

OPERATOR'S MANUAL



GLP-642

SSLP-642

LANDSCAPE SEEDER

MODEL NO.

DATE PURCHASED



BRILLION IRON WORKS
BRILLION, WISCONSIN 54110

SETTING UP AND OPERATING INSTRUCTIONS

BRILLION MODEL GLP-642 AND SSLP-642

5'4" PICKUP LANDSCAPE SEEDERS

Your 5'4" Landscape Grass Seeder is built with the best materials and workmanship available. It has been designed to give you years of trouble-free operation. You can avoid future difficulties by following the setup and operating instructions given in this manual, and by correctly adjusting and lubricating the machine when necessary. Save this manual for future reference.

LOCATION REFERENCE

"Right" and "Left", "Front" and "Rear" refer to the operator's "Right", "Left", "Front" or "Rear" when he faces in the direction as the machine will travel.

PREPARATION FOR ASSEMBLY

Place all bundles and parts where they will be convenient and remove all tie wires. Cut the straps on the seedbox crate and pull the top of the crate off so the box can be removed. Remove the bags of parts shipped inside the crate. Open the bags and place the parts where they can easily be located as needed.

ASSEMBLING END BRACKETS

The end bracket assemblies are shipped with protective paper gaskets over the shaft holes to keep out dust and foreign matter during shipment. Before assembling the machine cut out these gaskets. Do this carefully so the felt washer just behind the gasket will not be damaged.

1. Position the roller assemblies with the smaller diameter rollers behind the larger diameter rollers. The drive sprocket on the front roller assembly must be to the right. See Figure 1. Place the spacer over the left stub shaft of the front roller assembly. Slide the bearings over the shafts on both ends of the two roller assemblies. The raised boss on the bearings must be on the bottom. See Figure 2.

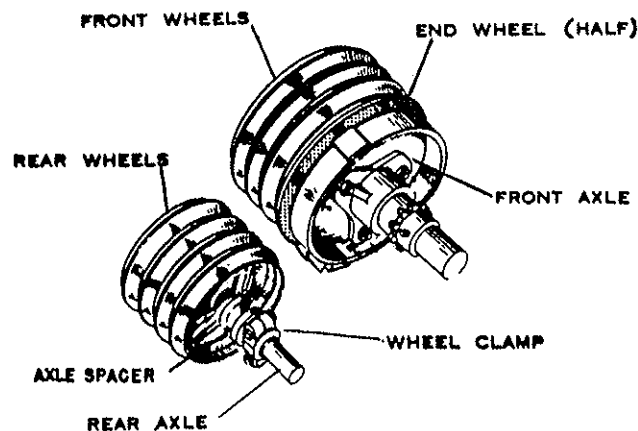


Figure 1. Roller Assemblies

2. Connect the ends of the detachable chain. Lay the chain over the right hand sprocket on the front axle, in order to make it easier to connect to the box later on.

3. Assemble the idler sprocket (Fig. 2), flat washer and cotter key to the idler arm. Detach rear arm spring from the right end bracket.

Insert the idler pivot shaft in the end bracket through the hole provided. With the idler arm turned up attach spring arm with cotter key. (Fig. 2) Attach spring to spring arm and rear arm as shown.

(NOTE: Two spring positions are provided to increase or decrease tension on the chain. Use upper hole for normal operation. If more tension is required, use lower hole.)

One idler arm is furnished and is assembled to the right hand end bracket.

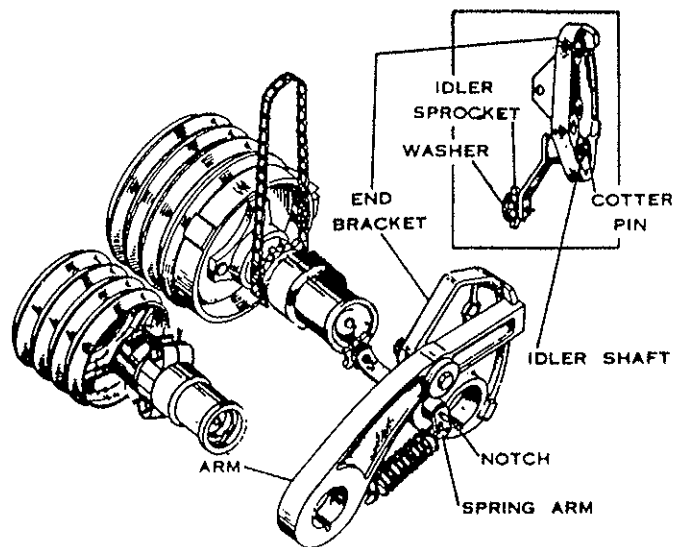


Figure 2. Mounting End Brackets

4. The notches in the bearing holes of the end bracket must line up with the raised boss on the bottom of the bearings. Be sure they are properly aligned before sliding the end bracket on. Then slide the end brackets over the axles as shown in Fig. 2. Note that the correct position of the end bracket arm is toward the outside.

