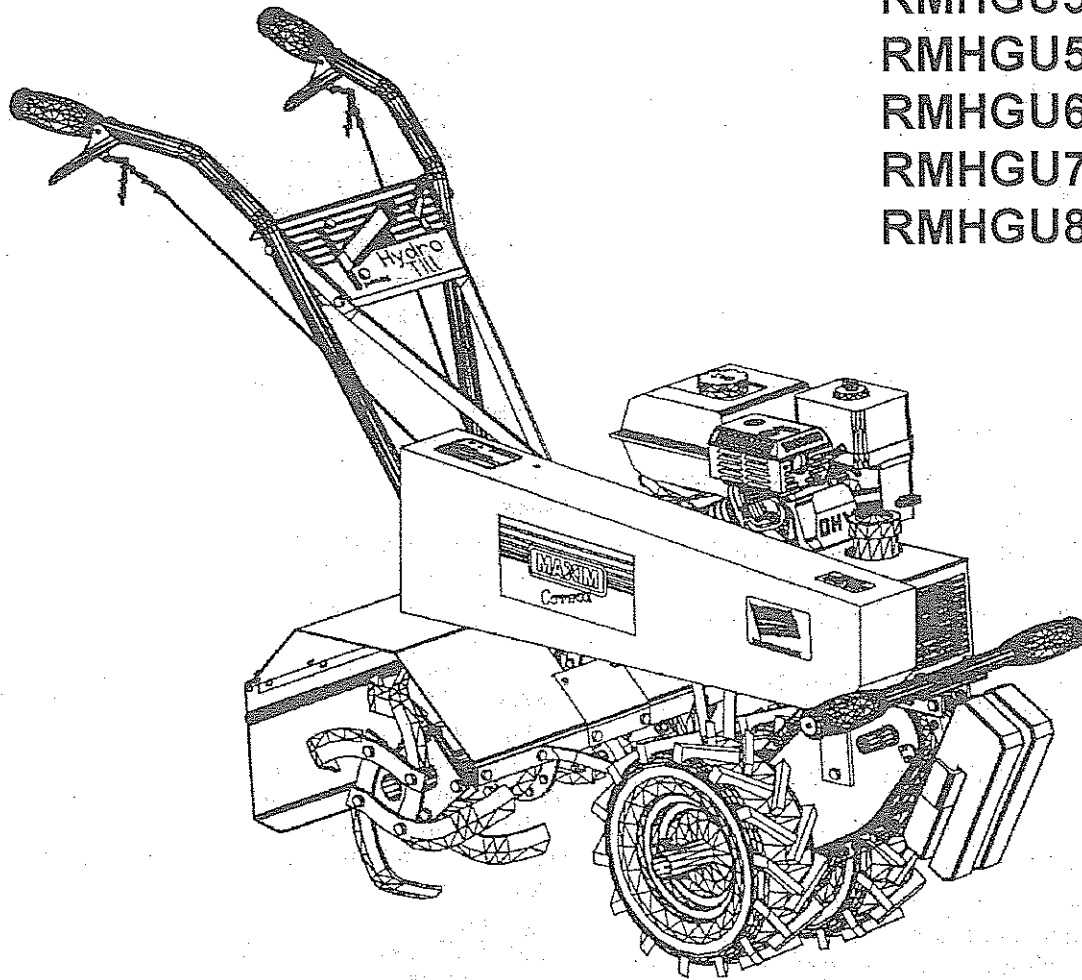


Operator's Manual

RMHGU5BIC
RMHGU55H
RMHGU6R
RMHGU7BIC
RMHGU8H



⚠ WARNING: READ ENTIRE MANUAL BEFORE ATTEMPTING TO OPERATE MACHINE!
If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers, and should read the entire manual before attempting to set up, operate, adjust, or service this machine.



The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

IMPORTANT: 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 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, A SPARK ARRESTER IS REQUIRED BY LAW (SECTION 4442 OF THE CALIFORNIA PUBLIC RESOURCES CODE). OTHER STATES MAY HAVE SIMILAR LAWS. FEDERAL LAWS APPLY ON FEDERAL LANDS. SEE YOUR AUTHORIZED SERVICE CENTER FOR A SPARK ARRESTER.

Important Rules for Your Safety



Before operating this machine read all the instructions for safe operation, as well as, the instructions governing the engine and other components of this machine.

TRAINING

- Read the Owner's Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
- Never allow children to operate the equipment. Never allow adults to operate the equipment without proper instruction.
- Operators should be mature enough to understand the dangers of the equipment.

PREPARATION

- Thoroughly inspect the area where the tiller is to be used and remove all large stones, boards, wires, and other foreign objects.
- Keep the area of operation clear of all persons, particularly small children and pets.
- Do not operate the equipment without wearing adequate outer garments.
- Wear footwear that will improve footing and provide adequate protection.
- Loose clothing may be caught by moving parts on the machine or by the surrounding environment and cause serious injury.
- Wear long pants and sturdy shoes to protect yourself from debris.
- Handle fuel with care. It is highly flammable.
- Use only an approved fuel container.
- Allow engine sufficient warm-up period.
- **Never add fuel to a running engine or a hot engine.**
- Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
- Replace gasoline cap securely and clean up spilled fuel before starting.
- Never attempt to make any adjustments while the engine is running (except where specifically recommended by manufacturer).
- Do not operate tiller until you are familiar with all controls and safety symbols.

OPERATION

- Give complete and undivided attention to the job at hand.
- Do not start the engine until the machine is on the ground to be tilled.
- When operating over uneven terrain and slopes, use extreme care and make sure of solid and firm footing at all times.
- Exercise special care when operating around objects to prevent the tines from striking them and never deliberately operate over any object.
- Do not over load machine capacity by attempting to till ground at too fast a rate.

- Never operate the tiller indoors where exhaust from engine can collect. It contains carbon monoxide which is a tasteless, odorless, poisonous gas.
- Operator should never place hands, feet, or any part of his body or clothing near any moving part of this tiller.
- Never operate the tiller without proper guards, plates, or other safety protective devices in place.
- Take all possible precautions when leaving the machine unattended. Remove spark plug wire.
- Stop the engine when leaving the operating position.
- If the tiller should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
- After striking a foreign object, stop the engine, remove the spark plug wire, and thoroughly inspect the tiller for any damage. If damage has occurred repair the damage before restarting and operating the tiller.
- Do not put hands or feet near or under rotating parts.
- Never operate the machine at high speeds on slippery surfaces.
- Never allow anyone near the machine when in operation. Disengage clutch, when someone approaches, when transporting or when not in use.
- Equipment should only be used as it was intended. Misuse can cause serious injury.
- Operate equipment only in a well lit area. Do not use tiller after dark without adequate artificial light.
- Never operate equipment when under the influence of drugs, alcohol, or prescription drugs which could cause drowsiness or poor judgement.
- Do not operate tiller in wet soil. Set soil can clog the cutter and increase the danger of slipping and falling and possibly coming in contact with the tines.

