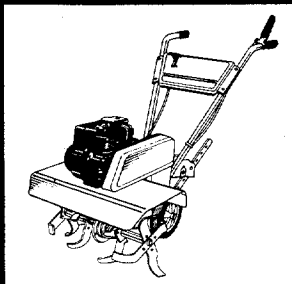


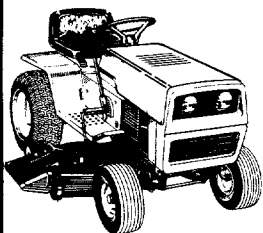
OWNER'S GUIDE

OUTDOOR POWER EQUIPMENT
for all seasons

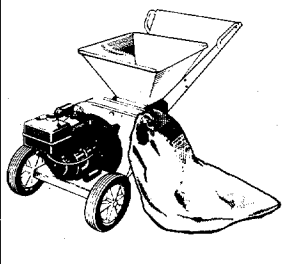
Spring



Summer



Fall



Winter



CHAIN DRIVE TILLER

Model Number
216-320-000

Important:
Read Safety Rules and
Instructions Carefully

Thank you for purchasing
an American-built product.

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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 MTD.

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



WARNING

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

1. 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 reference and for ordering replacement parts.
2. Your tiller is a precision piece of power equipment, not a plaything. Therefore, exercise extreme caution at all times.
3. Read this Owner's Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
4. 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, when the engine is running, or while the engine is still hot. 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.
19. 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.
22. 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.

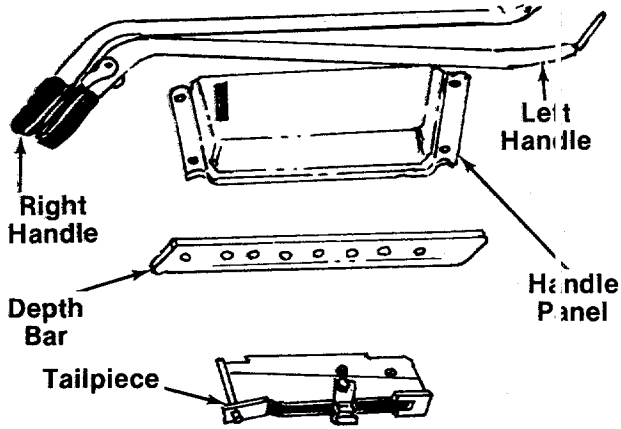


FIGURE 1.

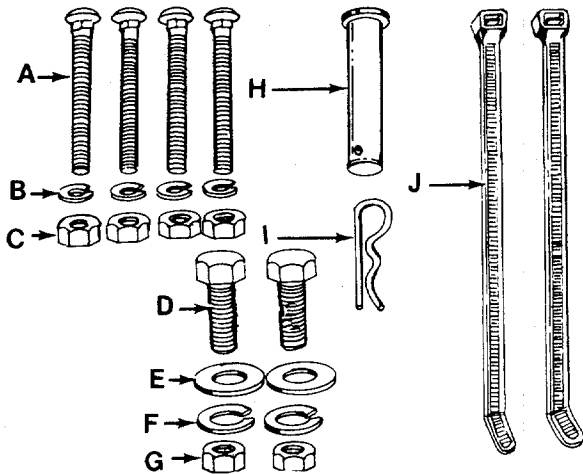


FIGURE 2.

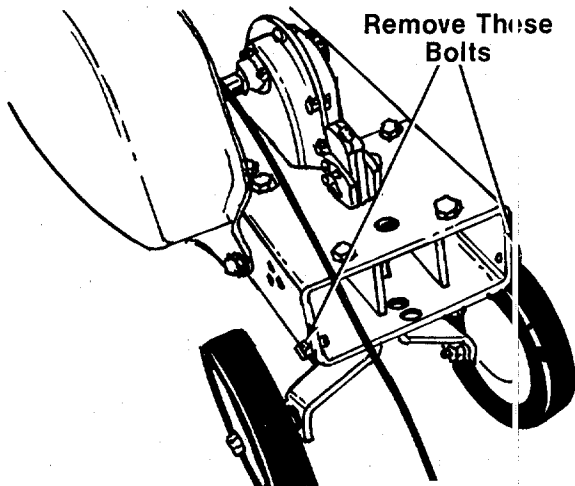


FIGURE 3.

ASSEMBLY INSTRUCTIONS



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

Tools Required:

- (2) 1/2" Socket, Open or Box Wrench
- (2) 9/16" Socket, Open or Box Wrench

Parts in Carton:

- Tiller
- Handle Panel*
- Depth Bar
- ← Tailpiece
- Handles*
- Hardware Pack

Contents of Hardware Pack: (See Figure 2)

- A (4) Carriage Bolts 5/16-18 x 1.75" Long*
 - B (4) Lock Washers 5/16" I.D.*
 - C (4) Hex Nuts 5/16-18 Thread*
 - D (2) Hex Bolts 3/8-16 x 1.00" Long
 - E (2) Belleville Washers
 - F (2) Lock Washers 3/8" I.D.
 - ← G (2) Hex Nuts 3/8-16 Thread
 - H (1) Clevis Pins
 - I (1) Hairpin Cotter
 - J (2) Cable Ties
 - K (1) Self-Tapping Screw (Not Shown)
- *May be preassembled on your unit.

Remove the tiller, all loose parts and literature from the carton before discarding carton.

Extend the throttle control and place on the floor. Be careful not to bend or kink control wire.

TAILPIECE INSTALLATION

1. Remove two hex bolts located on the rear of tiller frame. See figure 3. A 9/16" wrench is required.

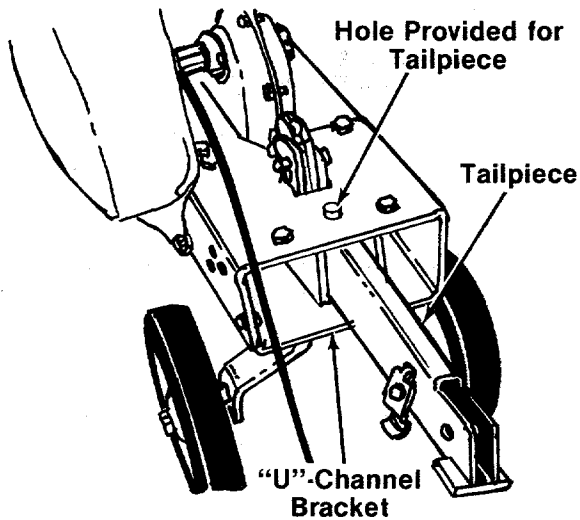


FIGURE 4.

NOTE

Wheel hanger bracket must be removed before the "U"-channel can be pivoted down.

2. Pivot the "U"-channel bracket down. Place the tailpiece in place in holes provided. See figure 4.

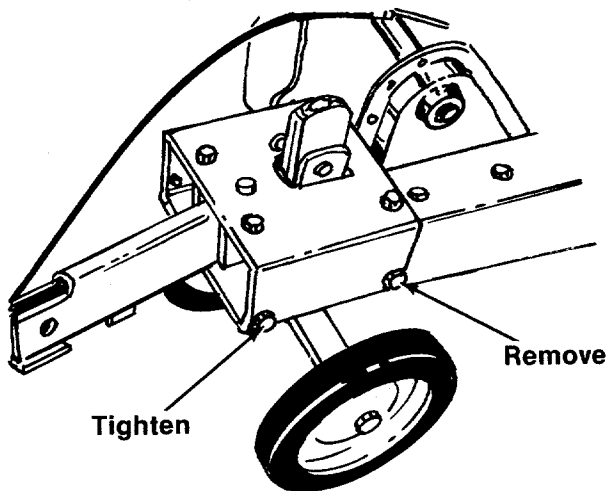


FIGURE 5.

