SEARS
OWNERS
MANUAL

MODEL NO.
C944.629450

Caution:
Read Rules for
Safe Operation
and Instructions
Carefully

CRAFTSMAN
5 H.P. CRT 17 INCH REAR TINE TILLER WITH COUNTER ROTATING TINES

Assembly
Operation
Maintenance
Repair and Adjustment
Repair Parts

Sears Canada Inc., Toronto, Ontario M5B 2B8

LIMITED TWO YEAR WARRANTY ON CRAFTSMAN TILLER

For two years from date of purchase, when this Tiller is maintained, lubricated, and tuned up according to the operating and maintenance instructions in the owner's manual, Sears will repair free of charge any defect in material or workmanship.

This Warranty excludes Tine(s), Spark Plug, Air Cleaner and Belt(s) which are expendable parts and become worn during normal use.

If this Tiller is used for commercial or rental purposes, This Warranty applies for only 30 days from the date of purchase.

WARRANTY SERVICE IS AVAILABLE BY CONTACTING THE NEAREST SEARS SERVICE CENTRE/DEPARTMENT IN CANADA. This Warranty applies only while this product is in use in Canada.

This Warranty gives you specific legal rights, and you may also have other rights which vary from area to area.

Sears Canada Inc., Toronto, Ontario M5B 2B8

For Optional Attachments see your Sears Catalog

MAINTENANCE AGREEMENT

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

-NOTE-

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 arreste meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective workin order by the operator.

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KNOW YOUR TILLER

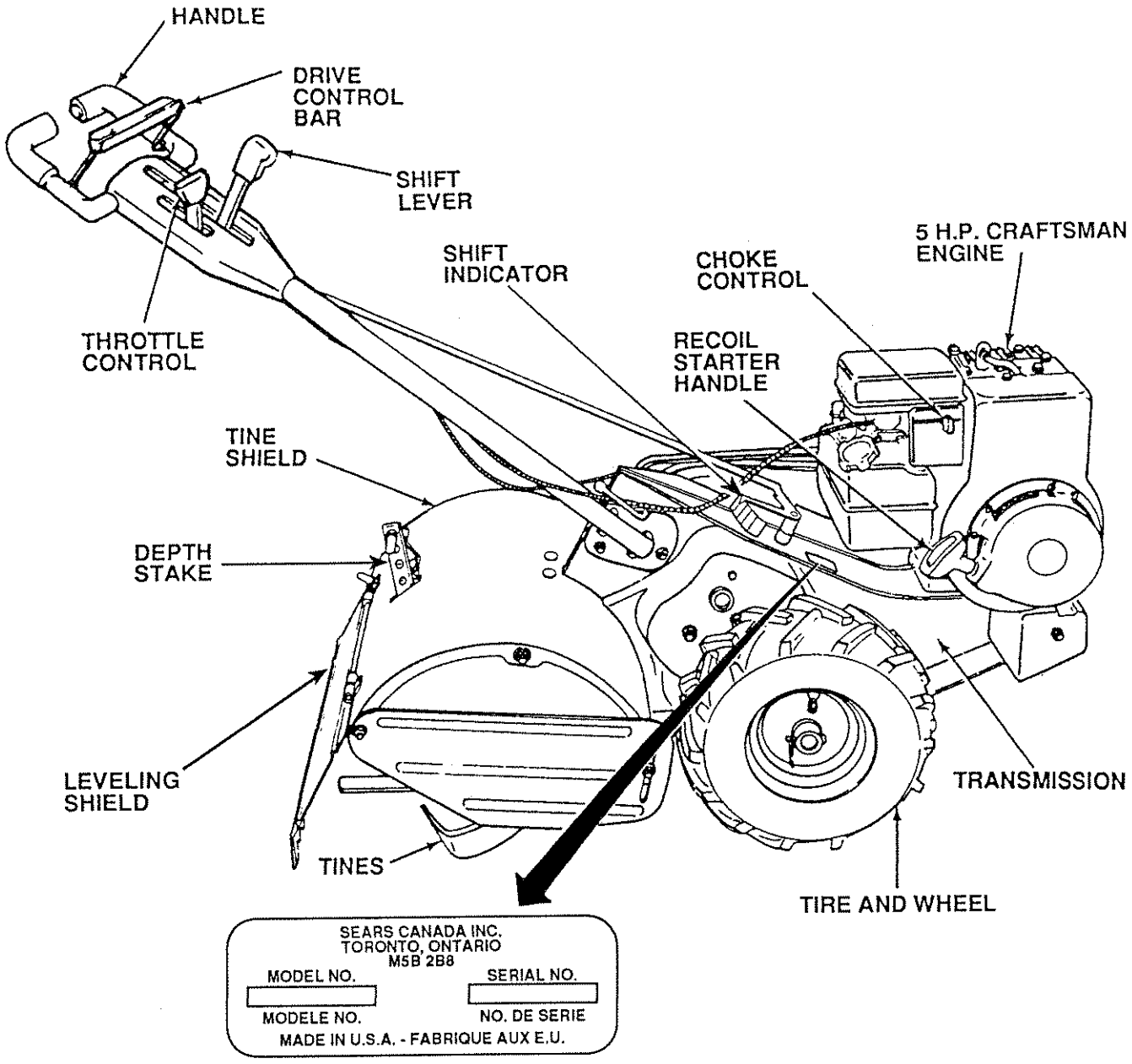


FIGURE 1

MODEL NUMBER _____

SERIAL NUMBER _____

THE MODEL AND SERIAL NUMBERS WILL BE FOUND ON THE MODEL PLATE ATTACHED TO THE TOP OF THE TRANSMISSION (FIG. 1).

YOU SHOULD RECORD BOTH MODEL AND SERIAL NUMBERS AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

RULES FOR SAFE OPERATION

1. **KNOW YOUR TILLER.**Become familiar with all the different sections of this Owner's Manual before attempting to operate your Tiller. Know the controls and how to stop quickly.

2. **ALWAYS KEEP HANDS AND FEET AWAY FROM ROTATING TINES AND OTHER DRIVEN PARTS.** Always wear substantial footwear. Do not wear loose fitting clothing that could get caught in moving parts.

3. **LIMIT YOUR TILLER'S USE TO TRAINED ADULTS.** Do not allow children to operate your Tiller. Keep bystanders and pets away from the area when you are operating your Tiller.

4. **MAKE SURE THE AREA IS CLEAR** of bottles, stones, wire, and other hazardous items before tilling.

5. **HANDLE FUEL WITH CARE;** it is highly flammable. Never add fuel to a running or hot engine or fill tank indoors. Turn engine off and let your engine cool before refueling.

   Fuel Tank Cap must be secure at all times except when refueling.

   Do not smoke while refueling.

   Fuel your Tiller in a clean area.

   Avoid spilling gasoline or oil. Wipe the Tiller clean of any spilled fuel or oil.

   Do not operate Engine if Air Cleaner or Cover Directly over Carburetor Air Intake is removed, except for adjustment. Removal of such part could create a fire hazard.

   Store your Tiller fuel and oil in approved containers away from heat or open flame and out of reach of children.

6. **USE YOUR TILLER PROPERLY.** Before starting the Engine make sure the Drive Control Bar is in "STOP" position.

   Operate your Tiller up and down the face of slopes (not greater than 15°): never across the face. Make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.

   Do not run Engine indoors, exhaust fumes are poisonous.

   Never operate product when tired or fatigued. Always operate product with extreme care with your own safety in mind. Carelessness or misuse could lead to severe injury.

   Before removing obstacles, transporting your Tiller, or when making any adjustments except Carburetor, make sure Drive Control Bar is in "STOP" position. Stop Engine before leaving the operating position. Disconnect Spark Plug Wire from Spark Plug.

7. **ALLOW THE ENGINE ON YOUR TILLER TO COOL** before performing any maintenance or adjustments, transporting your Tiller or storing your Tiller in any enclosure. Never store your Tiller with fuel in the tank inside a building where fumes may reach an open flame or spark.

8. **BE SURE TILLER IS IN GOOD WORKING ORDER.** Keep all nuts, bolts and screws tight to be sure your Tiller is in safe working condition.

   Do not change governor settings or over speed your Engine.

   Do not tamper with the exhaust system. Damaged Mufflers or Spark Arresters could create a fire hazard. Inspect periodically and replace if necessary.

   Your Tiller must be stopped and inspected for damage after striking a foreign object. The damage must be repaired before restarting or operating your Tiller.

9. **YOUR TILLER HAS BEEN DESIGNED WITH YOUR SAFETY AND CONVENIENCE IN MIND.** Keep all safety devices in place and do not alter your Tiller.

LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS -- ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.

CAUTION: LOOK FOR THIS WORD TO POINT OUT IMPORTANT EQUIPMENT PRECAUTIONS.

NOTE: Look for this word to point out important information about the operation and performance of your tiller.

ASSEMBLY

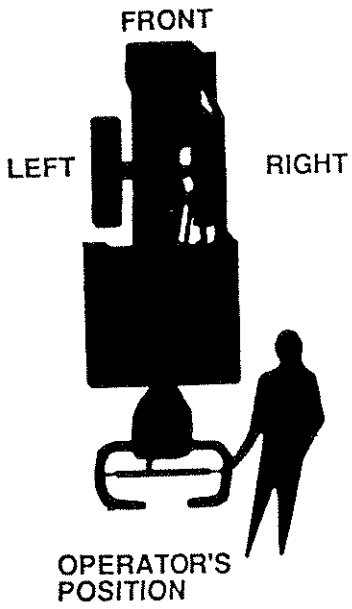


FIGURE 2

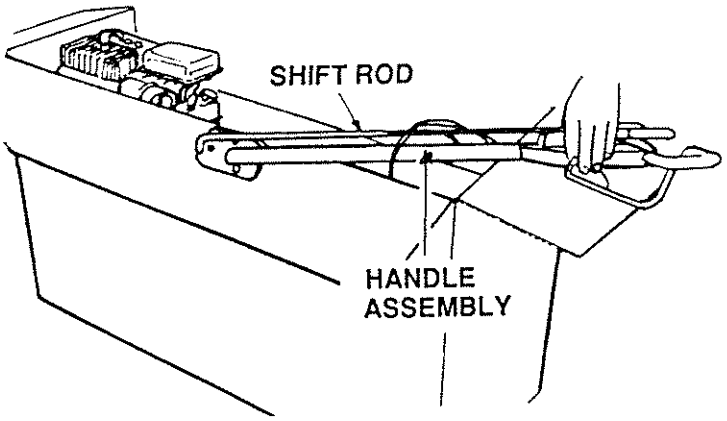


FIGURE 3

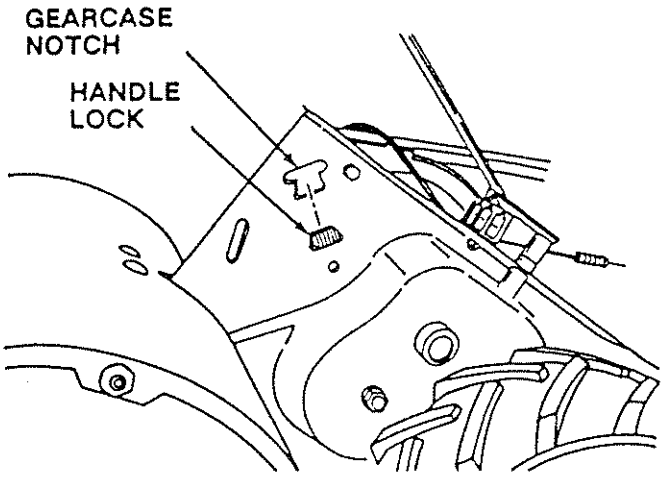


FIGURE 4

TO ASSEMBLE YOUR TILLER YOU WILL NEED:

(1) UTILITY KNIFE	(1) SCREWDRIVER
(1) WIRE CUTTER	(1) 9/16" WRENCH
(1) TIRE PRESSURE GUAGE	(1) RATCHET
(1) PAIR OF PLIERS	(1) SOCKET EXTENSION
	(1) 9/16" SOCKET

NOTE: The right hand (R.H.) and left hand (R.H.) sides of your Tiller are determined from the Operator's Position while standing behind Tiller (Fig. 2).

YOUR BAG OF PARTS WILL CONSIST OF THE FOLLOWING:

(1) Owners Manual
(2) Carriage Bolts 3/8 - 16 UNC x 1 Gr. 5
(2) Centerlock Nuts 3/8 x 16 UNC
(1) Cable Clip
(1) Handle Lock Lever
(1) Flat Washer, 13/32 x 1 x 11 Ga.
(2) Handle Locks
(2) Hairpin Clips

1. UNPACKING CARTON

   a. While holding Handle Assembly, cut Cable Ties securing Handle Assembly to Top Frame and Depth Stake. Let Handle Assembly rest on Tiller.

   b. Remove Top Frame of carton.

   c. Cut down right hand front and right hand rear corners of Carton, fold out and down.

   d. Slowly ease Handle Assembly up and place on top of Carton. BE CAREFUL NOT TO STRETCH OR KINK CABLES (Fig. 3).

   e. Remove packing material and Shift Rod from Handle Assembly.

2. INSTALL HANDLE

   a. Insert one Handle Lock (with teeth facing OUTWARD) in Gearcase Notch (Fig. 4). Handle Locks shipped in Bag of Parts.

NOTE: Apply grease on smooth side of Handle Lock. This will aid in keeping Lock in place until Handle is lowered into position.

   b. Grasp Handle Assembly, ease Handle Base into "UP" position as shown in Fig. 5. Be sure Handle Lock remains in Gearcase Notch.

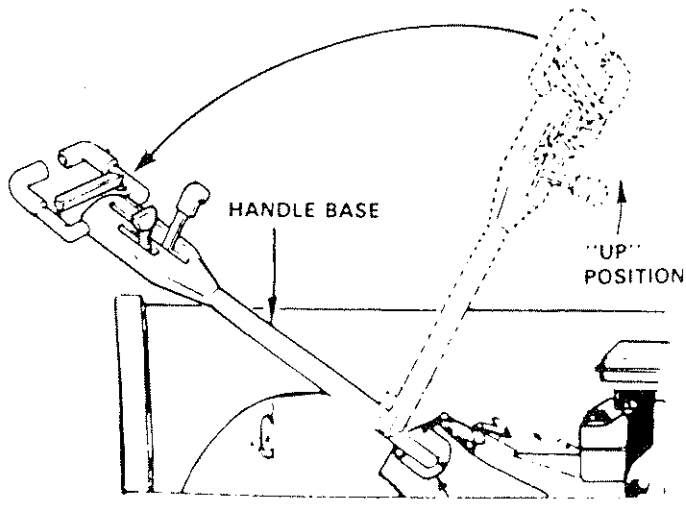


FIGURE 5

NOTE: Be careful not to stretch or kink Cables.

c. Rotate Handle Assembly down to install two Carriage Bolts and Lock Nuts (shipped in Bag of Parts).

NOTE: Insert rear Carriage Bolt (Fig. 6) first, with head of Bolt on L.H. side of Tiller. Lower the Handle Assembly. Tighten Bolts so Handle moves with some resistance.

d. Insert second Handle Lock (with teeth INWARD) in slot Handle Base (Fig. 6-Inset).

e. Place Washer (shipped in Bag of Parts) on threaded end of Handle Lock Lever.

f. Insert Handle Lock Lever through Handle Base and Gearcase (Fig. 6-Inset).

g. 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.

3. CONNECT SHIFT ROD

a. Insert end of Shift Rod fartherest from bend into hole of Shift Lever Indicator.

b. Swing Shift Rod to the right side of Tiller and insert one of two Hairpin Clips through hole of Shift Rod (Fig. 6). Hairpin Clip shipped in Bag of Parts.

c. Insert remaining end of Shift Rod into hole in Shift Lever (Fig. 5).

d. Insert second Hairpin Clip, shipped in Bag of Parts, through hole of Shift Rod.

4. REMOVE TILLER FROM CRATE

a. Make sure Shift Lever Indicator (Fig. 6) is in "N" Neutral position.

b. Tilt Tiller forward by lifting Handle. Seperate cardboard cover from leveling shield.

c. Rotate Tiller Handle to the right and pull Tiller out of Carton.

5. TIRE PRESSURE

Reduce Tire pressure to 20 PSI (Tires were overinflated for shipping purposes). If Tire pressures are not equal, Tiller will pull to one side.

6. CABLE CLIP

Insert Plastic Cable Clip (shipped in Bag of Parts) into hole on the back of Handle Assembly. Push Cables into Clip (Fig. 7).

BE CAREFUL OF EXPOSED STAPLES WHEN DISPOSING OF CARTONING MATERIAL.

7. ADJUSTMENTS

Refer to Repair and Adjustments Section to adjust Handle height (pg. 16).

