

OWNER'S MANUAL

MarkMaster[®]

- ASSEMBLY
- OPERATION
- MAINTENANCE
- PARTS LIST

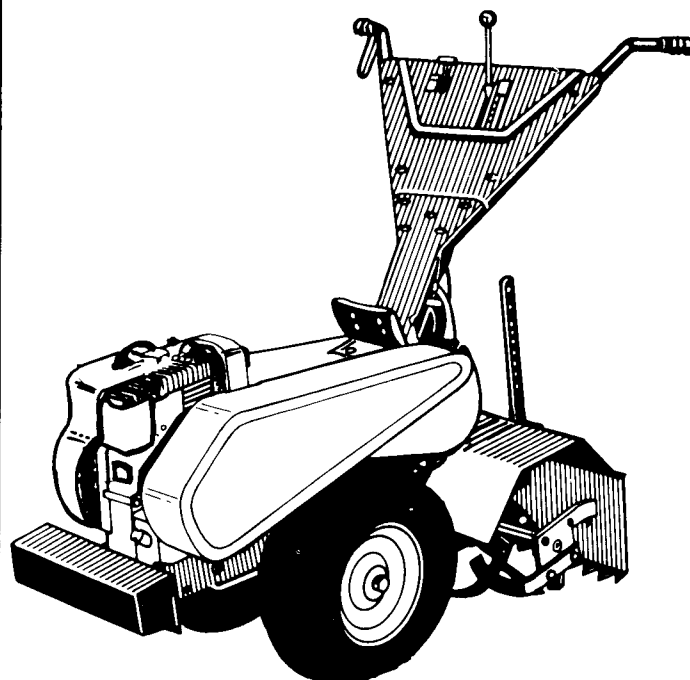
Model No.
218-405-065

Important:

Read Safety Rules and
Instructions Carefully



**5 H.P.
REAR TINE
CHAIN
DRIVE
TILLER**



LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for replacement under this warranty must be paid by the purchaser unless return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

WARNING TO PURCHASERS OF INTERNAL COMBUSTION ENGINE EQUIPPED MACHINERY OR DEVICES IN THE STATE OF CALIFORNIA

The equipment which you have just purchased does not have a spark arrester. If this equipment is used on any forest covered land, brush covered land, or grass covered unimproved land in the State of California, before using on such land, the California law requires that a spark arrester be provided. In addition, spark arrester is required by law to be in effective working order. The spark arrester must be attached to the exhaust system and comply with Section 4442 of the California Public Resources Code.

IMPORTANT

It is suggested that this manual be read in its entirety before attempting to assemble or operate. Keep this manual in a safe place for future reference and for ordering replacement parts.

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see operating section of this manual for proper fuel and amount.

Your tiller is a precision piece of power equipment, not a play thing. Therefore, exercise extreme caution at all times.

SAFE OPERATION PRACTICES FOR TILLERS

1. Read the Operating and Service Owner's Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
2. Never allow children to operate a power tiller. Only persons well acquainted with these rules of safe operation should be allowed to use your tiller.
3. Keep the area of operation clear of all persons, particularly small children and pets.
4. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
5. Do not wear loose fitting clothing that could get caught on the tiller.
6. Do not start the engine unless the shift lever is in the neutral (N) position.
7. Do not stand in front of the tiller while starting the engine.
8. Do not place feet and hands on or near the tines when starting the engine or while the engine is running.
9. Do not leave the tiller unattended with the engine running.
10. Do not walk in front of the tiller while the engine is running.
11. Do not fill gasoline tank while engine is running. Spilling gasoline on hot engine may cause a fire or explosion.
12. Do not run the engine while indoors. Exhaust gases are deadly poisonous.
13. Be careful not to touch the muffler after the engine has been running, it is hot.
14. Before any maintenance work is performed or adjustments are made, remove the spark plug wire and ground it on the engine block for added safety.
15. Use caution when tilling near buildings and fences, rotating tines can cause damage or injury.
16. Before attempting to remove rocks, bricks and other objects from tines, stop the engine and be sure the tines have stopped completely. Disconnect the spark plug wire and ground to prevent accidental starting.
17. Check the tine and engine mounting bolts at frequent intervals for proper tightness.
18. Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
19. Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

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INTRODUCTION

This Product has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact your nearest service dealer listed on the back of this manual.

PRE-ASSEMBLY



NOTE

The right and left side of your tiller is determined from operator's position.

Before any step is undertaken, the instructions for that step should be read through.

TOOLS REQUIRED:

1. (2) 7/16" Socket, open or box wrench.
2. (1) 9/16" Socket, open or box wrench.
3. (1) 1/4" Flat Screwdriver.
4. (1) Adjustable Wrench.

MATERIALS REQUIRED:

1. Funnel (for gas and oil—**NOTE: DO NOT MIX**)
2. S.A.E.-30 Oil—2 3/4 pints

3. Gas (regular)
4. Cleaning rag

PARTS IN CARTON

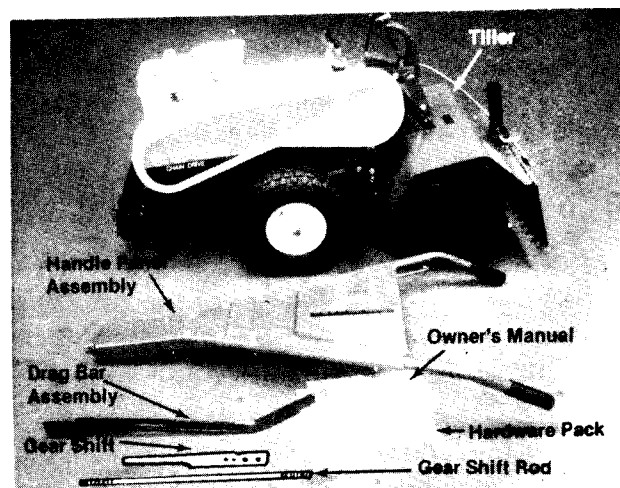


FIGURE 1.

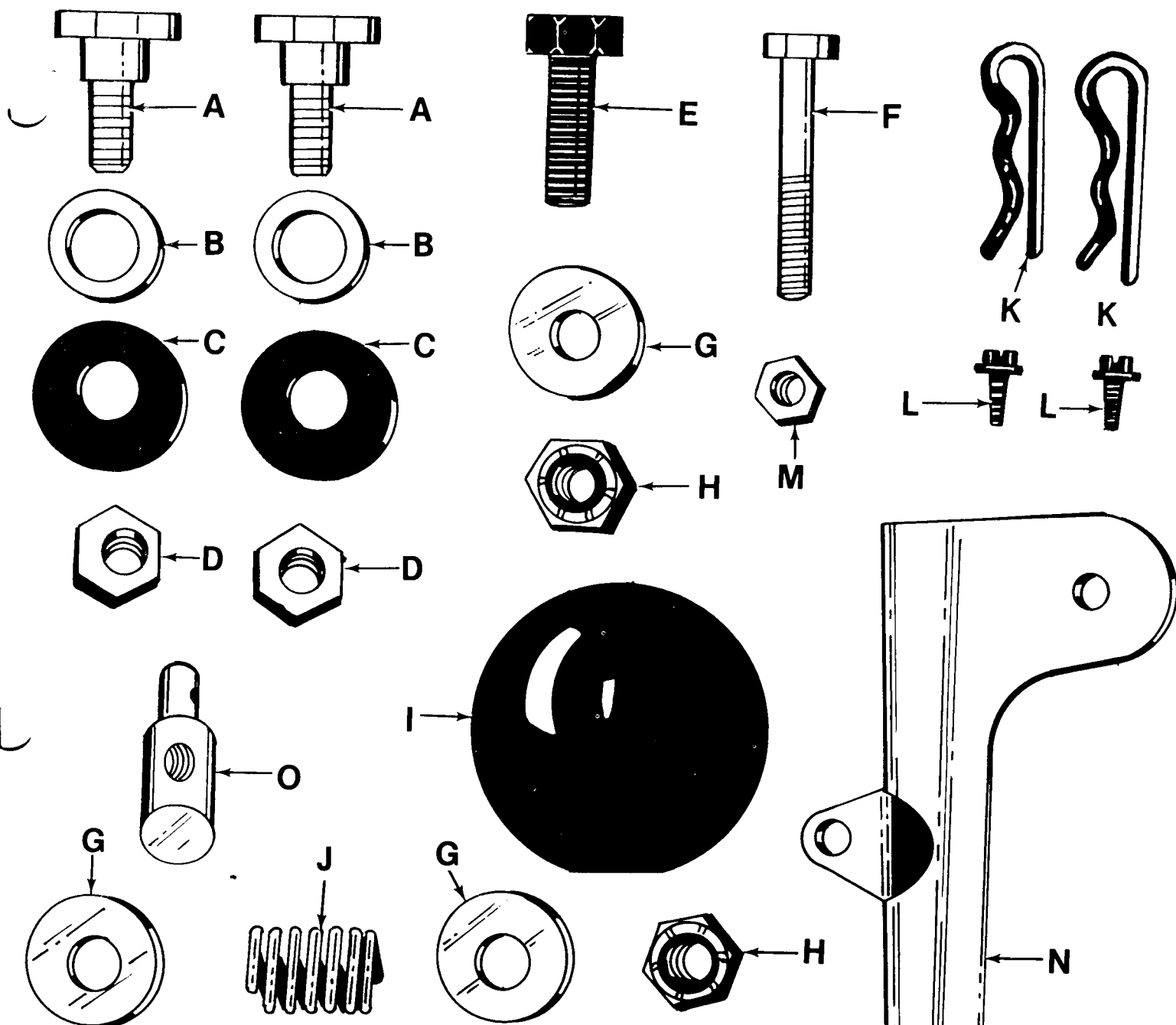


FIGURE 2. (SHOWN IN FULL SCALE)



NOTE

THE LETTERS LISTED BELOW WILL BE REFERRED TO THROUGHOUT THE FOLLOWING TEXT FOR EASIER HARDWARE IDENTIFICATION.

LIST OF CONTENTS IN HARDWARE PACK:

- | | |
|-------------------------------------|---------------------------------|
| A (2) Shoulder Bolts | I (1) Gear Shift Knob |
| B (2) Flat Washers | J (1) Compression Spring |
| C (2) Belleville Washers | K (2) Hair Pin Cotter |
| D (2) Hex Nuts 3/8-18 Thread | L (2) Self Tapping Screws |
| E (1) Hex Screw 3/8-24 x 1.25" Long | M (1) Hex Nut 1/4-20 Thread |
| F (1) Hex Screw 1/4-20 x 1.75" Long | N (1) Lever |
| G (3) Flat Washers 3/8" | O (1) Ferrule |
| H (2) Hex Locknuts 3/8-24 Thread | P (1) Hex Jam Nut 3/8-24 Thread |

