



# LandMax

Suppliers Of Quality Agricultural Machinery

**21 Plummers Point Road, Tauranga**



## **Forestry Mulcher**

**FFM140**

## **Operator's Manual**





**The word CAUTION preceded with a safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.**

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# CAUTION

The word **CAUTION** without a safety alert symbol means there is possibility of a hazards that can result in equipment damage.

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# NOTICE

Indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.

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## SAFETY FIRST

With any piece of equipment, new or used, the most important part of its operation is **SAFETY!** FARMER-HELPER Inc.

encourages you and your employees to familiarize yourselves with your new equipment and to **STRESS SAFE OPERATION!!**


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### Prior To Operation:

- Read the owner's manual in its entirety and follow all safety procedures.
  - Check all grease points per the owner's manual
  - Inspect all fasteners for tightness with power off.
  - Manually turn rotor to inspect tool bolts with engine off.
  - Check gearbox oil (PTO models) for proper level per owner is manual.
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	<p><b>Keep sufficient distance away from electrical power lines.</b></p>
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#### 1.4 Forestry Mulcher – Description and Applications

Forestry	Orchard Removal	Land Clearing
Transfer Stations	Stump Grinding	ROW Maintenance
Yard Waste Process	Forest Fire Prevention	Brush and Slash Piles

The versatile forestry mulcher was designed for shredding woody materials. The forestry mulcher excels at processing yard waste, land preparation and slash reduction. It has multiple uses for farmers, parks, golf courses, loggers, land clearing companies, ranchers, foresters and silvaculturists.

The mulchers fixed tools are designed to withstand daily brush shredding, land clearing, and stump grinding operations.

The forestry mulcher shreds material into a fine particle size by going over the shredded material until the desired texture is achieved.

If left on the ground the shredded material is beneficial to the soil. On steep slopes the output from the mulcher is ideal for interim erosion control.

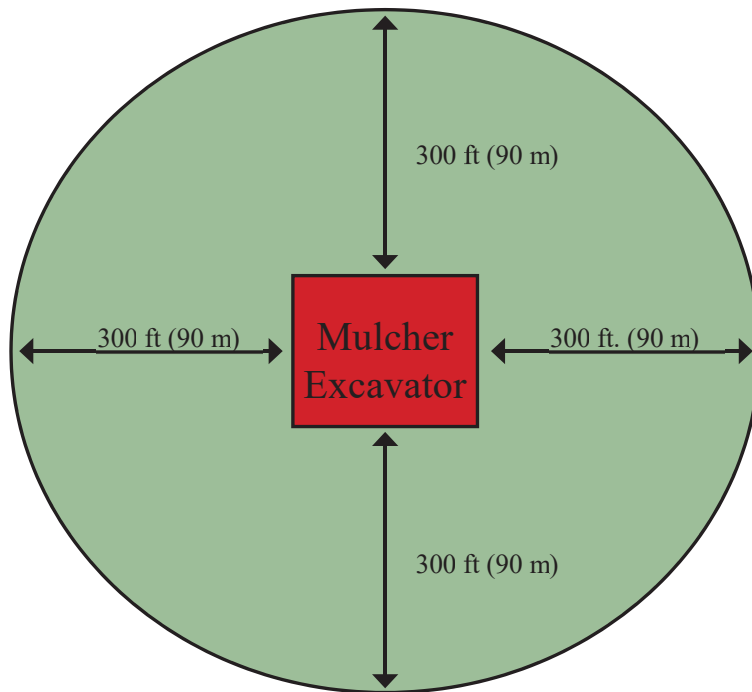
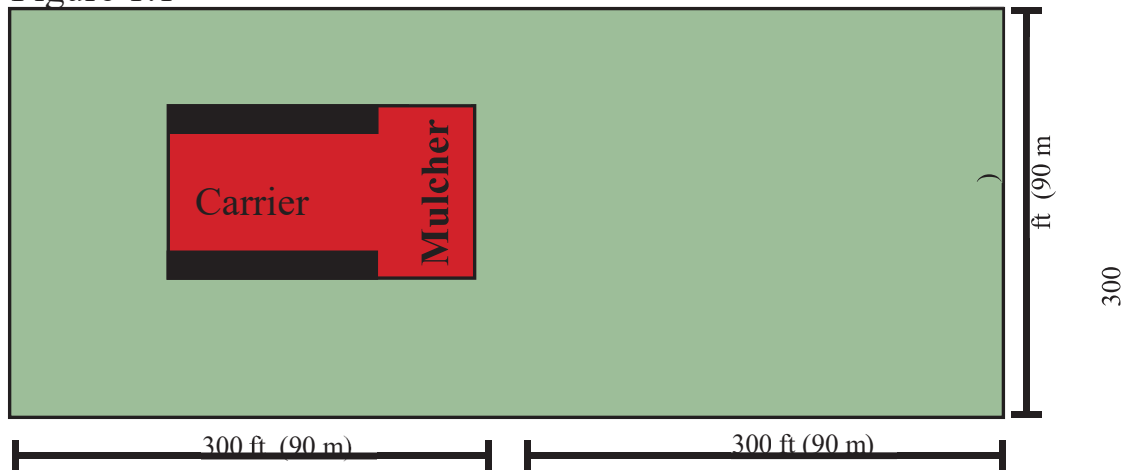




## Hazard Zone Precautions

- It is the **OPERATORS RESPONSIBILITY** to ensure that **NO ONE ENTERS THE HAZARD ZONE!**  
**WARN all persons in the area of the HAZARD ZONE**
- **STAY ALERT** for outsiders entering the work area who may not be aware of the **HAZARD ZONE**.
- Land clearing operations generally involve other machinery and people on the site. **MAINTAIN** an **AWARENESS** of all working traffic within 150 ft (45 m) (to each side) and 300 ft (90 m) (in front and behind) of the Mulcher operation.

