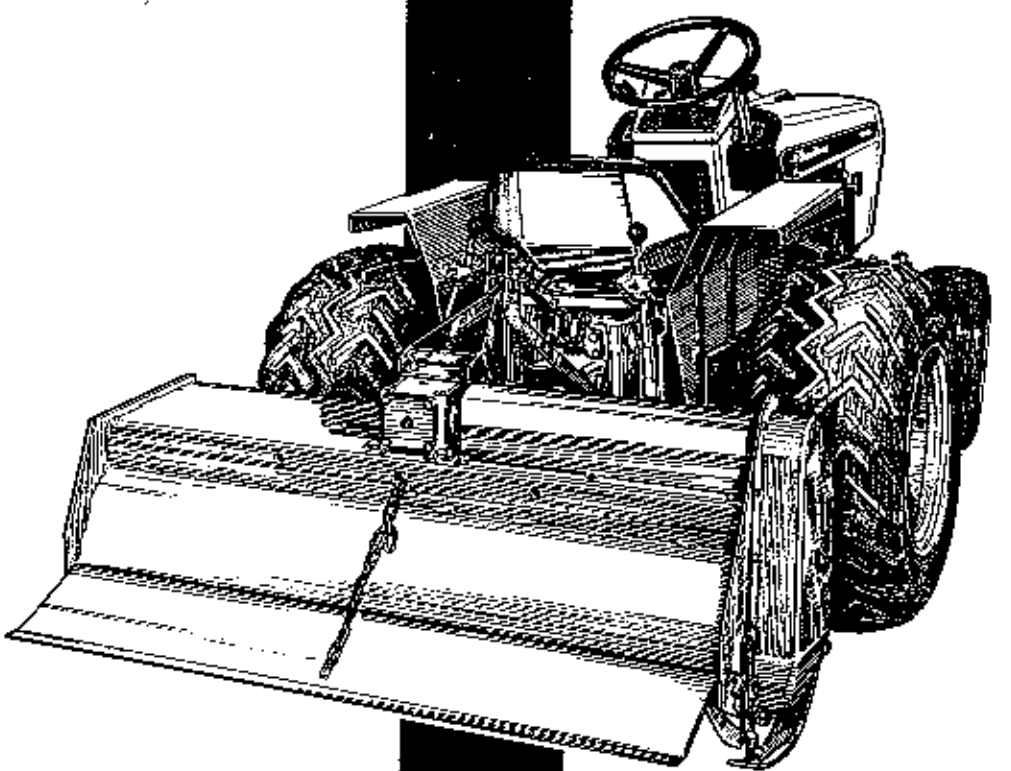
Simplicity®



OWNER'S MANUAL

48" ROTARY TILLER
MFR'S. NO. 696

LITHO IN U.S.A.
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SIMPLICITY MANUFACTURING COMPANY, INC.

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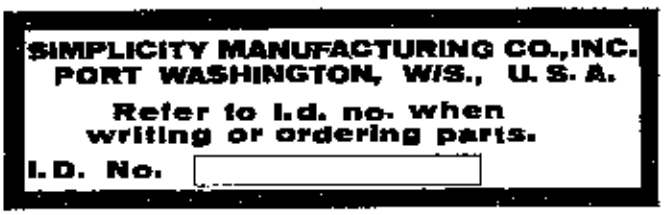
TO THE OWNER

You have made a wise choice in selecting the Simplicity 48" Rotary Tiller. It has been specially designed for your Simplicity tractor and constructed to give lasting superior performance.

Before attempting to operate the Rotary Tiller, study this manual and the manual for your tractor thoroughly. Pay special attention to the safety rules in this manual as well as the tractor owners manual. Your Simplicity equipment is designed with your safety in mind, but it is up to you to be an alert, safety conscious operator. Be sure anyone else who may operate the tiller is also familiar with the operation and safety instructions.

Your Simplicity equipment requires only a minimum of care. Following the maintenance instructions carefully will assure you of maximum satisfactory service. Thank you for taking time to read this manual. The time spent will pay big dividends in the extra time saving performance you receive from your Simplicity Rotary Tiller.

When ordering replacement parts for the tiller, be prepared to give your Simplicity dealer the identification number found on the identification plate shown below. It is located on the top of the tiller housing. We suggest that you locate the number and record it below for easy reference.



IDENTIFICATION PLATE

SIMPLICITY NEW EQUIPMENT WARRANTY

The Company warrants Simplicity products to be free from defects in material and workmanship, except the Company makes no warranty, express or implied, with respect to tires, engines, generators and voltage regulators, which are warranted by their respective manufacturers. Any part covered by this warranty which is proven defective within one year (6 months for equipment used for rental, municipal or commercial purposes) under normal use, from date of purchase, will be replaced without charge, provided such part is returned to the factory, (if requested), and is found to be defective upon examination at the factory. This warranty does not apply to any Simplicity products altered outside of the Simplicity factory. **THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, PERFORMANCE, OR OTHERWISE.** The Company's obligation under its warranty is strictly and exclusively limited to the replacement of such parts, and in no event shall the Company be liable for any other damages, whether direct, immediate, incidental, special, or consequential. Simplicity Manufacturing Company, Inc., reserves the right to modify or change specifications without prior notification. There are no warranties which extend beyond the description of any Simplicity product.

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SAFETY PRECAUTIONS TO PROTECT YOURSELF AND OTHERS

Read and become familiar with the owners manual for your tractor and the rotary tiller before operating the tiller.

Do not allow anyone to use the rotary tiller unless they have been instructed in how to operate it safely.

Never attempt to adjust, repair or service the tiller while the tractor engine is running.

Do not allow others near the tiller when it is operating.

Stay clear of the power take off shaft and tiller tines when the tractor engine is running.

Be sure the power take off shaft and tiller tines have stopped turning before attempting to adjust, repair or service the rotary tiller. **CAUTION: THE TINES MAY CONTINUE TO ROTATE A FEW SECONDS AFTER THE CLUTCH HAS BEEN DISENGAGED AND THE ENGINE SHUT OFF.**

Clear the work area of objects which might be picked up and thrown or caught in the tines.

Disengage power to the rotary tiller and stop the engine before leaving the operators position.

Operate the tiller only in daylight or good artificial light.

Always operate the rotary tiller with the hydraulic lift lever and the three point hitch float pins in the FLOAT position to prevent the tiller from jolting the tractor should the tines strike a hard object.

Use caution when operating on sloping surfaces.

MFG. NO. 696 48" ROTARY TILLER

REQUIRED ACCESSORIES AND OPTIONS
Three Point Hitch
Rear Power Take Off

RECOMMENDED ACCESSORIES AND OPTIONS
The front weight will give better steering traction at the front tires.

The front bumper is required to mount the front weight.

Rear wheel weights give added traction and stability when operating on slopes.

INSTALLATION

1. See figure 1. Before mounting the rotary tiller to the tractor, set up the 3 point hitch as shown. Attach the draft arms to the upper holes of the lower lift links at (A). Pin the turnbuckle link through the upper holes (B) of the mounting bracket. The eyebolts (C) should be positioned as shown so the chains attach on top of the tractor drawbar. The float lockout pins (D) should be placed in the "float" position as shown by adjusting the pins so the large end is exposed.
2. See figure 2. Back the tractor straight toward the front of the rotary tiller until the swivel sockets (A) are in line with the hitching pins (B). Use the tractor hydraulic lift lever to raise or lower the swivel sockets until they are the same height or slightly lower than the hitch pins.
3. Shut off the tractor engine and set the parking brake.
4. See figure 3. Slide the swivel sockets onto the tiller hitch pins and insert the safety pins (A). The leveling cranks (figure 1, item E) may be turned to aid in getting the swivel sockets lined up with the hitch pins.
5. See figure 4. **CAUTION: INSURE THE TRACTOR ENGINE IS STOPPED BEFORE ATTEMPTING TO ATTACH THE POWER TAKE OFF SHAFT.** After insuring the drive shaft spline (A) is clean, start it in the internally splined power take off. While holding the drive shaft in place with one hand, use the other to turn the outer locking ring (B) of the power take off drive clockwise and hold it there. Slide the drive shaft into the power take off and release the locking ring. Insure the drive shaft is locked in place by attempting to pull it out of the power take off.
6. See figure 5. Align the swivel (A) with the mounting holes of the rotary tiller tower (B). The turnbuckle may be extended or retracted by rotating the turnbuckle at (C) to aid in lining up the holes. Install the safety pin (E).
7. See figure 1. Turn the leveling cranks (E) clockwise all the way to give the tiller maximum clearance from the ground when in the raised position.