TILLER IDENTIFICATION

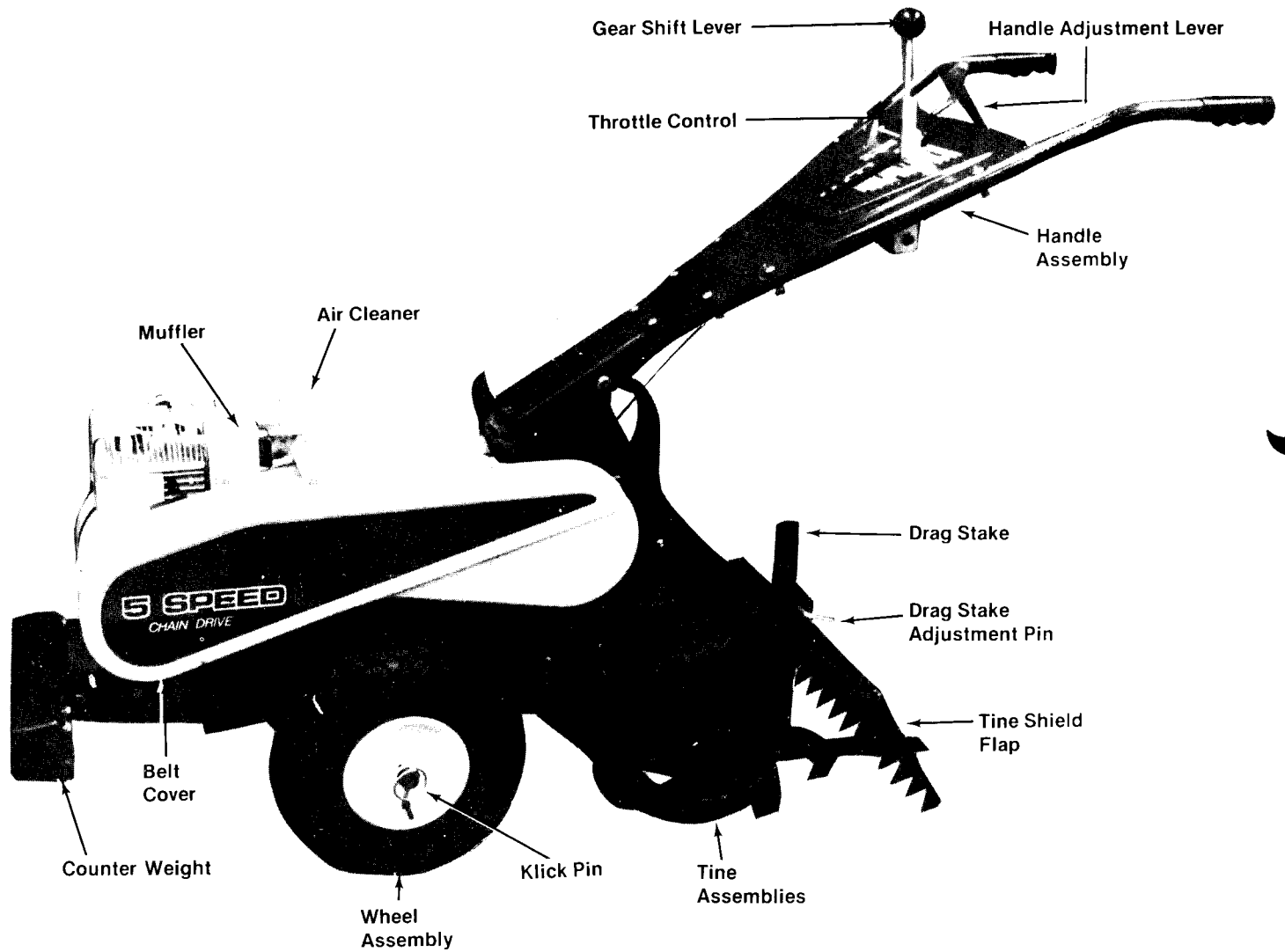


FIGURE 3.

ASSEMBLY INSTRUCTIONS

1. Handle Assembly

- A. Place the handle assembly in position on the tiller so that the holes in handle line up with holes in mounting bracket.
- B. Place flat washer (B) and belleville washer (C) over shoulder on shoulder bolt (A). Place shoulder bolt and two washers through handle mounting holes and secure with hex nut (D) from the inside of handle. See figure 4.

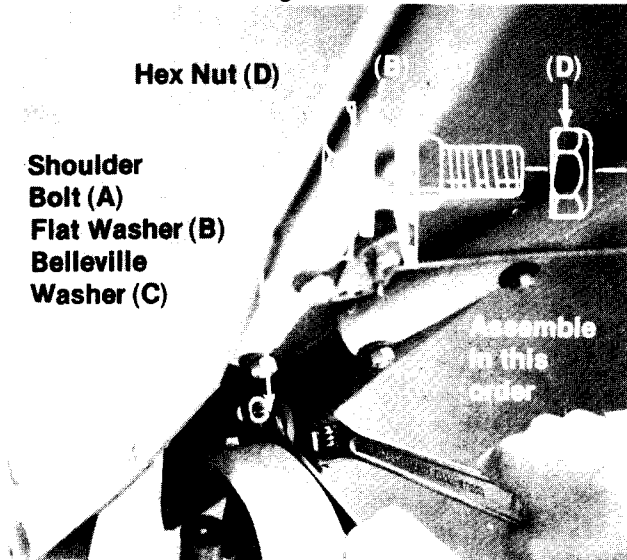


FIGURE 4.

- C. Remove drag stake from tiller and preassemble drag stake to drag bar assembly with hex screw (E), flat washer (G) and hex locknut (H). See Figure 5. Tighten nut and bolt, but do not over tighten. Parts must pivot.



NOTE

Flat washer must go against slot on drag bar assembly.

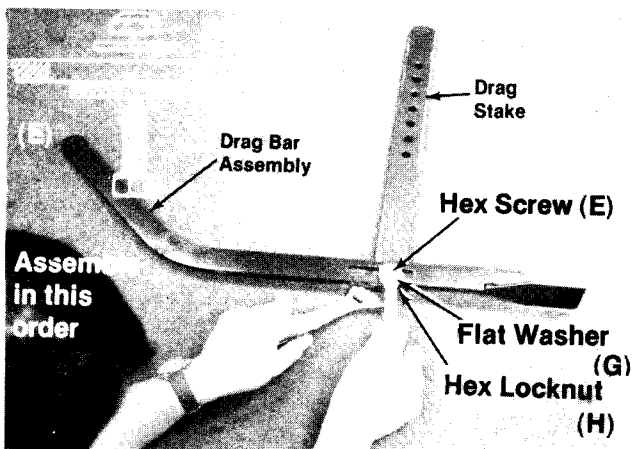


FIGURE 5.

- D. Tip the tiller forward, so it rests on counterweight. Slide drag stake up through tiller as shown in figure 6. Pull drag stake adjustment pin on tiller to lock in place.

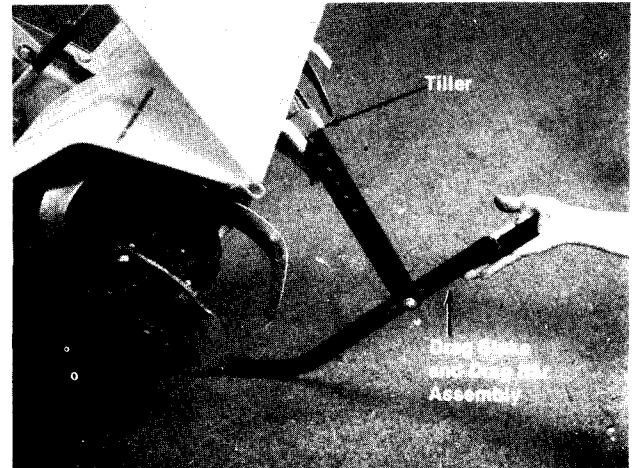


FIGURE 6.

- E. Attach front end of drag bar assembly to transmission housing. Slip drag bar over bolt and secure with hair pin cotter (K). See figure 7.



FIGURE 7

- F. Assemble notched edge of gear shift lever so notch faces forward. Place gear shift lever through slot in handle panel and bottom hole over weld stud. Secure with flat washer (G), compression spring (J), another flat washer (G) and hex locknut (H). See figure 8.

- G. Tighten hex locknut until nut is flush with stud. See figure 8.

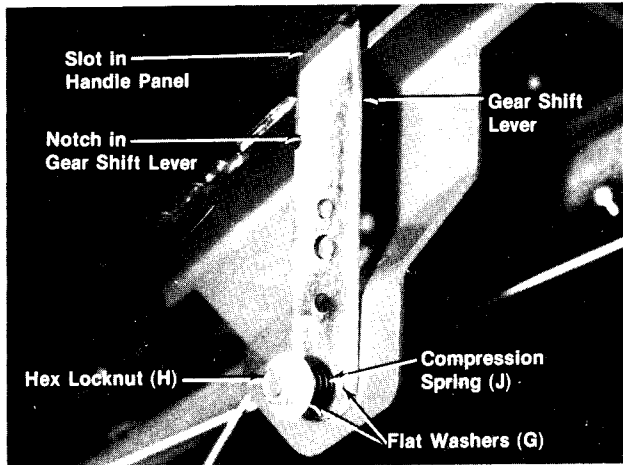


FIGURE 8.

- H. Thread hex jam nut (P) on one end of gear shift rod, then thread gear shift rod into ball joint on the top of pivot horn assembly, 10 to 12 complete turns, approximately $\frac{1}{2}$ inch. See figure 9.

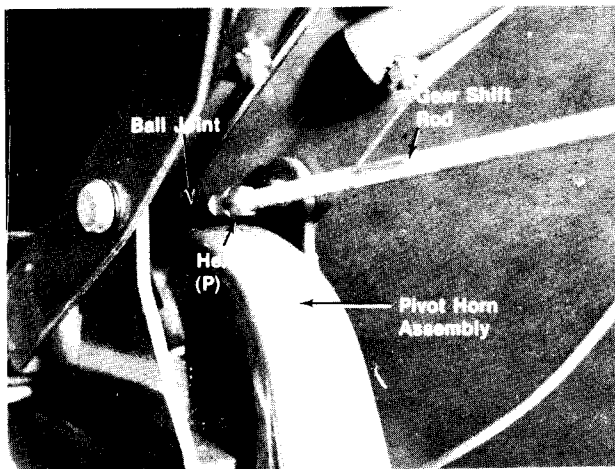


FIGURE 9.

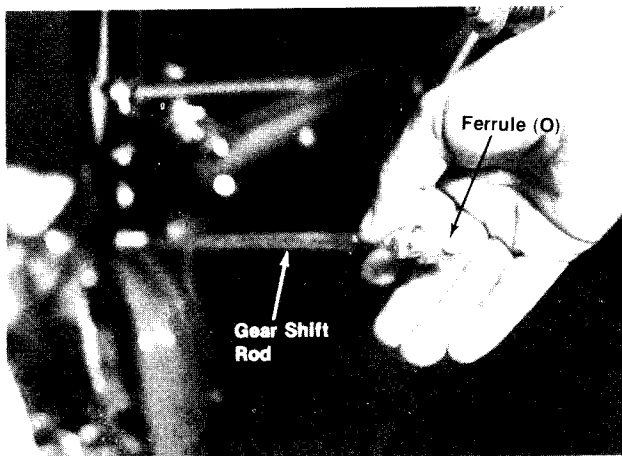


FIGURE 10.

- I. Thread ferrule (O) on other end of gear shift rod. See figure 10.
J. Secure ferrule in gear shift lever (as shown in figure 11) with hair pin cotter (K).

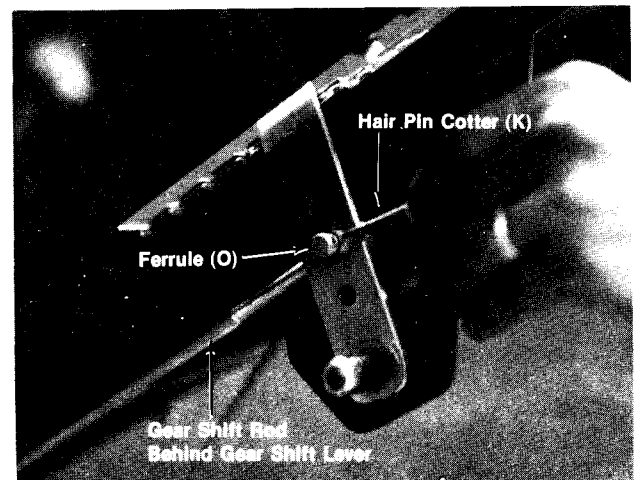


FIGURE 11.

- K. To assemble the handle adjustment lever, hook handle adjustment rod (already on handle) into lever. Hook to the outside. See figure 12.
L. Place handle adjustment lever in place on handle and secure with hex screw (F) and locknut (M). See figure 12. Do not over tighten handle adjustment lever must pivot freely.

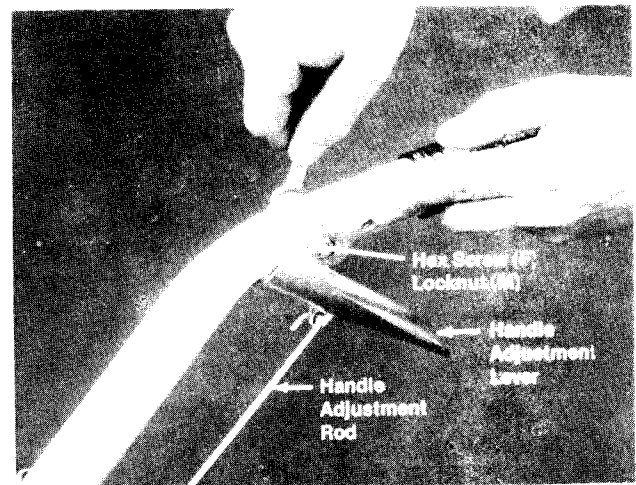


FIGURE 12.

- M. Throttle Control Lever.



NOTE

The throttle control may have four holes in the lever bracket. The holes on the outside edge are to be used for mounting on this unit. See figure 13.

