

FLAIL MOWER OPERATION MANUAL



Quality Certification

Products: Flail Mower

Model:

No:

Inspector:

Date of manufacture:

Hereby certify that all machine parts manufactured and supplied were tested by our Workers Quality Division for accuracy to sizes and for quality.

Product		Warranty	Remark
Main Unit	Hydraulic motor	12 Months	
	Gear box	12 Months	
Teeth/Hammers		N/A	
Belts		N/A	
Hydraulic Hoses		N/A	

SAFETY PRECAUTIONS

I. Instructions to customers:

Before using the FLAIL MOWER, the customer must carefully read the operation manual to ensure the correct use of the FLAIL MOWER. If the operation manual is not carefully read, and the FLAIL MOWER is misused, the manufacturer will not be responsible.

II. Instructions for operators:

Before using the FLAIL MOWER, the operator must carefully read the operation manual and operate in strict accordance with the requirements of the operation manual, otherwise, the manufacturer will not be responsible for the damage caused by the operator's failure for not reading the operation manual or not conducting formal and systematic training.

III. Replacement of parts:

The customer should use manufacturers original parts when purchasing the FLAIL MOWER from the manufacturer, otherwise the manufacturer will not be responsible for the damage caused by the after market parts.

IV. Pipelines:

When customers use the FLAIL MOWER, they should use special and matching pipelines, and every time they dismantle them, they should make sure that the pipelines and joints are clean. If impurities are taken into the system causing damage, the manufacturer will not be responsible.

V. Use of hydraulic oil:

The oil on the excavator should be changed frequently according to the service life of the excavator. If the oil products are not changed in time, the manufacturer will not be responsible for the damage of the FLAIL MOWER.

VI. Operating Environment:

Carefully observe the construction site and strictly observe the construction safety regulations to prevent safety accidents. It is forbidden to operate machines with drugs such as alcohol or doping. Preheat before operation; After the job or when just stopping the job, you must confirm whether the device stops the job completely.

DISCLAIMER

The manufacturer shall be responsible for the FLAIL MOWER quality problems themselves, but shall not be responsible for other related problems such as delays, industrial injuries caused by quality problems or other reasons.

INSTALLATION

The mower was shipped complete with appropriate mounting for your specific unit. Hoses and couplers of proper length and size must be furnished by you or your dealer.

NOTE: Recommends a case drain be installed for motor longevity.

NOTICE! AVOID HOSE DAMAGE. Route hoses away from hot and/or moving parts. Install hydraulic hoses, adapter fittings and quick disconnects as required.

WARNING! TO AVOID SERIOUS PERSONAL INJURY. Hoses must be rated for 4000 psi (276 bar) or greater. Secure all hoses with hose clamps or zip ties.

Install the mower by following your excavator operator's manual for installing an attachment.

Start engine and slowly cycle the auxiliary circuit several times to purge system of air and check for proper hydraulic connection, hose routing and hose length.

Check the attachment for proper direction, installation and hydraulic leaks.

WARNING! TO AVOID SERIOUS PERSONAL INJURY make sure the mower is securely engaged and locked to the attachment mechanism of your unit.

Failure to do so could result in separation of the attachment from the unit.