MAINTENANCE

- Keep machine in good working condition.
- Before cleaning, repairing, or inspecting the machine, shut off the engine and make certain all moving parts have stopped. Disconnect spark plug.
- Follow the recommendations for maintenance described in this manual and the engine literature.
- Store gasoline only in an approved container.
- Never store machine with fuel in the fuel tank inside a building where open flame or spark are present. Allow engine to cool before storing in any enclosure.
- Frequently check all bolts and other connectors for proper tightness before operating the equipment.

HYDRAULIC SAFETY

- The hydraulic system of your tiller requires careful inspection along with the mechanical parts. Be sure to replace cracked or otherwise damaged hydraulic components.

ASSUMPTION OF RISK: THE OWNER AND/OR OPERATOR OF THIS TILLER ASSUMES ALL THE RISKS INCIDENT TO AND ARISING OUT OF THE OPERATION OF THIS MACHINE. BEFORE OPERATING THE TILLER, READ ALL THE INSTRUCTIONS GOVERNING THE ENGINE AND THE TILLER.

HYDRAULIC SAFETY . . . CONTINUED

- Fluid escaping from a very small hole can almost be invisible. Do not check for leaks with your hand. Escaping fluid under pressure can have sufficient force to penetrate skin, causing serious personal injury or even death. Leaks can be located by passing a piece of cardboard or wood over the suspected leak and look for discoloration.
- If injured by escaping fluid, see a doctor at once. Serious infection or reaction can develop if proper medical treatment is not administered immediately.
- Should it become necessary to loosen or remove any hydraulic fitting or line, be sure to relieve all pressure by shutting off the engine and moving the control handle back and forth several times.
- Don't remove the cap from the hydraulic tank or reservoir while your tiller is running. Hot oil under pressure could result in serious injury.
- The pressure relief valve on your tiller is preset at the factory. Do not adjust the valve. Only a qualified service technician should perform this adjustment.

Assembly

1. Remove the tiller from the carton. Do not attempt to lift the tiller from the carton. After opening the top, cut all four corners and lay the sides flat on the floor or working space.
2. Take out all unassembled parts, parts bag, and protective packing and safety and maintenance manuals. Be careful not to kink the control cables.
3. Carefully lift handles into position. Bolt into place.

Operation

Before Starting Your Tiller . . .

1. Check your Tiller. Be sure all bolts are tight. After several hours of operating and at periodic maintenance intervals, check all fasteners and tighten securely as required.
2. Check oil and fill according to the engine owner's manual (See Figure 1).



WARNING : YOUR ENGINE IS SHIPPED WITHOUT OIL. YOU MUST FILL THE ENGINE WITH OIL BEFORE ATTEMPTING TO CRANK YOUR ENGINE.

- Read Engine manual for full instructions and safety warnings.
 - Place tiller on level ground.
 - Clean around oil fill area.
 - Remove dipstick. Wipe with clean cloth.
 - Reinsert dipstick and tighten. Remove dipstick and check.
 - Oil should be at FULL level.
 - If oil is required, add slowly. Recheck level.
 - Tighten dipstick and clean around oil fill area before starting.
3. Fill engine with clean unleaded gasoline according to the engine owner's manual.
 4. Check the air cleaner element. Insure that the air filter is clean.

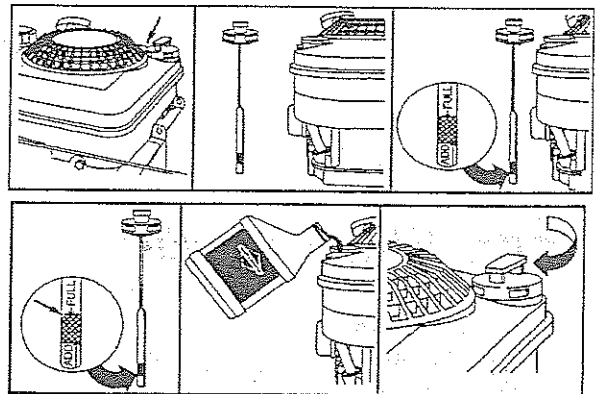


Figure 1



WARNING: GASOLINE IS FLAMMABLE. USE CAUTION WHEN HANDLING OR STORING GASOLINE. NEVER FILL THE GAS TANK WHILE THE ENGINE IS RUNNING OR HOT. ALLOW THE ENGINE TO COOL BEFORE ADDING GAS. CLEAN ANY SPILLED GASOLINE.

5. Check hydraulic fluid in fluid reservoir. The fluid should come to the fill line. The reservoir is filled at the factory though leakage during shipment is possible.
6. Familiarize yourself with all operating controls.



NEVER OPERATE THE TILLER WITHOUT PROPER GUARDS, PLATES, OR OTHER SAFETY DEVICES IN PLACE. SERIOUS INJURY OR DEATH COULD RESULT.



DO NOT ATTEMPT TO START OR OPERATE THIS TILLER UNTIL YOU ARE COMPLETELY FAMILIAR WITH LOCATION AND USE OF EACH CONTROL NECESSARY TO OPERATE THIS TILLER. YOU MUST KNOW HOW TO STOP THIS MACHINE BEFORE YOU START IT. EACH TIME PRIOR TO STARTING, CHECK THE THROTTLE ASSEMBLY TO INSURE IT IS WORKING PROPERLY.

