



Winton Agri-Machinery

OPERATOR'S MANUAL

WINTON COMPACT FLAIL MOWER

PART NO(S): WCF85 & WCF105



IMPORTANT

**Read these instructions before installing and
using this implement**

PLEASE NOTE

**Make sure all potential operators of this equipment review this manual
and all safety messages contained within.**

1.1 Safety First

Read this service manual before using the machine.

This safety alert symbol indicates important safety messages in this manual. When you see this symbol, carefully read this message that follows and be alert to the possibility of personal injury or death.

This machine is designed for pulverizing grass and short bramble, and should be used for the indicated purpose. You take the responsibility if the machine is used for any other purpose.

For safety of personnel and good performance of the mower, you should check the performance of the mower and the tractor before starting.

All persons and animals should keep away the machine when you start it.

The operator should not wear too loose clothes while operating the machine.

Do not touch the rotor when the machine rotates.

Keep away the mower when it moves.

When the tractor and the mower are travelling on the road, always keep the PTO off.

Before repairing the machine, turn the tractor off and remove the key keeping it with you.

Always keep the machine maintained in a good state and where necessary, repair or change the defective parts.

Don't use the machine to transport personnel.

Don't modify the machine.

Pay attention to the sharp and pointed parts while repairing the mower.

All protective parts shall be guaranteed to be in good state before starting the machine.

Don't leave the tractor when moving the machine; and always take away the key of the tractor with you.

The machine should be operated at the recommended speed.

Don't move between the tractor and the mower.

Don't start operate the mower in a confined space due to the exhaust from the tractor

Always wear appropriate protective clothing, eg: eye and ear protectors

1.2 Safety Signs

1.2.1 Care of Safety Signs

Keep safety signs clean and legible at all times.

Replace safety signs that are missing or have become illegible.

If a component with a safety sign(s) affixed is replaced with a new part, make sure new safety sign(s) are attached in the same locations as the replaced components.

Safety signs are available from your authorized Distributor or Dealer Parts Department or the factory.

1.2.2 Safety Signs locations

The types of safety signs and locations on the equipment are shown in the illustrations that follow. Good safety requires that you familiarize yourself with the various safety signs, the type of warning and the area, or particular function related to that area, that requires your SAFETY AWARENESS.

Before operating the machine, the following areas should be checked off:

Before starting up the machine, check and Lubricate all grease points, all lubricated parts inside the machine.

Use only an agricultural tractor of horsepower within limits of the machine specified.

Check that the machine is properly attached to the tractor. Be sure retainers are used on the mounting pins.

Be sure extra weights are mounted on the front of the tractor.

Check the oil level in the gearbox. Add as required.

Check that the tractor PTO shaft turns freely and that the machine driving shaft can telescope easily.

Check the blades. Be sure they are not damaged or broken and swing freely in their mount. Repair or replace as required.

Check and tighten the blade bolts.

Check for entangled material in all rotating parts. Remove this material.

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

Before installing the universal joint, the tractor and the machine motor shall be stopped and the key be taken away. The universal joints shall be installed in good state, with proper protective parts.

The chain on the protective parts of the universal joint shall be guaranteed in good condition, in case, automatic rotation occurs.

All other persons shall leave the ground before connecting the driving power from the tractor. Keep the output of the tractor at 540 RPM.

Before cleaning, repairing and lubricating the machine, stop the motor and take away the key with you.

When the universal joint is not connected with the tractor, they must be connected again through the frame to protect the joint from damaging.

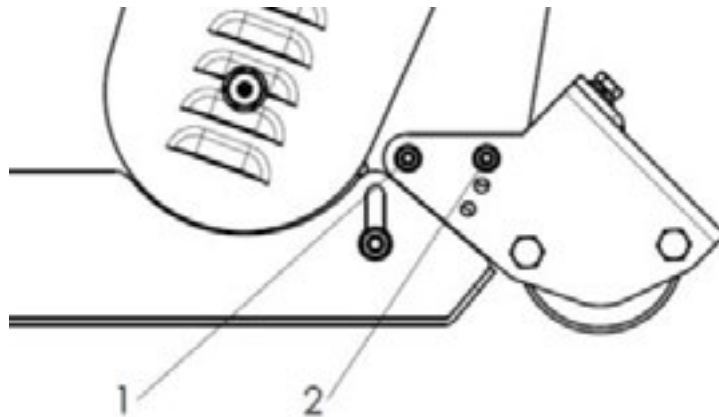
Don't approach the machine when the machine runs.

Adjusting the Height

To get the most out of your flail mower, it should be set within the recommended height.

To save fuel and power and reduce wear and tear, the cutting height must be regulated correctly.

