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U.S. Patent Numbers 2614474 and 2634666

# **OWNER'S INSTRUCTIONS MANUAL**

**AND**

**ILLUSTRATED PARTS LIST**



**SUBURBAN MERRY TILLER**

**MODEL G80**

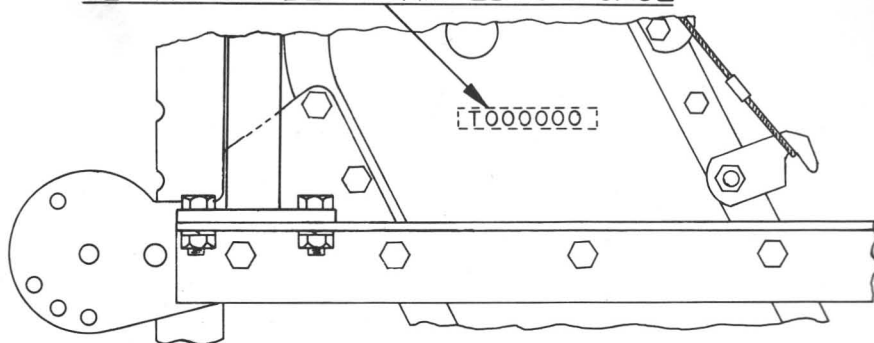
Manufactured by

**MERRY MANUFACTURING CO.**

**EDMONDS, WASHINGTON 98020**

**Box 370**

## SERIAL NUMBER STAMPED ON CASE



## Tractor Serial Number .....

Write down the serial number of your Merry Tiller in the space provided above for quick reference in event that your Merry Tiller is stolen or for matters pertaining to service or warranty.

## CONTENTS

Introduction and Operating Suggestions .....	1
How to Set Up Your Merry Tiller Suburban	
Handle Assembly Instructions .....	2
Transmission Servicing Procedures	
Service Notes	
Belt and Clutch Adjustment .....	3
Figure 1 .....	4
Figure 2 .....	5
Figure 3 .....	6
Belt Cover Assembly .....	7
Illustrated Parts List	
How to Order Parts	
Rear Wheel Assembly .....	8
Handle Assembly .....	9
Engine Mount Assembly .....	10
Transmission Case Assembly .....	11
Numerical Parts List .....	12, 13, 14, 15
Oil Change Record .....	Back Cover
Warranty Card .....	Back Cover

## INTRODUCTION AND OPERATING SUGGESTIONS

Your Merry Tiller is the most versatile garden tractor ever developed for the home gardener and does a soil preparation job second to none, so a few minutes spent in studying the following instructions will pay many dividends.

The tiller will dig deeper and move forward slower by pushing down on the handles, and it will go ahead faster but at a shallower depth by raising up on the handles. The speed of the rotors is controlled by the use of the throttle.

To control the depth of tilling, the Merry Tiller must be operated with both the proper throttle speed and correct up-and-down hand pressure on the handles. Raising up means going forward. This action releases the grip of the skid in the soil, allowing the Merry Tiller to progress ahead. Pushing down means slowing down or even standing still. This directs the skid into the soil, thus holding the Merry Tiller back. Adjust throttle for desired speed of rotors.

When a person is first learning the proper use of the Merry Tiller, it is not unlikely that he will encounter an uneven or "bucking" action in the operation of the machine. A little practice will accustom the operator on how to overcome this. Never push on the machine if it has dug itself in to a depth of six to ten inches in order to get it to move forward. This is accomplished by slightly raising up on the handles and tilting the machine slowly from one side to the other.

To acquire the knack of letting the Merry Tiller do the work without effort on the part of the operator, we offer the following suggestions:

1. Adjust tail skid and rear wheels so the handles are at such a height that your arms hang straight down to contact them. Rear wheels should be removed for deep tillage or ease of turning in confined areas.
- Caution:** Keep hands clear of belt while engine is running.
2. Operate the Merry Tiller at about half throttle.
3. Don't hurry the job — proceed at a slow walk — give the machine time to do its job.
4. Concentrate on keeping your arms relaxed. (There is a natural tendency for any beginner to tense up.) Operation actually takes very little effort. Let the Tiller do the work.
5. When tilling on sloping ground, turn the front of the machine up hill to sufficiently counteract the tendency to run down hill.
6. For best results, operate at reduced throttle settings when the ground is extremely hard or rough.
7. When cultivating, raise the tail skid until the handles are the proper height as described in Item 1 or set rear wheels in position. Proceed at a slow walk, watching the rotor as it tills along the row.
8. TIGHTEN ALL NUTS AND BOLTS PERIODICALLY

