



# **OPERATORS MANUAL**

20 Power Mower (Serial No.7665 and Up) For Models "40," "M," and "MT" Tractors

OMH31153 (01JAN53) English



OMH31153 (01JAN53)

LITHO IN U.S.A. ENGLISH



## FOREWORD

This manual contains valuable information on the operation and care of your new John Deere 20 Power Mower. Follow the suggestions in the manual and you will get many years of satisfactory service.

Difficulties with this or any other quality mower are largely due to lack of proper care and improper setting-up. How long the mower will last and continue to give good service depends upon the care you give it.

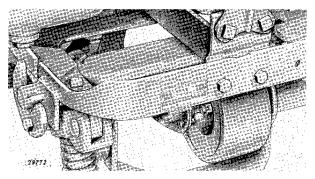
Right-hand and left-hand sides are determined by facing in the direction mower will travel when in use.

See your John Deere dealer for service. His skilled mechanics are especially trained to service John Deere machines.

The exploded views, at the back of this manual, make the identification of parts easy. When in need of parts for your Mower, see your dealer for genuine John Deere Parts.

#### SERIAL NUMBER

You will find the serial number of your mower stamped on a plate located on the left-hand side of the mower frame as shown in the illustration. Write this serial number in the space provided for handy reference later.



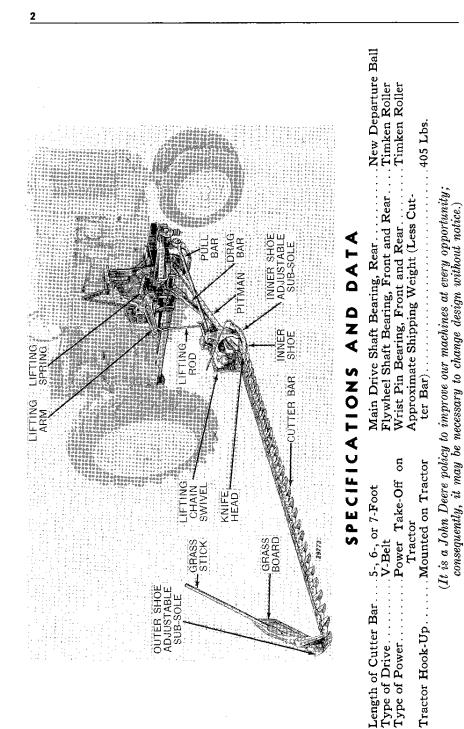
The Serial Number of your Mower is.....

Date of Purchase.....

THE COMPLETE OBSERVANCE of one simple rule would prevent many thousand serious injuries each year. THAT RULE IS: "NEVER ATTEMPT TO CLEAN, OIL, OR ADJUST A MACHINE WHILE IT IS IN MOTION."

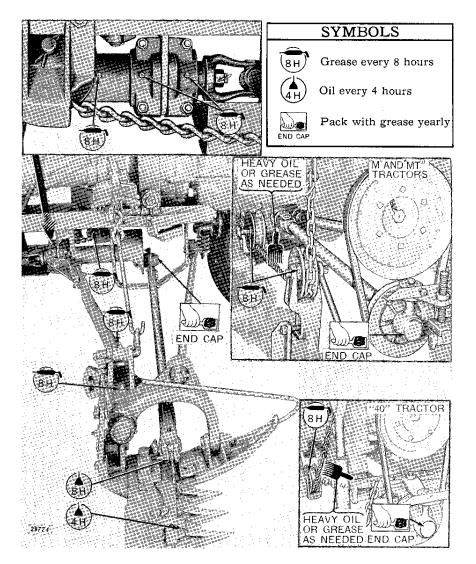
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# LUBRICATION

Use a good grade of lubricant. Wipe all fittings clean before greasing. Replace any missing fittings immediately. Thorough and regular lubrication is the largest single factor contributing to longer and more satisfactory mower performance.



## OPERATION

Keep your mower lubricated, the cutting parts sharp and in good condition, and lifting springs properly adjusted. These precautions will insure clean cutting, light draft, continuous operation, and low upkeep cost.

SAFETY FIRST. Never attempt to clean, lubricate, or adjust mower without first disengaging power take-off and shutting off tractor engine. A careful operator is the best insurance against an accident.

