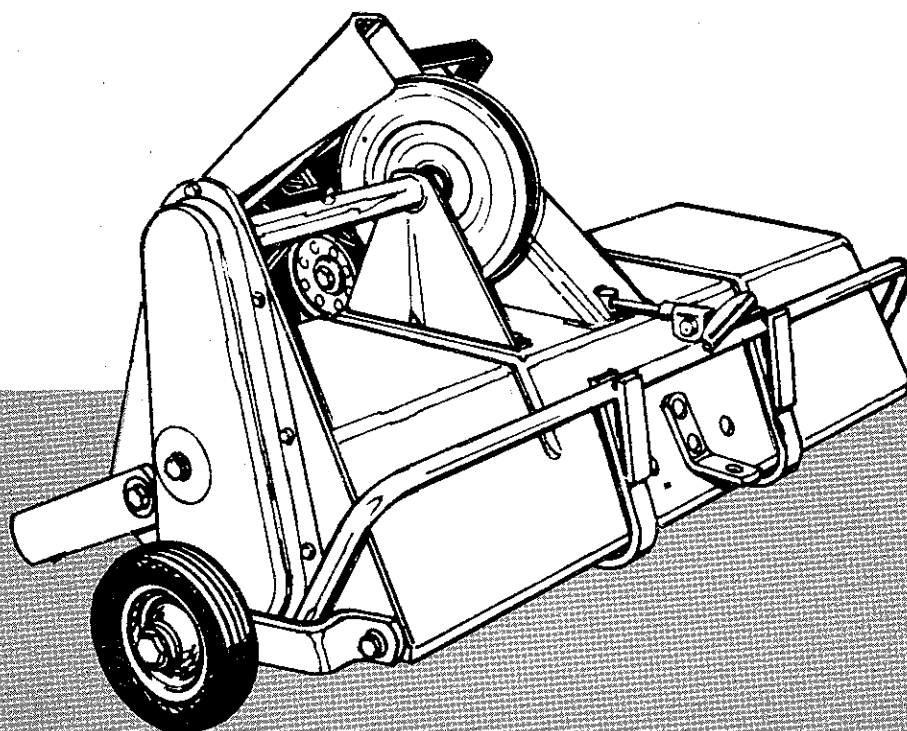


HOMELITE®

PARTS LIST & INSTRUCTIONS



38" LAWN REVITALIZER



A **Textron** DIVISION, PORT CHESTER, N.Y. 10573

Part No. 24683

TABLE OF CONTENTS

INSTALLATION	3
OPERATION	4
DEPTH ADJUSTMENT	4
PREPARATION FOR OPERATION	4
ENGAGING THE REVITALIZER	4
TRAVEL SPEED AND DIRECTION	4
PREPARING A SEED BED	5
REMOVING THE THATCH	5
TROUBLE SHOOTING	5
ADJUSTMENTS	5
BELT TENSION ADJUSTMENT	5
BELT STOP ADJUSTMENT	5
DRIVE CHAIN ADJUSTMENT	6
MAINTENANCE	7
AFTER EACH USE	7
AFTER 10 HOURS	7
ONCE EACH YEAR	7
BELT REPLACEMENT	7

PROTECT YOURSELF AND OTHERS

1. Read and be familiar with the owners manual for your tractor and the owners manual for the revitalizer before operating the revitalizer.
2. Do not allow anyone to use the revitalizer unless they have been instructed in how to operate it safely.
3. Never attempt to adjust, repair or service the revitalizer while the tractor engine is running.
4. Do not allow others near the revitalizer when it is operating.
5. Stay clear of the drive belt, revitalizer knives and other moving parts when the tractor engine is running.

WARRANTY

We warrant this HOMELITE product to be free from defects in material or workmanship under normal use and service, except that we make no warranty, express or implied, with respect to tires, engines, generators or voltage regulators (which usually are warranted by their respective manufacturers) nor with respect to any unit which after sale by HOMELITE has been altered in any way without HOMELITE'S express consent. Our obligation under this warranty is limited to replacing, without charge any part which is proven defective within one year (30 days if the unit is used for commercial, rental or municipal purposes) from date of purchase, if returned to us, with transportation charges prepaid, at a HOMELITE branch office or to a dealer whom we have authorized to make the replacement.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, PERFORMANCE OR OTHERWISE AND IN NO EVENT SHALL HOMELITE BE LIABLE FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES.

HOMELITE
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REQUIRED ACCESSORIES

Rear Lift Kit No. LM-16001-61 for Tractor Models T-10, T-12 & T-15.

RECOMMENDED ACCESSORIES

Electric Lift Kit No. LM-16001-78 for Tractor Models T-10, T-12 & T-15.

INSTALLATION

CAUTION: DO NOT ATTEMPT TO INSTALL OR WORK ON THE REVITALIZER WHEN THE TRACTOR ENGINE IS RUNNING.

1. Position the revitalizer behind the tractor.
2. (See figure 1) Slide the idler arm assembly onto the left end of the rear lift shaft. Attach the lower end of the idler arm assembly to the hitch member with a pin and spring clip.

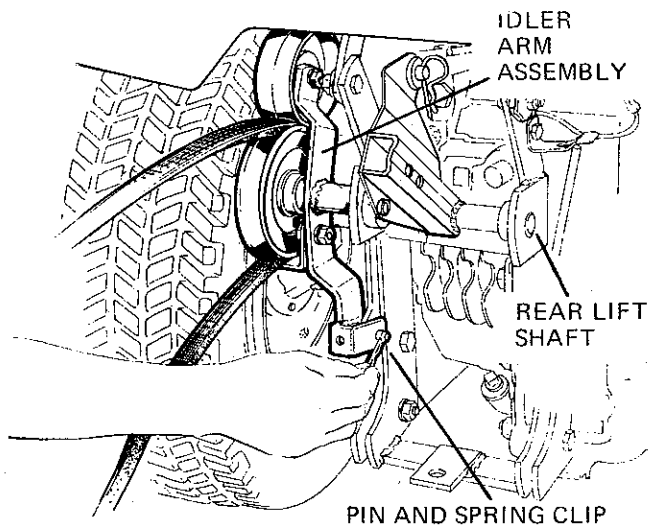


FIGURE 1

3. (See figure 2) Lower the tractor lift unit and place the revitalizer lift bar assembly into the tube of the tractor rear lift assembly. Placing a thin film of oil on the lift bar will make it