## HOW TO SET UP YOUR MERRY TILLER SUBURBAN

1. Remove the power unit and parts bag from the carton.
2. Assemble the rear wheels. Then after attaching the rear wheels to the hitch (shown in FIG. 1) the power unit can be supported on its wood base and rear wheels to facilitate assembly.
3. Install the tail skid in the closed slot as shown in FIG. 1.

## HANDLE ASSEMBLY INSTRUCTIONS

1. Attach lower end of handles to hitch as shown in FIG. 1 & 2. **(Do not tighten bolts at this time.)**
2. Attach the forward ends of handle supports on transmission case as shown in FIG. 1. Also attach a clutch cable guide on the right hand handle support as shown in FIG. 1 & 2.
3. To each handle, assemble the cross brace, a handle support, and a guide, as shown in FIG. 2. **Do not tighten nuts at this time.**
4. Slide throttle casing and clutch cable through guides as shown in FIG. 2.
5. Fasten throttle control to engine. Then attach the throttle control lever to the left hand handle as shown in FIG. 2. Loosen the swivel screw on said lever and move control lever down to low speed position. Insert wire through the swivel screw until carburetor throttle closes. Tighten swivel screw and bend or cut off loose end of wire around swivel.
6. **Now tighten all the bolts and nuts on the handle assembly.**
7. Attach center of clutch cable adjustment chain to spring as shown in FIG. 2. Slip the belt off of the 10 inch pulley and slip lower cable loop over adjustment clip as shown in FIG. 1. Reinstall belt on the 10 inch pulley.
8. Engage clutch lever and check adjustment. If clutch needs adjusting refer to adjustment instructions.
9. Remove the wood base and attach the rotors to your Merry Tiller.
10. Refer to engine manufacturer's manual for servicing engine.

## **TRANSMISSION SERVICING PROCEDURE**

1. To fill transmission (unit in normal upright position). FIG. 1.
  - A. Use 90 weight gear lube or 50 wt. motor oil. Approximately 1 pint.
  - B. Remove fill plug.
  - C. Remove check plug.
  - D. Fill until check plug hole overflows.
  - E. Replace plugs.
2. Periodic inspection of oil level.
  - A. Place Merry Tiller in normal upright position.
  - B. Oil level should be level with check plug as shown in FIG. 1.
3. If excessive oil leakage appears around rotor shaft, the seals (No. 344) must be replaced.
  - A. Removal and installation is accomplished from outside without any disassembly of the transmission assembly. Write for instructions on seal remover kit.

## **SERVICE NOTES**

1. Regularly check all bolts and nuts for tightness.
2. If the belt begins to bottom out on the engine pulley then replacement of the pulley is needed. This is noticeable by the pulley "V" bottom becoming shiny.

## **BELT AND CLUTCH ADJUSTMENT**

### **Do Not Adjust The Clutch With The Engine Running**

1. Proper clutch adjustment is very important. The friction type clutch may need adjusting as the "V" belt stretches. Adjust as follows: Refer to FIG. 1.
  - A. Loosen nut holding adjustment link. (1)
  - B. Pull up on idler arm taking some slack out of the belt. (2)
  - C. Push down on the adjustment link taking the slack out of the clutch cable. (3)
  - D. Tighten nut firmly. (1)
2. Check your adjustment by starting the Merry Tiller and holding the rotors off the ground. If the rotors turn without any hand pressure on the clutch, the adjustment is too tight. Loosen the nut and re-adjust. If the cable spring on the clutch handle doesn't stretch when you hold the clutch handle all the way in, the adjustment is too loose. Loosen nut and re-adjust.
3. Additional adjustment is provided by slotted engine mount holes. Loosen 4 engine mount bolts, slide engine forward or backward as required. Re-tighten engine mount bolts.
4. Final adjustment is then made as per instructions.
5. Minor adjustment can be made by using the links on the adjusting chain. FIG. 2.