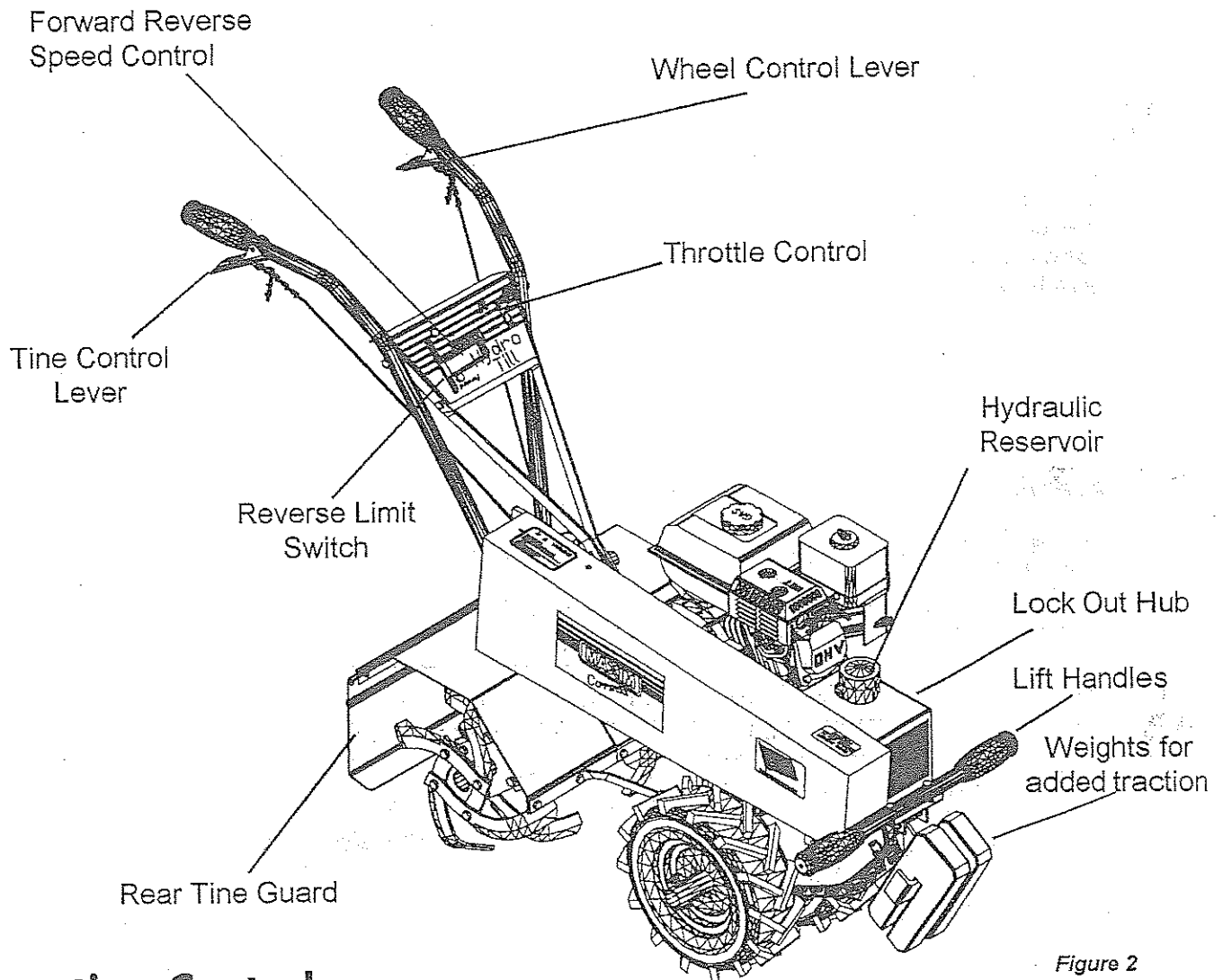


Figure 2

Operating Controls

1. **Tine Control Lever** -- Controls the tine rotation. To engage the tines press the tine control lever firmly. To disengage tines release lever.
2. **Throttle Control** -- Controls the speed of the engine or stops the engine. To stop the engine move the throttle back towards the operator to the stop or off position.
3. **Speed Control Lever** -- Controls the speed of the tiller. Move speed control lever forward to increase speed of tiller. To decrease speed of tiller pull the lever toward you. To reverse tiller, pull lever toward you from the neutral position. This tiller is equipped with a reverse limit switch which limits the speed of reverse tilling. **Do not run tiller without the reverse limit switch.** To stop the forward or reverse movement of the tiller move the speed control lever to the neutral position. The tiller must be in the neutral position to crank the engine.
3. **Lock Out Hub** -- Controls the movement of the wheels. Disengage the Lock Out Hub by pulling out and rotating 1/4 turn clockwise to transport tiller.
4. **Wheel Control Lever** -- Controls the engagement of the wheels during use. After moving the speed control lever forward, press the wheel control lever firmly.

Starting the engine

1. Read engine owner's manual for complete starting instruction. Do not operate this tiller without reading the engine owner's manual.
2. Move the kill switch on engine to the on position.
3. Move the throttle control lever forward to the START position.
4. Move the control lever to the neutral position.
4. Grasp rope handle and pull slowly until resistance is felt. Then pull cord rapidly to overcome compression, prevent kickback and start engine.
5. Operate engine in the 3/4 throttle position.

Adjustments and Maintenance

Follow engine manual for taking care of your engine.

Before each use . . .

1. Check oil in engine.
2. Check hydraulic fluid. **To check fluid** place tiller on level ground. Remove cap. (See figure 2). Fluid should come to the fill line. If fluid is needed add Mobil 1 SAE 15W-50 Synthetic Motor Oil. **Do not mix different types of fluid.**
3. Check to make sure all bolts holding the engine are tight.
4. Check transmission gear oil or grease.

After each use . . .

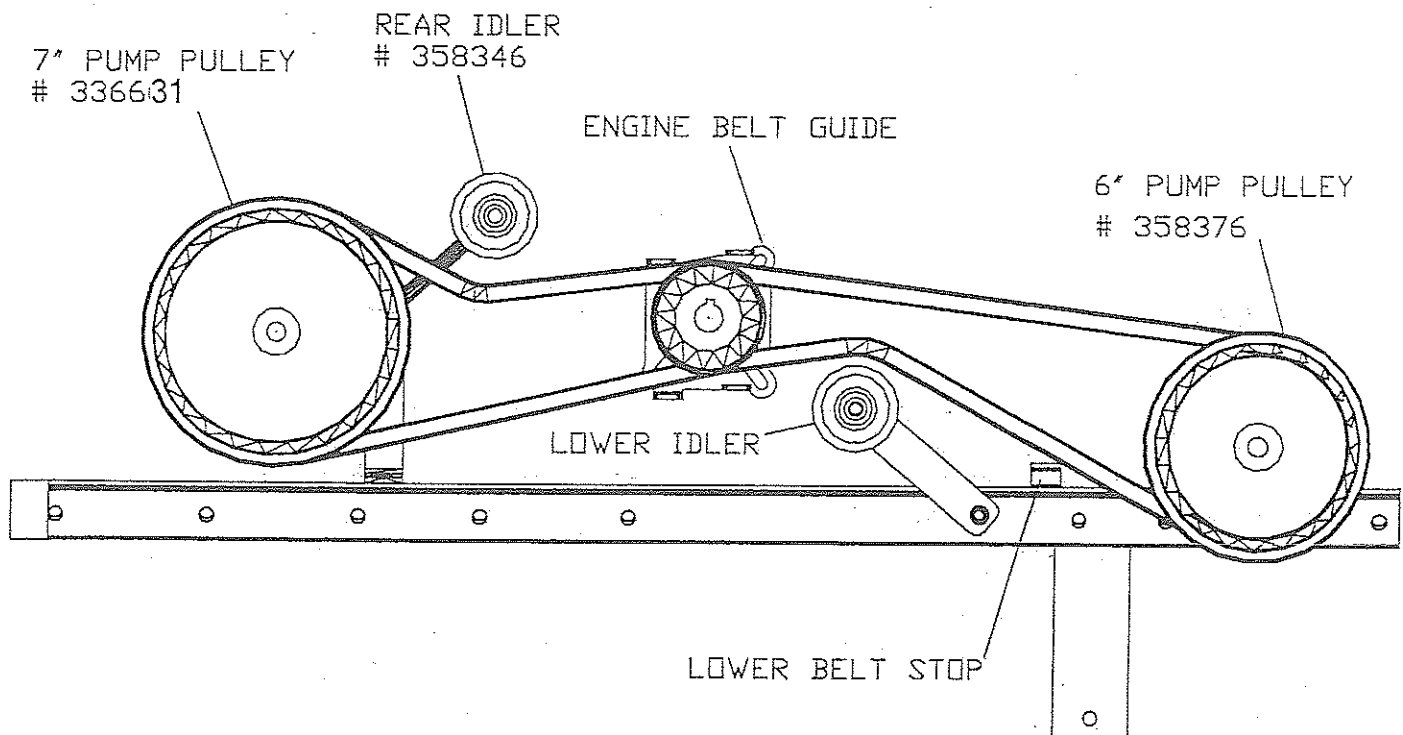
1. Clean dust and debris from engine.
2. Clean dirt and debris from tiller -- especially roots wound around the tines.