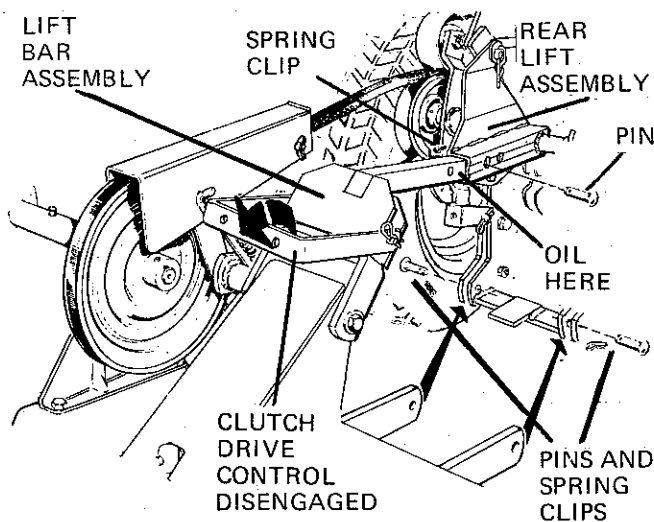


FIGURE 2

slide in place more easily. Fasten the lift bar in place with the pin and spring clip provided.

4. (See figure 3) Move the tractor lift to the raised position. Connect the revitalizer frame assembly to the tractor with 2 pins and spring clips.

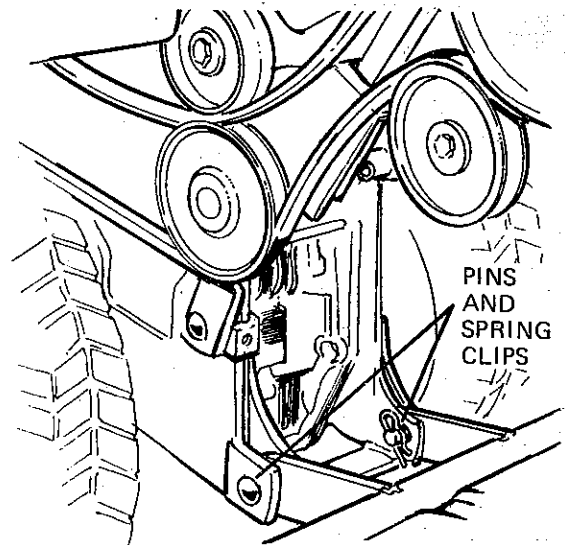


FIGURE 3

5. (See figure 2) Insure that the revitalizer drive clutch is pushed all the way back in the disengaged position.

6. (See figure 4) Install the revitalizer drive belt over the rear power-take-off pulley of the tractor. If this pulley and the belt stops shown in figure 4 have not been previously installed for use with the revitalizer or rotary tiller, see item (7) and figure (12) of belt replacement in the Maintenance section of this manual for proper positioning.

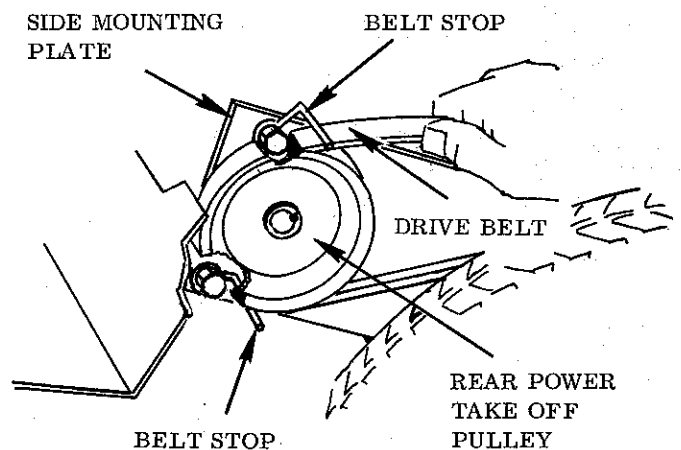


FIGURE 4

7. (See figure 5) If the mower is to be used with the revitalizer, remove the lift chain or cable from the tractor lift arm when operating. This is especially beneficial in reducing lifting effort on tractors not equipped with power lift since the revitalizer should be raised when turning to prevent excess lawn damage. It is not advisable to raise the mower when turning if the mower is engaged since operating the mower in the raised position will reduce the life of the mower drive belt.

8. Prior to first use or if the revitalizer has not been used recently, all adjustments listed in the Adjustments section of this manual except the drive chain adjustment should be checked before operating the revitalizer.

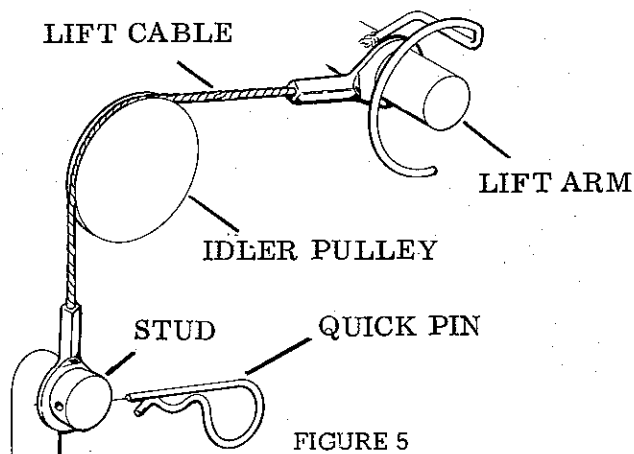


FIGURE 5

OPERATION

The HOMELITE Lawn Revitalizer is most effective if used in the Spring and Fall of the year. In the Spring its use will lift out thatch that harbors fungus and create a miniature irrigation system so that the water, fertilizer and air can reach the grass roots. Use the Revitalizer once in the Spring between the time the grass has started to grow vigorously and the time when summer weather might be expected to slow grass growth.

Used in the fall, the revitalizer will raise the summer's accumulation of thatch and create a series of grooves which permit frost to expand the soil for greater porosity. The grass roots will have a better chance to expand during the next growing season.

For best results the grass should be mowed to a length of about 2 inches before the revitalizer is used. This will prevent long grass from interfering with the revitalizing process.

Depth Adjustment

CAUTION: ALWAYS INSURE THE TRACTOR ENGINE IS STOPPED BEFORE ATTEMPTING TO ADJUST OR WORK AROUND THE REVITALIZER.