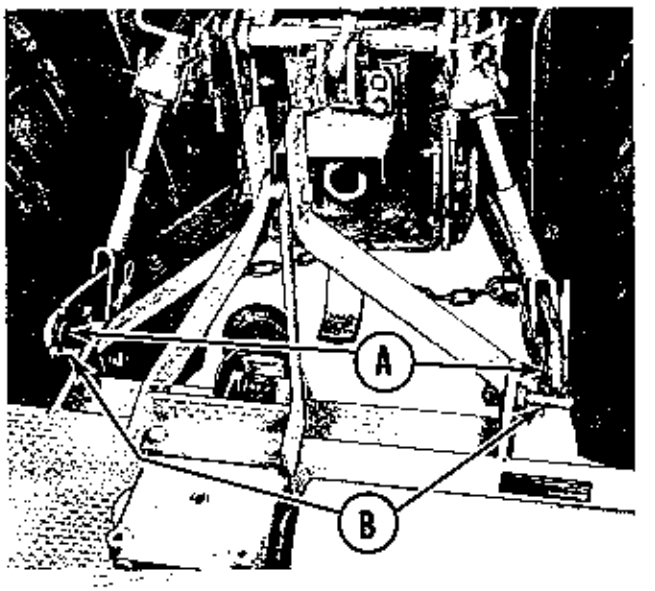


Figure 2. Tractor backed to front of tiller.

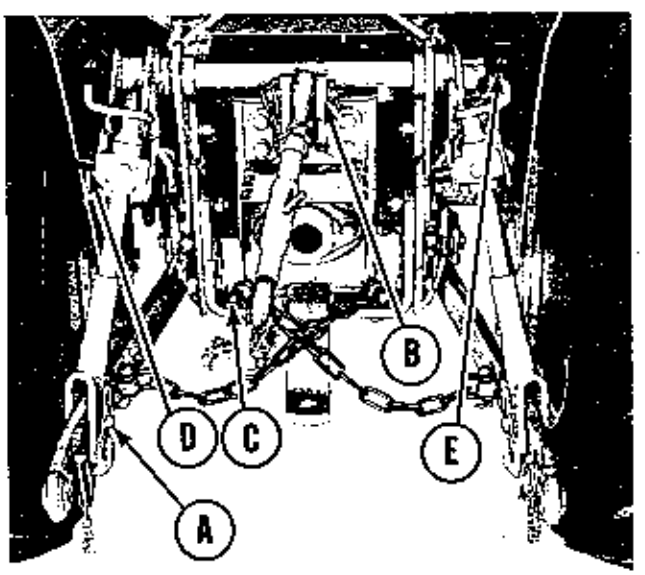


Figure 1. Three-point hitch set up to mount the rotary tiller.

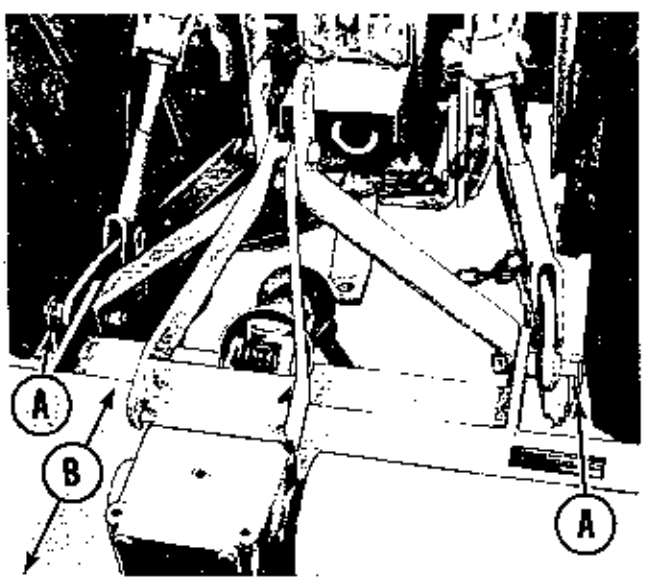


Figure 3. Swivel sockets attached to tiller hitch pins.

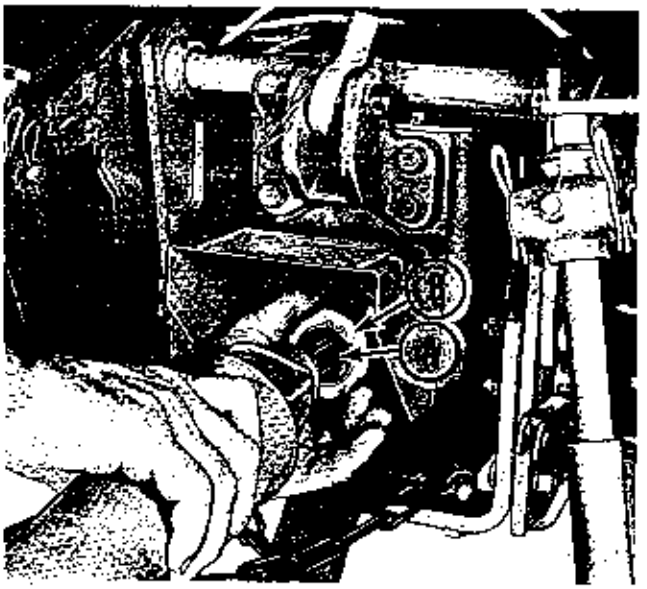


Figure 4. Installing tiller drive shaft in tractor power take off.

8. See figure 5. With the tiller resting on the ground surface, rotate the turnbuckle (C) until the top surface of the tiller (figure 3, item B) is level front to rear. Use a wrench to tighten the locking nut (D) securely against turnbuckle (C) to prevent the turnbuckle from changing position.

REMOVING THE ROTARY TILLER

CAUTION: BEFORE ATTEMPTING TO ADJUST, SERVICE OR REMOVE THE ROTARY TILLER, BE SURE THE ENGINE IS SHUT OFF, THE PARKING BRAKE SET AND THE TILLER TINES HAVE STOPPED TURNING.

1. Position the tractor so its rear wheels and the rotary tiller are on a level surface. Shut off the tractor engine and set the parking brake.
2. Push the tractor hydraulic control lever forward to the FLOAT position.
3. See figure 5. Remove the pin at (E) to unfasten the turnbuckle link from the rotary tiller.
4. See figure 4. Remove the tiller drive shaft by turning the locking ring (B) clockwise with one hand while using the other to pull the drive shaft out of the power take off.
5. See figure 3. Remove the safety pins (A) from the tiller hitch pins and pull the draft arms off the hitch pins. **CAUTION: BE SURE THE TILLER IS BLOCKED OR POSITIONED SO IT DOES NOT FALL AND CAUSE INJURY AFTER IT HAS BEEN UNFASTENED FROM THE THREE POINT HITCH.**

OPERATION

SOIL CONDITIONS REQUIRED

Moisture content of the soil will affect the quality of seedbed prepared when using the rotary tiller. It is not advisable to till soil which is too moist and forms large clods or balls of mud when tilled. Heavy clay soils tend to stay wet longer and form larger, harder clods when tilled too wet than lighter textured sandy or well developed dark soils which are high in organic material. For this reason, it is more important not to till clay soils too early in the spring or after a rain.