FIGURE 1  
R/H SIDE VIEW

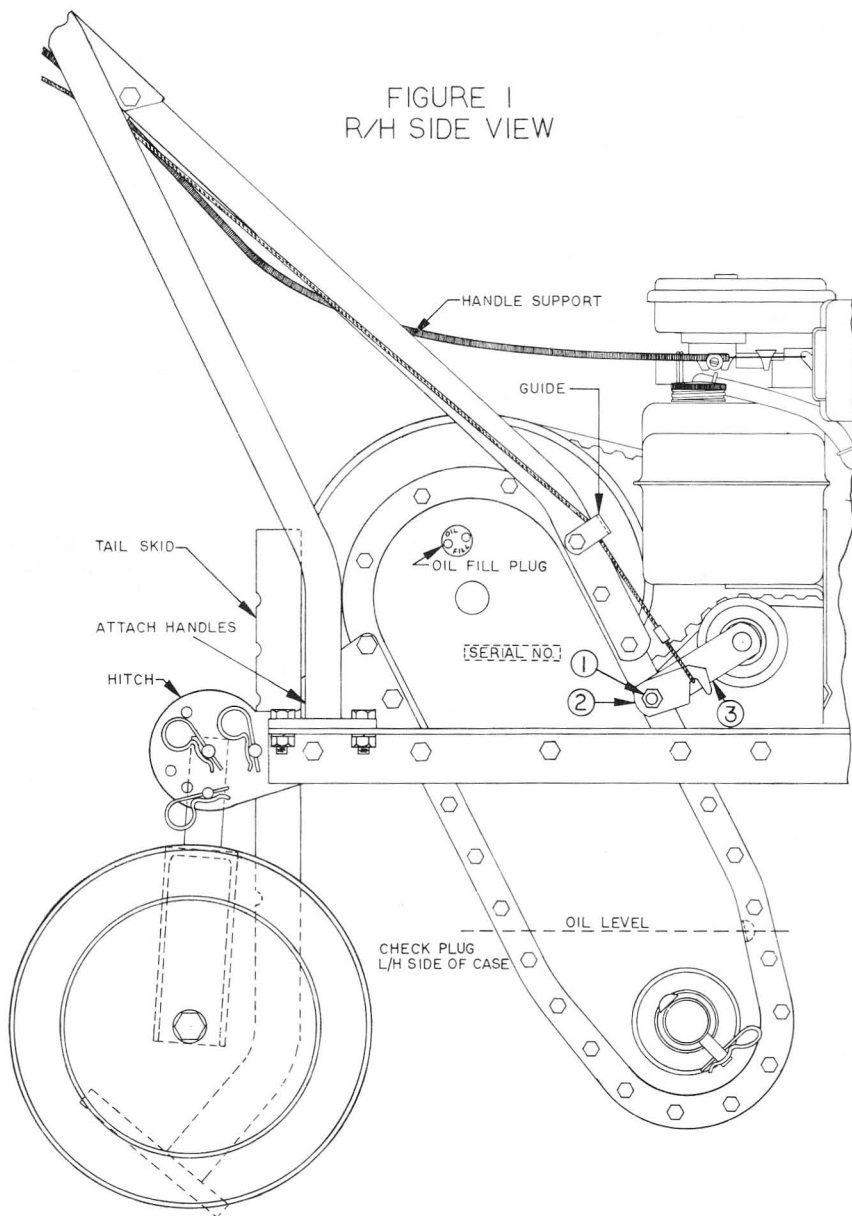


FIGURE 2  
REAR VIEW