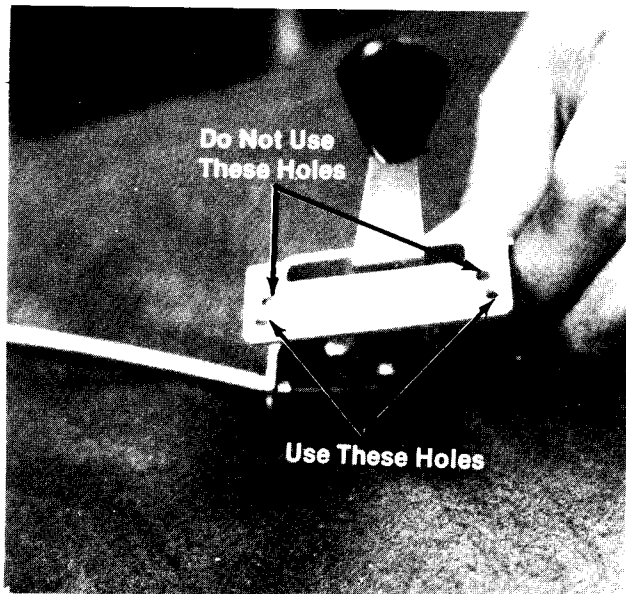


FIGURE 13.

Place throttle control lever up through the handle panel and secure with two self tapping screws (L), using a 1/4" flat screwdriver. See figure 14.

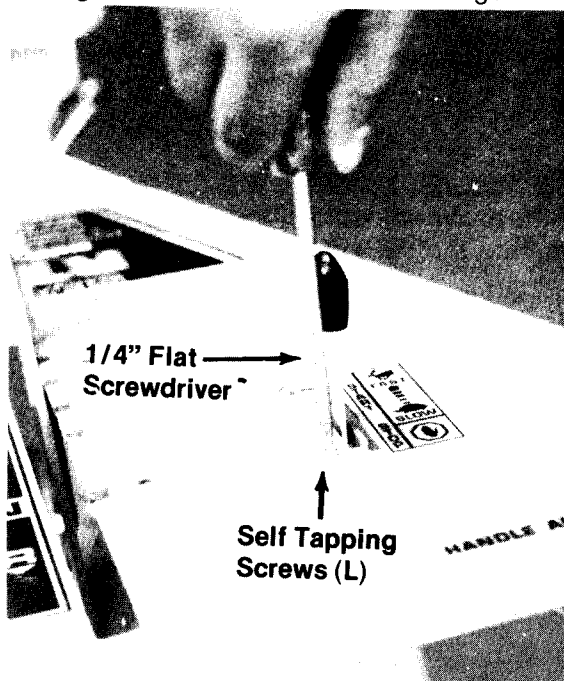


FIGURE 14.



WARNING

Engine is shipped **without** oil.

ENGINE PREPARATION

1. Before starting. Fill crankcase with 2 3/4 pints of SAE 30 heavy duty detergent oil. Be sure that engine is level. See figure 15.

2. Change oil after first 2 hours of operation and every 25 hours thereafter. Check oil every 8 operating hours.

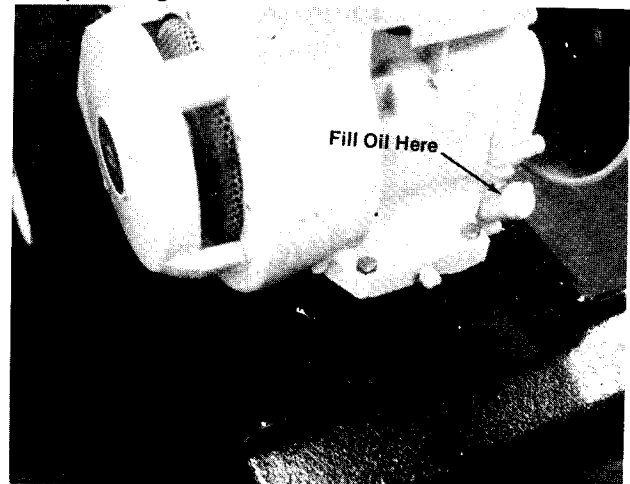


FIGURE 15.

3. Fill fuel tank with clean fresh regular grade of gasoline. See figure 16.

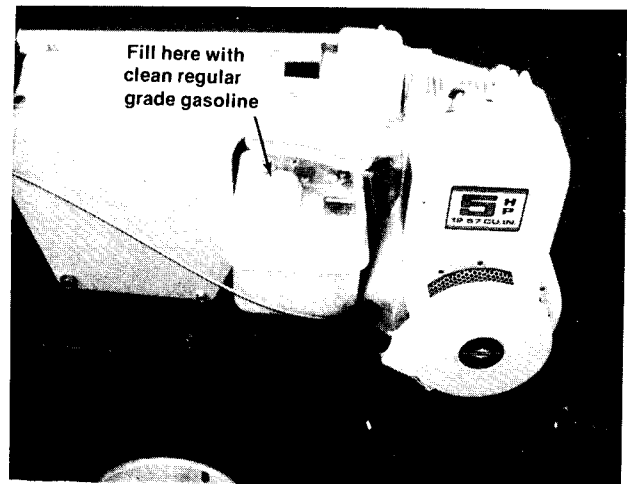


FIGURE 16.

ADJUSTMENTS



WARNING

After all assembly is completed, this final adjustment **must be made prior to initial operation.**

Gear Shift Rod Final Adjustment

1. Place click pins in freewheeling position. See figure 17.



FIGURE 17.

2. Pull the drag bar adjustment pin and move the drag stake all the way down, so the tines DO NOT touch the ground. See figure 18.
3. Block the front wheels as shown in figure 18.

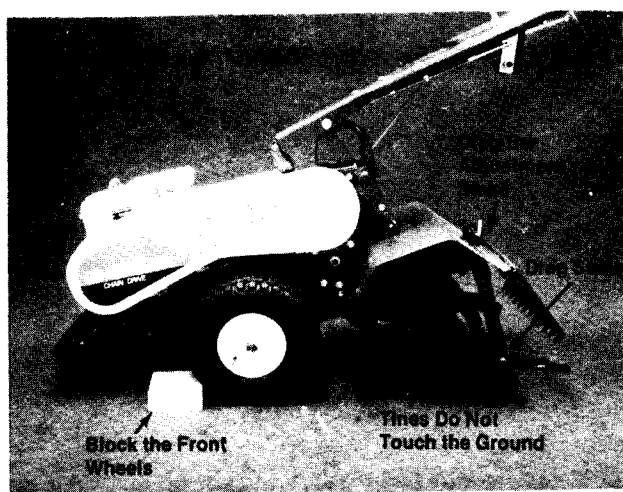


FIGURE 18.

4. Place the gear shift lever in Neutral (N) position.
5. Place the throttle in the Start position.
6. Pull choke lever out (if engine is cold).
7. Start the engine.
8. Engage the gear shift lever through the five gears with the engine running and return to Neutral (N).
9. Stop the engine.
10. Remove the hair pin from ferrule and pull out of gear shift lever.
11. Place gear shift lever in first gear (and pull lever to rear of slot). Adjust the ferrule to fit gear shift lever, and replace the hair pin.

Handle Adjustment Lever. (See figure 19.)



Figure 19 is viewed from the bottom of handle panel.

- A. Use if not enough free play.
- B. Normal setting.
- C. Use if pin will not withdraw completely from bracket.

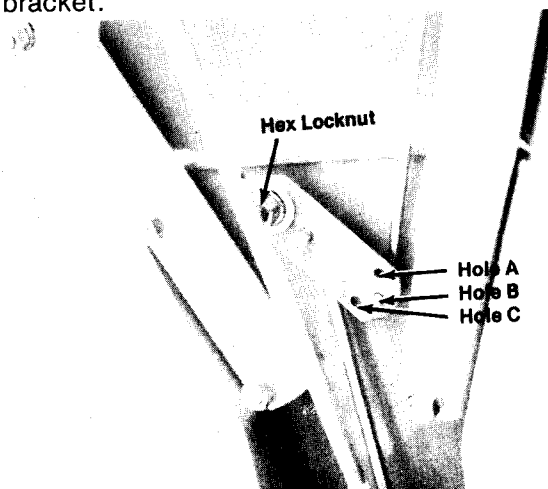


FIGURE 19.

To make the above adjustment loosen hex locknut and reposition the rod in Hole A, B or C.

Additional adjustment for the gear shift rod can be made after the tiller has been in service for a while.

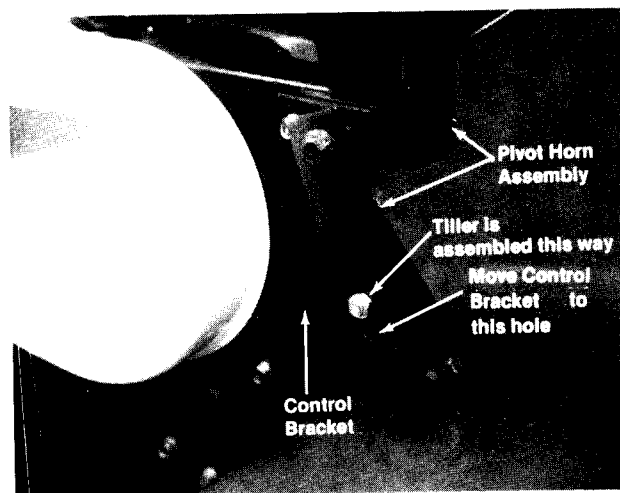


FIGURE 20.

When the belt has become worn and/or stretched or the friction wheel has become worn, make the following adjustment.

1. Move the control bracket to the bottom hole on the pivot horn assembly and readjust the gear shift rod. See figure 20.

CONTROLS

Location and Use.

1. **Gear Shift Lever:** The gear shift lever is located in the center of handle panel.

A. Forward (1 thru 5)—Move the lever to the left and forward for each gear. See figure 21.



CAUTION

Do not attempt to shift gears unless engine is running.

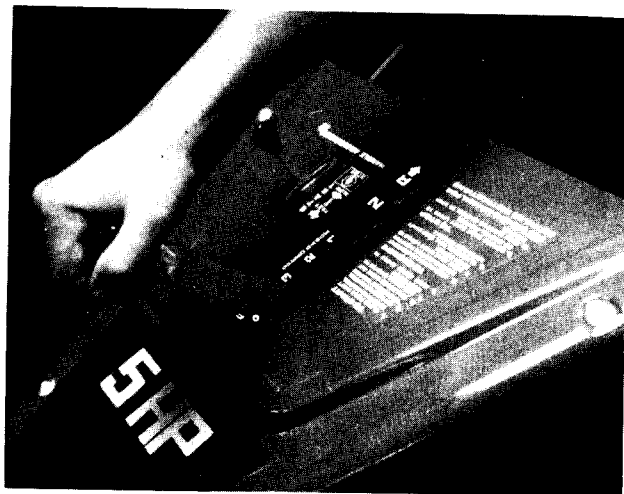


FIGURE 21.

B. Use (1) first and (2) second gears when breaking the sod for the first time.

C. Use (3) third and (4) fourth gears when tilling soil which has been tilled before.

D. Use (5) fifth gear for pulverizing soil.

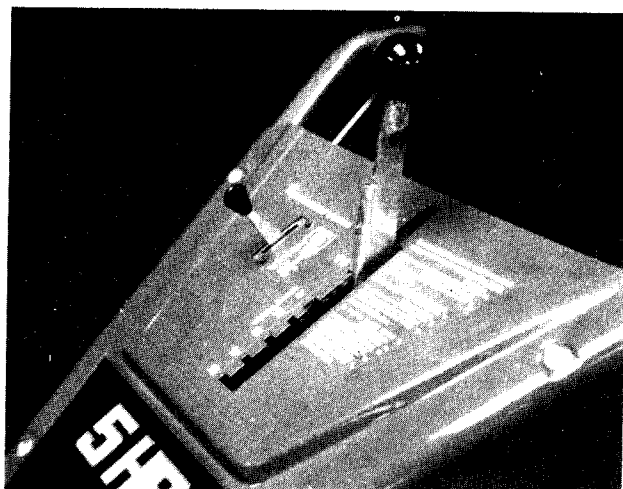


FIGURE 22.

E. Neutral (N)—Move lever to center detent. See figure 22.



FIGURE 23.

F. Reverse (R)—Pull the gear shift lever back (upward) slowly to obtain reverse. Always use caution when using the reverse. When using reverse, if gear shift lever is released it will snap back into neutral (N). See figure 23.

2. **Throttle Control:** The throttle control lever is located on the right hand side of handle panel and controls the engine speed.