After 25 tilling hours . . .

1. Check and clean air filter.
2. Check belt tightness and wear.

Hydro Gear DOES NOT recommend changing the synthetic motor oil, inside the hydraulic transmission unless water, grit or other foreign matter gets into the oil.

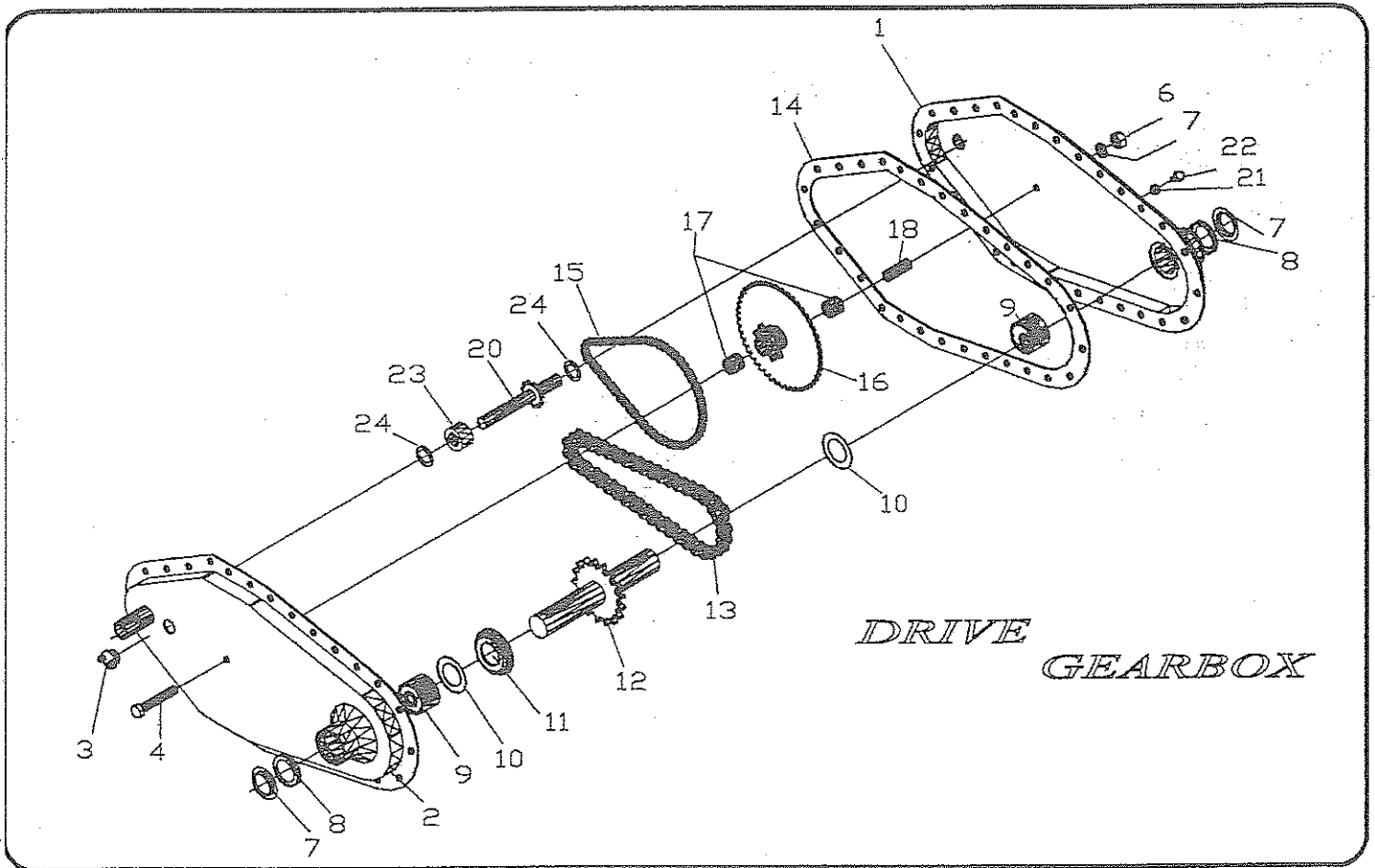
Belt



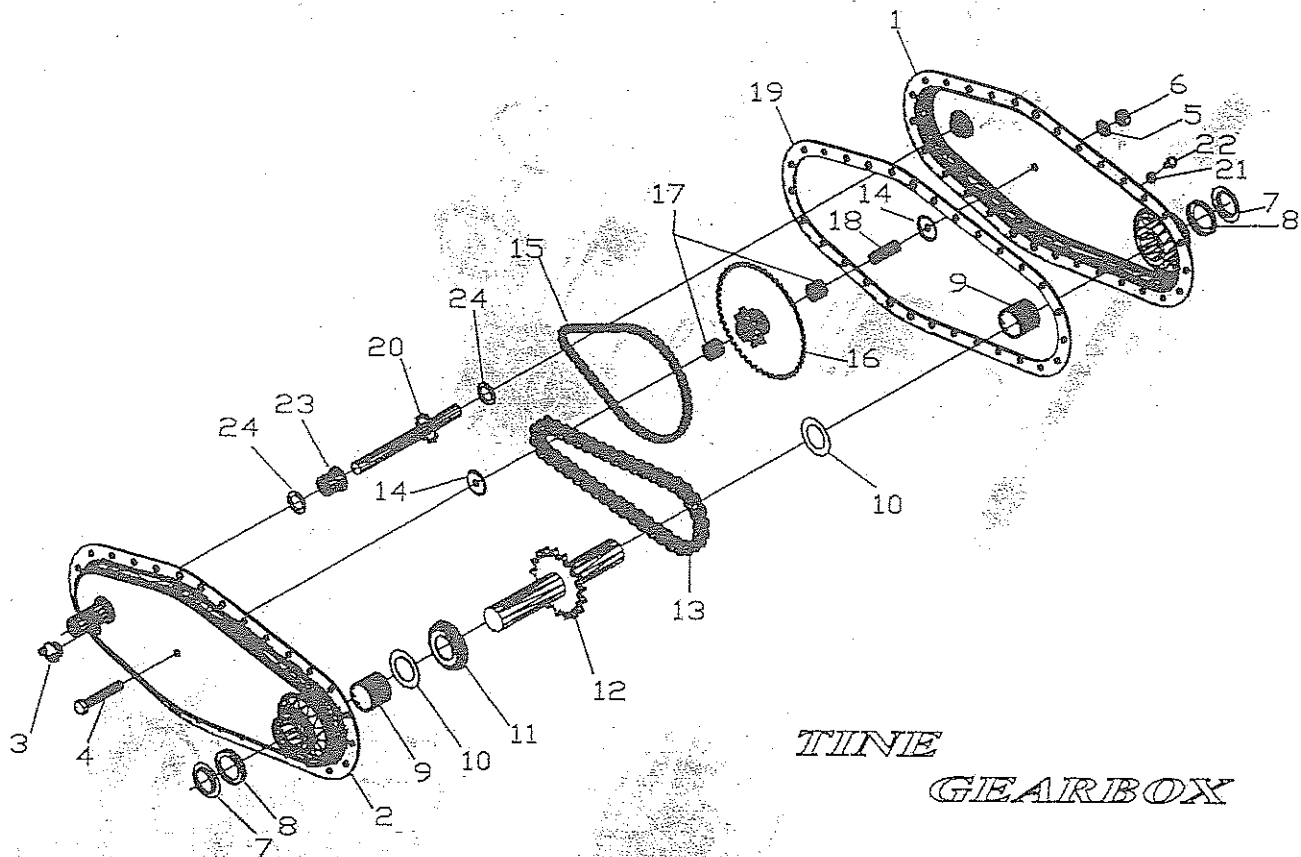
Transmission Maintenance

To check transmission gear oil:

1. With tiller in upright position and on level ground, remove check/fill plug on gear case. This is located on the right side as you stand behind the tiller.
2. If oil runs out of check plug hole, replace check plug. Transmission does not need additional oil.
3. If oil does not run out of check plug hole, fill transmission with 90 weight gear lube or 50 weight motor oil until check plug hole over flows. You will either need a long funnel or will have to tilt the tiller onto its left side.
4. Replace plug.
5. The check plug on the rear gear case is located on the left side of the transmission just above the tine shaft. You must remove the tines to check fluid level. The rear gear case also has a fill plug located at the top of the case on the left side.



REF.#	PART #	QTY.	DESCRIPTION	REF.#	PART #	QTY.	DESCRIPTION
	130400		DRIVE GEARBOX ASSEMBLY				
1	130693	1	L.H. CASE ASSEMBLY	13	359302	1	CHAIN