DETERMINING TILLING PATTERN

Before beginning to till any area, the operator should determine the best tilling pattern. The size, shape, terrain, and obstructions of the area to be tilled should be considered. Usually it is best to till the longest direction of the area to minimize turning. Required turns can often be made faster by backing the tractor and tiller since direction of travel can be easily and quickly changed with the hydrostatic transmission speed control. **CAUTION: ALWAYS RAISE THE TILLER BEFORE TURNING OR BACKING TO PREVENT DAMAGE TO THE TRACTOR AND TILLER.** Time can also be saved when turning or crossing the end of a field when the tiller is not in the ground by using the tractor hydrostatic transmission speed control to increase ground speed.

SEEDBED CONDITIONS DESIRED

TILLING DEPTH

The most desirable tilling depth for an area will vary according to its intended use. If seeds are to be planted, consideration should be given to the depth required to kill competing plant life, mix fertilizer, and prepare a good seedbed. In general, larger seeds should be planted deeper than smaller seeds. For example, corn is often planted two to three inches deep, whereas, the much smaller grass seed may be planted within the top 1/2 inch of soil. A good seedbed for grass seed can often be made by tilling only two to three inches deep. When planting larger seeds such as corn, a tilling depth of five or more inches may be desirable.

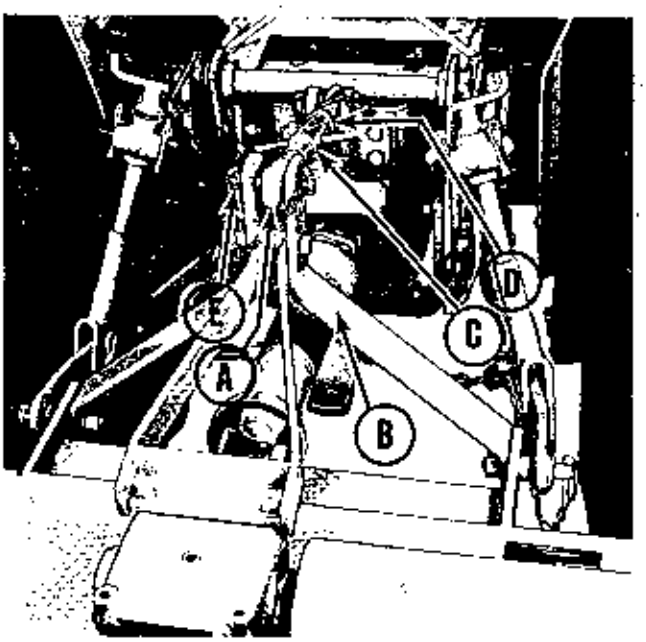


Figure 5. Turnbuckle link attached to tiller.

CLOD SIZE

The seedbed must be fine enough to insure that the planted seed makes good enough contact with the soil to germinate. Smaller seeds usually require a finer seedbed than larger ones. In many cases, more than one pass of the tiller will be required to prepare a seedbed of proper depth and texture.

PREPARING THE TRACTOR AND TILLER

CAUTION: BEFORE ATTEMPTING TO INSPECT, ADJUST, OR SERVICE THE ROTARY TILLER INSURE THE POWER TAKE OFF IS DISENGAGED, THE ENGINE SHUT OFF, AND THE TILLER TINES HAVE STOPPED TURNING.

DO THE FOLLOWING

1. Read this manual and the owners manual for the tractor carefully. Be sure you are familiar with the safety precautions, controls, and operating instructions.
2. Check the tiller carefully to be sure it is properly installed and leveled. See page 2.
3. Check the condition of the tiller tines. Clean the tine shaft of any foreign material and tighten any loose tine mounting bolts according to the Maintenance instructions.
4. Lubricate the tiller according to the Every 25 Hour Maintenance instructions on page 8.
5. Clear the area to be tilled of all wire and other debris which may be caught in or damage the tiller tines.

DUST SHIELD POSITION

See figure 8. For most tilling conditions, to give the smoothest tilling job and prevent rocks from being thrown, the rear of the dust shield (A) should rest on the ground when the tiller is operating in the ground. The height of the dust shield can be adjusted by placing various chain links over the hook (figure 8, item B). If finer adjustment is desired than the chain links provide, the chain can be twisted a few turns to give the height desired.

SKID SHOE POSITION

The Simplicity tiller has adjustable skid shoes which can be set to give various tilling depths. See figure 8. The two skid shoes (C) on either side of the tiller can be held in any of six positions by placing the pin and spring clip at (D) in various adjustment holes. Raise the skid shoes to provide greater tilling depth; lower them to give less depth. Both skid shoes should be positioned in the same adjustment hole to give uniform tilling depth. Other operating settings which influence tilling depth are covered under Controlling Tilling Depth and Clod Size on page 4.

OPERATING THE TRACTOR AND TILLER

CAUTION: NEVER BACK UP OR TURN SHARPLY WITHOUT RAISING THE TILLER OUT OF THE GROUND.

TRANSPORTING THE TILLER

Transport the tiller in the raised position with the **REAR CLUTCH** switch **OFF**. Any combination of the three speed transmission, hydrostatic transmission control lever, and the engine speed control may be used in transporting the tiller. Ground speed should be adjusted according to the type and condition of the ground surface. **CAUTION: WHEN THE TILLER IS IN THE RAISED POSITION, WEIGHT ON THE TRACTOR FRONT WHEELS WILL BE SUBSTANTIALLY REDUCED MAKING TURNING DIFFICULT UNDER SOME CONDITIONS. THE FRONT WEIGHT SHOULD BE USED ON THE TRACTOR WHEN THE TILLER IS INSTALLED.**

SELECTING TRANSMISSION GEAR

The tractor three speed transmission can be placed in second gear for most operating conditions and the hydrostatic transmission control lever used to regulate ground speed. When tilling hilly or rough areas, the tractor will be more efficient if first gear is used. It will also be easier to maintain a uniform ground speed in first gear.

ENGINE SPEED

The engine should be operated at 3/4 to full speed when using the rotary tiller. Operate it at full speed when tilling depth and ground conditions require full engine power.

ENGAGING TILLER DRIVE

To minimize wear on the tractor power take off clutch, the tiller should be engaged while it is out of the ground. Engage the tiller by pushing forward on the tractor **REAR CLUTCH** switch located on the instrument panel. **CAUTION: TO PREVENT DAMAGE TO THE TILLER SLIP CLUTCH DISENGAGE THE POWER TAKE OFF CLUTCH IMMEDIATELY IF THE TILLER TINES STOP TURNING DURING OPERATION.**

RAISING AND LOWERING THE TILLER

The tiller should be raised and lowered by using the tractor hydraulic lift control lever. Pull back on the lever and hold it in the **RAISE** position to lift the tiller. Lower the tiller by pushing the hydraulic lift control lever forward to the **FLOAT** position. **CAUTION: THE HYDRAULIC LIFT CONTROL LEVER MUST BE IN THE FLOAT POSITION WHEN THE TILLER IS BEING OPERATED TO PREVENT THE TRACTOR FROM BEING PROPELLED FORWARD BY THE TILLER.**

CONTROLLING GROUND SPEED

Ground speed can be easily and quickly controlled by using the tractor hydrostatic transmission control lever. The best ground speed will vary greatly with the type of terrain, tilling depth and condition of the soil. Tilling depth and size of soil particles will be affected by ground speed. For most conditions, 1 to 2 miles per hour will be a good starting speed. Refer to the operation chart in the Operation section of the 4040 tractor owners manual for approximate control settings to achieve these speeds.

CONTROLLING TILLING DEPTH AND CLOD SIZE

TILLING DEPTH

Factors which affect tilling depth include the skid shoe setting, type and condition of the soil, engine speed, and

ground speed. The skid shoes should be adjusted to control tilling depth as explained on page 4 under Skid Shoe Position.

The type and condition of soil will affect tilling depth for a particular ground speed and depth shoe adjustment. The tiller will tend to go deeper in light textured or sandy soils than in heavy clay soils. Hard, packed, or dry soils may require more passes of the tiller than soils which have been cultivated recently or are more moist.