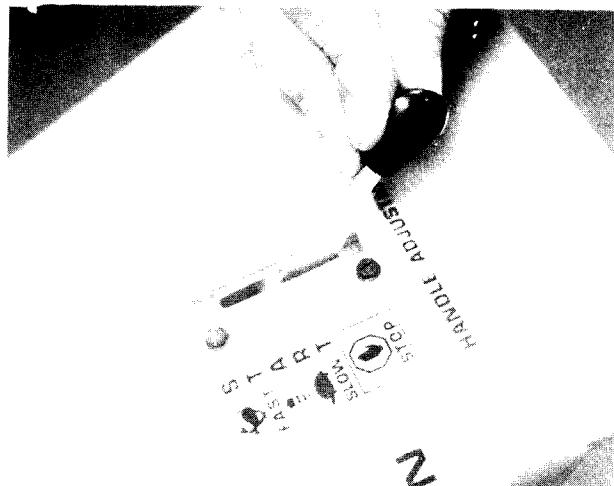


FIGURE 24.

A. Stop—Pull lever back (upward) to stop the engine. See figure 24.

B. Start—Push throttle control lever forward (down) to start position. See figure 25.

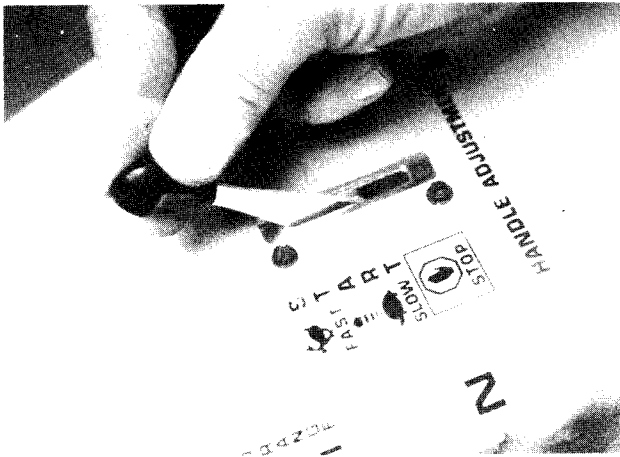


FIGURE 25.

3. **Choke:** The choke is located on the engine just below the air cleaner. To choke the engine pull the choke lever out. See figure 26.

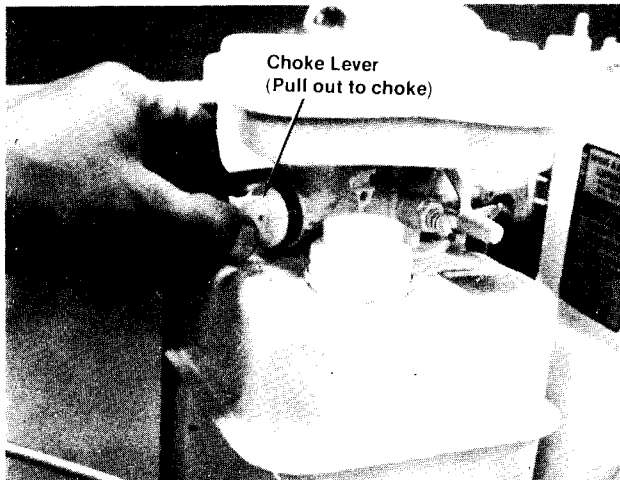


FIGURE 26.

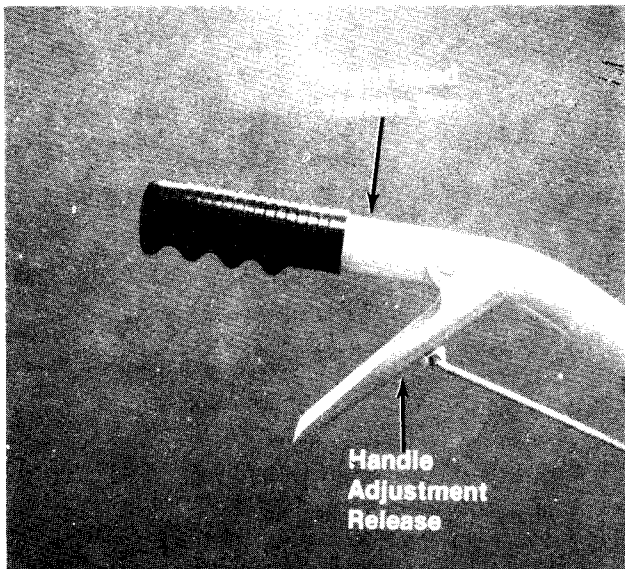


FIGURE 27.

4. **Handle Adjustment:** The handle adjustment release is located on the right hand handle bar. See figure 27.

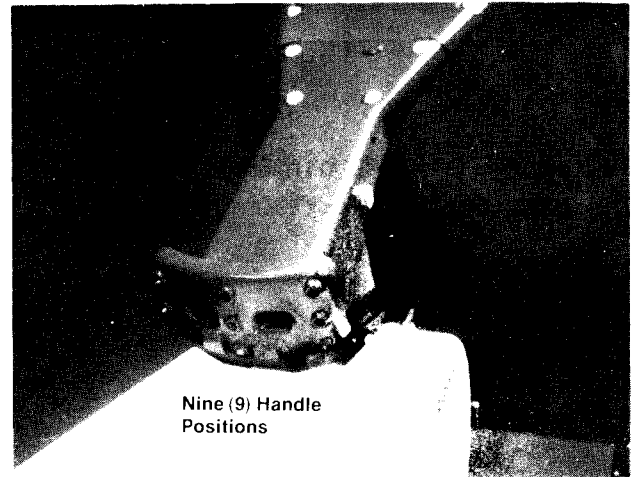


FIGURE 28.

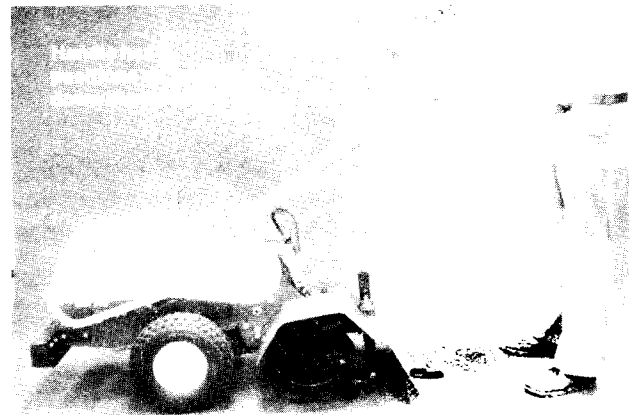


FIGURE 29.



FIGURE 30.

- A. Squeeze up on handle adjustment lever and place the handle in one of nine (9) positions. See figures 28, 29, 30 and 31.



NOTE

Figure 28 is viewed from the front of tiller for clarity.

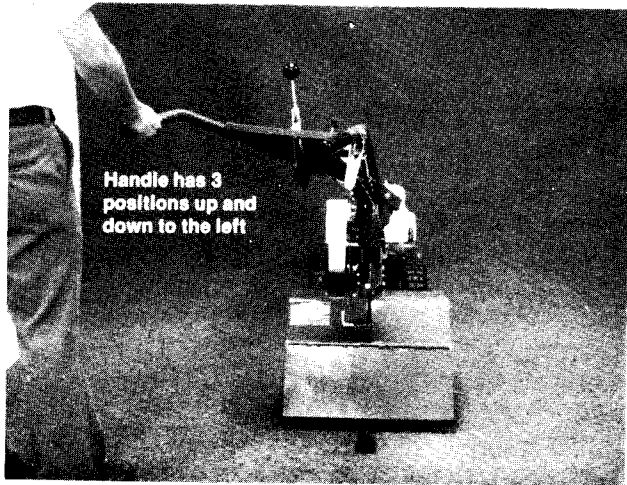


FIGURE 31.

OPERATION

Your tiller has freewheeling and drive positions.

- A. Freewheeling position is when the klick pin is placed in the outer hole on wheel shaft, as shown in 32.

Freewheeling is used for transporting the tiller to and from the work area, with the engine off and the gear shift lever in Neutral (N) position.

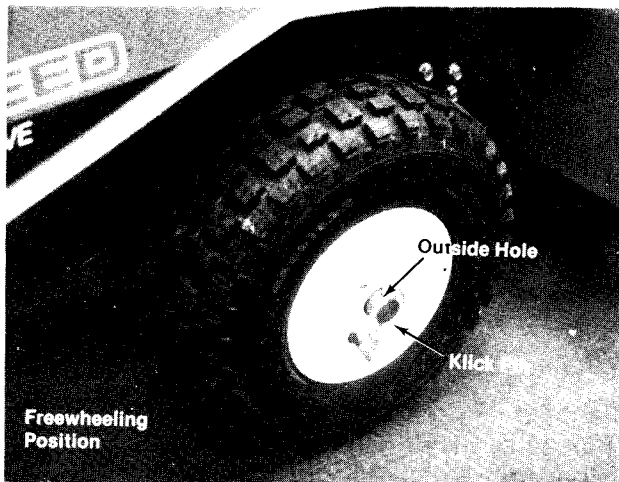


FIGURE 32.

- B. Drive position is when the klick pin is inserted into the inside hole of wheel shaft (hole in wheel hub) as shown in figure 33. Drive position is used for tilling.

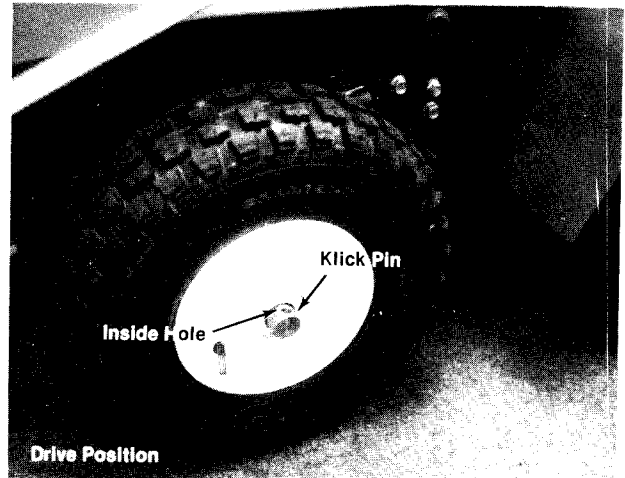


FIGURE 33.

TO START ENGINE:



CAUTION

BE SURE NO ONE IS STANDING IN FRONT OF THE TILLER WHILE THE ENGINE IS RUNNING OR BEING STARTED.

1. Place the gear shift lever in neutral (N) position. See figure 22.
2. Place the throttle control lever in **FAST** position. See figure 25.
3. Choke engine. Pull choke lever out. See figure 26. Once the engine starts, push the lever up.
4. Stand at side of tiller, grasp the starter handle and pull out rapidly. Return it slowly to the engine. Repeat as necessary. See figure 34.

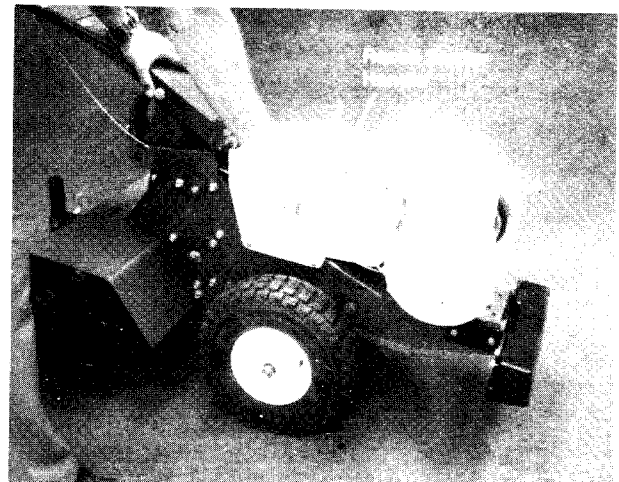


FIGURE 34.