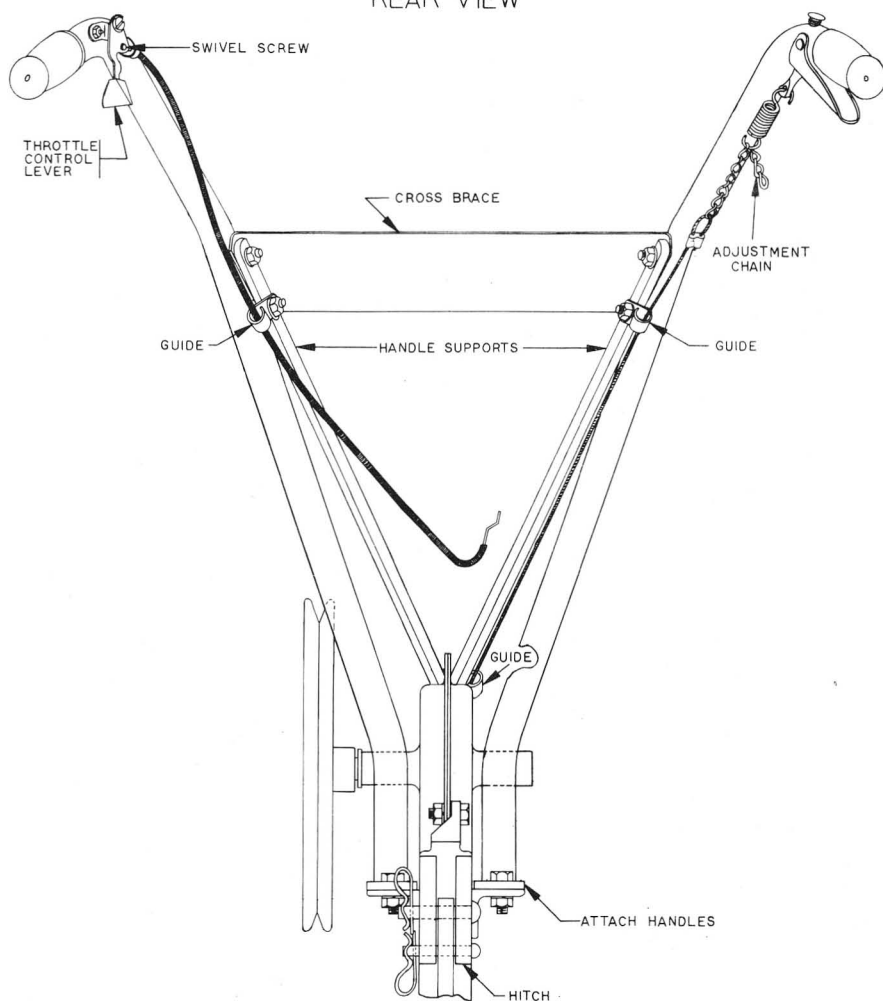
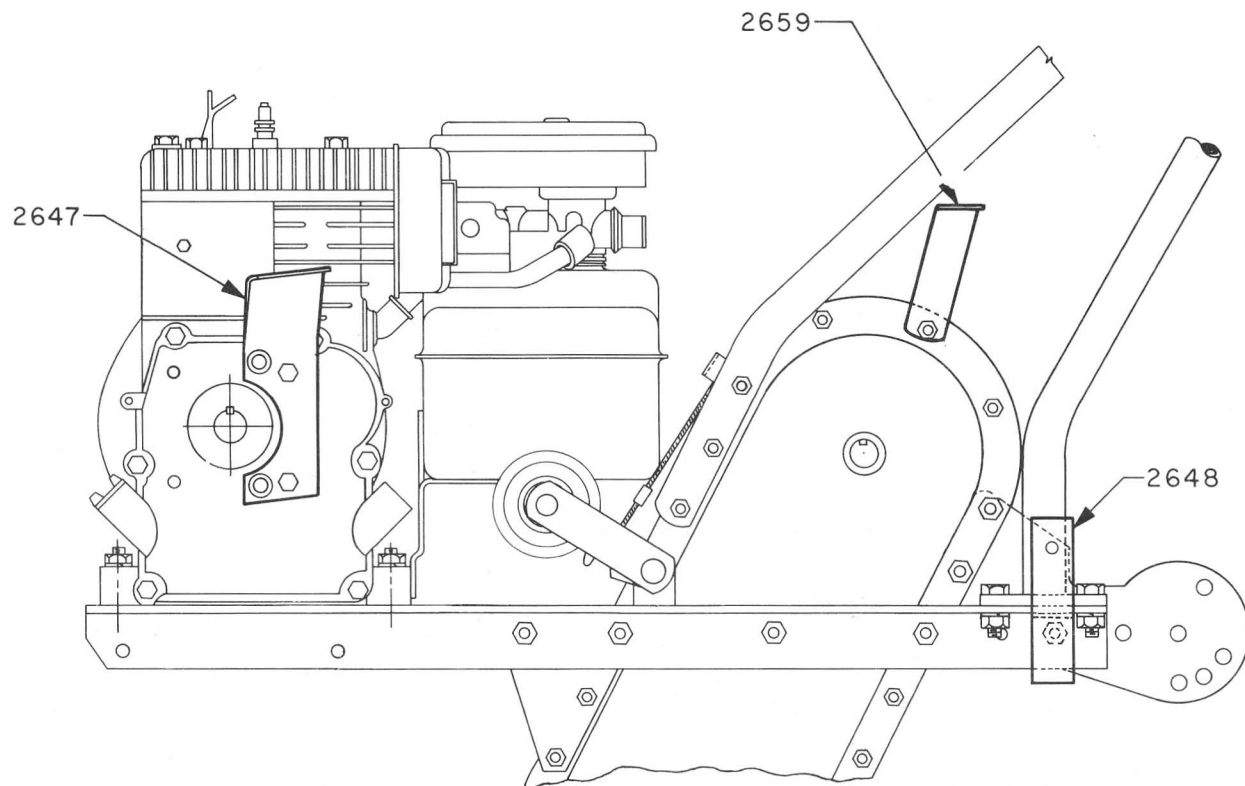