The engine should be operated at 3/4 to full speed for most efficient operation, so changing engine speed is not recommended as a method for regulating tilling depth.

Ground speed of the tractor and tiller will affect tilling depth unless the tiller skid shoes are resting on the ground surface. Using the hydrostatic control lever, decrease ground speed to increase tilling depth. More than one pass of the tiller may be required to reach the desired tilling depth.

CLOD SIZE

Ground speed and number of passes over the ground with the tiller can be varied to control clod size (soil texture). To reduce clod size or make a finer seedbed, reduce the tractor ground speed. Making additional passes with the tiller will also help reduce clod size. The tiller dust shield (figure 8, item A) must be in the lowered position so its lower edge rests on the ground surface to give a fine textured seedbed without large clods. If the clods are smaller than desired, increase ground speed and reduce the number of passes.

REMOVING THE HYDRAULIC CYLINDER

See figure 6. The tractor hydraulic cylinder (A) can be removed for use on a front mounted attachment while the rotary tiller is mounted and held in the raised position by the restraining chains. Proceed as follows to remove the cylinder:

1. Raise the rotary tiller to the full raised position using the tractor hydraulic lift system.
2. See figure 6. Remove the spring clip and pins at (B) to release the restraining chains from the eyebolts on the tractor drawbar.
3. Use the spring clips and pins removed in step 2 to fasten the restraining chains in the frame holes (C). Place the U link through the correct chain link to shorten the chain so it is only as long as necessary to reach the frame holes (C).
4. Place the tractor hydraulic lift control lever in the FLOAT position.
5. See figure 7. Remove the spring clip and pin at (A) to release the front of the hydraulic cylinder.
6. Pull rearward on the rod end of the hydraulic cylinder at (B) until the spring clip and pin at (B) can be removed. The crank handles (figure 1, item E) may need to be turned counter-clockwise (as viewed from above) to allow the cylinder to be pulled back sufficiently to allow the pin to pass by the restraining chain.
7. Disconnect the two hydraulic hoses at the tractor frame. See the tractor owners manual for instructions.
8. The hydraulic cylinder may now be removed. The restraining chains will hold the rotary tiller in the "raised" position.

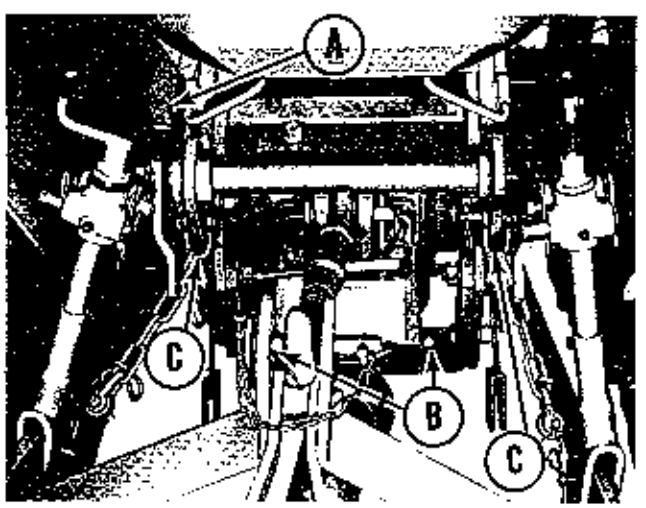


Figure 6. Holding the rotary tiller in the raised position with restraining chains.

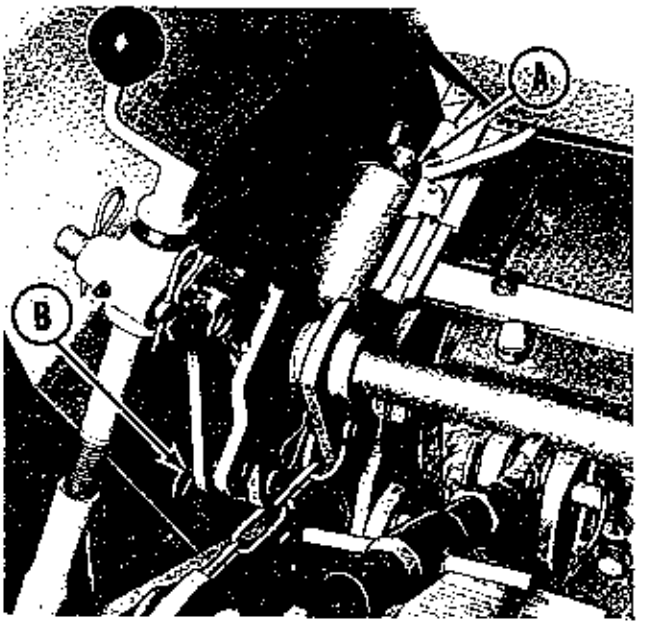


Figure 7. Removing the hydraulic cylinder.

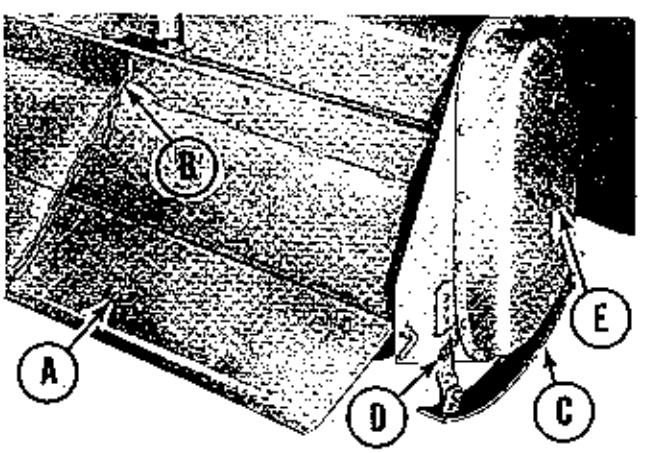


Figure 8. Dust shield and skid shoe adjustment seen from rear of tiller.

TROUBLE SHOOTING GUIDE

PROBLEM OR SYMPTOM	POSSIBLE CAUSES	CHECKS AND CORRECTIONS
Tiller Tines do not rotate.	Tractor Power Take Off not operating	Rear clutch switch must be turned ON. Power take off clutch not working. See your Simplicity dealer.
	Tiller slip clutch slipping	Clean any wire, chain, etc. from tiller tines.
		Adjust slip clutch. See page 7 of Adjustments.
	Tiller drive chain broken.	Replace drive chain. See page 8.
Tines rotate, but tiller does not till deeply enough.	Tractor hydraulic lift lever not in FLOAT position.	Place lift lever in FLOAT position.
	Tiller depth shoes not correctly adjusted	Adjust depth shoes for tilling depth required. See page 4.
	Engine speed too low	Set engine speed control 3/4 to full.
	Ground too hard.	Make several passes, setting the tilling depth deeper with each pass.
	Ground speed too fast.	Reduce ground speed.
Tiller leaves ground rough or cloddy.	Ground too wet.	Allow ground to dry until ground will not "ball up" when tilling.
	Skid shoes set too deep.	Adjust depth shoes. See page 4.
	Ground speed too fast	Reduce ground speed.
	Dust shield not adjusted properly.	See Dust Shield Position, Page 4.
Tiller jolts tractor or tends to propel tractor forward.	Tractor hydraulic lift lever not in FLOAT position.	Put tractor lift lever in FLOAT position.
	Three point hitch float pins not in FLOAT position.	Place float pins in FLOAT position. See page 2.
	Tiller depth shoes set too deep.	Adjust depth shoes to till no more than 4 inches of untilled ground in one pass.
Tractor not stable on sloping surfaces.	Ground speed too fast.	Slow ground speed. Use care when operating on rough or sloping surfaces.
	Tractor not properly weighted.	Use rear wheel weights and front weight when operating on slopes.
	Tire tread too narrow.	Turf or high flotation tires will increase stability. Turn agricultural tires outward to give wider tread.
	Tire pressure incorrect.	Inflate tires according to tractor owners manual.
Tractor will not make sharp turns.	Front of tractor not properly weighted.	Use front weight.
	Tractor brakes locked together.	Use tractor brakes individually for making sharp turns at slow ground speed.

