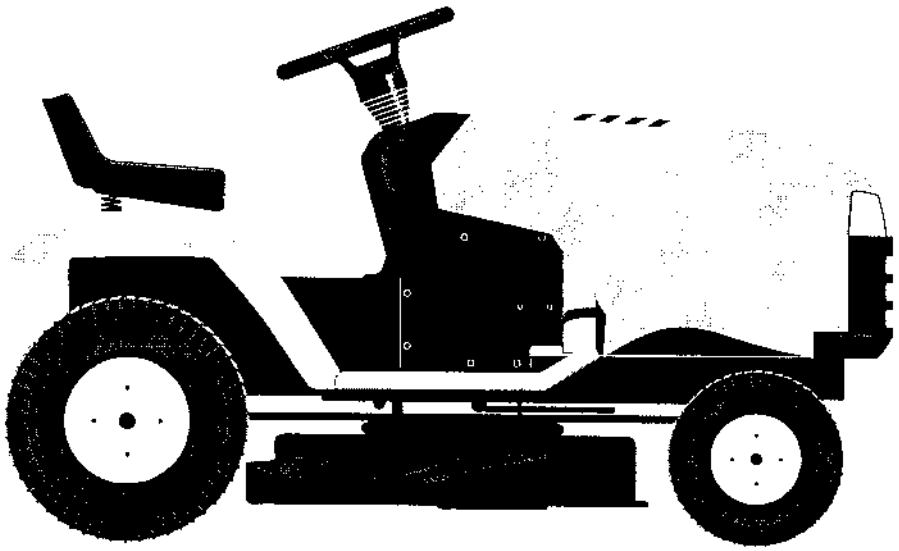
Husqvarna



LTH120

Owner's Manual

This product has a low emission engine which operates differently from previously built engines. Before you start the engine, read and understand this Owner's Manual.

SAFETY RULES

Safe Operation Practices for Ride-On Mowers

IMPORTANT: THIS CUTTING MACHINE IS CAPABLE OF AMPUTATING HANDS AND FEET AND THROWING OBJECTS. FAILURE TO OBSERVE THE FOLLOWING SAFETY INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.

I. GENERAL OPERATION

- Read, understand, and follow all instructions in the manual and on the machine before starting.
- Only allow responsible adults, who are familiar with the instructions, to operate the machine.
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade.
- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Be aware of the mower discharge direction and do not point it at anyone. Do not operate the mower without either the entire grass catcher or the guard in place.
- Slow down before turning.
- Never leave a running machine unattended. Always turn off blades, set parking brake, stop engine, and remove keys before dismounting.
- Turn off blades when not mowing.
- Stop engine before removing grass catcher or unclogging chute.
- Mow only in daylight or good artificial light.
- Do not operate the machine while under the influence of alcohol or drugs.
- Watch for traffic when operating near or crossing roadways.
- Use extra care when loading or unloading the machine into a trailer or truck.

II. SLOPE OPERATION

Slopes are a major factor related to loss-of-control and tipover accidents, which can result in severe injury or death. All slopes require extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it.

DO:

- Mow up and down slopes, not across.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine. *Tall grass can hide obstacles.*
- Use slow speed. Choose a low gear so that you will not have to stop or shift while on the slope.
- Follow the manufacturer's recommendations for wheel weights or counterweights to improve stability.
- Use extra care with grass catchers or other attachments. These can change the stability of the machine.
- Keep all movement on the slopes *slow* and *gradual*. Do not make sudden changes in speed or direction.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly *straight* down the slope.

DO NOT:

- *Do not* turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.
- *Do not* mow near drop-offs, ditches, or embankments. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.
- *Do not* mow on wet grass. Reduced traction could cause sliding.
- *Do not* try to stabilize the machine by putting your foot on the ground.
- *Do not* use grass catcher on steep slopes.

III. CHILDREN

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. *Never* assume that children will remain where you last saw them.

- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and *down* for small children.
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

IV. SERVICE

- Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.
  - Use only an approved container.
  - Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling. Do not smoke.
  - Never refuel the machine indoors.
  - Never store the machine or fuel container inside where there is an open flame, such as a water heater.
- Never run a machine inside a closed area.
- Keep nuts and bolts, especially blade attachment bolts, tight and keep equipment in good condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep machine free of grass, leaves, or other debris build-up. Clean oil or fuel spillage. Allow machine to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Never make adjustments or repairs with the engine running.
- Grass catcher components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
- Check brake operation frequently. Adjust and service as required.

