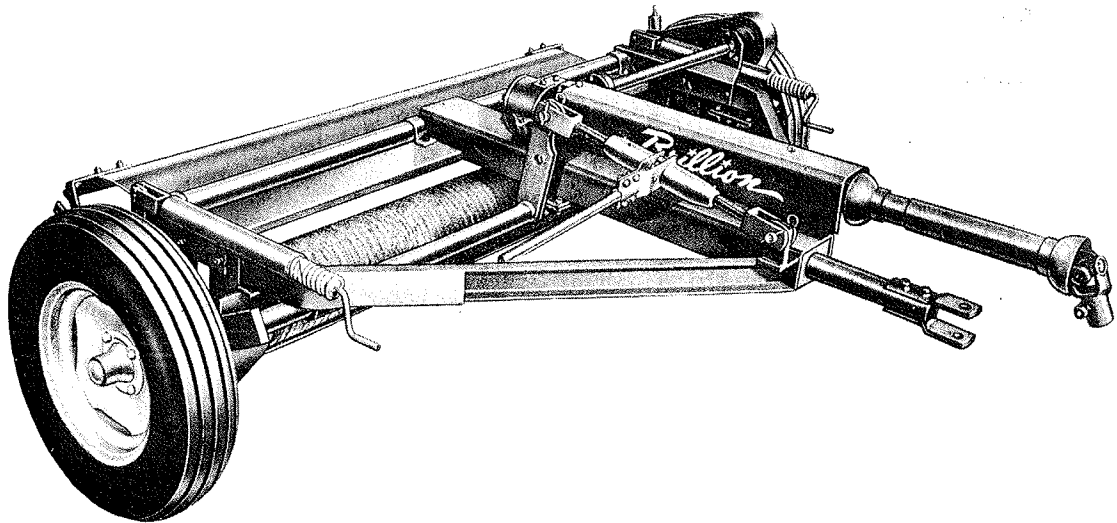


OPERATOR'S MANUAL

Brillion

MODEL HC-2A

HAY CONDITIONER



BRILLION IRON WORKS, INC.
BRILLION, WISCONSIN

9C 941

Brillion

**MODEL HC-2A
HAY CONDITIONER**

The Brillion Hay Conditioner is constructed with the best materials and workmanship available. The machine is factory adjusted, as near as possible, to assure proper field operation.

Many future difficulties can be avoided by following the operating and maintenance instructions and by correctly adjusting and lubricating the machine accordingly.

Study the Operators Manual and follow carefully the instructions regarding adjustments before operating the machine.

LOCATION REFERENCE

"Right" and "Left", "Front" and "Rear" refer to the operators "Right" and "Left", "Front" or "Rear" when he faces the same direction as the machine is traveling.

9C 941

BRILLION MODEL HC-2A

HAY CONDITIONER SPECIFICATIONS

Over-all width-----103-3/4 inches

Over-all length-----81 inches

Maximum height (6.70-15 tires)-----31 inches

Weight (less tires & tubes)-----980#

Hitch-----Trail-behind

Wheels

Tread Width-----8 Ft. - 3/8 inches

Tire Size-----15 Inches

Wheel Bearings-----Tapered Roller

Drive-----Power-Take-Off

Drive Shaft Bearings-----Self-aligning pre-lubricated ball bearings

Pickup Width-----Up to 7' Mower

Lower Roll-----6-5/8 In. diameter slatted steel

Bearings-----Self-aligning ball bearings with re-lubrication feature

Upper Roll-----8 In. diameter fabric reinforced rubber

Bearings-----Self-aligning ball bearings with re-lubrication feature

Gear Box

Gears-----Heat treated alloy steel-machine cut

Bearings-----Tapered Roller

Lubrication-----Continuous Oil Bath

Overload Protection-----Shear pin in shear flange

9C-941

BRILLION MODEL HC-2A HAY CONDITIONER

Your conditioner is shipped to you almost fully assembled. You receive as separate assemblies, (1) axle assembly, (2) screw jack assembly, (optional) (3) fluffer, (4) power-take-off shaft bundle, (5) bag assembly and (6) wheels.

SETTING UP INSTRUCTIONS

Open the bag assembly and lay the parts out, being careful not to lose any of the parts. Separate the bundles and lay these parts out, also.

With the conditioner assembly resting on the skids, block up the hitch so that the frame is approximately level.

Attach the axle assembly to the conditioner assembly with the three red axle bearings using $\frac{1}{2}$ " x $1\frac{1}{4}$ " long cap screws, with lock washers and nuts on the underside. Draw the nuts up tight.

After mounting tires and tubes on the wheels, bolt the wheels to the wheel hubs using the bolts provided. Draw these bolts up tight.