ADJUSTMENTS

PROTECTIVE SLIP CLUTCH

See figure 9. The slip clutch may require adjustment if it slips enough when tilling to cause it to get too hot to touch or whenever new linings are installed. It must be adjusted so it will drive the tiller during normal operation, yet slip when ever the tiller tines strike hard object. The slip clutch protects both the tiller drive and the power take off from shock loads which may cause damage. **DO NOT OVERTIGHTEN THE SLIP CLUTCH.** Have your Simplicity dealer adjust it for you or proceed as follows:

1. See figure 10. Remove the 6 capscrews (A) and the protective cover (B) from the rotary tiller.
2. See figure 9. While holding the bolts (A), tighten the six locknuts (B) by turning them clockwise until the springs (C) are fully compressed. You should be able to tell this by observing the springs and also noting that the nuts will start to turn harder. **CAUTION: TIGHTEN ONLY UNTIL THE SPRINGS ARE COMPRESSED. DO NOT OVER TIGHTEN.**
3. Hold the capscrews (A) with a wrench and loosen each of the six locknuts (B) 1/2 turn by rotating them counterclockwise.
4. See figure 10. Install the cover (B) and six capscrews (A) removed in step 1.

DRIVE CHAINS

Once a year or oftener if the rotary tiller is used commercially, the drive chains should be tightened as follows:

1. See figure 11. Using two box end wrenches loosen slightly the nut at (A) with one while holding the capscrew (B) with the other.
2. See figure 11. With the two box end wrenches positioned as shown over the nut and capscrew, push rearward on both wrenches to remove slack from the chain. While pushing rearward on the wrenches, turn the wrench on nut (A) clockwise until nut (A) is tightened securely.
3. Repeat steps 1 and 2 to tighten the lower drive chain at nut (C). The capscrew not shown in figure 11 is located under the tiller housing.
4. If the adjusting slots (behind A, B, and C in figure 11) will not allow the chains to be tightened, the chains should be replaced. See Chain Replacement on page 8.

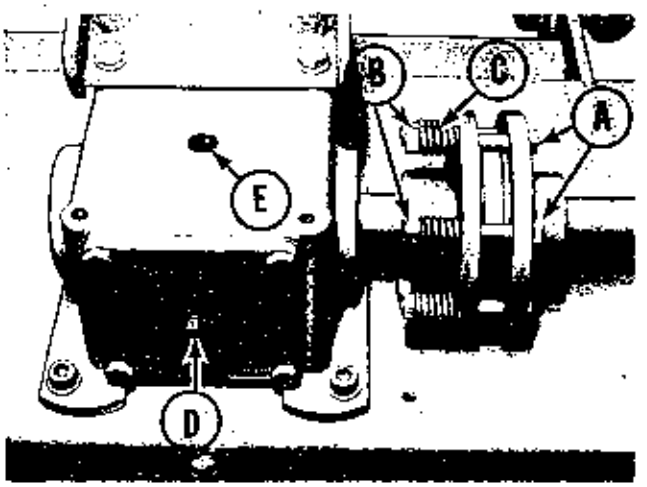


Figure 9. Tiller bevel gear box and protective slip clutch as seen from behind tiller.

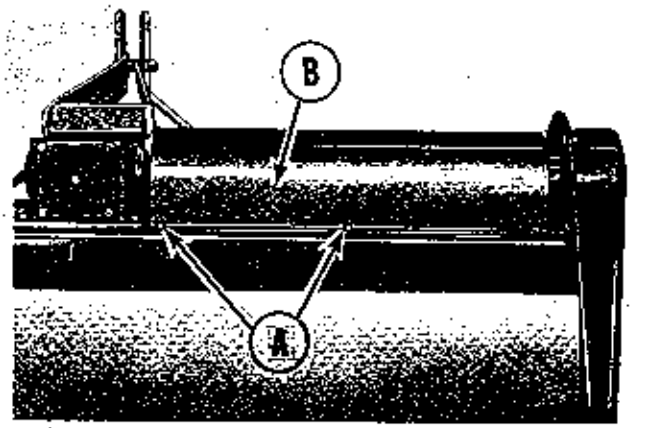


Figure 10. Right side of tiller as seen from behind tiller.

MAINTENANCE

ORDERING REPLACEMENT PARTS

Replacement parts required for performing maintenance services or repair work should be purchased from your Simplicity dealer. When ordering parts, be prepared to give him the identification number of your rotary tiller. If you have not already recorded this number on the inside front cover of this manual, we suggest that you do so now for convenient future reference.

AFTER EACH USE

Inspect the rotary tiller thoroughly looking for loose or missing bolts, pins or spring clips, oil leaks, worn parts, etc. Check the tine mounting bolts (figure 12, item A) to be sure they are tight. They should be kept torqued to 40 foot pounds. Also check the tine shaft for wire, chain or other foreign material which may interfere with proper tilling or cause damage to the tiller. Clean or repair as needed to insure the tiller is ready to use the next time you need it.

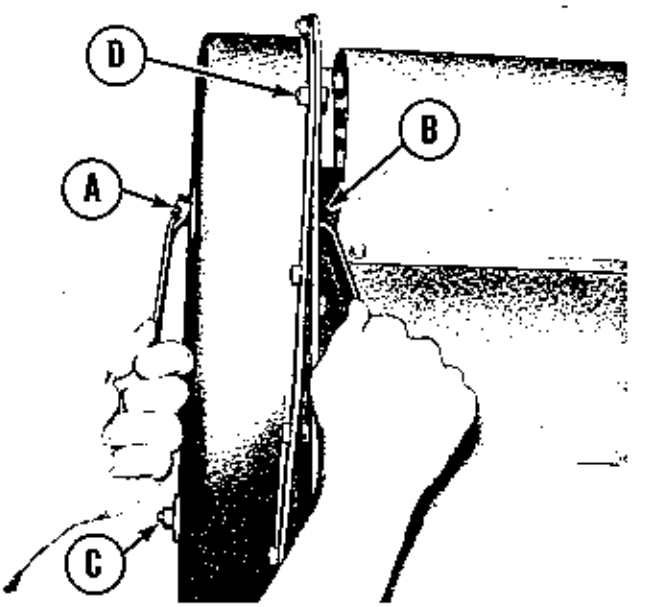


Figure 11. Adjusting drive chain tension.

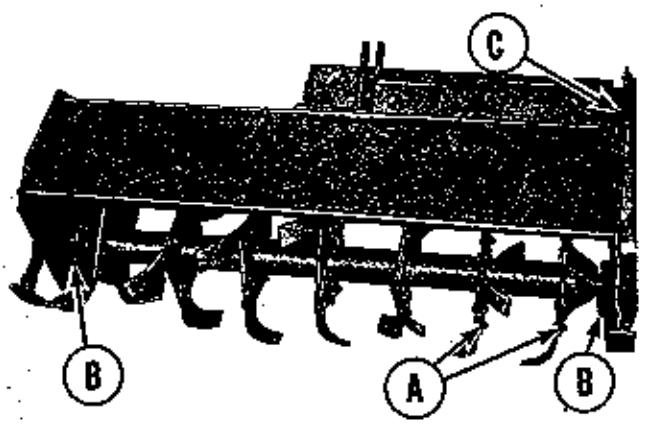


Figure 12. Tine assembly as seen from rear of tiller.

EVERY 25 HOURS

Check Lubricant Level: See figure 9. Remove plug (D). Oil should be level with the threads on the bottom of the plug hole when the tiller is setting level. If lubricant is required, add SAE 90 transmission oil. Plug (E) can be removed for adding oil.