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.

⚠ WARNING ⚠

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

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

Should you experience any problem you cannot easily remedy, please contact your nearest authorized service center/department. We have competent, well-trained technicians and the proper tools to service or repair this tractor.

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

MODEL NUMBER LTH120

SERIAL NUMBER _____

DATE OF PURCHASE _____

THE MODEL AND SERIAL NUMBERS WILL BE FOUND ON A PLATE UNDER THE SEAT.

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

CUSTOMER RESPONSIBILITIES

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

PRODUCT SPECIFICATIONS

HORSEPOWER:	12.0
GASOLINE CAPACITY AND TYPE:	2 GALLONS UNLEADED REGULAR
OIL TYPE (API-SF/SG/SH):	SAE 30 (above 32°F) SAE 5W-30 (below 32°F)
OIL CAPACITY:	3.0 PINTS
SPARK PLUG: (GAP: .030")	CHAMPION RJ19LM
VALVE CLEARANCE:	INTAKE: .005" - .007" EXHAUST: .009" - .011"
GROUND SPEED (MPH):	FORWARD: 4.7 REVERSE: 2.2
TIRE PRESSURE:	FRONT: 14 PSI REAR: 12 PSI
CHARGING SYSTEM:	3 AMPS BATTERY 5 AMPS HEADLIGHTS
BATTERY:	AMP/HR: 25 MIN. CCA: 190 CASE SIZE: U1R
BLADE BOLT TORQUE:	27-35 FT. LBS.

WARNING: This tractor 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.

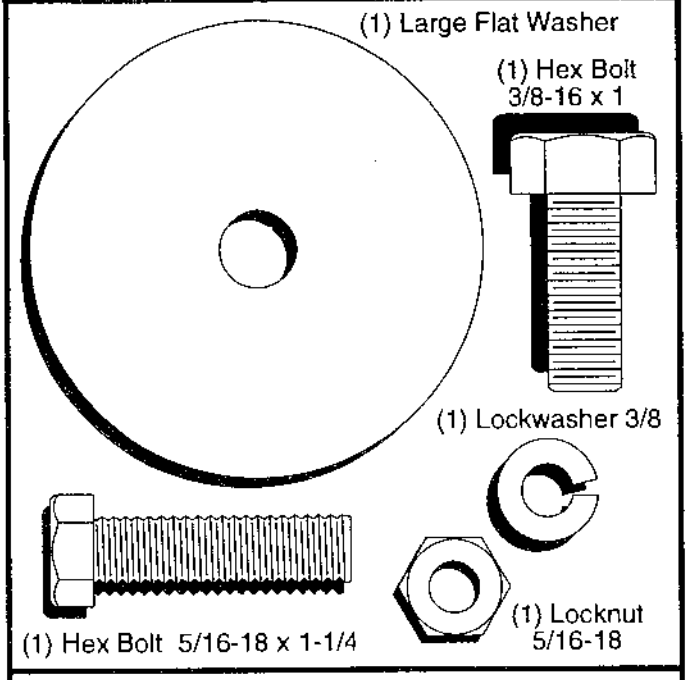
A spark arrester for the muffler is available through your nearest authorized service center/department (See REPAIR PARTS section of this manual).

