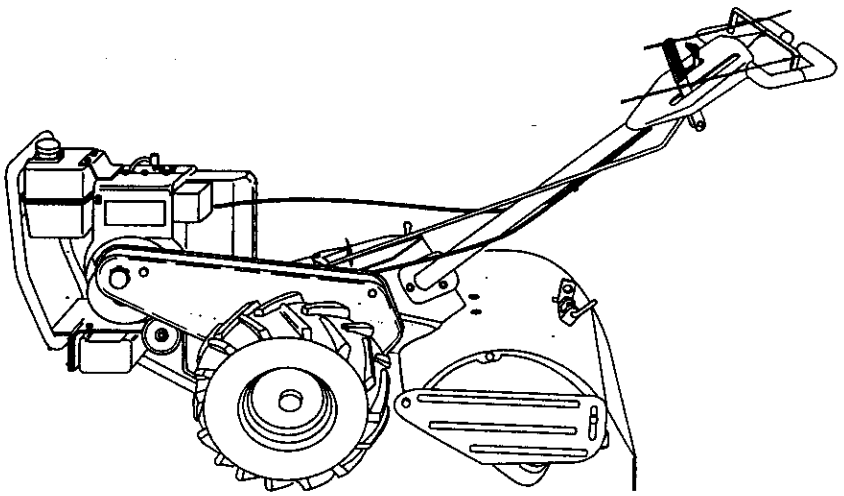
SEARS

OWNER'S MANUAL

MODEL NO. 944.627592

Caution:
Read and follow all Safety Rules and Instructions Before Operating This Equipment



CRAFTSMAN®

9.0 HP
21 INCH TINE WIDTH
REAR TINE TILLER WITH COUNTER ROTATING TINES

- Assembly
- Operation
- Customer Responsibilities
- Service and Adjustments
- Repair Parts

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.

SAFETY RULES

Safe Operation Practices for Walk-Behind Powered Rotary Tillers

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.
- Keep the area of operation clear of all persons, particularly small children, and pets.

PREPARATION

- Thoroughly inspect the area where the equipment is to be used and remove all foreign objects.
- Disengage all clutches and shift into neutral before starting the engine (motor).
- Do not operate the equipment without wearing adequate outer garments. Wear footwear that will improve footing on slippery surfaces.
- Handle fuel with care; it is highly flammable.
- Use an approved fuel container.
- Never add fuel to a running engine or hot engine.
- Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
- Replace gasoline cap securely and clean up spilled fuel before restarting.
- Use extension cords and receptacles as specified by the manufacturer for all units with electric drive motors or electric starting motors.
- Never attempt to make any adjustments while the engine (motor) is running (except where specifically recommended by manufacturer).

OPERATION

- Do not put hands or feet near or under rotating parts.
- Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic. Do not carry passengers.
- After striking a foreign object, stop the engine (motor), remove the wire from the spark plug, thoroughly inspect the tiller for any damage, and repair the damage before restarting and operating the tiller.
- Exercise caution to avoid slipping or falling.
- If the unit should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble.
- Stop the engine (motor) when leaving the operating position.
- Take all possible precautions when leaving the machine unattended. Disengage the tines, shift into neutral, and stop the engine.
- Before cleaning, repairing, or inspecting, shut off the engine and make certain all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting. Disconnect the cord on electric motors.
- Do not run the engine indoors; exhaust fumes are dangerous.
- Never operate the tiller without proper guards, plates, or other safety protective devices in place.
- Keep children and pets away.
- Do not overload the machine capacity by attempting to till too deep at too fast a rate.
- Never operate the machine at high speeds on slippery surfaces. Look behind and use care when backing.
- Never allow bystanders near the unit.
- Use only attachments and accessories approved by the manufacturer of the tiller.
- Never operate the tiller without good visibility or light.
- Be careful when tilling in hard ground. The tines may catch in the ground and propel the tiller forward. If this occurs, let go of the handlebars and do not restrain the machine.

MAINTENANCE AND STORAGE

- Keep machine, attachments, and accessories in safe working condition.
- Check shear pins, engine mounting bolts, and other bolts at frequent intervals for proper tightness to be sure the equipment is in safe working condition.
- Never store the machine with fuel in the fuel tank inside a building where ignition sources are present, such as hot water and space heaters, clothes dryers, and the like. Allow the engine to cool before storing in any enclosure.
- Always refer to the operator's guide instructions for important details if the tiller is to be stored for an extended period.

- IMPORTANT -

CAUTIONS, IMPORTANTS, AND NOTES ARE A MEANS OF ATTRACTING ATTENTION TO IMPORTANT OR CRITICAL INFORMATION IN THIS MANUAL.

IMPORTANT: USED TO ALERT YOU THAT THERE IS A POSSIBILITY OF DAMAGING THIS EQUIPMENT.

NOTE: Gives essential information that will aid you to better understand, incorporate, or execute a particular set of instructions.

Look for this symbol to point out important safety precautions. It means CAUTION!!! BECOME ALERT!!! YOUR SAFETY IS INVOLVED.

CAUTION: Always disconnect spark plug wire and place wire where it cannot contact spark plug in order to prevent accidental starting when setting up, transporting, adjusting or making repairs.

CONGRATULATIONS on your purchase of a Sears Tiller. It has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problems you cannot easily remedy, please contact your nearest authorized Sears Service Center/Department. They have competent, well-trained technicians and the proper tools to service or repair this unit.

Please read and retain this manual. The instructions will enable you to assemble and maintain your tiller properly. Always observe the "SAFETY RULES".

MODEL NUMBER **944.627592**

SERIAL NUMBER_____

DATE OF PURCHASE _____

THE MODEL AND SERIAL NUMBERS WILL BE FOUND ON THE MODEL PLATE ATTACHED TO THE TOP OF THE TRANSMISSION.

YOU SHOULD RECORD BOTH SERIAL NUMBER AND DATE OF PURCHASE AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

PRODUCT SPECIFICATIONS

HORSEPOWER:	9.0 HP
DISPLACEMENT:	19 cu. in. (311cc)
GASOLINE CAPACITY:	4 Quarts (3.8L) Unleaded Regular
OIL (API-SF/SG/SH) : (CAPACITY: 44 oz.)	SAE 30 (Above 32°F) SAE 3W-30 (Below 32°F)
SPARK PLUG : (GAP: .030")	Champion RJ19LM

MAINTENANCE AGREEMENT

A Sears Maintenance Agreement is available on this product. Contact your nearest Sears store for details.

CUSTOMER RESPONSIBILITIES

- Read and observe the safety rules.
- Follow a regular schedule in maintaining, caring for and using your tiller.
- Follow the instructions under the "Customer Responsibilities" and "Storage" sections of this Owner's Manual.

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 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. SEE YOUR SEARS AUTHORIZED SERVICE CENTER/DEPARTMENT FOR SPARK ARRESTER. REFER TO THE REPAIR PARTS SECTION OF THIS MANUAL FOR PART NUMBER.

LIMITED TWO (2) YEAR WARRANTY ON CRAFTSMAN TILLER

For Two (2) years from date of purchase Sears Canada, Inc. will repair or replace at Sears option free of charge parts which are defective as a result of material or workmanship.

COMMERCIAL OR RENTAL USE:
Warranty on Tiller will be thirty (30) days from date of purchase if used for commercial or rental purposes.

This Warranty does NOT cover:

1. **Pre-delivery set-up.**
2. **Expendable items which become worn during normal use, such as tines, spark plugs, air cleaners, shear pins, and belts.**
3. **Repairs necessary because of operator abuse or negligence, including the failure to operate and maintain the equipment according to the instructions contained in the Owner's Manual.**

Warranty service is available by returning the Craftsman Tiller to the nearest Sears Service Centre/Department in Canada. This warranty applies only while this product is in use in Canada.

This warranty is in addition to any statutory warranty and does not exclude or limit legal rights you may have but shall run concurrently with applicable provincial legislation. Furthermore, some provinces do NOT allow limitation on how long an implied warranty will last so the above limitations may not apply to you.

SEARS CANADA, INC., TORONTO, ONTARIO M5B 2B8

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ASSEMBLY

Your new tiller has been assembled at the factory with exception of those parts left unassembled for shipping purposes. To ensure safe and proper operation of your tiller all parts and hardware you assemble must be tightened securely. Use the correct tools as necessary to insure proper tightness.

TOOLS REQUIRED FOR ASSEMBLY

A socket wrench set will make assembly easier. Standard wrench sizes are listed.

(1) Utility knife

(1) Wire cutter

(1) Screwdriver

(1) Tire pressure gauge

(1) Pair of pliers

(1) 9/16" wrench

OPERATOR'S POSITION (See Fig. 1)

When right or left hand is mentioned in this manual, it means when you are in the operating position (standing behind tiller handles).

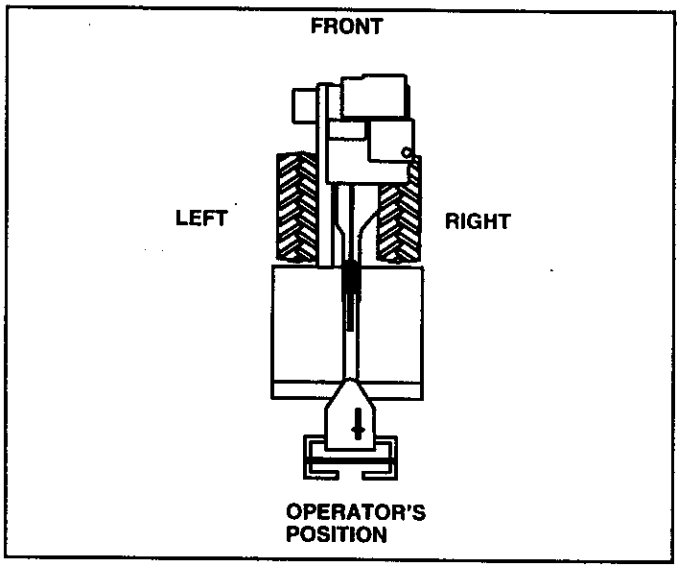
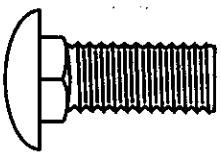


FIG. 1

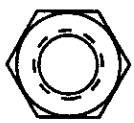
CONTENTS OF HARDWARE PACK

(1) Handle Lock (Black)

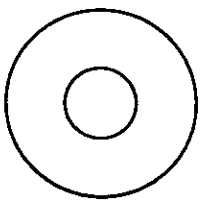
(1) Handle Lock (Silver)



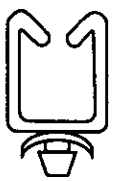
(1) Carriage Bolt 3/8-16 UNC x 1 Gr. 5



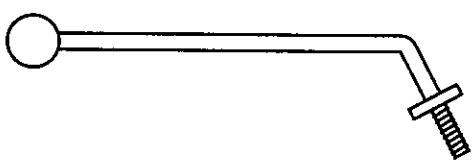
(1) Center Locknut 3/8-16 UNC



(1) Flat Washer 13/32 x 1 x 11 Ga.

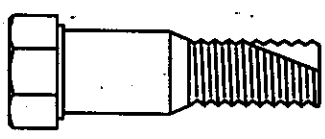


(1) Cable Clip



(1) Handle Lock Lever

(2) Hairpin Clips



(1) Pivot Bolt 3/8-16 UNC Grade 5

ASSEMBLY

UNPACKING CARTON (See Fig. 2)

CAUTION: Be careful of exposed staples when handling or disposing of cartoning material.

IMPORTANT: WHEN UNPACKING AND ASSEMBLING TILLER, BE CAREFUL NOT TO STRETCH OR KINK CABLES.

- While holding handle assembly, cut cable ties securing handle assembly to top frame. Let handle assembly rest on tiller.
- Remove top frame of carton.
- Slowly ease handle assembly up and place on top of carton.
- Cut down right hand front and right hand rear corners of carton. Lay side carton wall down.
- Remove packing material from handle assembly.

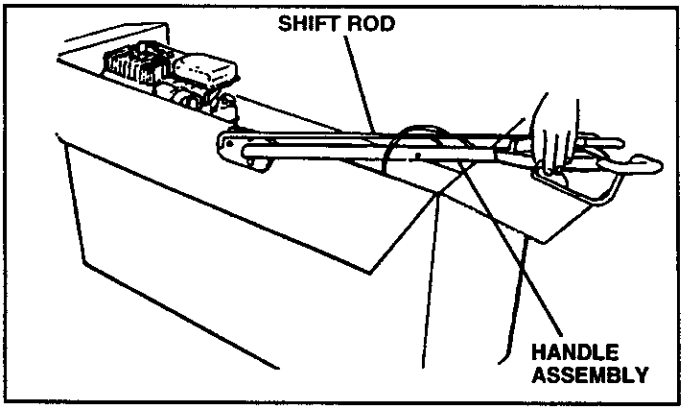


FIG. 2

INSTALL HANDLE (See Figs. 3, 4, and 5)

- Insert the thicker black handle lock (with teeth facing to the right) in gearcase notch.
- Grasp handle assembly. Hold in "up" position. Be sure handle lock remains in gearcase notch. Slide handle assembly into position.

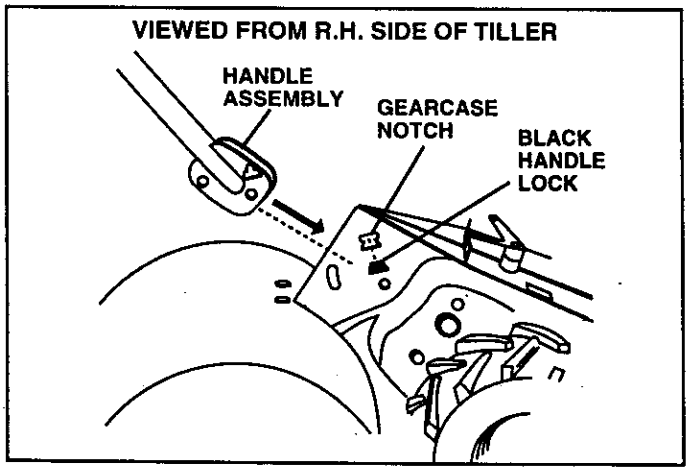


FIG. 3

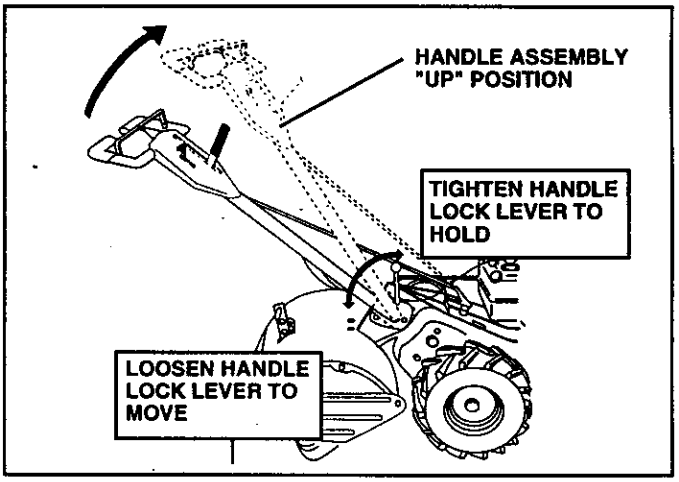


FIG. 4

- Rotate handle assembly down. Insert rear carriage bolt first, with head of bolt on L.H. side of tiller and loosely assemble locknut (See Fig. 5).
- Insert pivot bolt in front part of plate and tighten.
- Cut down left hand rear corner of carton. Lay rear carton wall down, which will remove the protective cardboard flap from leveling shield.
- Cut down remaining corners of carton and lay panels flat.
- Lower the handle assembly. Tighten nut on carriage bolt so handle moves with some resistance. This will allow for easier adjustment.
- Place flat washer on threaded end of handle lock lever.
- Insert handle lock lever through handle base and gearcase. Screw in handle lock lever just enough to hold lever in place.
- Insert the smaller silver handle lock (with teeth inward) in the slot of the handle base (just inside of washer).
- With handle assembly in lowest position, securely tighten handle lock lever by rotating clockwise. Leaving handle assembly in lowest position will make it easier to remove tiller from carton.

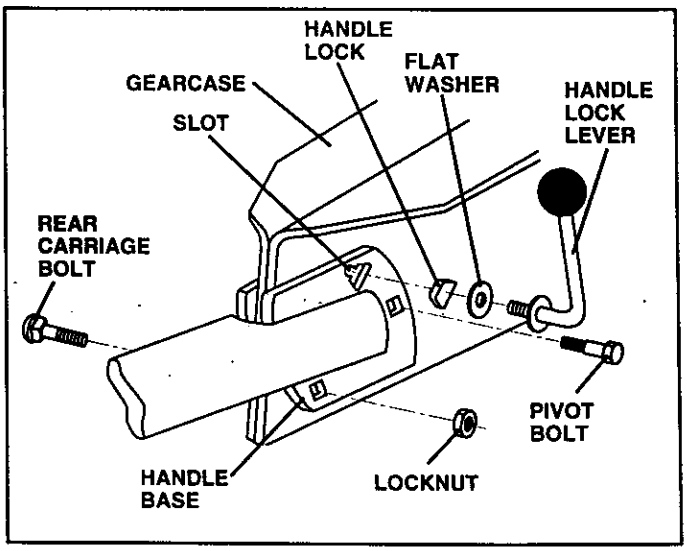


FIG. 5

ASSEMBLY

INSERT CABLE CLIP (See Fig. 6)

- Insert plastic cable clip into hole on the back of handle column. Push cables into clip.

