30" Rotary Tiller

30" ROTARY TILLER
MFG. NO. 1600343

OPERATOR'S MANUAL

FORM – 1651219
PRINTED IN U.S.A.
749

TABLE OF CONTENTS

RECOMMENDED ACCESSORIES

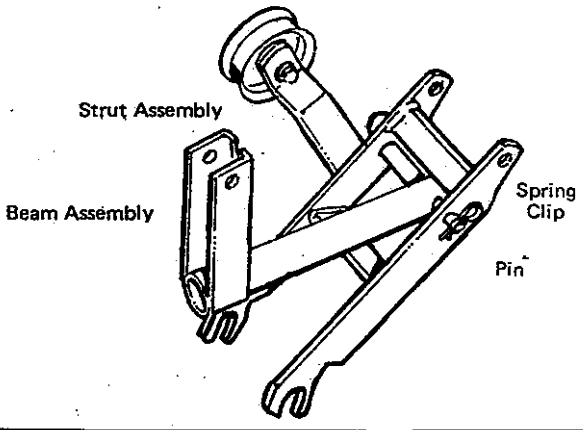
PACKING

The 30" Heavy Duty Tiller is delivered complete in one carton. The carton contains:

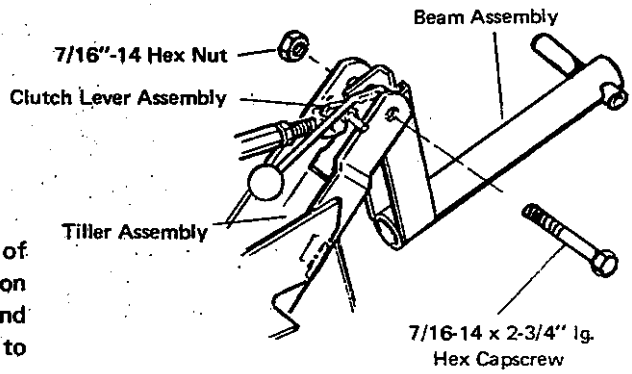
1 - Tiller Assembly
1 - Belt Guard
1 - Beam and Strut Assembly
1 - Hardware Pack
1 - Tension Spring

ASSEMBLY

1. Remove pin and spring clips attaching the beam assembly to the strut assembly and separate the assemblies.

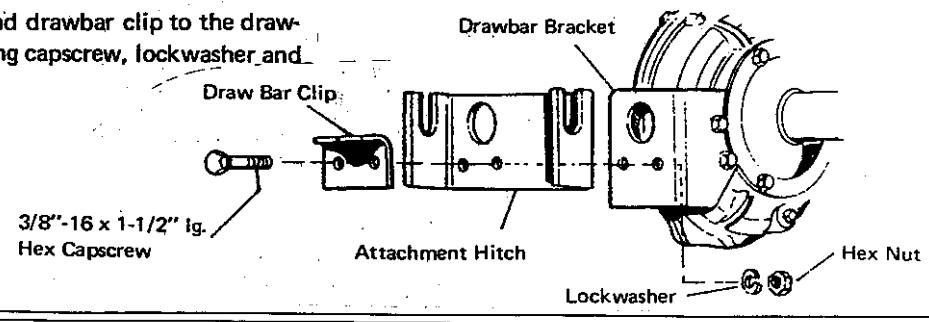


2. Remove the 2-3/4 inch long hex capscrew at the top of the tiller assembly. Mount the beam assembly at this location with the clutch lever assembly inside the beam assembly and all holes aligned. Tighten capscrew and nut only enough to allow beam assembly to pivot. See illustration at right.



ATTACHING TILLER TO TRACTOR

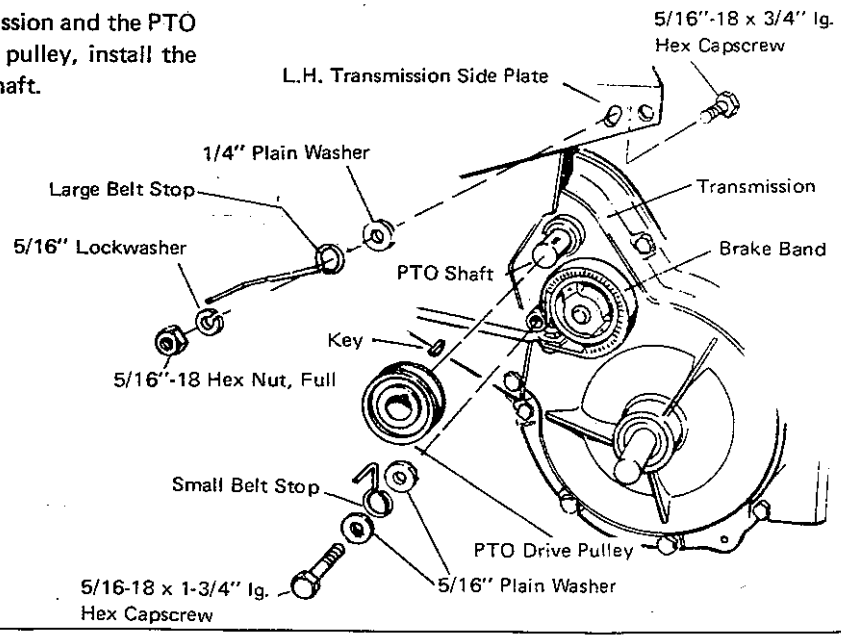
1. Remove the drawbar clip from the drawbar bracket. Assemble the attachment hitch and drawbar clip to the drawbar bracket with a 1-1/2 inch long capscrew, lockwasher and hex nut previously removed.