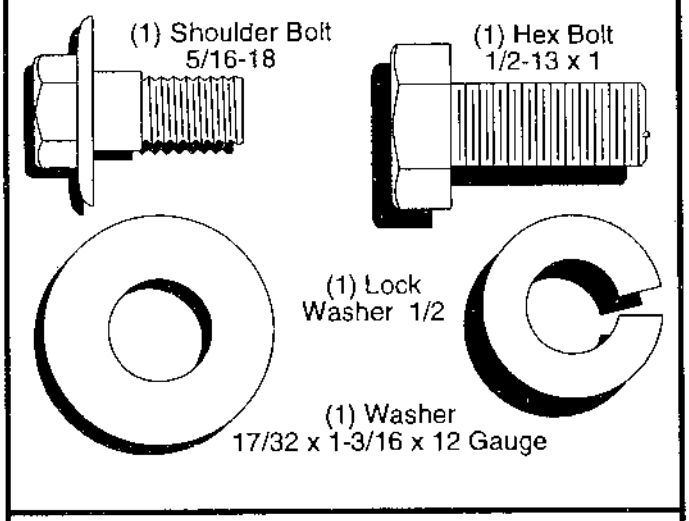
TABLE OF CONTENTS

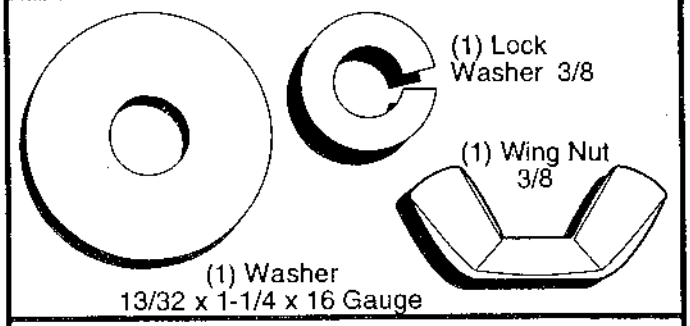
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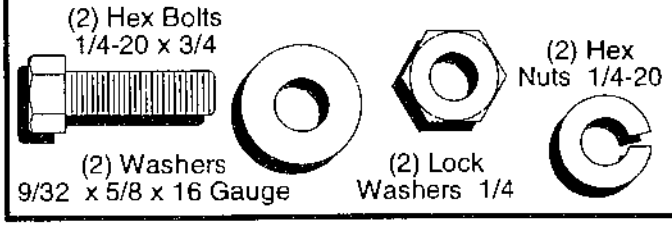
CONTENTS OF HARDWARE PACK

