
Greasing The Roller Bearings x2 (1)

Apply grease to both of the rear roller bearings. There are easy to access grease points on the left and right of the roller on the square bearing casing facing the roller.

8. Servicing & Maintenance (Continued)

Safety: Store all lubricants away from excessive heat, dust, moisture and contaminants.

Safety: Ensure tractor and machine is stationary and keys out of ignition before set-up/maintenance.



Greasing The Blade Bearings (2)

Apply grease to each of the blade bearing units. There is a grease point on the top of each blade seat, and the number will vary dependent on machine width.

Other Maintenance

Blades: Check condition of the blades and replace if worn/broken. Always take care when handling blades, wear gloves and use suitable tools for changing blades. If blades are replaced check they are secure to avoid any excessive vibration.

Tine Fixings: The screw connections between tines and tine flange/guard plate must be checked regularly. The condition and degree of wear on the tines fixings must be checked regularly.

Oils: Ensure oil levels are checked every 4 hours or before use. Ensure lubricant is topped up when needed. Replace any oils per the schedule.

PTO Shaft: Check the condition of your PTO shaft and replace if worn or damaged immediately.

Cleaning: Ensure the machine is cleaned of mud and grass. Remove debris from any moving parts to prevent entanglement. Do not spray water on bearings when cleaning with a high pressure washer.

Bearings: Check the bearings on the blade rotors. If the oil seals are damaged, debris may enter the bearings. Clean and replace with new bearings if necessary. Run the machine without a load for approx. 3-5 minutes to check bearings are operating smoothly.

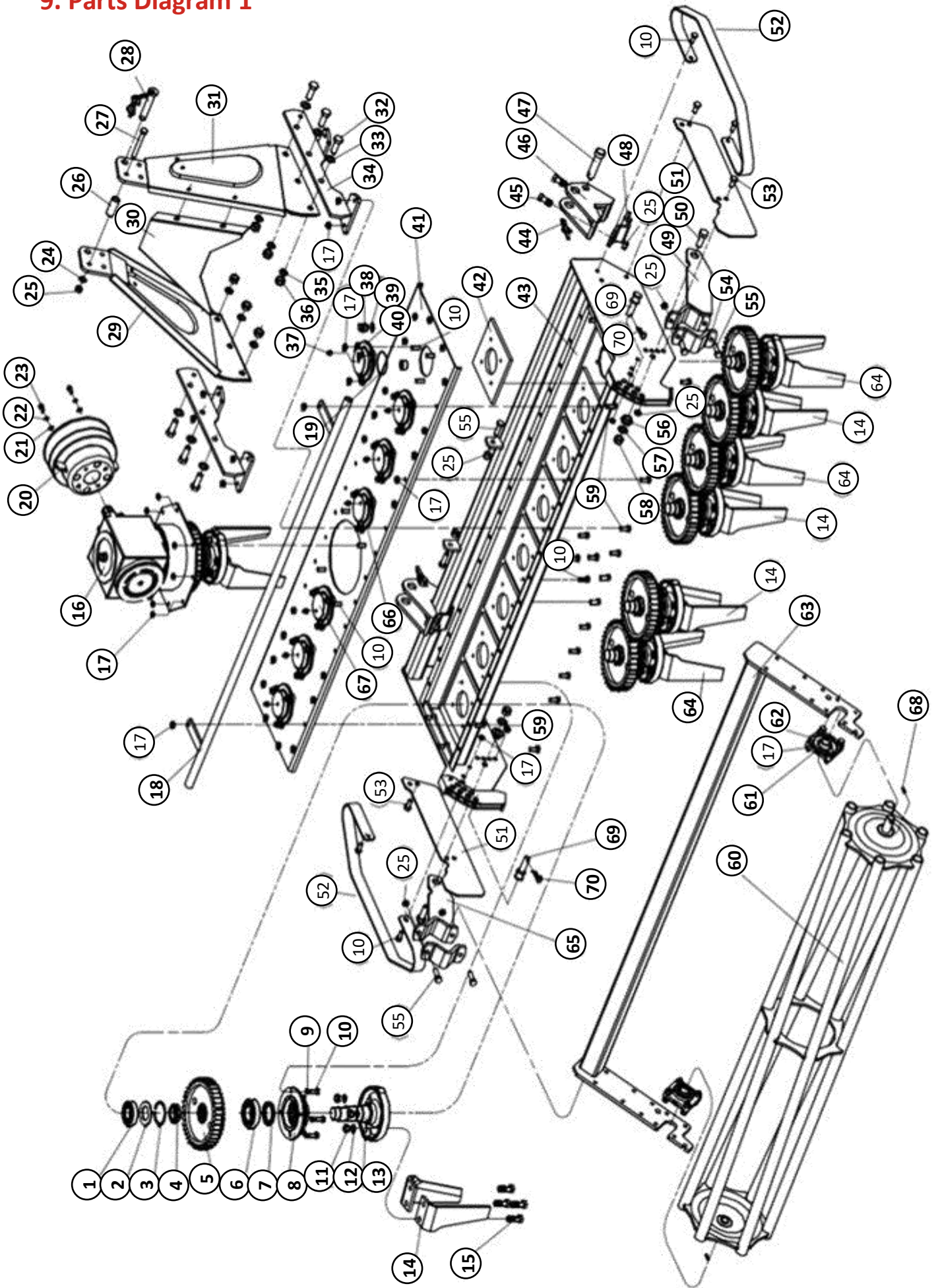
Paintwork: Re-coat any damaged paintwork to prevent corrosion.