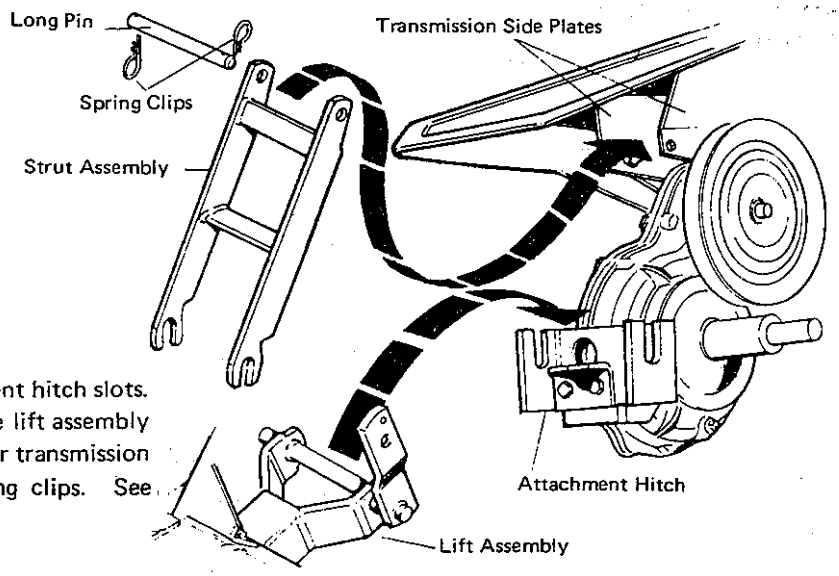


2. With the pulley hub facing the transmission and the PTO shaft flush with the outside face of the pulley, install the PTO drive pulley and key on the PTO shaft.

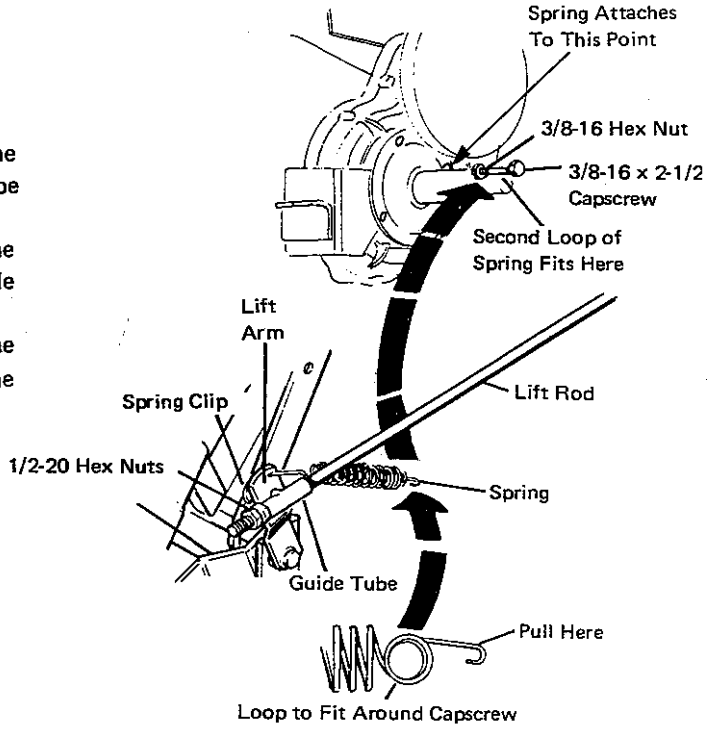
3. Remove the capscrew holding the brake band to the transmission and fasten the smaller belt stop at this location using the sequence of attaching parts shown at the right. Mount the larger belt stop in the slot of the left transmission side plate and secure it with attaching parts as shown at the right.