FIGURE 3





## BELT COVER ASSEMBLY

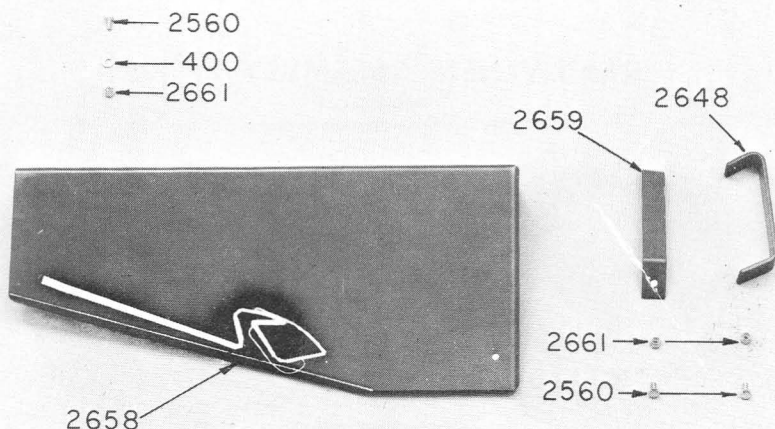
### Helpful Hint

When installing the Brackets on the Unit do not tighten capscrews until step 3 is completed below.

### Assembly

1. Attach No. 2659 Bracket on Case Fig. 3.
2. Attach No. 2648 Bracket on Engine Mount Fig. 3.
3. Mount No. 2658 Cover over the Brackets, and No. 2647 Belt Release. Fig. 3. Using 3 No. 2560 Capscrews, 3 No. 2661 Locknuts and one No. 400 Washer on the Locknut side of the No. 2647 Belt Release. (To protect the slots from damage.)

## COVER ASSEMBLY 2662



# ILLUSTRATED PARTS LIST—MODEL G80

## HOW TO ORDER PARTS

- I. THE MODEL NUMBER OF YOUR MERRY TILLER MUST BE GIVEN WHEN ORDERING PARTS. THE MODEL NUMBER IS INDICATED ON THE UPPER L. H. CORNER OF HANDLE CROSS BRACE NEXT TO THE MERRY TILLER OVAL.