Storage: Store the machine in a dry, level area. Chock the wheels if necessary.

Gears: Check the condition of gears, replace if required.

The periods recommended are based on normal operating conditions. Severe or unusual conditions may require more frequent maintenance.

9. Parts Diagram 1



10. Parts List 1

Dia No.	Number	Part Number	Part Description	Qty
1	511022613	GB276-6207	Bearing 6207	5/7
2	706590024	LXG170.115	Big washer	5/7
3	506060188	GB893.1-72	Circlip 72	5/7
4	706590025	LXG170.116-1	Self locking nut M39x1.5	5/7
5	706590026	LXG170.118	Export gear	5/7
6	511022615	GB276-6209	Bearing 6209	5/7
7	510020641	GB13871-FB-50X68X10	Oil seal FB -50X68X10	5/7
8	706590023	LXG170.112	Rotor support down panel	5/7
9	506030036	GB93-10	Washer 10	24/32
10	501011114	GB5783-M10X35	Bolt M10 x 35	24/32
11	503010048	GB6170-M14	Nut M14	24/32
12	506030038	GB93-14	Washer 14	24/32
13	706590022	LXG170.110	Colter fixing seat	5/7
14	706590021	LXG170.109	Blade (left)	6/8
15	501010768	GB5782-M14X60	Bolt M14x60	24/32
16	805680006	LXG130.011	Gear case & drive blade seat assembly	1
17	503010762	DIN985-M10	Six corner locknut M10	77
18-1	805680002	LXG130.018-1	Protection bar weldment 130	1
18-2	806590006	LXG170.018-1	Protection bar weldment 170	2
19	510013257	GB3452.1-G-90X3.55	O-ring	1
20	703400008	FM120.00.199	PTO shaft cover	1
21	506010055	GB97.1-8	Washer 8	2
22	506030035	GB93-8	Washer 8	2
23	501011098	GB5783-M8X16	Bolt M8x16	2
24	506010057	GB97.1-12	Washer 12	2
25	503010763	DIN985-M12	Locknut M12	2