HYDRAULIC CONNECTIONS-CASE DRAIN LINE FITTING

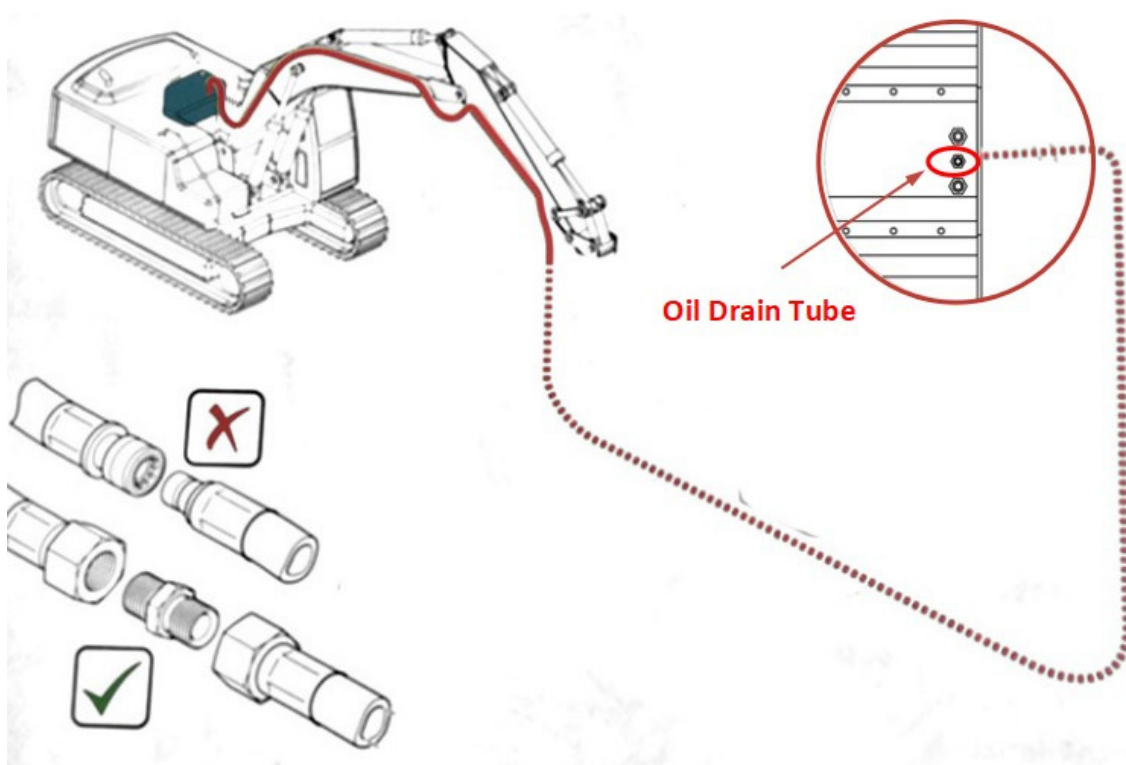
The FLAIL MOWERS are fitted with a case drain line.

This is a flexible hose protruding from the drive unit hood and must be connected to a line that returns to the machined hydraulic fluid reservoir,.

The parts required to complete this circuit will vary, depending on the machine and the hydraulic equipment fitted.

When fitting a case drain line, there must be no restrictions to the flow between the drive unit and the reservoir.

You MUST not use quick release couplings.



OPERATION

INTENDED USE

This mower is designed to cut grasses, weeds, light to medium brush and saplings/trees up to 50mm diameter. Consistent cutting of material larger than 50mm diameter will result in accelerated blade wear and blade breakage. Use in any other way is considered contrary to the intended use.

Compliance with and strict adherence to operation, service and repair conditions as specified by the manufacturer, are also essential elements of the intended use.