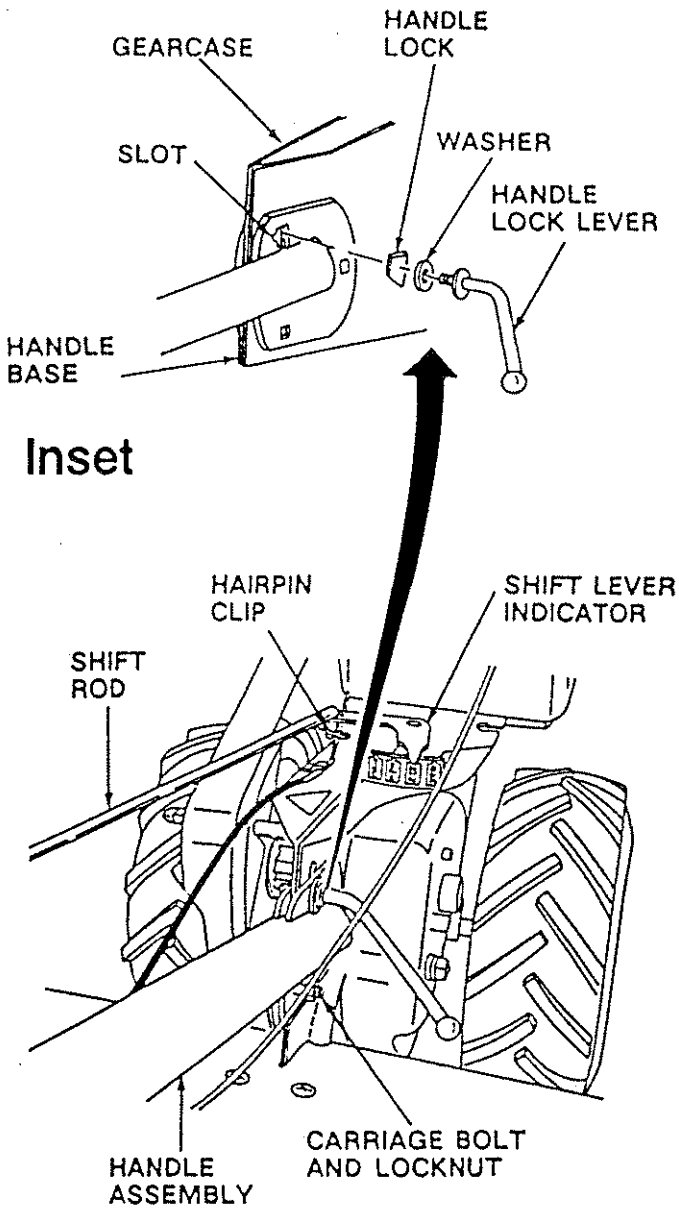


FIGURE 6

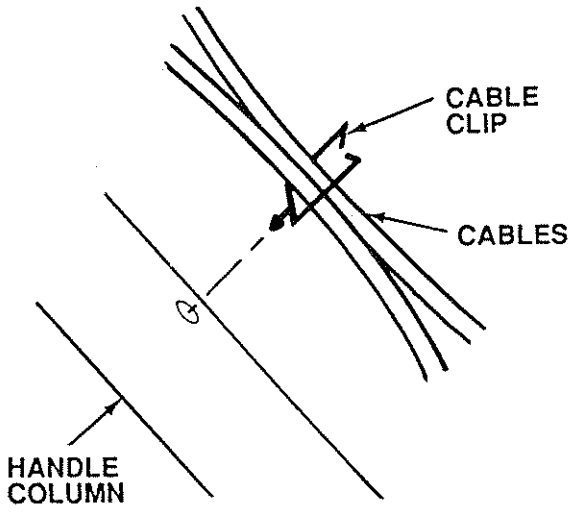


FIGURE 7

OPERATION

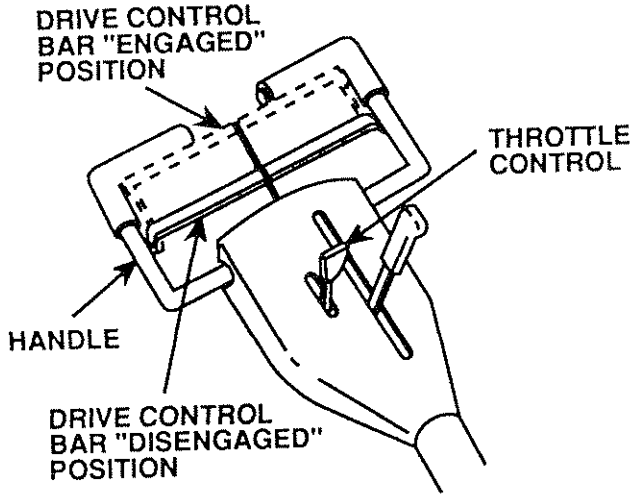


FIGURE 8

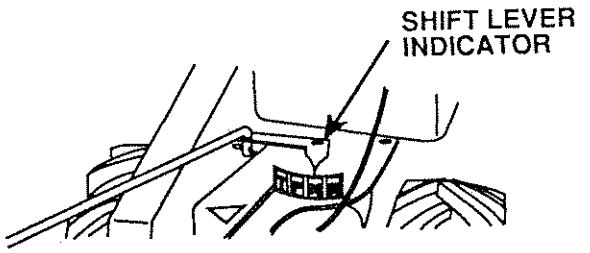


FIGURE 9

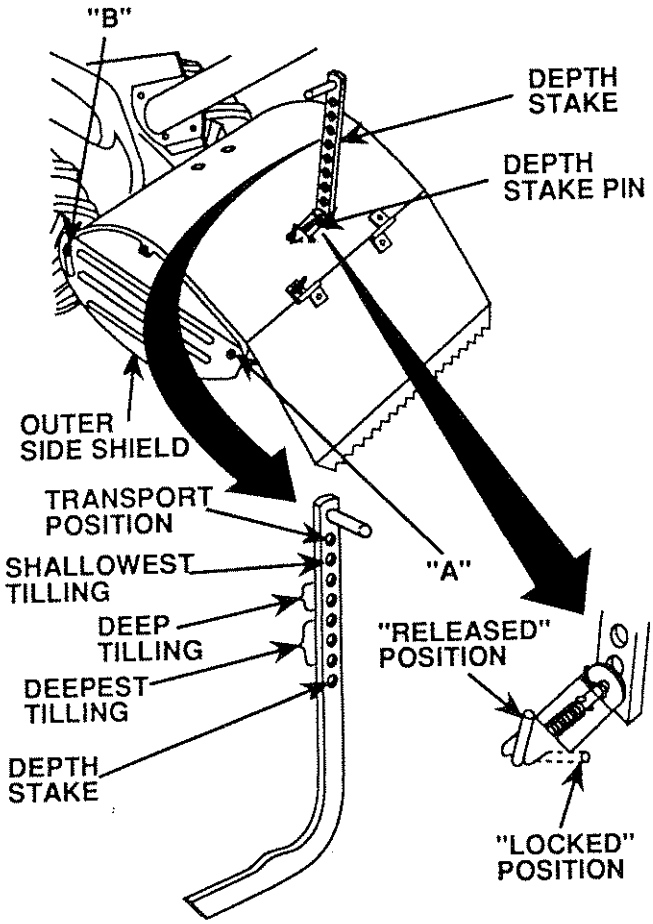


FIGURE 10

NOTE: Before operating your Tiller for the first time, study this section, "Know Your Tiller" on page 4, and the "Rules for Safe Operation" on page 5.

1. TINE OPERATION
   a. Move Throttle Control to desired speed.
   b. Tine movement begins when Drive Control Bar is in the "ENGAGED" position (Fig. 8).

NOTE: Always release Drive Control Bar before moving Shift Lever into another position.

2. REVERSE
   a. Release the Drive Control Bar (Fig. 8).
   b. Move Throttle Control (Fig. 8) to "SLOW" speed.
   c. Place Shift Lever Indicator (Fig. 9) in the "R" Reverse position.
   d. DO NOT STAND DIRECTLY BEHIND TILLER.
   e. Hold the Drive Control Bar against the Handle (Fig. 9) to start Tiller movement. Tines will not turn.

DON'T BACK YOURSELF INTO A SOLID OBSTRUCTION SUCH AS A TREE, FENCE, ETC.

3. TILLING
   a. Release the Depth Stake Pin (Fig. 10-Inset B). Pull the Depth Stake up for increased tilling depth. Place Depth Stake Pin in hole of Depth Stake to lock in position (Fig. 10-Inset A).
   b. Place Shift Lever Indicator (Fig. 9) in the "T" Tilling position.
   c. Hold the Drive Control Bar against the Handle (Fig. 8) to start tilling movement. Tines and wheels will both turn.
   d. Move Throttle Control (Fig. 8) to "FAST" position for deep tilling. For cultivating move Throttle Control to desired speed.

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

4. STOPPING TINES AND ENGINE
   a. TILLER MOVEMENT AND TINES WILL STOP WHEN DRIVE CONTROL BAR (FIG. 8) IS RELEASED.
   b. Move Shift Lever Indicator (Fig. 8) to "N" Neutral position.
   c. To stop Engine, move Throttle Control (Fig. 8) to "STOP" position.

5. TURNING
   a. Release the Drive Control Bar (Fig. 8).
   b. Move Throttle Control (Fig. 8) to "SLOW" speed.
   c. Place Shift Lever Indicator (Fig. 9) in the "F" Forward position. Tines will not turn.
   d. Lift Handle to raise Tines out of ground.

e. 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, lower the Handle. Place Shift Lever in "T" Tilling position and move Throttle Control to desired speed. To begin tilling, hold Drive Control Bar against the Handle.

6. CHECK ENGINE OIL LEVEL

a. With Engine level, remove Engine Oil Filler Plug (Fig. 11).

b. Engine oil should be to point of almost overflowing (Fig. 11). Engine oil capacity is about 1-1/4 pints (20 ounces).

NOTE: Be very careful not to allow dirt to enter the Engine when checking or adding oil or fuel. Use clean 30 or 10W-30 weight oil (Type SD, SE, or SF) and store in approved, clean covered containers. (Do not use pressurized starting fluid as severe internal damage may occur due to loss of lubrication).

7. FILL FUEL TANK

To fill Fuel Tank (Fig. 12), use fresh, clean regular unleaded automotive gasoline. Capacity is about 3 quarts.

FILL TO WITHIN 1/2 INCH OF TOP OF FUEL TANK TO PREVENT SPILLS AND TO ALLOW FOR FUEL EXPANSION. IF GASOLINE IS ACCIDENTLY SPILLED, MOVE MACHINE AWAY FROM AREA OF SPILL. AVOID CREATING ANY SOURCE OF IGNITION UNTIL GASOLINE VAPORS HAVE DISAPPEARED.

CAUTION: 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 INSTRUCTIONS FOR ADDITIONAL INFORMATION.

NEVER USE ENGINE OR CARBURETOR CLEANER PRODUCTS IN THE FUEL TANK OR PERMANENT DAMAGE MAY OCCUR.

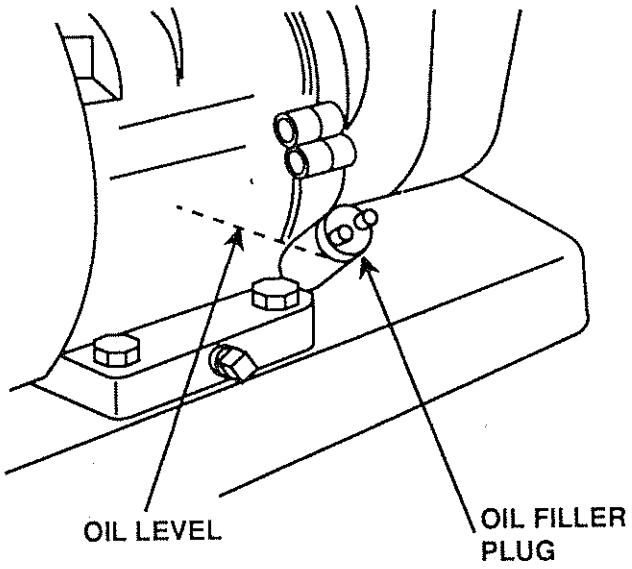


FIGURE 11

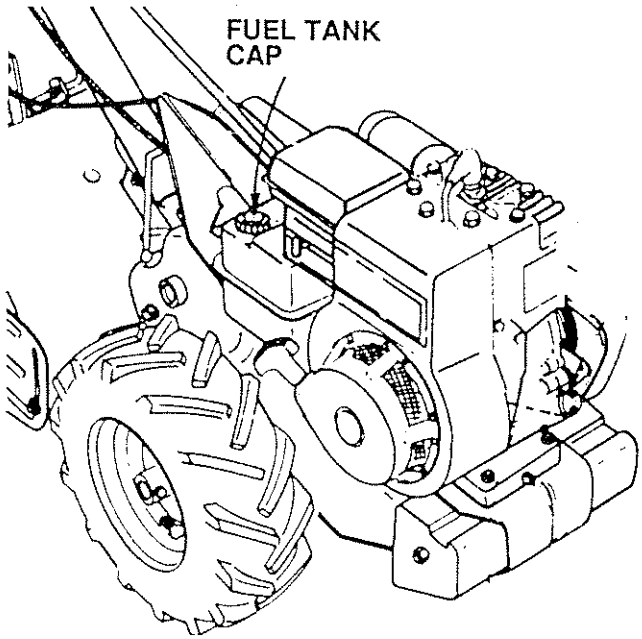


FIGURE 12

OPERATION

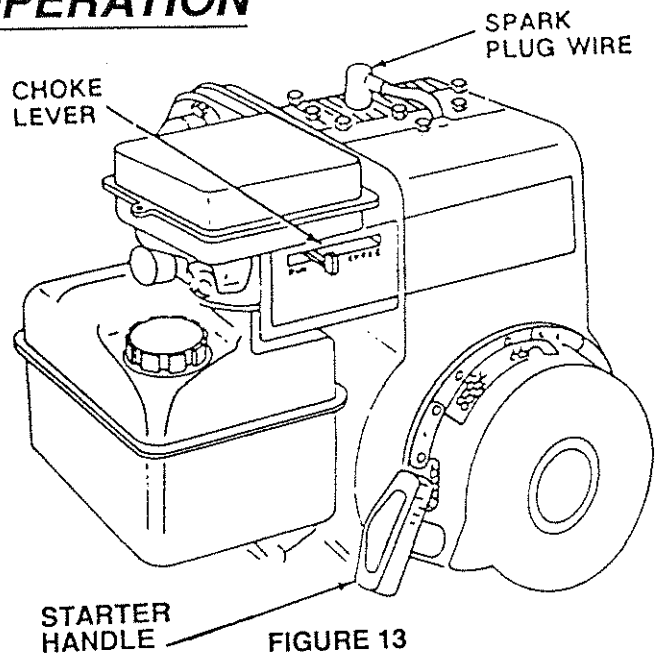


FIGURE 13

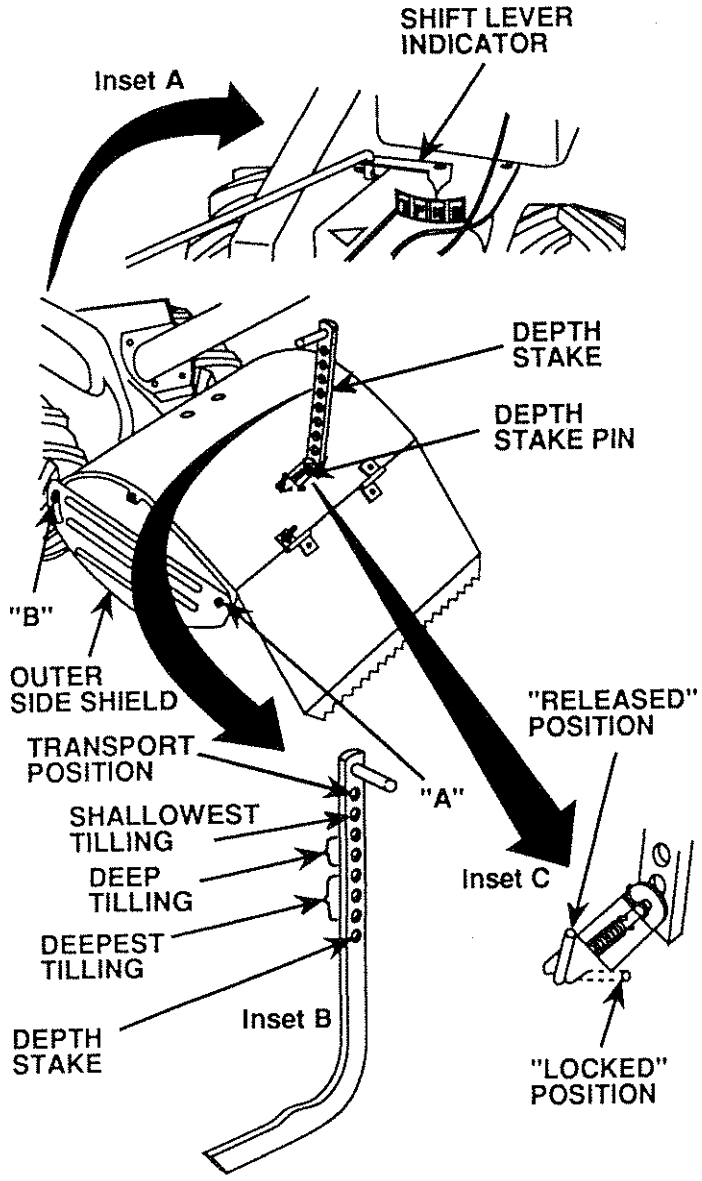


FIGURE 14

8. STARTING THE ENGINE

KEEP THE DRIVE CONTROL BAR IN "OFF" POSITION (FIG. 8) WHEN STARTING ENGINE.

a. Connect Spark Plug Wire. (Fig. 13).

b. Move Shift Lever Indicator to "N" Neutral position (Fig. 14-Inset A).

c. Place Throttle Control in "FAST" position.

d. Place Choke Control Lever In "CHOKE" position (Fig. 13).

e. Grasp Starter Handle (Fig. 13) with one hand and grasp Handle Bar with other hand. Pull Rope out slowly until Engine reaches start of Compression Cycle (Rope will pull slightly harder at this point).

f. Pull Rope with a rapid, continuous, full arm stroke. Keep a firm grip on Starter Handle and let Rope rewind slowly. Do not Let Starter Handle snap back against Starter.

g. Repeat preceding instructions (d) and (e) until Engine fires. When Engine starts, place Choke Control Lever on Engine halfway between "CHOKE" and "RUN" position (Fig. 13) and then to "RUN" position as Engine warms up.

h. Move Throttle Control halfway between "FAST" and "STOP" position for a few minutes to warm up.

NOTE: In order to idle smoothly, a new Engine may require 3 to 5 minutes running time above slow idle speed. Idle speed has been adjusted to be correct after this break-in period.

9. OUTER SIDE SHIELDS

The front of the Outer Side Shields (Fig. 10) is slotted so that they 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" (Fig. 9). Move Shield to desired position (both sides). Retighten Nuts.

10. TRANSPORTING

a. Release the Depth Stake Pin (Fig. 14-Inset C). Move the Depth Stake (Fig. 14-Inset B) down to the top hole for transporting the Tiller. Place Depth Stake Pin in hole of Depth Stake to lock in position (Fig. 14-Inset C). This prevents Tines from scuffing the ground.

b. Place Shift Lever Indicator (Fig. 14-Inset A) in "F" Forward position for transporting.

c. Hold the Drive Control against the Handle to start Tiller Movement. Tines will not turn,

d. Move Throttle Control to desired speed.

11. TILLING HINTS

a. 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.

b. 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.

c. For easier handling of your Tiller, leave about 8 inches of untilled soil between the first and second tilling passes. The third pass will be between the first and second (Fig. 15).

d. Do not lean on the 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.

