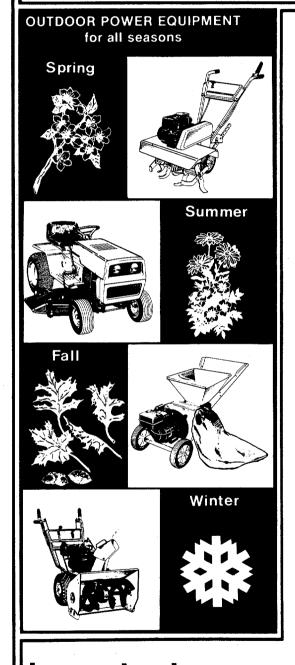
# OWNER'S GUIDE



CHAIN DRIVE TILLER

Model Number 216-031-000

Important:

Read Safety Rules and Instructions Carefully

Thank you for purchasing an American-built product.

## INDEX

Safe Operation Practices	Off-Season Storage11
Assembly Instructions4	
Operation	
Adjustments8	
Lubrication	
Maintenance10	Parts Information Back Cove



Instructions given with this symbol are for personal safety. Be sure to follow them.

# 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 the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such 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 MT().

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



This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester muffler is available at your nearest engine authorized service center.



To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

## SAFE OPERATION PRACTICES FOR TILLERS

- It is suggested that this manual be read in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
- Your tiller is a precision piece of power equipment, not a plaything. Therefore, exercise extreme caution at all times.
- Read this Owner's Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
- 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.
- 5. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
- 6. Keep the area of operation clear of all persons, particularly small children and pets.
- 7. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
- 8. Do not wear loose fitting clothing that could get caught on the tiller.
- 9. Do not start the engine unless the shift lever is in the neutral (N) position.
- 10. Do not stand in front of the tiller while starting the engine.
- 11. Do not place feet and hands on or near the tines when starting the engine or while the engine is running.
- 12. Never attempt to make a wheel or depth bar adjustment while the engine is running.

- 13. Do not leave the tiller unattended with the engine running.
- 14. Do not walk in front of the tiller while the engine is running.
- 15. Check the fuel before starting the engine. Gasoline is an extremely flammable fuel. Do not fill gasoline tank indoors, while the engine is running, or while the engine is still hot. Replace gasoline cap securely, and wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
- 16. Do not run the engine while indoors. Exhaust gases are deadly poisonous.
- 17. Be careful not to touch the muffler after the engine has been running. It is hot.
- 18. Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.
- 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.
- 20. Use caution when tilling near buildings and fences. Rotating tines can cause damage or injury.
- 21. 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.
- Check the tine and engine mounting bolts at frequent intervals for proper tightness.
- 23. Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- 24. 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.



Reference to left or right side of the tiller is determined from behind the unit in the operating position.

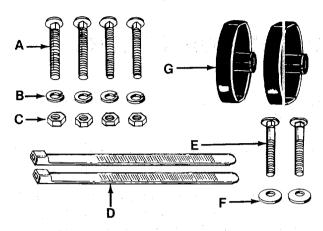


FIGURE 1.

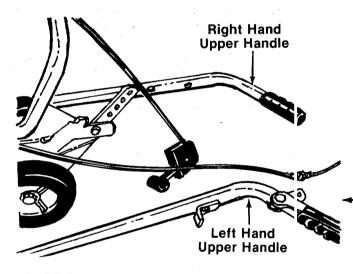


FIGURE 2.

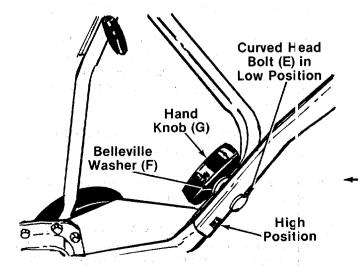


FIGURE 3.

## **ASSEMBLY**



This unit is shipped WITHOUT GAS-OLINE or OIL. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

#### ← Contents of Hardware Pack (See Figure 1):

- A (4) Carriage Bolts 5/16-18 x 11/2" Long
- B (4) Lock Washers 5/16" I.D.
- C (4) Hex Nuts 5/16-18 Thread
- D (2) Cable Ties
- E (2) Curved Head Bolts
- F (2) Belleville Washers 5/16" I.D.
- G (2) Hand Knobs
- H (1) Self-Tapping Screw (Not Shown)

#### Loose Parts in Carton:

- (1) Upper Handle—R.H.
- (1) Upper Handle-L.H.
- (1) Handle Panel

#### **Tools Required**

- (2) 1/2" open end or box wrenches
- Remove the tiller from the carton. Make certain all parts and literature have been removed before the carton is discarded.
- Extend the control cables and place on the floor.
   Be careful not to bend or kink the cables.

3. There are two eight positions for the upper handles. Place left hand upper handle (with clutch grip and cable support bracket already assembled) in position on lower handle, selecting hole for either high or low position. Secure with curved head bolt (E), belleville washer (F) (cupped side against the handle) and hand knob (G). See figure 3. Do not tighten at this time. Assemble right hand upper handle in the same manner.

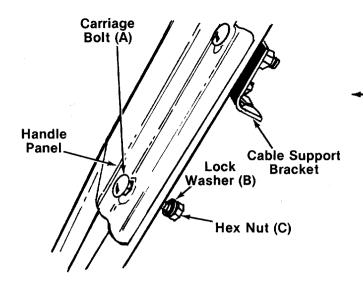


FIGURE 4.