TILLING

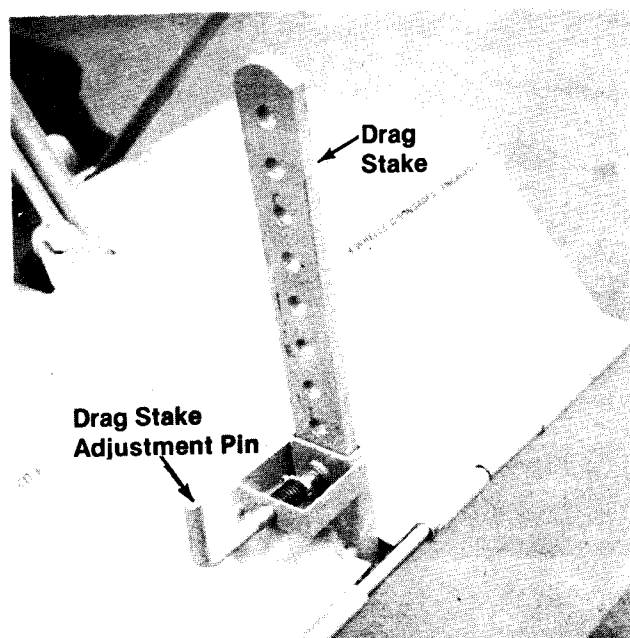


FIGURE 35.

1. Adjust the drag stake by pulling the drag stake adjustment pin. Release the drag stake. See figure 35.
2. Lower the drag stake for shallow tilling and raise the drag stake for deeper tilling.
3. Select gear on handle panel and tiller will propel itself.
 - A. For tilling in sod, raise the drag stake so the drag bar is one to two inches above the tines.

This setting is used for breaking up the sod and shallow cultivation. For further depth raise the drag stake and make one or two more passes over the area.
 - B. For tilling loose and sandy soil, further depth in tilling can be achieved by raising the drag stake to its highest setting.



When tilling, if a hard spot or rock is encountered, the tines may lift the back of the tiller out of the ground and start to walk across the ground. To correct this problem raise up on the handles.

TILLING HINTS

Soil conditions are important for proper tilling.

The tines will not readily penetrate dry, hard soil. This may contribute to excessive bounce and difficult handling of the tiller. Hard soil should be moistened prior to tilling.

Extremely wet soil will cause soil to ball up or clump.

When tilling in the Fall, all vines and long grass should be removed. This will prevent vines from wrapping around the tine shaft which slows tilling operation.

The best method will be determined by the soil condition. In some soils, the desired depth is obtained the first time over the garden. In other soils, the desired depth is obtained by going over the garden two or three times. In the latter case, the drag stake should be raised before each succeeding pass over the garden, and passes should be made across the length and width of the garden alternately. Rocks which are turned up should be removed from the garden area.

Handle Pressure: Further control of tilling depth and travel speed can be obtained by variation of pressure on the handles.

When using the drag stake a downward pressure on the handles will increase the working depth and reduce the forward speed. An upward pressure on the handles will reduce the working depth and increase the forward speed. The type of soil and working conditions will determine the actual setting of the drag stake.

MAINTENANCE

BELT REPLACEMENT:



CAUTION

Do not use an off-the-shelf belt.

If belt replacement is required, order belt or belts by part number from your nearest authorized dealer.

Part No. 754-0224
5/8" x 26" Short Belt

Part No. 754-0221
5/8" x 52" Long Belt

Your tiller has been engineered with the above belts and should not be replaced with an off-the-shelf belt. The above belts are made of special material (Kevlar Tensile) for longer life and better performance.

REMOVING AND REPLACING BELTS.

1. Remove belt cover, remove three bolts, two nuts and two flat washers. See figure 36.



CAUTION

HOT muffler in the area of belt cover. Only remove the belt cover when engine is cool.

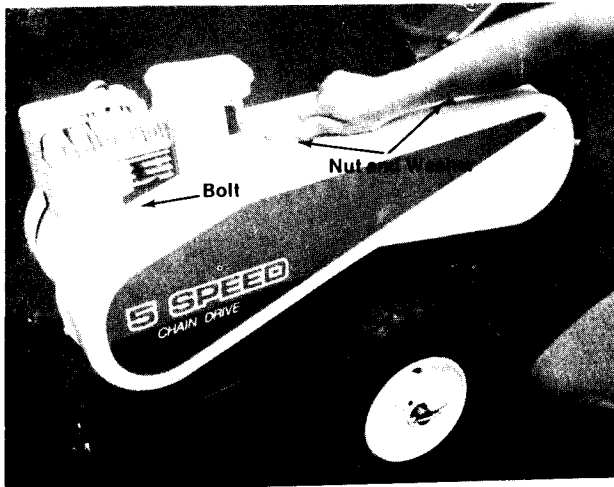


FIGURE 36.

2. To remove the front belt (short) pull gear shift lever back to Reverse (R) position and hold. With a 7/16" wrench remove three screws and lockwashers holding the friction disc. See figure 37.

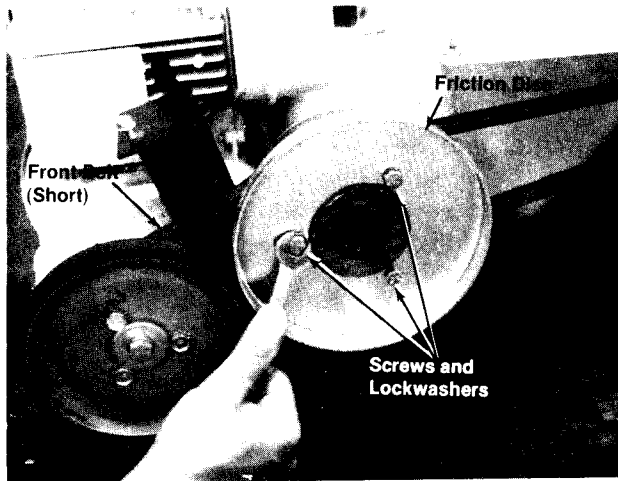


FIGURE 37.

3. Hold the gear shift lever in Reverse (R) position and slip the belt off engine pulley, towards the engine as shown in figure 38.

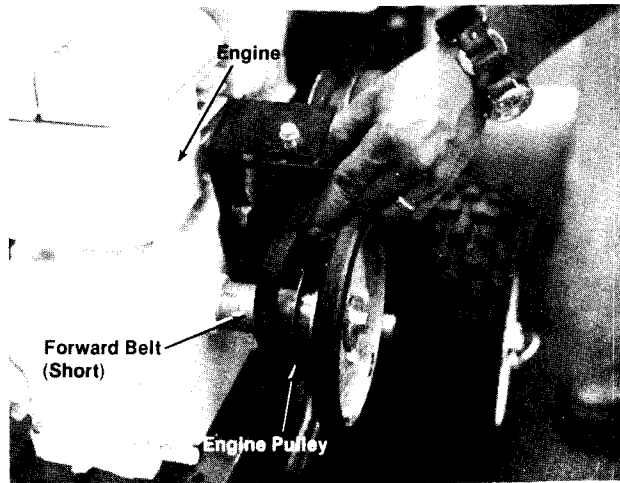


FIGURE 38.

4. Place the gear shift lever in one of the forward gears (as far forward as possible).
5. Pull the idler pulley down by hand and remove the belt from idler pulley and transmission pulley. See figure 39.

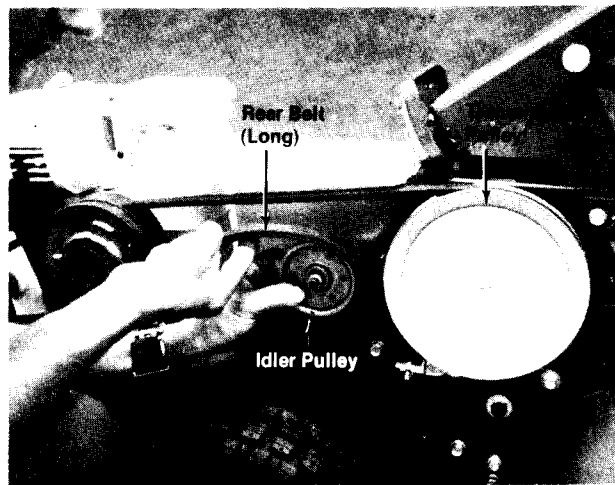


FIGURE 39.

6. Remove the forward belt (short) from the variable speed pulley and slip belt off the engine pulley. See figure 40.
7. Remove rear belt (long) and replace with new belts.



NOTE

Upon reassembly make sure the short belt is inside the guide pins. See figure 41.

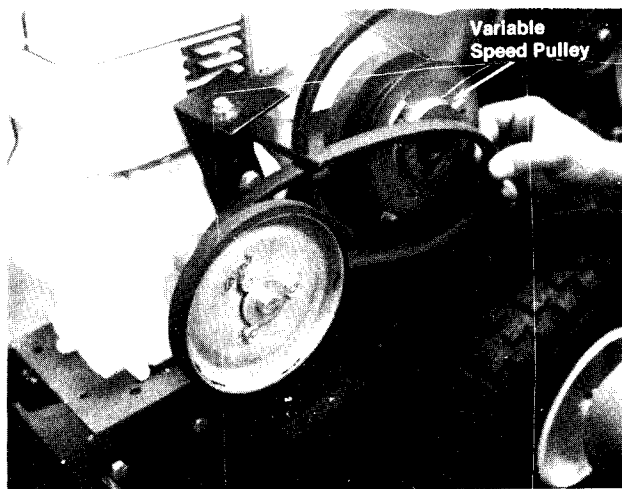


FIGURE 40.

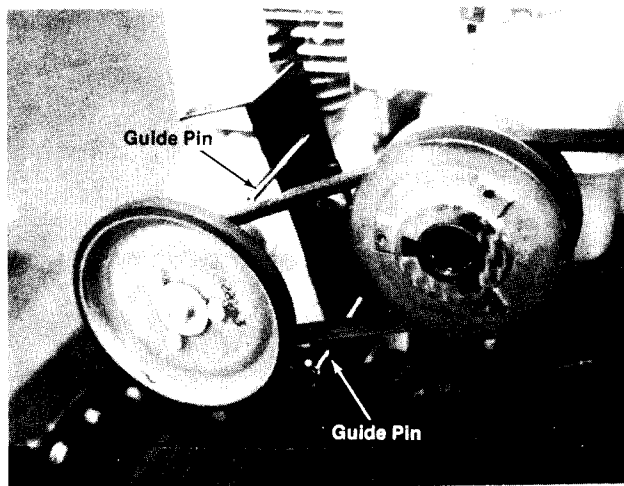


FIGURE 41.

8. Reverse steps 1 through 7 for reassembly.



Upon reassembly of friction disc, tighten three screws equally.

CARE AND MAINTENANCE:

Transmission:

The transmission is pre-lubricated and sealed at the factory. It requires no additional lubrication unless the transmission is disassembled. To fill with grease, lay the left half of the transmission on its side, add 28 ounces of Plastilube #1 grease and assemble the right half to it. This grease can be purchased from your nearest authorized dealer. (Order Part No. 737-0133.)

Engine:

1. You **MUST CHANGE THE OIL** in the crankcase after the first two hours of opera-

tion of your new engine and after each 25 hours of use thereafter to ensure proper lubrication of internal parts for trouble free operation and to prevent costly repair due to excessive wear. (Take care to remove dirt around filler plug.) Be sure oil level is maintained full to point of overflowing. See figure 42.

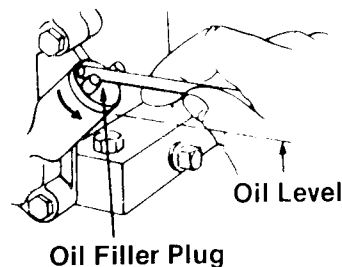


FIGURE 42.

To change oil remove drain plug (figure 43) and tip the tiller forward while engine is warm. Replace drain plug. Remove oil filler cap and refill with SAE 30 heavy duty detergent oil. Replace filler cap.

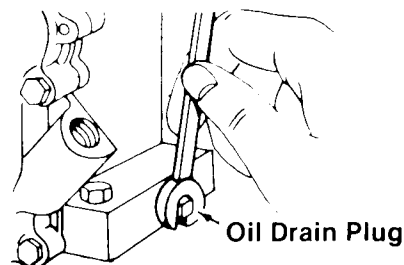


FIGURE 43.

2. Use only a good grade of fresh, clean, regular gasoline. Do not use gasoline that has been sitting for a long period of time. Stale gasoline may cause engine to run poorly or not at all.
3. Keep your engine **CLEAN**. Wipe off all spilled fuel and oil. Keep the engine clean of foreign matter and be sure the cooling fins on the cylinder are kept clean to permit proper air circulation. You must **REMEMBER** that this is an air cooled engine and free flow of air is essential to proper engine performance and life.
4. You must **SERVICE YOUR AIR CLEANER**. The air cleaner prevents damaging dirt, dust, etc. from entering the carburetor and being forced into the engine and is important to engine life and performance.