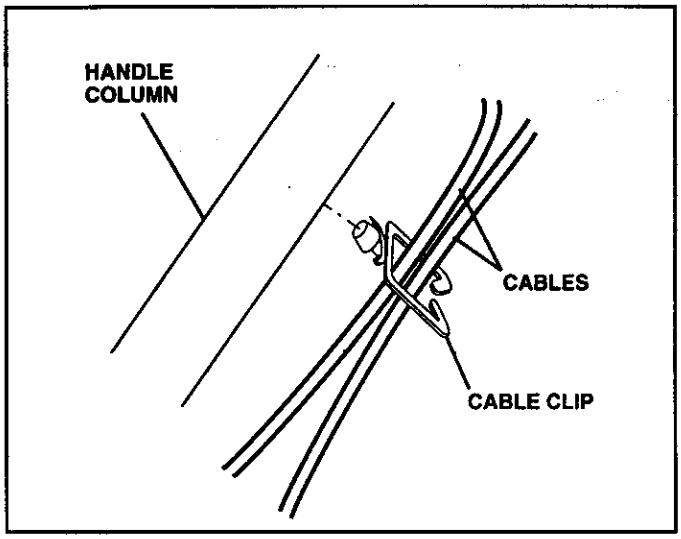


FIG. 6

CONNECT SHIFT ROD (See Fig. 7)

- Insert end of shift into hole of shift lever indicator.
- Insert hairpin clip through hole of shift rod to secure.

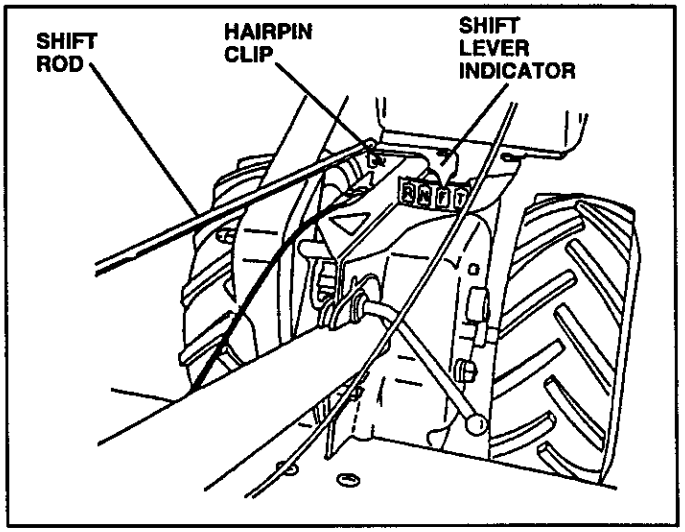


FIG. 7

REMOVE TILLER FROM CRATE

- Make sure shift lever indicator is in "N" (neutral) position (See Fig. 7)
- Tilt tiller forward by lifting handle
- Rotate tiller handle to the right and pull tiller out of carton.

CHECK TIRE PRESSURE

The tires on your unit were overinflated at the factory for shipping purposes. Correct and equal tire pressure is important for best tilling performance.

- Reduce tire pressure to 20 PSI.

HANDLE HEIGHT

- Handle height may be adjusted to better suit operator. (See "TO ADJUST HANDLE HEIGHT" in the Service and Adjustments section of this manual).

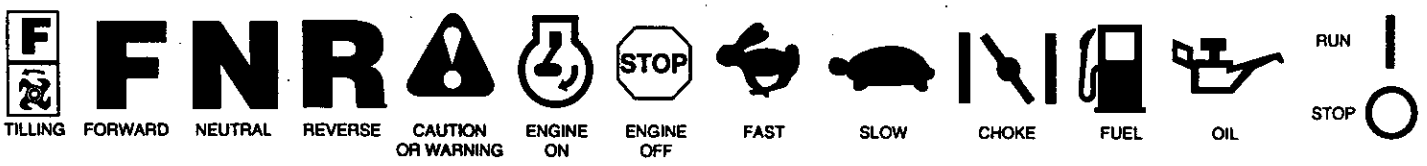
OPERATION

KNOW YOUR TILLER

READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR TILLER.

Compare the illustrations with your tiller to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.

These symbols may appear on your Tiller or in literature supplied with the product. Learn and understand their meaning.



TILLING FORWARD NEUTRAL REVERSE CAUTION OR WARNING ENGINE ON ENGINE OFF FAST SLOW CHOKE FUEL OIL

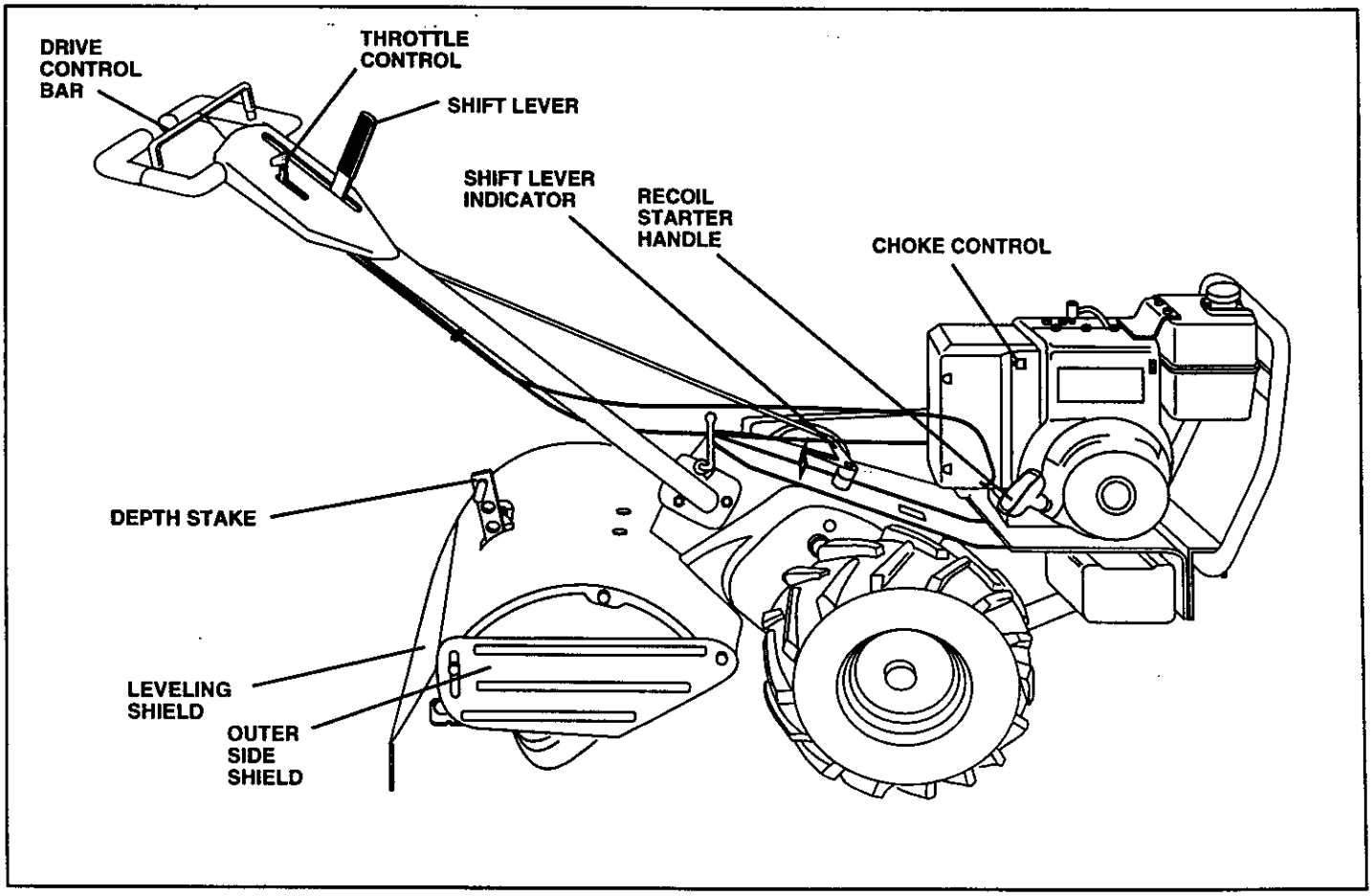


FIG. 8

MEETS ANSI SAFETY REQUIREMENTS

Our tillers conform to the safety standards of the American National Standards Institute.

DRIVE CONTROL BAR - Used to engage tines.
DEPTH STAKE - Controls depth at which tiller will dig.
LEVELING SHIELD - Levels tilled soil.
OUTER SIDE SHIELD - Adjustable to protect small plants from being buried.
THROTTLE CONTROL - Used to control engine speed.
SHIFT LEVER - Used to shift transmission gears.
SHIFT LEVER INDICATOR - Shows which gear the transmission is in.
RECOIL STARTER HANDLE - Used to start the engine.
CHOKE CONTROL - Used when starting a cold engine.

OPERATION

The operation of any tiller can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before starting your tiller and while tilling. We recommend a wide vision safety mask over spectacles or standard safety glasses.

HOW TO USE YOUR TILLER

Know how to operate all controls before adding fuel and oil or attempting to start engine.

STOPPING (See Fig. 9)

TINES AND DRIVE

- Release drive control bar to stop movement.
- Move shift lever to "N" (neutral) position.

ENGINE

- Move throttle control to "STOP" position. If equipped with stop switch, move switch to "STOP" position.
- Never use choke to stop engine.

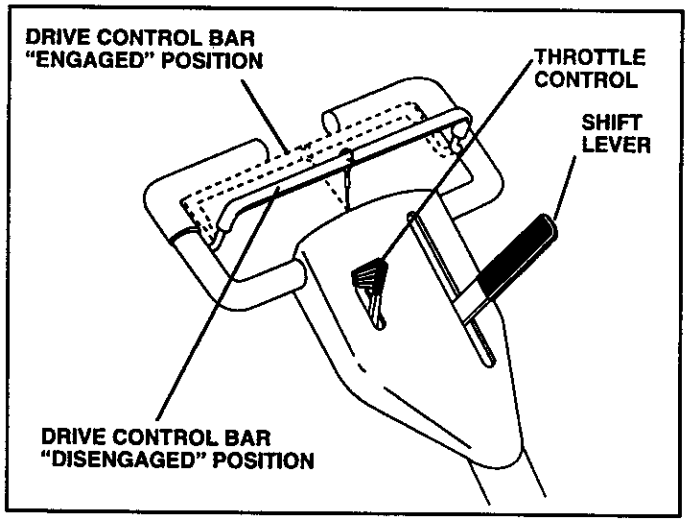


FIG. 9

TINE OPERATION - WITH WHEEL DRIVE

- Always release drive control bar before moving shift lever into another position.
- Tine movement is achieved by moving shift lever to (R) till position and engaging drive control bar.

FORWARD - WHEELS ONLY/TINES STOPPED

- Release drive control bar and move shift lever indicator to "F" (forward) position. Engage drive control bar and tiller will move forward.

REVERSE - WHEELS ONLY/TINES STOPPED

- DO NOT STAND DIRECTLY BEHIND TILLER.
- Release the drive control bar.
- Move throttle control to "SLOW" position.
- Move shift lever indicator to "R" (reverse) position.
- Hold drive control bar against the handle to start tiller movement.

DEPTH STAKE (See Fig. 10)

The depth stake can be raised or lowered to allow you more versatile tilling and cultivating, or to more easily transport your tiller.

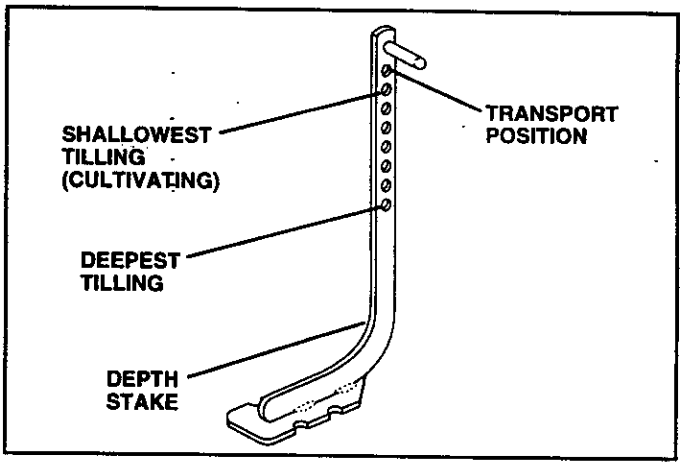


FIG. 10

TILLING (See Fig. 11)

- Release depth stake pin. Pull the depth stake up for increased tilling depth. Place depth stake pin in hole of depth stake to lock in position.
- Place shift lever indicator in till position.
- Hold the drive control bar against the handle to start tilling movement. Tines and wheels will both turn.
- Move throttle control to "FAST" position for deep tilling. To cultivate, throttle control can be set at any desired speed, depending on how fast or slow you wish to cultivate.

IMPORTANT: ALWAYS RELEASE DRIVE CONTROL BAR BEFORE MOVING SHIFT LEVER INTO ANOTHER POSITION.

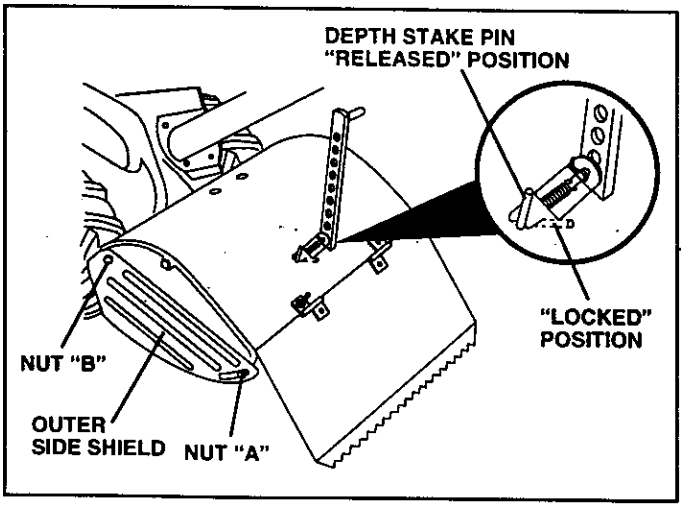


FIG. 11

OPERATION

TURNING

- Release the drive control bar.
- Move throttle control to "SLOW" position.
- Place shift lever indicator in "F" (forward) position. Tines will not turn.
- Lift handle to raise tines out of ground.
- Swing the handle in the opposite direction you wish to turn, being careful to keep feet and legs away from tines.
- When you have completed your turn-around, release the drive control bar and lower handle. Place shift lever in till position and move throttle control to desired speed. To begin tilling, hold drive control bar against the handle.

OUTER SIDE SHIELDS (See Fig. 11)

The back edges of the outer side shields are slotted so that the shields can be raised for deep tilling and lowered for shallow tilling to protect small plants from being buried. Loosen nut "A" in slot and nut "B". Move shield to desired position (both sides). Retighten nuts.

TO TRANSPORT

CAUTION: Before lifting or transporting, allow tiller engine and muffler to cool. Disconnect spark plug wire. Drain gasoline from fuel tank.

AROUND THE YARD

- Release the depth stake pin. Move the depth stake down to the top hole for transporting the tiller. Place depth stake pin in hole of depth stake to lock in position. This prevents tines from scuffing the ground.
- Place shift lever indicator in "F" (forward) position for transporting.
- Hold the drive control bar against the handle to start tiller movement. Tines will not turn.
- Move throttle control to desired speed.

AROUND TOWN

- Disconnect spark plug wire.
- Drain fuel tank.
- Transport in upright position to prevent oil leakage.

BEFORE STARTING ENGINE

IMPORTANT: BE VERY CAREFUL NOT TO ALLOW DIRT TO ENTER THE ENGINE WHEN CHECKING OR ADDING OIL OR FUEL. USE CLEAN OIL AND FUEL AND STORE IN APPROVED, CLEAN, COVERED CONTAINERS. USE CLEAN FILL FUNNELS.