12. 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 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 on further growth of weeds and grass (Fig. 16).

a. Place blocks under right hand side of Tiller and remove Hairpin Clip and Retainer Pin from right hand Wheel (Fig. 17).

b. Move Wheel outward approximately 1 inch until hole in inner wheel hub lines up with inner hole in axle.

c. Replace Retainer Pin and Hairpin Clip on inside of Wheel (Fig. 18) and remove blocks.

d. Repeat steps a, b, and c on left hand side.

NOTE: In extremely rough conditions and while cultivating, the Wheels should be moved out-ward on the Axle for increased stability.

TILLING

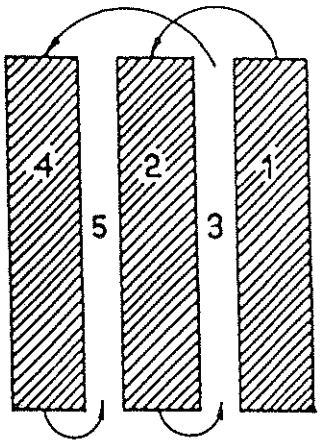


FIGURE 15

CULTIVATING

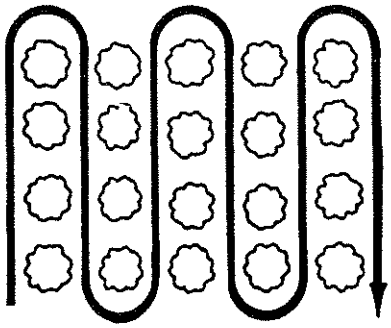


FIGURE 16

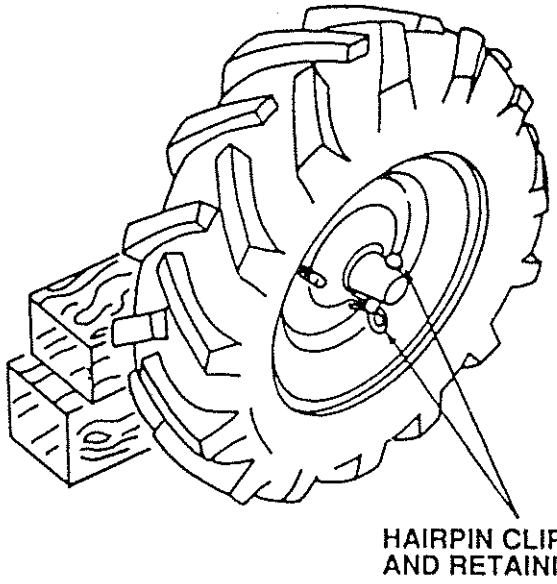


FIGURE 17

OPERATION

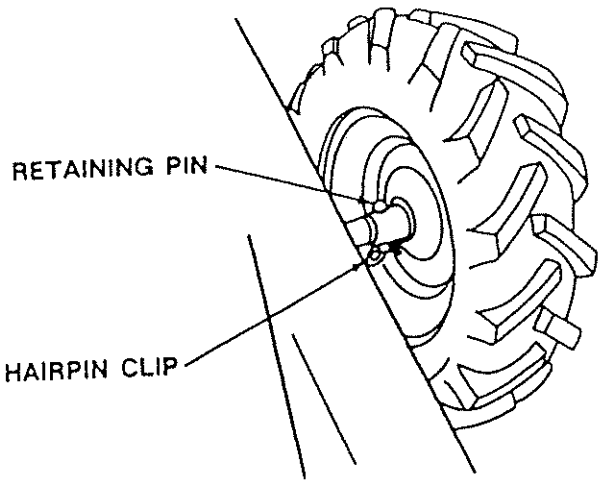


FIGURE 18

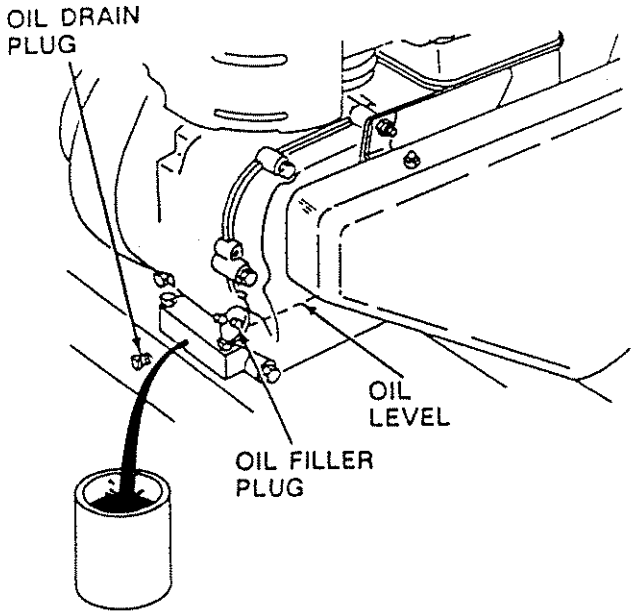


FIGURE 19

13. WINTER OPERATION (under 32º F)

a. ENGINE LUBRICATION

- For winter operation, Engine oil must be changed before the temperature drops below 32º F. Drain the Engine oil while Engine is warm (Fig. 19).
- Refill with new oil. Use oil labeled 5W30.

b. FUEL

Use fresh, clean, regular unleaded automotive gasoline. Capacity is about 2 quarts.

c. COLD WEATHER STARTING HINTS:

- Be sure to use the proper oil and gasoline.
- Keep Drive Control Bar in "OFF" position when starting the Engine.
- Set Throttle Control at medium to fast position. Use full Choke for starting. Slowly move Choke Lever to "RUN" position as Engine warms up.

NOTE: Be sure to change Engine oil back to S.A.E. 30 or 10W30) for spring Tilling (see page 9).

MAINTENANCE

DISCONNECT SPARK PLUG WIRE FROM SPARK PLUG 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.

1. COOLING SYSTEM

   Your Engine is air cooled. For proper Engine performance and long life KEEP YOUR ENGINE CLEAN.

   a. Clean Air Screen (Fig. 20) frequently using a stiff bristled brush.

   b. Remove Blower Housing (Fig. 20) and clean as necessary.

   c. Keep Cylinder Fins (Fig. 20) free of dirt and chaff.

2. AIR CLEANER

   Clean Air Cleaner Cartridge every twenty-five hours, more often if Engine is used in very dusty conditions:

   a. Loosen Air Cleaner Screws, one on each side of cover (Fig. 21).

   b. Remove Air Cleaner Cover (Fig. 21).

   c. Carefully remove Air Cleaner Cartridge (Fig. 21).

NOTE: Be careful. Do not allow dirt or debris to fall into carburetor.

   d. Clean Air Cleaner Cartridge by tapping gently on a flat surface, If very dirty replace Cartridge. DO NOT USE PRESSURIZED AIR TO CLEAN OR DRY CARTRIDGE.

NOTE: Air Cleaner uses a dry, paper type cartridge. Do not try to wash with fluid. Never run Engine without Air Cleaner Cartridge.

   e. Re-install Air Cleaner Cartridge and Cover. Tighten Screws securely.

3. MUFFLER

   Do not operate Tiller without muffler (Fig. 20). 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.

4. SPARK PLUG

   a. The Spark Plug (Fig.22) should be changed every 50 hours of operation or at the beginning of every tilling season.

   b. Reset gap at .030 (Fig. 22). Order Spark Plug listed in the Repair Parts Section of this Manual.

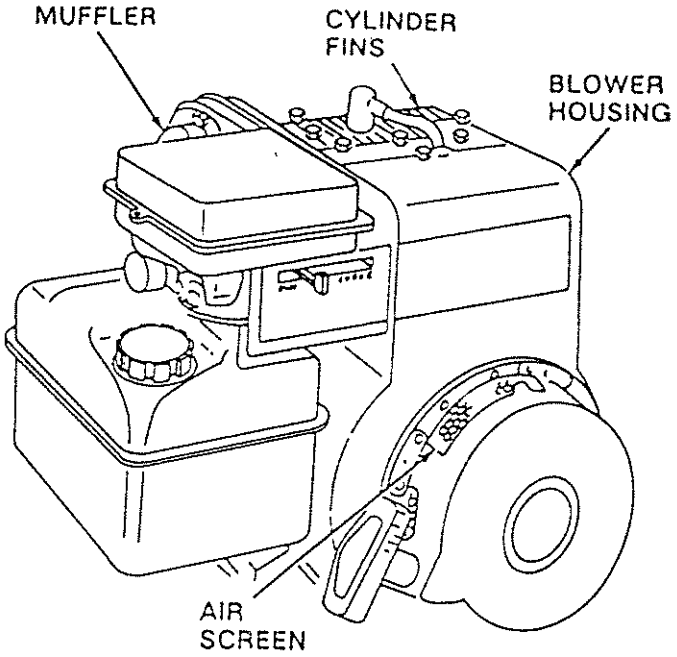


FIGURE 20

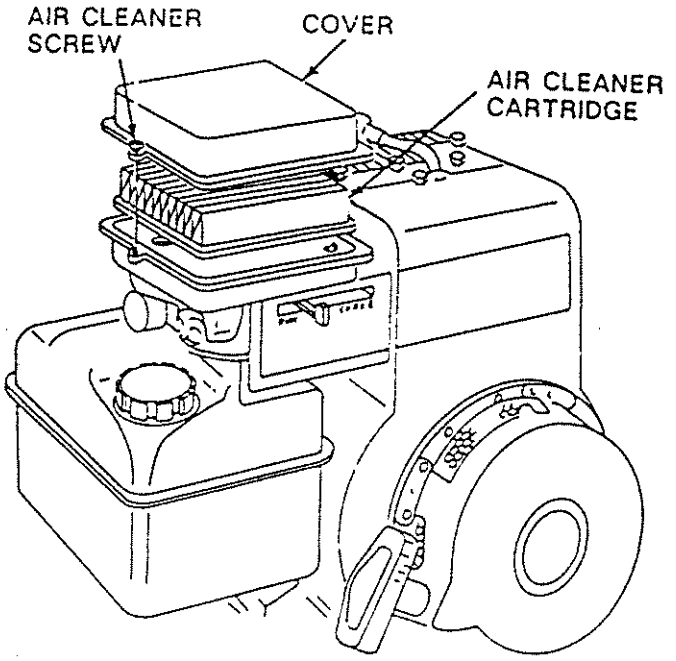


FIGURE 21

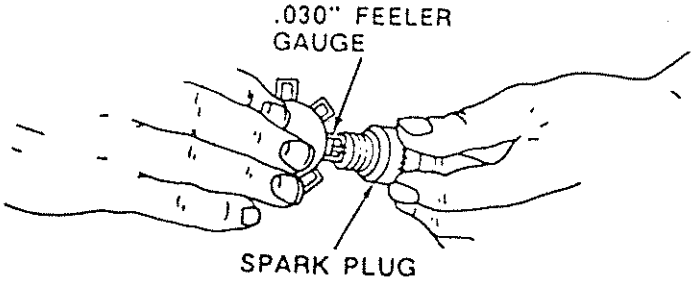


FIGURE 22

MAINTENANCE

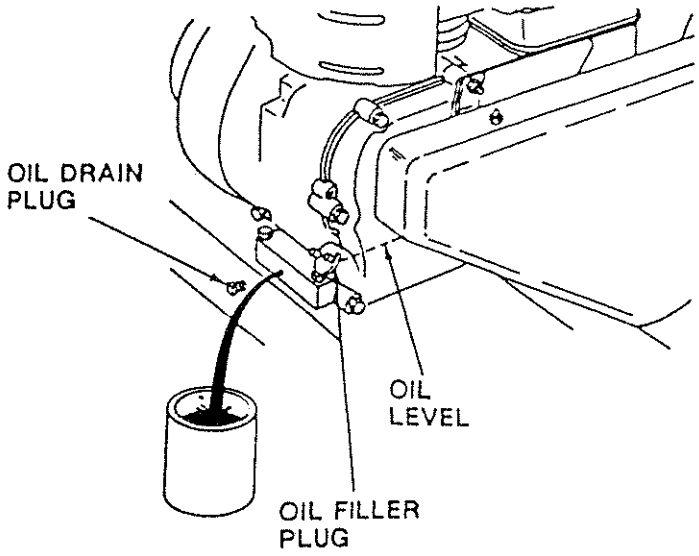


FIGURE 23

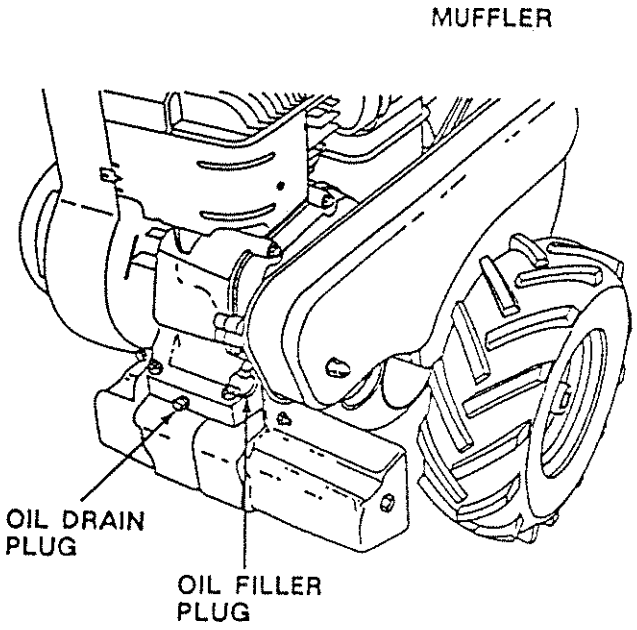


FIGURE 24

SPARKING CAN OCCUR IF SPARK PLUG WIRE TERMINAL DOES NOT FIT FIRMLY ON SPARK PLUG. REFORM TERMINAL IF NECESSARY.

5. ENGINE LUBRICATION

Your four cycle Engine will normally consume some oil, therefore check Engine oil level regularly—approximately every five hours of operation and before each usage. Stop Engine and wait several minutes before checking oil level. With Engine level the oil must be even with Oil Fill (Fig. 23). Change Engine oil after the first two hours of operation and every twenty five hours thereafter or at the beginning of every tilling season.

a. Drain oil while Engine is warm.
   - Remove Oil Drain Plug (Fig. 23).
   - Tip Tiller forward and catch oil in a suitable container.
   - When Engine is drained of all oil, replace Drain Plug (Fig. 24).

b. Refill with fresh SAE 30 or SAE 10W-30 weight oil. (See pg. 9 for oil specifications; also see page 12 for winter operation).

6. TRANSMISSION

Your Transmission is sealed and will not require lubrication.

7. FINISH

Keep your Tiller finish and wheels free of gasoline, oil, etc. Protect painted surfaces with automotive type wax.

8. STORAGE

Keep your Tiller in a weatherproof, dry building. It is important to prevent gum deposits from forming in essential fuel system parts such as the Carburetor 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. To avoid Engine problems, the fuel system should be emptied before storage for 30 days or longer.

a. Drain Fuel Tank, run Engine until gasoline in Carburetor is used.

b. While Engine is still warm, drain oil from Engine. Refill with fresh oil (Fig. 23).

c. Remove Spark Plug, pour one half ounce of clean engine oil into cylinder. Pull Starter Handle slowly several times to distribute oil. Replace Spark Plug.

d. Clean entire Tiller, especially Cylinder Fins, Blower Housing and Air Screen. Tighten all bolts and nuts (Fig. 20, pg. 13).

Gasoline stored for several months will lose its volatility (ability to burn effectively): therefore, always use up gasoline at the end of the season. Do not store, spill or use gasoline near an open flame or devices such as a stove, furnace or water heater which utilize a pilot light, or devices that can create a spark.