To remove air cleaner: See figures 44 and 45.

- A. Remove Screw.
- B. Remove air cleaner carefully to prevent dirt from entering carburetor.

- C. Take air cleaner apart.
- D. Wash element in detergent and solution by squeezing similar to a sponge.

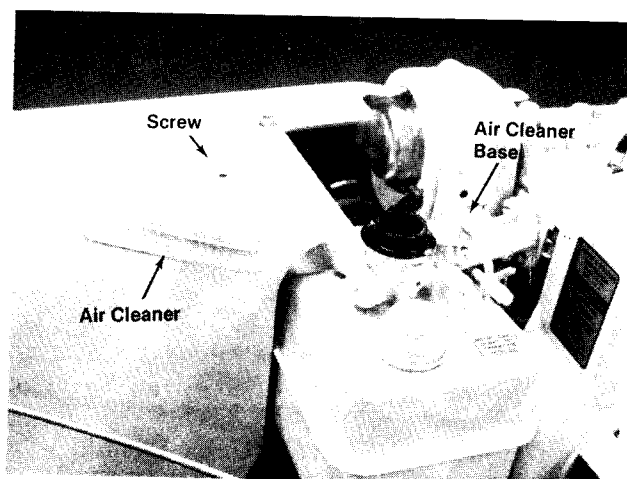


FIGURE 44.

- E. Wrap foam in cloth and squeeze dry.
- F. Coat element with two tablespoons of engine oil, squeeze to distribute and remove excess oil. See figure 45.
- G. Wipe air cleaner body with same solution to remove excess oil.
- H. Reassemble (See figure 44.) by inserting element into body and snapping cover into place, fasten to carburetor with screw.

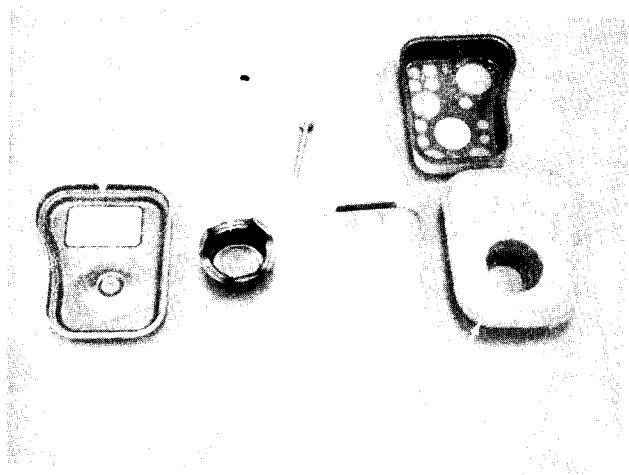


FIGURE 45.

NEVER RUN YOUR ENGINE WITHOUT AIR CLEANER COMPLETELY ASSEMBLED.

Carburetor Adjustment:

1. Never make unnecessary adjustments. The factory settings are correct for most applications.
2. If adjustments are needed, proceed as follows:

A. **INITIAL ADJUSTMENT.** See figure 46. Close needle valve (turn clockwise) then open 1½ turns (turn counterclockwise). This initial adjustment will permit the engine to be started and warmed up before making final adjustment.

B. **FINAL ADJUSTMENT.** See figure 46. With engine running at fast operating speed (approximately 3,000 RPM without load) close the needle valve (turn clockwise) until engine starts to lose speed (lean mixture). Then slowly open needle valve (turn counterclockwise) past the point of smoothest operation until engine just begins to run unevenly. This mixture should be rich enough for best performance under load. Hold throttle in idling position. Turn idle speed adjusting screw until fast idle is obtained (1,750 RPM). Test the engine and if it tends to stall or die out, it usually indicates that the mixture is slightly lean and it may be necessary to open the needle valve slightly to provide a richer mixture. This richer mixture may cause a slight unevenness in idling.

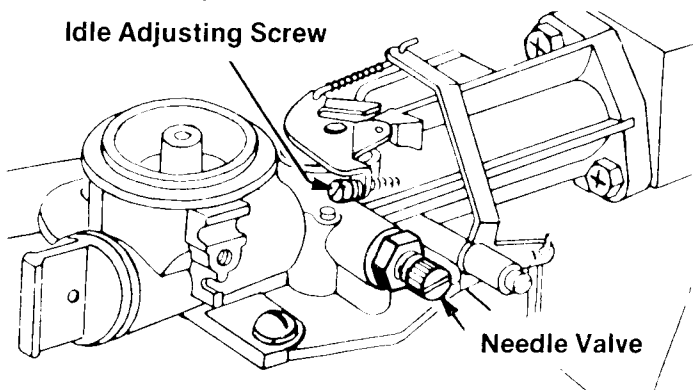


FIGURE 46.



NOTE
ALWAYS ALLOW SEVERAL SECONDS BETWEEN EACH ADJUSTMENT FOR THE ENGINE CARBURETOR TO REACT TO THE NEW SETTING.

3. Never attempt to change maximum engine speed as THIS IS PRESET AT THE FACTORY. Excessive speed, caused by by-passing the governor, can cause extensive damage to your engine.

SPARK PLUG:

1. Remove the spark each time you change the oil and inspect it. See figure 47.

- A. The electrodes should be kept clean and free OF CARBON. The presence of carbon or excess oil will greatly deter proper engine performance.

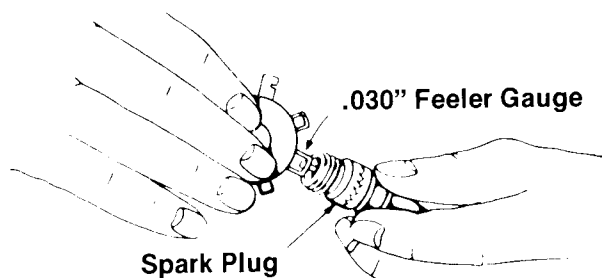


FIGURE 47.

- B. If possible, check the spark plug gap (area between electrodes) using a wire feeler gauge. This plug gap should be .030.
2. If you need a spark plug refer to the parts list for the proper replacement spark plug.

ADJUSTMENT OF THROTTLE CONTROL CABLE

1. Place the throttle control lever in stop position.
2. Loosen the casing clamp screw and move the throttle control wire in as far as possible.
3. Tighten the casing clamp screw. See figure 48.

TIRE PRESSURE

Tires should be inflated from 8 to 15 p.s.i.

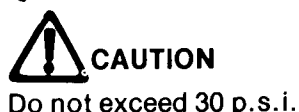


FIGURE 48.

OFF-SEASON STORAGE

If the tiller is to be inoperative for a period longer than 30 days, the following precautions are recommended. Keep your tiller in a weatherproof dry area. If stored for over 30 days the following steps will protect the essential engine parts from gum deposits.

1. Working outdoors, drain all fuel from the fuel tank. Use a clean dry cloth to absorb the small amount of fuel remaining in the tank, then run the engine until all fuel in carburetor is exhausted.



DO NOT DRAIN FUEL WHILE SMOKING, OR IF NEAR AN OPEN FIRE.

2. Drain all the oil from the crankcase (this should be done after the engine has been operated and is still warm) and refill the crankcase with clean new oil. See figure 15.
3. Disconnect the spark plug wire and remove the spark plug from the cylinder. Pour about six drops of engine oil into the cylinder, and then pull the recoil starter several times to spread the oil on the cylinder wall. Replace the spark plug, but DO NOT connect the wire.
4. Clean the engine and the entire tiller thoroughly.
5. Wipe tires with oiled rag to prevent rust.

TILLER WINTERIZING INSTRUCTIONS FOR USE WITH SNOW BLADE:

1. For cold weather (below 32°F.), drain oil from tiller engine crankcase and replace with SAE 10W or 10W-20W detergent oil.
2. Replace any remaining fuel on hand or in the engine fuel tank with a fresh supply of winter grade fuel. Winter fuels contain additives for faster starts. Keep fuel tank full.



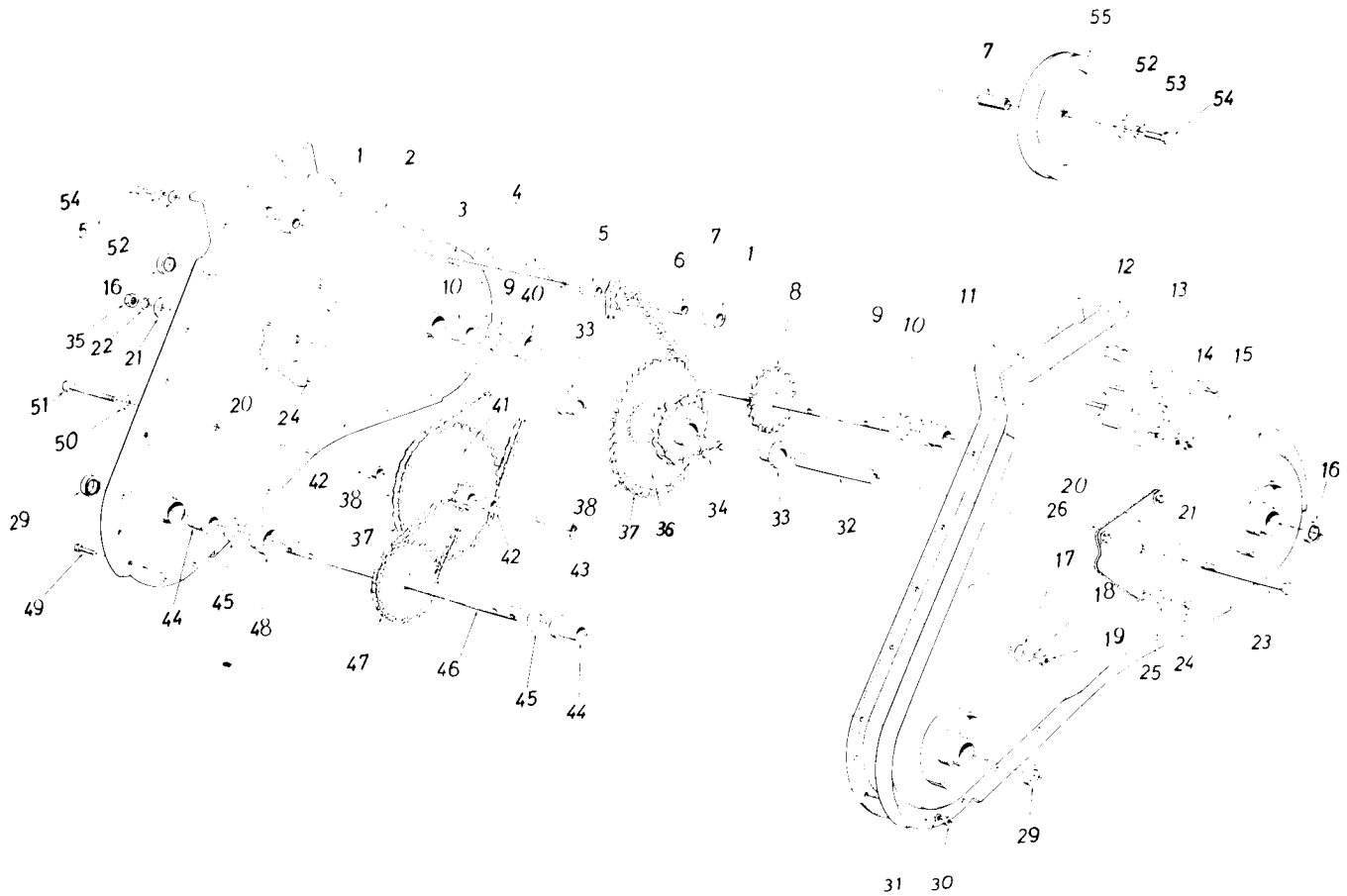
NOTE

It may be necessary to enrich the carburetor idle and high speed jets 1/8 to 1/4 turn (counterclockwise) for good performance.

3. In the spring of the year, before the tilling season, be sure to change engine oil back to SAE 30W detergent oil.

NOTES

218-405-065



NOTE: Use 28 ounces of
Plastilube #1 grease. Order
part no. 737-0133.