CHECK ENGINE OIL LEVEL (See Fig. 12)

- The engine in your unit has been shipped, from the factory, already filled with SAE 30 summer weight oil.
- With engine level, clean area around oil filler plug and remove plug.
- Engine oil should be to point of overflowing when engine is level. For approximate capacity see "PRODUCT SPECIFICATIONS" on page 3 of this manual. All oil must meet A.P.I. Service Classification SF, SG or SH.
- For cold weather operation you should change oil for easier starting (See oil viscosity chart in the Customer Responsibilities section of this manual).
- To change engine oil, see the Customer Responsibilities section in this manual.

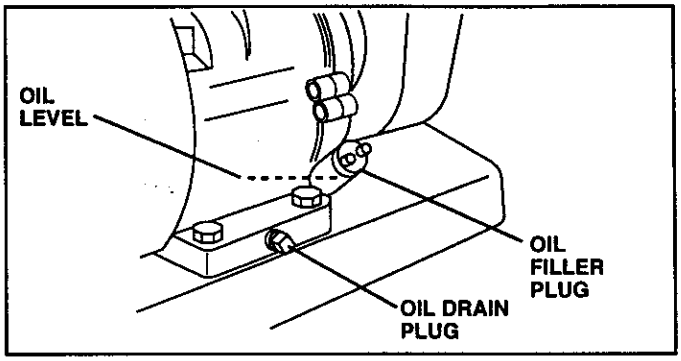


FIG. 12

ADD GASOLINE

- Fill fuel tank. Use fresh, clean, regular unleaded gasoline. (Use of leaded gasoline will increase carbon and lead oxide deposits and reduce valve life.)

IMPORTANT: WHEN OPERATING IN TEMPERATURES BELOW 32°F (0°C), USE FRESH, CLEAN, WINTER GRADE GASOLINE TO HELP INSURE GOOD COLD WEATHER STARTING.

WARNING: Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. **To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer.** Drain the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. **Use fresh fuel next season.** See Storage section of this manual for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

CAUTION: Fill to within 1/2 inch of top of fuel tank to prevent spills and to allow for fuel expansion. If gasoline is accidentally spilled, move machine away from area of spill. Avoid creating any source of ignition until gasoline vapors have disappeared.

Do not overfill. Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.

OPERATION

TO START ENGINE (See Fig. 13)

CAUTION: Keep drive control bar in "DISENGAGED" position when starting engine.

- Make sure spark plug wire is properly connected, and fuel shut-off valve is open.
- Move shift lever indicator to "N" (neutral) position.
- Place throttle control in "FAST" position.
- Move choke control to full "CHOKE" position. Grasp recoil starter handle with one hand and grasp tiller handle with other hand. Pull rope out slowly until engine reaches start of compression cycle (rope will pull slightly harder at this point).
- Pull recoil starter handle quickly. Do not let starter handle snap back against starter. Repeat if necessary.
- If engine fires but does not start, move choke control to half choke position. Pull recoil starter handle until engine starts.
- When engine starts, slowly move choke control to "RUN" position as engine warms up.

NOTE: A warm engine requires less choking to start.

- Move throttle control to desired running position.
- Allow engine to warm up for a few minutes before engaging tines.

NOTE: If at a high altitude (above 3000 feet) or in cold temperatures (below 32°F), the carburetor fuel mixture may need to be adjusted for best engine performance. See "TO ADJUST CARBURETOR" in the Service and Adjustments section of this manual.

NOTE: If engine does not start, see troubleshooting points.

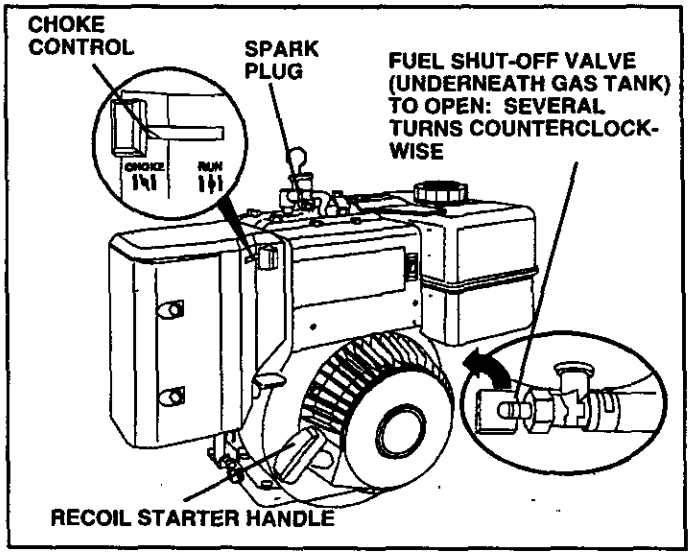


FIG. 13

TILLING HINTS

CAUTION: Until you are accustomed to handling your tiller, start actual field use with throttle in slow position (midway between "FAST" and "IDLE").

- Tilling is digging into, turning over, and breaking up packed soil before planting. Loose, unpacked soil helps root growth. Best tilling depth is 4" to 6". A tiller will also clear the soil of unwanted vegetation. The decomposition of this vegetable matter enriches the soil. Depending on the climate (rainfall and wind), it may be advisable to till the soil at the end of the growing season to further condition the soil.
- You will find tilling much easier if you leave a row untilled between passes. Then go back between tilled rows. (See Fig. 14) There are two reasons for doing this. First, wide turns are much easier to negotiate than about-faces. Second, the tiller won't be pulling itself, and you, toward the row next to it.
- Soil conditions are important for proper tilling. Tines will not readily penetrate dry, hard soil which may contribute to excessive bounce and difficult handling of your tiller. Hard soil should be moistened before tilling; however, extremely wet soil will "ball-up" or clump during tilling. Wait until the soil is less wet in order to achieve the best results. When tilling in the fall, remove vines and long grass to prevent them from wrapping around the tine shaft and slowing your tilling operation.
- Do not lean on handle. This takes weight off the wheels and reduces traction. To get through a really tough section of sod or hard ground, apply upward pressure on handle or lower the depth stake.

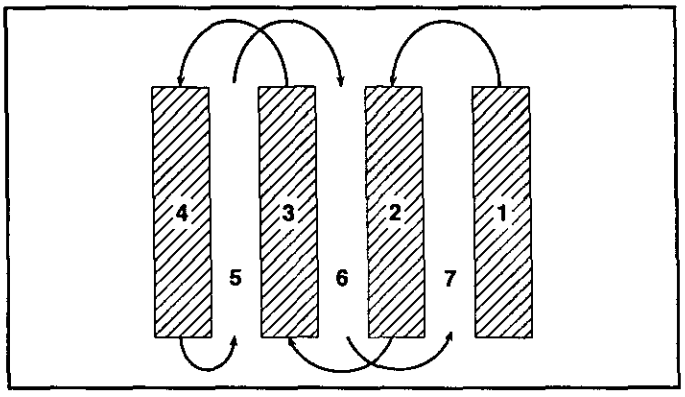


FIG. 14

OPERATION

CULTIVATING

Cultivating is destroying the weeds between rows to prevent them from robbing nourishment and moisture from the plants. At the same time, breaking up the upper layer of soil crust will help retain moisture in the soil. Best digging depth is 1" to 3". Lower the outer side shields to protect small plants from being buried.

- Cultivate up and down the rows at a speed which will allow tines to uproot weeds and leave the ground in rough condition, promoting no further growth of weeds and grass (See Fig. 15).

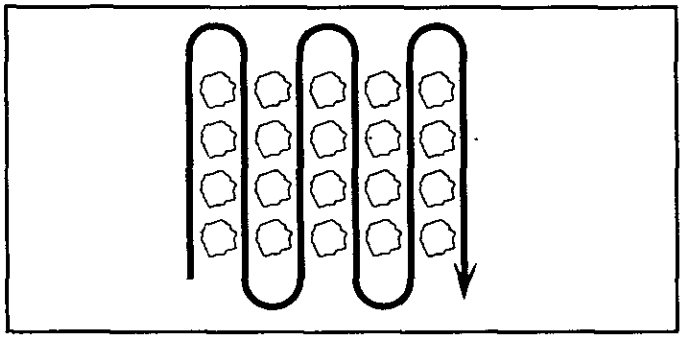


FIG. 15

TINE SHEAR PINS

The tine assemblies on your tiller are secured to the tine shaft with shear pins (See "TINE REPLACEMENT" in the Service and Adjustments section of this manual).

If the tiller is unusually overloaded or jammed, the shear pins are designed to break before internal damage occurs to the transmission.

- If shear pin(s) break, replace only with those shown in the Repair Parts section of this manual.

ADJUST WHEELS FOR CULTIVATING (See Figs. 16 and 17)

- Place blocks under right hand side of tiller and remove hairpin clip and clevis pin from right hand wheel.
- Move wheel outward approximately 1 inch until hole in inner wheel hub lines up with inner hole in axle.
- Replace clevis pin and hairpin clip on inside of wheel and remove blocks.
- Repeat preceding steps on left hand side.

NOTE: In extremely rough conditions and while cultivating, the wheels should be moved outward on the axle for increased stability.

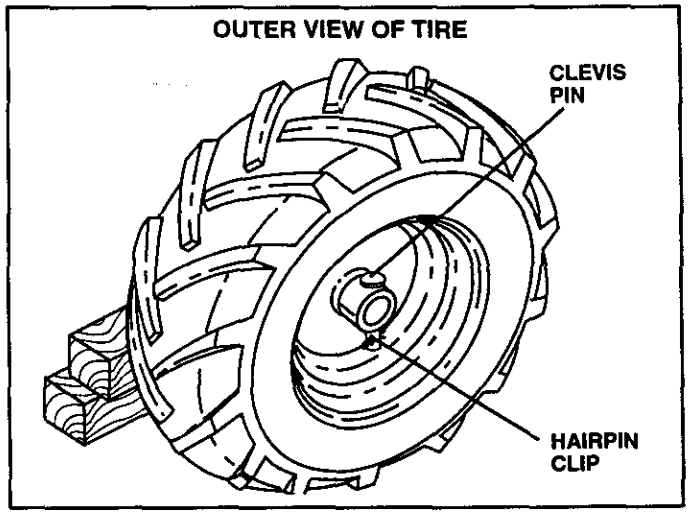


FIG. 16

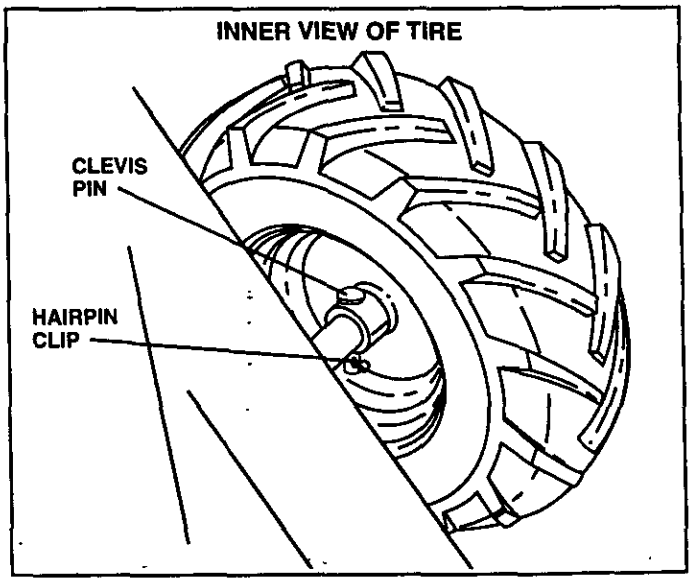


FIG. 17

CUSTOMER RESPONSIBILITIES

MAINTENANCE SCHEDULE FILL IN DATES AS YOU COMPLETE REGULAR SERVICE	BEFORE EACH USE	EVERY 5 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	SERVICE DATES									
Check Engine Oil Level	✔	✔												
Change Engine Oil				✔1,2										
Oil Pivot Points		✔												
Inspect Spark Arrester / Muffler				✔										
Inspect Air Screen	✔													
Clean or Replace Air Cleaner Cartridge				✔2										
Clean Engine Cylinder Fins				✔										
Replace Spark Plug				✔										

1 - Change more often when operating under a heavy load or in high ambient temperatures.
2 - Service more often when operating in dirty or dusty conditions.

GENERAL RECOMMENDATIONS

The warranty on this tiller does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, the operator must maintain tiller as instructed in this manual.

Some adjustments will need to be made periodically to properly maintain your tiller.

All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

- Once a year you should replace the spark plug, clean or replace air filter, and check tines and belts for wear. A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

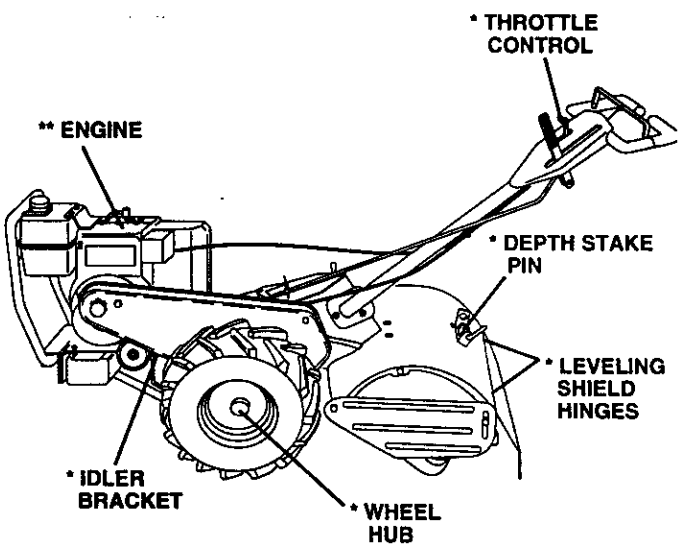
BEFORE EACH USE

- Check engine oil level.
- Check tine operation.
- Check for loose fasteners.

LUBRICATION

Keep unit well lubricated (See "LUBRICATION CHART") .

LUBRICATION CHART



* SAE 30 OR 5W-30 MOTOR OIL
** REFER TO CUSTOMER RESPONSIBILITIES "ENGINE" SECTION

CUSTOMER RESPONSIBILITIES

Disconnect spark plug wire before performing any maintenance (except carburetor adjustment) to prevent accidental starting of engine.

Prevent fires! Keep the engine free of grass, leaves, spilled oil, or fuel. Remove fuel from tank before tipping unit for maintenance. Clean muffler area of all grass, dirt, and debris.

Do not touch hot muffler or cylinder fins as contact may cause burns.

ENGINE

LUBRICATION

Use only high quality detergent oil rated with API service classification SF, SG or SH. Select the oil's SAE viscosity grade according to your expected temperature.

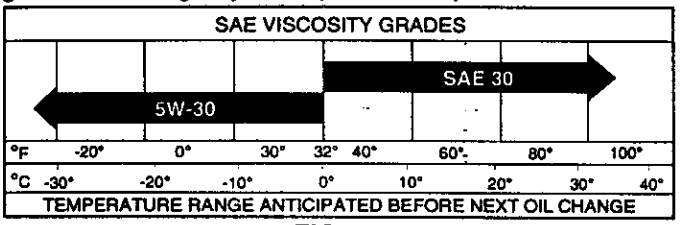


FIG. 18

NOTE: Although multi-viscosity oils (5W-30, 10W-30, etc.) improve starting in cold weather, these multi-viscosity oils will result in increased oil consumption when used above 32°F (0°C). Check your engine oil level more frequently to avoid possible engine damage from running low on oil.

Change the oil after every 50 hours of operation or at least once a year if the tiller is not used for 50 hours in one year.

Check the crankcase oil level before starting the engine and after each five (5) hours of continuous use. Add SAE 30 motor oil or equivalent. Tighten oil filler plug securely each time you check the oil level.

TO CHANGE ENGINE OIL (See Figs. 18 and 19)

Determine temperature range expected before oil change. All oil must meet API service classification SF, SG or SH.

- Be sure tiller is on level surface.
- Oil will drain more freely when warm.
- Use a funnel to prevent oil spill on tiller, and catch oil in a suitable container.
- Remove drain plug, For easier removal of plug use 7/16 12 pt socket with extension.
- Tip tiller forward to drain oil.
- After oil has drained completely, replace oil drain plug and tighten securely.
- Remove oil filler plug. Be careful not to allow dirt to enter the engine.
- Refill engine with oil. See "CHECK ENGINE OIL LEVEL" in the Operation section of this manual.

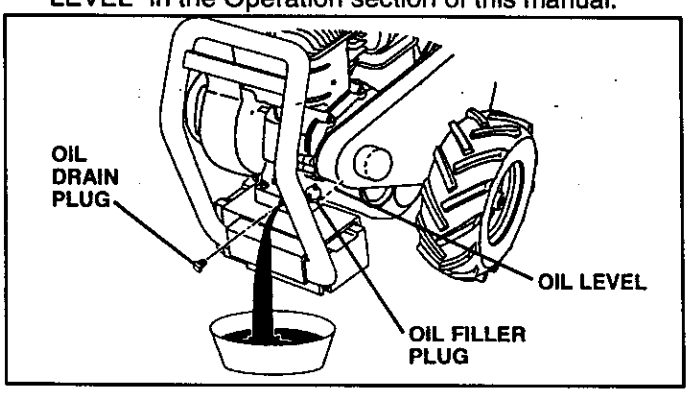


FIG. 19

AIR FILTER (See Fig. 20)

Your engine will not run properly using a dirty air filter. Clean the foam pre-cleaner after every 25 hours of operation or every season. Service paper cartridge every 100 hours of operation or every season, whichever occurs first. Service air cleaner more often under dusty conditions.