When adjusting the working height, loosen screw (1), remove screw (2) on both sides; The roller height (see following drawing) can be adjusted by aligning the selected hole in the roller support bracket at position 2. The lowest hole is the highest working height; put the screw (2) into the selected hole; tighten screw (1) and screw (2).



Flail Mower Adjustment

On a flat piece of ground, attach the Flail Mower to the Tractor using the three point linkage

Use a solid adjustable top link

Lower the three point linkage to its lowest position

With the roller at the rear in contact with the ground, adjust the length of the top link so that the lower edge at the side of the flail mower is parallel with the ground

Rotate the blade drum by hand so that a row of blades hang vertically towards the ground.

Measure the clearance between the bottom of the extended blades and the ground.

Minimum 50mm

Note in rough or lumpy paddocks the clearance needs to be increased to ensure that the blades don't impact the ground in operation.

Adjust the roller height to increase or decrease the blade clearance as required

When the Flail Mower has been set up with the required tolerances: Operate the Flail Mower with tractor in low range and the PTO delivering 540 RPM

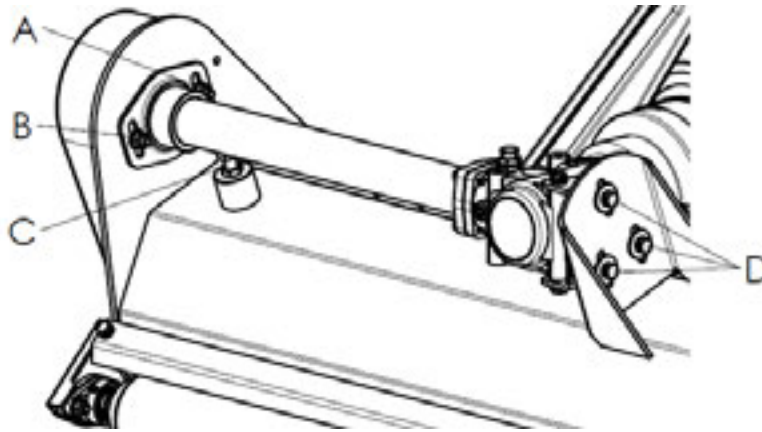
Regulating the Tension of Driving Belt

ATTENTION: The machine shall always stand still for regulating the tension.

Remove the driving belt cover.

Loosen the Screw A and B that locks the support shaft and loosen the counter nut C.

Loosen the screws that lock the gear box on the mounting plate D.



Adjust the drive belt tension. The correct belt tension is achieved when the belt can be deflected by the belt thickness about 10mm at the centre point between the pulleys.

Align the gearbox so the drive shaft is parallel with the body.

Use a straight edge to make sure the belt pulleys are in line and running true. If misaligned, call your dealer or service agent for technical support.

Starting up

Before starting the machine, control and adjust the following items:

Tension of driving belt.

Oil level of gear.

Point of lubrication

All bolts, nuts and screws.

The machine coupling is equipped with 3 pins so that the machine can be coupled with all tractors with universal coupling with 3 pins. Each telescopic pole on the machine can be adjusted properly according to the type of the tractor. Keep the Flail mower away the tractor with a certain distance. The universal joint shall be tense and the largest distance in the closed state shall be 5/10 cm.

Moving the lifting arm, and putting it between axes, insert the joint pins and fix them with pins. Fix the lifting arm with chain and tensioning device so as to prevent lateral movement of the machine. Connect the universal joint to the PTO shaft of the tractor on the side of the tractor. In any event, it cannot produce a collision in any position.

SERVICE AND MAINTENANCE

Grease:

Use multi-purpose lithium based grease.

Gear Box Oil:

Use N46 drive &hydraulic dual-purpose oil or equivalent for all operating conditions.

Each Gearbox Capacity: 0.85 liter

Storing Lubricants:

Your machine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture and other contaminants.

GREASING

Use a hand-held grease gun for all greasing.

Wipe grease nipple with a clean cloth before greasing, to avoid injecting dirt and grit.

Replace and repair broken nipple immediately.

If nipples will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace nipple if necessary.

ATTENTION: All maintenance, repairing, cleaning and lubricating shall be conducted when the tractor and motor are stopped and the key is taken away.

By following a careful service and maintenance program for your machine, you will enjoy many years of trouble-free operation.

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

4.2.1 8 Hours or Daily Maintenance

Check and screw all nuts and bolts in connection parts.

Check the blade and fixing parts every day and replace the damaged parts if they are found damaged. Don't install damaged, worn and unbalanced blade. New sleeve shall be used to replace the worn fixing parts on the blade.

NOTE:

The operator shall put on gloves and use suitable tools before changing blade.

Check the oil in gearbox. Fill them up to line if it's necessary.