On older units the large belt stop will be fastened to the clutch spring anchor capscrew.



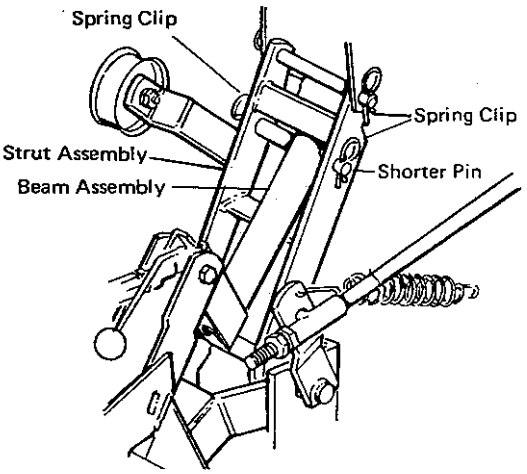


4. Place the lift assembly shaft in the attachment hitch slots. Mount the strut assembly on the shaft of the lift assembly and fasten the top end of the strut to the tractor transmission side plates with a long pin and two spring clips. See illustration.



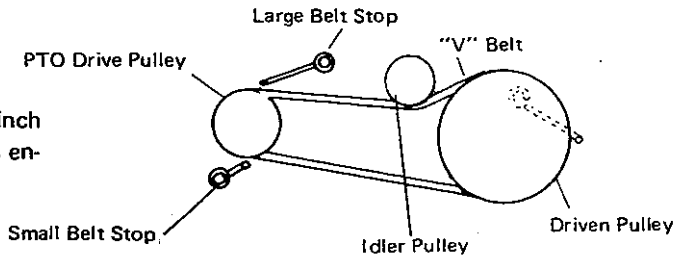
5. Place the guide tube on the lift rod and secure it to the rod with two 1/2"-20 hex jam nuts. Fasten the guide tube to the lift arm with a spring clip. See illustration.

6. Hook the end of the spring with a single loop through the small hole at the top of the lift arm. At the right hand side plate, replace the 3/8 inch capscrew with a 3/8-16 x 2-1/2 hex capscrew and 3/8 inch hex nut. Pull the spring to capscrew and place the second loop around the protruding capscrew. See Illustration.

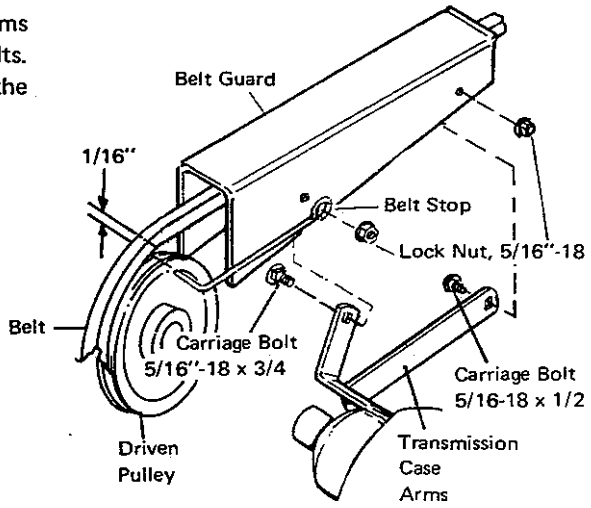


7. Fasten the beam assembly to the strut assembly with the shorter pin and two spring clips. See Illustration.

8. Mount the "V" belt as illustrated. Maintain 1/16 inch clearance between belt stops and belt when the belt is engaged. Be sure the belt is fully seated in pulley grooves.

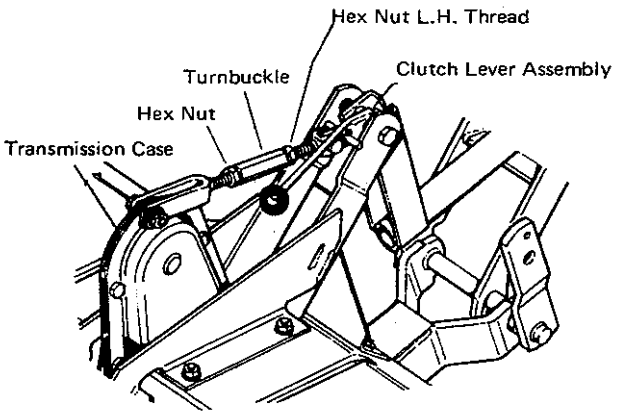


9. Secure belt guard and stop to transmission case arms as illustrated. Note position and size of carriage bolts. Adjust belt stop to 1/16 inch from belt when tiller is in the engaged position.