2	130692	1	R.H. CASE ASSEMBLY	14	336675	1	GASKET
3	359312	1	OIL FILL PLUG	15	359296	1	CHAIN
4	400201	1	1.5/16" X 2 3/4" BOLT	16	162023	1	IDLER SPROCKET CLUSTER
5	455041	1	5/16" FLAT WASHER	17	336675	2	INPUT BEARING
6	443106	1	5/16" NUT	18	359351	1	BUSHING, IDLER CLUSTER
7	359306	2	DUST SHIELD	20	162037	1	INPUT SHAFT / SPROCKET
8	359305	2	OIL SEAL	21	359339	1	WASHER RUBBER SEAL
9	359304	2	BEARING, NEEDLE	22	408883	1	1/4" X 1/2" SCREW
10	359313 A/R		WASHER	23	359350	1	SPACER
11	359303	1	SPACER	24	455049 A/R		SHIM WASHER
12	162038	1	SHAFT & SPROCKET ASSEMBLY				



REF.#	PART #	QTY.	DESCRIPTION	REF.#	PART #	QTY.	DESCRIPTION
	103050		TINE GEARBOX ASSEMBLY				
1	130697	1	L.H. CASE ASSEMBLY	12	162025	1	OUTPUT SHAFT & SPROCKET ASSEMBLY
2	130696	1	R.H. CASE ASSEMBLY	13	359300	1	CHAIN, # 50
3	359312	1	OIL FILL PLUG	14	359299	2	WASHER
4	400201	1	5/16" X 2 3/4" BOLT	15	359295	1	CHAIN # 35
5	455041	1	5/16" FLAT WASHER	16	162024	1	IDLER SPROCKET CLUSTER
6	443106	1	5/16" NUT	17	359297	2	IDLER BEARING
7	359306	2	DUST SHIELD	18	359298	1	BUSHING
8	359305	2	OIL SEAL	19	336674	1	GASKET
9	359304	2	BEARING	20	162039	1	INPUT SHAFT & SPROCKET ASSEMBLY
10	359313	A/R	WASHERS	21	359336	1	WASHER RUBBER SEAL
	359314	A/R	WASHERS	22	408883	1	SCREW, 1/4" X 1/2"
	359315	A/R	WASHERS	23	359351	1	SPACER
11	359303	1	SPACER	24	455049	A/R	SHIM WASHER