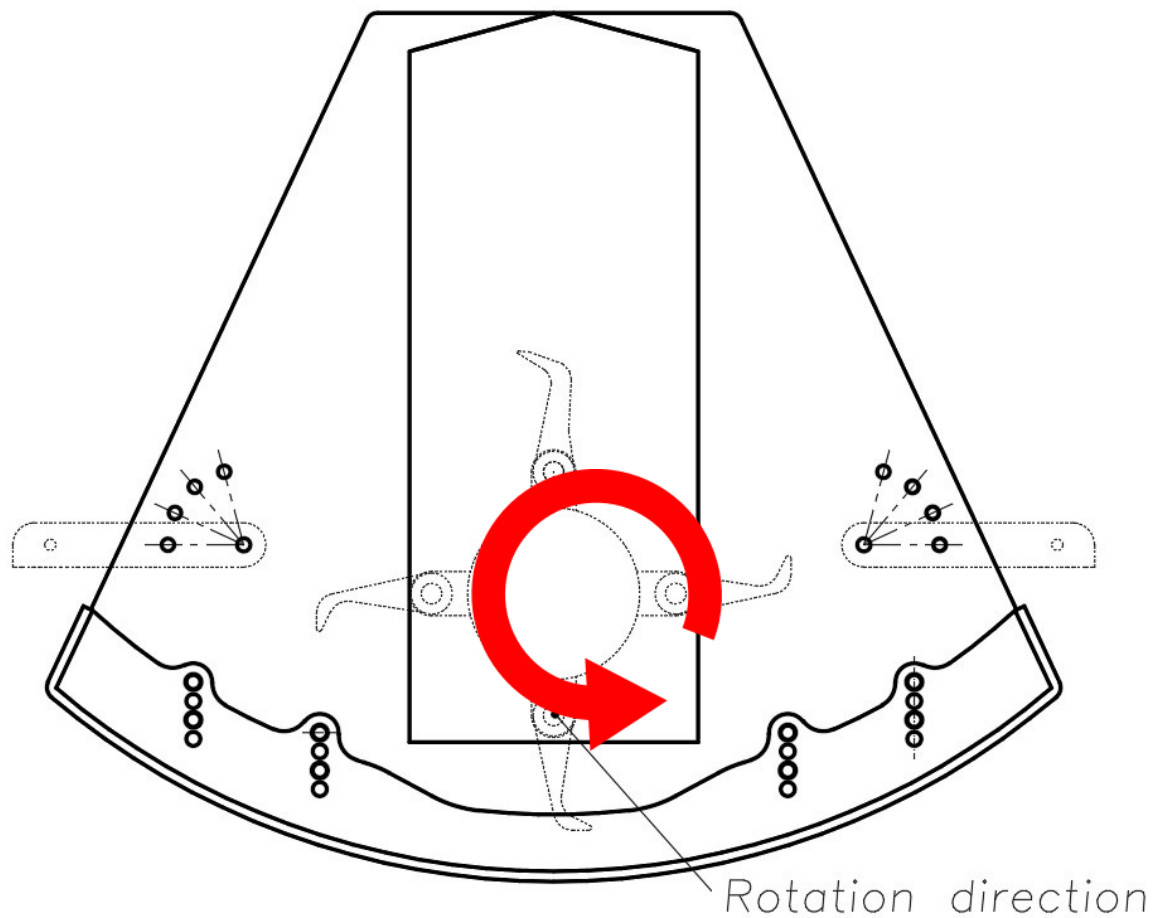
WARNING

TO AVOID SERIOUS PERSONAL INJURY make sure the mower is securely engaged and locked to the attachment mechanism of your unit. Failure to do so could result in separation of the attachment from the unit.

It is critical that the supply of oil is within the stated flow & pressure limits for the particular drive unit.

Warning: If pressure and oil flow exceed the maximum value which mower marks 3500PSI, hydraulic motor and bearing will be damaged. And as a consequence, no warranty will be provided, factory only provide paid maintenance services.