Lubricate Grease Fittings: The rotary tiller has six grease fittings which should be lubricated every 25 hours with general purpose grease. Wipe the grease fittings clean. Lubricate each fitting with 5 shots of grease or less if the grease is seen being forced out of the bearing. The grease fittings are located as follows:

QUANTITY	LOCATION
2	Drive Shaft (figure 13, item A)
2	Tine Shaft (figure 12, item B)
1	Cross Drive Shaft (figure 12, item C)
1	Chain Drive Cover (figure 8, item E)

A thin film of grease on the drive shaft spline (figure 13, item B) will reduce wear and make installing the drive shaft easier.

ONCE EACH YEAR

Once each year or more often if the tiller is used commercially, the tiller drive chains should be adjusted. Follow the instructions given for Drive Chain Adjustment on page 7.

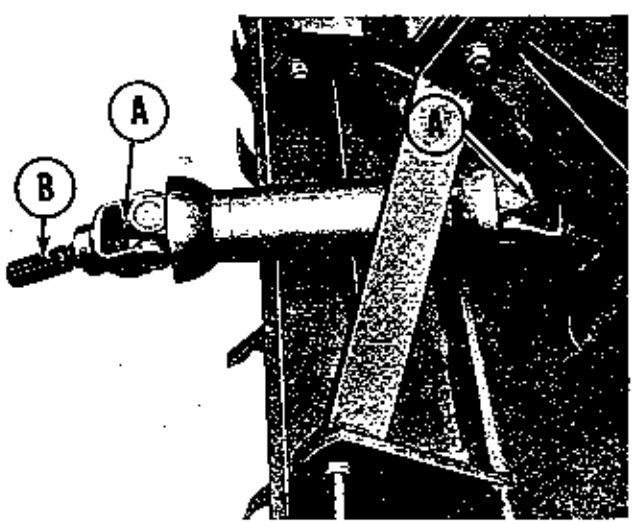


Figure 13. Tiller drive shaft seen from left side.

TINE REPLACEMENT

See figure 12. If tine replacement is required due to wear or breakage, be sure the tine blades are installed correctly as shown and the tine bolts (A) are tightened to 40 foot pounds torque. For best performance, **USE ONLY GENUINE SIMPLICITY REPLACEMENT PARTS.**

CHAIN REPLACEMENT

The tiller drive chains should be replaced when the bolt slots (figure 11, items A, B and C) no longer allow further tightening of the chain. To replace the chains, proceed as follows:

1. See figure 11. Remove the nuts at (A) and (C) and the nuts (D) which hold the chain cover to the tiller frame. Also remove nut (E) shown in figure 8.
2. See figure 14. Remove the chains (A) and (B) noting that they are a different size so the new chains can be installed correctly.
3. Remove the grease from the chain sprockets, tiller housing, and chain cover. Clean with a non-flammable cleaner.
4. Inspect the rollers (C) and gasket (D). Replace with new if they are worn or damaged.
5. Install new drive chains (A) and (B).
6. Coat the two drive chains liberally with general purpose automotive grease. Also put about 2 pounds of grease in the bottom of the chain cover.
7. See figure 11. Replace the chain cover and tighten all nuts (D) securely.
8. Install the washer and nuts at (A) and (C) and tighten finger tight.

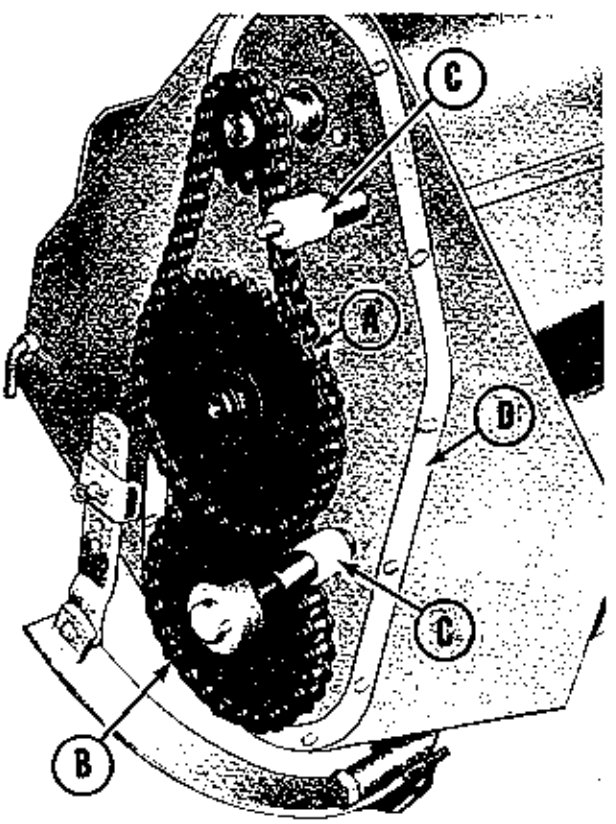


Figure 14. Drive chains as seen with chain cover removed.

9. See figure 8. Install nut (E) and tighten securely.
10. Tighten the two drive chains as explained on page 7 of the Adjustment section of this manual.

OUT OF SERVICE PROTECTION (STORAGE)

1. Remove the tiller from tractor. See page 3.
2. Use water pressure or a brush to thoroughly clean the tiller to remove buildup of dirt on or under the tiller housing.
3. Paint or lightly coat with oil any area where paint has been worn or chipped away.
4. Lubricate the tiller according to the Every 25 Hour Maintenance Service.
5. Store the tiller in a dry place.