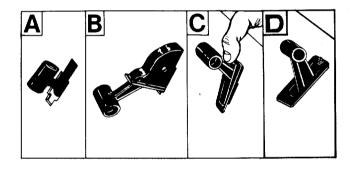


FIGURE 5.

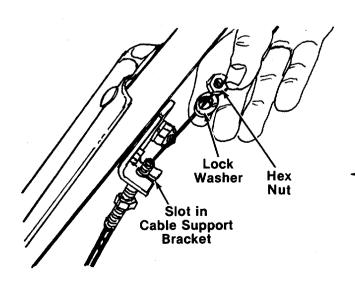


FIGURE 6.

 Place the handle panel in position on the upper handles. Secure in position with four carriage bolts
 (A), lock washers (B) and hex nuts (C). See figure 4.



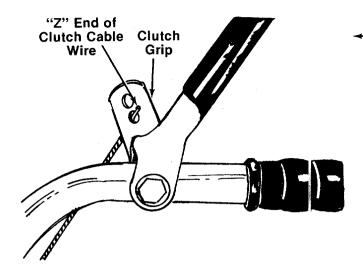
Carriage bolt on the upper left hand side of handle panel also secures the cable support bracket.

- 5. Tighten securely all nuts and bolts used in handle assembly.
- Assemble the throttle control to the handle panel as follows.
  - A. Hold the throttle control assembly beneath the handle panel. Turn the control sideways and insert the lever up through the wide portion of the slot on the handle panel. See figure 5A.
  - B. After the end of the lever is through the slot, turn and then tip the control forward as shownin figure 5B to slide it through the slot.



The lever must be all the way to the back of the control housing as shown in figure 5B.

- C. Push the control back into the slot in the handle panel and press in place. Be certain the control is locked securely into the slot. See figure 5C.
- D. Secure the throttle control to the handle panel using self-tapping screw provided. See figure 5D.
- Remove one hex nut and lock washer from end of clutch cable. Slip the wire up through slot on cable support bracket. Start hex nut and lock washer back on end of clutch cable. See figure 6.

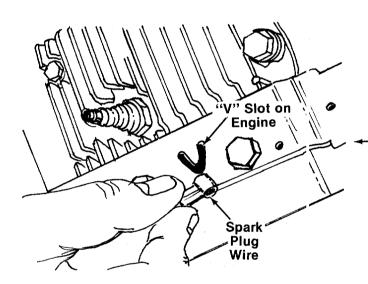


- 8. Hook the "Z" end of clutch cable wire into bottom hole of clutch grip. See figure 7.
- Hold the clutch grip so that the grip is down against the handle. Adjust the clutch control cable so that the slack is taken out of the control wire. Tighten the two hex nuts at the cable support bracket. Control wire should now be straight.



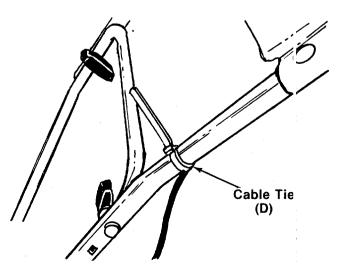
Do not overtighten control wire. Too much tension may cause it to break.

FIGURE 7.



10. To check the adjustment, disconnect the spark plug wire from spark plug to prevent accidental starting. Secure end of spark plug wire in the "V" slot on the engine. See figure
8. With the clutch grip released (neutral position), pull starter cord several times. The tines should not turn. If they do, adjust the hex nuts at the clutch cable bracket. Check again for correct adjustment.

FIGURE 8.



11. Secure the clutch cable and throttle cable to the upper handles with cable ties (D) provided
in hardware pack. See figure 9. Cut off excess end.

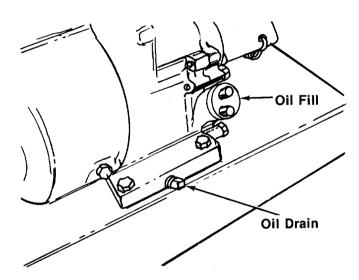
FIGURE 9.

### **OPERATION**

#### **BEFORE STARTING ENGINE**

- Check clutch adjustment before starting tiller.
   Refer to step number 9 of Assembly Instructions.
- 2. Fill crankcase with 1¼ pints of oil or to top of filler neck. Be sure that the engine is level. See figure 10.

Use SAE No. 30 MS, SC, SD or SE oil. If not available, use SAE 10W-30.



#### FIGURE 10.

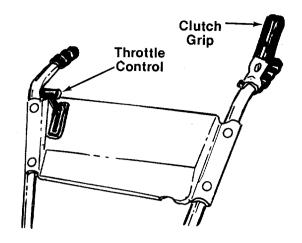
3. Fill fuel tank using a good grade of fresh, clean, regular gasoline. Do not use gasoline that has been sitting for a long period of time.

#### TO START ENGINE



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

- 1. Attach spark plug wire to spark plug.
- 2. Be certain the clutch grip is in the neutral (released) position. See figure 11.