3. Replace hex bolts in frame, which were removed in step 1. Tighten securely. See figure 5.
4. Remove hex bolts and belleville washers from front of frame. See figure 5.

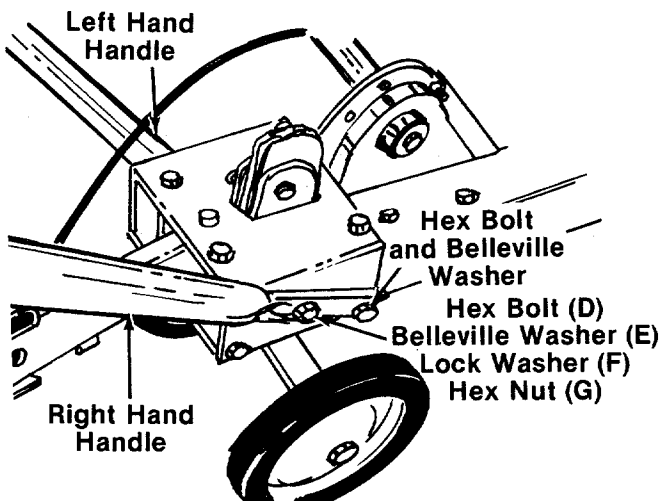


FIGURE 6.

HANDLE ASSEMBLY

1. Place the right and left hand handles in place against the tiller frame. See figure 6.

NOTE

The left hand handle has the clutch grip preassembled. Refer to figure 1.

2. Start the hex bolt and belleville washer by hand (removed in step 4) in the bottom hole in handle.
3. Secure the top hole in handle with hex bolt (D), belleville washers (E), lock washer (F) and hex nut (G). See figure 6.

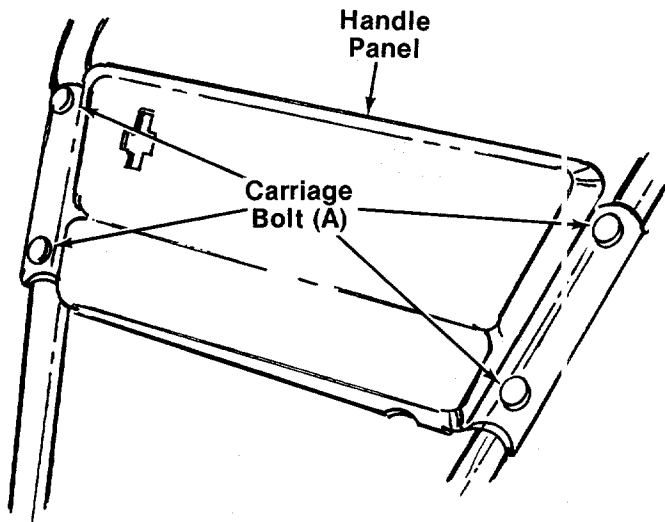


FIGURE 7.

NOTE

If the handle panel was preassembled on your unit, omit steps 4 and 5.

4. Place the handle panel in position on the handles. Secure with four carriage bolts (A), lock washers (B) and hex nuts (C). See figure 7.
5. Tighten securely hex nuts (C) with 1/2" wrench.
6. Tighten securely hex bolts on lower handle (figure 6) with two 9/16" wrenches.

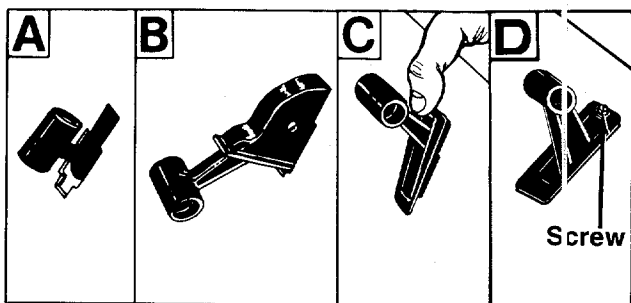


FIGURE 8.

THROTTLE CONTROL INSTALLATION

Assemble the throttle control to the handle panel as follows.

1. 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 8A.
2. After the end of the lever is through the slot, turn and then tip the control forward as shown in figure 8B to slide it through the slot.

NOTE

The lever must be all the way to the back of the control housing as shown in figure 8B.

3. 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 8C.
4. Secure the throttle control to the handle panel using self-tapping screw (K). See figure 8D.

ATTACHING CLUTCH CABLE

1. Hook the end of clutch cable (already attached to tiller) over the extension spring as shown in figure 9.

NOTE

If spring has come loose, it must be reassembled to the weld pin on the idler bracket.

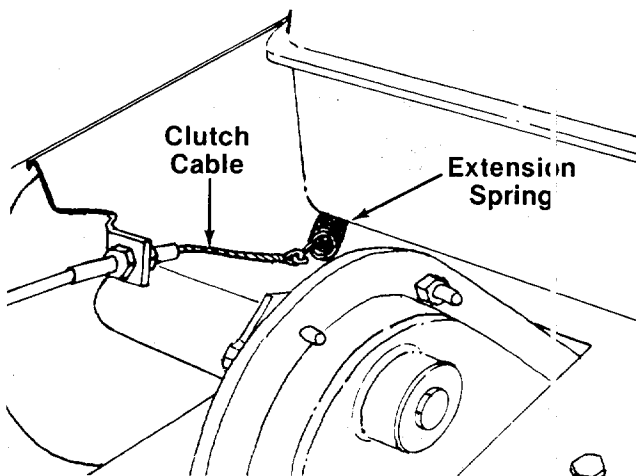


FIGURE 9.

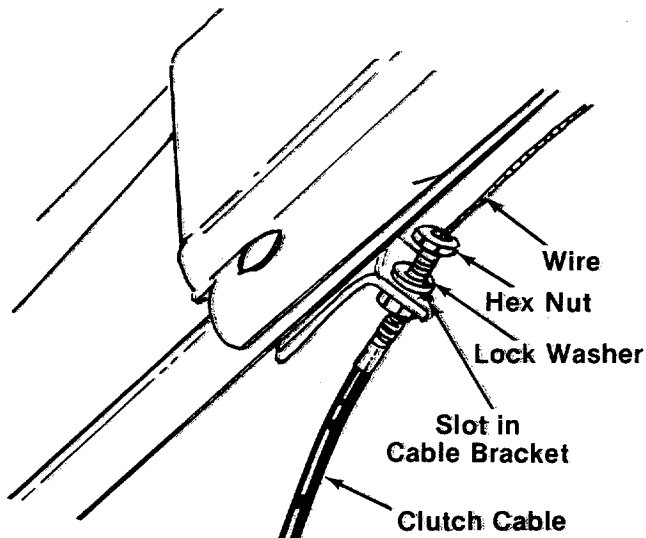


FIGURE 10.

2. Remove one nut and lock washer from other end of clutch cable. Slip the wire up through slot on clutch cable bracket. Start hex nut and lock washer back on end of clutch cable. See figure 10. Do not tighten at this time.

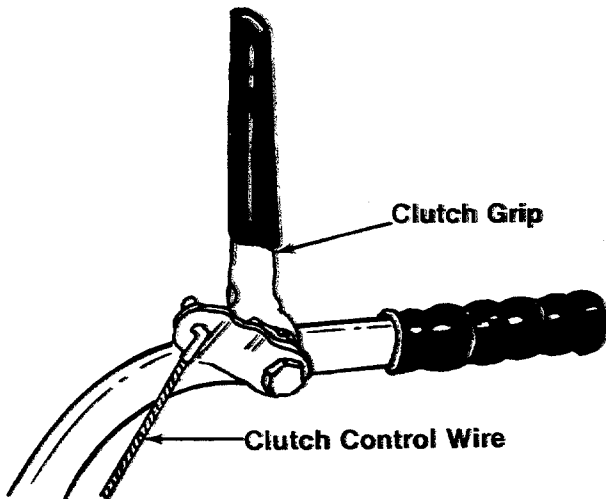


FIGURE 11.