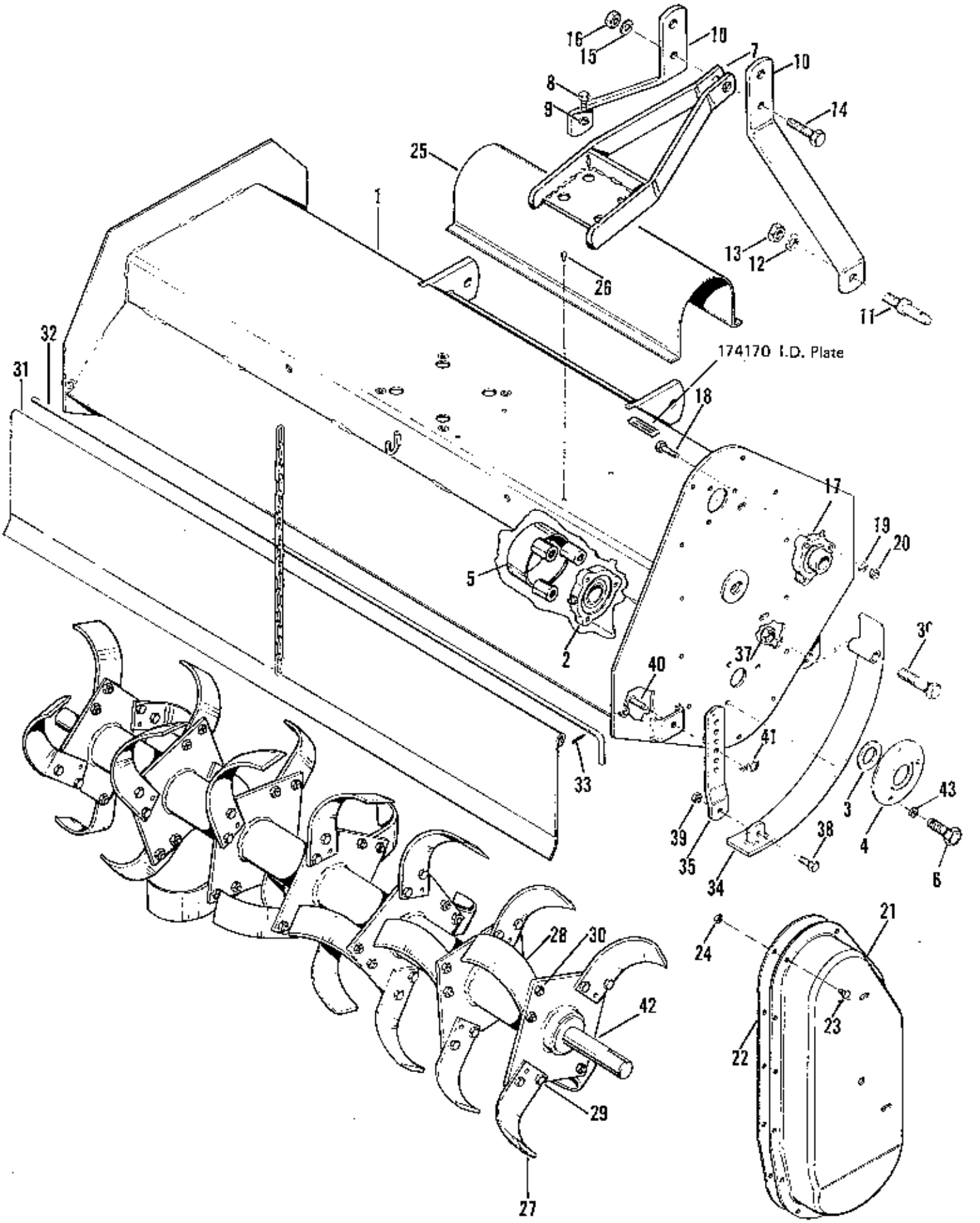
SPECIFICATIONS

Effective Width	48"
Tilling Depth	Up to 8" (requires multiple passes)
Number of Tine Clusters	7 (4 replaceable tines per cluster)
Tine Circle Diameter	16"
Drive Means	Tractor rear PTO
Drive Train	Double universal joint drive shaft, bevel gears, cross shaft with slip clutch, two stage No. 50 and 60 roller chains with hardened sprockets.
Bearings	Rolling contact bearings with grease fittings.
Tine Shaft Speed	200 rpm at full engine speed.
Weight (Approximate)	305 pounds.

Simplicity®

MFG. NO. 696 48" ROTARY TILLER PARTS CATALOG

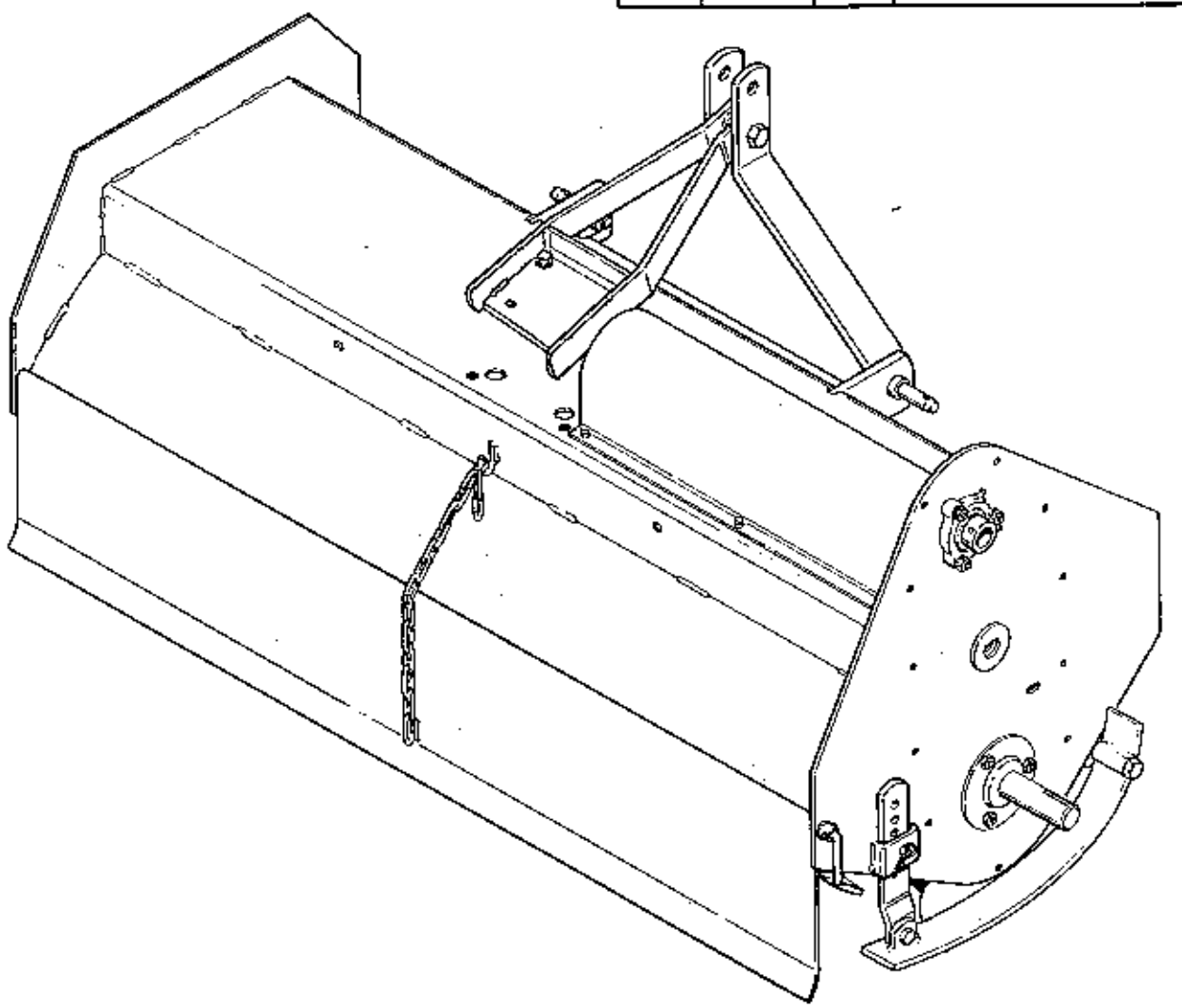
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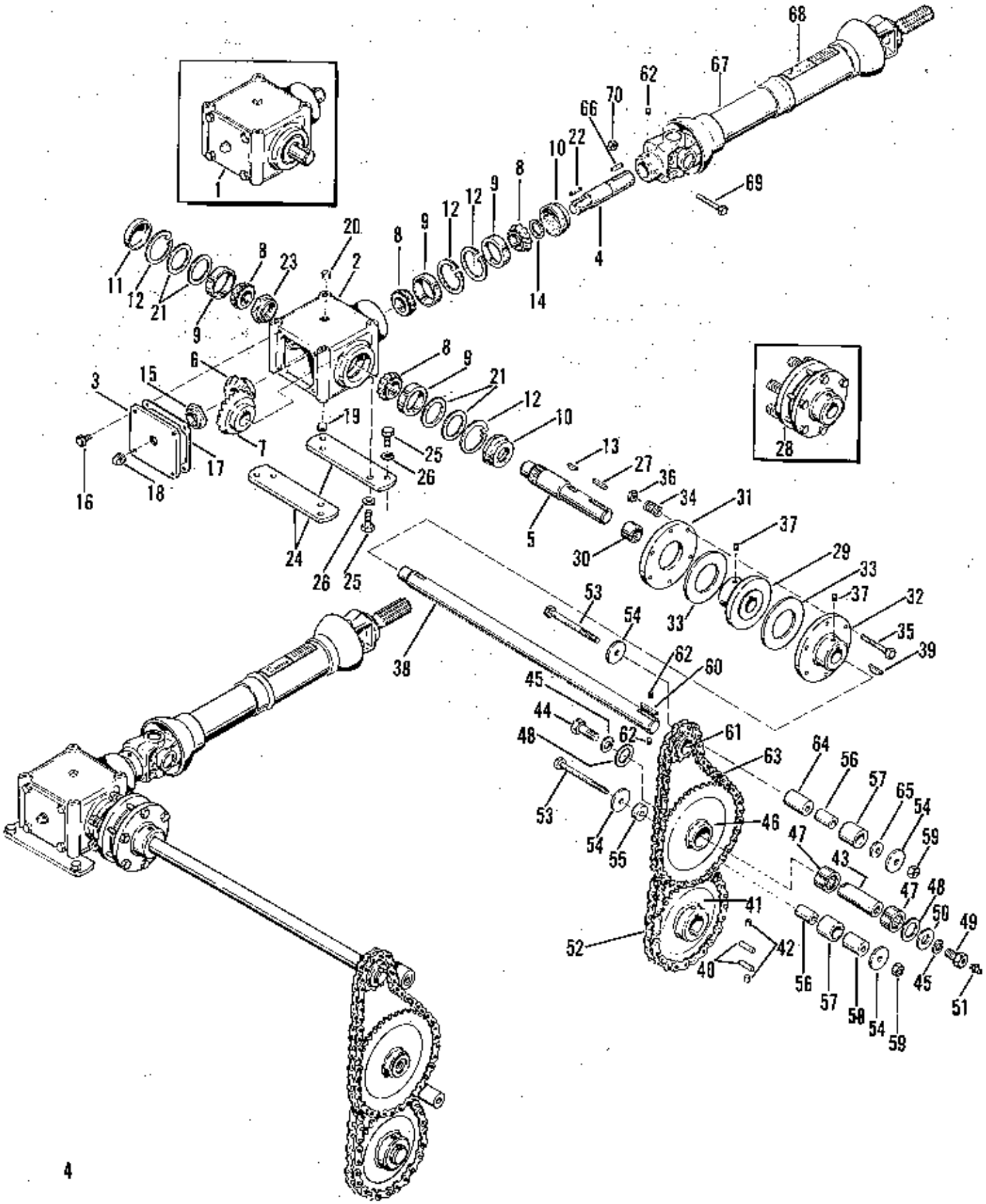