Attach the power-take-off hitch-joint assembly to the drive shaft following these steps, (1) remove the protective tape from the drive shaft, (2) remove the roll pin from the drive shaft yoke on the P.T.O. hitch-joint assembly, (3) slide the drive shaft yoke onto the shaft, positioning the pin hole in the yoke with the pin hole in the

shaft, (4) reinsert the roll pin and wire in place, and (5) tighten the set screw over the key.

Attach the loose drive shaft shield to the conditioner using a 3/8" x 1" long cap screw with flat washer and lockwasher at the gear box end and a 3/8" x 3/4" long cap screw with flat washer and lockwasher in the tapped hole at the bearing pedestal.

From the bag assembly, select the two green deflector shields. These are attached to the inside rear of the side plates using a 3/8" x 3/4" long cap screw and lockwasher in the tapped hole. Through each of the lower holes insert a 3/8" x 1-1/2" long cap screw with the head on the inside. On the outside of the side plates, install the 3/8" long bushing over the 3/8" x 1-1/2" long cap screw, assemble the 16" long slotted flat braces over the bushings and fasten in place with a 3/8" flat washer, lockwasher and nut in that order. Draw the nuts up tight. The deflector shields are correctly installed when they will deflect ejected hay inward toward the center of the conditioners line of travel.

Now assemble the fluffer to the rear frame tube by placing the fluffer under the tube and attaching with the four green clamps, placing a rubber pad between the clamps and fluffer, using 5/16" x 3/4" long carriage bolts with the heads to the underside of the fluffer. The fluffer is correctly positioned when the clearance between the sides of the cut-out in the fluffer and the frame center channel is the same on both sides of the channel.

9C-941

Attach the formed fluffer adjusting brackets on the top side of the curved part of the fluffer, with the arms extending downward, using 5/16" x 3/4" long carriage bolts with the heads on the under side of the fluffer. Complete the assembly by connecting the slotted braces to the adjusting brackets, using the 1/2" x 1 1/4" long carriage bolts with the head on the inside of the formed bracket, and the 1/2" flat washer on the outside of the slotted brace, fastening with the lockwasher and nut.

CAUTION! Gearbox should be filled with one pint of SAE 140 oil.

OPERATING INSTRUCTIONS

The Brillion HC2A Hay Conditioner will operate behind any tractor with standard ASAE power-take-off and drawbar hitch. (To check this, the horizontal distance from the end of the power-take-off shaft to the center of the hitch pin hole in the drawbar should be 14". The vertical distance from the ground to the top of the drawbar hitch plate should be from 13" to 17".) The tractor should ALWAYS be operated so that the power-take-off is operating at standard 530-550 rpm speed.

The conditioner must be operated following directly behind the mowing tractor and traveling in the same direction as the mower.

The conditioner height should be adjusted so that the lower roll is as high as possible above the ground, and still get good pick-up.

Spring pressure on the upper roll should be set so that the stems are just cracked. Generally, slightly more pressure is required for grasses than for legumes. However, the appearance of the conditioned hay must determine the setting. Damaged leaves and shredded stems indicate excessive spring pressure. Slight over conditioning is seen when the leaves of legume plants are bruised and appear dark. Proper conditioning can be obtained by reducing the spring pressure somewhat when the slight over conditioning is observed.

ADJUSTMENTS

Roll Spacing: Clearance between the upper and lower rolls is set at the factory from 1/64 inch to 1/32 inch. This should be maintained by adding or removing shims on the roll-arm stops located on each side of the machine.

Roller Chain: To adjust the tightness of the roller chain, take up or loosen the nut on the idler adjusting bolt until the rubber pads are compressed about 1/8" from their free height. This should give the proper tension on the chain.

Fluffer: The fluffer is adjusted by loosening the nut on the 1/2" carriage bolts, raising or lowering the fluffer, and then re-tightening the nut.

MAINTENANCE

Lubrication: Regular lubrication will increase the life of your hay conditioner and reduce wear. Use only good quality lubricants and lubricate as follows:

| | |
|--------------------------------------|----------------------------|
| Roll bearings (4) | Grease every 50 hours |
| Universal joints in P.T.O. Drive (2) | Grease every 10 hours |
| Drive Chain | Brush on oil every 5 hours |
| Telescoping drive shaft | Grease every 10 hours |
| Repack wheel bearings | Every 100 hours |
| Gear box - check oil level (SAE 140) | Every 100 hours |

Shear Pin: Shear pin should be replaced with a standard $\frac{1}{4}$ x 1-3/4 long hex head cap screw. Do not use a heat-treated cap screw.

9C 941