MOUNTING FRAME ON END BRACKETS

1. Set the frame (Fig. 3) in position between the end brackets.
2. Bolt frame to the end brackets with four $1/2 \times 1-1/2$ in. bolts, nuts and lockwashers.
3. Bolt the chain guard (Fig. 3) to the right hand end bracket through the lower hole, using the $1/2 \times 1-3/4$ in. bolt.

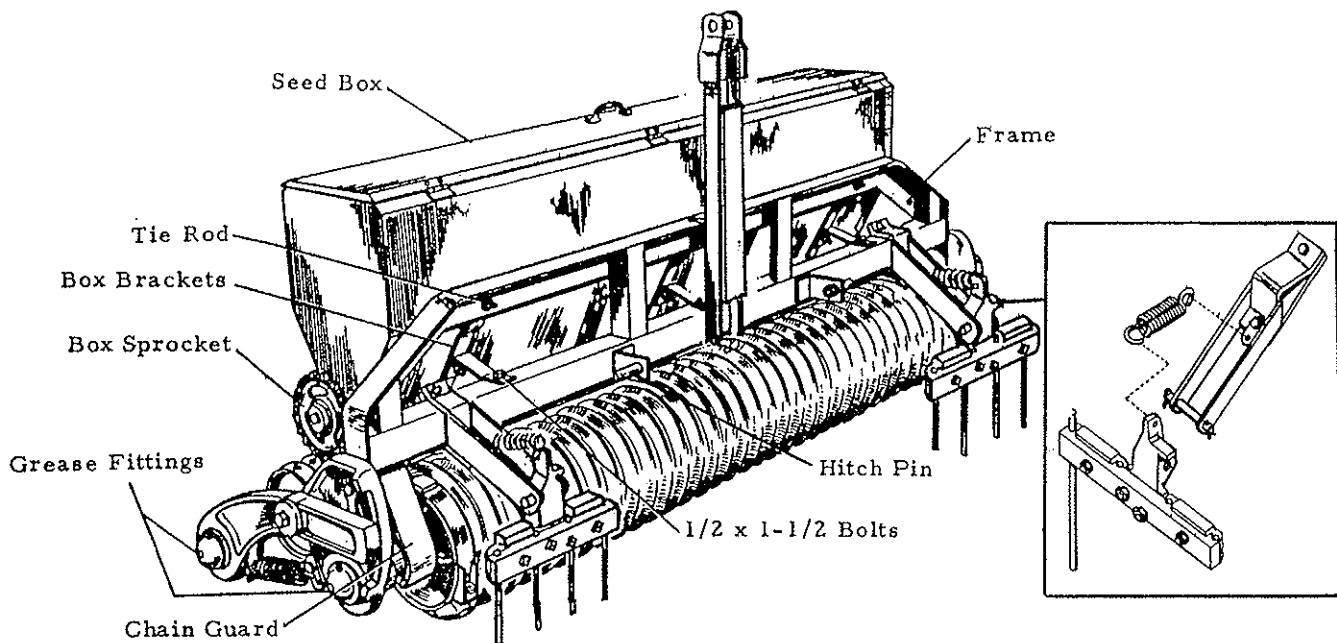


Figure 3. Mounting Box to Frame

MOUNTING BOX TO FRAME

1. Attach the three box brackets (Fig. 3) to the box with three $3/8 \times 1-1/2$ in. bolts, lockwashers and nuts.
2. Run the three tie rods through the top holes in the box. Place three small square spacers over the three tie rods.

CAUTION: Spacer must be placed between box bracket and frame.

