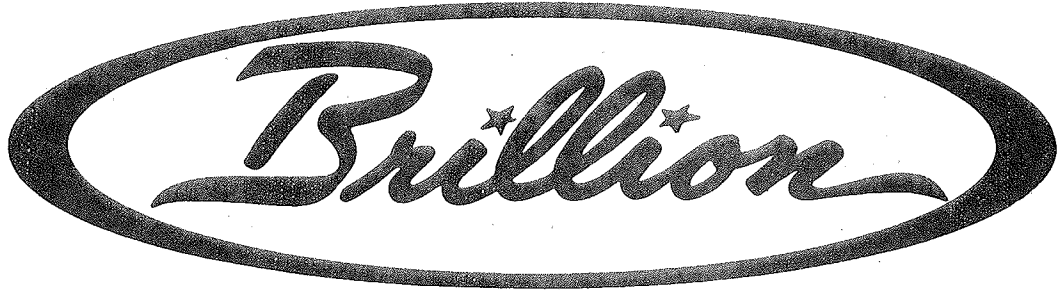
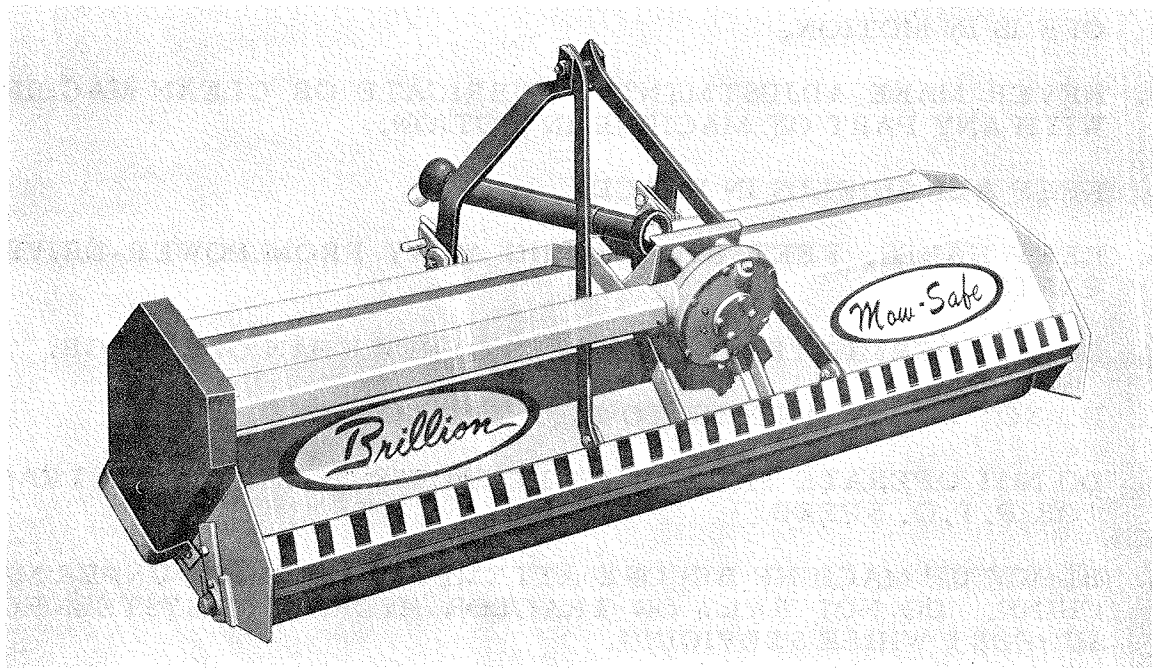


OPERATOR'S MANUAL



MOW SAFE MOWER

MODEL MS 880-01



A product of the

BRILLION IRON WORKS • BRILLION, WISCONSIN

INTRODUCTION

Your Brillion Mow-Safe Mower is built with the best materials and workmanship available. It has been carefully designed and thoroughly tested to assure you of a machine which is simple and durable, safe and easy to operate, yet economical to own.

Used within its ratings and properly maintained, it will give years of satisfying, trouble-free service.

Study this manual carefully before attempting to assemble or operate the machine.