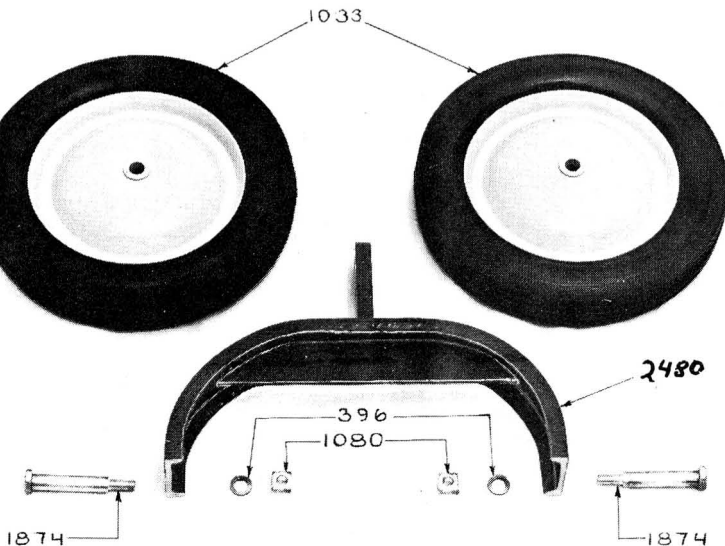


2. HOW TO FIND THE CORRECT NUMBER OF PARTS YOU NEED.

Refer to the following pages illustrating parts and locate the part needed in the correct exploded view and note the part number. All parts shown that have part numbers can be purchased separately. After the part number has been identified, refer to the following Parts List, pages 12, 13, 14, 15, where these parts are listed in numerical order.

\* \* \* \* \*

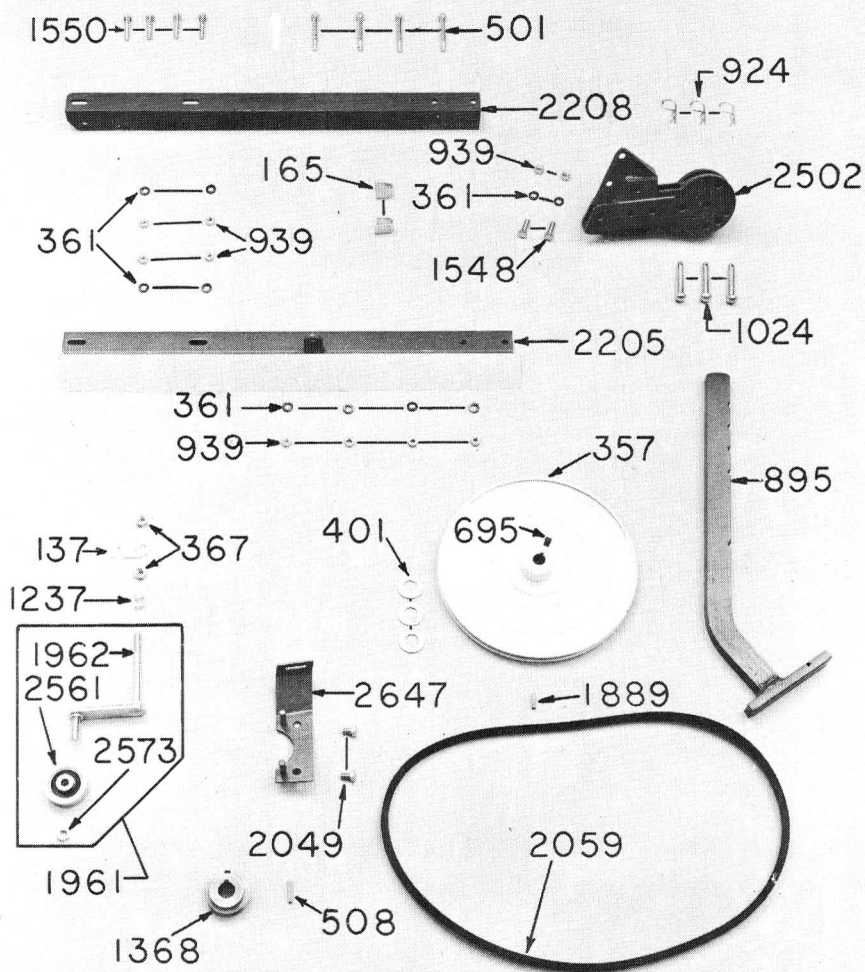
## REAR WHEEL ASSEMBLY 2479



This diagram illustrates the exploded view of a Merry Tiller lawn mower, showing the main frame, wheels, handle, and various adjustment components. The parts are identified by the following numbers:

- Frame and Main Components:** 2621, 2625, 2225, 2227, 2243, 2250, 1850 (Merry Tiller plate), 337, 338, 1784, 2393.
- Wheels and Axles:** 1539, 1815, 438, 396, 2243, 152.
- Handle and Controls:** 1547, 361, 939, 332, 2665, 2621, 2625.
- Adjusters and Fasteners:** 350, 332, 2665, 2243, 1547, 361, 939, 438, 396, 152, 1815.

