

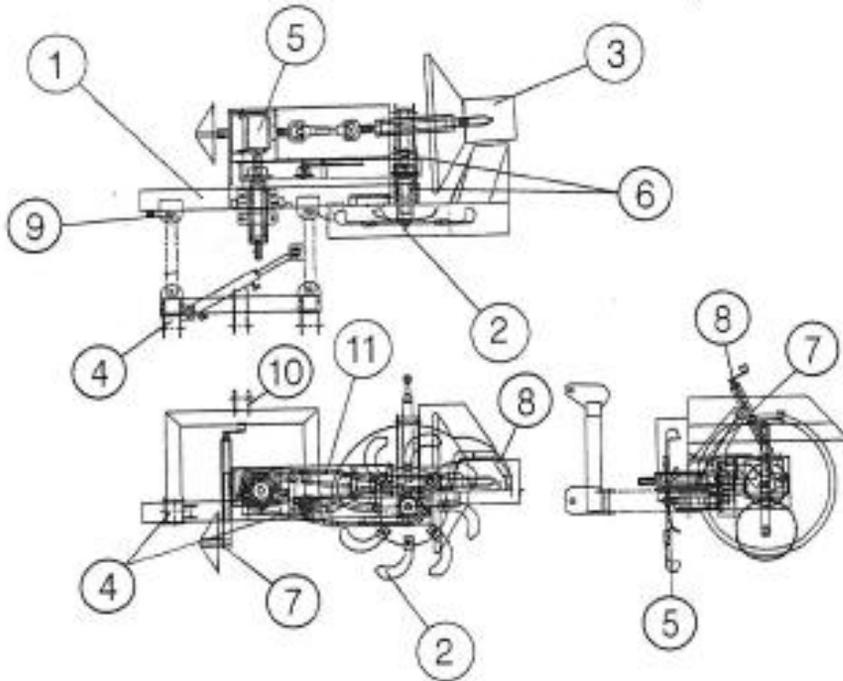
LEEVE PRODUCTION MACHINE

SB-1000S

Operation manual



■ Structure and Features



1) Frame

A framework for the tractor on which components serving different functions are mounted

2) Tillage blades

Regularly-shaped blades designed to break up soil between ridges in a forward and rotational motion.

3) Roller

Designed to create levees by flattening the soil broken up by the blades in a rotational motion

4) Upper and lower links

Linkage devices mounted on the tractor.

5) Gearbox

A bevel gearbox used to transmit the rotational torque sent from the tractor's PTO shaft.
(9 driving gear pitches: 16 driven gear pitches)

6) Driving pulley for the tillage blades

A double V pulley used to transmit the rotational torque transmitted from the tractor's PTO shaft to the pulley on the blade side to drive the blades.

7) Tail wheels

Wheels designed to adjust the height of the tillage blades.

8) Rod for adjusting the height of the roller

9) Lower pin

Coupled to the lower link of the tractor.

10) Upper pin

Coupled to the upper link of the tractor.

11) Chain cover

Coupled to the tractor's frame.

■ Safety Instructions

- **For your safety, please read this manual carefully before using the equipment.**

- * In case of injury due to contact with the equipment, "Safety Symbols" such as "Danger," "Warning," and "Caution" have been placed on the equipment, depending on the degree of hazard.

- A. Danger:** Failure to observe the precautions may lead to death or serious injury.

- B. Warning:** Failure to observe the precautions may lead to death or serious injury.

- C. Caution:** Failure to observe the precautions may lead to wounds.

- **Precautions before use**

- *To ensure safe operation of the equipment, the operator must perform inspection once each day before using the equipment.

- *Upon finding any faults on the equipment, immediately perform maintenance to avoid problems with operation.

- *Check for damaged or broken parts, loose bolts or nuts.

- *Headbands, scarves or towels across the hips worn by all operators are prohibited.

- *Operators must wear appropriate protective equipment such as a simple uniform and hat suitable for work.

- *This equipment must only be used to create levees. Use or alteration of the equipment for purposes other than those specified herein is prohibited.

- *Improper use or alteration of the equipment for other purposes may void the warranty.

- *Please observe the following traffic safety regulations as well as the Road Traffic Act:

- A. Action to be taken in case of equipment failure: When unable to operate farm equipment on roads due to the equipment's failure or for other inevitable reasons, the operator must take action such as moving the equipment to locations other than the road.