Parts Bag contents shown full size

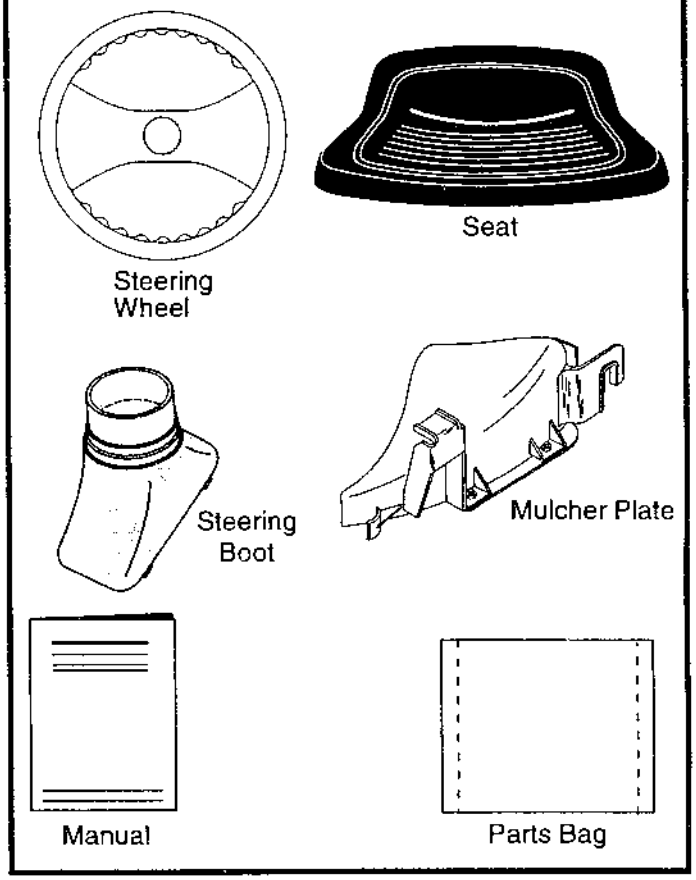




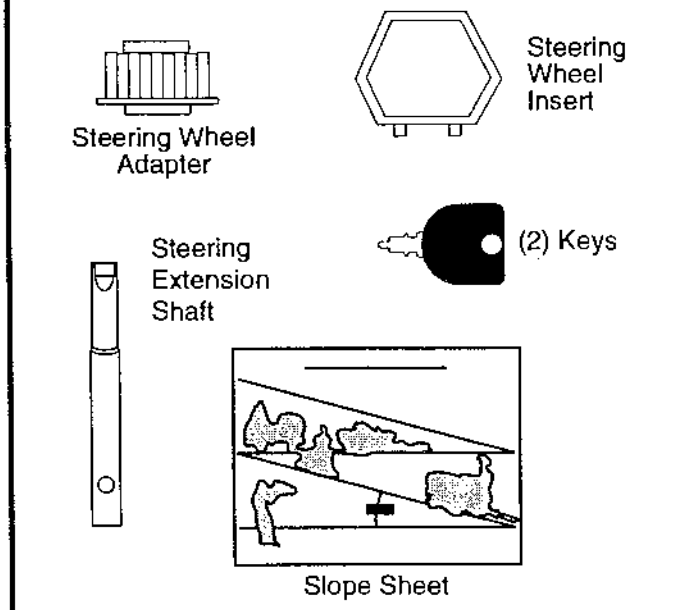




Parts packed separately in carton



Parts bag contents not shown full size



ASSEMBLY

Your new tractor has been assembled at the factory with exception of those parts left unassembled for shipping purposes. To ensure safe and proper operation of your tractor 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.

(2) 7/16" wrenches (1) 3/4" wrench

(2) 1/2" wrenches Tire pressure gauge

(1) 9/16" wrench Utility knife

When right or left hand is mentioned in this manual, it means when you are in the operating position (seated behind the steering wheel).

TO REMOVE TRACTOR FROM CARTON

UNPACK CARTON

- Remove all accessible loose parts and parts cartons from carton (See page 5).
- Cut, from top to bottom, along lines on all four corners of carton, and lay panels flat.
- Check for any additional loose parts or cartons and remove.

BEFORE ROLLING TRACTOR OFF SKID

ATTACH STEERING WHEEL (See Fig. 1)

ASSEMBLE EXTENSION SHAFT AND BOOT

- Slide extension shaft onto lower steering shaft. Align mounting holes in extension and lower shafts and install 5/16 hex bolt and locknut. Tighten securely.

IMPORTANT: TIGHTEN BOLT AND NUT SECURELY TO 18-22 FT. LBS TOROUE.

- Place tabs of steering boot over tab slots in dash and push down to secure.

INSTALL STEERING WHEEL

- Position front wheels of the tractor so they are pointing straight forward.
- Slide steering wheel adapter onto steering shaft extension.
- Position steering wheel so cross bars are horizontal (left to right) and slide inside boot and onto adapter.
- Assemble large flat washer, 3/8 lock washer, 3/8 hex bolt and tighten securely.
- Snap steering wheel insert into center of steering wheel.
- Remove protective materials from tractor hood and grill.

IMPORTANT: CHECK FOR AND REMOVE ANY STAPLES IN SKID THAT MAY PUNCTURE TIRES WHERE TRACTOR IS TO ROLL OFF SKID.

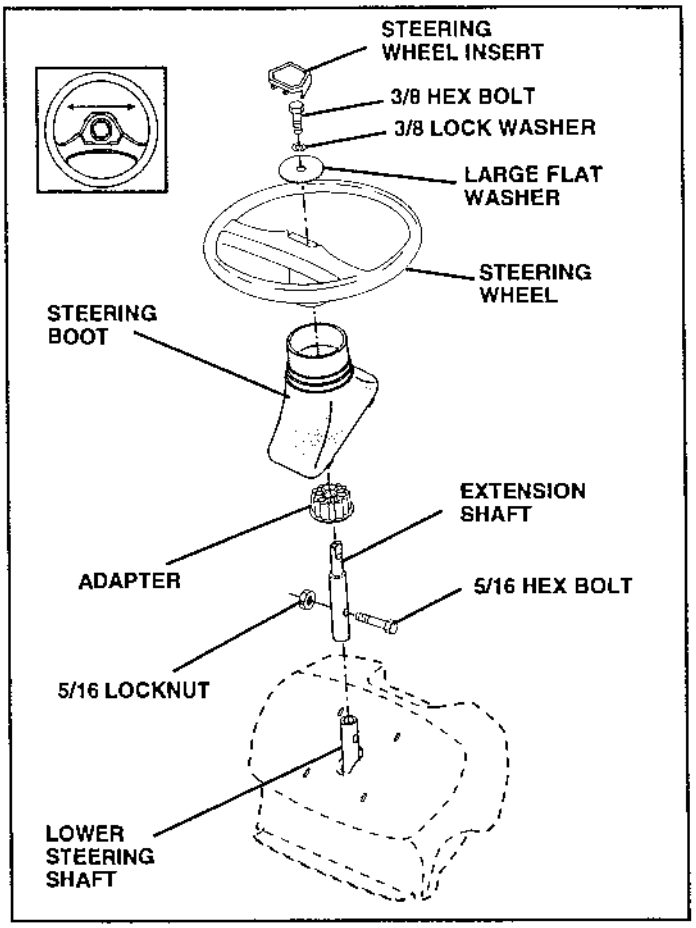


FIG. 1

TO ROLL TRACTOR OFF SKID (See Operation section for location and function of controls)

- Press lift lever plunger and raise attachment lift lever to its highest position.
- Release parking brake by depressing clutch/brake pedal.
- Place freewheel control in freewheeling position to disengage transmission (See "TO TRANSPORT" in the Operation section of this manual).
- Roll tractor forward off skid.
- Remove banding holding discharge guard up against tractor.