# ENGINE MOUNT ASSEMBLY





## MERRY TILLER NUMERICAL PARTS LIST

**NOTE: WHEN ORDERING PARTS BE SURE TO GIVE THE FOLLOWING:**

- |                          |               |              |
|--------------------------|---------------|--------------|
| (a) Tractor Model Number | (c) Part Name | (e) Shipping |
| (b) Part Number          | (d) Quantity  | Instructions |

**FOR NUMERICAL LISTING OF ATTACHMENTS AND ATTACHMENT  
PARTS, REFER TO ATTACHMENTS CATALOGUE**

Part No.	Part Name	Quantity Per Mach.
137	Adjustment link .....	1
147	Rotor control assembly .....	1
152	Clutch control spring .....	1
165	U Spacer $\frac{3}{4}$ " .....	2
295	Soft plus .....	1
332	Nut Hex $\frac{1}{4}$ " NC .....	21
336	Clutch control rivet .....	1
338	Handle Grip .....	2
342	Drive shaft seal .....	1
343	Rotor shaft bearings .....	2
344	Rotor shaft seals .....	4
345	Drive shaft bearings .....	2
347	Chain, #50 .....	1
348	Chain, #35 .....	1
350	Lock washer $\frac{1}{4}$ " .....	24
351	Idler sprocket bearing .....	2
352	Idler sprocket bearing race .....	1
357	Drive pulley, 10" .....	1
361	Lock washer, 5/16" .....	15
363	Seal Puller Kit .....	—
367	Nut $\frac{3}{8}$ " NF .....	2

Part No.	Part Name	Quantity Per Mach.
396	Lock Washer $\frac{3}{8}$ " .....	2
400	Washer Flat $\frac{1}{4}$ " .....	1
401	Drive shaft washer $\frac{5}{8}$ " .....	3
421	Roll Pin $\frac{1}{4}$ " x 1- $\frac{1}{4}$ " .....	1
501	Cap screw 5/16" NF x 2 $\frac{1}{2}$ " .....	4
508	Engine pulley key .....	1
651	Spacer-Rotor shaft .....	1
695	Set Screw 5/16" NC x $\frac{3}{4}$ " .....	1
895	Rear Skid .....	1
924	Hairpin cotter .....	5
925	Drive shaft w/sprocket .....	1
926	Drive shaft w/o sprocket .....	1
927	Sprocket — Drive shaft .....	1
939	Nut 5/16" .....	15
940	Check plug gasket 5/16" ID .....	1
1024	Pin, $\frac{3}{8}$ " x 2 $\frac{1}{4}$ " .....	5
1033	Wheel, 10 x 1.75 .....	2
1080	Nut, sq. $\frac{3}{8}$ " NC .....	2
1085	Idler sprocket w/o bearing .....	1
1237	Spring-compression idler arm .....	1
1275	Replacement case assembly .....	1
1368	Engine pulley, $\frac{3}{4}$ " bore .....	1
1484	Oil filler plug .....	1
1539	Nut — Keps-1032 .....	2
1548	Screw, cap 5/16" NF x 1" .....	2
1550	Screw—cap hx hd. 5/16" NF x 1- $\frac{1}{2}$ " Pltd. ....	4
1608	Screw, rd. Hd. 5/16" NF x $\frac{1}{2}$ " .....	1
1615	Idler sprocket assembly with brgs. ....	1
1654	Gasket .....	1
1711	Case assy. — L.H. w/brg. & seals .....	1
1712	Case assy. — R.H. w/brg. & seals .....	1