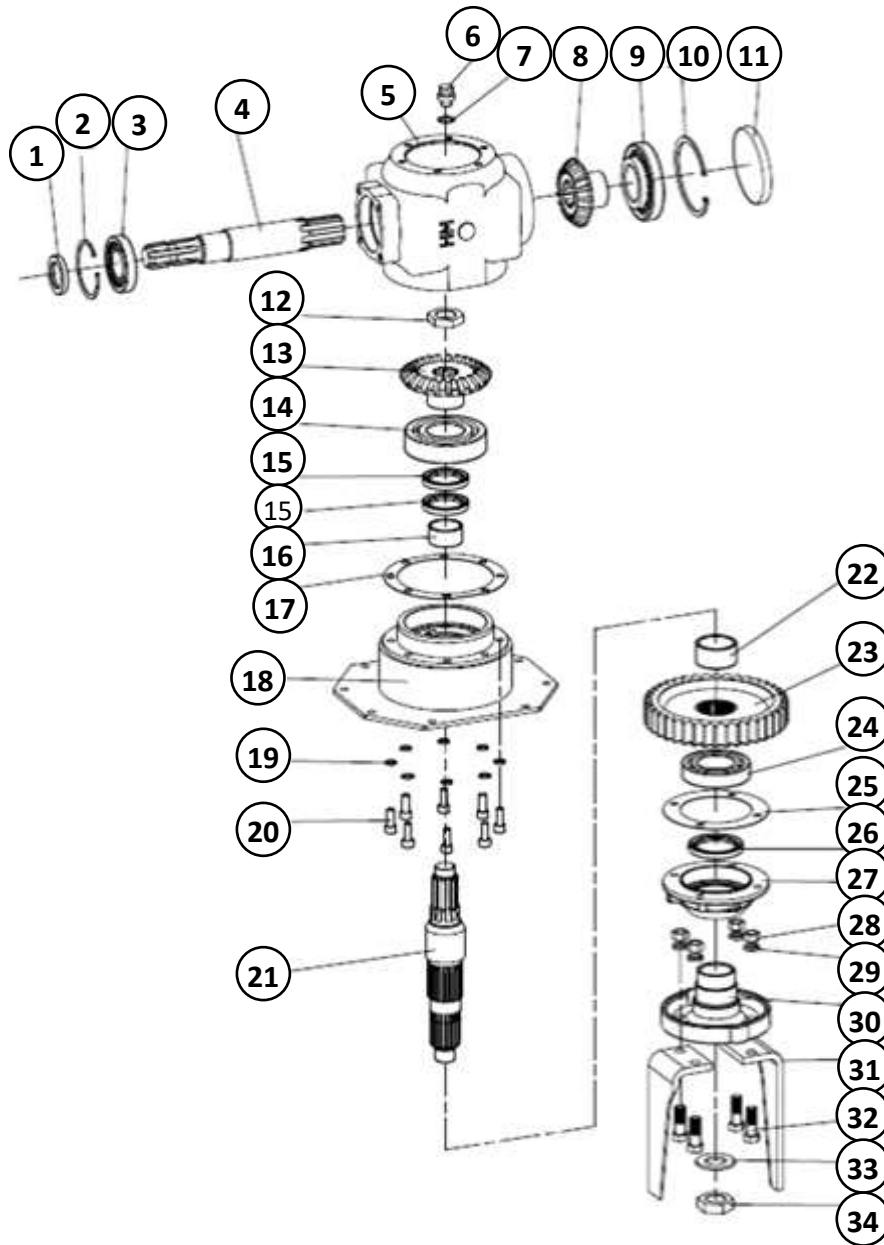
10. Parts List 1 (continued)

Dia No.	Number	Part Number	Part Description	Qty
26	703140006	MZ105.130	Bushing	2
27	501010763	GB5782-M12X100	Bolt M12x100	2
28	703740002	EF100.00.019-1	Top link pin	1
29	806590014	LXG170.029	A frame support (right)	1
30	706590017	LXG170.104	A frame guard	1
31	806590013	LXG170.028	A frame support (left)	1
32	501014760	GB5782-M16X45	Bolt M16x45	6
33	506010059	GB97.1-16	Washer 16	6
34	806590002	LXG170.012	A frame connection bracket (Left)	2
35	506030039	GB93-16	Washer 16	6
36	503010049	GB6170-M16	Nut M16	6
37	509010009	GB1152-M10X1	Pressed oil cup M10x1	8
38	703070084	CBW-00-011	Bolt	2
39	510015240	JB982-16	Combined oil seal 16	2
40	706590015	LXG170.102	Rotor support bracket	6
41-1	805680001	LXG130.015	Top panel cover/plate weldment 130	1
41-2	806590003	LXG170.015	Top panel cover/plate weldment 170	1
42	706590034	LXG170.132	Rotor seal/spacer	8
43	806590004	LXG170.016	Rotor mounting body weldment	1
44	700080010	200.56.011	Snap pin chain	2
45	501011128	GB5783-M12X40	Bolt M12x40	4
46	706590032	LXG170.130	Lower link mount	2
47	706590019	LXG170.106	Pin	2
48	706590033	LXG170.131	Lower link mount plate	2
49	806590007	LXG170.021	Right roller connecting bracket	1