ASSEMBLY

HOW TO SET UP YOUR TRACTOR

CONNECT BATTERY (See Figs. 2 and 3)

CAUTION: Do not short battery terminals by allowing a wrench or any other object to contact both terminals at the same time. Before connecting battery, remove metal bracelets, wristwatch bands, rings, etc.

Positive terminal must be connected first to prevent sparking from accidental grounding.

- Remove cardboard packing from seat pan and lift seat pan to raised position.
- Open battery box door.
- Remove terminal protective caps and discard.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps.
- First connect RED battery cable to positive (+) terminal with hex bolt, flat washer, lock washer and hex nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) terminal with remaining hex bolt, flat washer, lock washer and hex nut. Tighten securely.
- Close battery box door.

Open battery box door for:

- Inspection for secure connections (to tighten hardware).
- Inspection for corrosion.
- Testing battery.
- Jumping (if required).
- Periodic charging .

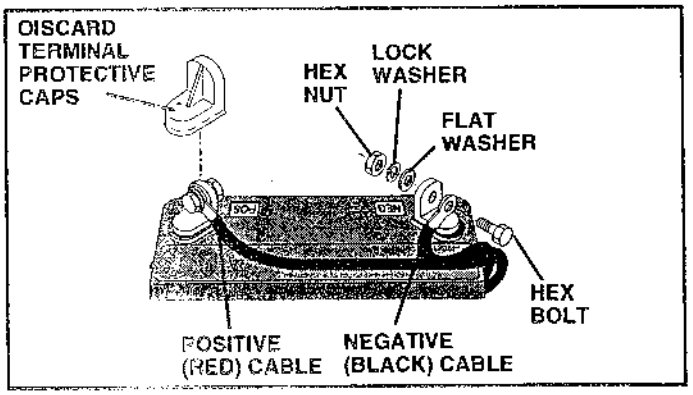


FIG. 2

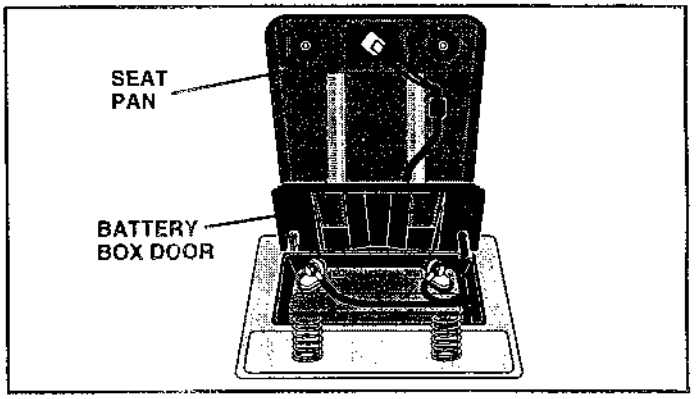


FIG. 3

INSTALL SEAT (See Fig. 4)

Adjust seat before tightening adjustment bolt.

- Remove cardboard packing on seat pan.
- Place seat on seat pan and assemble shoulder bolt. Tighten shoulder bolt securely.
- Assemble adjustment bolt, lock washer and flat washer loosely. Do not tighten.
- Lower seat into operating position and sit on seat.
- Slide seat until a comfortable position is reached which allows you to press clutch/brake pedal all the way down.
- Get off seat without moving its adjusted position.
- Raise seat and tighten adjustment bolt securely.