- Loosen air cleaner cover screws. Remove cover and air cleaner assembly from base.
- Remove air cleaner assembly from inside cover and disassemble.

TO SERVICE PRE-CLEANER

- Wash it in liquid detergent and water.
- Squeeze it dry in a clean cloth.
- Saturate it in engine oil. Wrap it in clean, absorbent cloth and squeeze to remove excess oil.

TO SERVICE CARTRIDGE

- Gently tap the flat side of the paper cartridge to dislodge dirt. Do not wash the paper cartridge or use pressurized air, as this will damage the cartridge. Replace a dirty, bent, or damaged cartridge.
- Reassemble retainer on pre-cleaner and cartridge (screen side of pre-cleaner toward cartridge pleats). Place assembly into cover.
- Insert tabs on cover into slots in base and tighten cover screws securely.

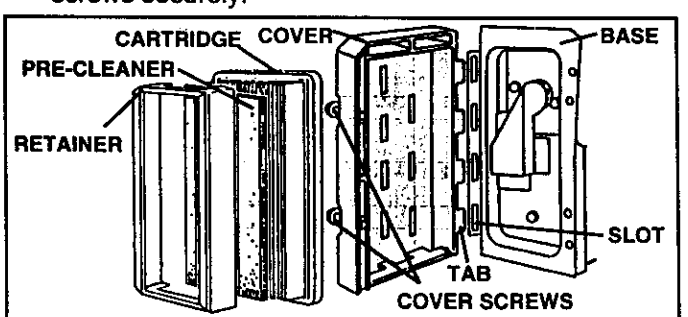


FIG. 20

COOLING SYSTEM (See Fig. 21)

Your engine is air cooled. For proper engine performance and long life keep your engine clean.

- Clean air screen frequently using a stiff-bristled brush.
- Remove blower housing and clean as necessary.
- Keep cylinder fins free of dirt and chaff.

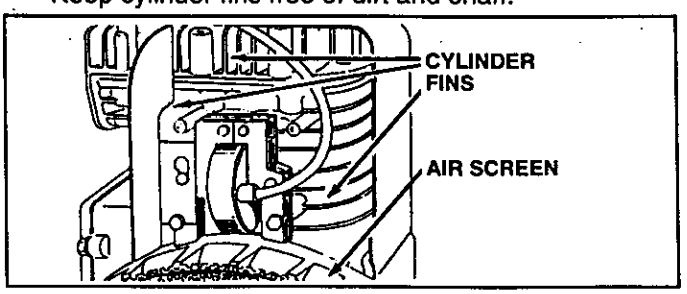


FIG. 21

CUSTOMER RESPONSIBILITIES

MUFFLER

Do not operate tiller without muffler. Do not tamper with exhaust system. Damaged mufflers or spark arresters could create a fire hazard. Inspect periodically and replace if necessary. If your engine is equipped with a spark arrester screen assembly, remove every 50 hours for cleaning and inspection. Replace if damaged.

SPARK PLUG

Replace spark plugs at the beginning of each tilling season or after every 50 hours of use, whichever comes first. Spark plug type and gap setting is shown in "PRODUCT SPECIFICATIONS" on page 3 of this manual.

TRANSMISSION

Your transmission is sealed and will only require lubrication if serviced.

CLEANING

- Clean engine, wheels, finish, etc. of all foreign matter.
- Keep finished surfaces and wheels free of all gasoline, oil, etc.
- Protect painted surfaces with automotive type wax.

We do not recommend using a garden hose to clean your unit unless the muffler, air filter and carburetor are covered to keep water out. Water in engine can result in a shortened engine life.

SERVICE AND ADJUSTMENTS

CAUTION: Disconnect spark plug wire from spark plug and place wire where it cannot come into contact with plug.

TILLER

TO ADJUST HANDLE HEIGHT (See Fig. 22)

Select handle height best suited for your tilling conditions. Handle height will be different when tiller digs into soil.

- First loosen handle lock lever.
- Handle can be positioned at different settings between "HIGH" and "LOW" positions.
- Retighten handle lock lever securely after adjusting.

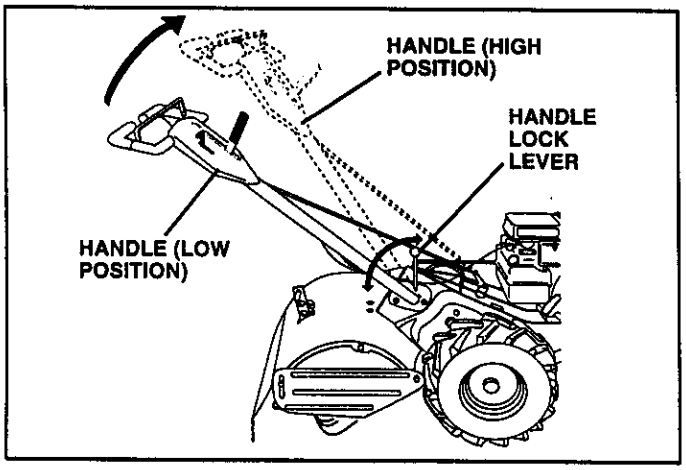


FIG. 22

TIRE CARE

CAUTION: When mounting tires, unless beads are seated, overinflation can cause an explosion.

- Maintain 20 pounds of tire pressure. If tire pressures are not equal, tiller will pull to one side.
- Keep tires free of gasoline or oil which can damage rubber.

TO REMOVE WHEEL (See Fig. 23)

- Place blocks under transmission to keep tiller from tipping.
- Remove outer side shield by removing nuts "A" and "B".
- Remove inner side shield by removing nuts "C" and "D".
- Remove hairpin clip and clevis pin from wheel.
- Remove wheel and tire.
- Repair tire and reassemble.

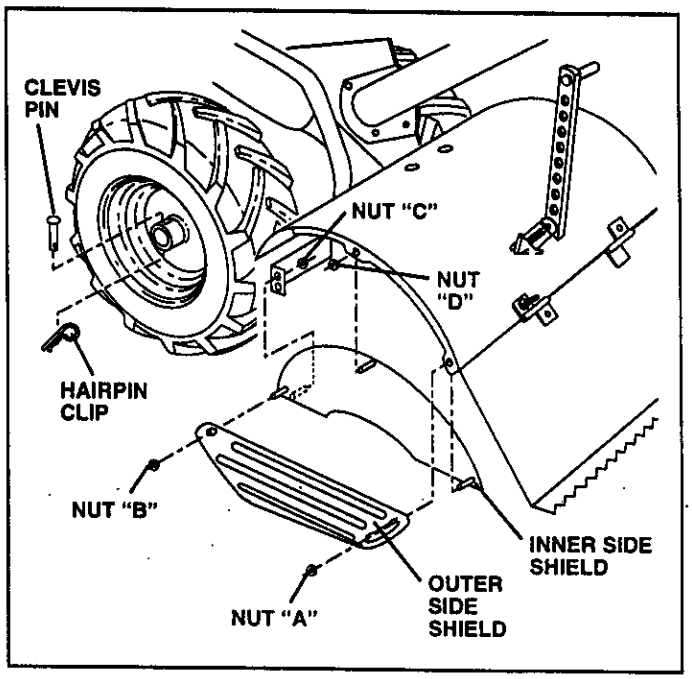


FIG. 23

SERVICE AND ADJUSTMENTS

TO REMOVE BELT GUARD (See Fig. 24)

- Remove hairpin clip and clevis pin from left wheel. Pull wheel out from tiller about 1 inch.
- Remove cap nut and washer, and hex bolt and washer from side of belt guard.
- Remove hex nut and washer from bottom of belt guard (located behind wheel).
- Pull belt guard out and away from tiller.
- Replace belt guard by reversing above procedure.

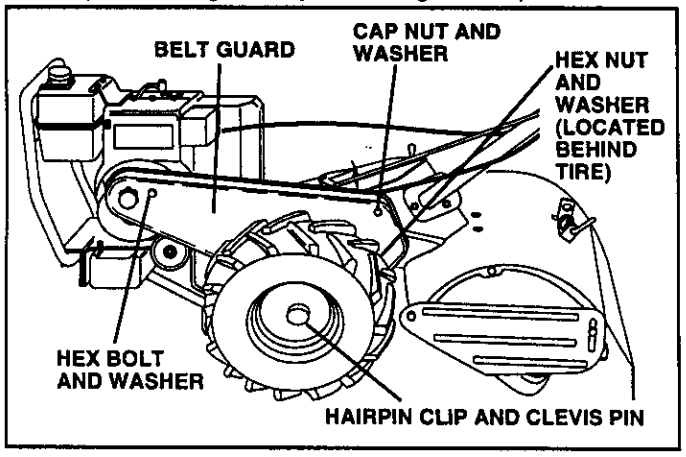


FIG. 24

TO REPLACE GROUND DRIVE BELT (See Figs. 24 and 25)

- Remove belt guard. (See "TO REMOVE BELT GUARD" in this section of this manual).
- Loosen belt guides "A" and "B".
- Remove old belt by slipping from engine pulley first.
- Place new belt in groove of transmission pulley and into engine pulley. BELT MUST BE IN GROOVE ON TOP OF IDLER PULLEY. NOTE POSITION OF BELT TO GUIDES.
- Tighten belt guides "A" and "B".
- Check belt adjustment as described below.
- Replace belt guard.
- Reposition wheel and replace clevis pin and hairpin clip.

GROUND DRIVE BELT ADJUSTMENT (See Fig. 25)

For proper belt tension, the extension spring should have about 5/8 inch stretch when drive control bar is in "ENGAGED" position. This tension can be attained as follows:

- Loosen cable clip screw securing the drive control cable.
- Slide cable forward for less tension and rearward for more tension until about 5/8 inch stretch is obtained while the drive control bar is engaged.
- Tighten cable clip screw securely.

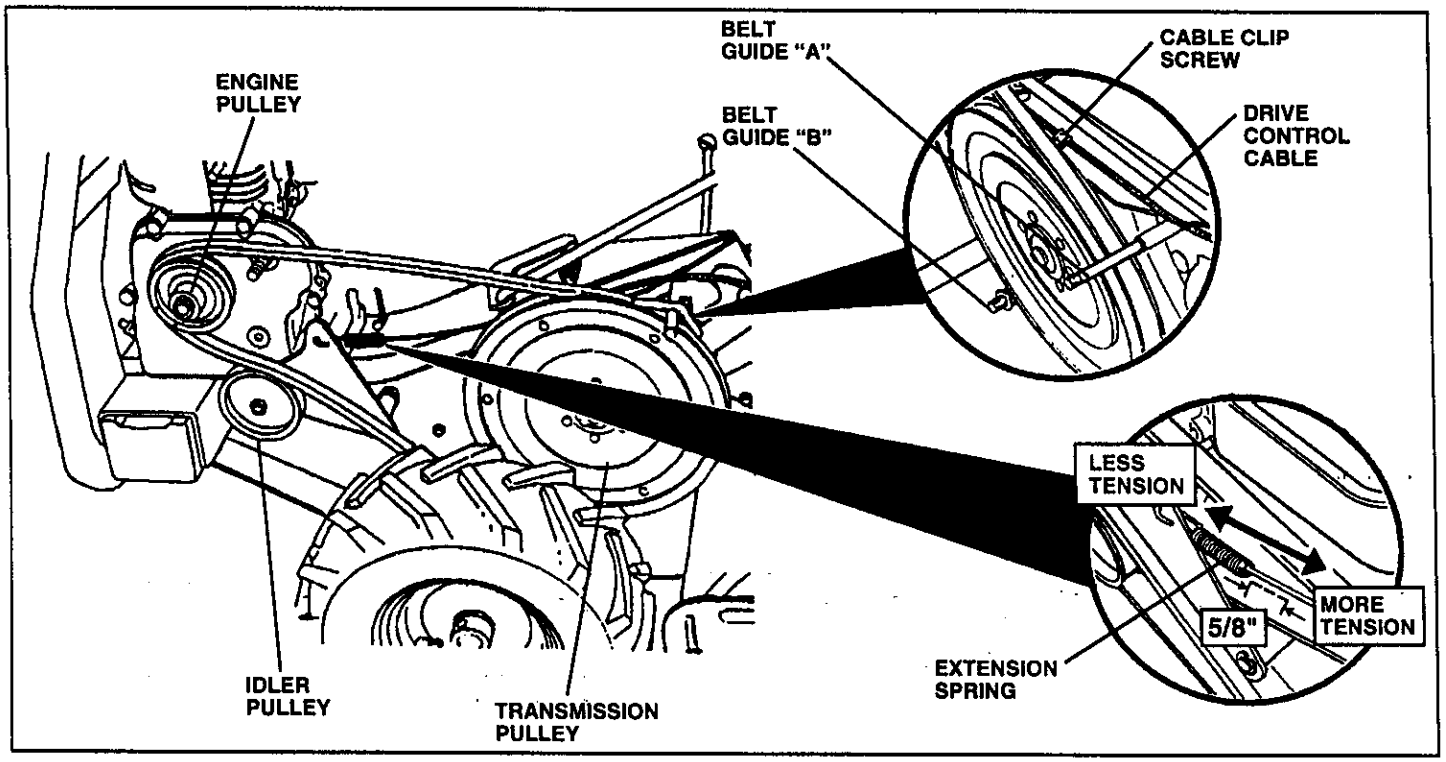


FIG. 25

SERVICE AND ADJUSTMENTS

TINE REPLACEMENT
(See Figs. 26, 27 and 28)

CAUTION: Tines are sharp. Wear gloves or other protection when handling tines.

A badly worn tine causes your tiller to work harder and dig more shallow. Most important, worn tines cannot chop and shred organic matter as effectively nor bury it as deeply as good tines. A tine this worn needs to be replaced.

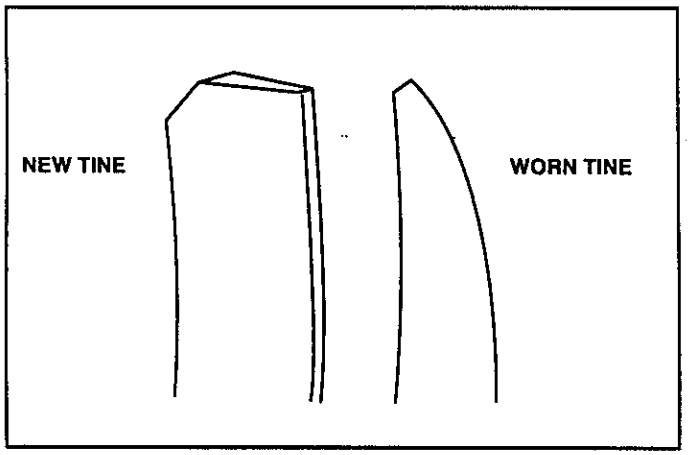


FIG. 26

- To maintain the superb tilling performance of this machine the tines should be checked for sharpness, wear, and bending, particularly the tines which are next to the transmission. If the gap between the tines exceeds 3-1/2 inches they should be replaced or straightened as necessary.
- New tines should be assembled as shown in Fig. 28. Sharpened tine edges will rotate rearward from above.