STARTING MOWER IN THE FIELD. Run mower slowly for awhile and observe knife, pitman connections, and other moving parts to see that they operate freely. Carefully raise and lower cutter bar several times with Touch-o-matic to see that it works properly. Check V-belt tension and sheave alignment.

**OPERATING SPEED.** Under most conditions, drive in second gear at full throttle. Avoid excessive speeds. Various mowing conditions require different mowing speeds. Operate at the travel speed that will meet crop and field conditions and provide the smoothest mowing action.

Always run tractor engine at full throttle. Running the engine slowly reduces the knife speed and may cause clogging. When necessary to slow down travel speed of tractor, shift to a lower gear, rather than retard throttle. By shifting to a lower gear, and continuing at full throttle, the knife will run at proper speed for best results.

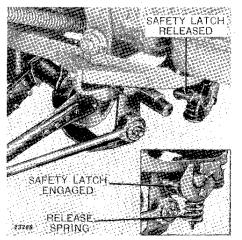
APPROXIMATE NUMBER OF ACRES CUT PER HOUR

Miles per Hour	1	1-1/2	1-3/4	2	2-1/4	2-1/3	2-1/2	2-3/4	3	3-1/4	3-1/2	3-3/4	4
5-Foot Cut	5/8	7/8	1	1-1/4	1-3/8	1-1/2	1-1/2	1-5/8	1-7/8	2	2-1/8	2-1/4	2-3/8
6-Foot Cut	3/4	1-1/8	1-1/4	1 - 1/2	1-5/8	1-3/4	1-7/8	2	2-1/8	2-3/8	$2 \cdot 1/2$	2-3/4	3
7-Foot Cut	7/8	1-1/4	1-1/2	1-3/4	1-7/8	2	2-1/8	2-3/8	2-1/2	2-3/4	3	3-1/8	3-3/8

GUMMY TRASH ON CUTTER BAR. Use water to remove gummy trash that packs on wearing plates and guards (operate mower slowly and pour water on bar). Do not let trash harden.

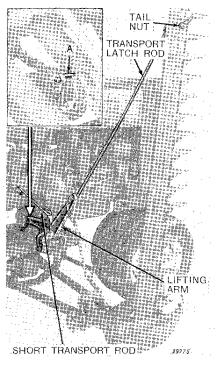
SAFETY LATCH. Should the cutter bar strike an obstruction, the safety latch releases, allowing the cutter bar to swing back. Reengage the latch by backing up the tractor until the mower returns to cutting position.

If the safety latch releases too easily, increase the spring tension slightly. Do not make the spring too tight or latch will not release when the cutter bar hits an obstruction.



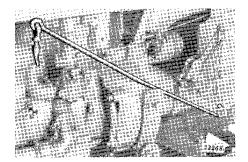
#### OPERATION

TRANSPORTING. The best way to move the mower any distance is with the cutter bar in transport position. Shut off the tractor engine. Hook the transport latch rod in the first hole of the lifting arm, not the notch, as the rod may slip out of the notch. Push the cutter bar up until the other end of the transport latch rod can be secured to the cutter bar through the hole farthest from the inner shoe. CAUTION: Be careful to keep your fingers out of the knife when raising the cutter bar. Pull lifting chain tight as possible to take up slack, and attach it to hook "A." Start the tractor engine and raise the cutter bar. Then hook the short transport rod onto the lifting arm. Remove chain from hook "A."

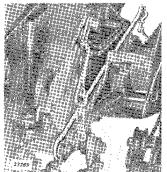


To take the mower out of transport position: Shut off tractor engine. Attach lifting chain to hook at "A," using same link in chain that was used to raise cutter bar. Start tractor engine and raise cutter bar until short transport rod can be unhooked. Lower cutter bar until inner shoe touches ground; unhook chain at "A." Remove transport latch rod and lower cutter bar.

When not in use, the latch rod can be stored as shown below on the left on the "40" and "MT" Tractors, or as shown on the right on a Model "M" Tractor.



Transport Latch Rod on Models "40" and "MT" Tractors



Transport Latch Rod on Model "M" Tractor

## MOUNTING MOWER ON TRACTOR

#### PREPARING MODEL "40" TRACTOR

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1. Pin upper link to rear of tractor seat.