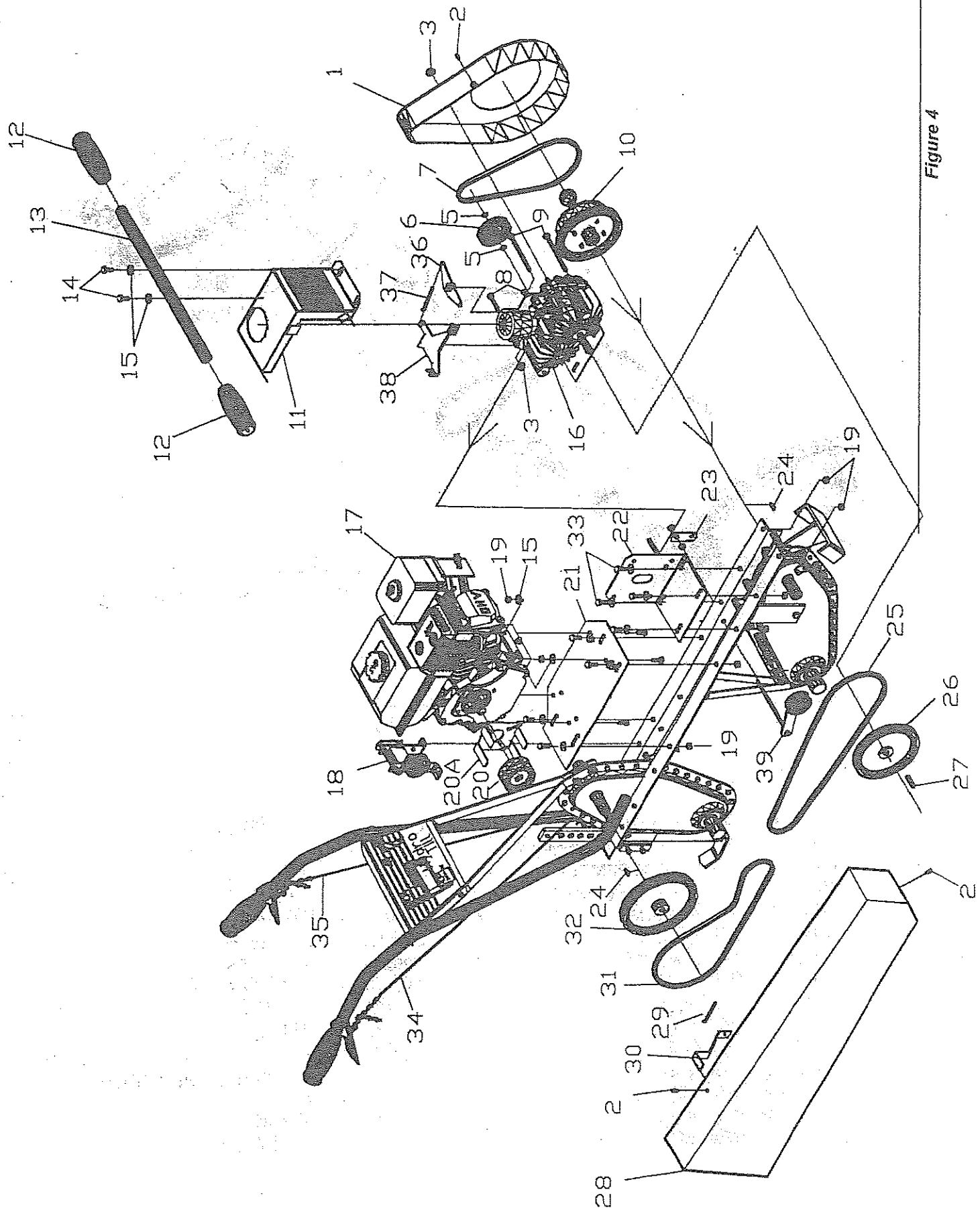
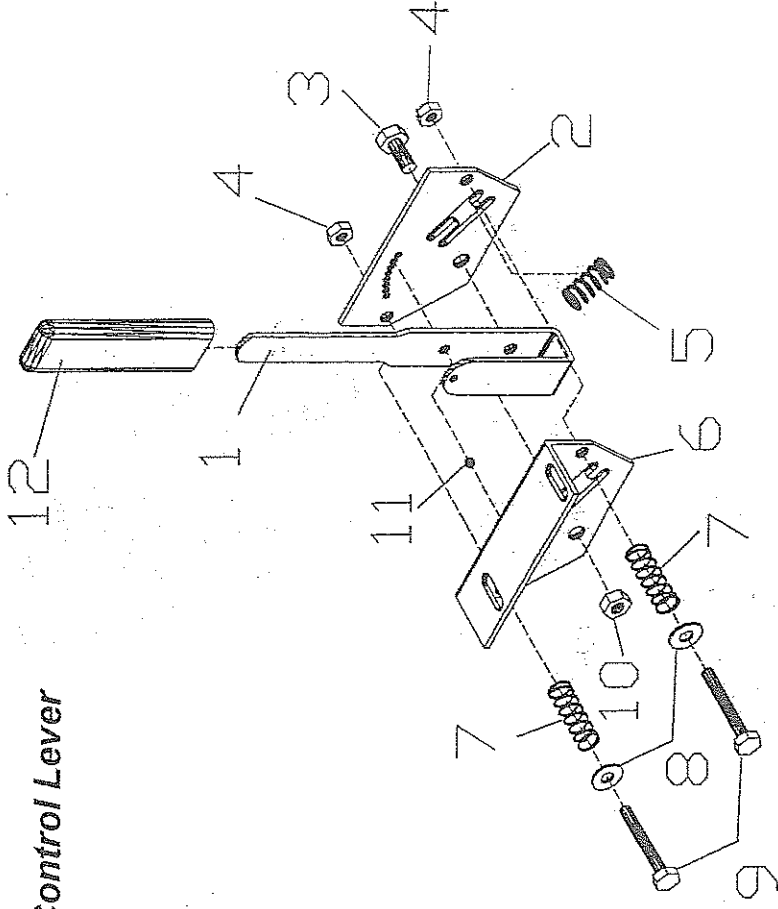


Figure 4

REF. #	PART #	QTY.	DESCRIPTION
1	358367	1	COVER LOCKOUT HUB
2	408883	3	1/2" X 1/2" SELF-TAP SCREW
3	445765	5	5/16" HEX NUT, WHIZLOCK
5	130327-C	2	RETAINING RING
6	358328	1	PULLEY PUMP (2 3/4")
7	272208	1	BELT, L428
8	400208	2	CAPSCREW 5/16" X 1 1/4" NC5
9	400211	2	CAP SCREW 5/16" X 4 1/2" NC5
10	358373	1	FREEWHEEL ASSEMBLY
11	358369	1	COVER, PUMP
12	313786	2	HANDLE GRIP, 1"
13	358370	1	LIFT HANDLE
14	400194	2	CAPSCREW 5/16" X 1 1/2" NC5
15	455041	10	5/16" FLAT WASHER
16	130327	1	HYDROSTATIC TRANSMISSION
17		1	ENGINE
18	358346	1	IDLER ARM ASSEMBLY
19	443100	10	5/16" NF HEX NUT
20	271690	1	PULLEY, ENGINE
20A	358399-A	1	ENGINE BELT GUIDE
21	358366	1	MOTOR MOUNT
22	358366	1	PUMP MOUNT
23	359325	2	LEVER, IDLER-CUT/PCH (MS50B)
24	463017	2	#K9N WOODRUFF KEY 3/16" X 3/4"
25	272251	1	BELT, L444
26	358376	1	PULLEY PUMP (6")
27	359383	1	KEY, PULLEY
28	358368	1	BELT GUARD
29	359324	1	SPRING, IDLER
30	358378	1	BRACKET, TOP BELT GUARD
31	272237	1	BELT, L438
32	336631	1	PULLEY (6 1/2")
33	400186	10	CAPSCREW 5/16" X 1" NC5
34	358397	1	CABLE, DRIVE / TINES
35	358398	1	CABLE, DRIVE ONLY
36	358396	1	LEVER, CAPRO
37	359364	1	SPRING
38	358395	1	CAPRO BRACKET
39	358363	1	PUMP IDLER LEVER
40	359321	1	IDLER PULLEY
61	130909	1	BELT COVER BACK PLATE EC
62	130910	1	BELT COVER BACK PLATE EC