3. Hook the "Z"-end of the clutch cable wire into clutch grip. See figure 11.
4. 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 clutch cable bracket. Control wire should now be straight.



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

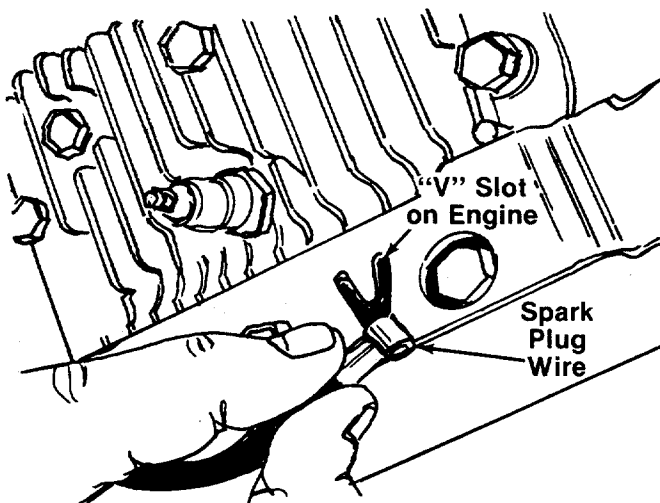
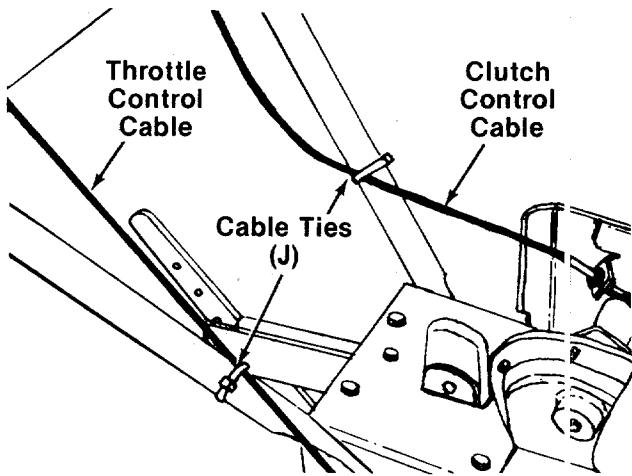


FIGURE 12.

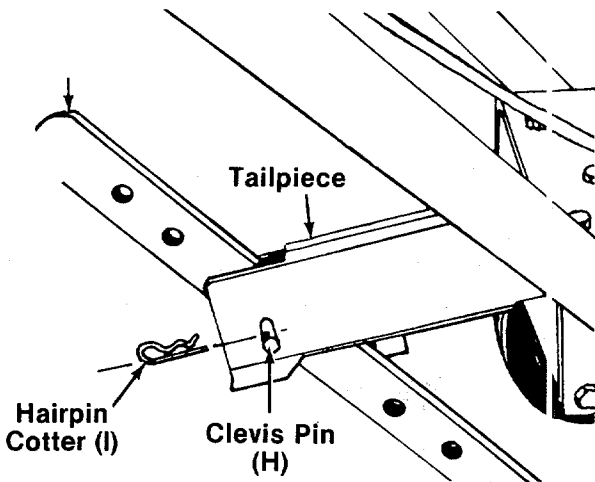
5. To check the adjustment, disconnect the spark plug wire from spark plug to prevent accidental starting. Secure end of spark plug wire in the "V" slot on the engine. See figure 12. With the clutch grip released (neutral position), pull starter cord several times. **The tines should not turn.** If they do, adjust the hex nuts at the clutch cable bracket. Check again for correct adjustment.



6. Secure the throttle control cable and clutch control cable to the handles with cable ties (J) provided. Cut off excess ends. See figure 13.



FIGURE 13.



DEPTH BAR INSTALLATION

Place the depth bar in position on the tailpiece. Secure with clevis pin (H) and hairpin cotter (I). Round end of depth bar goes to the top. See figure 14.

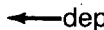
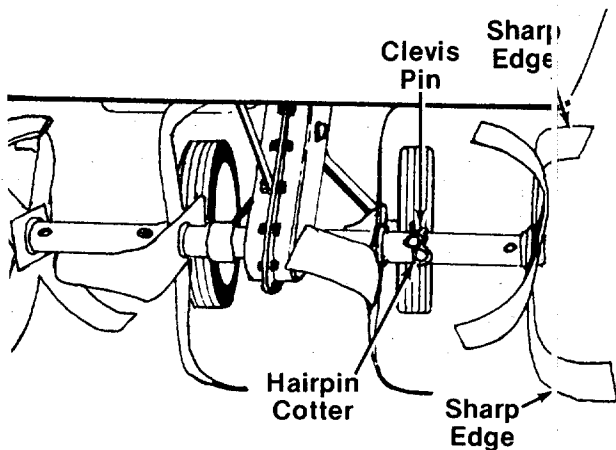


FIGURE 14.



TINE ASSEMBLIES

Check to be certain the tine assemblies are on the tine shaft so that the sharp edge enters the soil first. See figure 15.

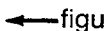


FIGURE 15.

OPERATION

BEFORE STARTING ENGINE

1. Before starting, fill crankcase with 1¼ pints of oil full to point of overflowing. Be sure that the engine is level. See figure 16.
Use SAE No. 30 MS, SC, SD or SE oil. If not available, use SAE 10W-30.
2. Fill fuel tank with clean, fresh, lead-free, low-lead or regular grade leaded gasoline.

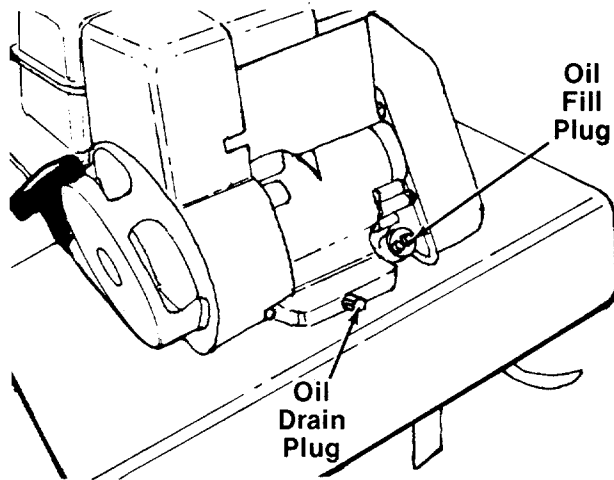


FIGURE 16.

TO START ENGINE



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

1. Move the throttle control lever forward to "FAST" position. See figure 17.

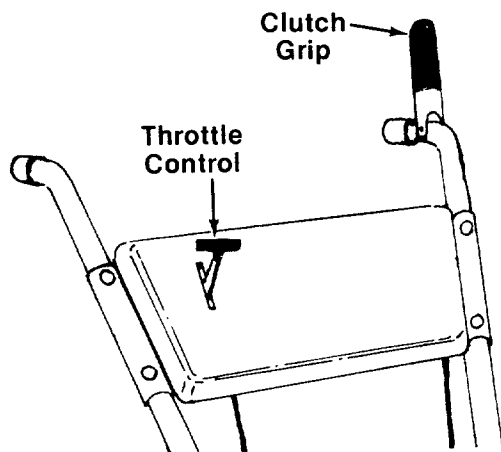


FIGURE 17.