Rotation Direction



**Hammers moving in counter-clockwise direction.
From protection box of view.**

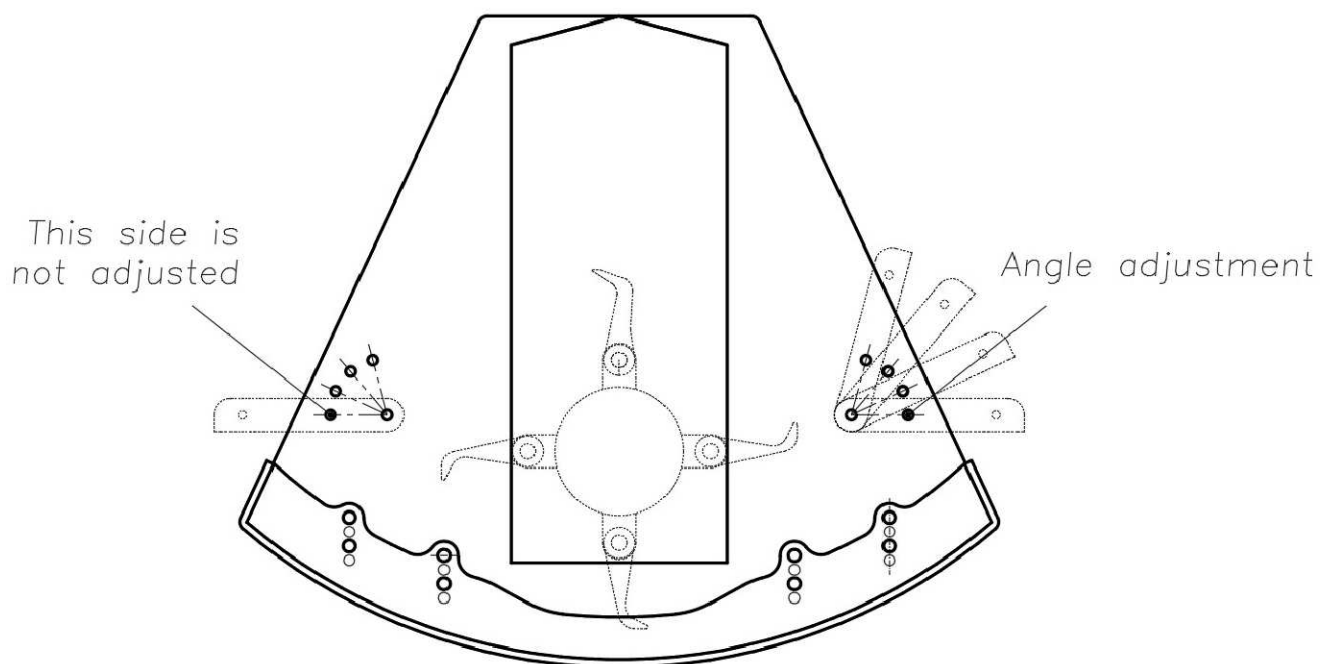
The mower rotates in one direction.

Therefore, the direction of cutting weeds is in the direction of the hammer blade rotation.

Guard Board Height Adjustment

The height of the guard plate can be adjusted by 4 angles through bolts.

When the weeds are high, it is need to raise the guard board at the side in the forward direction , not required on the other side.



CAUTION! A FLAIL MOWER IS A DEMANDING MACHINE.

Only fully trained operators or trainee operators under supervision of a fully trained person should use this machine.

Before operating mower:

- Learn mower and excavator controls in an off-road location.
- Be sure that you are in a safe area, away from traffic or other hazards.
- Check all hardware holding the mower to the excavator, making sure it is tight.
- Replace any damaged or fatigued hardware with properly rated fasteners.
- Make sure all hydraulic hardware and hydraulic fittings are tight.
- Replace any damaged or fatigued fittings or hoses.
- Be sure all persons not operating the mower are clear of the area being cleared.
- Always wear proper apparel; such as safety glasses, goggles or a face shield and ear protection.

While operating mower:

- When operating the mower, adhere to all government rules, local laws and other professional guidelines for your application.
- Before leaving the operators area for any reason, lower the mower to the ground. Stop the excavator engine, set the brakes and remove the key from the ignition.
- Keep hands, feet, hair and other loose clothing away from all moving parts.
- Leave all shields and safety equipment in place when operating the mower.
- Be aware of extra weight and width a mower adds. Reduce travel speed accordingly.
- When operating on rough terrain, reduce speed to maintain control of the excavator.

Be fully aware flail mower shreds grass and timber using a spinning rotor and blades, the forces cause ejections of material such as rocks and large pieces of timber. These can be ejected a considerable distance beyond 50m. Please ensure people are a safe distance from the working flail mower.