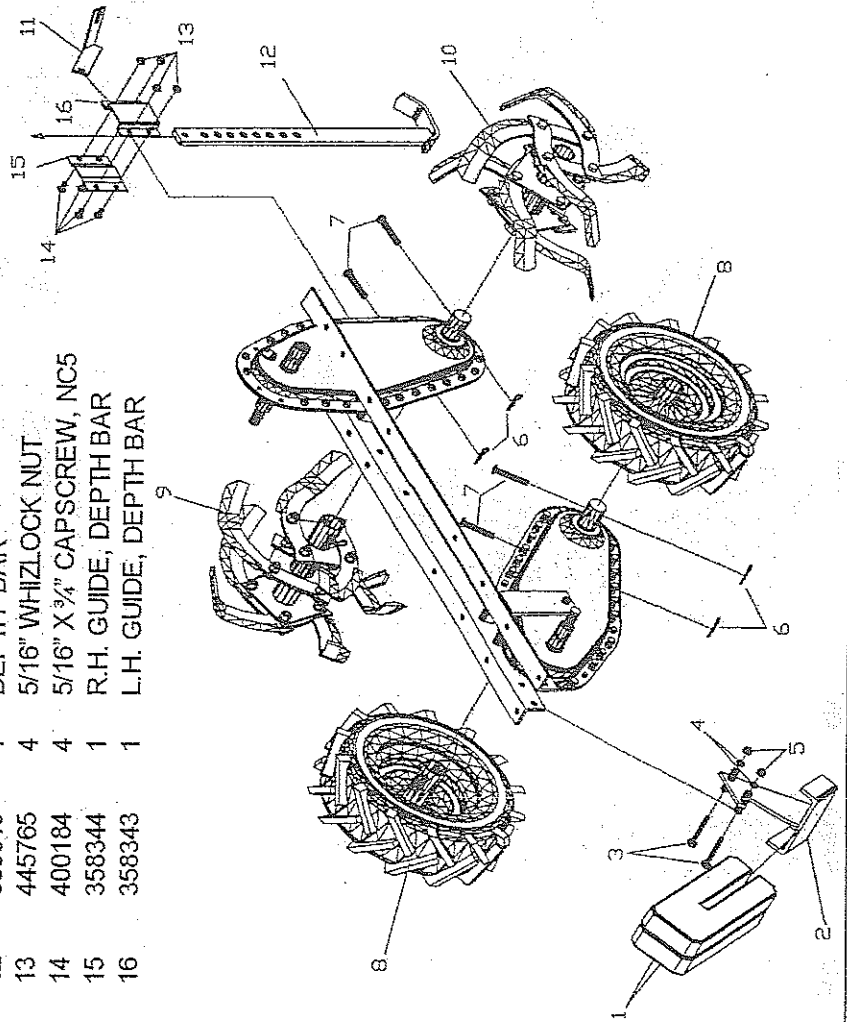
Control Lever



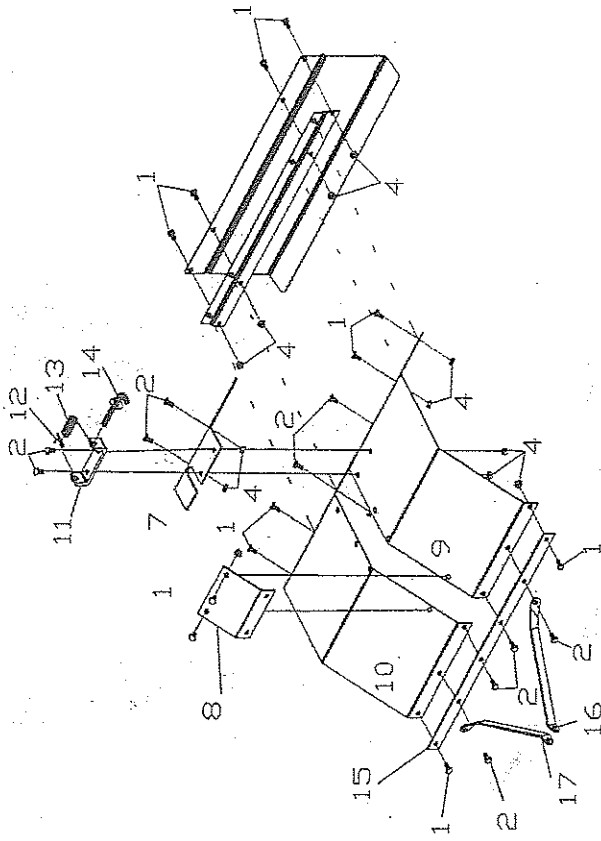
REF. #	PART #	QTY.	DESCRIPTION
	358391	1	CONTROL ASSEMBLY
1	358394	1	LEVER
2	358392	1	R.H. MOUNTING BRACKET
3	400291	1	3/8" X 3/4" CAPSCREW, NC5
4	444716	2	5/16" CENTERLOCK NUT NC
5	359333	1	SPRING, COMPRESSION
6	358393	1	L.H. MOUNTING BRACKET
7	359324	2	SPRING, COMPRESSION
8	455040	2	1/4" FLAT WASHER
9	400196	2	5/16" X 2" CAPSCREW, NC5
10	444721	1	3/8" CENTERLOCK NUT, NC
11	359332	1	1/4" STEEL BALL
12	313792	1	GRIP, 5/8" X 4"

Lower Frame and Drive Assembly

REF.#	PART #	QTY.	DESCRIPTION
1	336805	2	WEIGHTS
2	358374	1	WEIGHT BRACKET
3	400200	2	5/16" X 2 1/2" CAPSCREW, NC5
4	446136	2	5/16" LOCKWASHER
5	443106	2	5/16" NUT, NC
6	460312	4	HAIR PIN
7	461466	4	CLEVIS PIN
8	162109	2	13" WHEEL (5.5 & 6 H.P.)
9	162005	2	16" WHEEL (7 & 8 H.P.)
10	358320	1	R.H. TINE ASSEMBLY
11	358321	1	L.H. TINE ASSEMBLY
12	358331	1	REAR RACE TINE SHIELD
13	359319	1	DEPTH BAR
14	445765	4	5/16" WHIZLOCK NUT
15	400184	4	5/16" X 3/4" CAPSCREW, NC5
16	358344	1	R.H. GUIDE, DEPTH BAR
17	358343	1	L.H. GUIDE, DEPTH BAR