2. Move choke lever to "CHOKE" position. See figure 18. After the engine starts, gradually push the choke lever off.



A warm engine may not require choking.

3. Stand at side of the tiller, grasp the starter handle and pull out rapidly. Return it slowly to the engine. Repeat if necessary.

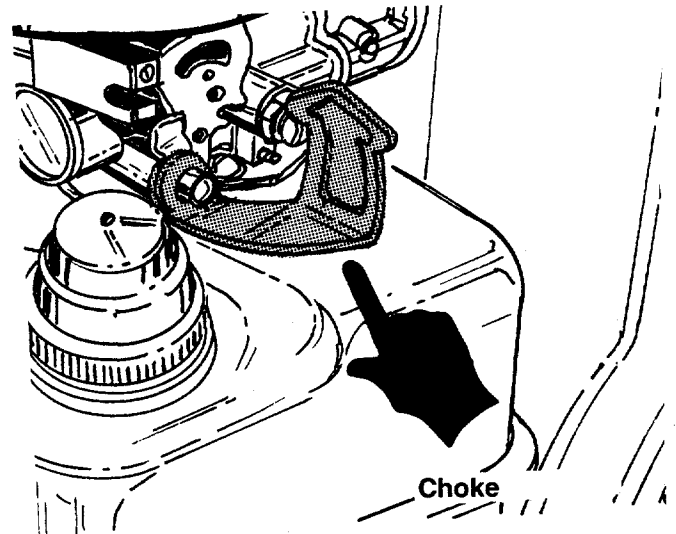


FIGURE 18.

TO STOP ENGINE

Move control lever to "STOP" position. See figure 17.

TO ENGAGE TINES

To engage the tines, squeeze the clutch grip. To stop the tines, release the clutch grip. See figure 17.

HOW TO USE YOUR TILLER

The tiller is a precision built machine designed for seed bed preparation, cultivating, furrowing and mulching. It is engineered to minimize the hardest work in the vegetable or flower garden, to till the soil for planting and cultivating, and for performing many other useful labor saving tasks in the garden. With the proper amount of care and maintenance, this machine will provide the owner with many years of excellent service.

WHEEL POSITION

The tiller is shipped with the wheels adjusted such that the unit sits level. During digging as the tines enter the ground and the front of the tiller lowers, the wheels must be raised to level the unit. This is essential for proper engine operation. This adjustment is made by removing the clevis pin and hairpin cotter from wheel yoke, raising the wheels to the desired height, and replacing the clevis pin and hairpin cotter. See figure 19.

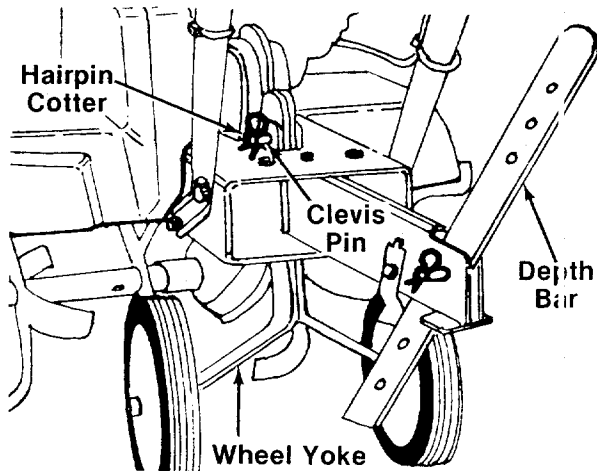


FIGURE 19.

CONTROLLING SPEED AND TILLING DEPTH:

1. **Wheel Yoke Adjustment:** Place wheel yoke so that the wheels are forward (nearest point between wheels and tines) for shallow tilling, cultivating and transport. This will also increase the forward speed. See figure 20. Turn yoke around (farthest point between wheels and tines) for deep tilling. Forward speed will decrease. See figure 20.

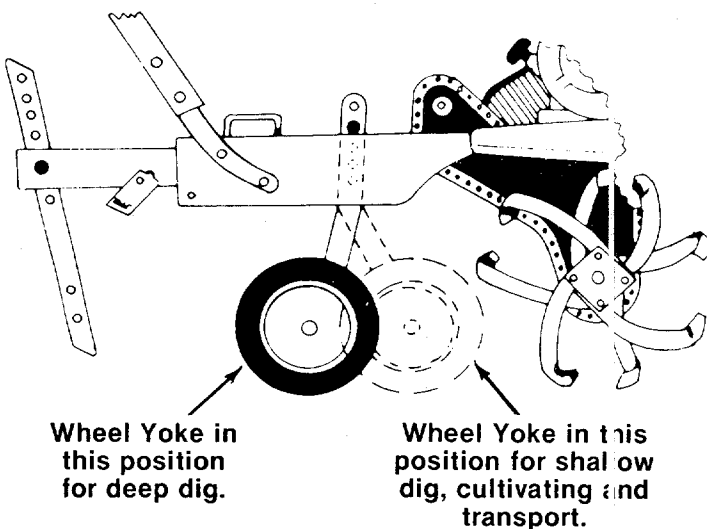


FIGURE 20.

2. **Depth Bar Adjustment:** The depth bar acts as a brake for the tiller and controls the depth and speed at which the machine will operate. See figure 21. Remove the clevis pin and hairpin cotter to raise or lower depth bar.

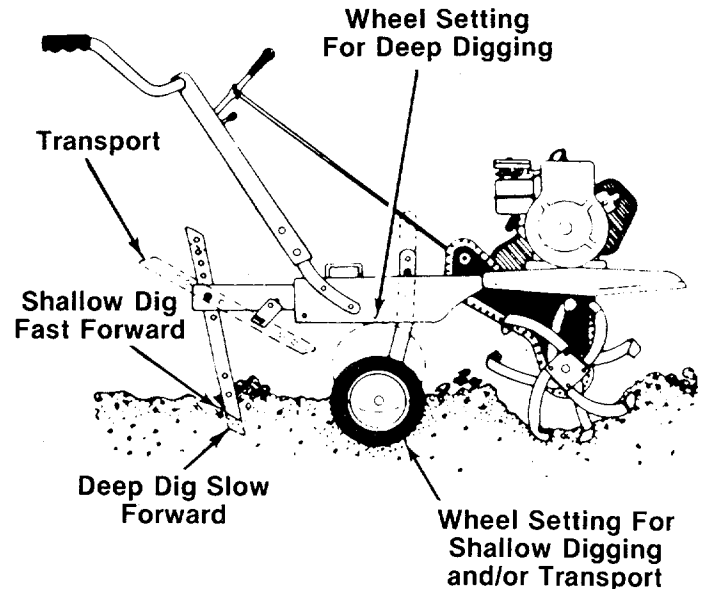


FIGURE 21.

By increasing the depth of the depth bar, the forward speed of the machine is reduced, and the working depth is increased. When the depth bar is raised, the working depth of the machine is reduced and the forward speed is increased. The working depth of the machine may be predetermined by setting the depth bar and wheels so that the wheels are about four inches from the ground when the tines and depth bar are resting on the ground. This setting will permit a working depth of about four inches. When presetting the working depth, the handles should be a little above waist height because the complete tiller will be lower when the tines and depth bar penetrate the ground. 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 depth bar should be lowered 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.

3. **Handle Pressure:** Further control of tilling depth and travel speed can be obtained by variation of pressure on the handles. A downward pressure on the handles will reduce the working depth and increase the forward speed. An upward pressure on the handles 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.

4. **Throttle Control:** The throttle control lever is located on the right side of handle panel.