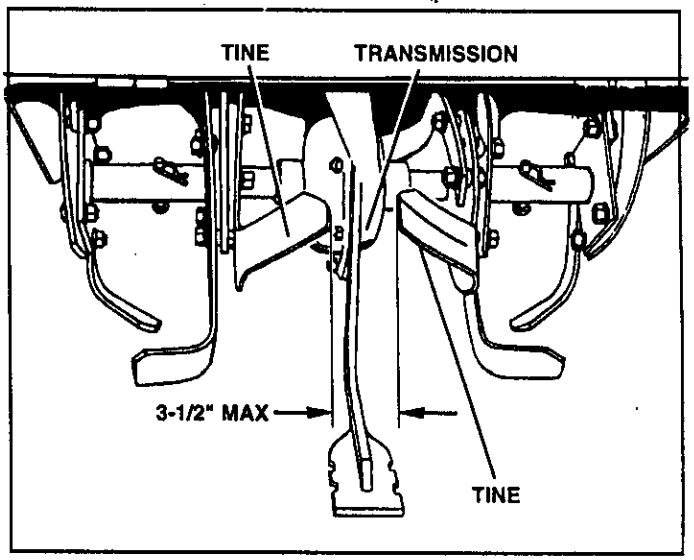


FIG. 27

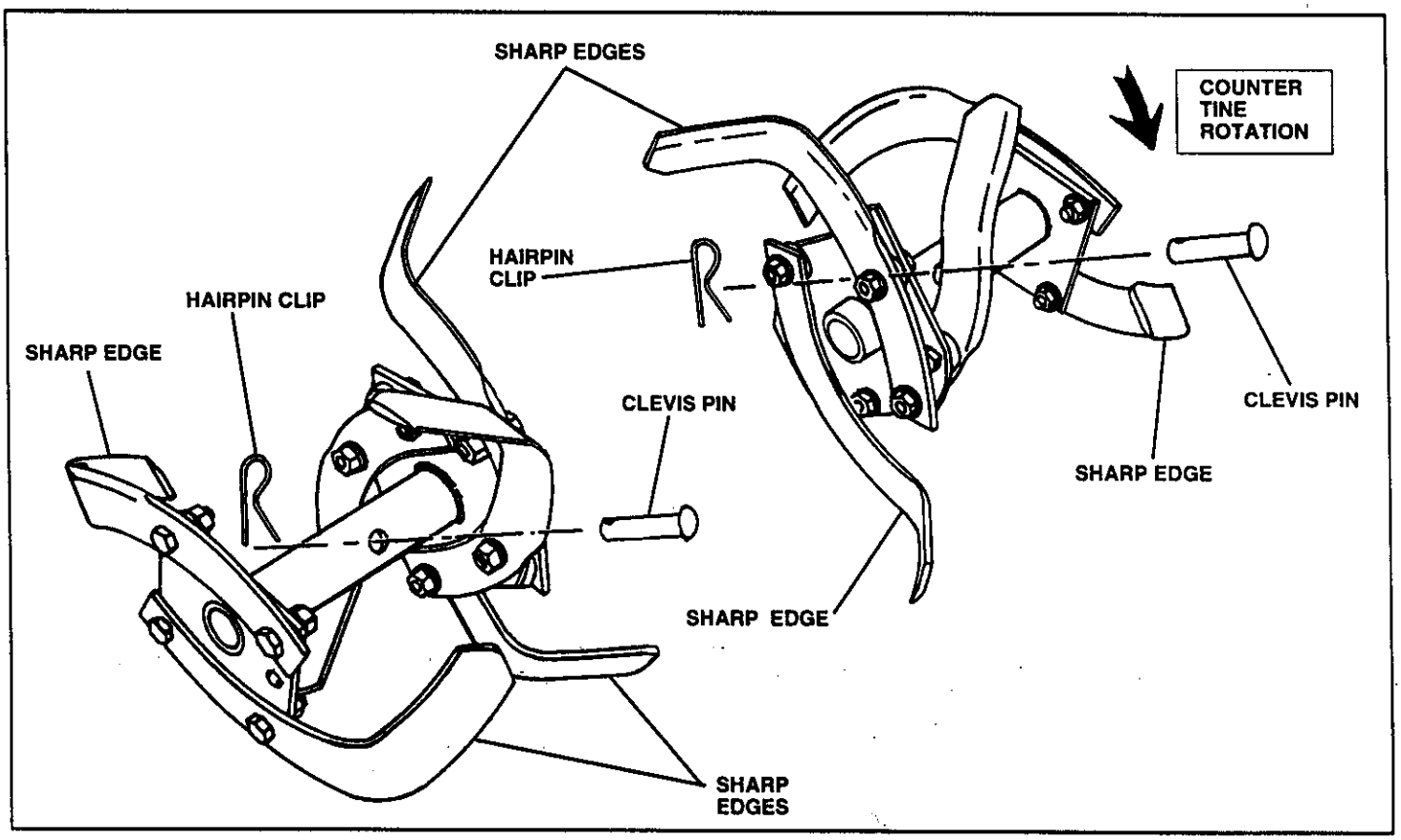


FIG. 28

SERVICE AND ADJUSTMENTS

ENGINE

Maintenance, repair, or replacement of the emission control devices and systems, which are being done at the customers expense, may be performed by any non-road engine repair establishment or individual. Warranty repairs must be performed by an authorized engine manufacturer's service outlet.

TO ADJUST THROTTLE CONTROL CABLE (See Fig. 29)

- Loosen cable clamp screw to allow cable to move.
- Move throttle control lever on upper handle to "FAST" position.
- Pull throttle cable out to end of travel
- Hold cable in this position and tighten clamp screw securely.

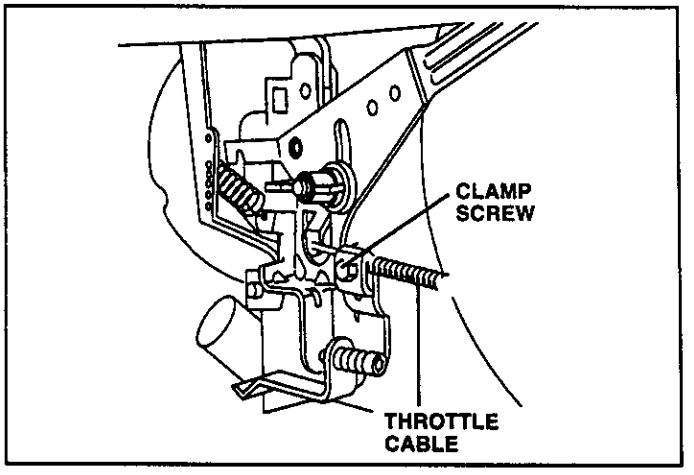


FIG. 29

TO ADJUST CARBURETOR (See Fig. 30)

The carburetor has a high speed jet and has been preset at the factory and adjustment should not be necessary. However, minor adjustments may be required to compensate for differences in fuel, temperature, altitude or load. If the carburetor does need adjustment, proceed as follows.

IDLE RPM ADJUSTMENT

- To adjust idle RPM, rotate throttle linkage counterclockwise and hold against stop while adjusting idle speed adjusting screw to obtain 1750 RPM. Release throttle linkage.

ACCELERATION TEST

- Move throttle control lever from "SLOW" to "FAST" position. If engine hesitates or dies, turn needle valve out (counterclockwise) 1/8 turn. Repeat test and continue to adjust, if necessary, until engine accelerates smoothly.

High speed stop is factory adjusted. Do not adjust or damage may result.

IMPORTANT: NEVER TAMPER WITH THE ENGINE GOVERNOR, WHICH IS FACTORY SET FOR PROPER ENGINE SPEED. OVERSPEEDING THE ENGINE ABOVE THE FACTORY HIGH SPEED SETTING CAN BE DANGEROUS. IF YOU THINK THE ENGINE-GOVERNED HIGH SPEED NEEDS ADJUSTING, CONTACT YOUR NEAREST AUTHORIZED SERVICE CENTER/ DEPARTMENT, WHICH HAS THE PROPER EQUIPMENT AND EXPERIENCE TO MAKE ANY NECESSARY ADJUSTMENTS.

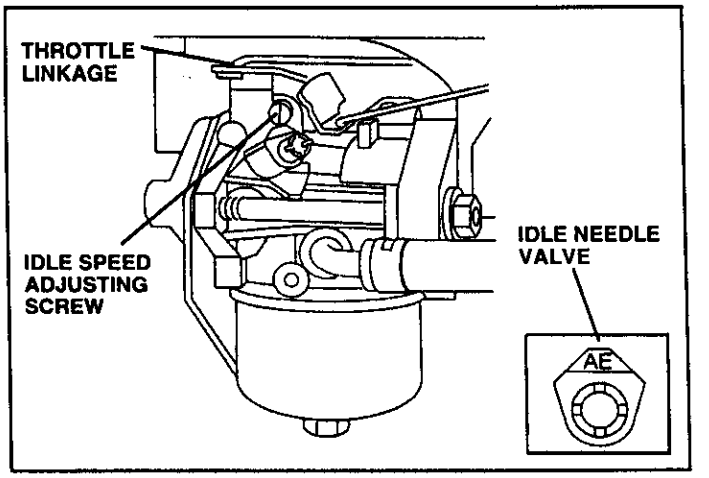


FIG. 30

STORAGE

Immediately prepare your tiller for storage at the end of the season or if the unit will not be used for 30 days or more.

CAUTION: Never store the tiller with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

TILLER

- Clean entire tiller (See "CLEANING" in the Customer Responsibilities section of this manual).
- Inspect and replace belts, if necessary (See belt replacement instructions in the Service and Adjustments section of this manual).
- Lubricate as shown in the Customer Responsibilities section of this manual.
- Be sure that all nuts, bolts and screws are securely fastened. Inspect moving parts for damage, breakage and wear. Replace if necessary.
- Touch up all rusted or chipped paint surfaces; sand lightly before painting.

ENGINE

FUEL SYSTEM

IMPORTANT: IT IS IMPORTANT TO PREVENT GUM DEPOSITS FROM FORMING IN ESSENTIAL FUEL SYSTEM PARTS SUCH AS THE CARBURETOR, FUEL FILTER, FUEL HOSE, OR TANK DURING STORAGE. ALSO, EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OR USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF AN ENGINE WHILE IN STORAGE.

- Drain the fuel tank.
- Start the engine and let it run until the fuel lines and carburetor are empty.
- Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.
- Use fresh fuel next season.

NOTE: Fuel stabilizer is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow the mix ratio found on stabilizer container. Run engine at least 10 minutes after adding stabilizer to allow the stabilizer to reach the carburetor. Do not drain the gas tank and carburetor if using fuel stabilizer.

ENGINE OIL

Drain oil (with engine warm) and replace with clean oil. (See "ENGINE" in the Customer Responsibilities section of this manual).

CYLINDER(S)

- Remove spark plug.
- Pour 1 ounce (29 ml) of oil through spark plug hole into cylinder.
- Pull starter handle slowly several times to distribute oil.
- Replace with new spark plug.

OTHER

- **Do not store gasoline from one season to another.**
- Replace your gasoline can if your can starts to rust. Rust and/or dirt in your gasoline will cause problems.
- If possible, store your unit indoors and cover it to give protection from dust and dirt.
- Cover your unit with a suitable protective cover that does not retain moisture. Do not use plastic. Plastic cannot breathe which allows condensation to form and will cause your unit to rust.

IMPORTANT: NEVER COVER TILLER WHILE ENGINE AND EXHAUST AREAS ARE STILL WARM.

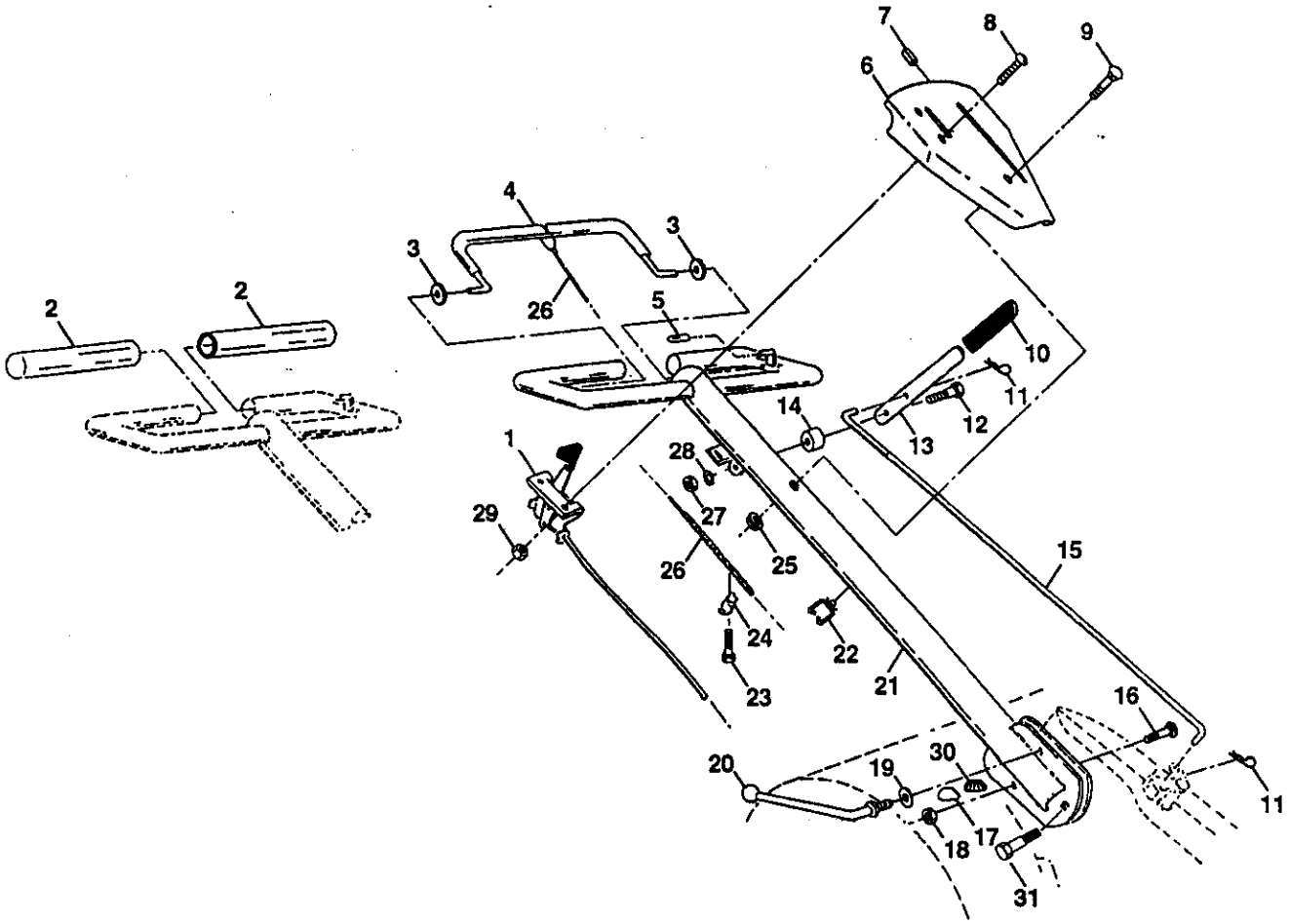
TROUBLESHOOTING POINTS

PROBLEM	CAUSE	CORRECTION
Will not start	1. Out of fuel. 2. Engine not "CHOKED" properly. 3. Engine flooded. 4. Dirty air cleaner. 5. Water in fuel. 6. Clogged fuel tank. 7. Loose spark plug wire. 8. Bad spark plug or improper gap. 9. Carburetor out of adjustment. 10. Oil soaked air filter.	1. Fill fuel tank. 2. See "TO START ENGINE" in Operation section. 3. Wait several minutes before attempting to start. 4. Clean or replace air cleaner cartridge. 5. Drain fuel tank and carburetor, and refill tank with fresh gasoline. 6. Remove fuel tank and clean. 7. Make sure spark plug wire is seated properly on plug. 8. Replace spark plug or adjust gap. 9. Make necessary adjustments. 10. Replace air filter.
Hard to start	1. Throttle control not set properly. 2. Dirty air cleaner. 3. Bad spark plug or improper gap. 4. Stale or dirty fuel. 5. Loose spark plug wire. 6. Carburetor out of adjustment.	1. Place throttle control in "FAST" position. 2. Clean or replace air cleaner cartridge. 3. Replace spark plug or adjust gap. 4. Drain fuel tank and refill with fresh gasoline. 5. Make sure spark plug wire is seated properly on plug. 6. Make necessary adjustments.
Loss of power	1. Engine is overloaded. 2. Dirty air cleaner. 3. Low oil level/dirty oil. 4. Faulty spark plug. 5. Oil in fuel. 6. Stale or dirty fuel. 7. Water in fuel. 8. Clogged fuel tank. 9. Spark plug wire loose. 10. Dirty engine air screen. 11. Dirty/clogged muffler. 12. Carburetor out of adjustment. 13. Poor compression.	1. Set depth stake for shallower tilling. 2. Clean or replace air cleaner cartridge. 3. Check oil level/change oil. 4. Clean and regap or change spark plug. 5. Drain and clean fuel tank and refill, and clean carburetor. 6. Drain fuel tank and refill with fresh gasoline. 7. Drain fuel tank and carburetor, and refill tank with fresh gasoline. 8. Remove fuel tank and clean. 9. Connect and tighten spark plug wire. 10. Clean engine air screen. 11. Clean/replace muffler. 12. Make necessary adjustments. 13. Contact an authorized service center/department.
Engine overheats	1. Low oil level/dirty oil. 2. Dirty engine air screen. 3. Dirty engine. 4. Partially plugged muffler. 5. Improper carburetor adjustment.	1. Check oil level/change oil. 2. Clean engine air screen. 3. Clean cylinder fins, air screen, and muffler area. 4. Remove and clean muffler. 5. Adjust carburetor to richer position.
Excessive bounce/ difficult handling	1. Ground too dry and hard.	1. Moisten ground or wait for more favorable soil conditions.
Soil balls up or clumps	1. Ground too wet.	1. Wait for more favorable soil conditions.
Engine runs but tiller won't move	1. Drive control bar is not engaged. 2. V-belt not correctly adjusted. 3. V-belt is off pulley(s).	1. Engage drive control. 2. Inspect/adjust V-belt. 3. Inspect V-belt.
Engine runs but labors when tilling	1. Tilling too deep. 2. Throttle control not properly adjusted. 3. Carburetor out of adjustment.	1. Set depth stake for shallower tilling. 2. Check throttle control setting. 3. Make necessary adjustments.
Tines will not rotate	1. Shear pin(s) broken.	1. Replace shear pin(s).