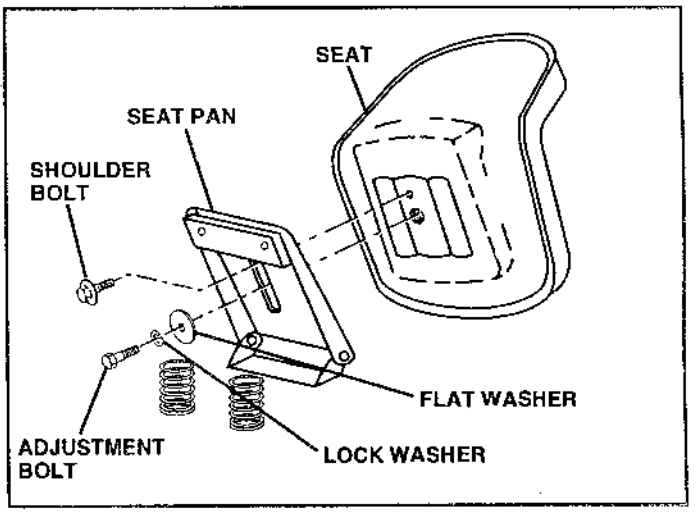


FIG. 4

ASSEMBLY

INSTALL MULCHER PLATE (See Figs. 5 and 6)

CAUTION: Do not remove discharge guard from mower. Raise and hold guard when attaching mulcher plate and allow it to rest on plate while in operation.

1. Raise and hold deflector shield in the upright position.
2. Position alignment cup over rear baffle.
3. Pivot mulcher plate forward and hook on mounting bolt. Be sure hang tab hooks top of deck opening.
4. Assemble flat washer, lock washer and wing nut to mounting bolt and tighten securely.

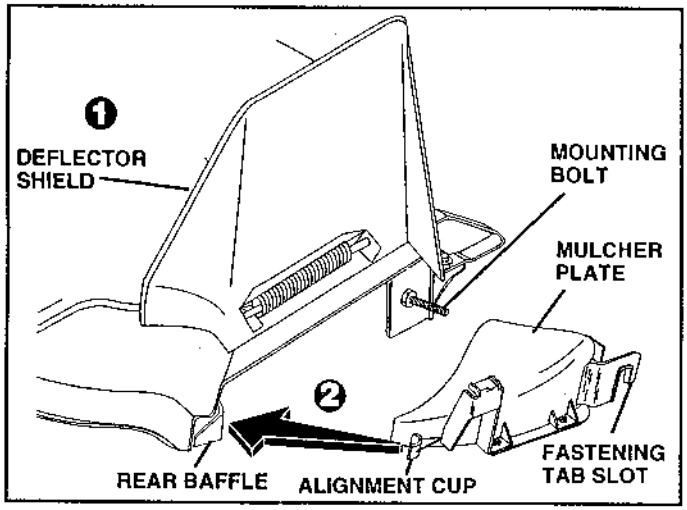


FIG. 5

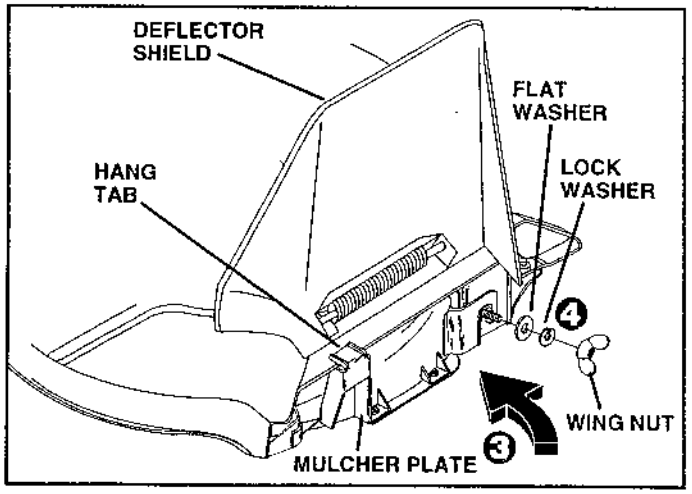


FIG. 6

TO CONVERT TO BAGGING OR DISCHARGING

Simply remove mulcher plate and store in a safe place. Your mower is now ready for discharging or installation of optional grass catcher accessory.

NOTE: If discharging or bagging results are unsatisfactory with mulcher blades on mower, remove the mulcher blades and install high performance discharging blades, which are available at an authorized service center/department. (See MOWER in the Repair Parts section of this manual).

CHECK TIRE PRESSURE

The tires on your tractor were overinflated at the factory for shipping purposes. Correct tire pressure is important for best cutting performance.

- Reduce tire pressure to PSI shown in "PRODUCT SPECIFICATIONS" on page 3 of this manual.