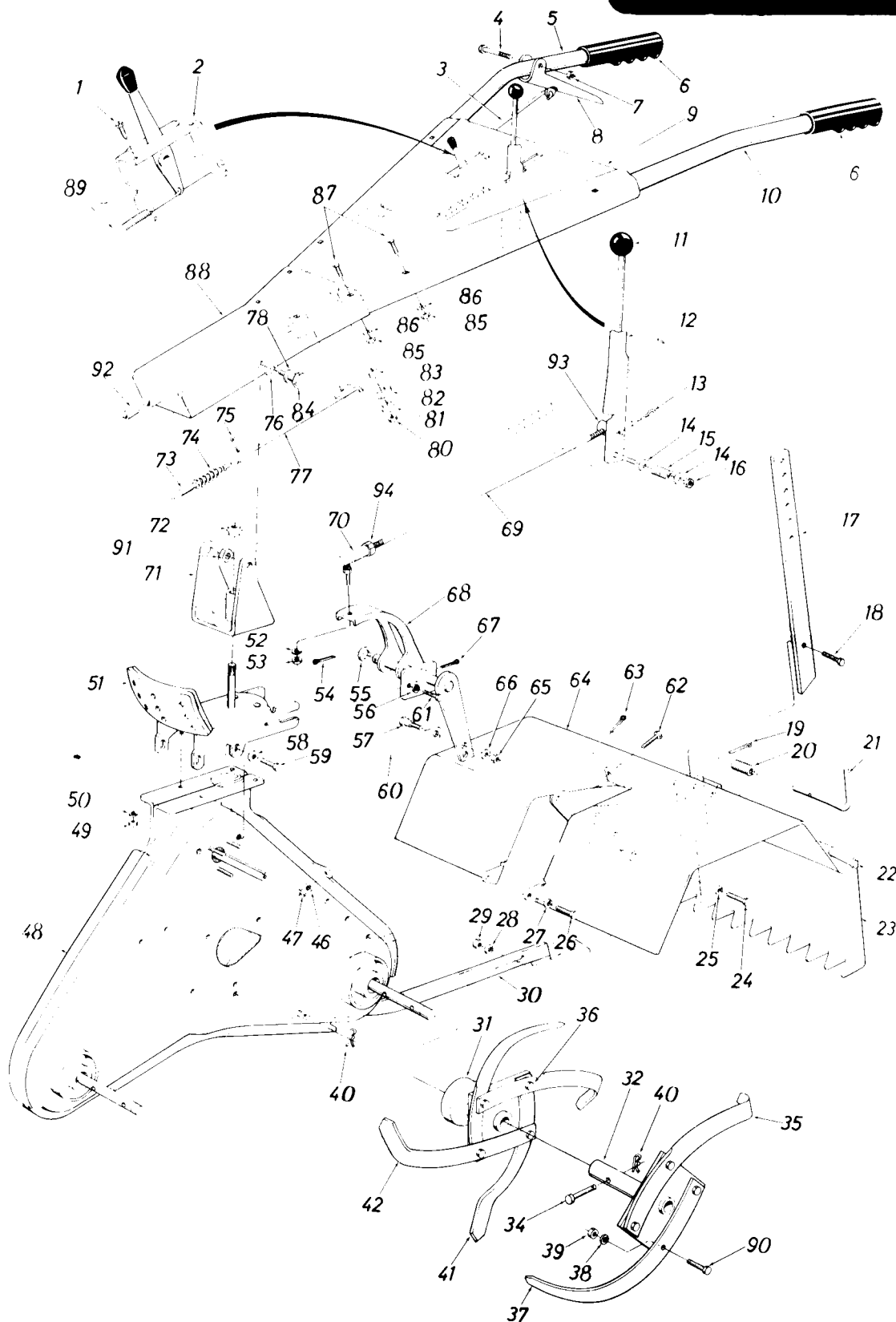
PARTS LIST FOR TRANSMISSION ASSEMBLY 04878

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	741-0155		Ball Bearing		31	736-0329		L-Wash. 1/4" Scr. *	
2	04822 —606		Chain Case Ass'y. —R.H.		32	750-0388		Hub Sleeve 3/8" I.D. x 5/8" O.D. x 3.135 Lg.	N
3	738-0379		Input Shaft 5/8" Dia.						
4	714-0122		Sq. Key 3/16 x 3/16 x .75" Lg.		33	748-0184		Flange Brg. .628 I.D. x .753 O.D. x .75	
5	750-0379		Spacer .637 I.D. x .781 O.D. x .85" Lg.		34	713-0226		Chain #50—5/8" Pitch x 52 Links Endless	
6	717-0210		Sprocket 9T x .500 Pitch		35	712-0375		Hex Cent. L-Nut 3/8-16 Thd.	
7	750-0378		Spacer .637 I.D. x .781 O.D. x 1.44" Lg.		36	713-0237		Sprocket Hub Ass'y.	N
8	04867		Tine Shaft Ass'y.		37	713-0165		#420 Chain 1/2" Pitch x 57 Links	
9	736-0259		Fl-Wash. 1.0" I.D. x 1.62" O.D. x .09		38	713-0154		Master Link 1/2" Pitch	
10	741-0189		Flange Brg. 1.00" I.D. x 1.188 O.D. x 1.12		40	750-0314		Spacer 1.0" I.D. x 2.0" O.D. x .68	
11	721-0163		Gasket—Housing		41	713-0222		Sprocket Ass'y.	
12	04821 —606		Chain Case Ass'y. —L.H.		42	748-0184		Flange Brg. .628 I.D. x .753 O.D. x .75	
13	05034		Bearing Housing		43	750-0374		Hub Sleeve .38 I.D. x .625 O.D.	
14	736-0329		L-Wash. 1/4" Scr. *		44	741-0189		Flange Brg. 1.00" I.D. x 1.188 O.D.	
15	712-0138		Hex Nut 1/4-28 Thd. *		45	736-0259		Fl-Wash. 1.0" I.D. x 1.62" O.D.	
16	721-0102		Seal 1.0" I.D. x 1.38" O.D.						
17	736-0219		Bell. Wash. 3/8" I.D.		46	04873		Axle Shaft Ass'y.	N
18	736-0169		L-Wash. 3/8" Scr. *		47	713-0225		#420 Chain 1/2" Pitch x 42 Links Endless	
19	712-0214		Hex Nut 3/8-24 Thd. *		48	750-0314		Spacer 1.0" I.D. x 2.0" O.D.	
20	04872		Side Plate	N	49	710-0195		Hex Scr. 1/4-28 x .62" Lg. *	
21	736-0219		Bell. Wash. 3/8" I.D.		50	736-0219		Belleville Wash.	
22	736-0169		L-Wash. 3/8" Scr. *		51	710-0629		Hex Scr. 3/8-24 x 2.75" Lg. *	
23	710-0411		Hex Scr. 3/8-16 x 4.00" Lg. *		52	736-0159		Fl-Wash. 5/16" Scr. *	
24	710-0601		Hex Taptite 5/16-18 x .75" Lg.		53	736-0119		L-Wash. 5/16" Scr. *	
25	736-0242		Bell. Wash. .345 I.D. x .88 O.D.		54	710-0627		Hex L-Scr. 5/16-24 x .75" Lg. *	
26	721-0162		Gasket—Side Plate		55	756-0297		Input Pulley—Chain Case	
29	721-0102		Seal 1.0" I.D. x 1.38" O.D.						
30	712-0138		Hex Nut 1/4-28 Thd. *						