(See figure 6) Adjust the depth with the Revitalizer in the lowered position. The cutting depth of the revitalizer knives may be precisely adjusted by turning the T handle at the rear of the revitalizer clockwise to raise the knives and counter clockwise to lower them. For use in Spring and Fall as recommended, the knives should be set about 1/2 inch deep. The 1/2 inch depth may be set quite easily and accurately on a level surface by placing a 1/2 inch block under each of the revitalizer guide wheels. **BE SURE THE TRACTOR ENGINE IS STOPPED.** With the revitalizer clutch disengaged for ease of turning, alternately rotate the drive pulley on the revitalizer and turn the depth adjusting handle until the ends of the knives just hit the ground surface. The revitalizer should now be set at 1/2 inch cutting depth. The grooves in the ground may also be checked after operating a short distance to insure the correct depth setting.

Preparation for Operating

With the revitalizer (and mower if attached) disengaged and in the raised position, move to the area to be revitalized. The

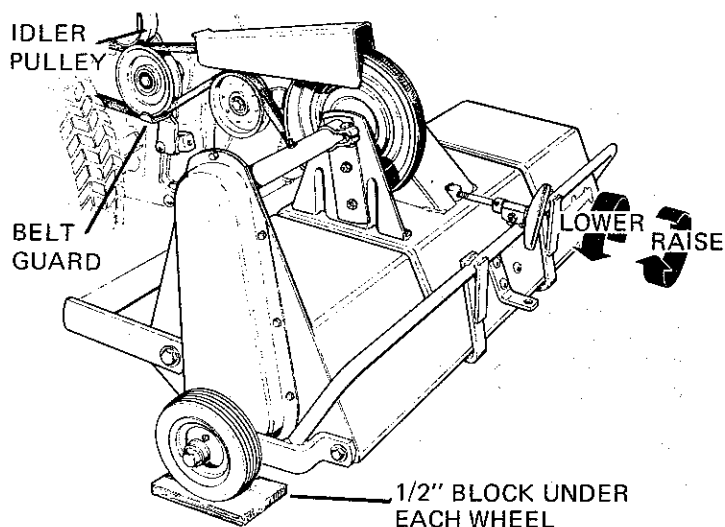


FIGURE 6

mower may be used with the revitalizer if the grass is not long or wet as to require full engine power for mowing. When using the revitalizer it should be raised when turning to prevent excessive uprooting of grass, but it is neither advised nor necessary to raise the mower. This may best be accomplished by disconnecting the mower lift cable from the lift lever by removing the spring clip and pin. See step 7 of Installation instructions.

Engaging the Revitalizer

(See figure 7) The Revitalizer drive is engaged by pulling forward on the clutch lever mounted on the revitalizer. This can be done from the tractor seat simply by reaching around and pulling the clutch ahead. The revitalizer will be disengaged if the lever is pushed back, away from the tractor.

Travel Speed and Direction

The revitalizer should be used with the tractor engine at 3/4 to full speed. Operating conditions will determine the best ground speed. Under normal conditions where the ground is smooth and soft a speed of 2 to 4 miles per hour should be satisfactory. This speed range will be approximated using 2nd gear, hi range on the dual range trans-

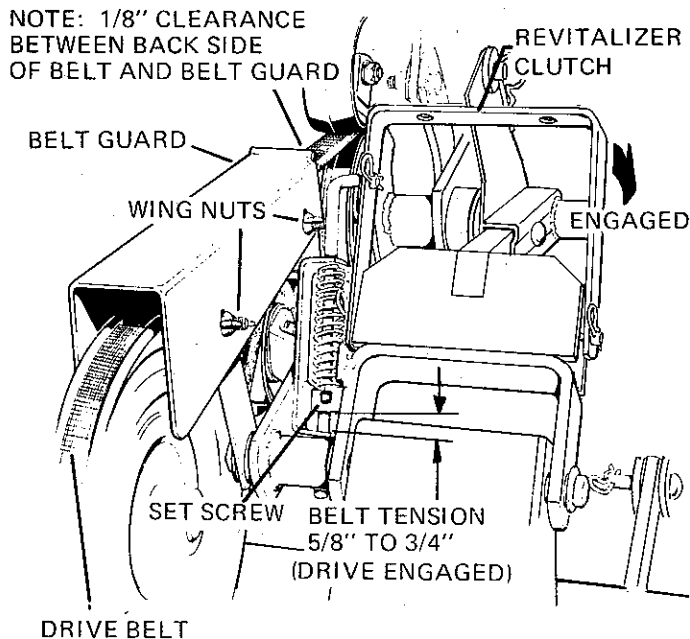


FIGURE 7

mission or 1/3 to 1/2 speed with the Hydrostatic Transmission. If the ground is hard, rocky or rough, a slower speed may be advisable since the revitalizer will not be as effective under these conditions.

Travel the long direction of the lawn to minimize turns. Before turning, raise the revitalizer to prevent excessive uprooting of grass. On the second and successive passes, be sure to drive so the revitalizer slightly overlaps that portion of the lawn already revitalized.

NOTE: DO NOT MAKE SHARP TURNS WITH UNIT IN GROUND, SINCE THIS WILL CAUSE LAWN DAMAGE.

If wire or other foreign material get caught in the revitalizer, stop the tractor and disengage the clutch immediately. STOP THE TRACTOR ENGINE BEFORE ATTEMPTING TO WORK AROUND THE REVITALIZER.

ADJUSTMENTS

Belt Tension Adjustment

(See figure 7) Tension on the revitalizer drive belt is regulated by the position of the set collar in the rod guide assembly of the revitalizer clutch. Belt tension is correct when there is 5/8" to 3/4" clearance between the set collar and the lower end of the rod guide assembly when the revitalizer clutch is engaged. To increase belt tension, disengage the revitalizer clutch and loosen the set screw in the collar. Move the rod down slightly to reposition it under the set collar and retighten the set screw. Check the clearance by engaging the revitalizer clutch. Do not operate the revitalizer with more than 3/4 inch clearance between the set collar and rod guide as the excessive tension may cause premature belt and bearing failure.

Preparing a Seedbed

The revitalizer may be used to prepare a seedbed for reseeding a sparse area by making a second pass diagonally to the first one at about a 45° angle. Use a depth setting of approximately 1/2 inch.

Removing the Thatch

Dead grass and thatch should be removed after using the revitalizer. A HOMELITE vacuum collector system is excellent for this purpose. For best results allow the thatch and grass to dry for a few hours before using the vacuum collector. A sweeper will also work well in removing the thatch.

Trouble Shooting

If the thatch is not being lifted effectively:

1. Ground speed may be too fast - use a lower ground speed.
2. Engine speed may be too slow - operate the engine at 3/4 to full throttle.
3. Long grass may be interfering - grass should be cut to about 2" before revitalizing.
4. The revitalizer drive belt may be slipping - check the belt tension to be sure it is set correctly, see Adjustments. Page 5.