SAFETY INSTRUCTIONS

1. DO NOT UNDER ANY CIRCUMSTANCES ALLOW ANYONE TO REMAIN IN VICINITY OF MACHINE WHEN STARTING & OPERATING.
2. OPERATOR MUST REMAIN ON TRACTOR WHILE POWER TAKE-OFF IS IN MOTION.
3. NEVER MAKE ADJUSTMENTS, LUBRICATE OR CLEAN MACHINE WITH ANY PART OF MACHINE IN MOTION.
4. KEEP ALL SHIELDS IN PLACE.
5. KEEP HANDS, FEET & CLOTHING AWAY FROM POWER-DRIVEN PARTS.
6. DO NOT PERMIT TRACTOR RIDERS OTHER THAN OPERATOR.
7. DO NOT ALLOW ANYONE TO RIDE THE MACHINE.
8. DO NOT OPERATE THE MOWER IN EXCESS OF STANDARD TRACTOR P.T.O. SPEED.
9. BLOCK UP MACHINE BEFORE ATTEMPTING SERVICE UNDER MACHINE. DO NOT RELY ON TRACTOR HYDRAULIC SYSTEM FOR SUPPORT WHILE SERVICING.
10. ALLOW THE ROTOR TO ATTAIN ITS FULL SPEED BEFORE ATTEMPTING TO CUT.

MOW-SAFE MS-880 FLAIL MOWER
SPECIFICATIONS

Model No. - - - - - MS-880

Mounting - - - - - 3 Point Lift - Category I

Tractor P. T. O. - - - - - 540 RPM

Width of Cut - - - - - 87-3/8 inches

Overall Width - - - - - 96 inches

Height of Cut- - - - - Adjustable from 3/4 to 6 inches

Knives - - - - - Heat treated steel - reversible, double edge

Knife Thickness & Width - - - - - 14 Ga. (.083) x 1-1/4 inches

Gears - - - - - Heat treat alloy steel, machine cut - run in oil bath

Drive Ratio - - - - - 1 to 3.92 speed-up

Rotor Speed at 540 P. T. O. - - - - - 2120 RPM

Bearings - - - - - Ball bearings - relubricatable

Bearing Sizes - - - - - Rotor Shaft - 1-15/16 diameter
Cross Shaft - 1-1/8 diameter

Belt - - - - - C-section, premium, 3 reverse bend construction

Frame - - - - - Heavy gauge steel welded assembly

Weight - - - - - 850#

OPTIONAL EQUIPMENT

Rear trash deflector: Additional protection against flying debris.

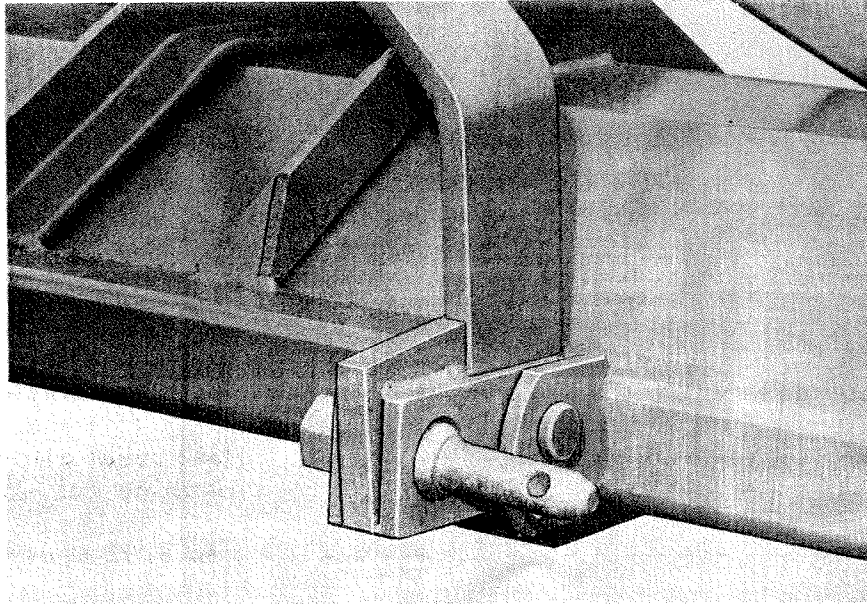
Rubber sleeve: Slips over the rear roller to prevent damage against ground installations in cemeteries and similar areas of mowing.

ASSEMBLY INSTRUCTIONS

"Right" and "Left", "Front" and "Rear" are determined when the operator faces the direction the machine will travel, standing behind it.

Attach braces to outer side of lugs on rear 2-1/2" square tubing. Insert 1/2 x 1-1/2" long capscrews so that lockwasher and nut will be toward center of machine.

Mount the mast and float links between the front lugs using the 7/8 x 3" long clevis pins, flat washers and cotter pins (see figure below). Note position of the clevis pin—the flat washer and cotter toward the inside of the machine. Beveled ends of the mast frame must be toward the tractor to allow the float links to pivot up and down.