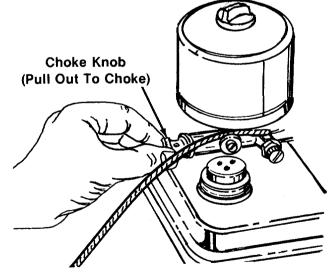


#### FIGURE 11.

- 3. Pull choke knob out to choke engine. See figure 12.
- 4. Move the throttle control lever forward to FAST POSITION. See figure 11.
- 5. Standing at side of the tiller, grasp the starter handle and pull out rapidly. Return it slowly to the engine. Repeat if necessary.
- 6. After engine starts, push choke knob gradually in to "OFF" position.



Warm engine should not need choking.



#### FIGURE 12.

#### TO STOP ENGINE

- 1. Move throttle control lever to "STOP" position
- Disconnect spark plug wire from spark plug to prevent accidental starting while equipment is unattended.

#### CONTROLLING SPEED AND TILLING DEPTH

The tiller has eight 10-inch diameter, spring steel tines. Tine speed is 160 RPM The normal tilling depth is  $4\frac{1}{2}$  inches deep. It may be changed by adjusting the depth bar and pressure exerted on the handles. The tilling width may also be varied. See adjustment section.

#### **Throttle Control**

The throttle control lever is located on the right hand side of handle.



Right hand side is determined from the operator's position standing behind the tiller.

The throttle control lever adjusts the engine speed. It also gives finger tip control of the carburetor and magneto stop switch. With the throttle control knob pushed completely forward, the carburetor is in FAST position. Pulling the throttle control back slightly adjusts the engine speed to START. Pulling the throttle back further reduces the engine speed to SLOW. When the throttle is pulled completely back, the magneto stop switch grounds out the spark and stops the engine. Move the throttle control to slow when transporting the tiller. When the tiller is being moved to or from the garden, the depth bar should be raised up until it clears the ground.

The machine may be moved under its own power, without damaging grass areas as long as it is allowed to move freely. If the operator holds back, it will start to dig.

#### Depth Bar

The depth bar acts as a brake for the tiller and controls the depth and speed at which the machine will operate. You may till deeper by moving the depth bar all the way down. See adjustmer t section.

#### **Handle Pressure**

Further control of tilling depth and travel speed can be obtained by variation of pressure on the handle. A downward pressure on the handle will reduce the working depth and increase the forward speed. An upward pressure on the handle will increase the working depth and reduce the forward speed. The type of soil and working conditions will determine the actual setting of the depth bar and the handle pressure required

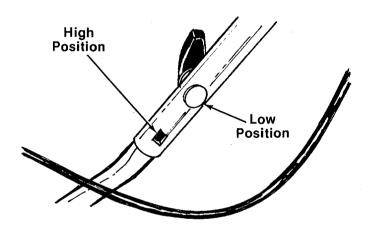
## **ADJUSTMENTS**



Disconnect the spark plug wire from spark plug and ground against the engine block (secure in "V" slot) before making any adjustments or performing maintenance. See figure 8.

#### HANDLE POSITION

The upper handle can be adjusted to two different heights. The operator of the tiller can easily adjust the handle position by unscrewing the two knobs, removing the two bolts and reassembling in another position. No tools are necessary to make this adjustment. See figure 13.



#### FIGURE 13.

#### **DEPTH BAR ADJUSTMENT**

The working depth of the tiller is determined by the position of the depth bar. Remove the clevis pin and internal cotter pin to raise or lower depth bar. See figure 14.

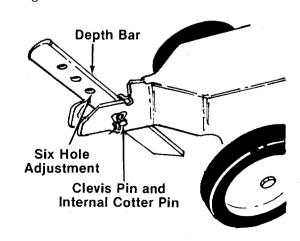


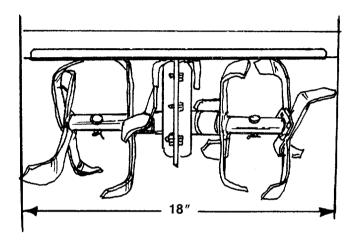
FIGURE 14.

#### **TILLING WIDTH**

There are three tilling widths available.

Remove the spark plug wire from spark plug and ground before making any adjustments to tine width.

1. Standard tilling width is 18 inches. See figure 15.



#### FIGURE 15.

 A narrower width (14 inches) can be obtained by removing both outer tines. Use a 3/8" wrench to remove the two self-tapping screws on the outside of the tines. See figure 16. Replace the first tine removed as shown in figure 17.

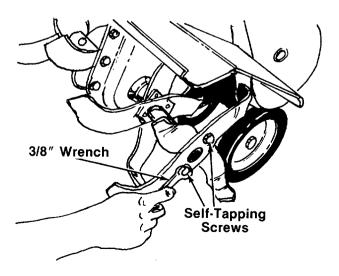
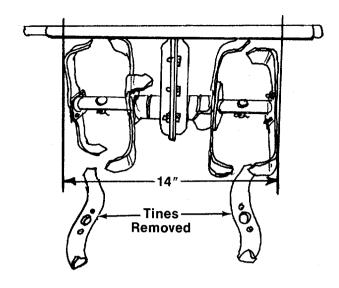
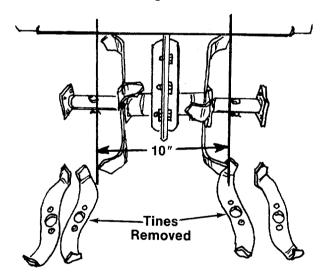


FIGURE 16.



#### FIGURE 17.

3. The minimum tiller width that can be obtained is 10 inches. Remove the outer tines by removing the two self-tapping screws on the outside of the tines. See figure 18.