174170 I.D. Plate

FRAME AND TINES

Ref. No.	Part No.	Qty. Req.	Description
1	172476	1	Main Frame Assy.
2	172536	2	Bearing Flange
3	172458	1	Seal
4	172507	1	Seal Retainer
5	175138	2	Trash Guard Assy.
6	715045	6	Hex Head Bolt
7	172943	1	Brace Assembly
8	715096	2	Hex Capscrew, 3/8"-16 x 1" lg.
9	720002	2	Lock Washer, 3/8"
10	172464	2	Mast
11	172500	2	Hitch Pin
12	720005	2	Lock Washer, 5/8"
13	717004	2	Hex Nut, Full, 5/8"-11
14	715153	1	Hex Capscrew, 1/2"-20 x 2-1/2" lg.
15	720004	1	Lock Washer, 1/2"
16	717008	1	Hex Nut, Full, 1/2"-20
17	172870	1	Bearing Flange
18	715046	3	Hex Capscrew, 5/16"-18 x 1-1/4" lg.
19	720001	3	Lock Washer, 5/16"
20	717001	3	Hex Nut, Full, 5/16"-18

Ref. No.	Part No.	Qty. Req.	Description
21	172519	1	Cover Assembly
22	172482	1	Gasket
23	705012	13	Hex Capscrew, 5/16"-18 x 5/8" lg.
24	717511	13	Hex Nut, Full, Lock, 5/16"-18
25	172859	1	Guard
26	715067	6	Taptite Screw, 1/4"-20 x 3/8"
27	172511	14	Tine R.H.
28	172512	14	Tine L.H.
29	715038	56	Hex Capscrew, 3/8"-16 x 1" lg.
30	718059	56	Hex Lock Nut, 3/8"-16
31	173436	1	Deflector Assembly
32	172818	1	Deflector Rod
33	722002	1	Cotter Pin, 3/32" x 1" lg.
34	172875	2	Skid Assembly
35	172879	2	Adjusting Bracket
36	705056	2	Hex Capscrew, 5/8"-11 x 3" lg.
37	717522	2	Hex Lock Nut, 5/8"-11
38	705005	2	Hex Capscrew, 3/8"-16 x 1" lg.
39	717510	2	Hex Nut, Full, Lock, 3/8"-16
40	108158	2	Pin
41	8161045	2	Spring Clip
42	172771	1	Rotor Assy.
43	720002	6	Lock Washer




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DRIVE SYSTEM

Ref. No.	Part No.	Qty. Req.	Description
1	172534	1	Drive Assembly
2	173586	1	Housing (For Service Only)
3	173587	1	Cover (For Service Only)
4	173588	1	Input Shaft (For Service Only)
5	173589	1	Output Shaft (For Service Only)
6	173590	1	Gear 16T (For Service Only)
7	173591	1	Gear 24T (For Service Only)
8	170835	4	Bearing Cup (For Service Only)
9	170836	4	Bearing Cone (For Service Only)
10	173592	2	Seal (For Service Only)
11	173593	1	Cap (For Service Only)
12	173594	4	Snap Ring (For Service Only)
13	725004	1	Key (For Service Only)
14	105194	1	Retaining Ring (For Service Only
15	173595	1	Stake Nut (For Service Only)
16	705017	4	Hex Capscrew, 5/16"-18 x 3/4" lg. (For Service Only)
17	173596	1	Gasket (For Service Only)
18	726001	1	Pipe Plug (For Service Only)
19	726005	1	Pipe Plug (For Service Only)
20	173597	1	Vent Plug (For Service Only)
21	173598	4	Shim (For Service Only)
22	173599	1	Key (For Service Only)
23	173600	1	Stake Nut (For Service Only)
24	172439	2	Plate
25	715096	8	Hex Capscrew, 3/8"-16 x 1" lg.
26	720002	8	Lock Washer, 3/8"
27	177304	1	Key
28	173412	1	Torque Limiter Assy.
29	173404	1	Clutch Hub Assy. w/bushing
30	158363	1	Bushing
31	173327	1	Clutch Plate
32	173328	1	Clutch Flange
33	173329	2	Clutch Disk
34	173575	6	Spring

Ref. No.	Part No.	Qty. Req.	Description
35	705036	6	Hex Capscrew, 5/16"-18 x 2-1/2" lg.
36	717511	6	Hex Nut, Full Lock, 5/16"-18
37	713006	2	Set Screw, Set Screw Sq. Head
38	173330	1	Shaft
39	151040	1	Key
40	172669	2	Key
41	172777	1	Sprocket Assembly
42	713507	2	Set Screw, 3/8"-16 x 3/8" lg.
43	172456	1	Spacer
44	706022	1	Hex Capscrew, 1/2" - 20 x 1-1/4" lg.
45	720004	2	Lock Washer, 1/2"
46	172174	1	Sprocket Assembly
47	105195	2	Roller Bearing
48	8281014	2	Washer
49	105132	1	Bolt, R.H. Side
50	719004	1	Plain Washer, 1/2"
51	727002	1	Grease Fitting
52	172497	1	Roller Chain No. 60
53	715130	2	Hex Capscrew, 3/8" - 16 x 4" lg.
54	8161199	4	Special Washer
55	172454	1	Spacer
56	170369	2	Spacer
57	170177	2	Roller
58	172453	1	Spacer
59	717510	2	Hex Nut, Full Lock, 3/8"-16
60	172669	1	Key
61	172772	1	Sprocket Assembly
62	713006	3	Set Screw, Set Screw Sq. Head
63	172496	1	Roller Chain No. 50
64	172452	1	Spacer
65	157424	1	Special Washer
66	172668	1	Key
67	172670	1	P.T.O. Drive Assembly
68	174005	1	P.T.O. Decal
69	715053	1	Hex Capscrew, 1/4"-20 x 2-1/4" lg.
70	717513	1	Hex Nut, Full Lock, 1/4"-20

⚠ CAUTION

1. Keep all shields in place.
2. Before leaving operator's position:
   Shift transmission to neutral.
   Set parking brake.
   Disengage attachment clutch.
   Shut off engine.
   Remove ignition key.
3. Wait for all movement to stop before servicing machine.
4. Keep people and pets a safe distance away from machine.