LUBRICATION CHART - OIL PIVOT POINTS

USE SAE 30 OIL

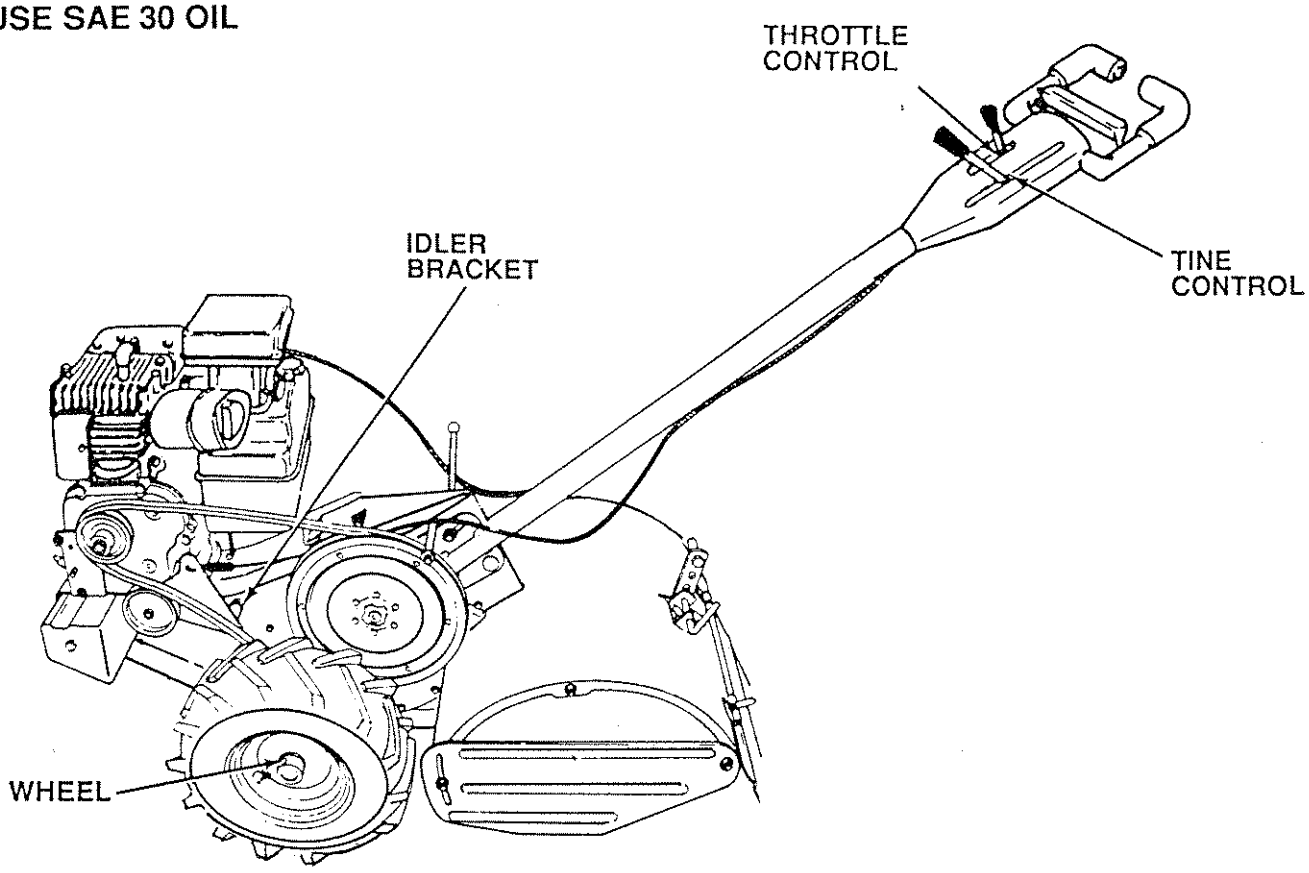


FIGURE 25

MAINTENANCE CHECK LIST SERVICE RECORD FILL IN DATES AS YOU COMPLETE REGULAR SERVICE	PAGE NUMBERS	1st 2 HOURS	BEFORE EACH USE	EVERY 5 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	SERVICE DATES									
Check Engine Oil Level	9		✔	✔												
Change Engine Oil	14	✔			✔											
Oil Pivot points	15			✔												
Inspect Spark Arrester Muffler	13					✔										
Inspect Air Screen	13		✔													
Clean Air Cleaner	13				✔											
Clean Engine Cylinder Fins	13				✔											
Replace Spark Plug	13					✔										

REPAIR AND ADJUSTMENT

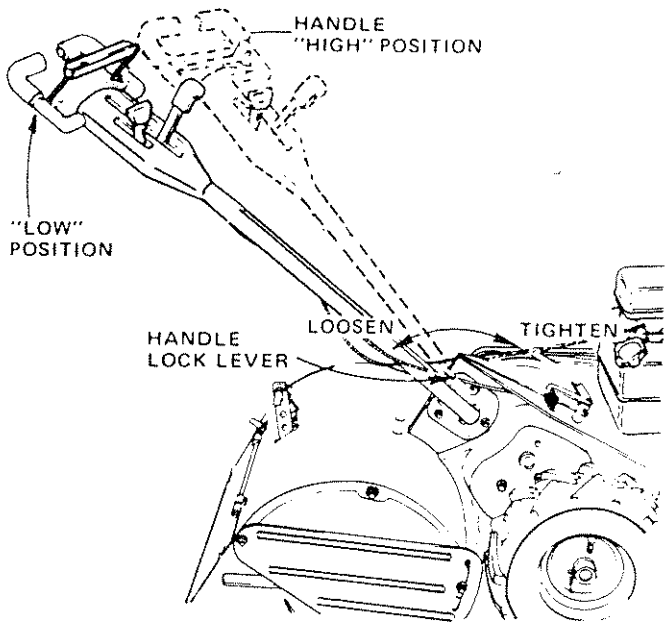


FIGURE 26

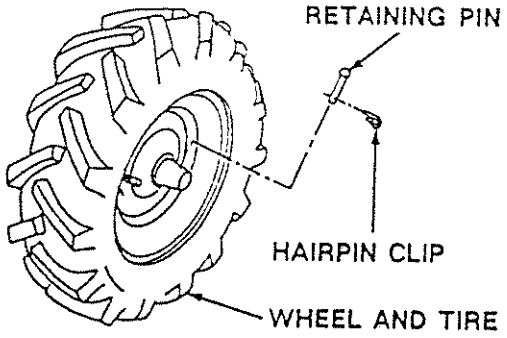


FIGURE 27

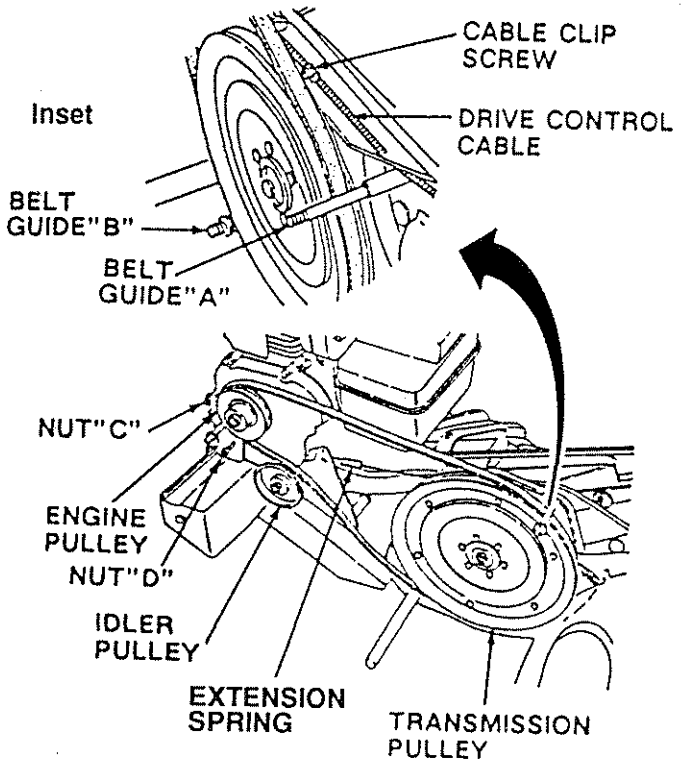


FIGURE 28

1. POSITION HANDLE

   Loosen Handle Lock Lever(fig. 26). Handle can be positioned at different settings between "HIGH" and "LOW" positions (fig. 26). Retighten Handle Lock Lever.

NOTE: Select Handle height suitable for you and your tilling conditions. Handle height will change when tiller digs into the soil.

2. TIRE CARE

   a. Maintain 20 pounds of Tire pressure. If Tire pressures are not equal, tiller will pull to one side.

   b. Keep Tires free of gasoline or oil which can damage rubber.

   c. Removing Wheel and Tire for repair (Fig. 27).

      1. Block up Tiller securely.

      2. Remove Hairpin Clip and Retaining Pin.

      3. Remove Wheel and Tire.

      4. Repair Tire and reassemble.

WHEN MOUNTING TIRES, UNLESS BEADS ARE SEATED, OVER INFLATION CAN CAUSE AN EXPLOSION.

STOP THE ENGINE AND REMOVE THE SPARK PLUG WIRE FROM THE SPARK PLUG BEFORE CLEANING OUT THE TINES BY HAND. USE CAUTION - TINES ARE SHARP.

CAUTION: PLACE BLOCKS UNDER TRANSMISSION TO KEEP TILLER FROM TIPPING.

3. GROUND DRIVE BELT ADJUSTMENT

   For proper belt tension, the Extension Spring (Fig. 28) should have about 5/8 inch stretch with Drive Control Bar in ENGAGED position. This tension can be obtained as follows:

   a. Loosen Cable Clip Screw securing the Drive Control Cable (Fig. 28-Inset).

   b. Slide Cable forward for less tension and rearward for more tension until about 5/8 inch stretch is obtained.

4. GROUND DRIVE BELT REPLACEMENT

   a. Block up Tiller securely.

   b. Remove Hairpin Clip and Retaining Pin (Fig. 29) from Hub of left hand Wheel. Pull Wheel out from Tiller about 1-1/2 inches.

   c. Remove Belt Guard by removing two (2) Cap Nuts, one (1) Hex Nut and three (3) Washers so that the Belt Guard can slide straight out away from the engine (fig. 29).

   d. Loosen Belt Guides "A" and "B" (Fig. 28-Inset) and also Nuts "C" and "D" (Fig. 28).

   e. Remove old Belts by slipping from Idler Pulley (Fig. 28) first.

   f. Place new Belt in groove of Transmission Pulley (large pulley) and into groove of Engine Pulley(Fig. 28). BELT MUST BE IN GROOVE ON TOP OF IDLER PULLEY (FIG. 28). NOTE POSITION OF BELT TO GUIDES.

   g. Tighten Belt Guides "A" and"B" (Fig. 28 - inset) and Nuts "C" and "D" (Fig. 28).

   h. Replace Belt Guard, Washers , Cap Nuts, and Hex Nut (Fig. 29).

   i. Reposition Wheel and replace Retaining Pin and Hairpin Clip.

5. TINE REPLACEMENT

   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 (Fig. 30) needs to be replaced.

   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 (Fig. 31). 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 Figur 32. SHARPENED TINE EDGES WILL ROTAT REARWARD FROM ABOVE (FIG. 32).

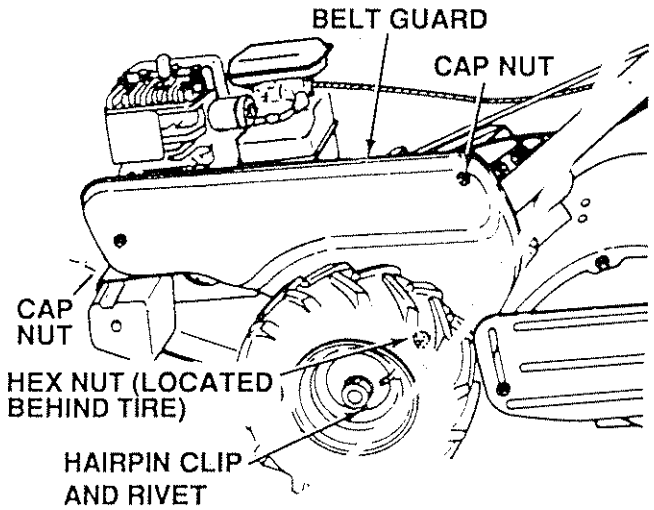


FIGURE 29

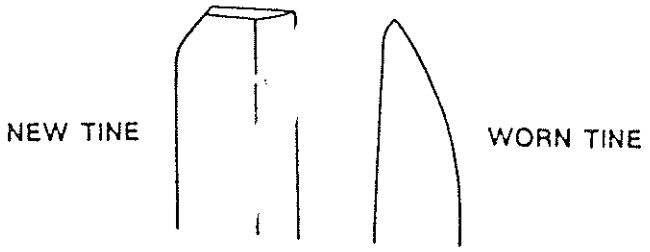


FIGURE 30

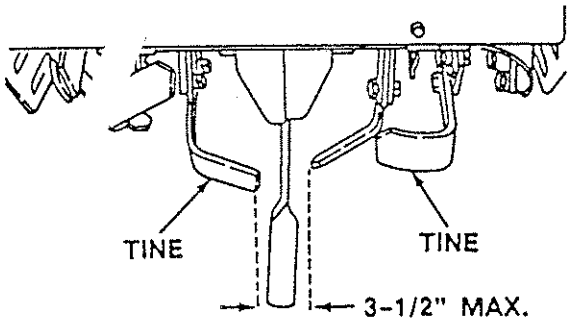


FIGURE 31

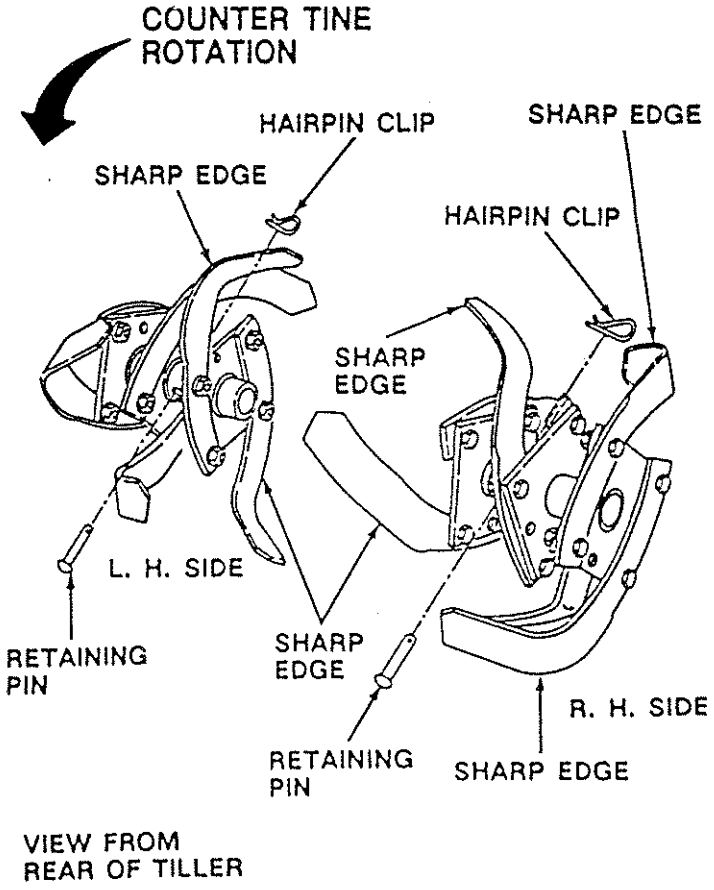


FIGURE 32

REPAIR AND ADJUSTMENT

6. CARBURETOR

NOTE: A dirty Air Cleaner will cause Engine to run rough. Be sure Air Cleaner is clean before Adjustments. Factory settings are satisfactory for most applications and conditions. If adjustments are needed, proceed as follows:

Never attempt to change maximum Engine speed. This is preset at the factory and should only be changed by a qualified service technician who has the necessary equipment. The carburetor may need re-adjusting if Engine lacks power or does not idle properly.

a. Turn needle valve (Fig. 33-Inset A) clockwise (↷) until it just closes. Valve may be damaged by turning Needle Valve in too far.

b. Open Needle Valve 1-1/2 turns counterclockwise (↶). This initial adjustment will permit the Engine to be started and warmed up prior to final adjustment.

c. Start the Engine. Allow Engine to warm up for about 5 minutes before proceeding.

d. Place Throttle Control in "IDLE" position.

- Turn Needle Valve in until Engine slows (clockwise (↷) lean mixture).
- Then turn Needle Valve out past smooth operating point until Engine runs unevenly (counterclockwise (↶) rich mixture).
- Now turn Needle Valve to the midpoint between rich and lean so the Engine runs smoothly.

e. To adjust Idle RPM, Rotate Throttle Linkage (Fig. 33-Inset A) counterclockwise (↶) and hold against stop while adjusting Idle Speed Adjusting Screw (Fig. 33-Inset A) to obtain 1750 RPM. Release Throttle Linkage.

f. Test the Engine by tilling. If Engine dies out, it usually indicates that the mixture is slightly lean and it may be necessary to open (↶) the Needle Valve slightly to provide a richer mixture. This richer mixture may cause a slight unevenness in idling.

7. THROTTLE CONTROL ADJUSTMENT

a. Loosen Throttle Cable Adjusting Screw (Fig. 33-Inset B).

b. With Throttle Control(Fig. 33) in "FAST" position and Cable connected to bellcrank (Fig. 33-inset B) pull Cable backward through screw until Bellcrank is as far rearward as it will go.

3. Tighten Adjusting Screw.

CAUTION: NEVER TAMPER WITH THE ENGINE GOVERNOR, WHICH IS FACTORY SET FOR PROPER ENGINE SPEED.