NOTE

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 START position. Pulling the throttle control back slightly adjusts the engine speed to FAST. 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. Use maximum engine speed for deep tilling.

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 pivoted forward until it engages the depth bar spring pin. 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.

CULTIVATING

For cultivating, a two to three inch depth is desirable. Setting the wheels and depth bar so that the wheels are about two inches above the ground while the tiller is resting on the tines and depth bar will allow the machine to work at cultivating depth. The throttle should be set to control forward movement to a slow walking speed. With standard tines, the maximum working width of the tiller is 26 inches. This width may be reduced to 24" by moving the clevis pins and hair-pin cotters to the inner holes on the tine shaft. For cultivation, remove the outer tines to obtain a tilling width of 13 inches.

When laying out plant rows, be sure to allow enough width to permit cultivation between the rows. In growing corn or similar crops, check-row planting will permit cross cultivation and practically eliminate hand hoeing.

The tiller has many uses other than tilling and cultivating a garden. One of these is the preparation of lawn area for seeding. The tiller will prepare a deep seed bed which will be free of hard untilled spots, allowing a better stand of grass to grow. The tiller is very useful for loosening hard soil for excavation with a shovel. No tedious hand pickwork will be necessary. Your tiller may be used for mixing compost in the pile, or for mixing it with the soil in your garden. This should be done after the soil has been broken to the full working depth. The compost should be worked in to a depth of six to eight inches. This may be done by working the length of the garden, and then by mixing separate passes across its width. The addition of decayed organic matter will substantially increase the fertility of your garden. For proper decaying action, fertilizer should be applied and worked in with the mulch materials. Breaking up leaves and straw and mixing it with several inches of soil causes the soil to hold moisture longer and allows proper aeration of the plant root system. It also retards the growth of weeds.

The U.S. Department of Agriculture and various state and local agencies offer published booklets and expert advice on all phases of gardening. They should be consulted regarding soil information, planting dates, and the most satisfactory varieties of crop for your particular area.

ADJUSTMENTS



Disconnect the spark plug wire and ground against the engine before performing any adjustments, repairs or maintenance.

WHEEL ADJUSTMENT

To adjust the wheel yoke and wheel position, refer to "How To Use Your Tiller" on pages 10 and 11.

DEPTH BAR ADJUSTMENT

To adjust the depth bar, refer to "How To Use Your Tiller" on pages 10 and 11.

TINE CLUTCH CONTROL ADJUSTMENT

To adjust the tine clutch control, refer to "attaching clutch cable," step numbers 4 and 5 under Assembly Instructions.

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 and 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 left half of the chain case on its side, add 12 ounces of Plastilube #0 grease and assemble the right half to it. This grease can be obtained at your nearest authorized dealer listed on the back of this manual. Order Part Number 737-0133.

MAINTENANCE

ENGINE OIL

Check the oil level in the crankcase before each use. 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 to insure proper lubrication of internal parts. (Take care to remove dirt around filler plug.) Be sure oil level is maintained full to point of overflowing. See figure 22.

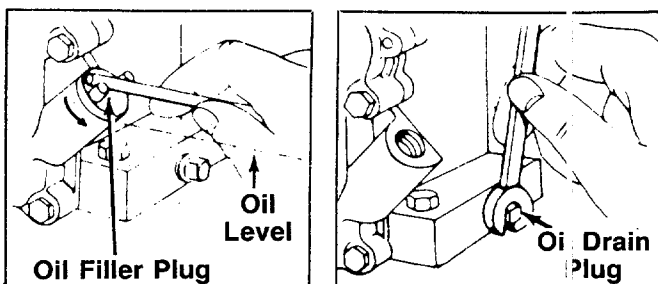


FIGURE 22.

To change oil, remove drain plug and tip the tiller forward while engine is warm. See figure 22. Replace drain plug. Remove oil filler cap and refill with new oil of proper grade. Replace filler cap.

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

Never run your engine without air cleaner completely assembled.

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 engine and free flow of air is essential to proper engine performance and life.

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

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

1. Remove the belt cover by removing three self-tapping screws. A 3/8" wrench is required. See figure 23.

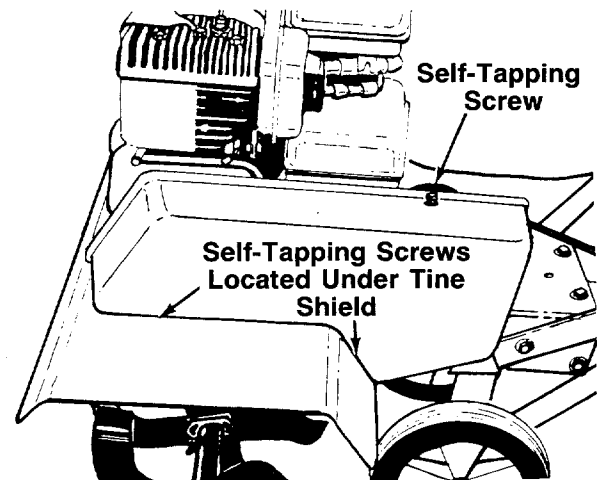


FIGURE 23.

2. After removing three screws, lift off belt cover. See figures 23 and 24.
3. Slip the belt off the chain case pulley first, then off idler pulley. Remove belt from engine pulley. See figure 25.
4. To reassemble the new belt, first place belt over engine pulley. Be sure belt is inside two pins at engine pulley. See figure 24.
5. Belt must be over top of idler pulley. See figure 24. Slip end of belt over the chain case pulley.
6. Reassemble the belt cover. See figure 23.

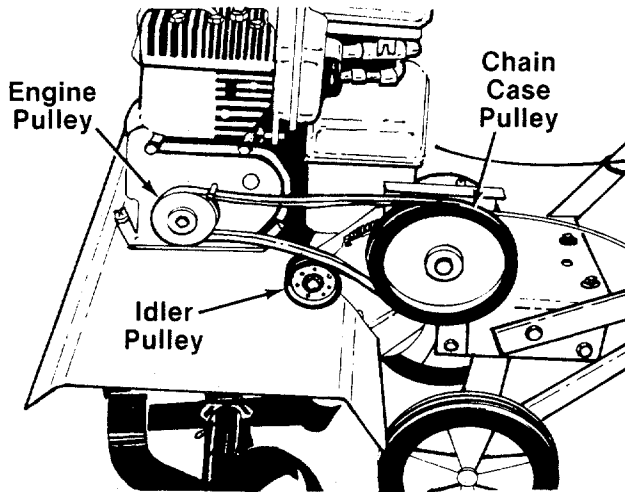


FIGURE 24.

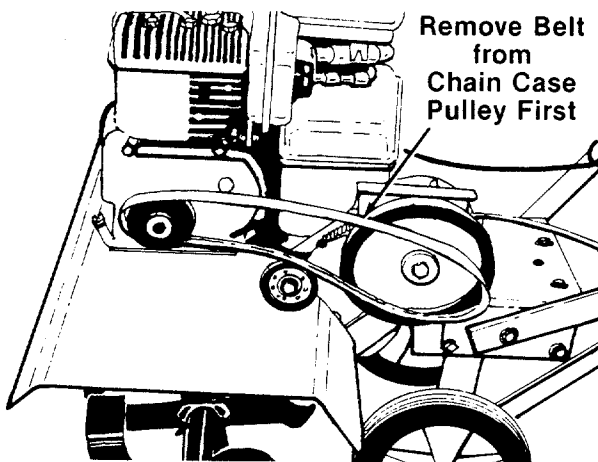


FIGURE 25.

OFF-SEASON STORAGE

If the tiller is not to be used for a while, the following procedure should be followed. The tines, depth bar, gear 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. Refer to the engine manual for correct engine storage instructions.