Press butter in each oil nipple three to five times.

Clean the implement; take away all grass and mud.

Season Maintenance

Check the machine as below beside the terms of daily maintenance.

Check the oil in gearbox; replace it if it is bad.

Check the bearings of blade spindles whether mud and water have been enter because oil seals are damaged, if it's so, disassemble and clean them and replace them if it is necessary. And then press butter into them.

Check the distance between bearings and gears. Adjust them if it's necessary.

Annually Maintenance

Cleaning mud and grass on the machine thoroughly.

Check all clearance between bearings and gears if you have replaced them. Please run it without load for 3-5 minutes.

Check and clean blade axles. Replace oil seals and press butter into them.

Check all blades, replace then if they are wear-out or damaged.

Repair the side skirts; let them to original technical condition. Replace damaged or broken protective devices.

Remove the driving shaft from the machine. Pull the machine driving shaft apart. Check and replace any components that are damaged or worn. Install the driveline on the machine. The machine driving shaft should telescope easily and the guard turn freely on the shaft

Let the oil in gearbox drain out thoroughly. Check and clean it. Fill new gear oil up to the dedicated oil level.

The oil shall be drained off after 50 hours of using time. Then the oil shall be drained off every 250 hours. One time every year at least.

The draining procedure is as follows: remove the draining bolt under the gear box, so that the oil drains off. After the oil is drained off, put back the cover and fill the gear oil up to the dedicated oil level.

Storage

The machine inside and outside shall be cleaned carefully so as to avoid corrosion.

Don't spray water on the rolling bearing if you clean the machine with high pressure sprayer.

Check and clean the universal joint, driving belt press roller, or replace them if they are not in good state.

Spread oil on all parts required.

Recoat the parts rubbed and damaged for anti corrosion.

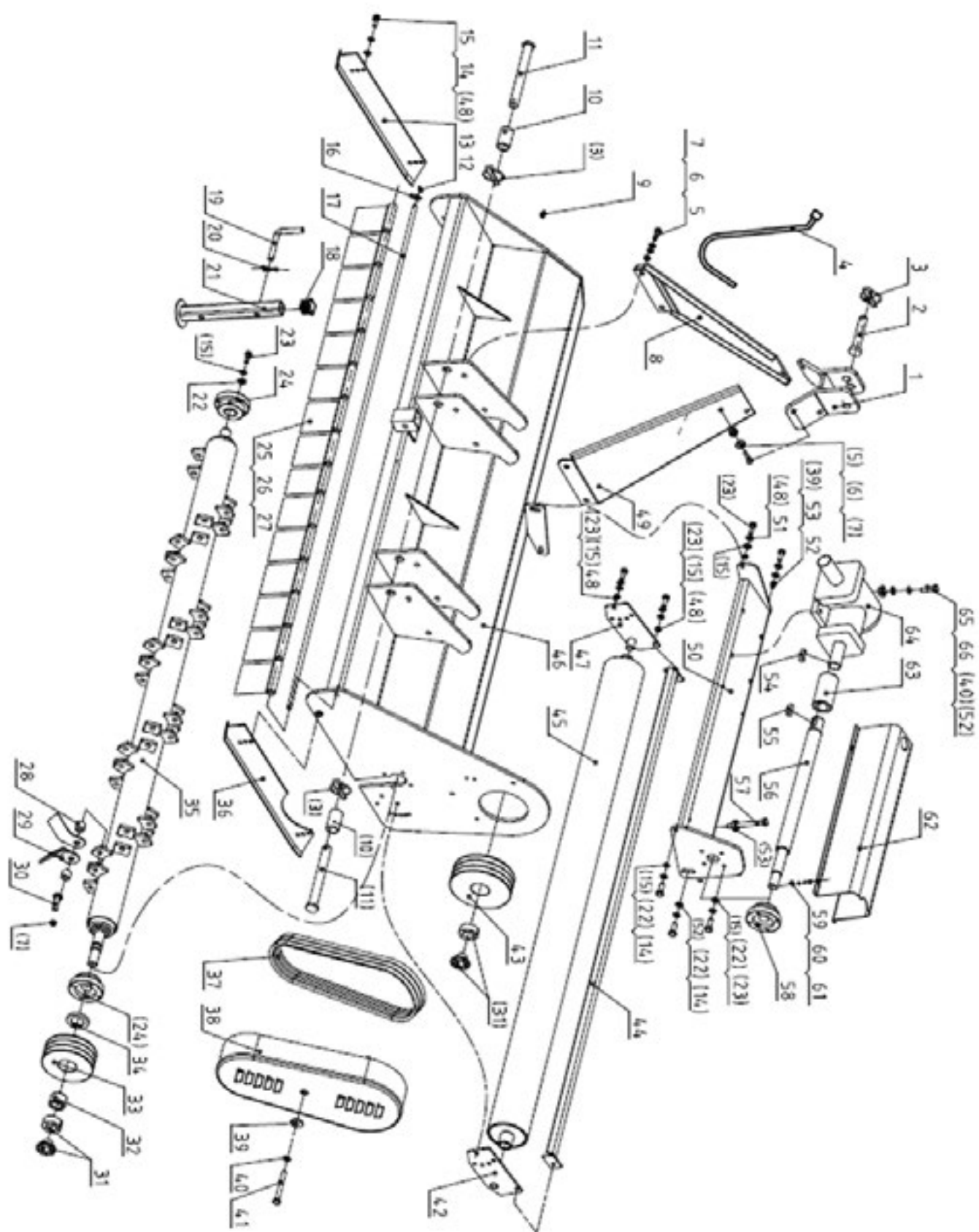
Store the machine in a dry, level area. Support the frame with planks if require.