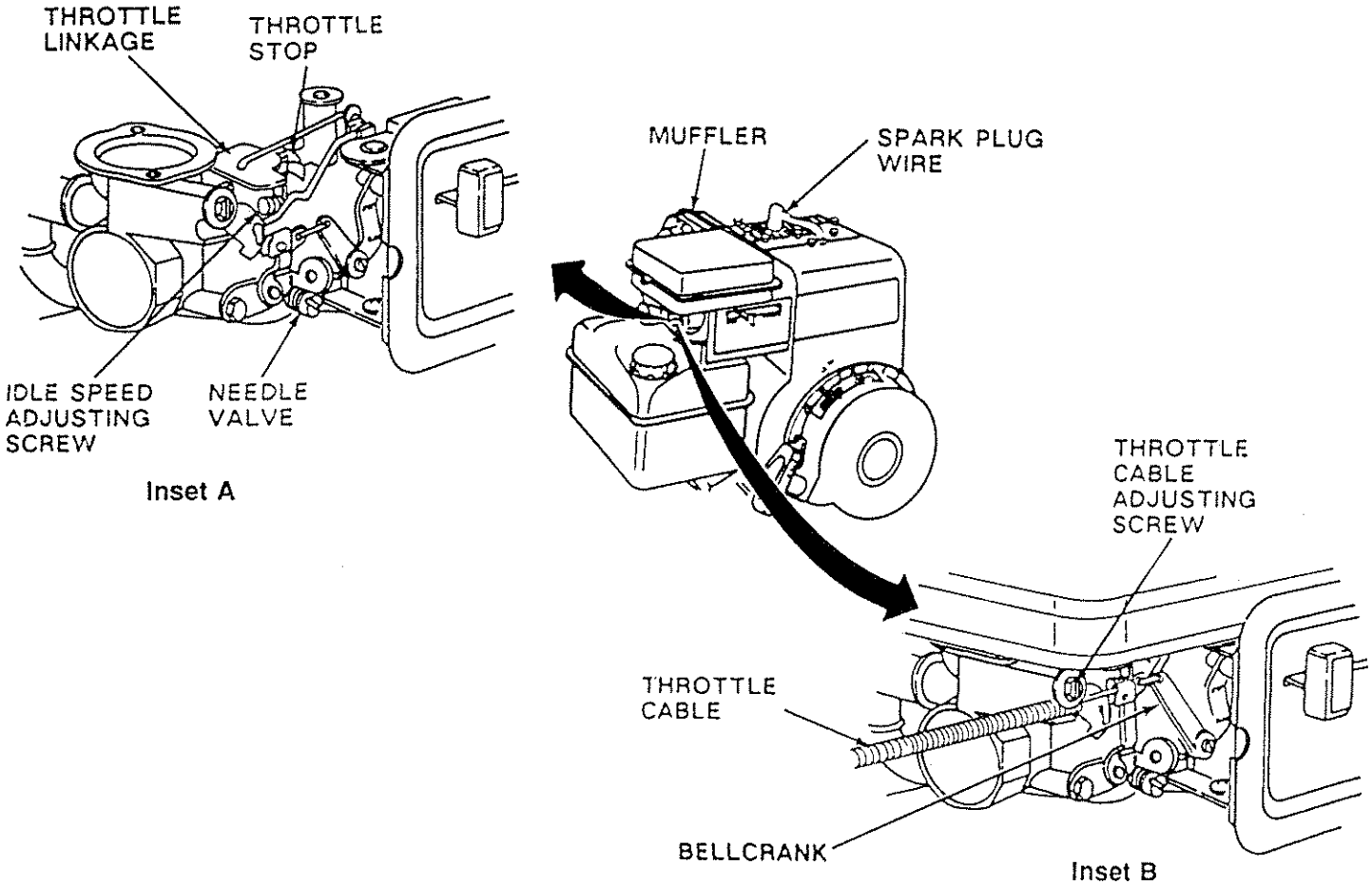


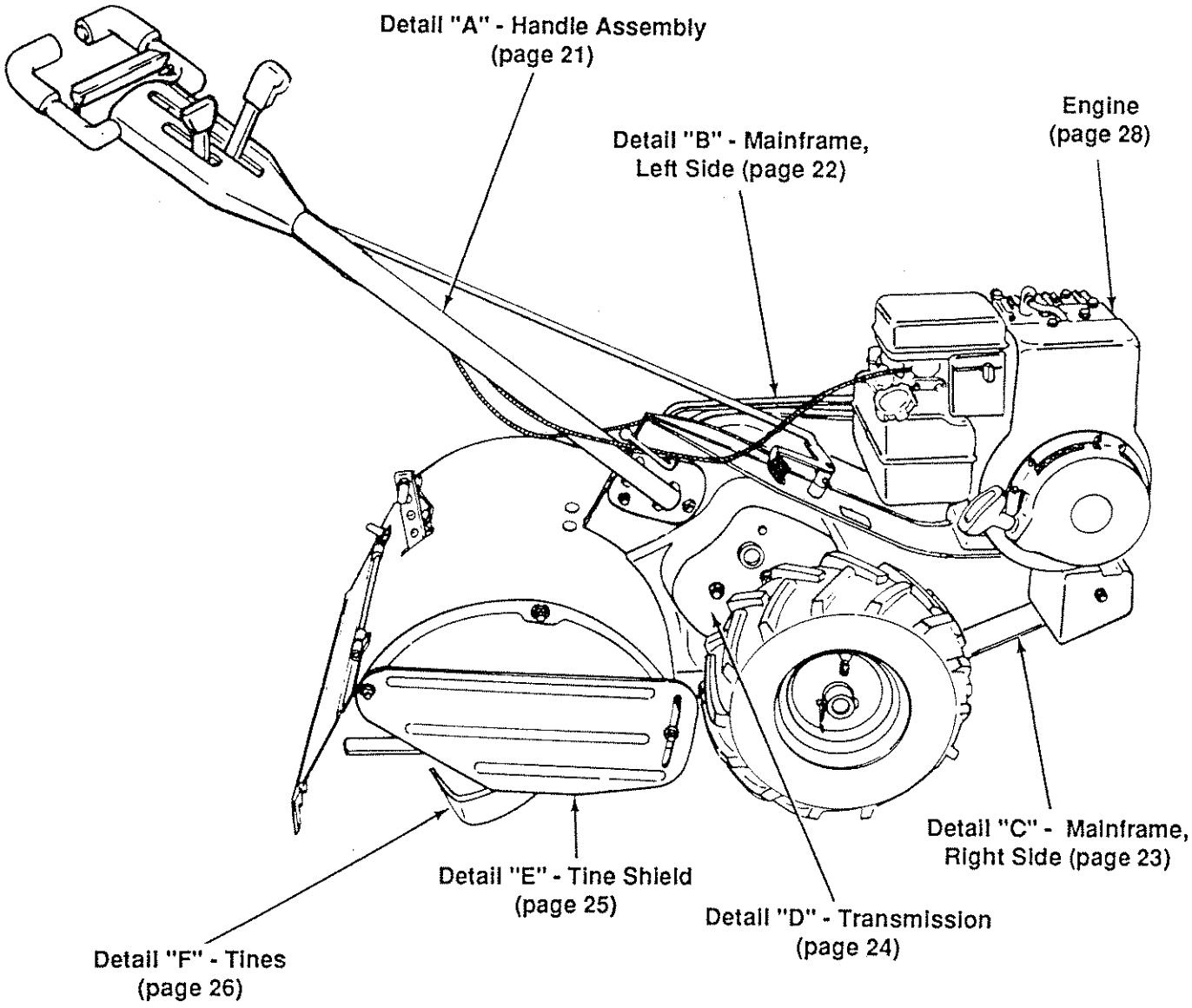
FIGURE 33

Problem and Probable Cause	Possible Remedy
WILL NOT START OR HARD TO START:	
No gasoline in Fuel Tank	Fill Tank with gasoline (pg. 9)
Throttle Control not set properly	Place Throttle Control (pg. 8) in "FAST" position
Choked improperly, flooded Engine	Move Choke Control (pg. 10) to "RUN" position or place Throttle Control in "FAST" position and pull Starter several times to clear out gas
Clogged Fuel Tank	Remove and clean
Dirty Air Cleaner Cartridge	Remove and clean or replace (pg. 13)
Spark Plug Dirty or improper gap	Clean, adjust gap or replace (pg. 13))
Water in gasoline or old fuel	Drain Fuel Tank and Carburetor, use fresh fuel and replace Spark Plug
Improper Carburetor adjustment	Make necessary adjustments (pg. 18)
ENGINE MISSES OR LACKS POWER:	
Engine overloaded	Set Depth Stake for shallower tilling (pg. 8)
Clogged Fuel Tank	Remove and clean
Partially plugged Air Cleaner	Remove and clean or replace (pg.13)
Improper Carburetor adjustment	Make necessary adjustments (pg. 18)
Dirty Air Screen	Clean Air Screen (pg. 13)
Spark Plug dirty, improper gap, or wrong type	Replace Spark Plug and adjust gap (pg. 13)
Poor compression	Major Engine Overhaul
Oil in gasoline	Drain and refill gas Tank and Carburetor
ENGINE OVERHEATS:	
Dirty Air Screen	Clean Air Screen (pg. 13)
Low oil level or dirty oil	Add or change oil (pg. 14)
Dirty Engine	Clean Cylinder Fins, Air Screen, and Muffler area (pg. 13)
Partially Plugged Muffler	Remove and clean Muffler
Improper Carburetor adjustment	Make necessary adjustments (pg. 18)
SOIL BALLS UP OR CLUMPS:	
Ground too wet	Wait for more favorable soil conditions

REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450

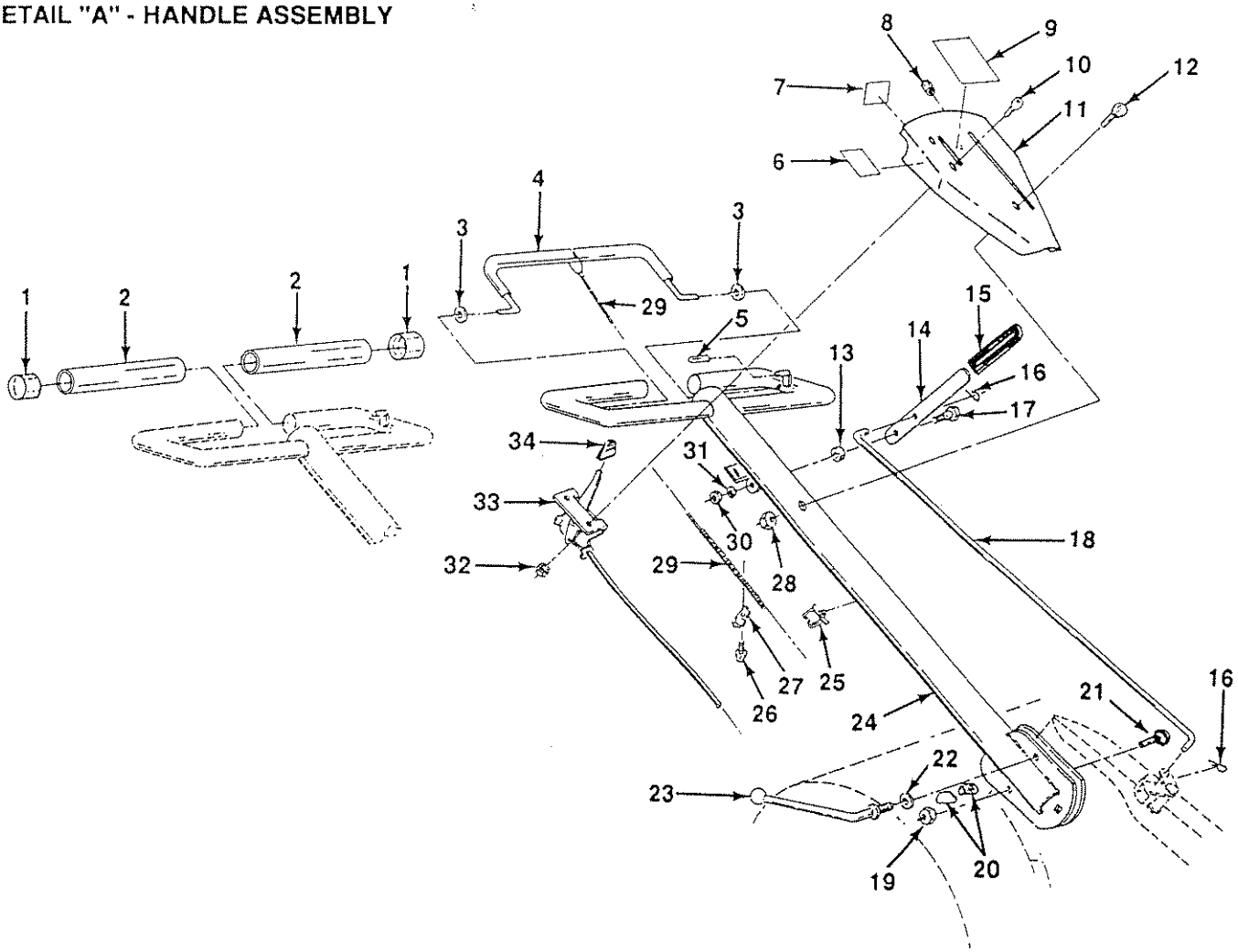
OVERVIEW



REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450

DETAIL "A" - HANDLE ASSEMBLY



KEY NO.	PART NO.	DESCRIPTION
1	110707X	Cap, Sleeve
2	110674X	Grip, Handle
3	110673X	Grommet, Handle
4	110672X	Bar, Drive Control Assembly
5	6712J	Cap, Vinyl
6	110614X	Decal, Hand Placement
7	122979X	Decal, Caution - Clutch
8	110641X	Bushing, Split
9	122978X	Decal, Control Panel
10	71091008	Screw, Mach. Pan Head. C.R. #10-24 x 1/2
11	110548X	Panel, Control
12	72010519	Bolt, Carr 5/16 - 18 UNC x 2-3/8 Gr5.
13	109313X	Grommet, Rubber
14	110741X	Handle, Shift
15	110646X	Handle, Grip
16	4497H	Clip, Hairpin
17	81328	Bolt, Shoulder

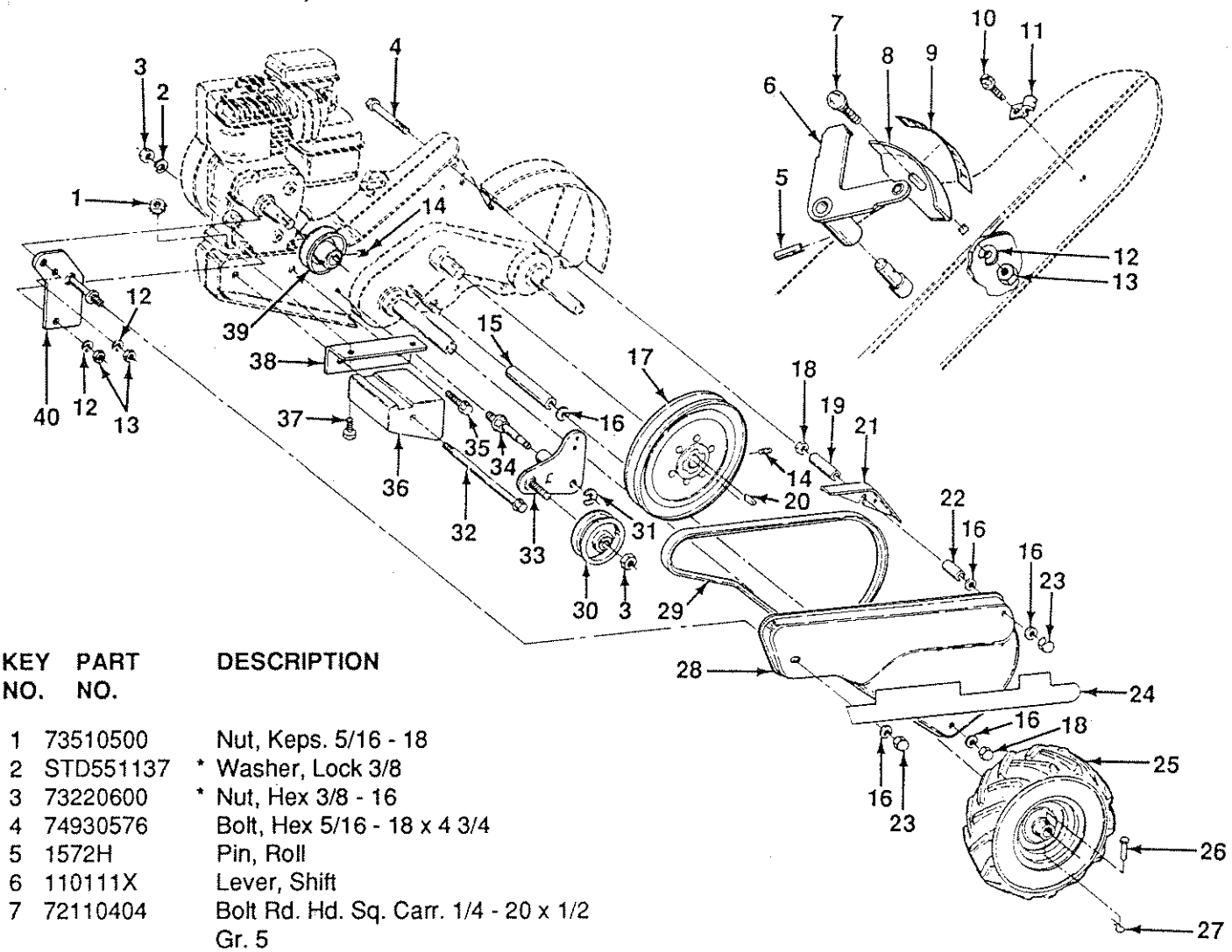
KEY NO.	PART NO.	DESCRIPTION
18	110702X	Rod, Shift
19	5394H	Nut, Centerlock - 3/8 - 16
20	109229X	Lock, Handle
21	72110608	Bolt, Rd. Hd. Sq. Neck Carr. 3/8 - 16 x 1 Gr 5.
22	19131611	Washer, 13/32 x 1 x 11 Ga.
23	109228X	Lever, Lock - Handle
24	121213X	Handle, Assemble
25	121145X	Clip, Plastic Cable
26	86777	Screw, Hex Washer Hd Slt. #10-24 x 1/2
27	9484R	Clip
28	73970500	Nut, Lock Hex. Flange
29	110675X	Clutch, Cable
30	STD541025	* Nut, Hex 1/4-20
31	STD551125	* Washer, Lock 1/4
32	73731000	Nut, Keps. #10-24
33	110670X	Throttle, Control
34	110680X	Knob, Control

* STANDARD HARDWARE--PURCHASE LOCALLY

REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450

DETAIL "B" - MAINFRAME, LEFT SIDE



KEY NO.	PART NO.		DESCRIPTION
1	73510500		Nut, Keps. 5/16 - 18
2	STD551137	*	Washer, Lock 3/8
3	73220600	*	Nut, Hex 3/8 - 16
4	74930576		Bolt, Hex 5/16 - 18 x 4 3/4
5	1572H		Pin, Roll
6	110111X		Lever, Shift
7	72110404		Bolt Rd. Hd. Sq. Carr. 1/4 - 20 x 1/2 Gr. 5
8	8700J		Panel, Shift Indicator
9	104323X		Decal, Shift Indicator
10	86777		Screw, Hex - Washer Head, slotted #10 - 24 x 1/2
11	9484R		Clip
12	551125	*	Washer, Lock 1/4
13	STD541025	*	Nut, Hex 1/4 - 20
14	23230506		Screw, Set Hex. 5/16 - 18 x 3/8
15	120938X		Spacer, Split 0.327 x 0.42 x 2.68
16	STD551031		Washer, 11/32 x 11/16 x 16 Ga.
17	100473M		Sheave, Transmission
18	STD541031	*	Nut, Hex 5/16 - 18
19	110651X		Spacer, Split 0.327 x 0.42 x 1.75
20	2649M		Key, Square 3/16 x 1-1/8
21	110653X		Guard, Pinch Point
22	110652X		Spacer, Split 0.327 x 0.42 x 2.09
23	104214X		Nut, Cap 5/16 - 18
24	120042X		Decal, Belt Guard
25	102190X		Tire
	109208X		Rim
	795R		Tire Valve
26	102841X		Rivet, Drilled