REPAIR PARTS

TILLER - - MODEL NUMBER 944.627592

HANDLES



KEY NO.	PART NO.	DESCRIPTION
1	138305	Throttle, Control
2	141406	Grip, Handle
3	110673X	Grommet, Handle
4	127254X	Bar, Assembly Control
5	6712J	Cap, Vinyl
6	137119	Panel, Control
7	110641X	Bushing, Split
8	71191008	* Screw 10-24
9	72010520	* Bolt, 5/16-18 x 2.50
10	110646X	Handle, Grip
11	4497H	Retainer, Spring
12	81328	Bolt, Shoulder
13	138295	Handle, Shift
14	109313X	Grommet, Rubber
15	110702	Rod, Shift
16	72140608	* Bolt, Carriage 3/8-16 x 1
17	109229X	Lock, Handle
18	73930600	* Nut, Centerlock 3/8-16

KEY NO.	PART NO.	DESCRIPTION
19	19131611	Washer 13/32 x 1 x 11 Ga.
20	109228X	Lever, Lock, Handle
21	150628	Column, Handle, Asm.
22	165197	Clip, Plastic, Cable
23	86777	Screw, Hex, Washer #10-24 x 1/2
24	9484R	Clip
25	73970500	Locknut, Hex, Flange
26	138306	Clutch, Cable
27	73220400	* Nut, Fin, Hex 1/4-20
28	10040400	* Washer, Lock Hvy Helical 1/4
29	73731000	Nut, Keps #10-24
30	138283	Lock, Handle
31	150696	Bolt, Pivot

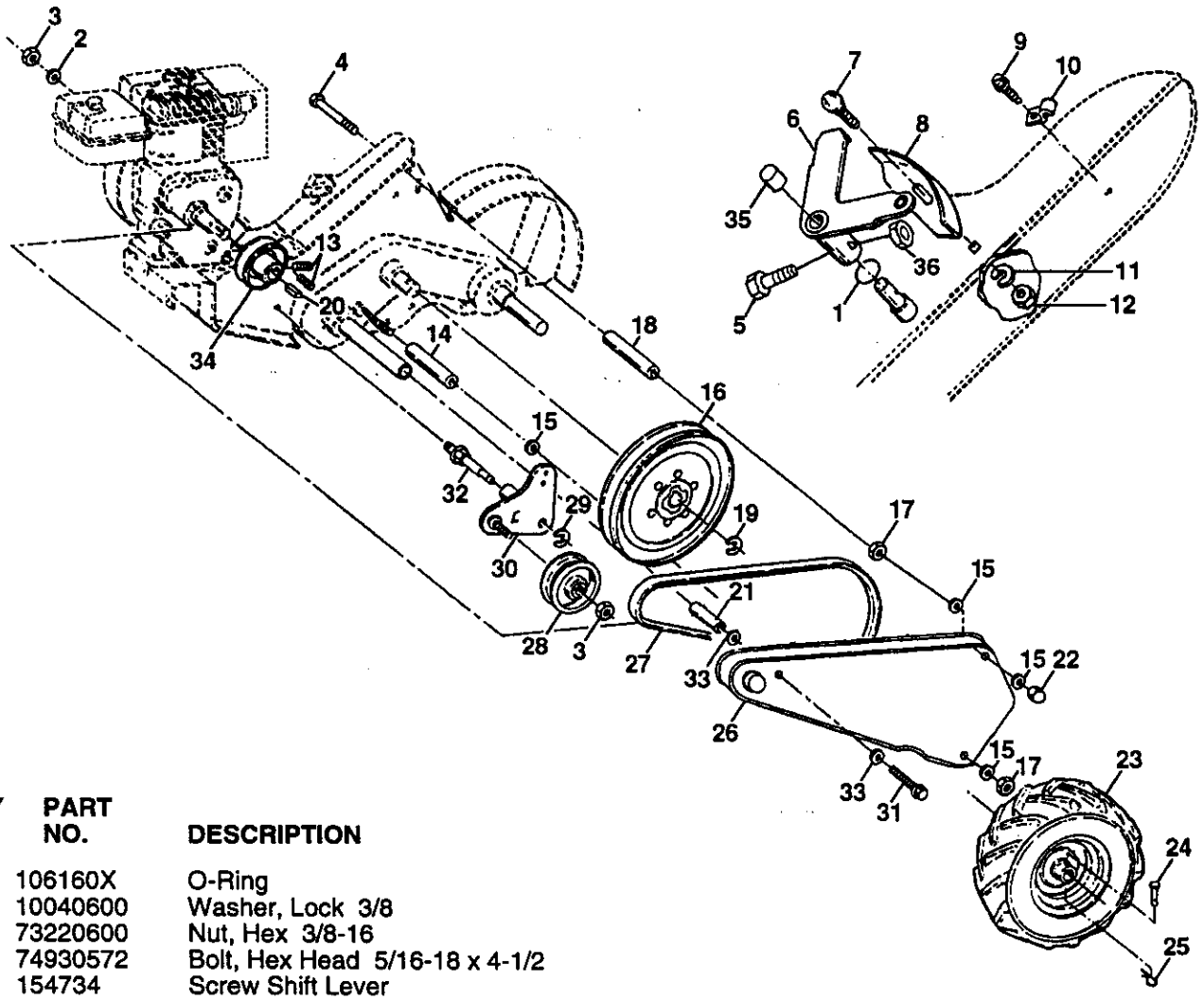
* STANDARD HARDWARE - - PURCHASE LOCALLYAssembly

NOTE: All component dimensions given in U.S. inches. 1 inch = 25.4 mm

REPAIR PARTS

TILLER - - MODEL NUMBER 944.627592

MAINFRAME, LEFT SIDE



KEY NO.	PART NO.	DESCRIPTION
1	106160X	O-Ring
2	10040600	Washer, Lock 3/8
3	73220600	Nut, Hex 3/8-16
4	74930572	Bolt, Hex Head 5/16-18 x 4-1/2
5	154734	Screw Shift Lever
6	110111X	Lever, Shift
7	72110404	Bolt, Carriage 1/4-20 x 1/2 Grade 5
8	8700J	Plate, Shift Indicator
9	86777	Screw, Hex Washer Head, Slotted #10-24 x 1/2
10	9484R	Clip
11	10040400	Washer, Lock 1/4
12	73220400	Nut, Hex 1/4-20
13	23230506	Screw, Set, Hex 5/16-18 x 3/8
14	8382J	Spacer, Split 0.327 x 0.42 x 2.68
15	19111116	Washer 11/32 x 11/16 x 16 Gauge
16	145102	Sheave, Transmission
17	73220500	Nut, Hex 5/16-18
18	8381J	Spacer
19	12000028	Ring, Retainer
20	4914H	Key, Square
21	139155	Spacer, Split .523 x .718 x 2
22	104214X	Nut, Cap 5/16-18
23	5015J	Tire
	138417	Rim
	795R	Tire Valve
24	4929H	Rivet, Drilled

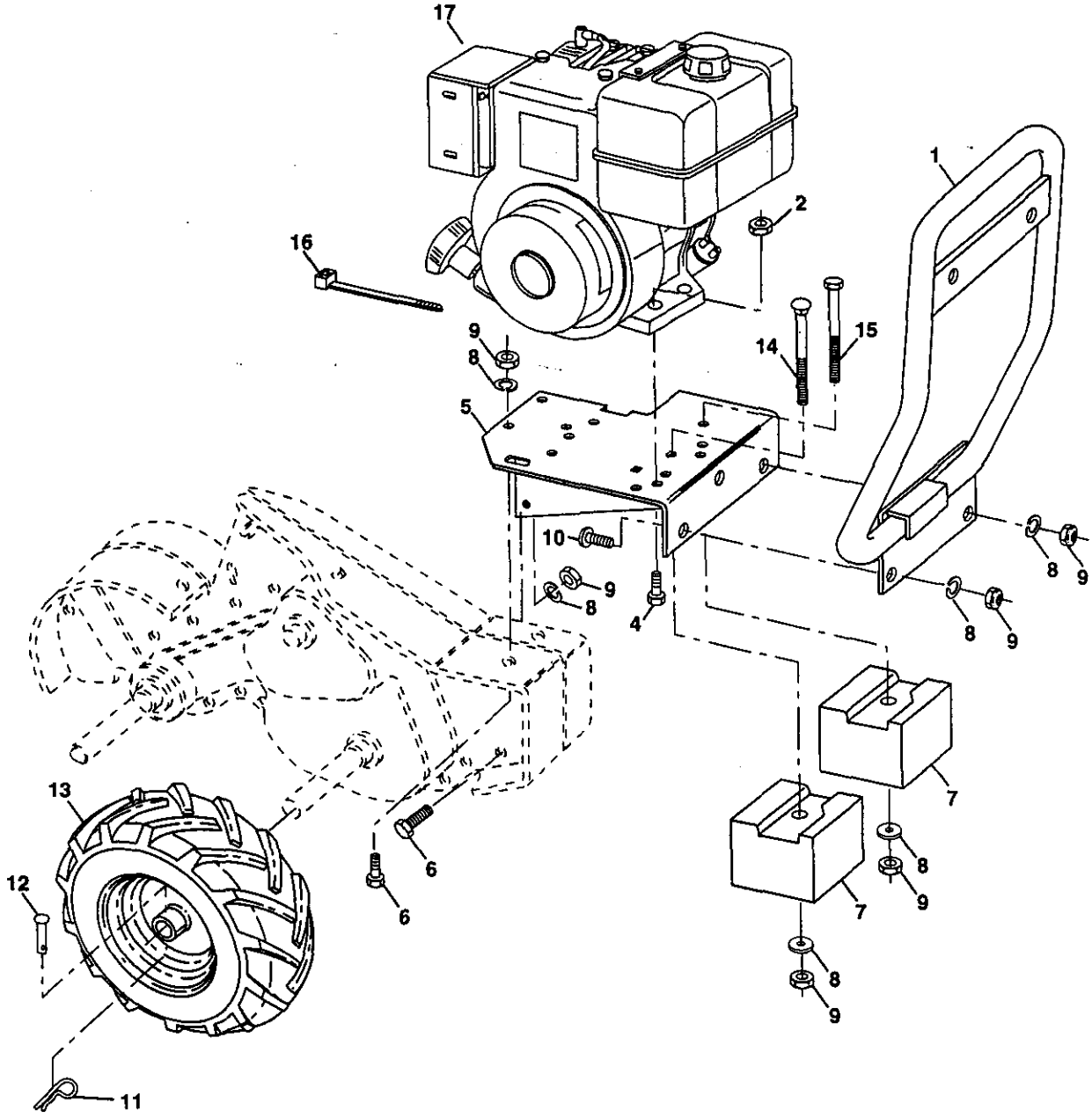
KEY NO.	PART NO.	DESCRIPTION
25	4921H	Clip, Hairpin
26	102818X558	Guard, Belt
27	138399	V-Belt
28	104679X	Pulley, Idler
29	12000032	Ring, Klip
30	159229	Bracket, Idler
31	74770844	Bolt, Hex Head 1/2-20 x 2-3/4
32	139401	Shaft, Idler Arm
33	19171616	Washer
34	4368J	Sheave, Engine
35	140062	Cap, Plunger
36	69180	Nut Lock #10-24

NOTE: All component dimensions given in U.S. inches.
1 inch = 25.4 mm

REPAIR PARTS

TILLER - - MODEL NUMBER 944.627592

MAINFRAME, RIGHT SIDE



KEY NO.	PART NO.	DESCRIPTION
1	138402	Bumper
2	73510500	Nut 5/16-18
4	74760528	Bolt, Hex 5/16-18 x 1-3/4
5	138669	Bracket, Engine
6	74760616	Bolt, Hex Head 3/8-16 x 1
7	8450J	Counter Weight, R.H.
8	10040600	Washer, Lock 3/8
9	73220600	Nut, Hex 3/8-16
10	72140608	Bolt, Carriage 3/8-16 x 1
11	4921H	Clip, Hairpin
12	4929H	Rivet, Drilled

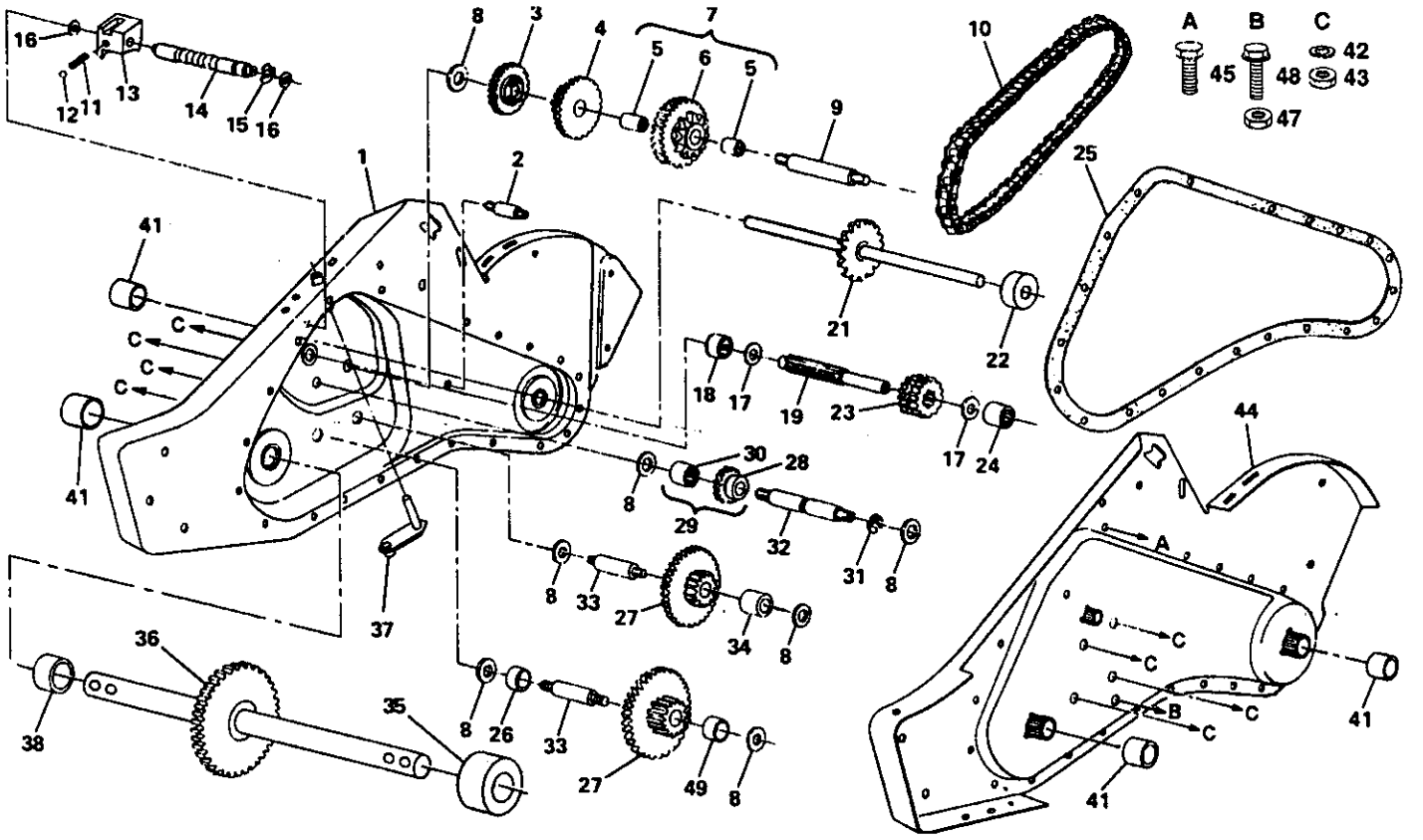
KEY NO.	PART NO.	DESCRIPTION
13	5015J	Tire
	138417	Rim
	795R	Tire Valve
14	72470636	Bolt, Carriage 3/8-16 x 4-1/2
15	74760672	Bolt, Hex Head 3/8-16 x 4-1/2
16	7192J	Tie, Cable
17	- - - - - - -	Engine (See Breakdown) Briggs Model 19G402-1170-E1