10. Parts List 1 (continued)

Dia No.	Number	Part Number	Part Description	Qty
50	501011159	GB5783-M16X45	Bolt M16x45	2
51	706590027	LXG170.122	Side shield	2
52	706590014	LXG170.101	Body bash bar	2
53	501011126	GB5783-M12X30	Bolt M12x30	4
54	706590008	RT150.107	U bolt	2
55	501011128	GB5783-M12X40	Bolt M12x40	18
56	706590020	LXG170.108	Bush	2
57	506010059	GB97.1-16	Washer 16	2
58	503010765	DIN985-M16	Locknut M16	2
59	501011113	GB5783-M10X30	Bolt M10x30	10
60-1	805680003	LXG130.024 MESH	Roller weldment 130 mesh style	1
60-2	806590008	LXG170.024 MESH	Roller weldment 170 mesh style	1
61	511040011	UCF205	Bearing UCF205	2
62	501011115	GB5783-M10X40	Bolt M10x40	8
63-1	805680004	LXG130.025	Roller bracket weldment 130	1
63-2	806590011	LXG170.025	Roller bracket weldment 170	1
64	706590028	LXG170.123	Blade (Right)	8
65	806590005	LXG170.017	Left roller connecting bracket	1
66	706590015	LXG170.102	Rotor support top plate	1
67	706590015	LXG170.102	Rotor support top plate	1
68	508011565	GB879.1-8X35	Pin 8x36	2
69	706590072	LXG170.250	Roller height adjustment pin	2
70	703340017	ZL-25.104	R clip	2

11. Parts Diagram 2 - Gear Case Assembly & Blade Seat



Dia No.	Number	Part Number	Part Description	Qty
1	510020412	CFW-40X80X12	Oil seal 40X80X12	1
2	506060191	GB893.1-80	Circlip 80	1
3	511016412	GB297-30208	Bearing 30208	1
4	703190197	1G-150.01.117-1	Transmission shaft	1
5	703190198	1G-150.01.118	Gearbox	1
6	703070084	CBW-00-011	Breather plug	1
7	510015240	JB982-16	Oil bolt washer	2
8	703210001	1GN180.00.141	Small cone-shaped gear	1

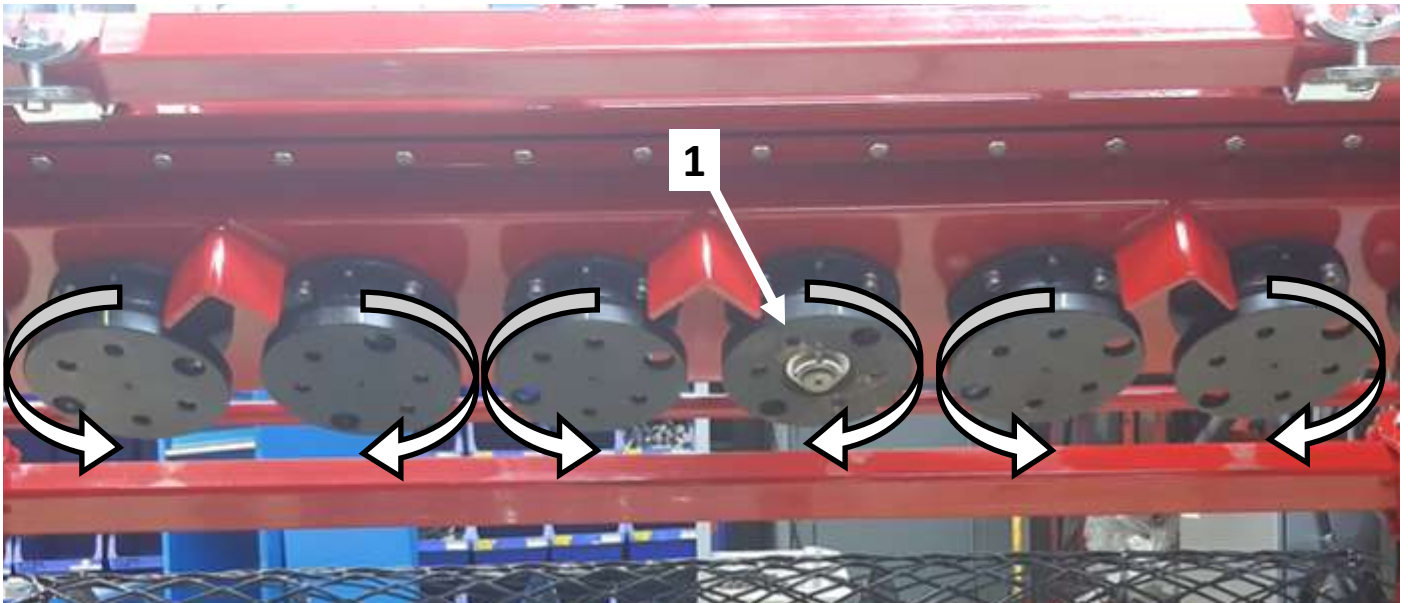
12. Parts List 2 - Gear Case Assembly & Blade Seat