NOTICE!

Operate the mower only when you are at the operator's station.

Reduce speed when driving over rough terrain, on a slope or turning to avoid overturning the vehicle.

Avoid side slope travel whenever possible. Drive up and down the slope.

Before exiting the excavator, lower the mower to the ground, turn off the excavator engine, remove the key and apply the brakes.

Detaching

On firm level ground, lower the mower to the ground.

Turn off the engine. Follow excavator instructions for relieving pressure in lines.

Disconnect couplers.

NOTICE!

Connect couplers together or install caps to prevent contaminants from entering the hydraulic system.

Follow your excavator operator's manual for detaching (removing) an attachment.

General Storage:

NOTICE!

Do not store in direct sunlight. Materials will deteriorate prematurely if stored in direct sunlight.

Do not store near intense heat.

- **Storage:**

- Clean the unit thoroughly, removing all mud, dirt and grease.
- Inspect for visible signs of wear, breakage or damage.
- Order any parts required and make the necessary repairs to avoid delays upon removal from storage.
- Tighten loose nuts, capscrews and hydraulic connections.
- Lubricate grease fittings.
- Seal hydraulic system from contaminants and secure all hydraulic hoses off the ground to help prevent damage.
- Store unit in a dry and protected place. Leaving the unit outside will materially shorten its life.

Additional Precautions for Long Term Storage:

- Touch up all unpainted surfaces with paint to avoid rust.

Removal from Storage:

- Remove cover.
- Wash unit and replace any damage and/or missing parts.
- Lubricate grease fittings.
- Check hydraulic hoses for damage and replace as necessary.

OPERATION

- Check unit stability before transporting.

WARNING! VERIFY THAT ALL TIE DOWN ACCESSORIES (CHAINS, SLINGS, ROPES, SHACKLES AND ETC.) ARE CAPABLE OF MAINTAINING ATTACHMENT STABILITY DURING TRANSPORTING and are attached in such a way to prevent unintended disengagement or shifting of the unit.

Failure to do so could result in serious personal injury or death.

MAINTENANCE SCHEDULE

Regular maintenance is the key to long equipment life and safe operation.

Maintenance requirements have been reduced to an absolute minimum.

However, it is important that these maintenance functions be performed as described below.

Procedure	Before Each Use	After Each Use	Every 40 Hours	Every 160 Hours
Fittings/Hoses, Hydraulic - Check for leaks/Tighten Check for damage	✓			
Fittings, Zerk - Grease (See lubrication points) NOTE: Always Grease Bearings after use when bearings are hot.		✓		
Hardware - Check for tightness	✓			
Worn parts and Cracked Welds - Visually inspect				✓
Flail knives - Check for wear/Damage	✓			
Deflector Flap - Check for Damage	✓			
Hoses - Check for kinked/Pinched	✓			
Excavator mounting bolts - Re-torque as necessary			✓	
Decals - Check for missing/damaged safety decals	✓			
Case drain coupler - Check for engagement	✓			
Roll Pins - Check for proper installation in flail bolts	✓			
Rotor - Check for dirt/debris	✓			
Clean Unit - Remove all mud, dirt and grease		✓		

WARRANTY STATEMENT

The Warranty does not cover the following:

1. Normal wear and tear.
2. Faults or failures due to incorrect dealer assembly, pre delivery inspection or installation.
3. Faults or failures due to use under load conditions greater than the design specification.
4. Transportation costs of parts.
5. Consequential loss of any description.

Users must be operated in accordance with the recommended procedures and within the ranges specified on the FLAIL MOWER Unit and stated in the operating manual.

Any claims under this warranty must be made in writing within fourteen (14) days of the fault occurring.

Any claims not received within 14 days may be deemed invalid.

Any goods returned by the customer, under warranty or for repair, must be freight paid unless authorised in writing.