NOTE: All component dimensions given in U.S.inches. 1 inch = 25.4 mm

REPAIR PARTS

TILLER - - MODEL NUMBER 944.627592

TRANSMISSION



KEY NO.	PART NO.	DESCRIPTION
- -	162169	Transmission Assembly
1	162163	Gearcase Assembly, R.H., with Bearing (Includes Key No. 18)
2	8370J	Bolt, Upset
3	8547J	Gear, Reverse
4	8546J	Gear, Cluster, Red., 1st and 2nd
5	100413K	Bearing, Needle
6	674A291	Sprocket Assembly, Tine
7	674A290	Sprocket Assembly with Bearings (Includes Key #6 & two of Key #5)
8	4358J	Washer
9	8358J	Shaft, Reduction, 1st
10	8371J	Chain, Roller, 60P
11	100371K	Spring, Shift, Fork
12	7392M	Ball, Steel
13	8353J	Fork, Shift
14	8354J	Shaft, Shift
15	12000039	Klip Ring
16	154467	Washer, Seal
17	1370H	Race, Bearing, Thrust, 5/8 I.D.
18	4895H	Bearing, Needle
19	150695	Shaft, Input
21	105378X	Shaft Assembly, Tine
22	106181X	Spacer 1.008 x 1-3/4 x .645
23	8359J	Pinion, Input
24	5020J	Bearing, Needle
25	164396	Gasket, Gearcase

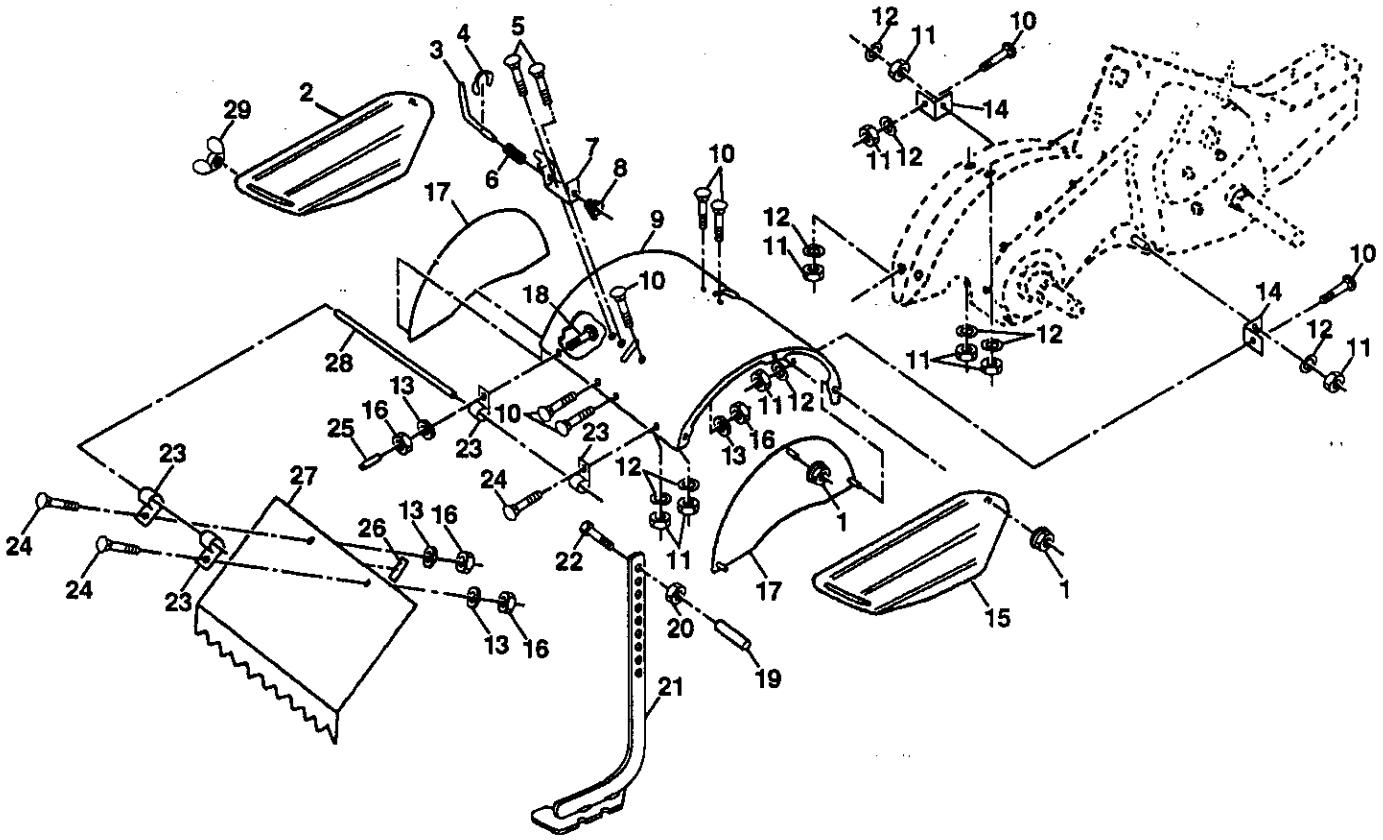
KEY NO.	PART NO.	DESCRIPTION
26	106389X	Spacer .765 I.D. x 1.12 x 5/8
27	100433M	Gear, Cluster, Red., 2nd and 3rd
28	8357J	Gear, Reverse Idler
29	674A289	Gear Assembly, Reverse Idler (Includes Key Numbers 28 and 30)
30	6803J	Bearing, Needle
31	12000040	Klip Ring
32	8356J	Shaft, Reverse Idler
33	100016K	Shaft, Reduction, 2nd
34	106392X	Spacer .765 I.D. x 1-1/8 x 1-3/8
35	106394X	Spacer, Ground Drive, L.H.
36	100436L	Shaft Assembly, Ground
37	142145	Arm Assembly, Shift
38	106393X	Spacer, Ground Drive, R.H.
41	155236	Seal, Oil
42	10040700	Washer, Lock 7/16
43	73610700	Nut, Hex 7/16-20
44	162165	Gearcase Assembly, L.H., with Bearing (Includes Key Number 24)
45	17720510	Screw 5/16-18 x 5/8
47	73220500	Nut, Hex Head 5/16-18
48	100107K	Screw, Whiz-Lock 5/16-18 x 4
49	106391X	Spacer .765 I.D. x 1.12 x 3/4
- -	6066J	Grease, Plastilub Number 1

NOTE: All component dimensions given in U.S. inches
1 inch = 25.4 mm

REPAIR PARTS

TILLER - - MODEL NUMBER 944.627592

TINE SHIELD



KEY NO.	PART NO.	DESCRIPTION
1	98000129	Nut, Flange 5/16-18
2	161416X558	Shield, Side, Outer, L.H.
3	8393J	Pin, Depth Stake
4	12000036	Ring, Klip
5	72140508	Bolt, Carriage 5/16-18 x 1
6	8394J	Spring
7	8392J	Bracket, Latch
8	109230X	Spring, Depth Stake
9	104178X558	Shield, Tine
10	72140506	Bolt, Carriage 5/16-18 x 3/4 Gr. 5
11	73220500	Nut, Hex 5/16-18
12	10040500	Washer, Lock 5/16
13	10040400	Washer, Lock 1/4
14	8386J	Bracket, Shield Tine
15	161417X558	Shield, Side, Outer R.H.

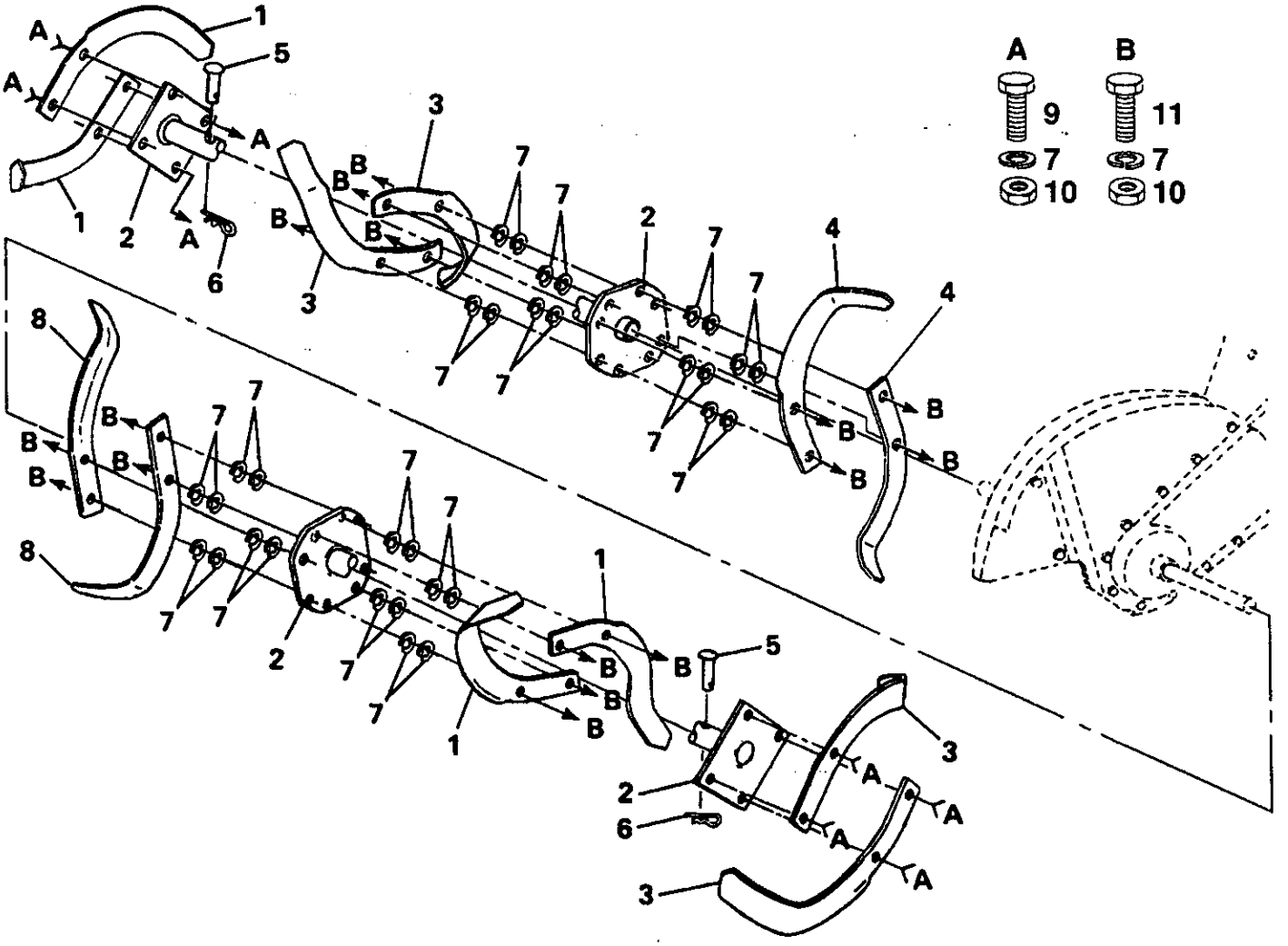
KEY NO.	PART NO.	DESCRIPTION
16	73220400	Nut, Fin, Hex 1/4-20
17	104084X558	Shield, Side
18	72040410	Bolt, Carriage 1/4-20 x 1-1/4 Gr. 5
19	102701X	Grip
20	73220600	Nut, Hex 3/8-16
21	138420	Stake, Depth
22	74930632	Bolt, Hex 3/8-16 x 2
23	4440J	Hinge
24	72140408	Bolt, Carriage 1/4-20 x 1/2 Gr. 5
25	6712J	Cap, Vinyl
26	109227X	Pad, Idler
27	102713X558	Shield, Leveling
28	138609	Pin, Hinge
29	162175	Nut, Wing 5/16-18

NOTE: All component dimensions given in U.S. inches.
1 inch = 25.4 mm

REPAIR PARTS

TILLER - - MODEL NUMBER 944.627592

TINE ASSEMBLY



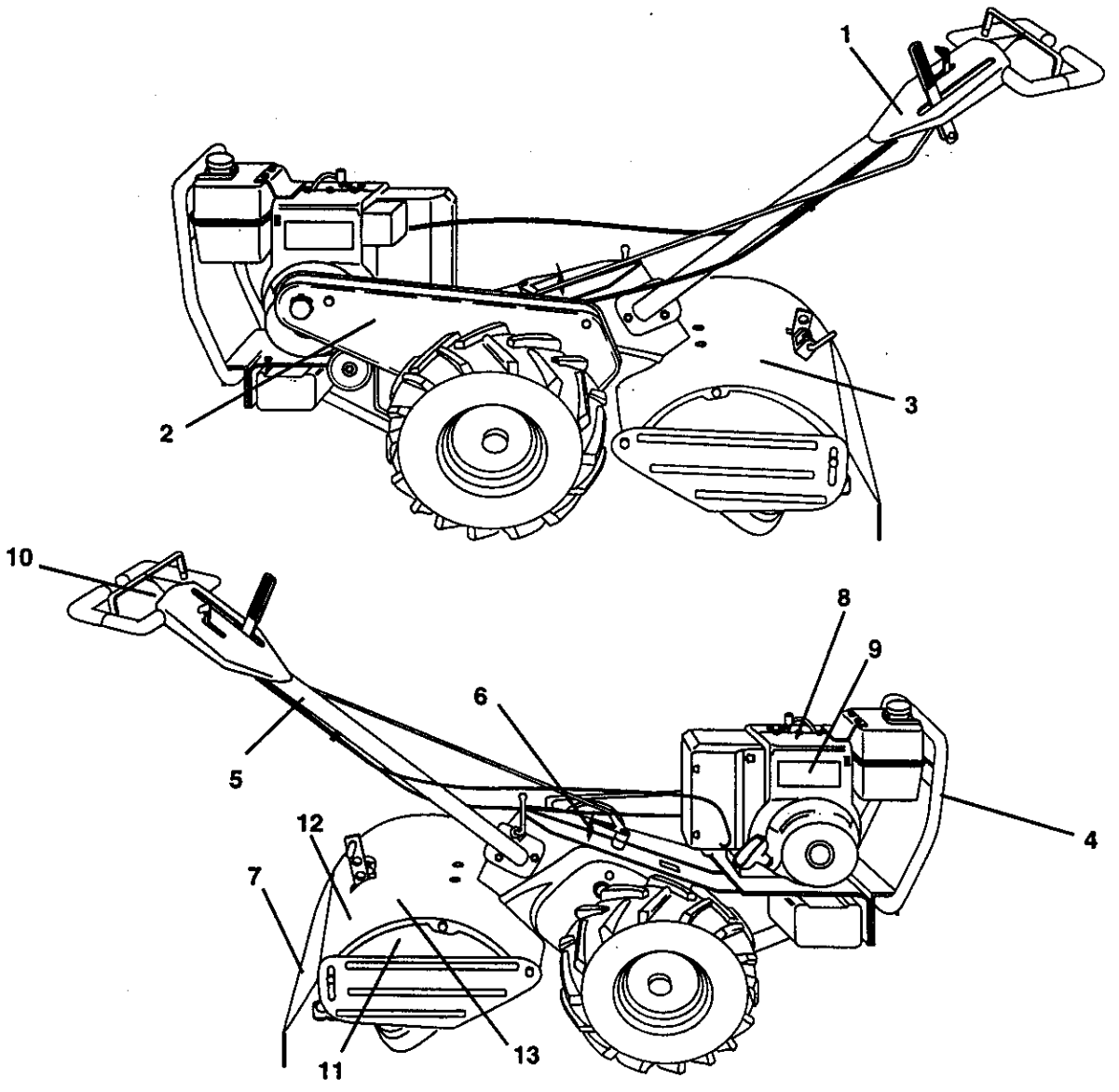
KEY NO.	PART NO.	DESCRIPTION
1	6556J	Tine, L.H., 14"
2	100445L	Hub Assembly
3	6557J	Tine, R.H., 14"
4	101194M	Tine, L.H., 14"
5	4929H	Rivet, Panhead
6	163552	Retainer Spring
7	10040600	Washer, Lock 3/8
8	101193M	Tine, R.H., 14"
9	74610616	Bolt, Hex Head 3/8-24 x 1
10	73610600	Nut, Hex 3/8-24
11	74610624	Bolt, Hex Head 3/8-24 x 1-1/2