Place braces on inner side of mast lugs. To fasten, use 3/4 diameter pin from upper link of tractor when mounting to machine.

Place 5/16 x 2" long square key into the keyway in the gearbox shaft. Align keyway in PTO shaft yoke with key and slide into position. Secure the yoke to the shaft with the 5/16 x 3" long capscrew and locknut. Lock the key into place using the 5/16 x 3/4" long socket head setscrew, securing the set screw with the 5/16" jam nut.

CAUTION: THIS MACHINE IS SHIPPED WITHOUT OIL IN THE GEARBOX. REMOVE UPPER 1/2" PIPE PLUG ON GEARBOX COVER TO ADD OIL. FILL TO LOWER 1/4" PIPE PLUG ON COVER WITH S.A.E. NO. 90 E.P. (EXTREME PRESSURE) OIL.

MAINTENANCE

This shredder is designed to require simple lubrication procedures. The roller, rotor and cross shaft bearings, the idler pivot arm, and the PTO shaft are relubricatable. Grease after every 8 hours of operation. The only oil check is in the gearbox, where the level is indicated by removing the lower 1/4" pipe plug for inspection. Check oil monthly. If adding is necessary, use a good grade of S.A.E. No. 90 E.P. (extreme pressure) oil.

Before attempting to operate your Brillion Mow-Safe, go over the machine and check all bolts for tightness. Normal periodic checks should be made thereafter.

The knives should swing freely. If the knives become damaged or lost, the mower will begin to vibrate. The cause of vibration should immediately be determined and checked. Continued operation while unbalanced will cause severe damage to the machine. When necessary, replace these parts only with genuine Brillion parts. They are specially heat treated and sized to function properly.

It is important to maintain pulley alignment for normal belt life.

Lay a straight edge against the driver and driven pulleys. Straight edge should touch on both edges of each pulley. Adjust the drive pulley to get alignment. The idler should be centered on the belt.

OPERATION

This machine is rated for general service in mowing grass, shredding weeds and mulching leaves.

When operating, set the cutting height so as to avoid rocks, wire, etc. For maximum safety and efficiency, keep blades out of the ground. Short life of the blade edge almost always means abrasive or rocky conditions have been encountered.

If it is necessary to change cutting height, adjust rear roller and the upper link of the tractor accordingly to keep the machine level.

When level, the input shaft on the gearbox is parallel to the tractor PTO shaft while the rear roller is on the ground.

It is recommended that the roller be set in the lower cutting positions when cutting lawns and on level areas. When used in rough or trashy areas, the knives will last longer if the roller is adjusted to the higher positions. Remove the 1/2" x 1-1/4" capscrews to change position of roller gauge arm. There are two positions in the gauge arm and four positions in the side plate to provide a total of eight positions.

Always start the mower where the rotor is free to get up to full operating speed before cutting is required. Maintain 540 RPM P.T.O. speed while mowing to attain best results.

Never run the machine without a full set of knives. If one knife assembly is replaced with a new one, the closest set, 180° opposite, must also be replaced with a new assembly. This is necessary to maintain proper rotor balance which prevents machine vibration.

STORAGE

Before placing your Mow-Safe in storage, release the idler tension from the V-belt. This will reduce unnecessary strain and stretch on the belt.

Grease the P.T.O. shaft and bearings when machine is not being used for a long period of time. This will keep moving parts from "freezing tight" due to moisture and corrosion.

Also remove old grass and debris that may have collected during the mowing season.

If desired, the rotor and knife assembly can be coated with light oil to minimize corrosion.

MOW-SAFE GEARBOX AND CROSS SHAFT ALIGNMENT

To obtain the correct alignment between the gearbox and the cross shaft bracket assembly, it may be necessary to shim the gearbox in or out. Provided in the shipping specifications are eight 9D-74 steel shims (1-1/2" square x .007" thick) for this purpose.

Before fastening the bearing and flangette stampings, check and measure the position of the cross shaft in relation to the hole opening in the bracket assembly. If the cross shaft is not exactly in the center of the hole, shim the necessary left or right vertical pairs of feet on the gearbox. The gearbox does not have to be removed from the hood mounting assembly to shim. Remove the two bolts on the side to be shimmed and loosen the two bolts on the other side enough to allow for inserting the shims. Use only the necessary number of shims to correctly align the cross shaft in the center of the bearing hole in the bracket assembly. Then proceed to assemble the unit.