Operation After Storage

Check oil level and add it if not enough.

Check and tighten all screws and nuts;

Check the regulated state of the machine.



Ser.No.	Part No.	Name & Specification	Quantity	Remarks
1	EF175-020	Hanging arm weldment	1	
2	EF175-118	Hanging pin (upper)	1	
3	MT001	Pin shaft weldment	3	
4	EF175-117	Hook weldment	1	
5	GB5783-86	Bolt M12*35	8	
6	GB6170-86	Plain washer 12	16	
7	GB6184-86	Looknut M12	8	
8	EF175-022	Connection arm weldment(R)	1	
9	DIN71412-86	Oil cup M8*1	1	
10	EF175-114	Sleeve	2	
11	EF175-120	Hanging pin (down)	2	
12	GB879-86	Slotted spring pin 4	2	
13	EFL155-021	Connection plate assenbly	1	
14	GB5783-86	Bolt M8*20	6	
15	GB97.1-86	Plain washer 8	40	
16		Plain washer 10*1	30	
17	EFL155-110	Fender axle	1	
18	EF175-115	Square pipe stopper	1	
19	EF175-116	Right angle pin	1	
20	GB91-86	Cotter pin	1	
21	EF175-023	Supporting foot weldment	1	
22	GB93-87	Spring washer Φ8*1.5	15	
23	GB5783-86	Hex bolt M8*25	19	
24		UC205 Bearing seat assembly	2	
25	EF175-108	Fender(General)	17	
26	EF175-109	Fender(Allocated)	3	
27	EF175-108(A)	Fender(General)	3	
28	EFL155-102	Distance sleeve	48	
29	EFL155-113	Y blade	48	
30	GB5782-86	Bolt M12*80	24	
31		Swellable sleeve 22X47X34	2	
32	EFL155-103	Bushing block	1	
33	EFL155-109	Driven wheel (Vice)	1	
34	GB13871-86	Oil seal 55*40*8	1	
35	EFL155-014	Blade axle weldment	1	
36	EFL155-020	Connection plate assenbly	1	
37	GB11544-86	Strap 13*940	3	
38	EFL155-022	Belt wheel cover weldment	1	
39	GB96.1	Big plain washer 10	2	
40	GB93-86	Spring washer 10	5	
41	GB5782-86	Bolt M10*95	1	
42	EFL155-016	Adjustable welding assembly(L)	1	
43	EFL155-108	Drived wheel (Main)	1	
44	EFL155-018	Fender welding assembly	1	
45	EF175-013	Roller assembly	1	
46	EFL155-011	Welding bracket assembly	1	
47	EFL155-017	Adjustable welding assembly(R)	1	
48	GB6184-86	Looknut M8	11	
49	EF175-021	Left connection arm weldment	1	
50	EFL155-012	Gear box support assembly	1	
51		Middle plain washer 8	2	
52	GB6170-86	Nut M8	5	
53	GB5783-86	Bolt M10*35	1	
54	GB1095-86	Flat key 10*10*35	1	
55	GB1095-86	Flat key 10*10*20	1	
56	EFL155-106	Coupling shaft	1	
57	GB2783-86	Bolt M10*70	1	

58		UC205 Bearing seat assembly	1	
59	GB29.2-2000	Six angle cross bolt M8*20	4	
60	GB97.1-2000	Plain washer 8	4	
61	GB93-2000	Spring washer 8	4	
62	EFL155-104	Gear box protection cover	1	
63	EFL155-107	Axle sleeve	1	
64	XH30.290Z.01W	Gear box	1	
65	GB5783-86	Hex bolt M10*40	4	
66	GB97.1-86	Plain washer 10	10	