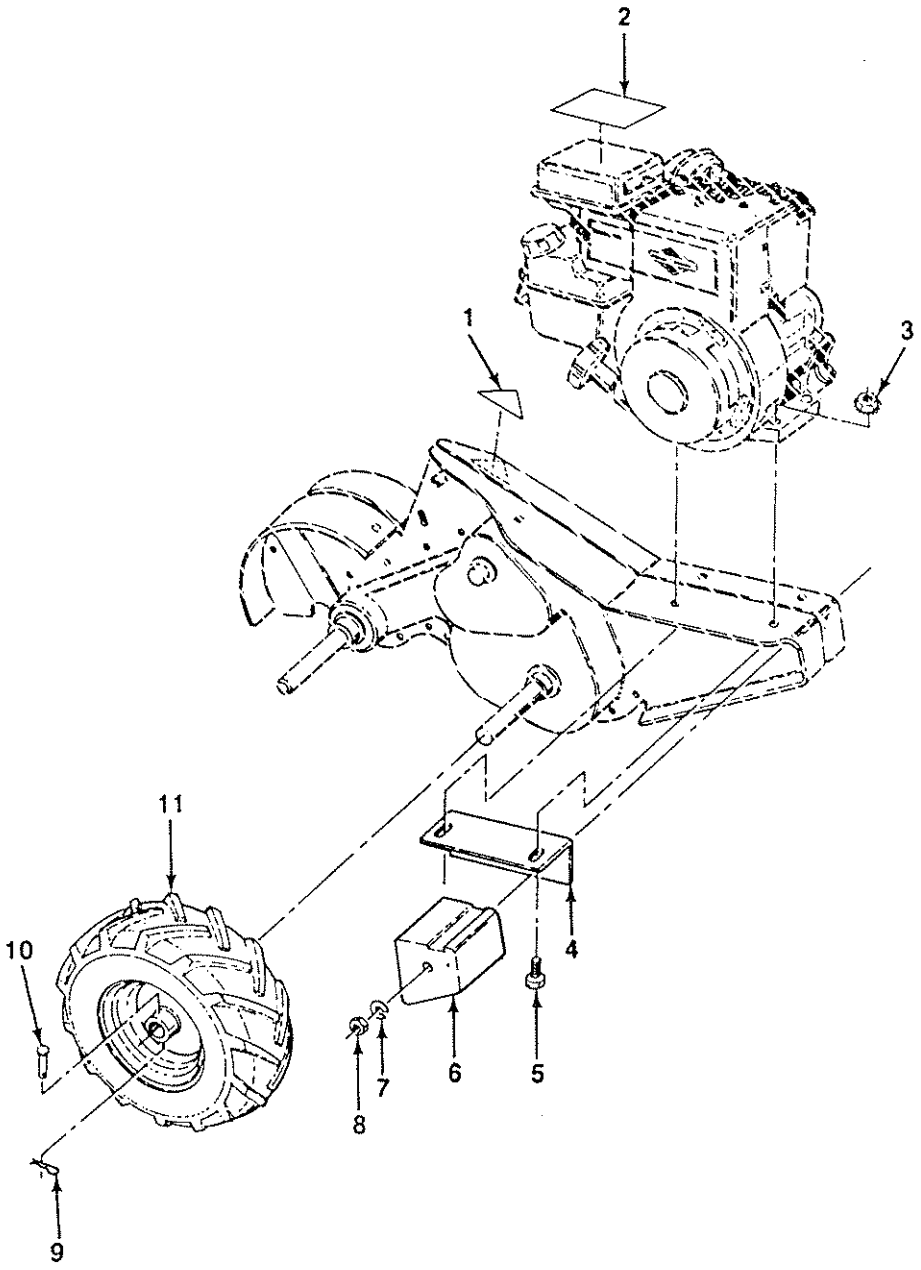
KEY NO.	PART NO.		DESCRIPTION
27	4497H		Clip, Hairpin
28	102148X		Guard, Belt
29	102143X		Belt, V
30	104679X		Pulley, Idler
31	12000032		Ring, Klip
32	102384X		Bolt, Hex 5/16 - 16 x 12
33	105611X		Bracket, Idler
34	102141X		Shift, Idler Arm
35	STD523710	*	Bolt, Hex 3/8 - 16 x 1
36	102383X		Counterweight, L. H.
37	STD523115	*	Bolt, Hex 5/16 - 18 x 1 1/2
38	102331X		Braket, Reinforcement, L. H.
39	102142X		Sheave, Engine
40	102376X		Bracket, Guard Belt

* STANDARD HARDWARE--PURCHASE LOCALLY

REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450

DETAIL "C" - MAINFRAME, RIGHT SIDE



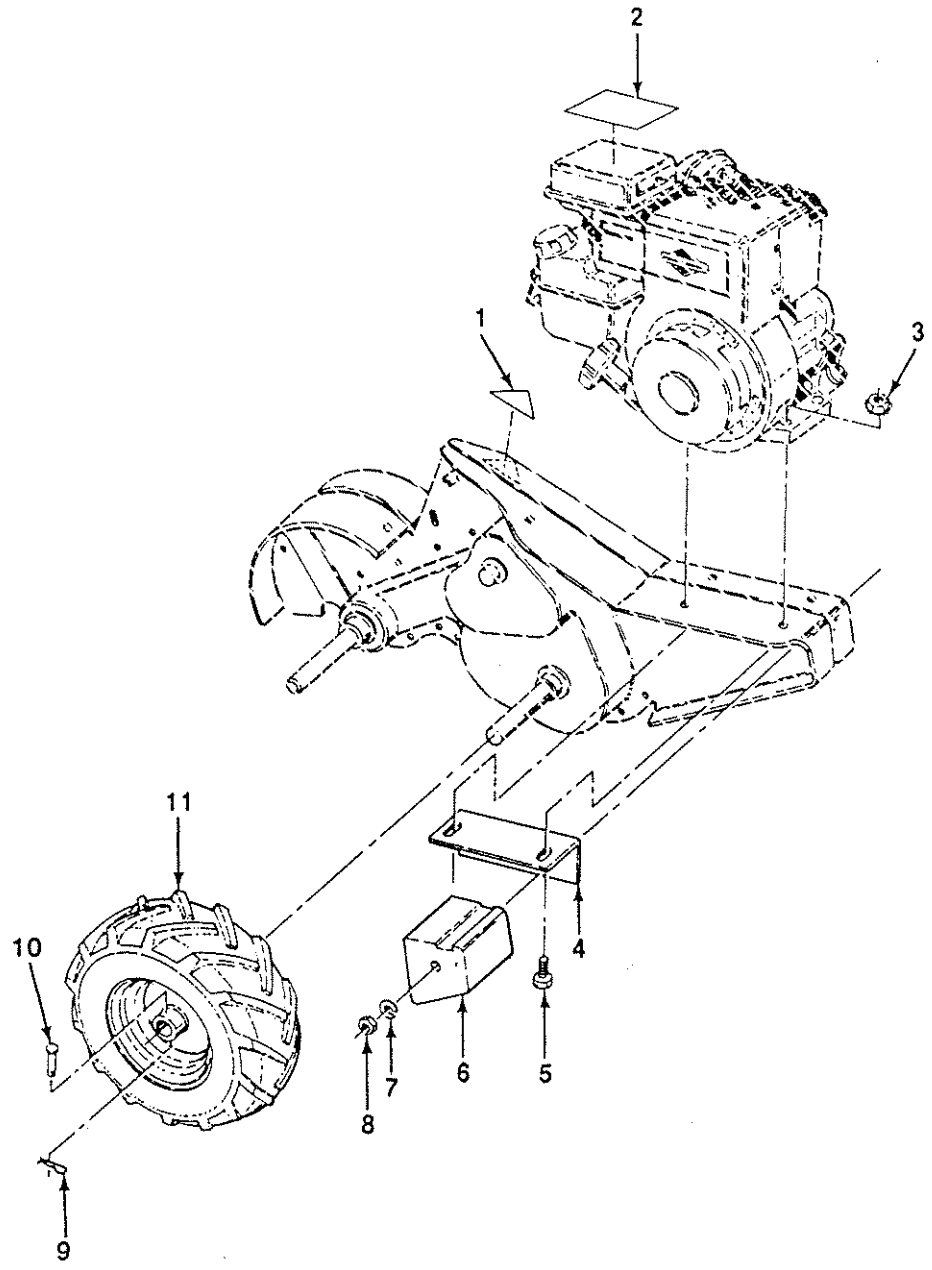
KEY NO.	PART NO.		DESCRIPTION
1	---		Decal, O.P.E.I.
2	110612X		Decal, Caution
3	73510500		Nut, Keps 5/16 - 18
4	102332X		Bracket Reinforcment
5	STD523115	*	Bolt, Hex 5/16 - 18 x 1-1/2
6	102173X		Counter Weight, R.H.
7	10040600	*	Washer, Lock 3/8
8	73220600	*	Nut Hex 3/8 - 16
9	4497H		Clip, Hairpin
10	102841X		Rivet, Drilled
11	109208X		Tire
	109208X		Rim
	795R		Tire Valve

* STANDARD HARDWARE--PURCHASE LOCALLY

REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450

DETAIL "C" - MAINFRAME, RIGHT SIDE



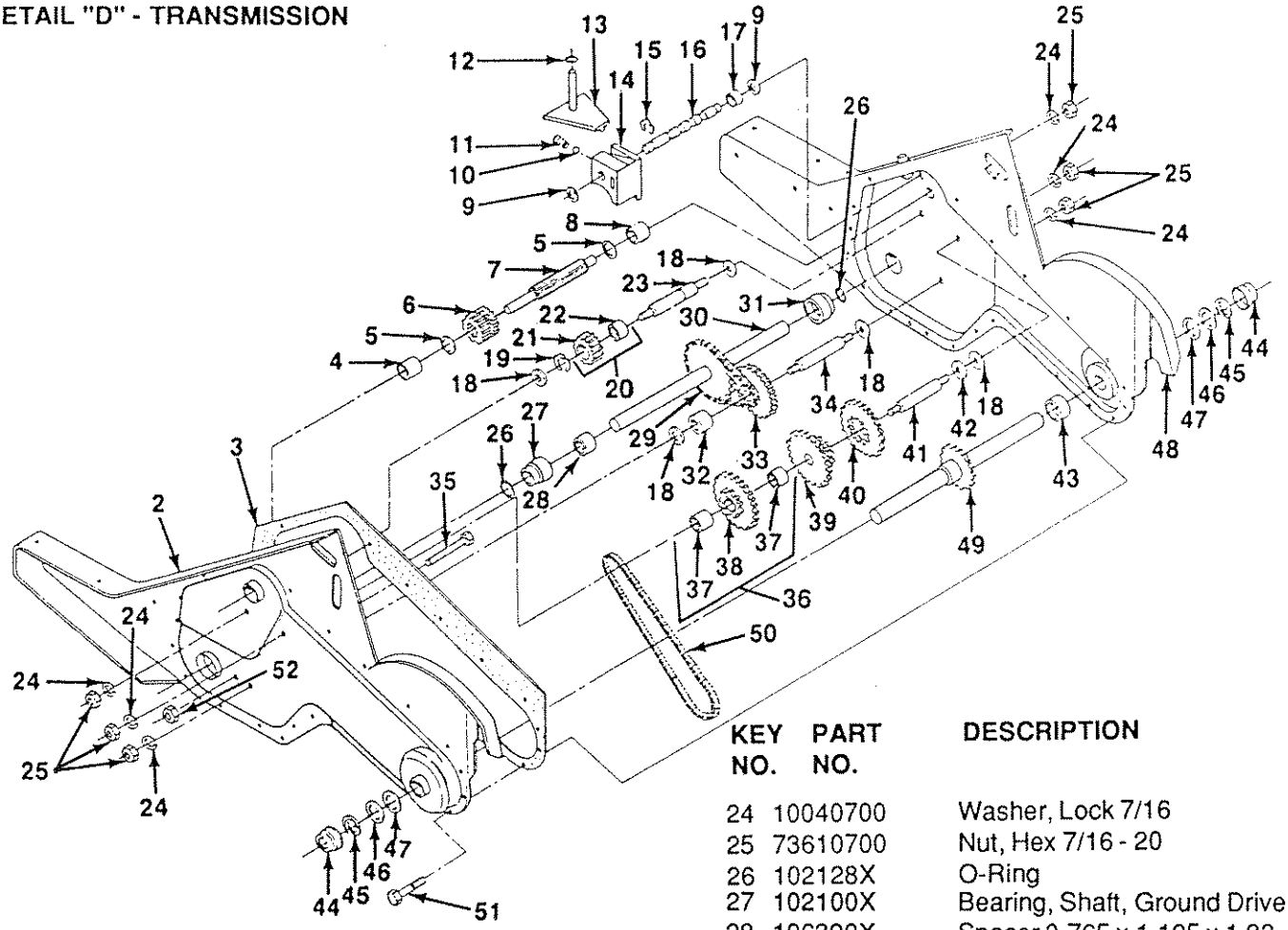
KEY NO.	PART NO.		DESCRIPTION
1	---		Decal, O.P.E.I.
2	110612X		Decal, Operations and Lubrication
3	73510500		Nut, Keps 5/16 - 18
4	102332X		Bracket Reinforcment
5	STD523115	*	Bolt, Hex 5/16 - 18 x 1-1/2
6	102173X		Counter Weight, R.H.
7	10040600	*	Washer, Lock 3/8
8	73220600	*	Nut Hex 3/8 - 16
9	4497H		Clip, Hairpin
10	102841X		Rivet, Drilled
11	109208X		Tire
	109208X		Rim
	795R		Tire Valve

* STANDARD HARDWARE--PURCHASE LOCALLY

REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450

DETAIL "D" - TRANSMISSION



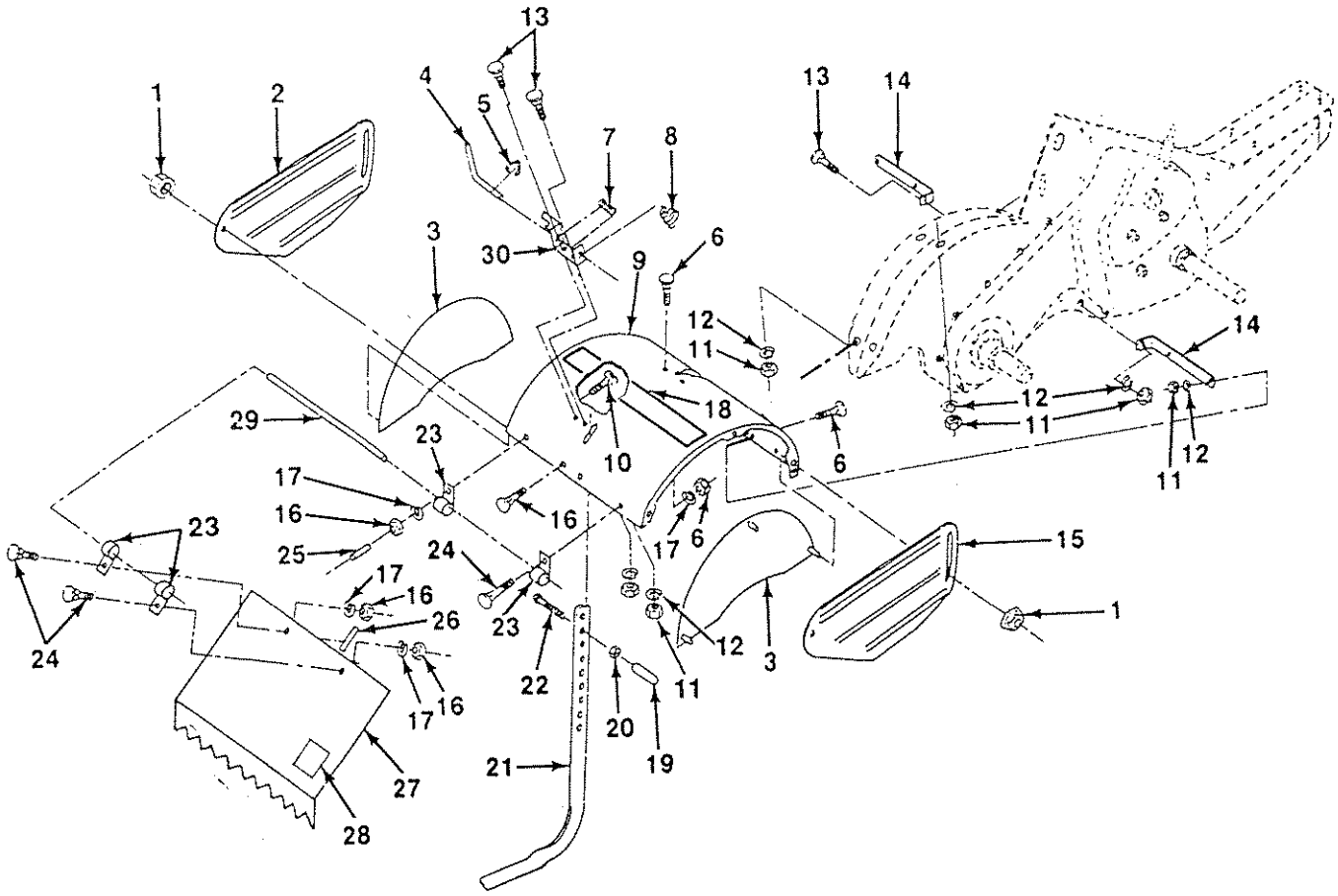
KEY NO.	PART NO.	DESCRIPTION
1	121146X	Transmission Assembly (Inc. key 2 - 52)
2	121147X	Gearcase, L.H. w/Bearing (Inc. key 4)
3	106211X	Gasket, Gearcase
4	5020J	Bearing, Needle
5	1370H	Race, Bearing Thrust 5/8 I.D.
6	102113X	Pinion, Input
7	102110X	Shaft, Input
8	4895H	Bearing, Needle
9	102136X	Washer, Seal
10	7392M	Ball, Steel
11	100371K	Spring, Shift, Fork
12	106160X	O-Ring
13	102107X	Arm,. Shift
14	8353J	Fork, Shift
15	12000039	Ring, Klip
16	102109X	Shaft, Shift
17	104159X	Spacer, Split
18	4358J	Washer
19	12000040	Ring, Klip
20	102114X	Gear, Assembly, Reverse Idler (Inc. key 21 & 22)
21	102115X	Gear, Reverse Idler
22	6803J	Bearing, Needle
23	102111X	Shaft, Reverse Idler
24	10040700	Washer, Lock 7/16
25	73610700	Nut, Hex 7/16 - 20
26	102128X	O-Ring
27	102100X	Bearing, Shaft, Ground Drive
28	106390X	Spacer 0.765 x 1.125 x 1.23
29	102134X	Chain #35-50 Pitch
30	109204X	Ground Shaft Assembly
31	102106X	Bearing, Shaft, Ground Drive
32	106388X	Spacer 0.70 x 1.00 x 1.150
33	102121X	Sprocket and Gear Assembly
34	102112X	Shaft, Reduction (2nd)
35	102101X	Screw, Whiz, Lock 5/16 - 18 x 3/12
36	106141X	Sprocket Assembly w/Bearing (Inc. key 37 & 38)
37	4422J	Bearing, Needle
38	106142X	Sprocket, Tine
39	105345X	Gear, Cluster, Red 1st & 2nd
40	105346X	Gear, Reverse
41	8358J	Shaft, Reduction (1st)
42	4220R	Washer, Thrust
43	106146X	Spacer 1.01 x 1.75 x 0.760
44	9672R	Cup, Formed
45	102144X	Ring, Spiral
46	9676R	Seal, Ring, Rubber
47	9674R	Seal, Oil
48	121745X	Gearcase, R.H. w/Bearing (Inc key 8)
49	106144X	Shaft, Tine
50	106147X	Chain, Roller #50-50 Pitch
51	17580408	Screw 1/4 - 20 x 1/2
52	73220500	* Nut, Hex. 5/16 - 18