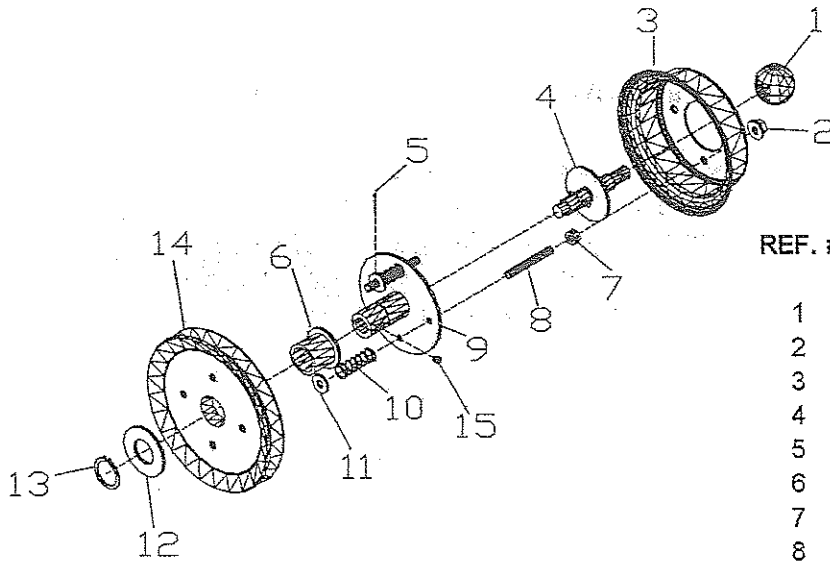


Tine Shield Assembly



REF	Part Num	QTY	Description
1	400179	12	5/16" x 1/2" capscrew, nc5
2	400184	8	5/16" x 3/4" Capscrew, nc5
3	400186	2	5/16" x 1" capscrew, nc5
4	445765	22	5/16" whizlock, nut
5	358138	1	Drag Flap
6	358336	1	Hinge
7	358334	1	Connector, Rear
8	358335	1	Connector, Front
9	358333	1	LH Tine Shield
10	358332	1	RH Tine Shield
11	358339	1	Lock Pin Holder
12	461468	1	Cotter Pin, 7/16" x 1"
13	359324	1	Spring
14	358345	1	Locking Pin
15	358108	1	Reinforce Band
16	358379	1	LH Stabilizer Brace
17	358380	1	RH Stabilizer Brace

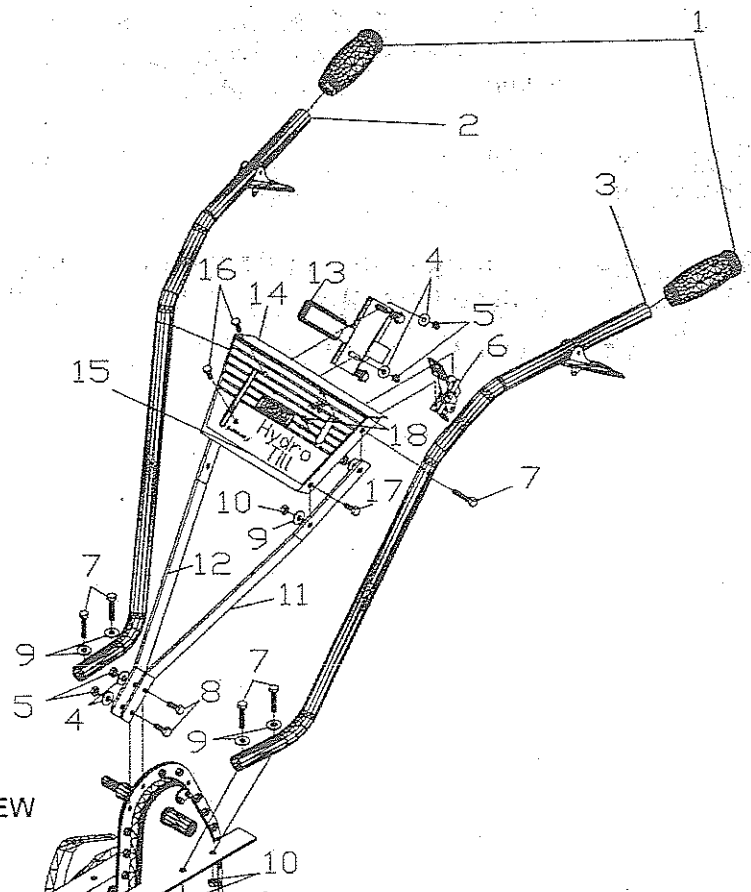
Lock Out Hub



REF. #	PART #	QTY.	DESCRIPTION
1	313788	1	BALL KNOB, 1/2"
2	445765	4	5/16" WHIZLOCK NUT
3	358373-E	1	COVER
4	358373-WC	1	SHAFT ASSEMBLY
5	461457	4	5/64" X 1/2" COTTER PIN
6	359204	1	BUSHING, FLANGED
7	444716	4	5/16" CENTERLOCK NUT, NC
8	358373-F	4	STUD
9	358373-W	1	SPINDLE WELDMENT
10	359362	4	SPRING
11	455066	4	1/4" FLAT WASHER
12	455066	1	1" FLAT WASHER
13	446148	1	1" RETAINING RING
14	358373-D	1	PULLEY
15	415562	1	SET SCREW, 5/16" X 5/16"

Handle Bar Assembly

REF #	PART #	QTY.	DESCRIPTION
1	313786	2	HANDLE GRIP 1"
2	162080	1	R.H. HANDLE ASSEMBLY
3	358364	1	L.H. HANDLE ASSEMBLY
4	455040	4	1/4" FLAT WASHER
5	443101	4	1/4" NUT, NC
6	162026	1	THROTTLE CONTROL
7	400208	6	5/16" X 1 3/4" CAPSCREW, NC5
8	400112	2	1/4" X 1" CAPSCREW, NC5
9	455041	8	5/16" FLAT WASHER
10	443106	8	5/16" NUT
11	358323	1	L.H. HANDLE BRACE
12	358324	1	R.H. HANDLE BRACE
13	358391	1	CONTROL ASSEMBLY
14	358390	1	CROSS BRACE
15	336942	1	DECAL
16	400110	2	1/4" X 1" CAPSCREW, NC5
17	400186	2	5/16" X 1" CAPSCREW, NC5
18	402014	2	#10 X 3/8" SELF TAPPING SCREW



Limited Warranty

Maxim Manufacturing Corporation, through its dealers will repair or replace any part, or parts of the Hydro Till frame or handles that are defective in material or workmanship or both. **Transportation charges on parts submitted for repair or replacement under this Warranty must be borne by purchaser.** The original sales receipt must be submitted as proof of purchase date. The sales receipt will be returned. Maxim Manufacturing Corporation assumes no liability for labor charges made in performance of this warranty.

The Warranty periods are as follows:

- A. Frame for 1 Year
- B. Handles for 1 Year
- C. Transmissions for 1 Year

The Throttle Cable, Tires, Fasteners, and belt are not warranted because during normal service they are subject to wear.

The Warranty on the Frame is Void if:

- A. Frame is broken or bent due to abuse.
- B. Wheels are bent or broken due to impact.
- C. Altering of engine or its components has occurred.

All warranties are voided if the Tiller has been altered, used under abnormal conditions, or subject to abuse, misuse, neglect, or improper maintenance.

The Engine is warranted by the engine manufacturer, not by Maxim Manufacturing Corporation. See Engine Owner's Manual for information regarding engine warranty.

The Hydraulic Pump is warranted by the pump manufacturer, not by Maxim Manufacturing Corporation. See Hydraulic Pump manual for warranty information.

Should you experience problems with your Tiller take it back to your authorized Maxim dealer or distributor to make warranty claims.

Maxim Manufacturing is not liable for any damage claim or liability claim, personal or otherwise, resulting from the operation of this tiller in any way.