#### FIGURE 18.

#### **CLUTCH ADJUSTMENT**

Refer to step numbers 8 and 9 of Assembly Instructions for clutch adjustment information.

#### **CARBURETOR ADJUSTMENT**



If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches and tines. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Never make unnecessary adjustments. The factory recommended settings are correct for most applications.

If adjustments are needed, refer to the engine manual packed with the tiller.

## **LUBRICATION**

#### Chain Case

The chain case is pre-lubricated and sealed at the factory. It requires no checking unless the chain case is disassembled. To fill with grease, lay the right half of the chain case on its side. Add 10 ounces of Plastilube #0 grease and assemt le the left half to the right half. The grease can be obtained at your nearest authorized dealer listed on the back of this manual. Order part no. 737 0133.

## **MAINTENANCE**



Disconnect the spark plug wire from spark plug and ground against the engine block (secure in "V" slot) before performing any maintenance. See figure 8.

#### **CLEAN ENGINE**

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. This is an air cooled engire and free flow of air is essential to proper engire performance and life.

#### **ENGINE OIL**

Check oil level before each use. Be sure oil level is maintained full to point of overflowing. See figure 19.

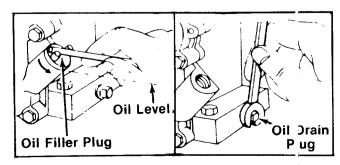


FIGURE 19.

Change the oil in the crankcase after the first two hours of operation of your new engine and after each 25 hours of use thereafter. This will ensure proper lubrication of internal parts to prevent excessive wear.

To change the oil, remove drain plug and tip the tiller forward while engine is warm. See figure 19. Replace drain plug. Remove oil filler cap, taking care to remove dirt around filler plug. Refill with new oil of proper grade. Replace filler cap.

#### **AIR CLEANER**

Service the air cleaner every 25 hours of operation. The air cleaner prevents damaging dirt, dust, etc. from entering the carburetor and being forced into the engine. It is important to engine life and performance.

To service air cleaner, refer to the engine manual packed with the tiller.

Never run your engine without air cleaner completely assembled.

#### SPARK PLUG

The spark plug should be cleaned and the gap reset at least once a season or when oil is changed. Spark plug replacement is recommended at the start of each season; check engine manual for correct plug type and gap specification.

#### **BELT REPLACEMENT**

- Remove belt cover assembly by removing one hex nut and lock washer, one self-tapping screw, one hex bolt, flat washer and hex nut and one hex bolt and external lock washer. See figure 20.
- Lift the belt cover assembly off the tiller. Be careful not to bend or kink the clutch cable. See figure 20.
- 3. Remove the belt and position the new belt on engine pulley and chain case pulley.



Upon reassembly of belt cover, place the belt over top of the idler pulley and between engine pulley and weld pin on belt cover assembly. See figure 20.

4. Fasten belt cover assembly in position. Secure with the hardware removed in step 1.

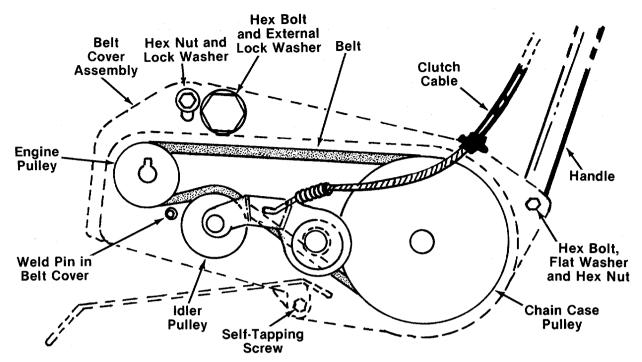


FIGURE 20.

## **OFF-SEASON STORAGE**

If the tiller is not to be used for a while, the following procedure should be followed. The tines, depth bar, chain case and wheels should be cleaned of all dirt. It is very important that the unit be stored in a level position to prevent engine oil from draining into the cylinder head cavity.

Engines on tillers to be stored between seasons should be completely drained of fuel to prevent gum deposits forming on essential carburetor parts and fuel tank.

 All fuel should be removed from fuel tank. Run the engine until it stops from lack of fuel. The small amount of fuel that remains in the sump of the tank should then be removed by absorbing it with a clean dry cloth.

- 2. Clean dirt and chaff from cylinder, cylinder head fins and blower housing.
- 3. Remove spark plug, pour 2 or 3 tablespoons of SAE-30 oil into cylinder and pull crank cord out slowly to distribute oil. Replace spark plug.



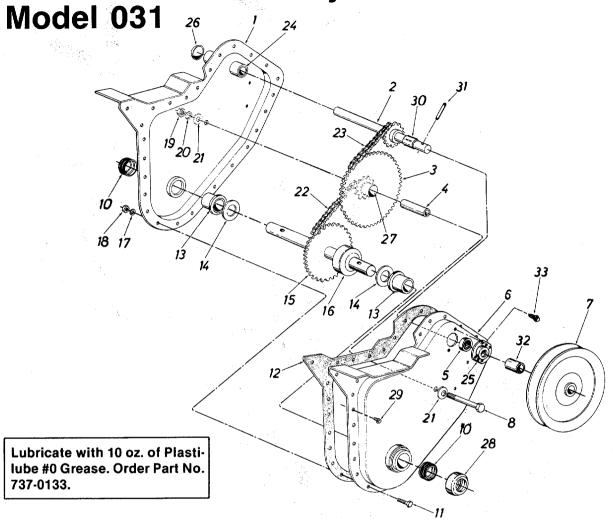
When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially any chains, springs, bearings or cables.