2. Turn out load control lock-out screw so load control yoke will not operate.

3. Remove shield from tractor power take-off shaft.

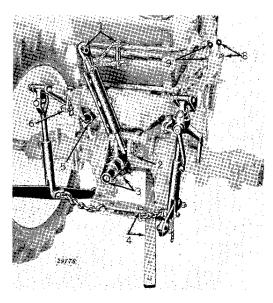
4. Remove sway stop chain anchor from drawbar support. Move swinging drawbar to the right and bolt anchor to second hole from right in drawbar support to provide room for mounting mower drive parts.

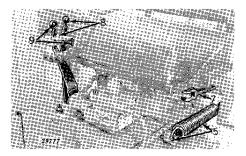
5. Remove left-hand rockshaft return spring.

6. Make certain that inner and outer left-hand rockshaft arms are not pinned together, and that pin is in holder clip provided.

7. Make certain that Touch-o-matic selector lever under tractor seat is in rear position.

8. Move right-hand or





outer Touch-o-matic control lever to rear position. This will raise the lifting arm linkage up out of the way since it is not required in the operation of the mower. Set the quadrant stop against the lever.

9. Operation of the Touch-o-matic system is controlled by the left-hand or inner Touch-o-matic control lever. The quadrant stop for this lever should be set at the rear of the slot to allow full movement of the lever.

## PREPARING MODELS "M" AND "MT" TRACTORS

Be sure tractor drawbar is in lower locked position. See Tractor Operator's Manual.

#### PREPARING MODELS "40," "M," AND "MT" TRACTORS

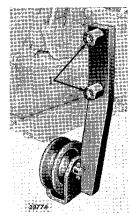
Rotate starting motor dust shield so clamp will not interfere with mower mounting bracket.

Remove cap screws from tractor center frame, both sides.

Remove nuts from implement attaching bracket, both sides.

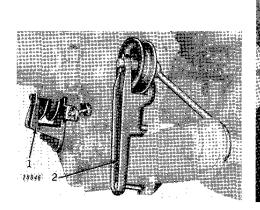
#### MOUNTING

### INSTALLING MOWER MOUNTING PARTS ON TRACTOR



#### MODEL "40" TRACTOR ONLY

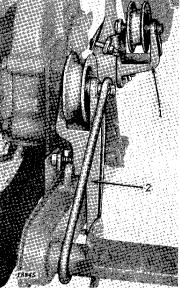
1. Attach rear lifting sheave bracket to front of axle housing, being certain that conical ends of nuts are against bracket to insure full thread engagement.



#### MODEL "MT" TRACTOR ONLY

1. Attach middle lifting sheave bracket to outside of tractor drawbar.

2. Attach rear lifting sheave bracket to outside of tractor drawbar.



#### MODEL "M" TRACTOR ONLY

1. Attach middle lifting sheave bracket to the inside of the tractor drawbar.

2. Attach rear lifting sheave bracket to the inside of the tractor drawbar.

## MODELS "40," "M," AND "MT" TRACTORS

#### **Disassemble Mounting Bracket.**

1. Remove cotter pin and straight pin and remove mounting sheave. Remove Woodruff key from shaft.

2. Slide shaft out of mounting bracket.

3. Remove clamp from mounting bracket.

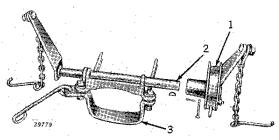
#### Install Mounting Bracket.

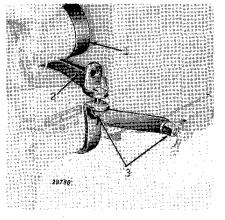
1. Starting motor dust shield is shown rotated as suggested in the preparing the tractor section.

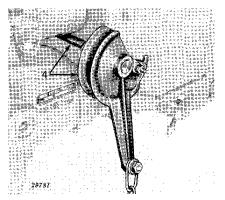
2. Turn bracket on its side with high rib down. Slide bracket under tractor starting motor. Rotate bracket so that high rib is to the front.

3. Attach clamp to mounting bracket and tractor, both sides. For "40" Tractors use nuts removed from implement attaching bracket. For "M" and "MT" Tractors, replace nuts removed with nuts furnished.

4. Slide shaft through mounting bracket. Install mounting bracket on shaft and secure with Woodruff key, pin, and cotter pin.







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