3. Place the box on the frame with the front of the tie rods projecting through the holes on the top frame angle.
4. Place flatwashers, lockwashers and nuts over the front end of the tie rods.
5. Attach the box brackets to the frame with three $1/2 \times 1-1/2$ in. bolts, lockwashers and nuts (Fig. 3).
6. Tighten nuts holding the box to the frame.
7. **BE SURE TO REMOVE ANY PARTS WHICH MAY HAVE FALLEN INTO THE BOXES DURING ASSEMBLY.**
8. Run the chain over the box sprocket (Fig. 3) and over the idler attached to the right hand end bracket.
9. Install the hitch pins, from the bag assembly, in the angle clips on the frame. The pins must point outward as shown in Fig. 3. Use lockwashers and nuts to hold the pins in place.

ASSEMBLING DEFLECTORS

1. Crated with the box are a wind shield and a deflector. Two end shields are included in the bag assembly. Assemble the ends to the shields as shown in Fig. 5 using eight $1/4 \times 1/2$ in. round head capscrews, lockwashers and nuts.
2. Place the eight $7/8$ in. spacers between the shields and fasten with #10 $\times 1-1/4$ in. round head capscrews, lockwashers and nuts.
3. Attach the three deflector arms to the wind shield as shown in Fig. 5 with six $3/8 \times 1$ in. round head capscrews, lockwashers and nuts.
4. Attach the deflector arms to the box (Fig. 5) with six $3/8 \times 1$ in. round head capscrews, lockwashers and nuts. **BE SURE TO REMOVE ANY PARTS WHICH MAY HAVE FALLEN INTO THE BOXES DURING ASSEMBLY.**
5. Attach the handle to the seedmeter. Make sure the lug on the bottom of the handle engages the slide clip on the bottom of the box. Tighten this screw enough so the handle is free to turn, but will not rattle. Then tighten the setscrew in the bottom, left side of the seedmeter casting. The top of the handle attaches to the seedmeter with the wing nut and washer provided on the seedmeter.