CHECK DECK LEVELNESS

For best cutting results, mower housing should be properly leveled. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.

CHECK FOR PROPER POSITION OF ALL BELTS

See the figures that are shown for replacing motion and mower blade drive belts in the Service and Adjustments section of this manual. Verify that the belts are routed correctly.

CHECK BRAKE SYSTEM

After you learn how to operate your tractor, check to see that the brake is properly adjusted. See "TO ADJUST BRAKE" in the Service and Adjustments section of this manual.

✓CHECKLIST

BEFORE YOU OPERATE AND ENJOY YOUR NEW TRACTOR, WE WISH TO ASSURE THAT YOU RECEIVE THE BEST PERFORMANCE AND SATISFACTION FROM THIS QUALITY PRODUCT.

PLEASE REVIEW THE FOLLOWING CHECKLIST:

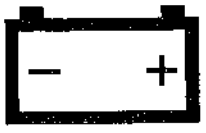
- ✓ All assembly instructions have been completed.
- ✓ No remaining loose parts in carton.
- ✓ Battery is properly prepared and charged. (Minimum 1 hour at 6 amps).
- ✓ Seat is adjusted comfortably and tightened securely.
- ✓ All tires are properly inflated. (For shipping purposes, the tires were overinflated at the factory).
- ✓ Be sure mower deck is properly leveled side-to-side/ front-to-rear for best cutting results. (Tires must be properly inflated for leveling).
- ✓ Check mower and drive belts. Be sure they are routed properly around pulleys and inside all belt keepers.
- ✓ Check wiring. See that all connections are still secure and wires are properly clamped.
- ✓ Before driving tractor, be sure freewheel control is in drive position.

WHILE LEARNING HOW TO USE YOUR TRACTOR, PAY EXTRA ATTENTION TO THE FOLLOWING IMPORTANT ITEMS:

- ✓ Engine oil is at proper level.
- ✓ Fuel tank is filled with fresh, clean, regular unleaded gasoline.
- ✓ Become familiar with all controls - their location and function. Operate them before you start the engine.
- ✓ Be sure brake system is in safe operating condition.
- ✓ It is important to purge the transmission before operating your tractor for the first time. Follow proper starting and transmission purging instructions (See "TO START ENGINE" and "PURGE TRANSMISSION" in the Operation section of this manual).

OPERATION

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



BATTERY



CAUTION OR WARNING



REVERSE



FORWARD



FAST



SLOW



ENGINE ON



ENGINE OFF



OIL PRESSURE



LIGHTS ON



OVER TEMP LIGHT



MOWER LIFT



FUEL



CHOKE



MOWER HEIGHT



PARKING BRAKE LOCKED



UNLOCKED



MOWER LIFT



ATTACHMENT CLUTCH ENGAGED

R

REVERSE

N

NEUTRAL

H

HIGH

L

LOW



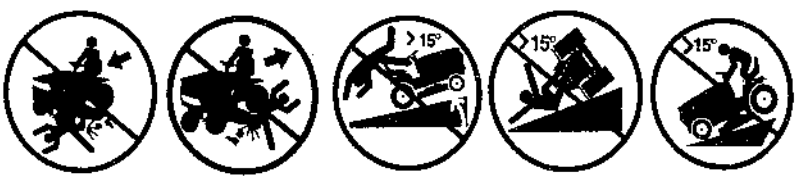
PARKING BRAKE



IGNITION



ATTACHMENT CLUTCH DISENGAGED



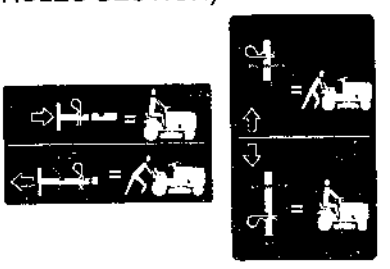
KEEP AREA CLEAR

SLOPE HAZARDS

(SEE SAFETY RULES SECTION)



DANGER, KEEP HANDS AND FEET AWAY



FREE WHEEL
(Automatic Models only)