Figure 1.1



## 1.7 Dangerous Locations



**FLYING DEBRIS OR OBJECTS AND FALLING OBJECTS CAN CAUSE SERIOUS INJURY OR DEATH**



**Improper operation and failure to follow safety precautions can cause serious injury or death. All personnel must be clear of the hazard zone while the Mulcher is in operation.**

**DANGER EXISTS MOST PROMINENTLY IN FRONT OF AND BEHIND THE MULCHER.**

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Pieces of wood and rock can project from the mulcher. This condition is dangerous. This will occur when the mulcher is raised high enough to allow material to escape.

### **FOLLOW THESE PRECAUTIONS:**

- NEVER allow anyone to enter the Safety Zone of the mulcher while it is in operation.
- INSPECT the Carrier and mulcher daily for damaged or missing deflection chains and flaps

### ***Be especially CAREFUL when:***

- When the mulcher is being raised up and out of the material that it is working in.
- When the mulcher is lowered into new material.









































- Remove the inspection plates from the side access panels to check belt tension.
  - Open the access doors at the rear of the mulcher to expose the adjustment bolt and fixing screws.
  - Loosen the fixing screws until the bearing housing can be moved with the adjusting bolt.
    1. Ideal tension is the lowest tension at which the belt will not slip under peak load conditions. Refer to Figure 6.1 for belt deflection at the center of the span between pulleys.
    2. Over tensioning shortens belt and bearing life.
    3. Keep belts free from foreign material, which may cause slippage.
    4. Never apply belt dressing as this will damage the belt and cause early failure.
  - When proper tension is achieved:
    - Lock the adjusting bolt.
    - Tighten the fixing screws.
- To Replace Drive Belts
- Follow the same procedure as stated above for adjusting belts except:
- Remove entire side access panels.
  - It is not necessary to remove side inspection plates, which are mounted to the access panels.





## 6.3 Lubrication Points

# NOTICE

### LUBRICATION TYPE

*The manufacturer's warranty is conditional upon using a quality #2 lithium based grease.*

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# WARNING



- Shut-off the engine. Put carrier in depressurized state.
  - Wait until all machine components have completely stopped before touching them.
  - Use lockout/tag out procedure (29CFR 1910.147) during any inspection or maintenance.
  - Secure lifting cylinder with locking device before getting in hazardous area.
  - Insert safety lock before getting in hazardous area.
  - Attach support before getting into hazardous area. Refer to the Safety Section in this manual for more information.
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- Rotor Bearings – Grease Daily. Use 1 pump of grease for each hour of operation. For best results and to ensure long component life grease 4 pumps after every 4 hours of operation.

*Notice: If grease is noticed inside the belt housing, decrease the frequency of lubrication.*

- Drive Shaft Bearing Housing – Every 50 hours (1-2 pumps max). Open front access panels on each side. Use hand pump only. **Notice:** *Excess lubrication can elevate the operating temperature of the bearing housing.*

**Acceptable levels at housing are:**

- Minimum- 50% full (Add 1 pump and recheck)
- Maximum 75% at assembly

**OVER LUBRICATING DRIVE BEARING**

**CAUTION**

**Over-lubricating sealed drive bearings will cause premature seal failure resulting in bearing failure, premature shaft wear and/or hydraulic motor shaft failure.**

**6.4 Tighten All Bolts!**

The mulcher is assembled with superior grade fasteners with locking nuts where applicable and torqued to their proper range. All precautions are taken to keep bolts tight but with the forces exerted by the mulcher the potential for loosening bolts exists.

- Go over the machine and check all bolts for tightness after the first 10 hours.
- Check all bolts daily thereafter

**7.0 ROTOR MAINTENANCE**

**7.1 Visual Inspection**

- Safely Position the machine as instructed in Section 6.1 so that the rotor turns freely.
- Check the tools daily for:
  - Lateral clearance

## CAUTION

- Bolt tightness (See model specific parts manual for torque value.)
- Condition of carbide tips

**After 20 to 40 hours of operation all tools must be checked for proper torque. Failure to check torque after initial 20 to 40 hours can result in tool and tool holder failure. Note: See rotor specific parts manual for torque specifications.**

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### 7.2 Tool Replacement

- Remove fixing bolts.
- Remove old tool and insert new tool.
- Torque new fixing bolts and torque to factory specifications (see your specific model parts manual). Use only factory supplied high strength bolts.

## NOTICE

**Always use new hardware to ensure proper torque.**

### 8.0 DISPOSAL PROCEDURE

- Do not discard into municipal waste stream.
- Disassemble and contain hydraulic components in approve container. Discard through a licensed processing facility.