* STANDARD HARDWARE--PURCHASE LOCALLY

REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450

DETAIL "E" - TINE SHIELD



KEY NO.	PART NO.		DESCRIPTION
1	98000129		Nut, Flange 5/16 - 18
2	104086X		Shield, Side outer L. H.
3	104085X		Shield Side
4	8393J		Pin, Stake Depth
5	12000036		Ring, Klip
6	72140505		Bolt, Carriage 5/16 - 18 x 5/8 Gr 5
7	8394J		Spring
8	109230X		Spring, Depth Stake
9	102326X		Shield, Tine
10	72040410		Bolt, Carriage 1/4 - 20 x 1 - 1/4 Gr. 5
11	541031		Nut, Hex 5/16 - 18
12	STD551131	*	Washer, Lock 5/16
13	STD533110	*	Bolt, Carriage 5/16 - 18 x 1
14	102155X		Bracket, Shield Tine
15	104101X		Shield, Side Outer R.H.
16	STD541025		Nut Hex 1/4 - 20

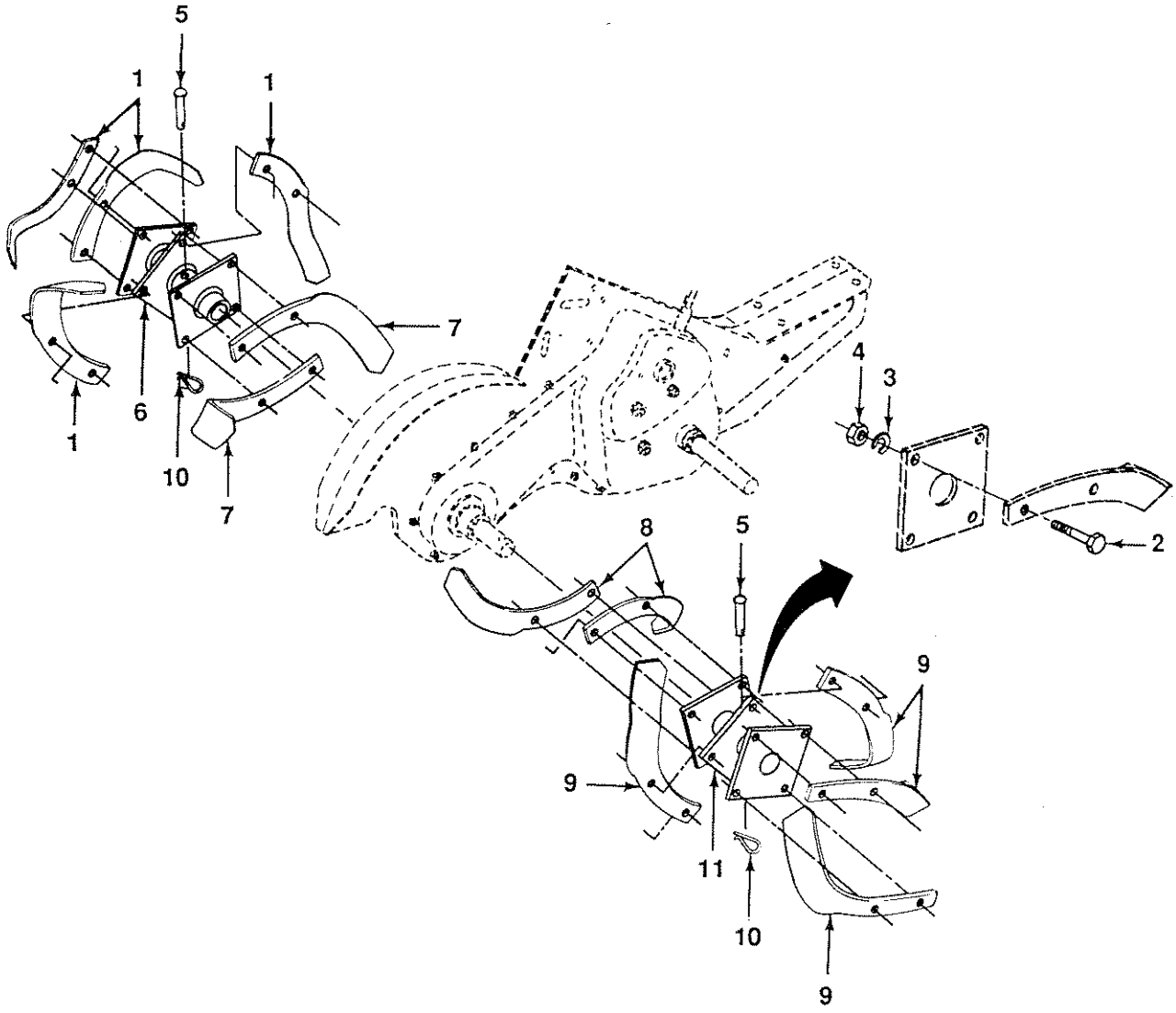
KEY NO.	PART NO.		DESCRIPTION
17	STD551125		Washer, Lock 1/4
18	110799X		Decal, Tine Shield
19	102701X		Grip
20	STD541037		Nut, Hex 3/8 - 16
21	102156X		Stake, Depth
22	74930632	*	Bolt, Hex 3/8 - 16 x 2
23	4440J		Hinge
24	72140404		Bolt, Carriage 1/4 - 20 x 1/2 Gr. 5
25	6712J		Cap, Vinyl
26	109227X		Pad, Idler
27	102695X	*	Shield, Leveling
28	120076X		Decal, Warning
29	120588X		Pin, Hinge
30	8392J		Bracket, Latch

* STANDARD HARDWARE--PURCHASE LOCALLY

REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450

DETAIL "F" - TINES



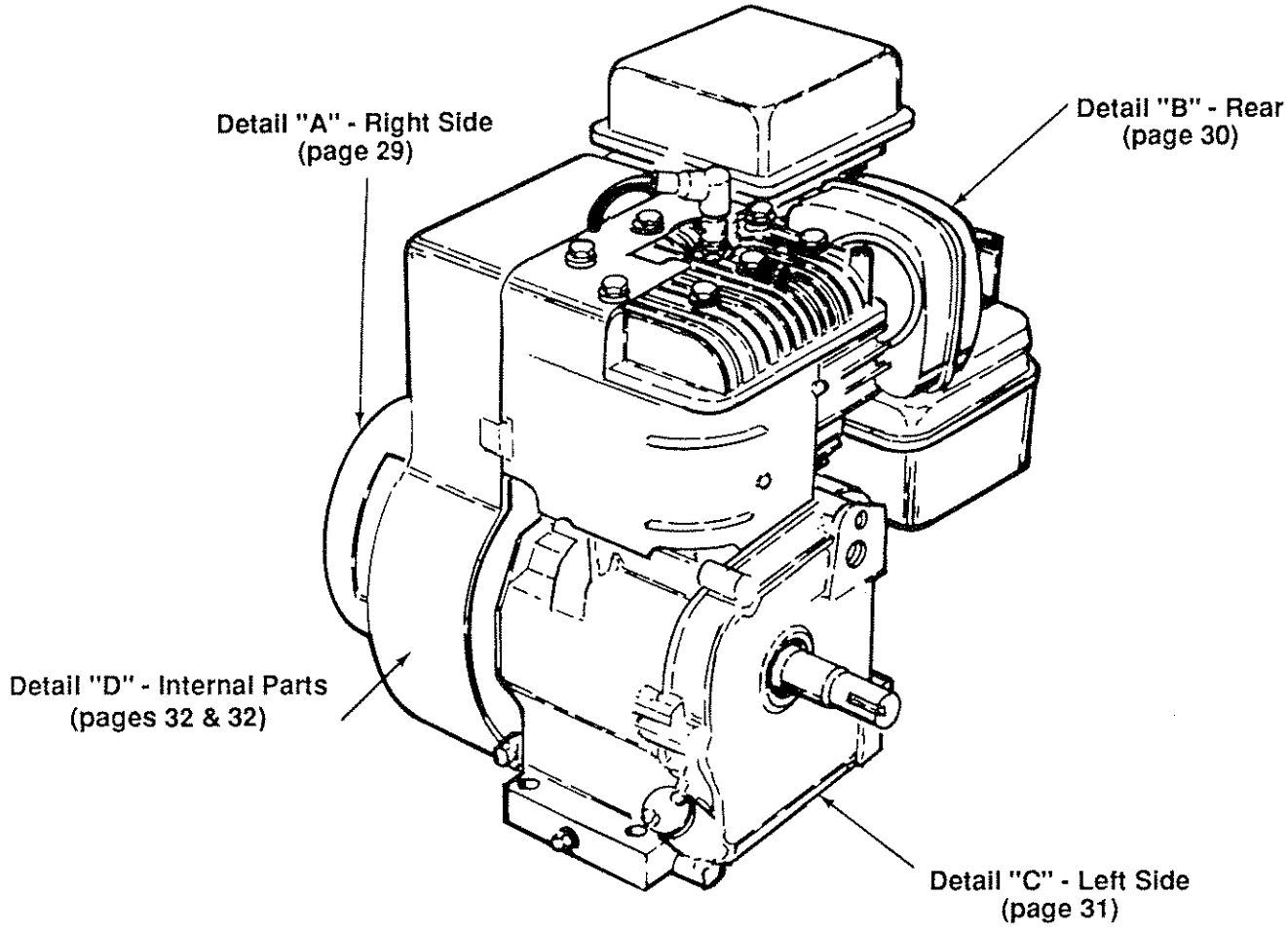
KEY NO.	PART NO.		DESCRIPTION
1	4459J		Tine L. H.
2	STD6237102	*	Bolt, Hex 3/8 - 24 x 1
3	STD551137	*	Washer, Lock 3/8
4	STD54113	*	Nut, Hex 3/8 - 24
5	4929H		Retaining Pin with hole
6	102380X		Hub and Plate, Assembly L. H.
7	6554J		Tine L. H.
8	6555J		Tine, R. H.
9	4460J		Tine, R. H.
10	3146R		Clip, Hairpin
11	102382X		Hub and Plate, Assembly R. H.
--	121254X		Owner's Manual

* STANDARD HARDWARE--PURCHASE LOCALLY

REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450
ENGINE - CRAFTSMAN -- MODEL NUMBER 130202, TYPE NUMBER 3130-01

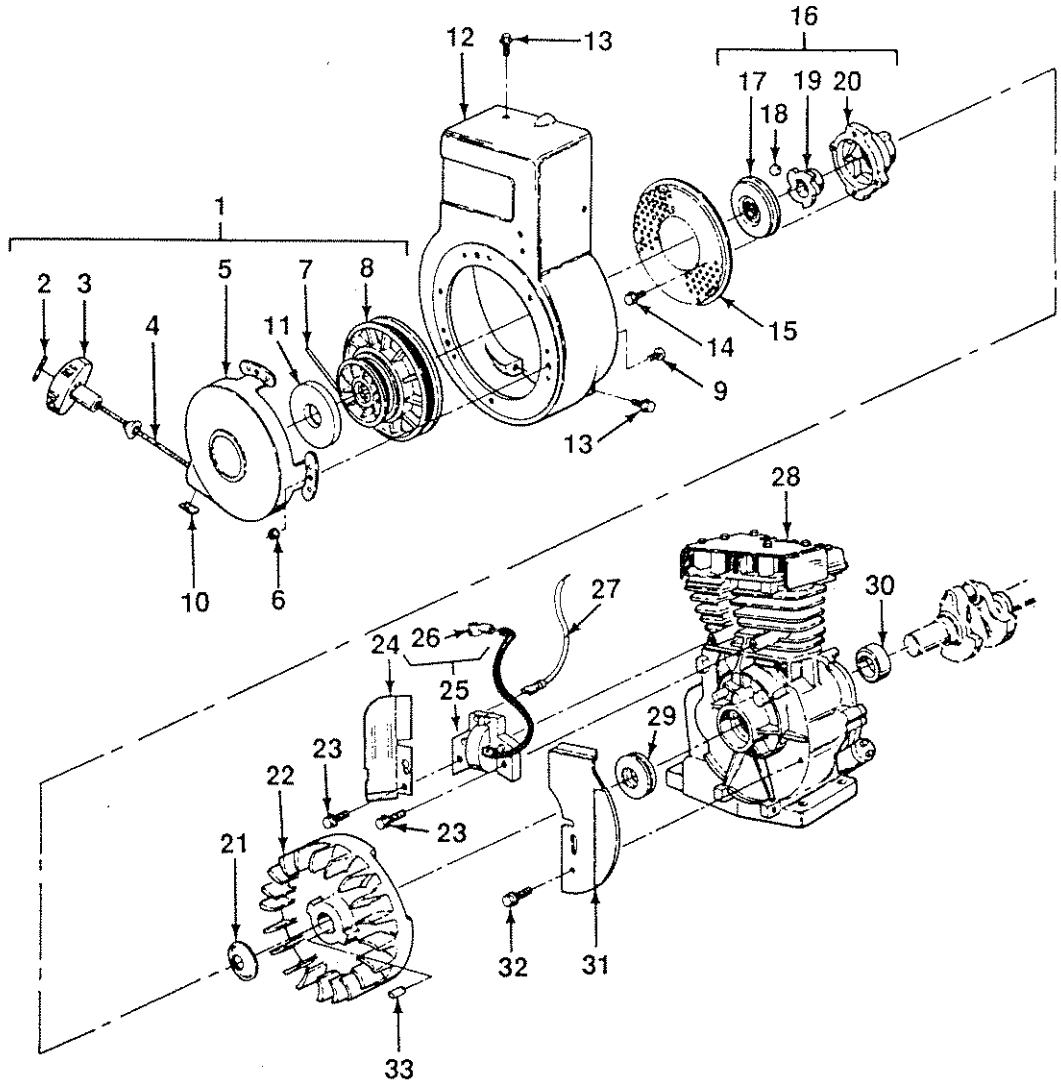
OVERVIEW



REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450
ENGINE - CRAFTSMAN -- MODEL NUMBER 130202, TYPE NUMBER 3130-01

DETAIL "A" - ENGINE, RIGHT SIDE



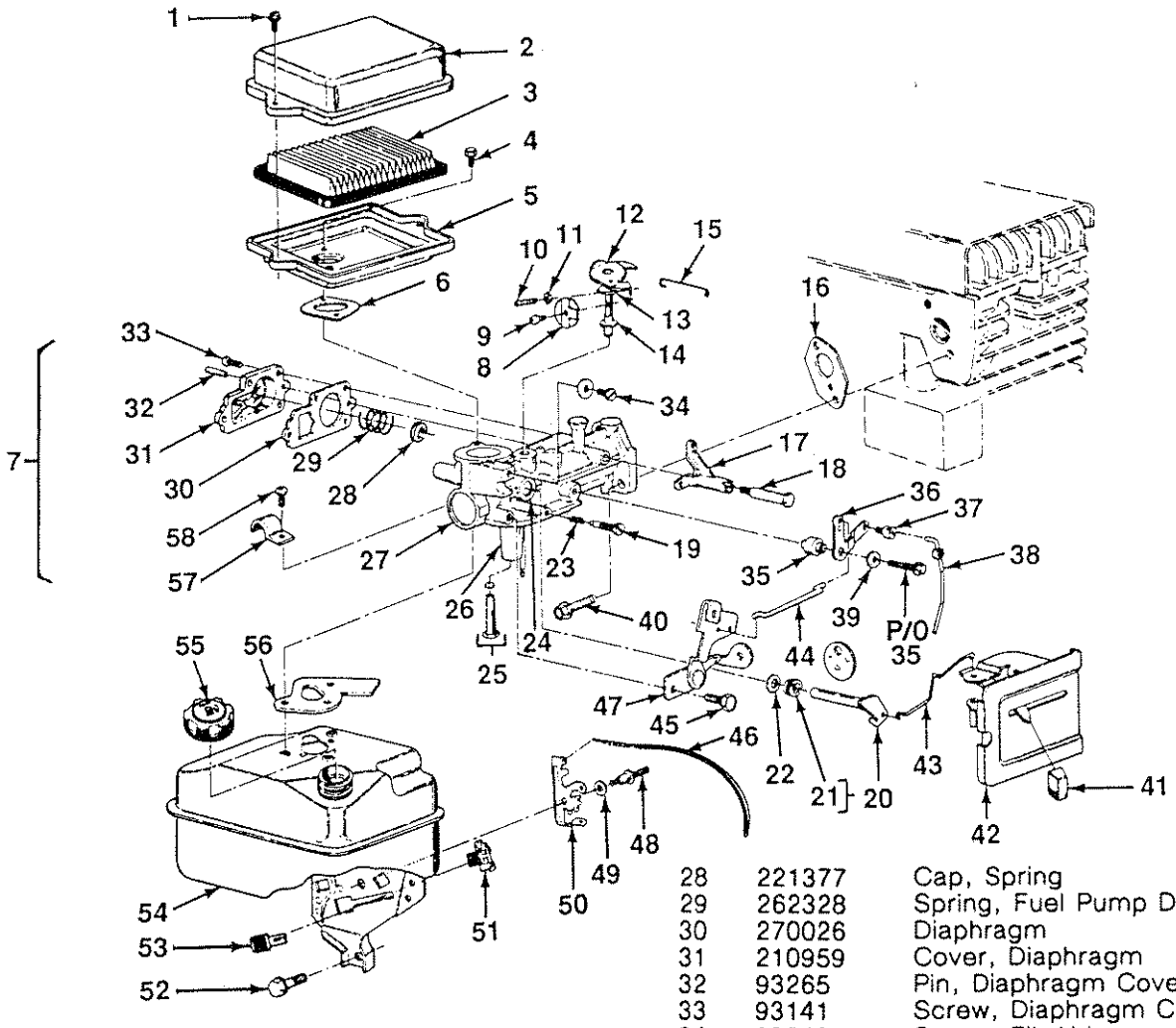
KEY NO.	PART NO.	DESCRIPTION
1	390463	Starter Assembly, Rewind (Inc. Key No's 2-9)
2	230228	Pin, Starter Grip
3	66728	Grip, Starter Rope (Inc. Key No. 2)
4	66884	Rope, Starter 63" Long
5	299431	Housing, Starter (Inc. Key No's 6 and 9)
6	92987	Nut, Hex
7	490179	Spring, Starter
8	295871	Pulley, Starter (Inc. Key No. 4)
9	94128	Screw, Starter Housing Mounting
10	222598	Anchor - Spring
11	490817	Spacer
12	490169	Housing, Blower
13	93158	Screw, Blower Housing Mounting
14	93490	Screw, Sem
15	221923	Screen, Starter Pulley
16	399671	Clutch Assembly (Inc. Key No's 17-20)
17	394506	Washer, Clutch Retainer
18	63770	Ball, Clutch
19	298799	Ratchet
20	394897	Housing, Starter Clutch
21	220865	Washer, Spring
22	297229	Flywheel, Magneto
23	93414	Screw, Armature Mtg. Sem
24	223886	Guide, Air
25	397358	Armature Assembly (Inc. Key No. 26)
26	221798	Cable - Terminal Ignition
27	398808	Wire, Ground
28	395990	Cylinder Assembly (Inc. Key No 29)
29	299819	Seal, Oil
30	297565	* Bushing - Cylinder (Inc. Key No 29)
31	222443	Guard, Flywheel
32	93705	Screw, Flywheel Guard
33	222698	Key, Flywheel