# TROUBLE SHOOTING CHART

SYMPTOM	POSS!BLE CAUSE(S)	SOLUTION
Engine fails to start	<ol> <li>Check tuel tank for gas.</li> <li>Spark plug lead wire disconnected.</li> <li>Faulty spark plug.</li> </ol>	<ol> <li>Fill tank if empty.</li> <li>Connect lead wire.</li> <li>Spark should jump gap between control electrode and side electrode. If spark does not jump; replace the spark plug.</li> </ol>
Hard starting or loss of power	<ol> <li>Spark plug wire loose.</li> <li>Dirty ai cleaner.</li> </ol>	<ol> <li>Connect and tighten spark plug wire.</li> <li>Clean air cleaner as described in engine manual.</li> </ol>
Engine overheats	<ol> <li>Carbure tor not adjusted properly.</li> <li>Air flow restricted.</li> <li>Engine oil level low.</li> </ol>	1. Adjust carburetor. See engine manual. 2. Remove blower housing and clean as described in the engine manual. 3. Fill crankcase with the proper oil.
Tine control does not engage	Belt worn and/or stretched.	Make control cable adjustment (see Assembly Instructions) or replace belt.

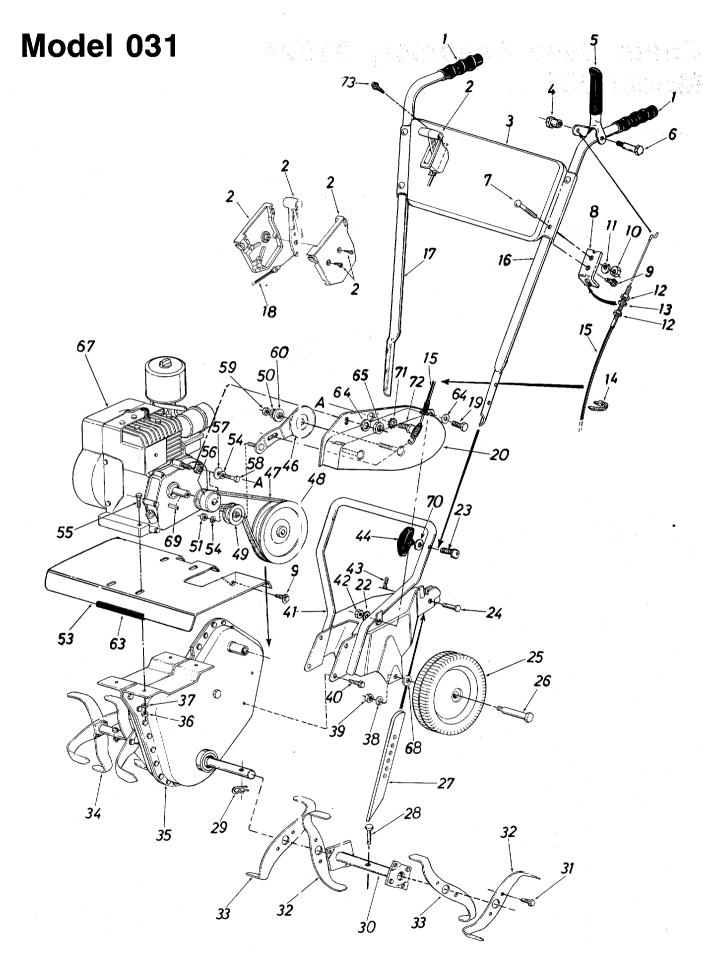
NOTE: For repairs beyond the minor adjustments listed above, please contact your local service dealer.

# Chain Case Assembly 04924



#### PARTS LIST FOR CHAIN CASE ASSEMBLY 04924

EF.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	04926	<del>46</del> 3	Chain Case Ass'y.—R.H.		21	736-021	9	Bell-Wash406 I.D. x	
2	04756		Input Shaft Ass'y.	ļ.	i			1.130 O.D.	
3	04757		Hub and Sprocket Ass'y.	ļ	22	713-021	5	Chain #420—.50" Pitch x	
4	750-035	1	Bearing Inner Race					38 Links	
5	741-015	5	Ball Bearing		23	713-021	6	Chain #35—.375" Pitch x	
6	15863	463	Chain Case Ass'y.—L.H.					50 Links	
7	756-028		Pulley—Chain Case		24	748-015	4	Bearing .62" I.D. x .813	
			5½ x ½††					O.D. x 1.31	
8	710-036	9	Hex Bolt 3/8-24 x 2.50" Lg.*		25	05034		Bearing Housing	
10	721-015	7	Seal††		26	726-016	34	Expansion Plug 13/16" Dia.	
11	710-019		Hex Bolt 1/4-28 x .625" Lg.*		27	741-022	28	Bearing	
12	721-015	6	Gasket		28	731-048	16	Dust Cap††	
13	741-022	7	Flange Brg879 I.D.		29	710-059	9	Hex Wash. Hd. Self-Tap Scr.	
14	736-026		FI-Wash88 I.D. x	100				1/4-20 x .50" Lg.	
			1.50 O.D. x .030		30	750-047	'1	Spacer .630 I.D. x .77 O.D. x	
15	04920		Tine Shaft Ass'y.					.38" Lg.	
16	750-035	4	Spacer 7/8" I.D. x 2.0" O.D.		31	715-011	4	Spring Pin Spiral 1/4" Dia. x	
			x .68" Lg.	İ				1½" Lg.††	
17	736-032	9	L-Wash. ¼" Scr.*		32	750-055	iO	Spacer .647 x 1.25"††	
18	712-013	8	Hex Nut 1/4-28 Thd.*		33	710-065	3	Hex Wash. Hd. Self-Tap Scr.	1. 1
19	712-011	6	Hex Ins. L-Nut 3/8-24 Thd.					1/4-20 x .38" Lg.	l i
20	736-016		L-Wash. 3/8" I.D.*					Ĭ	