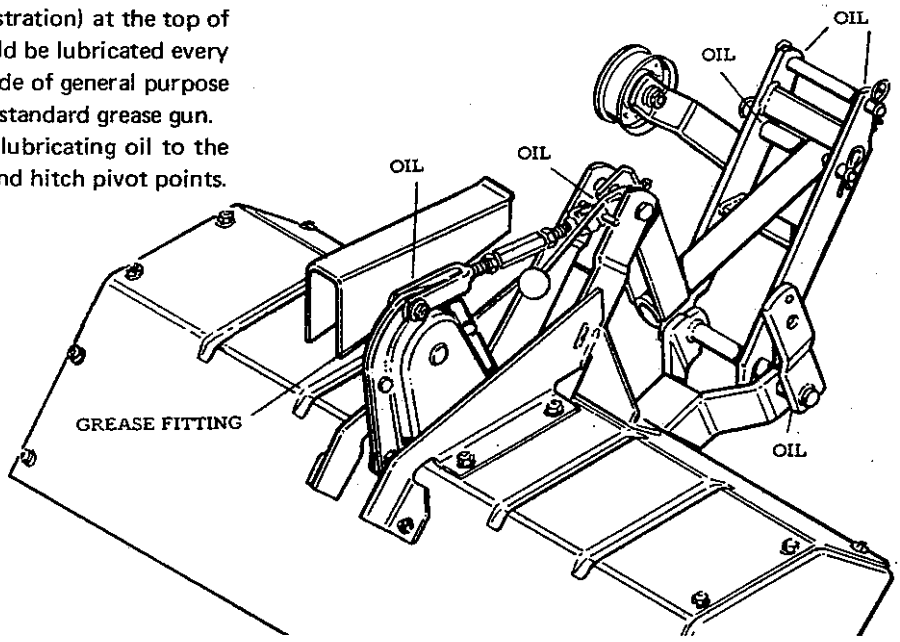
ADJUSTMENT

1. Replacement "V" belts should be ordered from your dealer. Consult the parts list for correct belt part number.
2. The distance between the transmission case and the clutch lever assembly determines belt tension. To increase tension, increase the distance and to relieve tension, decrease the distance. Loosen the two hex nuts (one is left hand thread) and move the turnbuckle to the desired position. Tighten the two hex nuts and check the tension by engaging the clutch lever.
3. Belts should be snug in pulley grooves. Recheck for tension after running tiller and adjust per above procedure. Avoid excessive tension as it will cause premature belt failures. See illustration.



LUBRICATION

1. There is one grease fitting (See illustration) at the top of the transmission case. This fitting should be lubricated every four hours of operation with a good grade of general purpose automotive type grease applied with a standard grease gun.
2. Occasionally apply a few drops of lubricating oil to the moving parts of the tiller drive linkage and hitch pivot points. See illustration.



OPERATION

Before starting the tractor engine, DISENGAGE the tiller clutch by pulling the lever FORWARD. Push the lift lever forward to raise the tiller off the ground. Start the tractor and move to the area to be tilled. When you have reached the area to be tilled, lower the tiller to the operating position. Set the engine speed lever at about three-fourths and engage the tiller clutch by pushing the lever all the way to the rear. Slowly release the tractor clutch pedal and move ahead. Adjust the engine speed as required to obtain proper depth. At the end of a row, raise the tiller free of the ground before turning around.

TILLING DEPTH

Tiller depth will be determined by engine speed, transmission gear and the type of ground you are operating in. Place the tractor transmission in first gear for most uses. If the ground is very soft and a deep penetration is not needed, you may use second gear. If deep penetration is desired or when going over hard ground the first time, use first gear and a slow engine speed. Faster engine speed will give less tilling action and shallower penetration. When working sod or hard ground, you may need to make several passes. It is most effective if alternate passes are made across the previous one. Use first gear and about one third engine speed the first few passes.

TROUBLESHOOTING

If the tiller is not adequately turning up the ground, check the following:

1. Operate the tractor in first gear.

2. Use a lower engine speed.

3. Check the drive belt to see it is not slipping. (See "Adjustments").

4. Use the tractor weights listed under recommended accessories.

If the tiller tines will not turn, check the following.

1. Check the belt tension adjustment. (See "Adjustments").

2. Be sure the tractor clutch is engaged. (Since the tiller operates off the transmission pulley, it will not operate unless the clutch is engaged.)

3. Check to see if rocks, wire, or other foreign material are caught in the tiller tines. DISENGAGE THE TILLER CLUTCH AND STOP THE TRACTOR ENGINE BEFORE WORKING AROUND THE TILLER.