Dia No.	Number	Part Number	Part Description	Qty
9	511016492	GB297-30310	Bearing 30310	1
10	506060203	GB893.1-110	Circlip 110	1
11	706230018	NFG-RCA-110X12	Back end gearbox cover	1
12	503020071	GB812-M30X1.5	Lock Nut M30x1.5	1
13	703210002	1GN180.00.146	Big cone-shaped gear	1
14	511022658	GB276-6311	Bearing 6311	1
15	510020390	CFW-50X68X8	Oil seal 50x68x8	2
16	706590038	LXG170.138	Bush	1
17	706590011	1G-150.01.114	Gasket/seal	1
18	806590012	LXG170.026	Gearbox plate	1
19	506030036	GB93-10	Washer 10	8
20	505011429	GB70.1-M10X25	Bolt M10x25	8
21	706590037	LXG170.136	Gearbox drive shaft	1
22	706590036	LXG170.135	Bush	1
23	706590035	LXG170.133	Output gear	1
24	511022617	GB276-6211	Bearing 6211	1
25	706590031	LXG170.128	Gasket/seal	1
26	510020634	GB13871-FB-60X80X10	Oil seal PB-60X80X10	1
27	706590039	LXG170.147	Bearing seat	1
28	503010048	GB6170-M14	Nut M14	4
29	506030038	GB93-14	Washer 14	4
30	706590030	LXG170.126	Blade seat	1
31	706590028	LXG170.123	Blade (Right)	2
32	501011142	GB5783-M14X40	Bolt M14x40	4
33	706590029	LXG170.125	Washer 30	1
34	503020071	GB812-M30X1.5	Lock Nut M30x1.5	1

13. Blade Layout

The power harrow has several blade seats, these are all geared and rotate alternating clockwise or anti-clockwise from the main drive blade seat (1) under the gearbox.

Each blade carrier has the same directional blade fitted. So either 2x left blades or 2x right blades are bolted on dependent on whether the carrier spins clockwise or anti-clockwise underneath the machine.



14. Safety Labels



Warning: Read operating instructions before use.



Warning: Never reach under the protective cover with hands or feet.



Warning: Beware of being trapped!



Warning: Beware of flying objects!



Warning: Keep a safe distance.

PTO Shaft Resizing

Safety: Ensure tractor and machine is stationary and keys out of ignition before carrying out any work.

If you are not confident in carrying out the work consult your local supplier or mechanic.

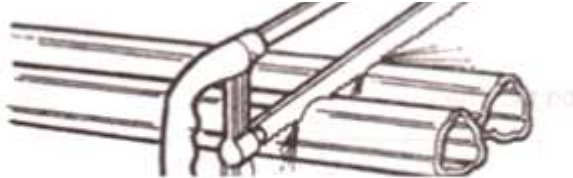
Most PTO driven implements are supplied with a standard sized PTO shaft. As all tractors vary this often means cutting it down to size. Always replace worn or damaged PTO shafts.