Just as your automobile needs professional mechanical maintenance from time to time, so does your air-cooled engine. Cleaning and adjusting of the carburetor and periodic replacement of the spark plug and ignition points is made necessary by NORMAL use.

Professional Air-Cooled Engine Service is as close as your telephone book.

A yearly checkup or tune-up by an authorized engine dealer is a good idea to avoid breakdowns or delay...do it at the end of the season, then you're ready for the next.



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 and cables.

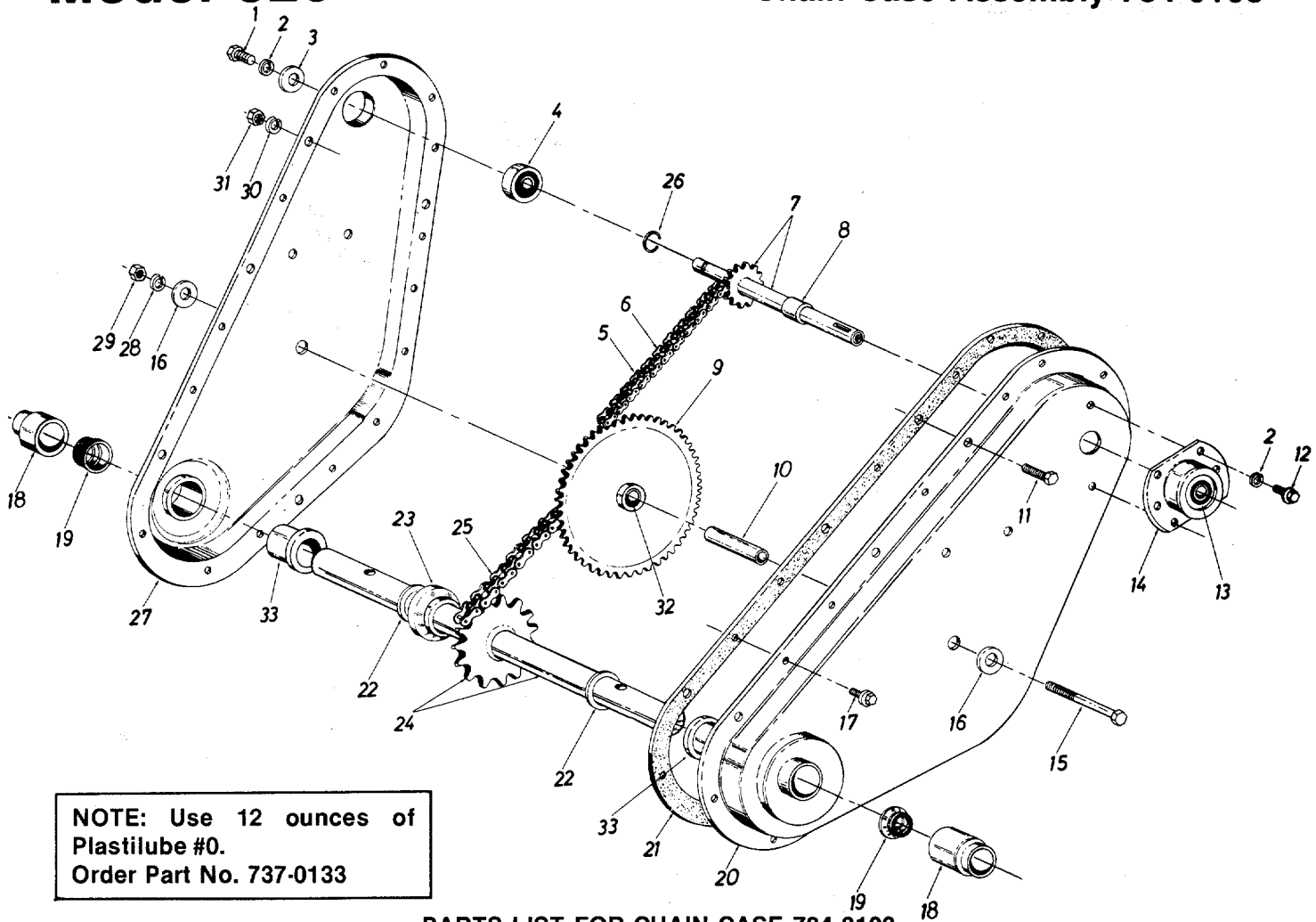
TROUBLE SHOOTING CHART

SYMPTOM	POSSIBLE CAUSE(S)	SOLUTION
Engine fails to start	<ol style="list-style-type: none"> 1. Check fuel tank for gas. 2. Spark plug lead wire disconnected. 3. Faulty spark plug. 	<ol style="list-style-type: none"> 1. Fill tank if empty. 2. Connect lead wire. 3. Spark should jump gap between control electrode and side electrode. If spark does not jump, replace the spark plug.
Hard starting or loss of power	<ol style="list-style-type: none"> 1. Spark plug wire loose. 2. Dirty air cleaner. 	<ol style="list-style-type: none"> 1. Connect and tighten spark plug wire. 2. Clean air cleaner as described in engine manual.
Engine overheats	<ol style="list-style-type: none"> 1. Carburetor not adjusted properly. 2. Air flow restricted. 3. Engine oil level low. 	<ol style="list-style-type: none"> 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.

Model 320

Chain Case Assembly 784-0103



**NOTE: Use 12 ounces of Plastilube #0.
Order Part No. 737-0133**

PARTS LIST FOR CHAIN CASE 784-0103

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	710-0513		Hex L-Scr. 1/4-28 x .625" Lg.		17	710-0599		Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg.	
2	736-0329		L-Wash. 1/4" Scr.*		18	731-0487		Dust Cap	
3	736-0176		FI-Wash. .25" I.D. x .93" O.D. x .125" Thk.		19	721-0175		Seal	
4	741-0155		Bearing .62" I.D. x 1.38" O.D. x .437" Thk.		20	14985		Tiller Housing—L.H.	
5	713-0327		#35 Chain 3/8" Pitch x 52 Links—Endless		21	721-0170		Gasket	
6	713-0139		Master Link (Service Only)		22	736-0163		Thrust Wash. 1.00" I.D. x .030" Thk.	
7	04956		Input Shaft Assembly		23	750-0570		Step Spacer	
8	750-0471		Spacer		24	784-0089		Tine Shaft Assembly	
9	713-0331		Sprocket Assembly (Includes Ref. No. 32)		25	713-0328		#50 Chain 5/8" Pitch x 46 Links—Endless	
10	750-0275		Sprocket Hub Tubing 3/8" I.D. x 5/8" O.D. x 1.9" Lg.		26	716-0131		Snap Ring 5/8" Dia. Shaft	
11	710-0118		Hex Scr. 5/16-18 x .625" Lg.		27	14984		Tiller Housing—R.H.	
12	710-0599		Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg.		28	736-0169		L-Wash. 3/8" Scr.*	
13	741-0155		Bearing .625" I.D. x 1.38" O.D. x .437" Thk.		29	712-0711		Hex Nut 3/8-24 Thd.	
14	05034		Bearing Housing		30	736-0119		L-Wash. 5/16" Scr.*	
15	710-0629		Hex Scr. 3/8-24 x 2.75" Lg.		31	712-0267		Hex Nut 5/16-18 Thd.	
16	736-0258		FI-Wash. 3/8" I.D. x 1.25" O.D. x .100 Thk.		32	741-0304		Bearing (For Service Only—Must be Press Fit)	
					33	731-0374		Bearing	