If thatch removed is not uniform or an unusual amount of green grass is being torn up:

1. Check to see if wire, sticks, etc. are caught on the knives.
2. Check the depth of the grooves in the ground. A depth of 1/2 inch is correct under most conditions.

If the drive belt will not stop turning when the revitalizer is disengaged:

1. The belt stops may be out of adjustment. See "Adjustments." Page 5.
2. The belt tension adjustment at the revitalizer clutch may be out of adjustment. See "Adjustments." Page 5.
3. The belt may be of the wrong length or construction - use only the correct belt.

Belt Stop Adjustment

If the revitalizer will not disengage properly or the backside of the drive belt shows wear, the belt stops and guard may need adjusting. Adjustments should be made as follows.

CAUTION: DO NOT ATTEMPT TO MAKE ANY ADJUSTMENTS WITH THE TRACTOR ENGINE RUNNING.

(See Figure 8.) The belt stops are located above and below the drive pulley.

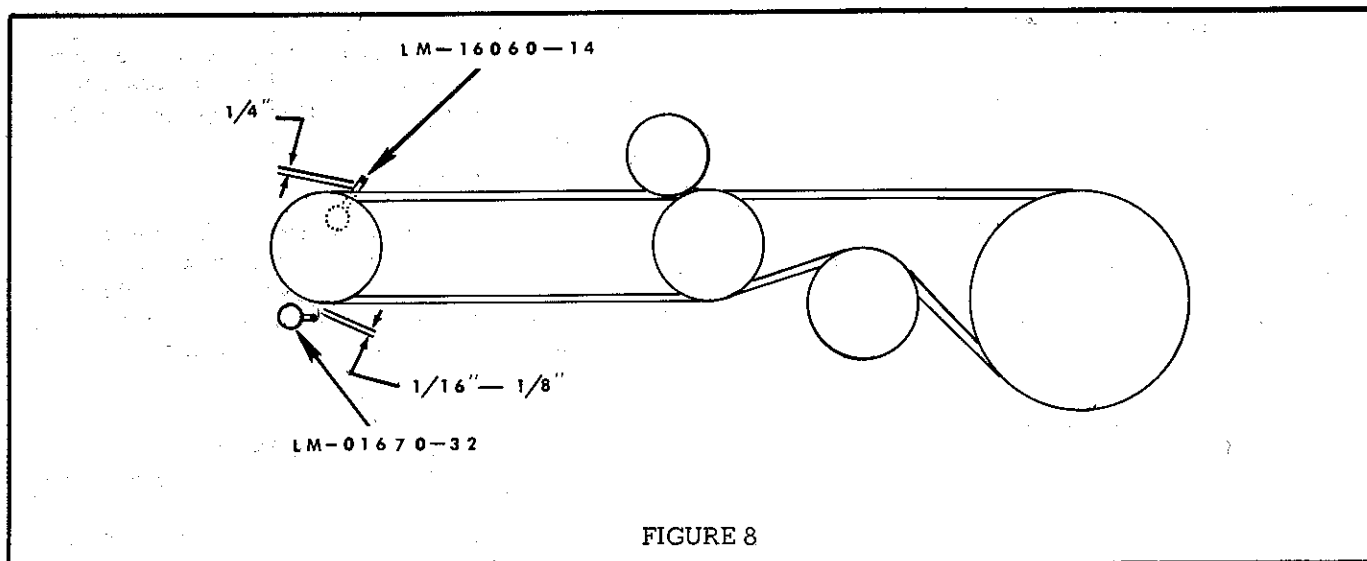


FIGURE 8

1. The belt stop located above the drive pulley is mounted on the top mounting screw of the bevel gear case with a special cap screw which replaces the original. This belt stop should be adjusted to $1/4$ " clearance as shown in Figure 8.
2. The belt stop located below the drive pulley is mounted with a cap screw, flat washer, lock washer and hex nut to the side mounting plate of the bevel gear case.
3. While holding the cap screw with a wrench so it will not turn, loosen the nut located on the other side of the mounting plate (see Figure 12) enough so the belt stop can be moved. Adjust the belt stop so there is $1/16$ " to $1/8$ " clearance between it and the revitalizer drive belt.
4. To prevent the belt stops from moving, use a wrench to hold the cap screw from turning while tightening the nut inside the frame securely.

(See figure 7) The belt guard mounted over the revitalizer drive belt should be adjusted so there is at least $1/8$ " clearance between the guard and the belt when the revitalizer clutch is engaged to assure the backside of the belt does not rub against the guard. If it is necessary to adjust the guard, loosen the two wingnuts and reposition the guard correctly.

Drive Chain Adjustment

If inspection reveals that there is slack in the drive chain or it must be replaced, use the following procedure to tighten the chain:

1. (See figure 9) With the chain cover removed so the chain is visible, loosen, but do not remove the two bolts holding each end of the bearing housing.
2. Pull upward on the bearing housing until all slack is removed from the chain. Before tightening the bolts at each end of the bearing housing, insure that the bearing housing is parallel to the revitalizer housing. This may be easily and accurately done by measuring the distance from the bearing housing to the revitalizer housing at each end of the bearing housing. When the two distances are equal, the bearing housing is parallel to the revitalizer housing. (See figure 9).

After insuring all slack has been removed from the chain and the bearing housing is parallel to the revitalizer housing, tighten the two adjustment bolts at each end of the bearing housing securely.

Put a liberal coating of automotive grease on the chain and replace the chain cover.

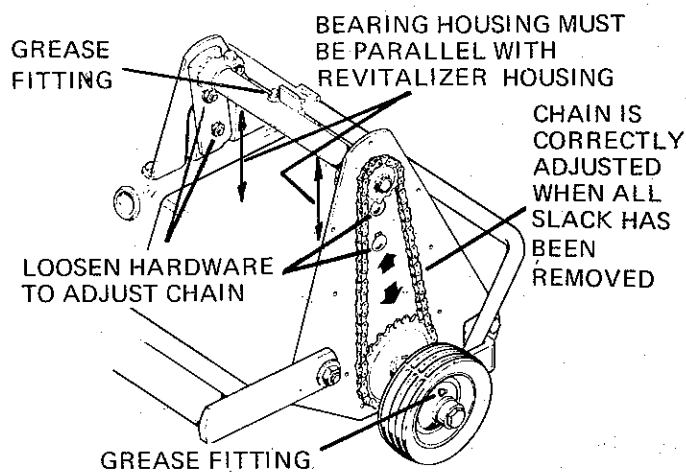


FIGURE 9

CAUTION: ALWAYS BE SURE THE TRACTOR ENGINE IS STOPPED BEFORE ATTEMPTING TO WORK AROUND THE REVITALIZER.