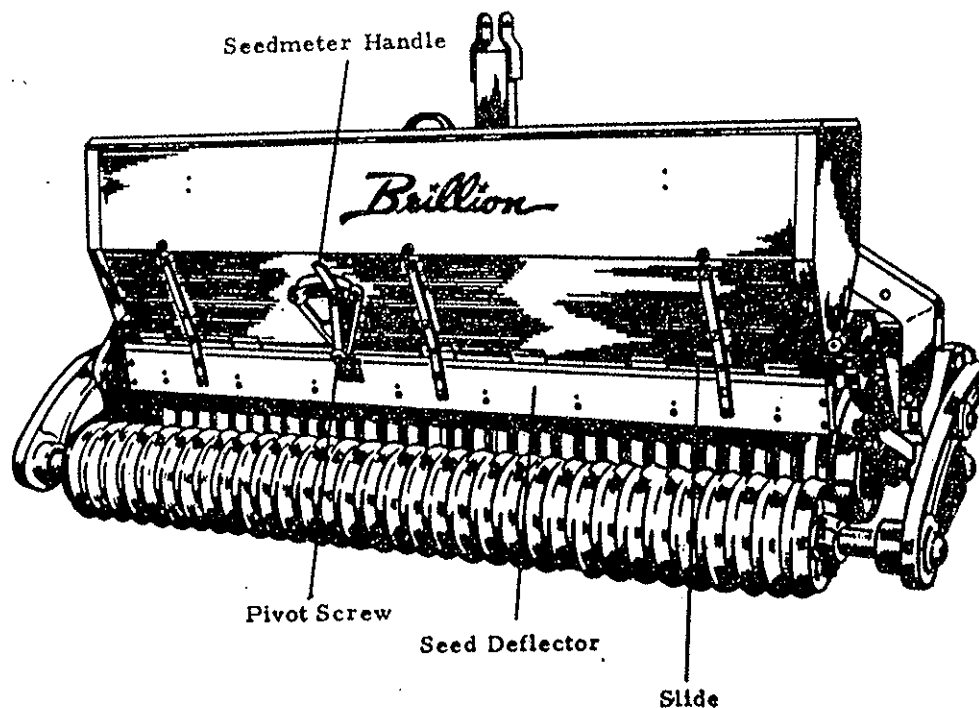


Figure 4. Seed Box

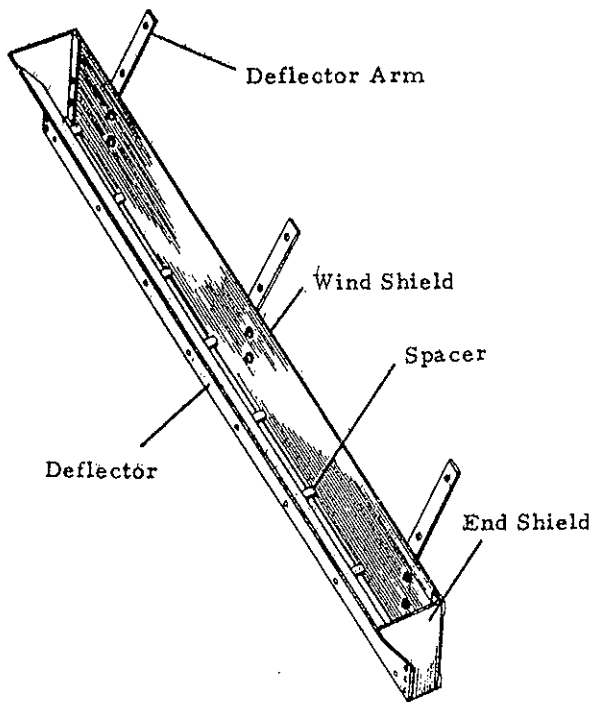


Figure 5. Seed Deflector

LUBRICATION

Before operation see that the machine is lubricated at the following points:

<u>Location</u>	<u>No. of Grease Fittings</u>
Idler Sprocket	1
Box Drive Sprocket	1
Axle Bearings	4

WHEEL POSITION

For best operation the wheels must be lined up so that while the machine is running the rear wheels split the ridges made by the front wheels. This can be done by adjusting the end clamps on the rear roll accordingly. The wheels should turn freely and independently to allow the machine to turn more easily at the headlands or corners. Check this adjustment again after the machine has been in operation for a day or so.

The bolts in all four axle clamps must be tight to prevent any turning and shifting of these clamps. An Allen wrench is provided for the socket head in the front clamp ring. The opening in the front clamp must straddle the welded seam on the axle pipe for good contact between the pipe and the clamp ring.

MAINTENANCE AND ADJUSTMENT

Very few adjustments are necessary to keep your Grass Seeder operating properly. However, it is important that you make the adjustments and follow the maintenance procedures given here in order to get the best results.

END OF SEASON MAINTENANCE

1. At the end of a season, apply grease to all grease fittings, and apply a protective coating of oil to all chains.
2. Be sure the box is clean and free of seed or dirt.
3. Store your grass seeder where it will be protected from the weather.

START OF SEASON MAINTENANCE

1. Apply grease to all grease fittings, and be sure all drive chains are lubricated.
2. Check inside the box to be sure it is free of any foreign material.
3. Check operation of control handle on the box. If necessary lubricate so it will move easily.
4. Test operation of the clutch. If sluggish, remove any dust or dirt by washing the kerosene and apply grease to grease fittings.
5. Check to see that no moving parts are rusted tight. Clean them with kerosene.
6. Inspect the brushes and the clips that hold them in place. The clips must be tightened firmly. The brushes should be clean, of uniform length, and in good general condition.
7. Replace any broken parts with genuine Brillion parts.

OPERATING MAINTENANCE

1. Lubricate all grease fittings before or at the end of each day's operation.
2. Check the box to be sure there is no foreign material in it.
3. Apply a light oil to all drive chains.
4. Inspect brushes and clips regularly to be certain they are tight and in good condition.

ADJUSTING SEED BOX SLIDE

When properly adjusted, the holes in the slide should line up with the holes in the box, with the control handle set at "6". To make an adjustment, loosen the control handle on the box, move the slide until the holes line up. When the handle is moved to "0" the holes in the box should be completely covered. If the holes are not covered, loosen the three bolts holding the seedmeter casting and shift it slightly so that "0" mark is farther from control handle. Retighten the bolts. Move control handle to "0". Holes in box should then be completely covered.

ADJUSTING PRESSURE OF BRUSHES IN SEED BOX

The brushes in the seedbox sweep the bottom of the box and control the flow of the seed. However, if they exert too much pressure on the bottom of the box, chain breakage and excessive brush wear can possibly result. To overcome excessive pressure of the brushes on the bottom of the box, the bolts holding the triangular cast iron bearings can be loosened and the bearings raised to reduce excessive drag. The holes in the bearing are slightly larger than the bolts holding them, thus making an adjustment possible.