Model 320

PARTS LIST FOR TILLER MODEL 320

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	749-0356		Handle—R.H.		25	736-0176		Fl-Wash. .25" I.D. x .930" O.D. x .120" Thk.	
2	710-0458		Carriage Bolt 5/16-18 x 1.75" Lg.		26	736-0329		L-Wash. 1/4" I.D.*	
3	741-0402		Hex Flange Plastic Brg.		27	710-0412		Hex Scr. 1/4-28 x .75" Lg.	
5	784-0036		Handle Panel		28	06813	395	Wheel Bracket Ass'y.	
6	720-0180		Grip		29	734-0968		Wheel Ass'y. 9 x 1.75	
7	738-0560		Shld. Bolt .38" Dia. x 1.53" Lg.		30	738-0318		Shld. Bolt	
8	784-0031		Clutch Grip Ass'y.		31	736-0253		Belleville Washer 1/2" I.D.	
9	738-0561		Shld. Nut 1/4-20 Thd.		32	736-0921		L-Wash. 1/2" I.D.*	
10	15093		Cable Support Brkt.		33	712-0200		Hex Nut 1/2-20 Thd.	
11	712-0256		Hex Jam Nut 5/16-24 Thd.		34	756-0389		Pulley 6.00" O.D.	
12	710-0599		Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg.		35	756-0137		Idler Pulley	
13	736-0119		L-Wash. 5/16" I.D.*		36	754-0190		V-Belt 1/2" Pitch x 39"	
14	746-0370		Clutch Control Cable		37	750-0472		Spacer	
15	749-0639		Handle—L.H.		38	726-0106		Cap Speed Nut	
16	711-0415		Clevis Pin		39	732-0387		Extension Spring	
17	04927	395	Depth Bar		40	714-0388		Hi-Pro Key	
18	714-0149		Hairpin Cotter		41	736-0169		L-Wash. 3/8" I.D.*	
19	732-0380		Depth Bar Spring		42	712-0342		Hex L-Nut 3/8-16 Thd.	
20	710-0599		Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg.		43	725-0157		Cable Ties	
21	04944	395	Tailpiece Ass'y.		44	831-0692		Throttle Control Box	
22	710-0253		Hex Scr. 3/8-16 x 1.00" Lg.*		45	712-0267		Hex Nut 5/16-18 Thd.*	
23	736-0105		Belleville Wash. 3/8" I.D.		46	736-0119		L-Wash. 5/16" I.D.*	
24	710-0649		Hex Wash. Hd. Self-Tap Scr. 3/8-24 x 7/8" Lg.		47	746-0503		Throttle Control Wire—35"	
					48	710-0779		Self-Tap Scr. #10 x 1/2" 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.

NOTE: 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."



NOTE

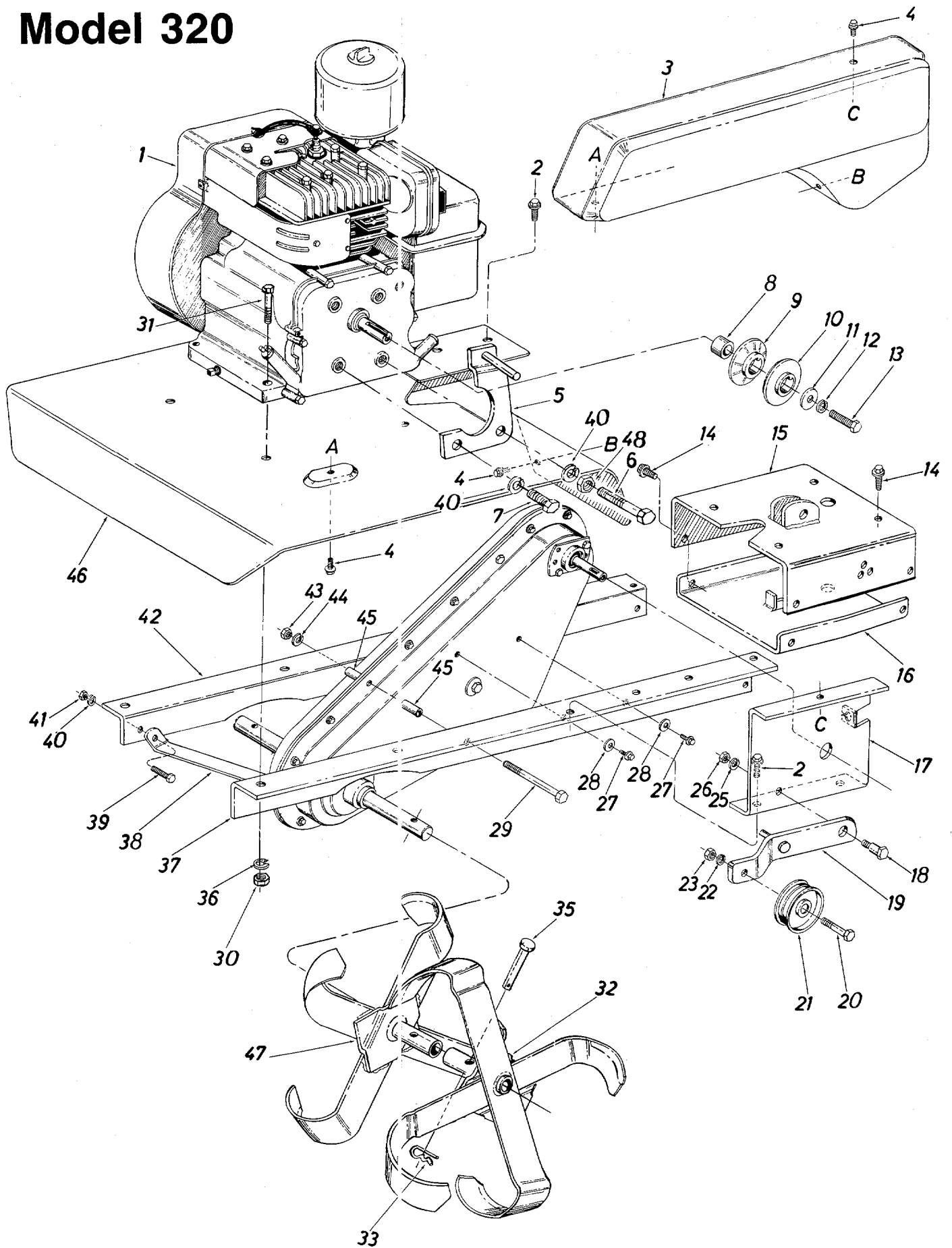
This instruction manual covers various models, and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

If color or finish is important when ordering parts, use the appropriate color code shown below [i.e. (part no.)-395 for Heather Green Finish].

Color Codes

312—White	463—Topflite Red
436—Radiant Yellow	395—Heather Green
452—Black	483—Charcoal Grey
456—Radiant Tangerine	499—Beige
462—Red Flake	623—Silver Mist