After Each Use

Each time the revitalizer is used the knives should be checked for wire or other material which may be caught in them. Clean any foreign material away from the knives for best operation.

Every 10 Hours

There are five grease zerks located on the revitalizer which should be lubricated with automotive grease after every 10 hours of use. They are located one on each of the two guide wheels, one on each of the two tine shaft bearings and one on the crossdrive housing. (See figure 9 and 10.) Lubricate each zerk with 5 shots of grease or until grease is pushed out around the bearings.

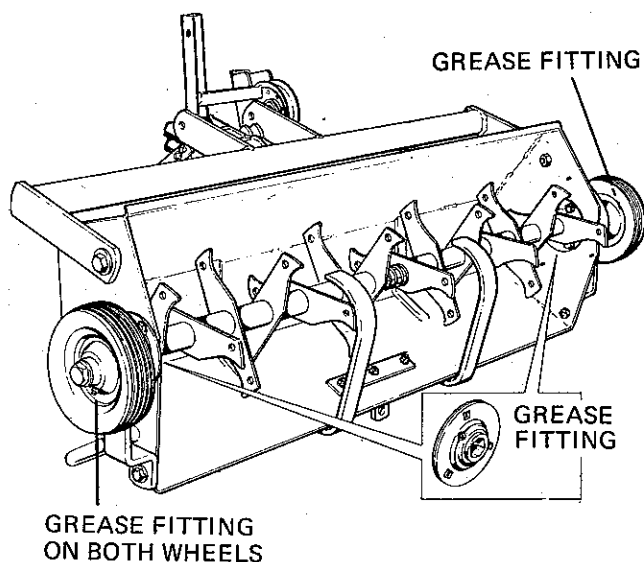


FIGURE 10

Lubricate all pivot points with engine oil to help prevent wear. (See figure 11) Do not get oil on the drive belt or the pulleys.

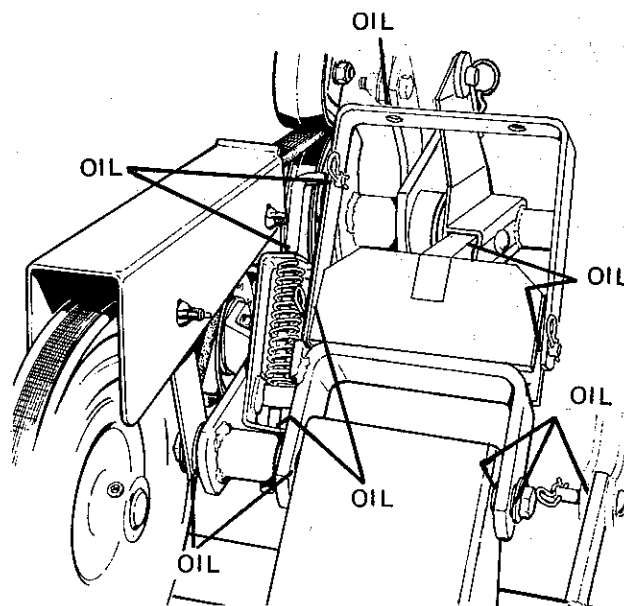


FIGURE 11

Once Each Year

Once a year remove the chain cover on the left side of the revitalizer housing and inspect the chain. If the chain shows excessive wear, it should be replaced. See your dealer for the correct chain.

If the chain is loose it should be tightened until all slack is removed. (See Adjustments).

Coat the chain liberally with automotive grease and replace the cover.

Belt Replacement

If the revitalizer drive belt should become excessively frayed or twisted or break and replacement is necessary, do the following:

1. Be sure the tractor engine is not running.
2. Place the revitalizer clutch in the disengaged position.
3. (See figure 7) Remove the two wingnuts holding the belt guard in place over the drive belt. Remove the belt guard.
4. (See figure 6) Remove the belt guard and idler pulley from the reverse idler assembly and replace the damaged belt with a new belt.
5. When replacing the belt guard, position it so the belt will not rub against it when the revitalizer is operated.
6. (See figure 7) Place the new belt over the revitalizer pulley and replace the belt guard.

7. (See Figure 12.) Check power-take-off pulley on the tractor to be sure it is properly installed with the hub facing in toward the tractor. Align the drive pulley with the pulleys on the revitalizer, be sure that these pulleys are in direct line. The key must be in place and the set screw on the pulley hub tightened securely (see also Figure 4).

8. Install the belt over the power-take-off pulley and check all adjustments listed in the adjustments section except the drive chain adjustment.