Attach the machine to the tractor without the PTO shaft, raise the linkage so the PTO shaft is level/horizontal. Measure the length between tractor PTO and the machine's shaft. If the compressed (closed) PTO shaft length exceeds the one measured here then the driveline will need to be cut.

1. PTO length adjustment, first remove PTO shaft shielding.



2. Shorten the driveline tubes to proper equal lengths.



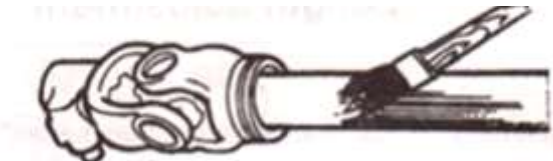
3. Tidy edges of the drive tube with a file and clean all fillings from the tubes.



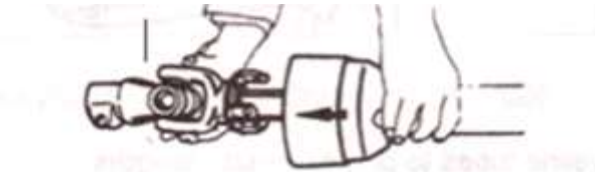
4. Shorten the equally long guard tubes to the same length as the driveline tubes.



5. Grease the internal driveline tube.



6. Fit the guard on the shaft.



7. Make sure that the length allows for at least 16cm (6 inches) of overlap.



Winton Product Warranty

We always strive to create great products, but when something does go wrong we have a strong network of resellers on hand throughout the UK to help out.

Warranty Claims

Before you get in touch here are 5 pieces of information your Winton reseller will need to progress your claim:

- Your invoice/order details - to include date of purchase
- Machine model number
- Machine serial number
- Details of the fault
- Images/videos of the fault

The Terms & Conditions

All products purchased as new are covered under our 12 month warranty from the date of purchase. During this period Winton will repair or replace defective parts free of charge. This warranty is given on the proviso that the product has been used and maintained according to the Owner's Manual.

Warranty is carried out on a return to reseller / manufacturer basis and excludes any labour or delivery / collection costs.

Exclusions

- Wearing parts are excluded; including but not limited to blades, belts and bearings.
- Modification of the product in any way will cease the manufacturers warranty.
- The machine is warranted for one year to the original purchaser, resale within the period will cease the warranty.
- Damage in transit is not covered. Claims will need to be made through the courier or your Winton reseller directly.
- Compensation for down-time, labour or loss of earnings is not covered by the warranty.
- No warranty extension will be granted for replacement parts fitted.
- Damage caused by continued use of a faulty machine will not be covered.

Your **Winton** reseller will provide their own terms and conditions upon purchase, consult this for any additional queries.

Trouble-Shooting

Safety: Ensure tractor and machine is stationary and keys out of ignition before set-up/maintenance.

WPH Problem	Solution
Uneven finish	<ul style="list-style-type: none"> Slow the working speed Change in to a lower gear on the tractor Check blades, replace if damaged or worn Check blades move freely Check that nothing is entwined in any moving parts Decrease the working depth Adjust tractor top linkage arm to level machine Check ground for obstacles (wire, bricks, etc.) Clean out the machine's deck Reduce speed when turning Change working pattern/route Check tractor PTO speed is at 540 RPM
Excessive vibration	<ul style="list-style-type: none"> Check tractor PTO speed is at 540 RPM Check that nothing is entwined in any moving parts Clean out the machine's deck Check blades, replace if damaged or worn Check blades are moving freely Ensure all bolts are tight Check PTO shaft for damage and replace
Gearbox noisy	<ul style="list-style-type: none"> Check oil level and top up if required Extract the oil/debris and replace with new oil Check tractor PTO speed is at 540 RPM
Tractor loaded down by machine	<ul style="list-style-type: none"> Check tractor PTO speed is at 540 RPM Change into a lower gear on the tractor Take more than one pass starting at a reduced working depth Check that nothing is entwined in any moving parts Clean out the machine's deck Check blades move freely Check power output on your tractor Ensure tractor has weights and/or front weights

Always consult your **Winton** dealer if you have any questions about your machine.

Notes



W Winton

www.wintonmachinery.co.uk