Model 031

PARTS LIST FOR MODEL 031 TILLER

REF. NO.   PART NO.   CODE   DESCRIPTION   NEW PART   NO.   PART NO.   PART NO.   PART NO.   DESCRIPTION	
1       720-0204       Grip       34       04921       463       Tine Ass'y. Comp. Chain Case Ass'y. Handle Panel       35       04924       463       Tine Ass'y. Comp. Chain Case Ass'y. Handle Panel       36       712-0267       712-0267       736-0119       15       736-0119       15       15       736-0217       15 <th>ON NEW PART</th>	ON NEW PART
Throttle Control Box Ass'y.   35   04924   363   Chain Case Ass'y.   Handle Panel   36   712-0267   Hex Nut 5/16-18 T   L-Wash. 5/16" I.D. (Duty)   Hex Cent. L-Nut 3/ 710-0262   Carriage Bolt 5/16-18 x 1.5"   Lg. * Cable Support Bracket   Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg.   L-Wash. 5/16" I.D. *   L-Wash. 5	
3       784-0036       Handle Panel       36       712-0267       Hex Nut 5/16-18 T         4       738-0561       Shoulder Nut       37       736-0119       L-Wash. 5/16" I.D.         5       784-0007       Clutch Grip Ass'y.       38       736-0217       L-Wash. 3/8" I.D. (Duty)         6       738-0572       Shoulder Bolt 3/8 x 1.160"       39       712-0375       Hex Cent. L-Nut 3/9         7       710-0262       Carriage Bolt 5/16-18 x 1.5"       40       710-0600       Hex Wash. Hd. Se         8       15093       Cable Support Bracket       41       04762       463       Support Brkt. Ass'         9       710-0599       Hex Wash. Hd. Self-Tap Scr.       42       712-0287       Hex Nut 1/4-20 Thd         10       712-0267       Hex Nut 5/16-18 Thd.*       44       09966         11       736-0119       L-Wash. 5/16" I.D.*       46       784-0016       Hand Knob         12       712-0256       Hex Jam Nut 5/16-24 Thd.       47       754-0216       Belt 3/8" x 29" Lg         13       736-0119       L-Wash. 5/16" I.D.*       48       756-0199       Chain Case Pulley         14       725-0157       Cable Tie       50       736-0119       L-Wash. 5/16" I.D.	Comp.
4       738-0561       Shoulder Nut       37       736-0119       L-Wash. 5/16" I.D.         5       784-0007       Clutch Grip Ass'y.       38       736-0217       L-Wash. 3/8" I.D. (Duty)         7       710-0262       Carriage Bolt 5/16-18 x 1.5"       40       710-0600       Hex Cent. L-Nut 3/Hex Wash. Hd. Setter Solder Support Bracket         8       15093       Cable Support Bracket       41       04762       463       Support Brkt. Ass's 5/16-18 x .50" L         10       712-0267       Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg.       42       712-0287       Hex Nut 1/4-20 Thd. 1/4-0104         11       736-0119       Hex Nut 5/16-18 Thd.* L-Wash. 5/16" I.D.*       46       784-0016       Hand Knob Idler Arm Ass'y. Belt 3/8" x 29" Lg         12       712-0256       Hex Jam Nut 5/16-24 Thd. L-Wash. 5/16" I.D.*       47       754-0216       Belt 3/8" x 29" Lg         13       736-0119       Cable Tie Clutch Control Cable       50       736-0119       L-Wash. 5/16" I.D.	
5       784-0007       Clutch Grip Ass'y.       38       736-0217       L-Wash. 3/8" I.D. (Duty)         6       738-0572       Shoulder Bolt 3/8 x 1.160"       39       712-0375       Hex Cent. L-Nut 3/8         7       710-0262       Carriage Bolt 5/16-18 x 1.5"       40       710-0600       Hex Wash. Hd. Se         8       15093       Cable Support Bracket       41       04762       463       Support Brkt. Ass's         9       712-0267       Hex Wash. Hd. Self-Tap Scr.       42       712-0287       Hex Nut ½-20 Thd         10       712-0267       Hex Nut 5/16-18 Thd.*       44       09966       Hand Knob         11       736-0119       L-Wash. 5/16" I.D.*       46       784-0016       Hand Knob         12       712-0256       Hex Jam Nut 5/16-24 Thd.       47       754-0216       Belt 3/8" x 29" Lg         13       736-0119       Cable Tie       49       756-0199       Chain Case Pulley         14       725-0157       Cable Tie       50       736-0119       L-Wash. 5/16" I.D.         15       746-0509       Clutch Control Cable       50       736-0119       L-Wash. 5/16" I.D.	