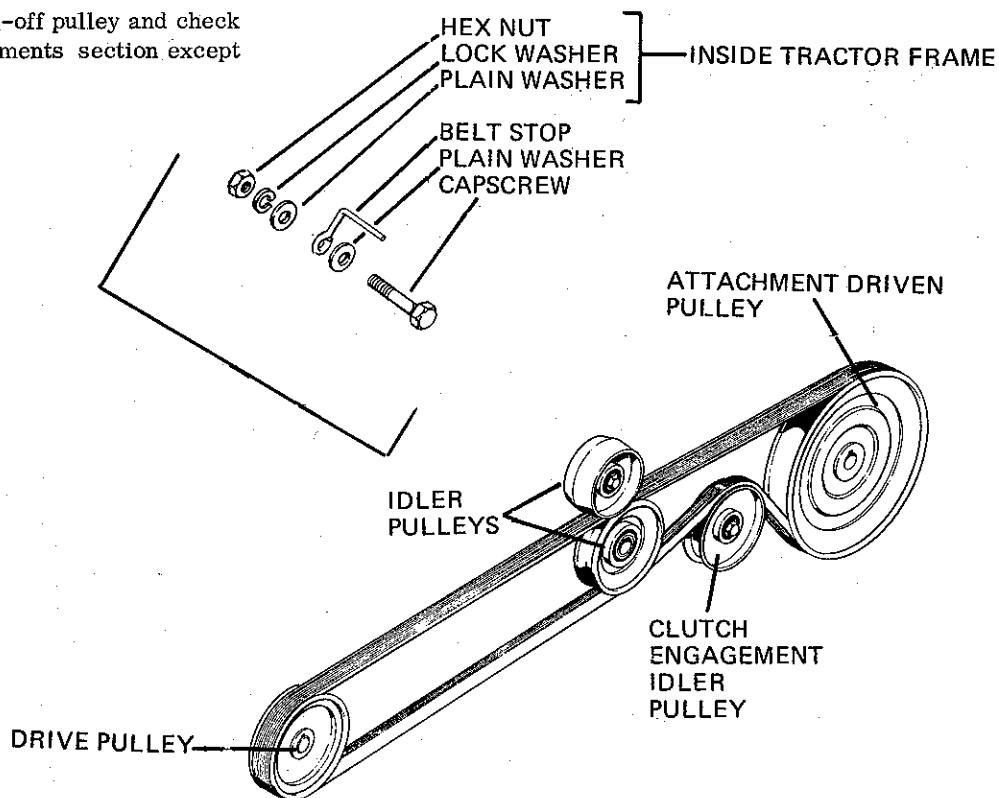
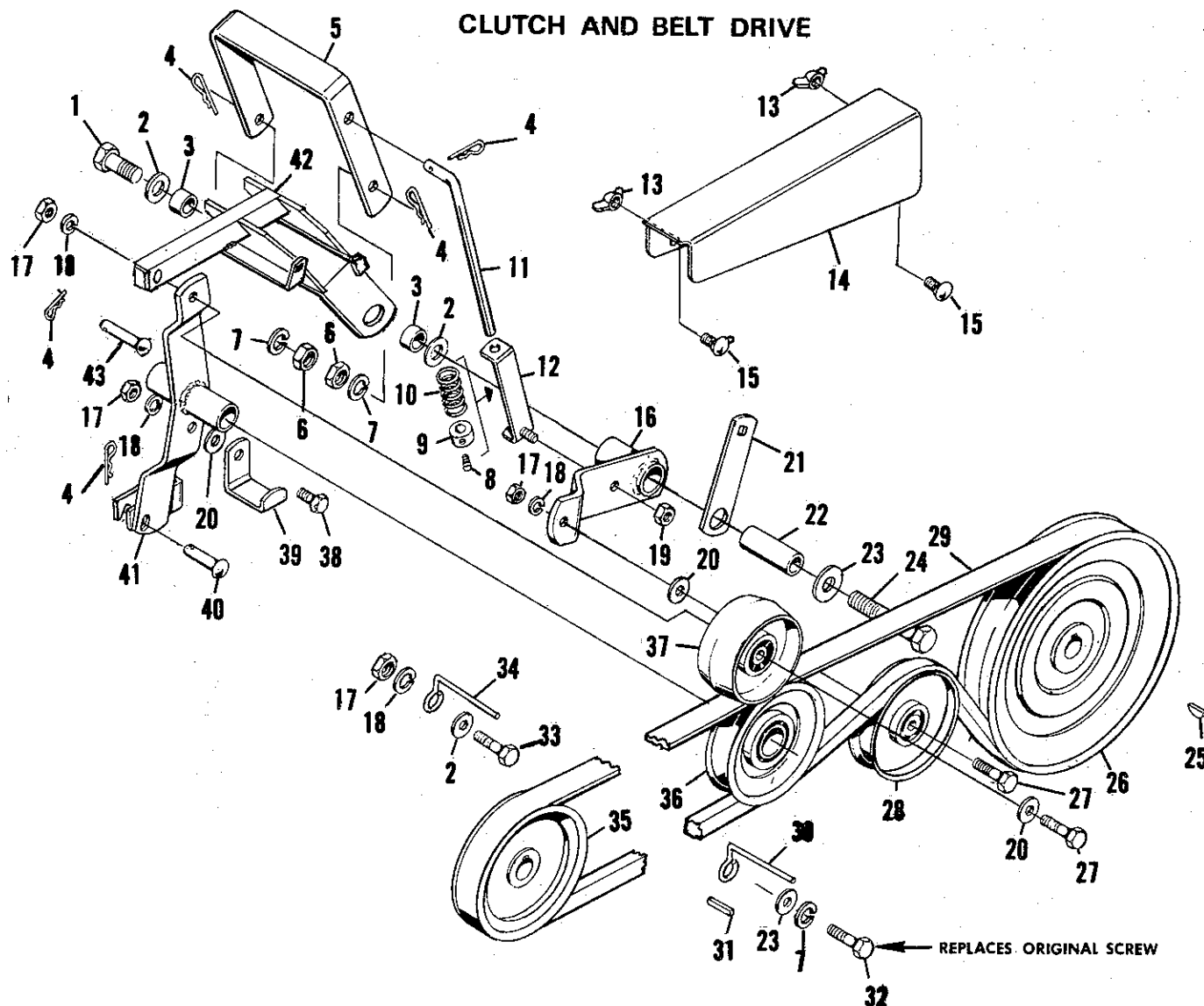