- B. Indication of circumstances such as failure: At a distance of at least 100 meters on the road behind the equipment during the daytime, and a distance of at least 200 meters during the nighttime.

- *The operator must not operate the equipment while intoxicated but must get enough sleep before using the equipment.



- **Assembling the equipment**

- *Pull down the lower link of the tractor and couple it to the lower pin of the production machine.
- *Adjust the screws on the tractor's upper link and couple it to the upper pin of the production machine.
- *Connect the hydraulic jack to the hydraulic device of the tractor.
- *Once the assembly has been completed, tighten the bolts to eliminate any clearance in the machine.
- *Make sure that no one except the operator gets near the equipment. In particular, keep children out of touch of the equipment.
- *After finishing operation, make sure to clean up and sort out the material used during the operation.
- *Read the safety labels placed on the equipment.
- *While transporting (or operating) the equipment, make sure that the hydraulic lever is in place since the equipment may start moving. When the equipment sticks out sideways, use the hydraulic lever to position the equipment in front of and behind the operating device.

- **Precautions before operation**

- *Perform equipment checks and maintenance thoroughly and always use the equipment on an even surface and in a safe location. Make sure to have in place the safety protection devices mounted on the equipment before starting work.
- *When the protection devices have been dismantled to perform a check or maintenance on the equipment, make sure to restore them to their original positions and keep them in fully functioning condition

- **Precautions during operation**

- *While operating the machine, make sure that unauthorized persons do not get near the equipment.
- *Make sure that the operator does not come into contact with dangerous parts such as power transmission devices and rotating parts during operation.
- *Exercise caution particularly when operating a machine with sharp protrusions such as tillage blades to avoid injury.
- *Before using the equipment, place the tractor's PTO lever in the level 1 position at 540 rpm and the gear at level 1 and adjust the hydraulic lever to maximize efficiency.

- **Control points after use**

- *After finishing operation, perform checks and maintenance to prepare for the next operation.
 - A. Tightness and looseness in the assembly of components
 - B. Abrasion and wear on operating parts (V belt, tillage blades, gear, etc.)
 - C. Cleaning the equipment body.
- *After finishing work, place the equipment in the warehouse or put a cover over it in case of rain. If the equipment is not to be used for a long time, keep it in a dry and well-ventilated location without exposure to rain. Apply rust protection oil or engine oil to areas susceptible to rust.



■ Instruction Manual

1. Place the tractor lever **to the first low speed position**.
(Generally, operate faster for high water content; slower for low water content.)
2. Set the tractor's PTO to **450 RPM** (PTO level 1)
3. Set the tractor's engine **to 1200 to 1500 RPM**.
4. Read the above carefully before using the equipment.

• **Caution**

- **Startup**

*Make sure to check for any persons nearby before starting the engine or operating the lever on the equipment.

- **Operation**

*Make sure to check the surroundings and behind before turning, reversing or moving up or down the equipment.

*Make sure that no person climbs the equipment.

- **Maintenance**

*Move to a location with an even surface before performing repairs, inspection or cleaning on the equipment. Use the brakes to park the equipment, close the hydraulic down valve, and place an anti-roll bar underneath the equipment.

*Do not stand between the tractor and the machine when dismantling the machine.

*During startup and inspection, check the oil level (specified level) of each component and feed gear oil when there is not enough oil.

*During startup and inspection, make sure to inject grease into the joints.

*Check the assembled parts such as bolts and nuts and tighten them when necessary.

*Make sure to mount covers in specified locations.

■ Inspection and Maintenance Instructions

- **Stop the engine before performing checks or maintenance on the equipment.**

A. Poor working condition of the tillage blades

- *Abrasion on the driving V belt on the blade shaft – Replace with a new product (B84 specification)
- *Improper belt tension – The rotational force of the blades decreases due to abrasion in case of excessive tension, or due to an increase in the slipping of the blades in case of insufficient tension.
- *Abnormal abrasion on the tillage blades
- *Improper revolutions per minute of the tillage shaft – Adjust the RPM to +/- 540

B. Malfunction of the roller

- *Improper positioning of the roller – Place the roller on the same plane as the tillage blade.
- *Poorly compacted ridges due to the lack of elasticity of the compaction blade on the roller – Replace with a new product
- *Improper revolutions per minute of the roller shaft – Keep the RPM at around 300.

C. Overheated gearbox

- *Lack of lubricant: Supply SAE30 up to 500ml.