Part No.	Part Name	Quantity Per Mach.
1783	Pin, easy lock .....	1
1784	Spring, easy lock .....	1
1815	Clutch lever .....	1
1850	Cross Brace Assy. ....	1
1874	Shoulder bolt $\frac{1}{2}$ " x $2\frac{1}{4}$ " .....	2
1889	Key $\frac{3}{16}$ " x $\frac{3}{16}$ " x 1 .....	1
1937	Set Screw - Soc. Hx. Hd. $\frac{5}{16}$ " NC x $\frac{5}{16}$ " cup pt. ....	1
1961	Idler arm assembly complete .....	1
1962	Idler arm .....	1
2049	Screw-Cap Hx. Hd. $\frac{5}{16}$ " NF x $\frac{1}{2}$ " plated .....	2
2059	Belt 50" .....	1
2205	Engine Mount L.H. ....	1
2208	Engine Mount R.H. ....	1
2225	Tie Bar L.H. ....	1
2227	Tie Bar R.H. ....	1
2243	Cable Guide, (Clutch & Throttle) .....	3
2250	Clutch cable Assembly .....	1
2252	Screw-Cap Hx Hd $\frac{5}{16}$ " NF x $2\frac{1}{2}$ " ptd. ....	1
2479	Wheel Assembly .....	1
2480	Rear Wheel Frame Weld Assembly .....	1
2502	Rear Hitch .....	1
2529	Screw-Cap Hx Hd $\frac{1}{4}$ " NC x $\frac{5}{8}$ " HT .....	18
2560	Screw-Cap Hx Hd $\frac{1}{4}$ " NC x $\frac{1}{2}$ " Pltd. ....	3
2561	Idler Wheel .....	1
2573	Jam Nut $\frac{3}{8}$ " NF Hex .....	1
2620	Handle Assembly—Complete .....	1
2621	Handle Assembly L.H. ....	1
2625	Handle Assembly R.H. ....	1
2647	Belt Release Bracket .....	1
2648	Engine Mount Bracket .....	1
2658	Cover .....	1



Part No.	Part Name	Quantity Per Mach.
2659	Case Bracket .....	1
2661	Nyock Locknut 1/4 " NC .....	3
2662	Cover Assembly .....	1
2665	Screw-Cap Hx Hd 1/4 " NC x 1 1/4 " Pltd. - HT .....	3
2666	Throttle Control .....	1

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## **OIL CHANGE RECORD**

# WARRANTY CERTIFICATE

FOR ONE YEAR from purchase date, Merry Manufacturing Company will replace for the original purchaser, **FREE OF CHARGE**, any part or parts found, upon examination at our factory at Edmonds, Washington, to be defective under normal use and service, on account of defects in material or workmanship.

**ALL TRANSPORTATION CHARGES ON PARTS SUBMITTED FOR REPLACEMENT UNDER THIS WARRANTY MUST BE BORNE BY PURCHASER.**

THIS WARRANTY shall not be effective if the product has been subject to misuse, negligence or accident, nor if the product has been repaired or altered outside of our Edmonds Factory, or Authorized Service Station, in any respect which, in our judgment, affects its condition or operation.

**FOR COMMERCIAL USE, WARRANTY LIMITED TO THIRTY DAYS.**

The engine is covered under separate Warranty from Engine Manufacturer.

MERRY MANUFACTURING COMPANY

By

This Warranty shall be effective only providing attached Warranty Card is properly filled out and returned to Merry Manufacturing Co. at time of purchase.



President

## SAVE THIS WARRANTY CARD

Fill in this information and retain for your own record.

Serial No. ....  
(Not engine Serial No.)

Model No. ....

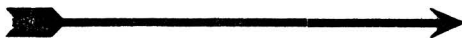
Purchased from .....

Date Purchased .....

For Prompt and Accurate Service  
Serial Number must always be given  
when ordering parts or writing for any  
information.

## IMPORTANT

To make Warranty valid, fill in  
and return attached card.



**Merry Manufacturing Co.**

**Box 370**

**Edmonds, Wash. 98020**

Be sure to fill in the attached  
Warranty Card below and  
mail it immediately!

**WARRANTY CARD**

Please print carefully in ink

Serial No. .... Model No. .... Date Purchased ....  
(Not engine Serial No.)

Dealer Purchased from .....

Address ..... State ..... Zip .....

Owner's Name .....

Address .....

Town ..... County ..... State .....

Please Check One of the Following:

Suburban ☐

Rural ☐

Commercial ☐

**Be sure to fill in the attached  
Warranty Card below and  
mail it immediately!**

**POST CARD**

**PLACE  
STAMP  
HERE**

**Merry Manufacturing Co.**

**Box 370**

**Edmonds, Washington 98020**

"The Original



Since 1947"

**MERRY MANUFACTURING CO.**

**Box 370, Edmonds, Wash. 98020**