6       738-0572       Shoulder Bolt 3/8 x 1.160" Lg.       39       712-0375 710-0600       Duty) Hex Cent. L-Nut 3/9 Hex Wash. Hd. Se 5/16-18 x .50" L Support Bracket         8       15093 9 710-0599       Cable Support Bracket Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg.       41       04762 42       463       Support Brkt. Ass'y Hex Nut 1/4-20 Thd Internal Cotter Pin Hand Knob         10       712-0267 11       Hex Nut 5/16-18 Thd.* L-Wash. 5/16" I.D.*       44       09966 44       Hand Knob 10dler Arm Ass'y.         12       712-0256 13       Hex Jam Nut 5/16-24 Thd. L-Wash. 5/16" I.D.* Cable Tie Clutch Control Cable       47       754-0216 48       Belt 3/8" x 29" Lg Chain Case Pulley FI-Idler 2" L-Wash. 5/16" I.D.         15       746-0509       Clutch Control Cable       50       736-0119 736-0119       L-Wash. 5/16" I.D.	
Tol. 10	
7 710-0262 Carriage Bolt 5/16-18 x 1.5" Lg.*  8 15093	8-16 Thd.
8 15093 9 710-0599 Hex Wash. Hd. Self-Tap Scr. 10 712-0267 Hex Nut 5/16-18 Thd.* 12 712-0256 Hex Jam Nut 5/16-24 Thd. 13 736-0119 14 725-0157 Cable Support Bracket Hex Wash. Hd. Self-Tap Scr. 14 04762 Hex Nut 1/4-20 Thd. 15 746-0509 Hex Nut 5/16-18 Thd.* Hex Nut 5/16-18 Thd.* Hex Jam Nut 5/16-24 Thd. L-Wash. 5/16" I.D.* Cable Tie Clutch Control Cable  5/16-18 x .50" L Support Brkt. Ass'y Hex Nut 1/4-20 Thd He	
8   15093   710-0599   Cable Support Bracket   Hex Wash. Hd. Self-Tap Scr.   10   712-0267   Hex Nut 5/16-18 Thd.*   11   736-0119   12   712-0256   Hex Jam Nut 5/16-24 Thd.   13   736-0119   14   725-0157   15   746-0509   Clutch Control Cable   150   736-0119   Clutch Control Cable   150   736-0119   L-Wash. 5/16" I.D.*   150	
9 710-0599	
10   712-0267   Hex Nut 5/16-18 Thd.*   44   09966   Hand Knob	
10       712-0267       Hex Nut 5/16-18 Thd.*       44       09966       Hand Knob         11       736-0119       L-Wash. 5/16" I.D.*       46       784-0016       Hex Nut 5/16-24 Thd.         12       712-0256       Hex Jam Nut 5/16-24 Thd.       47       754-0216       Belt 3/8" x 29" Lg         13       736-0119       L-Wash. 5/16" I.D.*       48       756-0287       Chain Case Pulley         14       725-0157       Cable Tie       49       756-0199       FI-Idler 2"         15       746-0509       Clutch Control Cable       50       736-0119       L-Wash. 5/16" I.D.	•
11	
12	
13	. ]
14   725-0157   Cable Tie	
15 746-0509 Clutch Control Cable 50 736-0119 L-Wash. 5/16" I.D.	0/2 X /2
10 1740-0000 Clateri Control Cable	*
10   749-000   Oppor Haridio E.I.I.	u.
17 175-0000   Oppor rando 7000	
10 170 0710 1110000 001001 1110 20	
i     <b>  19</b>	
10 110 00001 1100 000 00 00	V X ./3
1 40 1 10 1 10 1 10 1 10 1 10 1 10 1 10	× 1 00"
ZZ   700 00Z5	. X 1.00
20   710-0-001   Oui vou 11a. Boit 0/10 10 X	1.00// 1.0 *
1.75" Lg. 58 710-0152 Hex Bolt 3/8-24 x	
24 711-0653 Clevis Pin 59 712-0267 Hex Nut 5/16-18 T	
25 734-0840 Wheel Ass'y. Comp. 7.0" x 60 736-0289 Shid. Spacer .50"	Dia. x .133
1.5   63   731-0511   Trim Strip—4"	F00//
26 738-0126 Shoulder Bolt 64 736-0142 FI-Wash281" I.D	. x .500"
27 04764 463 Depth Bar O.D.	00 Tha
28 711-0702 Clevis Pin .31" Dia. x 1.50" 65 712-0107 Hex Cent. L-Nut 1/2	4-20 ina.
Lg.   67   —   Engine	*
29 714-0145 Hairpin Cotter 68 736-0219 Bell-Wash.	0, "
30 04918 Tine Adapter Ass'y. 69 714-0122 Square Key 3/16 >	. ¾" Lg.
31 710-0599 Hex Wash. Hd. Self-Tap Scr. 70 736-0242 Bell-Wash.	
1/4-20 x .50" Lg.   71   736-0190   Ext. L-Wash. 1/2"	
32 04923 Tine Blade—L.H. 72 710-0121 Hex Bolt ½-20 x .	
33   04922   Tine Blade—R.H.   73   710-0779   Self-Tap Screw #1	U X .5" Lg.

<sup>\*</sup>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.