Model 320



Model 320

PARTS LIST FOR TILLER MODEL 320

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	—		Engine		22	736-0169		L-Wash. 3/8" I.D.*	
2	710-0600		Hex Wash. Hd. Self-Tap Scr. 5/16-24 x .50" Lg.		23	712-0342		Hex Nut 3/8-16 Thd.	
3	04958	395	Belt Cover		25	736-0169		L-Wash. 3/8" I.D.*	
4	710-0599		Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg.		26	712-0342		Hex Nut 3/8-16 Thd.	
5	784-0114		Belt Keeper Brkt. Ass'y.		27	710-0599		Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg.	
6	710-0593		Hex Bolt 5/16-24 x 2.25 Lg. (Gr. 5)		28	736-0270		Belleville Wash. .26 I.D. x .75 O.D. x .060	
7	710-0237		Hex Bolt 5/16-24 x .62" Lg. (Gr. 5)		29	710-0176		Hex Scr. 5/16-18 x 2.75" Lg.	
8	750-0345		Spacer		30	712-0267		Hex Nut 5/16-18 Thd.*	
9	748-0282		Pulley Half		31	710-0442		Hex Bolt 5/16-18 x 1.50" Lg.	
10	748-0282		Pulley Half		32	—		See Tine Chart	
11	736-0258		Fl-Wash. 3/8" I.D. x 1.25" O.D. x .100		33	714-0149		Hairpin Cotter	
12	736-0169		L-Wash. 3/8" I.D.*		35	1545-029		Clevis Pin	
13	710-0152		Hex Scr. 3/8-24 x 1.00" Lg.		36	736-0119		L-Wash. 5/16" I.D.*	
14	710-0649		Hex Wash. Hd. Self-Tap Scr. 3/8-24 x 7/8" Lg.		37	04949		Frame Rail—L.H.	
15	04950		Handle Mounting Brkt. Ass'y.		38	04933		Front Brace Brkt.	
16	04943		U-Channel Brkt. Ass'y.		39	710-0118		Hex Scr. 5/16-18 x .75" Lg.*	
17	04934		Idler Mounting Brkt.		40	736-0119		L-Wash. 5/16" I.D.*	
18	738-0322		Shld. Bolt		41	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
19	784-0027		Idler Brkt. Ass'y.		42	04948		Frame Rail—R.H.	
20	710-0344		Hex Scr. 3/8-16 x 1.50" Lg.		43	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
21	756-0137		Idler Pulley		44	736-0119		L-Wash. 5/16" I.D.*	
					45	750-0470		Spacer	
					46	04941	395	Tine Shield	
					47	—		See Tine Chart	
					48	712-0123		Hex Nut 5/16-24 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.

TINE CHART

Part No.	Description
784-0092	Inner Tine Ass'y. Comp.—R.H.
784-0094	Outer Tine Ass'y. Comp.—R.H.
784-0091	Inner Tine Ass'y. Comp.—L.H.
784-0093	Outer Tine Ass'y. Comp.—L.H.

Heavy Duty Garden Tiller Attachments Available for All-Season Use

31-0106	Depth Gauge Wheels (Pair)	31-0123	Lawn Aerator (Use with 31-0114 Wheel Weights for added penetration)
31-0107	6-Tine Cultivator (Must be used with 31-0106 Depth Gauge Wheels)	31-0144	"V"-Bar Cultivating Kit Kit Includes: "V"-Bar Frame, 4-Point Cultivating Tines, Hiller/Furrower, Depth Gauge Wheels (Pair).
31-0110	8" Furrow Opener	31-0145	Depth Stake Cultivating Kit Kit Includes: 8" Furrow Opener, 15" Sweep Cultivator, 32" Leveling Rake, Extra Depth Stake.
31-0111	15" Sweep Cultivator		
31-0113	Pneumatic Tires, 13 x 5.00-6 (Pair)		
31-0114	Wheel Weights (Pair)		
31-0115	Tire Chains, 13 x 5.00 (2 Link) (Pair)		
31-0119	Tine Cultivating Shields w/Adapters (Pair)		

Note: Attachments are available through your local dealer or from the factory:
Agri-Fab Inc., 303 W. Raymond Street, Sullivan, Illinois 61951 (217) 728-4334

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	BIRMINGHAM	NORTH CAROLINA	GOLDSBORO
Auto Electric & Carburetor Co.	2625 4th Ave. S. 35233	Smith Hardware Co.	515 N. George St. 27530
ARKANSAS	NORTH LITTLE ROCK		GREENSBORO
Sutton's Lawn Mower Shop	5301 Roundtop Drive	Dixie Sales Company	335 N. Green 27402
	Box 368, Rt. 4 72117	OHIO	CARROLL
CALIFORNIA	PORTERVILLE	Stebe's Mid-State Mower Supply	Box 366, 71 High St. 43112
Billious	75 North D Street 93257	Bleckrie, Inc.	CLEVELAND
COLORADO	DENVER		7900 Lorain Ave. 44102
Spitzer Industrial Products Co.	6601 N.	National Central	WADSWORTH
	Washington St. 80229	Burton Supply Co.	687 Seville Rd. 44281
FLORIDA	JACKSONVILLE		YOUNGSTOWN
Radco Distributors	4909 Victor St.		1301 Logan Ave.
	Box 5459 32207		Box 929 44501
	HIALEAH	OKLAHOMA	MUSKOGEE
Small Eng. Dist.	7995 W. 26th Court 3016	Victory Motors, Inc.	605 S. Cherokee 74401
GEORGIA	EAST POINT	OREGON	PORTLAND
East Point Cycle & Key Inc.	2834 Church St. 30344	Kenton Supply Co.	8216 N. Denver Ave. 97217
ILLINOIS	LYONS	PENNSYLVANIA	HARRISBURG
Keen Edge Co.	8615 Ogden Ave. 60534	EECO Inc.	4021 N. 6th St. 17110
INDIANA	ELKHART		WILLOW GROVE
Parts & Sales Inc.	2101 Industrial Pkwy. 46516	Thompson Rubber Co.	850 Davisville Rd. 19090
IOWA	DUBUQUE	Bluemont Co.	PITTSBURGH
Power Lawn & Garden Equip.	2551 J.F. Kennedy 52001	Frank Roberts & Sons	R.D. 2 15235
LOUISIANA	NEW ORLEANS		PUNXSUTAWNEY
Suhren Engine Co.	8330 Earhart Blvd. 70118	Scranton Auto Ignition Co.	1133-35 Wyoming Ave. 18509
MARYLAND	TAKOMA PARK	TENNESSEE	KNOXVILLE
Center Supply Co.	6867 New Hampshire	Ace Distributors	2103 Magnolia 37919
	Ave. 20912	American Sales & Service, Inc.	MEMPHIS
MASSACHUSETTS	SPRINGFIELD		3035-43 Bellbrook 38116
Morton B. Collins Co.	300 Birnie Ave. 01107	TEXAS	DALLAS
MICHIGAN	LANSING	Marr Brothers, Inc.	423 E. Jefferson 75203
Lorenz Service Co.	2500 S. Pennsylvania 43910	Woodson Sales Corp.	FORT WORTH
	MOUNT CLEMENS		6733 Baker Blvd.
Power Equipment Dist.	340 Hubbard 43043		Hwy. 10 76118
MINNESOTA	HOPKINS	Bullard Supply Co.	HOUSTON
Hance Distributing Inc.	420 Excelsior Ave. W. 55343	Engine House Inc.	2409 Commerce St. 77003
MISSOURI	KANSAS CITY		SAN ANTONIO
Automotive Equip. Service	3117 Holmes St. 64109		8610 Botts Lane
	ST. JOSEPH		P.O. Box 17867 78217
Ross-Frazier Supply Co.	8th and Monterey 64503	UTAH	SALT LAKE CITY
	ST. LOUIS	Powered Products	1661 N. Beck St. 84116
Henzler, Inc.	2015 Lemay Ferry Rd. 63125	VIRGINIA	ASHLAND
NEW JERSEY	BELLMAWR	RBI Corp.	101 Cedar Ridge Dr. 23005
Lawnmower Parts Inc.	717 Creek Rd. 03030	WASHINGTON	SEATTLE
NEW MEXICO	ALBUQUERQUE	Equip. Northwest	1410 14th Ave. 98122
Spitzer Eng. & Parts Co.	1023 Third Ave. N.W. 87103	WISCONSIN	MILWAUKEE
NEW YORK	CARTHAGE	Wisconsin Magneto Inc.	4727 N. Teutonia St. 53209
Gamble Dist., Inc.	West End Ave. 13619		

WARRANTY 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 assume 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.