FIGURE 12

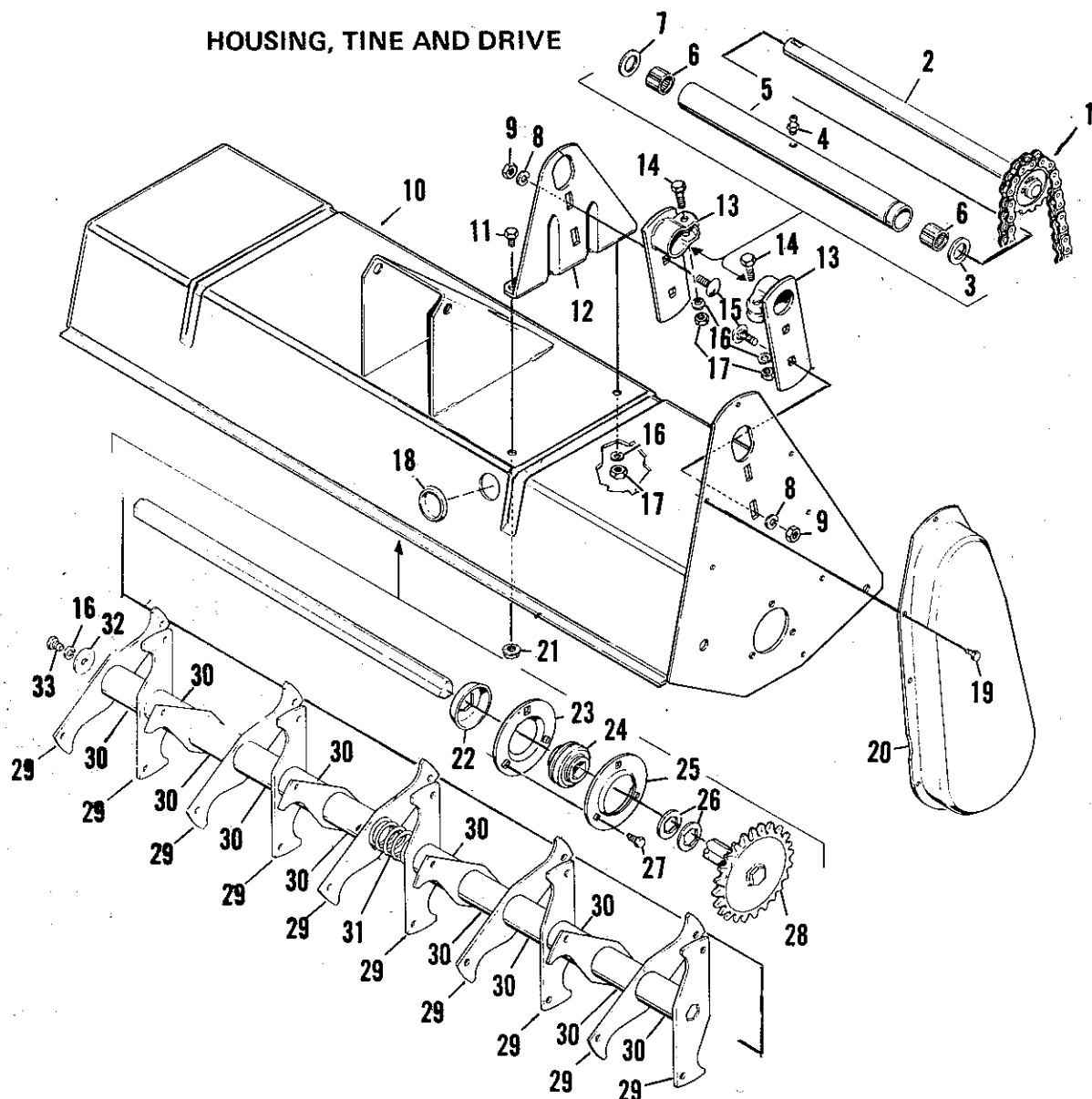
CLUTCH AND BELT DRIVE



No.	Description	Part No.	Qty.
1	SCREW-hex cap, 7/16-14 x 1-1/4	LM-09164-32	1
2	WASHER-flat, 3/8	LM-09173-78	3
3	SPACER	LM-01053-46	2
4	CLIP-spring	LM-01067-87	6
5	HANDLE-clutch	LM-01053-03	1
6	NUT-hex jam, 7/16-14	LM-09182-13	2
7	WASHER-lock, 7/16	LM-09181-99	2
8	SCREW-set, 1/4-20 x 3/8	LM-09038-07	1
9	COLLAR-set	LM-81910-22	1
10	SPRING	LM-01620-65	1
11	ROD-clutch	LM-01053-43	1
12	GUIDE ASSEMBLY-rod	LM-01584-06	1
13	NUT-wing, 5/16-18	LM-07180-06	2
14	GUARD-belt	LM-01053-26	1
15	BOLT-carriage, 5/16-18 x 3/4	LM-09205-62	2
16	LEVER ASSEMBLY-clutch	LM-01052-95	1
17	NUT-hex, 3/8-16	LM-09169-50	4
18	WASHER-lock, 3/8	LM-09169-65	4
19	NUT-hex, 5/16-18	LM-09233-62	1
20	WASHER-flat, 5/16	LM-09176-42	3
21	SUPPORT-belt guard	LM-01053-59	1
22	SPACER	LM-01053-39	1

No.	Description	Part No.	Qty.
23	WASHER-flat, 7/16	LM-09184-30	2
24	SCREW-hex cap, 7/16-14 x 3-1/2	LM-07150-93	1
25	KEY-Woodruff, #9.	LM-09051-23	1
26	PULLEY	LM-01053-02	1
27	SCREW-hex cap, 3/8-16 x 1-1/4	LM-09174-00	2
28	PULLEY	LM-01053-06	1
29	BELT-"V", 12 hp.	LM-01053-40	1
30	STOP-belt	LM-16060-14	1
31	KEY	LM-80610-81	1
32	SCREW-hex cap, 7/16-14 x 1-1/4	LM-09234-71	1
33	SCREW-hex cap, 3/8-16 x 1	LM-09077-31	1
34	STOP-belt	LM-01670-32	1
35	PULLEY	LM-01642-02	1
36	PULLEY-idler	LM-01053-80	1
37	PULLEY-idler	LM-01640-83	1
38	SCREW-hex cap, 3/8-16 x 7/8	LM-09193-57	1
39	GUARD-belt	LM-01053-51	1
40	PIN	LM-01563-06	1
41	ARM ASSEMBLY-idler	LM-01053-22	1
42	BAR ASSEMBLY-lift	LM-16074-25	1
43	PIN	LM-01180-53	1