NOTE: All component dimensions given in U.S. inches.
1 inch = 25.4 mm

REPAIR PARTS

TILLER - - MODEL NUMBER 944.627592

DECALS

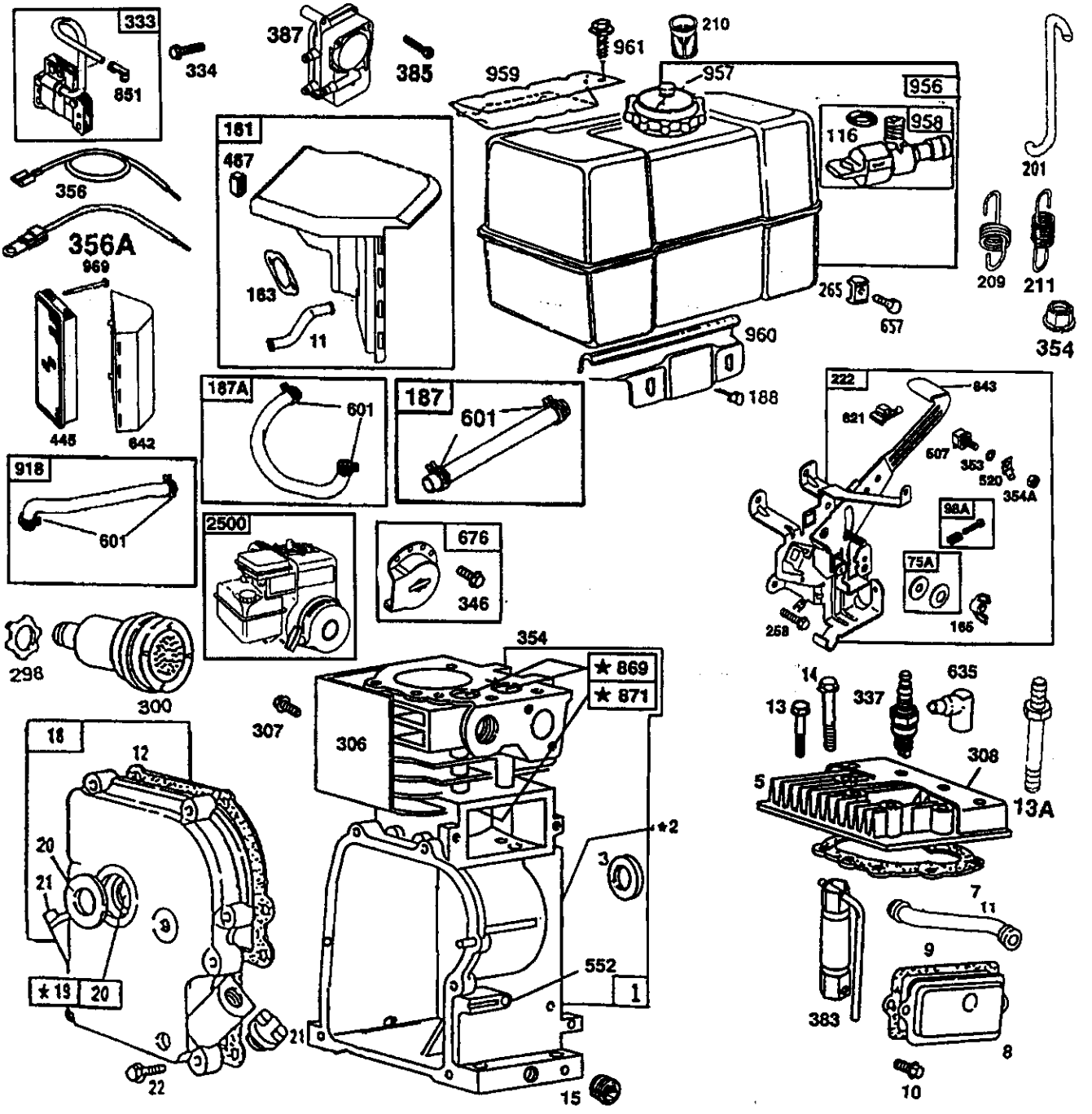


KEY NO.	PART NO.	DESCRIPTION
1	158097	Decal, Logo
2	157986	Decal, Logo
3	157987	Decal, Logo
4	138813	Decal, Craftsman
5	110614X	Decal, Hand Placement
6	138546	Decal, Shift Indicator
7	120076X	Decal, Warning, Rotaing Tines
8	110612X	Decal, Caution
9	165270	Decal, Briggs & Stratton
10	137282	Decal, Instr.
11	157988	Decal, Cou. Rot. Tines
12	168260	Decal, Tine, Depth Stake
13	162384	Decal, Warning, Till Eng/Fr
- -	168560	Manual, Owner's (English)
- -	168561	Manual, Owner's (French)

REPAIR PARTS

TILLER - - MODEL NUMBER 944.627592

ENGINE, BRIGGS & STRATTON - - MODEL NUMBER 19G402, TYPE NO. 1170-E1



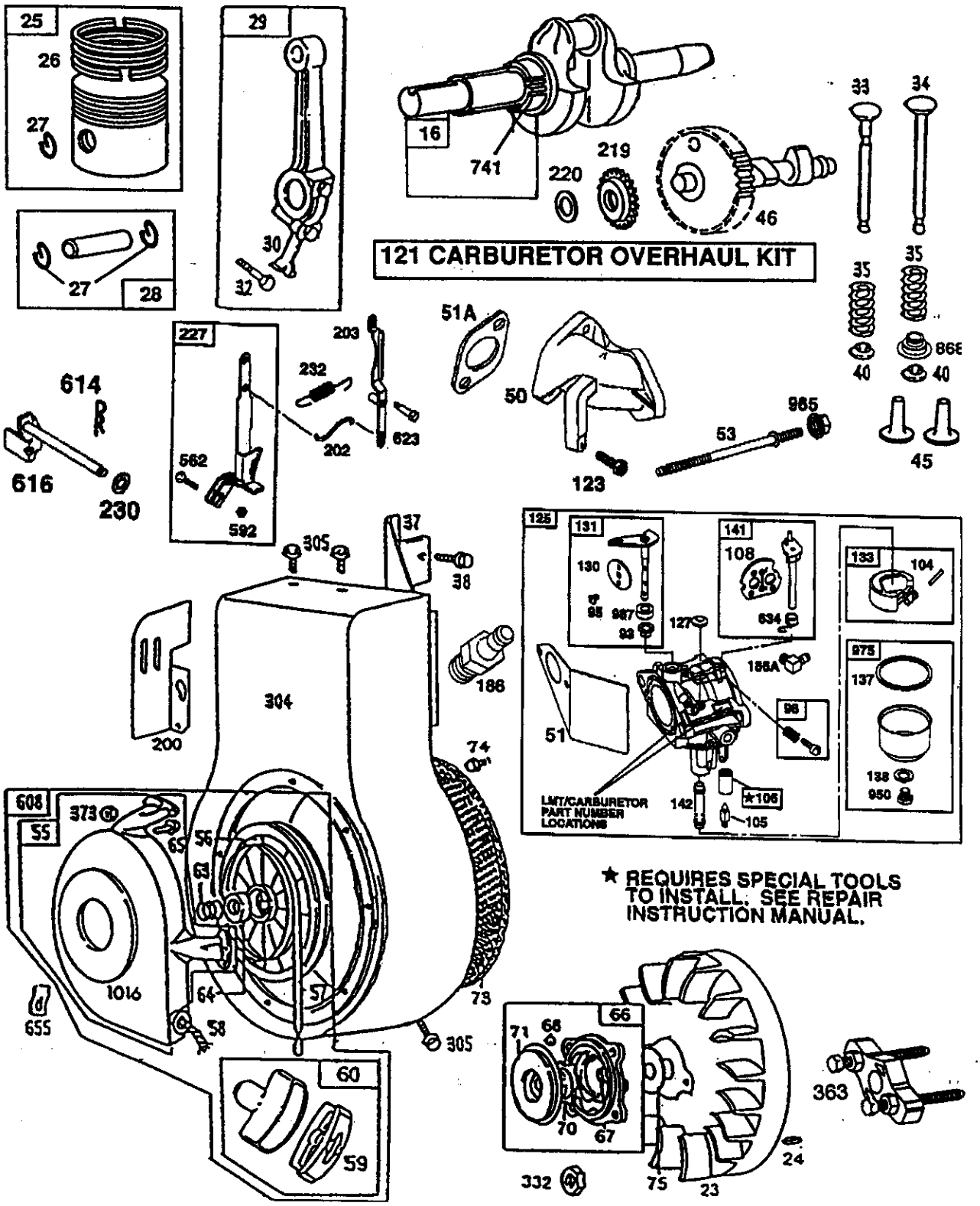
1036 LABEL KIT | 358 GASKET SET

★ REQUIRES SPECIAL TOOLS TO INSTALL. SEE REPAIR INSTRUCTION MANUAL.

REPAIR PARTS

TILLER - - MODEL NUMBER 944.627592

ENGINE, BRIGGS & STRATTON - - MODEL NUMBER 19G402, TYPE NO. 1170-E1



REPAIR PARTS

TILLER - - MODEL NUMBER 944.627592

ENGINE, BRIGGS & STRATTON - - MODEL NUMBER 19G402, TYPE NO. 1170-E1

KEY NO.	PART NO.	DESCRIPTION
1	495631	Cylinder Assembly
2	495657	Bushing, Cylinder
3	391086	* Seal, Oil
5	214347	Head, Cylinder
7	272163	ø* Gasket, Cylinder Head
8	498038	Breather Assembly
9	27803	ø* Gasket, Breather
10	94621	Screw, Sems
11	280819	Tube, Breather
12	271701	* Gasket, Crankcase Cover 1/64 "
	27876	* Gasket, Crankcase Cover .005 "
	27877	* Gasket, Crankcase Cover .009"
13	94565	Screw, Cylinder Head 3-9/16"
13A	94926	Stud, Hex, Drive
14	93723	Screw, Cylinder Head 3"
15	94880	Plug, Oil Drain, Flush
	94239	Plug, Oil Drain, Square Head
16	495648	Crankshaft
	94388	Key, Timing Gear Retaining
18	496982	Cover Assembly, Crankcase
19	295964	Bushing, Crankcase
20	391086	* Seal, Oil
21	281658	Plug, Oil Filler
22	93585	Screw, Crankcase Cover
23	298260	Flywheel
24	222698	Key, Flywheel
25	499907	Piston Assembly standard
	499908	Piston Assembly, .010" O.S.
	499909	Piston Assembly, .020" O.S.
	499910	Piston Assembly, .030" O.S.
26	499921	Ring Set, Piston Standard
	690018	Ring Set, Piston, 0,010" Oversized
	690019	Ring Set, Piston, 0,020"
	690020	Ring Set, Piston, 0,030" Oversized
27	263181	Lock, Piston Pin
28	499911	Pin Assembly, Piston Standard
	499920	Pin Assembly, Piston 005" O.S.
29	390401	Rod Assembly, Connecting (Std.)
	390773	Rod Assembly, Connecting (.020" U. S.)
30	222113	Dipper, Connecting Rod
32	92659	Screw, Connecting Rod
33	263017	Valve, Exhaust
34	261055	Valve, Intake
35	65906	Spring, Valve
37	222475	Guard, Flywheel
38	94811	Screw, Sems
40	221596	Retainer valve
45	260933	Tappet, Valve
46	214786	Gear, Cam
50	214170	Elbow, Intake
51	272708	Δ• Gasket, Carburetor Mounting
51A	272707	Δ• Gasket, Intake Manifold
53	94778	Stud, Carb. Mounting
55	393576	Housing, Rewind Starter
56	295871	Pulley, Rewind Starter
57	490179	Spring, Rewind Starter
58	66884	Rope, Rewind Starter
59	490653	Insert, Starter Handle
60	490652	Handle, Rewind Starter
63	260414	Spring, Ratchet
64	281204	Adapter, Ratchet Spring
65	94904	Screw, Rewind Starter Housing Mounting
66	399671	Clutch Assembly, Rewind Starter
67	394897	Housing, Rewind Starter Clutch
68	63770	Ball, Clutch
70	298799	Ratchet, Rewind Starter Clutch
71	394506	Washer, Clutch Retaining
73	224874	Screen, Rewind Starter
74	94680	Screw, Sems
75	225136	Washer, Spring
75A	495659	Washer, Set
93	281346	• Bushing, Throttle Shaft
94	496589	Valve, Idle Adjustment
95	94098	• Screw, Slotted
98	495800	Screw, Idle Speed
98A	493280	Screw, Idle Speed
104	231789	• Pin, Float Hinge
105	231935	• Valve, Needle
106	231856	• Seat, Inlet
108	224666	Valve, Choke
116	280203	O-Ring, Fuel Valve
121	497581	Carburetor Overhaul Kit
123	94913	Screw Torx-
125	690011	Carburetor
127		• Plug, Welch (Sold in Kit Only)
130	224539	Valve, Throttle
131	498846	Shaft, Throttle
133	494381	Float, Carburetor
137	281165	Δ• Gasket, Float Bowl
138	281164	Δ• Washer
141	497160	Shast, Choke
142	690125	Nozzle, Carburetor (Standard)
	690126	Nozzle, Carburetor (High Altitude)
161	497669	Base, Air Cleaner
163	273101	ø* Gasket, Air Cleaner
165	94692	Nutwing
186	230318	Connector, Hose
186A	493496	Connector, Hose

RPM Settings: Low: 1750 - 1950
High: 3500 - 3700

* Included in Gasket Set (497070)
Included in Carburetor Kit (497578)
• Included in Carburetor Gasket Set (497069)
ø Included in Valve Overhaul Gasket Set (497534)

NOTE: All component dimensions given in U.S. inches
1 inch = 25.4 mm

REPAIR PARTS

TILLER - - MODEL NUMBER 944.627592

ENGINE, BRIGGS & STRATTON - - MODEL NUMBER 19G402, TYPE NO. 1170-E1

KEY NO.	PART NO.	DESCRIPTION
187	296004	Line, Fuel
187A	497029	Line, Fuel
188	94627	Screw, Hex
200	221760	Guide, Air
201	263051	Link, Governor
202	263049	Link, Throttle
203	497207	Lever, Linkage
209	263212	Spring, Governor
210	492044	Strainer, Fuel
211	263182	Spring, Governed Idle
219	497037	Gear Governor
220	221551	Washer, Thrust
222	499103	Plate, Governor Control
227	499096	Lever Assembly, Governor
230	94927	Washer, Governor Crank
232	263020	Spring, Link
258	94929	Screw, Sems
265	221535	Clamp, Casing
298	261409	Locknut, Muffler
300	496127	Muffler, Exhaust
304	491596	Housing, Blower
305	94786	Screw, Sems
306	496797	Shield, Cylinder
307	94930	Screw, Cylinder Shield
308	225055	Cover, Cylinder Head
332	92284	Nut, Flywheel
333	398811	Armature, Magneto
334	94731	Screw, Armature Mounting
337	496018	Spark Plug
346	94896	Screw, Sems
353	92791	Washer, Lock
354	94726	Nut, Hex
354A	90576	Nut, Hex
356	398838	Wire, Ground
356A	496868	Wire, Ground
358	497070	Gasket Set
363	19203	Puller, Flywheel
373	94908	Nut, Hex
383	89838	Wrench, Spark Plug
385	94789	Screw, Fuel Pump Mounting
387	496257	Pump, Fuel
445	496077	Cartridge, Air Cleaner
467	280715	Knob, Air Cleaner
520	93722	Terminal, Spade
552	491893	Bushing Governor Crank
562	94907	Bolt, Carriage
592	231978	Nut, Hex
601	95162	Clamp, Fuel Pipe
608	390391	Starter, Rewind
614	93306	Cotter Pin
616	496818	Crank, Governor
621	396847	Switch, Stop
623	231520	Screw, Shoulder
634	494455	• Seal, Choke Shaft
635	66538	Elbow, Spark Plug
642	281357	Cover, Air Cleaner
655	222598	Anchor, Spring
657	94906	Screw, Sems
676	393757	Deflector, Exhaust
741	263025	Gear, Timing
843	280643	Sleeve, Lever
851	493880	Terminal, Ignition Cable
868	497656	Seal, Intake Valve
869	211661	Seat, Intake and Exhaust Valves
871	231218	Guide, Intake and Exhaust Valves
918	497457	Line, Vacuum
950	94642	Plug
956	493337	Fuel Tank Assembly
957	493988	Cap, Fuel Tank
958	399517	Valve, Fuel Shut-Off
959	495664	Bracket, Fuel Tank, Upper
960	492990	Bracket, Fuel Tank, Lower
961	94095	Screw, Tank Mounting
965	94010	Nut, Hex
969	94777	Screw, Slotted Hex
975	494378	Bowl, Float
985	398525	Insulator
987	281166	• Seal, Throttle Shaft
1016	490817	Spacer
1036	499354	Label Kit, Emission
1058	273682	Owner's Manual
2500	192402-1015	Replacement Engine
- -	497536	Replacement Shortblock

RPM Settings: Low: 1750-1950
High: 3500-3700

* Included in Gasket Set (497070)
· Included in Carburetor Kit (497578)
· Included in Carburetor Gasket Set (497069)
ø Included in Valve Overhaul Gasket Set (497534)

NOTE: All component dimensions given in U.S. inches
1 inch = 25.4 mm

SEARS
OWNER'S MANUAL

MODEL NO. 944.627592

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(1-800-473-7247)

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(1-800-366-7278)

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The model number for your tiller will be found on a plate attached to the top of the transmission.

The model number for your engine will be found on the blower housing of the engine.

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- **PRODUCT - REAR TINE TILLER**
- **MODEL NUMBER - 944.627592**
- **ENGINE MODEL NUMBER - 19G402, TYPE NUMBER 1170-E1**
- **PART NUMBER**
- **PART DESCRIPTION**

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