(463—Top Flite Red) When ordering parts if color or finish is important, use the appropriate color code shown at left. (e.g. Top Flite Red Finish—04762 (463).)



This instruction manual covers various models and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

NOTE: The engine is not under warranty by the mower 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."

## **PARTS INFORMATION**

#### POWER EQUIPMENT PARTS AND SERVICE

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

## BRIGGS AND 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.

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

ALABAMA B	IRMINGHAM	NORTH CAROLINA	GOLDSBORO
Auto Electric & Carburetor Co	2625 4th Ave. S	NORTH CAROLINA Smith Hardware Co	515 N George St 27530
ARKANSAS N	IORTH LITTLE ROCK	oman narawara co	GREENSBORO
Sutton's Lawn Mower Shop	5301 Roundtop Drive	Dixie Sales Company	335 N Green 27402
	D 000 D 1	OHIO	
CALIFORNIA P Billious	ORTERVILLE	Stebe's Mid-State Mower Supply	Roy 366 71 High St 42112
Billious	75 North D Street 93257	otobe o inid-otate Mower ouppry	CLEVELAND
COLORADO	ENVER	Bleckrie, Inc	7900 Lorain Ave 44102
Spitzer Industrial Products Co	6601 N.		WADSWORTH
	Washington St 80220	National Central	687 Seville Rd 44281
FLORIDA J	ACKSONVILLE		YOUNGSTOWN
FLORIDA JA Radco Distributors	4909 Victor St.	Burton Supply Co	1301 Logan Ave
	Box 5459 32207		Roy 929 44501
H	IALEAH	OKLAHOMA Victory Motors, Inc.	MUSKOGEE
Small Eng. Dist	7995 W. 26th Court 33016	Victory Motors Inc	605 S Cherokee 74401
GEORGIA E	AST POINT	OREGON	PORTI AND
GEORGIA East Point Cycle & Key Inc	2834 Church St 30344	OREGON Kenton Supply Co	8216 N Denver Ave 07217
ILLINOIS	YONS	PENNSYLVANIA	HARRISRURG
Keen Edge Co	8615 Ogden Ave 60534	PENNSYLVANÍA EECO Inc.	4021 N 6th St 17110
INDIANA EI Parts & Sales Inc	LKHART		WILLOW GROVE
Parts & Sales Inc.	2101 Industrial Pkwy 46516	Thompson Rubber Co	850 Davisville Rd 19090
IOWA D	UBUQUE		PITTSBUPGH
Power Lawn & Garden Equip	2551 J.F. Kennedy 52001	Bluemont Co	11125 Folkstown Rd 15235
LOUISIANA	EW ORI FANS		PUNXSHTAWNEY
LOUISIANA N Suhren Engine Co	8330 Farhart Blvd 70118	Frank Roberts & Sons	BD 2 15767
MARYLAND TA	AKOMA DADK		
MARYLAND TA	6867 New Hampshire	Scranton Auto Ignition Co	1133-35 Wyoming Ave 18509
	00040	TENNESSEE	KNOXVILLE
MASSACHUSETTS SI	DDINGEIELD	TENNESSEE Ace Distributors	. 2103 Magnolia 37919
Morton B. Collins Co	300 Pirnio Avo		MEMPHIS
MICHIGAN LA	ANCINO	American Sales & Service, Inc	. 3035-43 Bellbrook 38116
MICHIGAN LA Lorenz Service Co	ANOING	TEXAS Marr Brothers, Inc.	DALLAS
Lorenz Service Co	OUNT CLEMENS	Marr Brothers, Inc	. 423 E. Jefferson 75203
Power Equipment Dist	240 Hubbard 40040	Woodson Sales Corp.	FORT WORTH
MINNESOTA HO	340 Hubbaru 48043	Woodson Sales Corp	. 6733 Baker Blvd.
MINNESOTA HO Hance Distributing Inc	400 Francision Ave. 344 55040	•	Hwv. 10 76118
mance distributing inc	420 Excelsior Ave. W 55343	Bullard Supply Co	HOUSTON
MISSOURI KA Automotive Equip. Service	ANSAS CITY	Bullard Supply Co	. 2409 Commerce St 77003
Automotive Equip. Service	3117 Holmes St 64109		CAN ANTONIO
Ross-Frazer Supply Co	I. JUSEPH	Engine House Inc	. 8610 Botts Lane
Hoss-Frazer Supply Co			P.O. Box 17867 78217
Henzier, Inc.	1. LUUIS	UTAH	P.O. Box 17867 78217  SALT LAKE CITY
NEW JERSEY BE		Powered Products	. 1661 N. Beck St 84116
	ELLMAWK	VIRGINIA	ASHLAND
Lawnmower Parts Inc.	7 17 Creek Hd	VIRGINIA RBI Corp	. 101 Cedar Ridge Dr 23005
NEW MEXICO AL Spitzer Eng. & Parts Co	LBUQUERQUE	WASHINGTON	SFATTI F
Spitzer Eng. & Parts Co	1023 I nird Ave. N.W 87103	Equip. Northwest	. 1410 14th Ave 98122
NEW YORK CA	ARTHAGE	WISCONSIN	MILWAUKFF
Gamble Dist., Inc.	vvest End Ave13619	Wisconsin Magneto Inc	. 4727 N. Teutonia St 53209

#### **WARRANT / PARTS AND SERVICE POLICY**

(0685)

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 assurae responsibility for conditions over 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.