HOUSING, TINE AND DRIVE



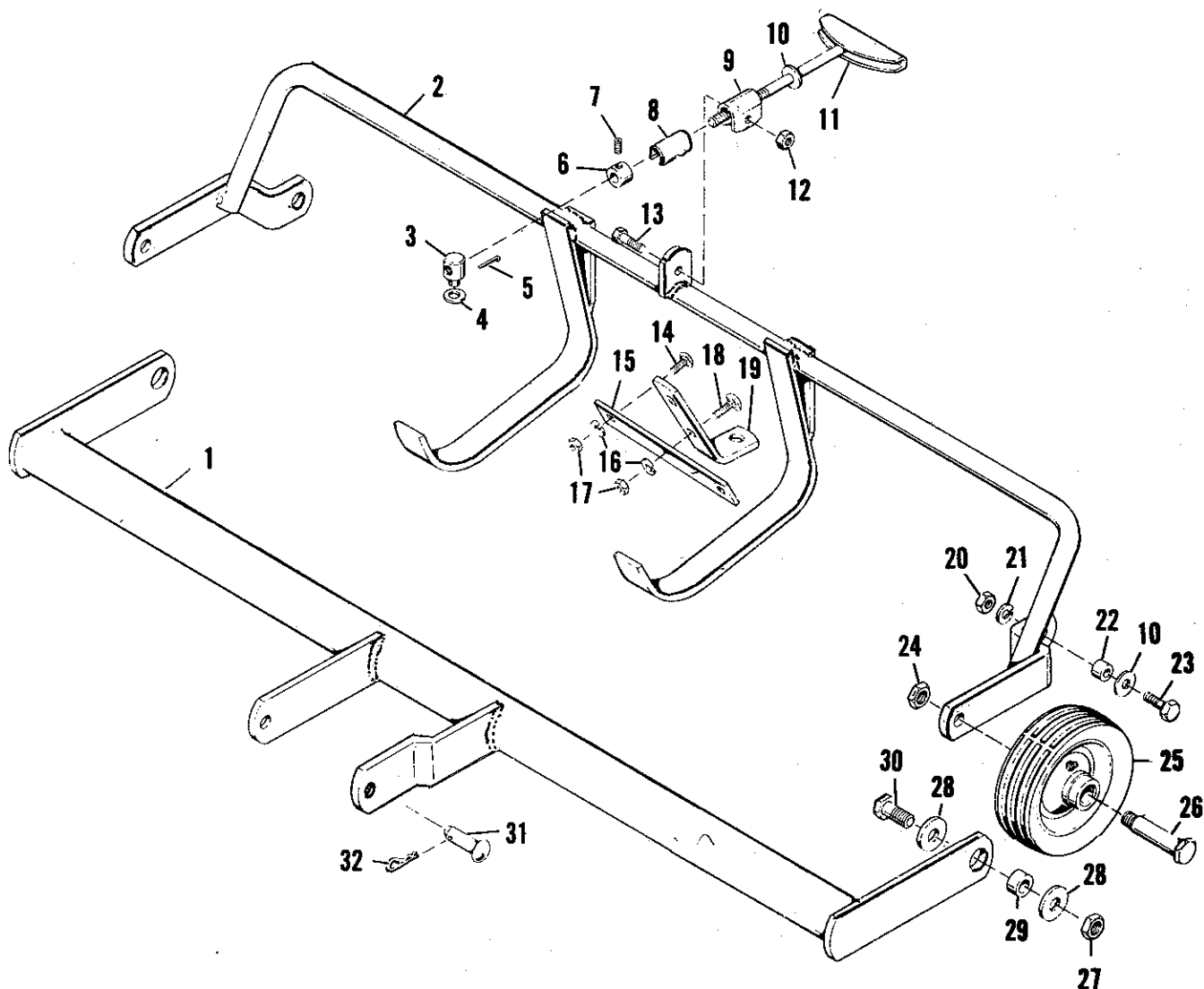
No.	Description	Part No.	Qty.
1	CHAIN-drive	LM-01728-91	1
2	SHAFT ASSEMBLY-drive	LM-01723-40	1
3	WASHER	LM-01060-69	1
4	FITTING-grease (Hemite #1952)	LM-07270-13	1
5	HOUSING & BEARING ASSEMBLY	LM-01729-06	1
Includes:			
6	BEARING-needle	LM-01727-47	2
7	WASHER	LM-01010-22	1
8	WASHER-lock, 7/16	LM-09181-99	4
9	NUT-hex jam, 7/16-14	LM-09182-13	4
10	HOUSING ASSEMBLY	LM-01723-07	1
11	SCREW-hex cap, 5/16-18 x 5/8	LM-09193-18	2
12	SUPPORT-bearing	LM-01722-52	1
13	SUPPORT ASSEMBLY-clamp	LM-01728-95	2
14	SCREW-hex cap, 5/16-18 x 1-1/2	LM-09199-33	2
15	BOLT-carriage, 7/16-14 x 1	LM-07020-25	4
16	WASHER-lock, 5/16	LM-09173-56	4
17	NUT-hex, 5/16-18	LM-09173-72	3
18	PLUG-button	LM-01729-34	1
19	SCREW-hex Taptite, 1/4-20 x 3/8	LM-09274-28	8

No.	Description	Part No.	Qty.
20	GUARD-chain	LM-01729-83	1
21	NUT-special, 5/16-18	LM-09257-63	1
22	GUARD-trash	LM-01728-74	2
23	FLANGE-bearing	LM-01729-73	2
24	BEARING	LM-01723-47	2
25	FLANGE-bearing	LM-01729-72	2
26	WASHER-hex	LM-01723-32	4
27	SCREW-hex Taptite, 5/16-18 x 1/2	LM-09248-56	6
28	SHAFT ASSEMBLY-tine	LM-01723-38	1
29	TINE	LM-01703-33	14
30	SPACER	LM-01703-37	12
31	SPRING	LM-01704-17	1
32	WASHER	LM-01231-44	1
33	SCREW-hex cap, 5/16-18 x 1/2	LM-09193-17	1

Accessories:

SPRAY CAN-blue, 14 oz.	LM-16076-89	1
SPRAY CAN-black, 12 oz.	22772	1

HITCH AND HEIGHT ADJUSTMENT



No.	Description	Part No.	Qty.
1	HITCH ASSEMBLY	LM-16074-44	1
2	ADJUSTER	LM-01722-71	1
3	PIVOT	LM-01081-72	1
4	WASHER-flat, 5/16	LM-09176-42	1
5	PIN-cotter, 3/32 x 3/4	LM-09184-47	1
6	COLLAR-set	LM-01052-01	1
7	SCREW-set, 1/4-20 x 5/16	LM-07135-05	1
8	LINER-guide	LM-01211-75	1
9	GUIDE-rod	LM-01520-50	1
10	WASHER-flat, 3/8	LM-09173-78	3
11	SCREW ASSEMBLY-adjusting	LM-01084-15	1
12	NUT-hex, 5/16-18	LM-09233-62	1
13	SCREW-hex cap, 5/16-18 x 1-1/4	LM-09077-29	1
14	BOLT-carriage, 5/16-18 x 3/4	LM-09194-14	3
15	REINFORCER-tow bar	LM-01723-16	1
16	WASHER-lock, 5/16	LM-09173-56	4
17	NUT-hex, 5/16-18	LM-09173-72	4

No.	Description	Part No.	Qty.
18	BOLT-carriage, 5/16-18 x 1	LM-09211-58	1
19	BAR-tow	LM-01723-17	1
20	NUT-hex, 3/8-16	LM-09169-50	2
21	WASHER-lock, 3/8	LM-09169-65	2
22	SPACER	LM-01183-35	2
23	SCREW-hex cap, 3/8-16 x 1-1/4	LM-09174-00	2
24	NUT-hex, 7/16-14	LM-07175-19	2
25	WHEEL & TIRE ASSEMBLY	LM-16062-55	2
26	BOLT-wheel	LM-01726-82	2
27	NUT-hex, 1/2-13	LM-07175-18	2
28	WASHER-flat, 1/2	LM-09184-31	4
29	SPACER	LM-01053-86	2
30	SCREW-hex cap, 1/2-13 x 1-1/4	LM-09172-79	2
31	PIN	LM-01550-37	2
32	CLIP-spring	LM-01067-87	2
	DECAL-safety (not shown)	LM-01030-31	1



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