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

218-405-065

IF YOU WRITE TO US ABOUT THIS ARTICLE
OR IF YOU ORDER REPLACEMENT PARTS AL-
WAYS MENTION THIS MODEL & SERIAL NO
MODEL



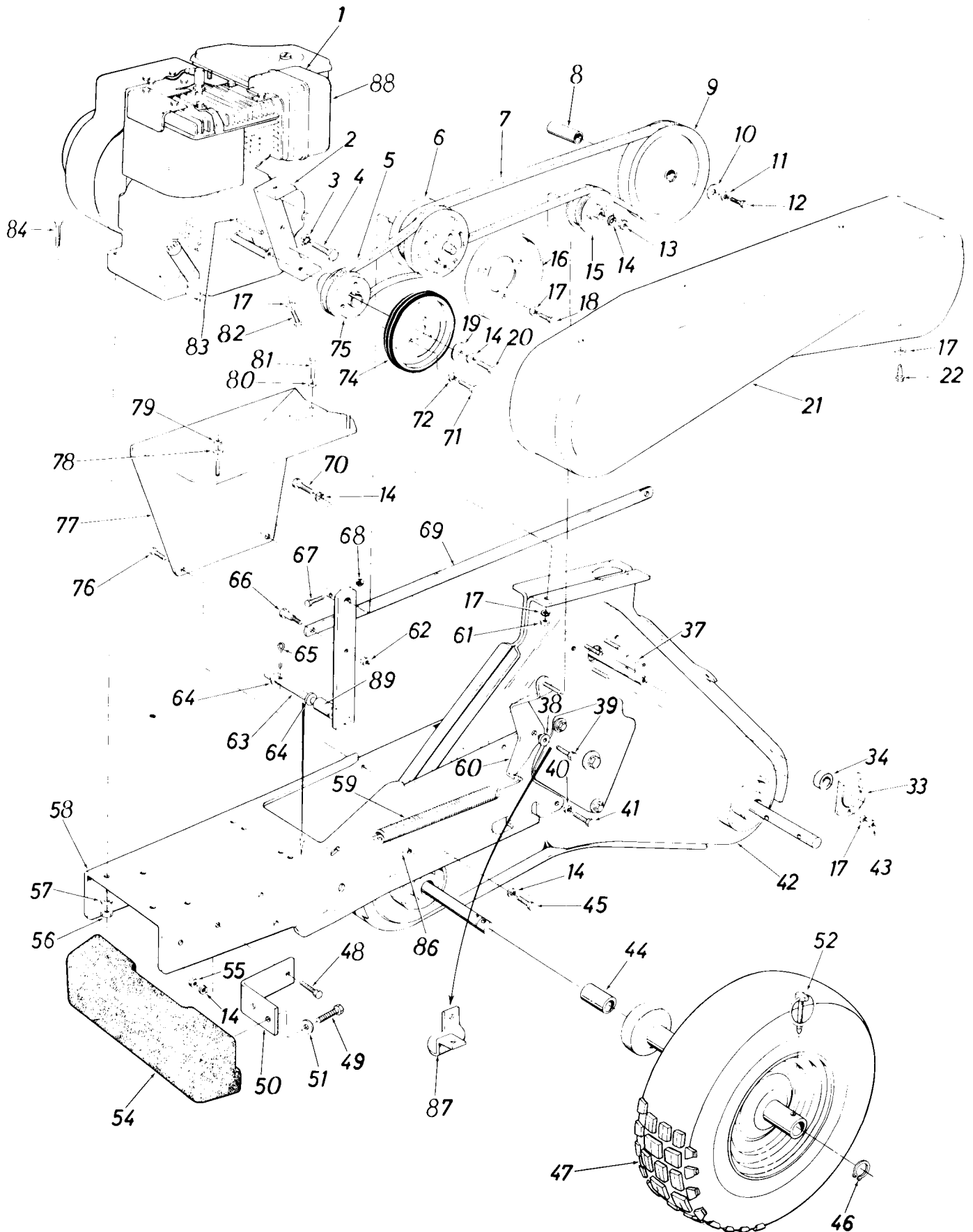
PARTS LIST FOR MODEL 218-405-065

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	710-0227		Hex Wash. Hd. Tap Scr. #8 x .50" Lg.*		50	736-0119		L-Wash. 5/16" Scr.*	N
2	746-0304		Throttle Control Ass'y. Comp.		51	04850 —606		Handle Positioner Ass'y.	
3	747-0255		Handle Lock Rod		52	736-0169		L-Wash. 3/8" Scr.*	
4	710-0136		Hex Scr. 1/4-20 x 1.75" Lg.*		53	712-0116		Hex Ins. L-Nut 3/8-24 Thd.	
5	749-0268		Handle—R.H.		54	714-0474		Cotter Pin 1/8" Dia. x .75" Lg.*	
6	720-0180		Grip		55	736-0290		FI-Wash. .630 I.D. x 1.0" O.D. x .063	
7	712-0107		Hex Cent. L-Nut 1/4-20 Thd.		56	736-0119		L-Wash. 5/16" Scr.*	
8	04830		Clutch Grip		57	738-0258		Shld. Scr. .50 x .25	
9	04831 —606		Handle Panel Ass'y.		58	736-0105		Belleville Wash.	
10	749-0269		Handle—L.H.		59	710-0623		Hex Wash. Hd. Self Tap Scr. 3/8-16 x .75" Lg.	
11	720-0183		Ball Knob 3/8-16 Thd.	N	60	04841		Control Brkt.	
12	04892		Clutch Handle Ass'y.	N	61	710-0601		Hex Wash. Hd. Self Tap Scr.	
13	714-0104		Hair Pin Cotter		62	710-0216		Hex Scr. 3/8-16 x .75" Lg.*	
14	736-0101		FI-Wash.		63	714-0115		Cotter Pin 1/8" Dia. x 1.00" Lg.*	
15	732-0193		Compression Spring .88 O.D. x .81 Lg.		64	04796 —606		Tine Shield Ass'y.	
16	712-0214		Hex Nut 3/8-24 Thd.*		65	712-0130		Hex Ins. L-Nut 3/8-16 Thd.	
17	04833 —606		Depth Bar		66	736-0169		L-Wash. 3/8" Scr.*	
18	710-0344		Hex Scr. 3/8-16 x 1.50" Lg.*		67	714-0474		Cotter Pin 1/8" Dia. x .75" Lg.*	
19	714-0115		Cotter Pin 1/8" Dia. x 1.00" Lg.*		68	04806 —606		Pivot Horn Ass'y.	N
20	732-0306		Compression Spring		69	747-0278		Gear Shift Rod	
21	747-0256		Depth Bar Adjustment Pin		70	723-0156		Rod End 3/8-24 Thd.	
22	747-0252		Hinge Rod		71	04812 —606		Pivot Brkt. Ass'y.	
23	04804		Tine Shield Hinge Flap Ass'y.		72	712-0221		Hex Ins. L-Nut 5/8-16 Thd.	
24	710-0623		Hex Wash. Hd. Self Tap Scr. 3/8-16 x .75" Lg.		73	711-0663		Locking Pin	
25	736-0169		L-Wash. 3/8" Scr.*		74	732-0132		Compression Spring	
26	710-0623		Hex Wash. Hd. Self Tap Scr. 3/8-16 x .75" Lg.		75	714-0474		Cotter Pin 1/8" Dia. x .75" Lg.*	
27	736-0169		L-Wash. 3/8" Scr.*		76	736-0253		Bell. Wash. .505 I.D. x 1.00" O.D.	
28	736-0101		FI-Wash.		77	747-0254		Lower Handle Control Rod	
29	712-0130		Hex Ins. L-Nut 3/8-16 Thd.		78	736-0192		FI-Wash. .50" I.D. x 1.00" O.D.	
30	04879		Drag Bar Ass'y.	N	80	712-0158		Hex Nut 5/16-18 Thd.*	
31	04909		Inner Tine Adapter Ass'y.	N	81	748-0516		Pivot Handle Brg.	
32	04683		Outer Tine Adapter Ass'y.		82	04819		Pivot Handle Link	
34	711-0599		Clevis Pin 3/8" Dia. x 1.75" Lg.		83	736-0289		Bushing Wash.	
35	742-0175		Tine—L.H.		84	738-0143		Shld. Scr. .500" Dia. x .660	
36	710-0191		Hex Scr. 3/8-24 x 1.25" Lg.*		85	712-0267		Hex Nut 5/16-18 Thd.*	
37	04857		Outer Tine Ass'y. Comp.—L.H.		86	736-0119		L-Wash. 5/16" Scr.*	
38	736-0169		L-Wash. 3/8" Scr.*		87	710-0458		Carr. Bolt 5/16-18 x 1.75" Lg.	
39	712-0241		Hex Nut 3/8-24 Thd.*		88	04792 —606		Handle Mtg. Brkt. Ass'y.	
40	714-0145		Hair Pin Cotter		89	746-0305		Conduit and Wire	
41	742-0174		Tine—R.H.		90	710-0152		Hex Scr. 3/8-24 x 1.00" Lg.*	
42	04855		Inner Tine Ass'y. Comp.—L.H.		91	712-0181		Hex Top L-Nut 3/8-16 Thd.	
46	736-0169		L-Wash. 3/8" Scr.*		92	748-0150		Sleeve Brg. .50 I.D. x .62 O.D. x 1.12" Lg.	
47	712-0130		Hex Ins. L-Nut 3/8-16 Thd.		93	711-0198		Ferrule	
48	04878 —606		Transmission Ass'y. Comp.		94	712-0711		Hex Jam Nut 3/8-24 Thd.	
49	712-0267		Hex Nut 5/16-18 Thd.*						

TIME CHART

Not Shown	Inner Tine Ass'y. Comp.—R.H.	04854
42	Inner Tine Ass'y. Comp.—L.H.	04855
Not Shown	Outer Tine Ass'y. Comp.—R.H.	04856
37	Outer Tine Ass'y. Comp.—L.H.	04857

218-405-065



PARTS LIST FOR MODEL 218-405-065

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	—		Engine B. & S.		48	710-0152		Hex Scr. 3/8-24 x 1.00" Lg.*	
2	04869		Belt Cover Support Ass'y.	N	49	710-0118		Hex Scr. 5/16-18 x 3/4 Lg.	
3	736-0114		Internal L-Wash. 1/2" Scr.*		50	04860		Weight Mtg. Brkt.	
4	710-0121		Hex Scr. 1/2-20 x .75" Lg.*		51	736-0159		FI-Wash. 5/16 I.D. x 7/8	
5	754-0224		"V"-Belt 5/8" x 26" Lg.					O.D. x .056	
6	717-0343		Variable Speed Ass'y.		52	714-0151		Klick Pin.	
7	754-0221		"V"-Belt 5/8" x 52" Lg.		54	723-0340		Weight	
8	750-0387		Spacer .637 I.D. x .78 O.D. x 1.44" Lg.		55	712-0214		Hex Cent. L-Nut 3/8-24	
9	756-0297		Input Pulley—Chaincase					Thd.*	
10	736-0159		FI-Wash. 5/16" Scr.*		56	712-0267		Hex Nut 5/16-18 Thd.*	
11	736-0119		L-Wash. 5/16" Scr.*		57	736-0119		L-Wash. 5/16" Scr.*	
12	710-0627		Hex L-Scr. 5/16-24 x .75" Lg.		58	04844 —606		Frame Ass'y.	
13	712-0130		Hex Ins. L-Nut 3/8-16 Thd.		59	732-0153		Extension Spring	
14	736-0169		L-Wash. 3/8" Scr.*		60	04864		Idler Arm Ass'y.	
15	756-0225		FI-Idler 2.75" Dia.		61	712-0138		Hex Cent. L-Nut 1/4-28 Thd.	
16	04836		Friction Disc		62	712-0130		Hex Ins. L-Nut 3/8-16 Thd.	
17	736-0329		L-Wash. 1/4" Scr.*		63	04837		Variable Speed Brkt. Ass'y.	
18	710-0230		Hex Scr. 1/4-28 x .50" Lg.		64	736-0256		FI-Wash. .625 I.D. x 1.25	
19	736-0133		FI-Wash. .375 I.D. x 1.25					O.D.	
			O.D. x .10		65	714-0474		Cotter Pin 1/8" Dia. x .75"	
20	710-0151		Hex Scr. 3/8-24 x 2.00" Lg.*					Lg.*	
21	04790 —312		Belt Cover		66	738-0380		Shoulder Scr. .50 x .267	
22	710-0599		Hex Wash. Hd. Self Tap Scr.		67	710-0106		Hex Scr. 1/4-20 x 1.25" Lg.*	
33	05034		Bearing Housing		68	712-0324		Hex Ins. L-Nut 1/4-20 Thd.	
34	741-0155		Ball Bearing		69	04841		Control Brkt.	
37	714-0122		Sq. Key 3/16 x .75" Lg.		70	710-0623		Hex Wash. Hd. Self Tap Scr.	
38	738-0372		Shoulder Spacer		71	710-0621		Hex Scr. 5/16-18 x .50" Lg.*	
39	710-0502		Hex Self Tap Scr. 3/8-16 x 1.25" Lg.		72	736-0119		L-Wash. 5/16" Scr.*	
					74	05080		Friction Wheel Ass'y.	
40	736-0169		L-Wash. 3/8" Scr.*		75	756-0301		Engine Pulley Ass'y. 5/8 V	
41	710-0623		Hex SF Tap Scr. 3/8-16 x .75" Lg.					x .75 I.D.	N
42	04878 —606		Transmission Ass'y. Comp.	N	76	710-0599		Hex Wash. Hd. Self Tap Scr.	
43	712-0138		Hex Nut 1/4-28 Thd.		77	04876 —312		Belt Cover Extension Ass'y.	N
44	741-0246		Bearing 1.0" I.D. x 1.12" Lg.	N	78	736-0173		FI-Wash. 1/4" Scr.	
45	710-0347		Hex Scr. 3/8-16 x 1.75" Lg.		79	712-0117		Hex Cent. L-Nut 1/4-28 Thd.	
46	716-0102		Snap Ring		80	736-0173		FI-Wash. 1/4" Scr.	
47	734-0832		Wheel Ass'y. Comp.—R.H.	N	81	710-0195		Hex Scr. 1/4-28 x .62" Lg.*	
	734-0833		Wheel Ass'y. Comp.—L.H.		82	710-0599		Hex Wash. Hd. Self Tap Scr.	
			(Not Shown)	N	83	714-0105		Key 3/16 x 3/16 x 1.00" Lg.	
	734-0338		Tire Only		84	710-0380		Hex Scr. 5/16-18 x 1.75 Lg.*	
	734-0339		Inner Tube Only		86	750-0382		Spacer	
	04874		Wheel Hub Ass'y.—R.H.	N	87	04863		Rear Belt Cover Support	
	04875		Wheel Hub Ass'y.—L.H.					Brkt.	
			(Not Shown)	N	88	751-0233		Muffler Deflector	
					89	750-0379		Spacer .637 I.D. x .781 O.D.	
								x .85" Lg.	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(606—Majestic Orange)

When ordering parts, if color or finish is important use the appropriate color code shown above (e.g. Majestic Orange Finish—04831 (606).)

The engine is not under warranty by the tiller manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines — Gasoline."



ACCESSORIES AVAILABLE FOR TILLER MODEL 218-405-065

298-167	Hilling Plow (Must be used with 298-169 "V" Bar Frame Adapter)
298-168	Six Tang Cultivator (Recommended use of 298-191 Depth Gauge Wheels)
298-169	"V" Bar Frame Adapter (Recom- mended use of 298-191 Depth Gauge Wheels)
298-190	Four Shovel Cultivator (Must be used with 298-169 "V" Bar Frame Adapter)
298-191	Depth Gauge Wheels
298-192	Tine Cultivating Shields
298-194	Wheel Weights
298-195	Tire Chains (13" x 5")
298-196	32" Angle Dozer Blade
298-197	Front Hitch Mount (Required to mount 298-196 32" Angle Dozer Blade)

PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all Mark Master power equipment are available through the authorized service firms listed below. All orders should specify the model number of your unit, parts number, description of parts and the quantity of each part required.



NOTE

ORDERING INSTRUCTIONS FOR PAINTED PARTS

All parts are shipped in the color currently available unless otherwise specified. When parts must be a specified color, use the color code as a suffix.

Majestic Orange	606
White	312
Black	452

Example:

Handle Panel 04831
Required in Majestic Orange
Order as:
Handle Panel 04831—606

MASSACHUSETTS

SOUTHBORO

Grandell-Hicks Co. Rt 9 01772

MINNESOTA

ST. PAUL

Power Tools, Inc. 3771 Sibley Memorial Hwy.
..... 55122

MISSOURI

OSAGE BEACH

Crowell Distributing Co. P.O. Box 185 65063

ST. JOSEPH

Ross-Frazier Supply Co. 8th and Monterey 64503

BRIGGS & STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing **Engines—Gasoline**, Briggs & Stratton or Tecumseh Lauson.

NEW YORK

SYRACUSE

GTP Leisure Products Inc. 420 Marsellus St. 13204

NORTH CAROLINA

WINSTON-SALEM

Carswell Distributing Co. 3750 N. Liberty Street
P.O. Box 4193 North Station 27105

OHIO

YOUNGSTOWN

Burton Supply Co. 1301 Logan Ave.
P.O. Box 929 44501

OKLAHOMA

OKLAHOMA CITY

Forest Sales, Inc. 1039 N.W. 63rd St. 73116

PENNSYLVANIA

CHESTER

Stull Equipment Corp. 742 W. Front St. 19013

TENNESSEE

MORRISTOWN

Hasson-Bryon Hardware 114 W. Main St. 37814

WARRANTY PARTS AND SERVICE POLICY

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES

1. Replacement of Missing Parts on new equipment.
2. Replacement of Defective Parts within the warranty period.
3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

1. Model Number of unit involved.
2. Date unit was purchased or first put into service.
3. Date of failure.
4. Nature of failure.