* REQUIRES SPECIAL TOOLS TO INSTALL

REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450
ENGINE - CRAFTSMAN -- MODEL NUMBER 130202, TYPE NUMBER 3130-01

DETAIL "B" - ENGINE, REAR



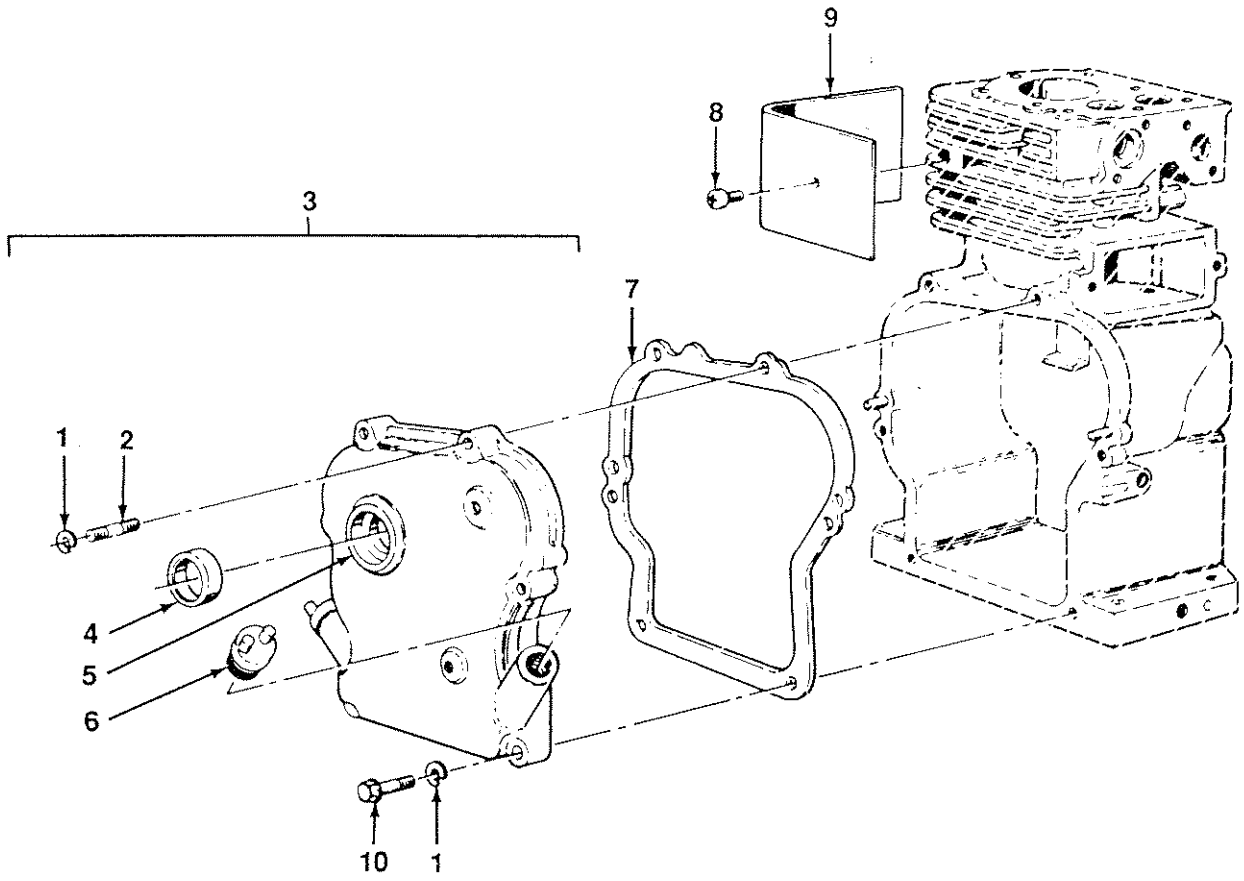
1	490073	Screw, Cover Mounting
2	223765	Cover, Air Cleaner
3	399959	Filter, Air
4	94018	Screw, Air Cleaner
5	490074	Base, Air Cleaner
6	271935	Gasket, Air Cleaner Mtg.
7	490533	Carburetor Assembly (Inc. Key No's 8 thru 33)
8	223793	Throttle, Carburetor
9	93499	Screw, Throttle Valve to Shaft Sem
10	93527	Screw, Machine
11	260575	Spring, Throttle Adjustment
12	490048	Shaft and Lever, Throttle
13	271853	Washer, Throttle Shaft (Foam)
14	398970	Seal, Throttle Shaft
15	262270	Link, Throttle
16	271936	** Gasket, Carburetor Mtg. (2)
17	280720	Crank, Bell
18	231520	Screw, Shoulder
19	231530	Valve, Needle
20	491177	Valve Group, Choke (Inc. Key No.'s 21 and 22)
21	270382	Washer, Choke Shaft (Felt)
22	221839	Washer, Choke Shaft
23	26336	Spring, Needle Valve
24	223789	Plug, Welch
25	391813	Fuel Pipe and Clip
26	223472	Plug, Welch
27	220352	Plug, Welch
28	221377	Cap, Spring
29	262328	Spring, Fuel Pump Diaphragm
30	270026	Diaphragm
31	210959	Cover, Diaphragm
32	93265	Pin, Diaphragm Cover
33	93141	Screw, Diaphragm Cover
34	93543	Screw, Fil. Hd.
35	490589	Screw and Collar
36	223813	Crank, Bell
37	490507	Retainer, Rod
38	262279	Rod - Control
39	220982	Washer
40	93357	Screw, Hex Hd.
41	280715	Knob, Control
42	490649	Control Panel (Inc. key No.s 41, & 51)
43	262359	Link, Choke
44	262470	Link, Throttle
45	93572	Screw
46	262283	Spring, Governor
47	491577	Control, Throttle
48	93491	Rivet, Governor Control Lever M
49	222962	Bushing, Governor Lever (Flat)
50	223455	Lever, Governor Control
51	396847	Switch, Stop
52	93343	Screw, Tank Bracket Mtg. Sem
53	280321	Gear Rack, Governor
54	490554	Tank, Fuel (Inc. key No.s 48, 50, & 55)
55	490075	Cap, Fuel Tank
56	271928	Gasket, Fuel Tank Mounting
57	223786	Clamp, Breather Tube
58	94094	Screw, Fuel Tank Mtg. Sem

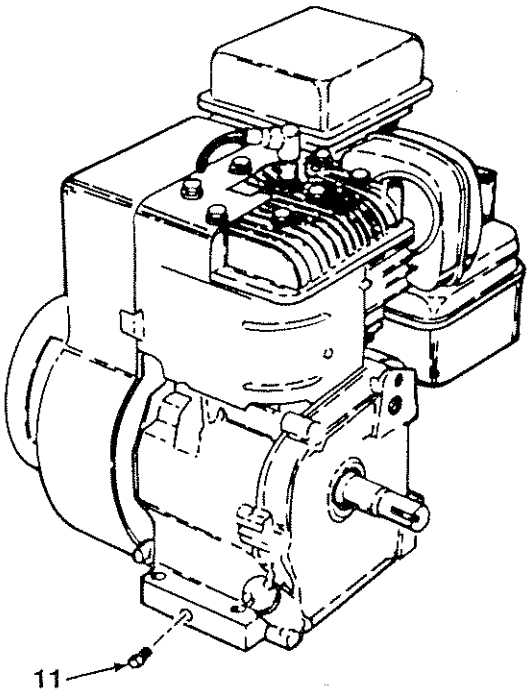
** INCLUDED IN GASKET SET NO. 397145

REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450
ENGINE - CRAFTSMAN -- MODEL NUMBER 130202, TYPE NUMBER 3130-01

DETAIL "C" - ENGINE, LEFT SIDE





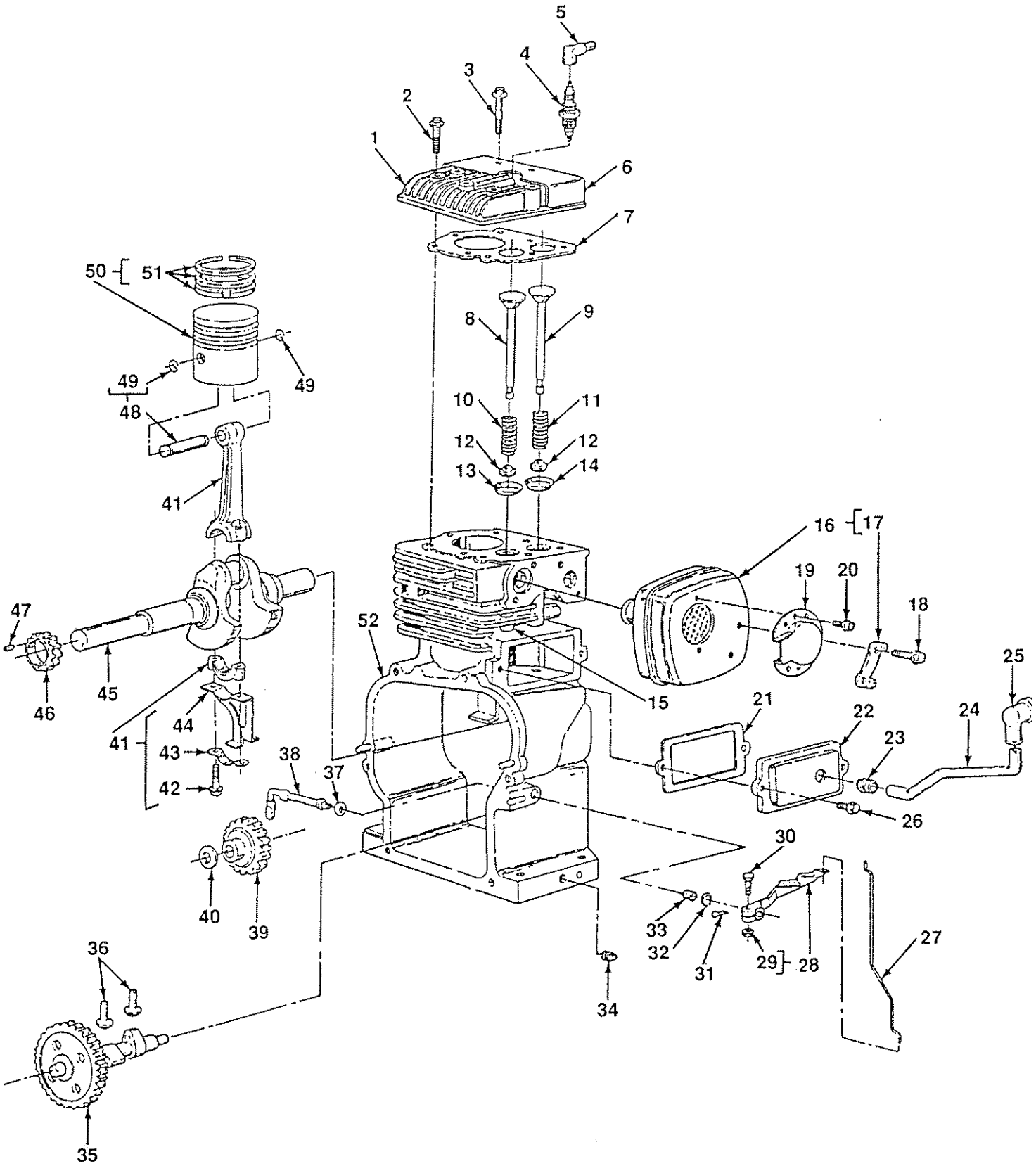
1	90832	Washer, Lock
2	93656	Stud
3	297602	Cover Assembly, Crankcase (Inc. Key No.'s 5, 6 and 7)
4	294606	Seal, Oil
5	297603	Bushing, Crankcase Cover
6	66768	Plug, Oil Filter
7	270080	** Gasket, Crankcase .015" thick
8	93490	Screw, Cylinder Shield Mtg. Sem
9	221511	Shield, Cylinder
10	93032	Screw, Crankcase Cover Mtg.
11	91249	Plug, Pipe 1/4" Std. (Square Head)

** INCLUDE IN GASKET SET NO. 397145

REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450
ENGINE - CRAFTSMAN -- MODEL NUMBER 130202, TYPE NUMBER 3130-01

DETAIL "D" - ENGINE, INTERNAL PARTS



REPAIR PARTS

5 H.P. TILLER -- MODEL NUMBER C944.629450
ENGINE - CRAFTSMAN -- MODEL NUMBER 130202, TYPE NUMBER 3130-01

DETAIL "D" - ENGINE, INTERNAL PARTS

KEY NO.	PART NO.	DESCRIPTION
1	211542	Head, Cylinder
2	93368	Screw, Cylinder Head-2-3/32 l.
3	93369	Screw, Cylinder Head-2-15/32 l.
4	293918	Plug - Spark, Resistor
5	66538	Elbow, Spark Plug
6	221512	Cover, Cylinder Head
7	270383	** Gasket, Cylinder Head
8	211119	Valve, Exhaust
9	261044	Valve, Intake
10	26478	Spring, Exhaust Valve
11	260552	Spring, Intake Valve
12	93312	Retainer, Valve Spring
13	211172	* Seat - Exhaust Valve (Std.)
14	211787	* Seat - Intake Valve (Std.)
15	262001	* Guide - Exhaust Valve
16	393615	Muffler - Exhaust (Inc. Key No.'s 17 and 18)
17	222263	Lock - Screw
18	93935	Screw, Hex Hd. Shoulder
19	393757	Deflector - Exhaust, Side Outlet (Inc. Key No. 20)
20	93705	Screw
21	27549	** Gasket, Valve Cover
22	294178	Breather, Valve Chamber
23	66578	Grommet, Breather Tube
24	231526	Tube, Breather
25	67838	Grommet, Breather Tube
26	93394	Screw, Breather Mounting
27	262230	Link, Governor
28	490374	Lever Assembly, Governor (Inc. Key No.'s 29 and 30)
29	231082	Nut, Hex No. 10 - 24
30	92613	Bolt, Governor Lever
31	93306	Cotter, Hairpin
32	93307	Retainer, E-Ring
33	231079	Bushing, Governor Crank (1/4" I.D.)
34	93448	Plug, Pipe (Hex Socket)
35	212733	Gear, Cam
36	260642	Tappet, Valve
37	222450	Washer, Governor Lever
38	231077	Crank, Governor (1/4" Dia.)
39	391737	Gear, Governor
40	221551	Washer, Thrust
41	299430	Rod Assembly, Connecting (Inc. Key No.'s 42 to 44) NOTE: For connecting Rod with .020" undersize Crankpin Bore, Order No. 390459
42	92296	Screw, Connecting Rod
43	221876	Lock, Connecting Rod Screw
44	221890	Dipper, Connecting Rod
45	397103	Crankshaft
46	261696	Gear - Timing
47	230978	Key, Crankshaft
48	298909	Pin Assembly, Piston Std. (Inc. Key No. 49)
49	26026	Lock, Piston Pin
50	298904	Piston Assembly - Std. (Inc. Key No. 51)
51	298982	Ring Set, Piston - Std.
52	395990	Cylinder Assembly

* REQUIRES SPECIAL TOOLS TO INSTALL
** INCLUDE IN GASKET SET NO. 397145

OPTIONAL EQUIPMENT AND SPECIAL TOOLS:

--	392193	Spark Arresting Muffler Assembly, Consists of the following:
		-- 391913 Screen (1 required)
		-- 222535 Deflector (1 required)
		-- 93705 Screw (4 required)
--	397145	Gasket Set
--	89838	Spark Plug Wrench
--	19069	Flywheel Puller

SEARS
OWNERS
MANUAL

MODEL NO.
C944.629450

HOW TO ORDER
REPAIR PARTS

CRAFTSMAN
5 H.P. CRT 17 INCH REAR TINE TILLER WITH COUNTER ROTATING TINES

The Model Number will be found on a plate attached to the top of the Transmission. Always provide the Model Number when requesting service or repair parts for your Tiller.

All parts listed herein may be ordered from any Sears Service Centre/Departments and most Sears Stores.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- THE PART NUMBER
- THE PART DESCRIPTION
- THE MODEL NUMBER
- THE NAME OF MERCHANDISE

Your Sears merchandise has added value when you consider Sears has service units nationwide staffed with Sears trained technicians having the parts, tools and the equipment to insure that we meet our pledge to you, "We Service What We Sell".

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