SEED RATE CHART
GLP-64 LANDSCAPE SEEDER

This seed chart is provided to act as a guide. Inasmuch as different seeds vary somewhat in size and cleanliness, the seeding rate is naturally affected. For the best results check your acreage and pounds of seed used with each variety seeded. To accurately establish a seed rate, the seeder should be operated under field conditions for a given distance (100 feet will usually prove satisfactory) and the seed collected and weighed. A box can be attached to the seed deflectors to collect the seed. Since an acre is 43,560 square feet, the rate, in pounds per acre, can be calculated for the setting used by multiplying the weight of the seed collected in pounds times 43,560 and dividing by the width of the machine in feet times the distance traveled in feet. This will give the accurate rate per acre for the seed or seed mixture used under the field conditions encountered.

$$\text{POUNDS PER ACRE} = \frac{\text{SEED WEIGHT X 43,560}}{\text{WIDTH X DISTANCE}}$$

INDICATOR SETTING	Pounds Per Acre									
	<u>1/2</u>	<u>1</u>	<u>1-1/2</u>	<u>2</u>	<u>2-1/2</u>	<u>3</u>	<u>3-1/2</u>	<u>4</u>	<u>4-1/2</u>	<u>5</u>
SCOTT'S SPECIAL PURPOSE	19.5	51	79	120	182	250	342	418		
KENTUCKY BLUE GRASS	62	148	201	269	320	370	420	485		
MERION BLUE GRASS	31	90	167	250	292	343	382	437	488	
HIGHLAND BENT	125	238	324	433	527					
FLAX	43	183	331	465	585					

Pounds Per 1,000 Sq. Feet

INDICATOR SETTING	Pounds Per 1,000 Sq. Feet									
	<u>1/2</u>	<u>1</u>	<u>1-1/2</u>	<u>2</u>	<u>2-1/2</u>	<u>3</u>	<u>3-1/2</u>	<u>4</u>	<u>4-1/2</u>	<u>5</u>
SCOTT'S SPECIAL PURPOSE	.5	1.1	1.8	2.8	4.2	5.8	8.0	9.6	12.2	
KENTUCKY BLUE GRASS	1.4	3.4	4.6	6.2	7.4	8.5	9.7	11.2		
MERION BLUE GRASS	.7	2.1	3.8	5.8	6.7	7.9	8.8	10.1	11.2	
HIGHLAND BENT	2.9	5.5	7.5	10.0	12.1					
FLAX	1.0	4.2	7.6	10.7	13.5					

****CALIBRATE SURE-STAND SEEDERS FOR ANY SEEDS OR MIXTURES****

There is a fairly simple way to figure seeding rates for seeds not listed on your seed rate charts, or for mixtures of several different kinds or varieties of seed. Follow these steps:

1. Disengage the clutch so that the seed box shafts can be turned by placing a wrench on the end of the shaft.
2. Spread a canvas or tarp under the boxes to catch the seed as it leaves the boxes.
3. With a wrench, turn the indicated shaft the number of revolutions per acre shown on the chart below, according to the model seeder being calibrated.
4. Weigh the seed caught and you will know the seeding rate per acre for your machine at the indicator setting used.

MODEL #	SERIAL # PREFEX	ROLLING WIDTH	SHAFT TO TURN*	SHAFT RPM PER ACRE
SSP-60	SV	5'	BROME SHAFT	480
GLP-64	V	5'4"	AGITATOR SHAFT	1425
SS-961 SSPT-961	SS	8'	BROME SHAFT	345
SS-120 SSPT1201	SS	10'	BROME SHAFT	276
SSLFT120 SSFLPT120	SSLF	10'	SEED METER SHAFT	
GLFT120	SLOW SPEED (12 TOOTH SPROCKET IS DRIVER)			385
GLFPT120	FAST SPPED (24 TOOTH SPROCKET IS DRIVER)			1540
SST-144 & SSPT-144	SS	12'	BROME SHAFT	273

*The brome shaft is the 5/8" square shaft. By turning this shaft you drive both boxes except on models GDP-64 and GDD-64.

**Remove the end shields from the drive mechanism. Raise the seeder up and spread a tarp under it to catch the seed. Turn the 5/8 sq/ shaft 273 turns. Weigh the seed and this will give you the rate in lbs. If the seed is caught from only one side of the seeder multiply by 2 to get the rate in lbs./acre.