OPERATION

KNOW YOUR TRACTOR

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

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

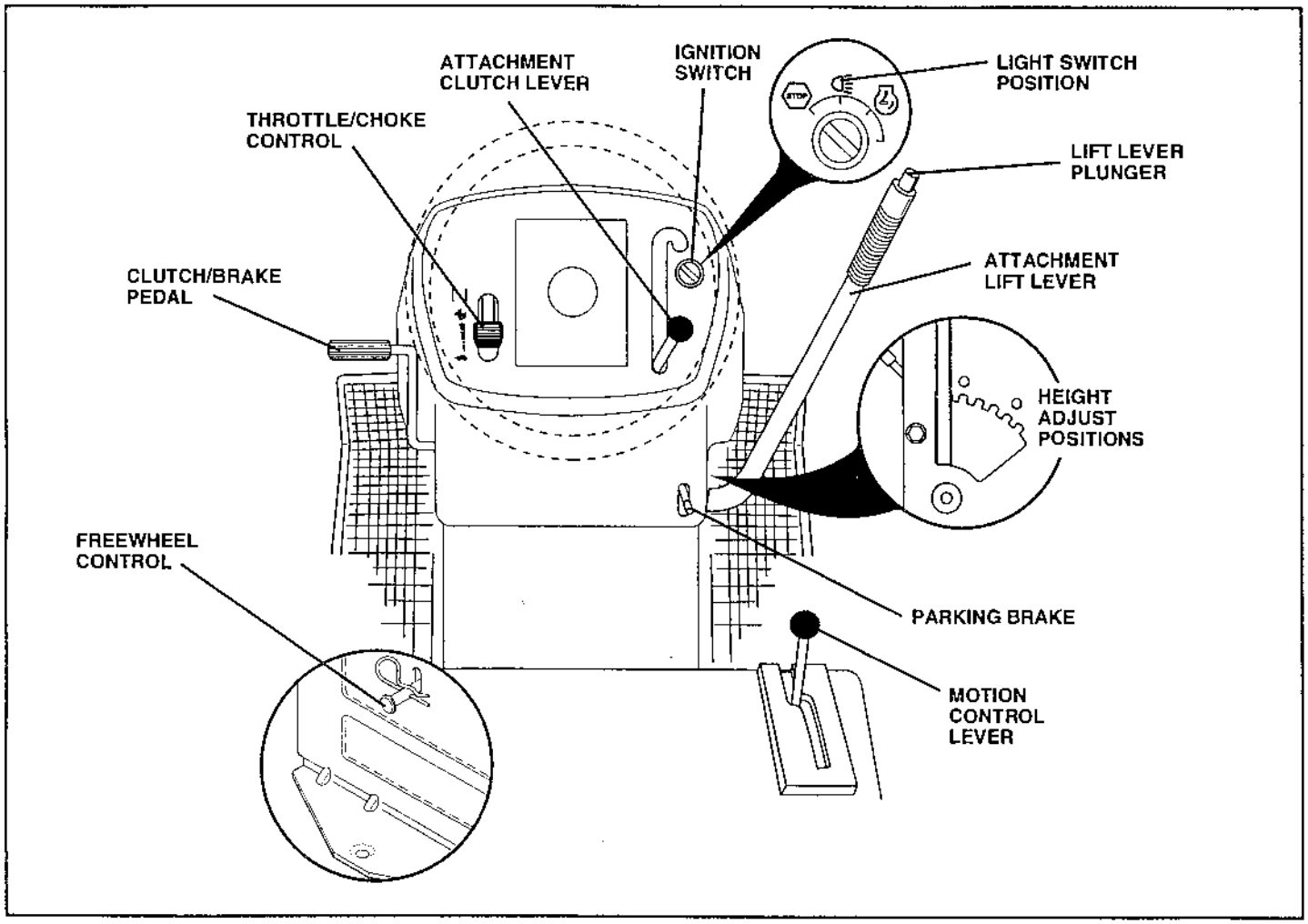


FIG. 7

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

ATTACHMENT CLUTCH LEVER: Used to engage the mower blades, or other attachments mounted to your tractor.

LIGHT SWITCH POSITION: Turns the headlights on.

THROTTLE/CHOKE CONTROL: Used for starting and controlling engine speed.

CLUTCH/BRAKE PEDAL: Used for declutching and braking the tractor and starting the engine.

PARKING BRAKE: Locks clutch/brake pedal into the brake position.

MOTION CONTROL LEVER: Selects the speed and direction of tractor.

ATTACHMENT LIFT LEVER: Used to raise, lower, and adjust the mower deck or other attachments mounted to your tractor.

LIFT LEVER PLUNGER: Used to release attachment lift lever when changing its position.

IGNITION SWITCH: Used for starting and stopping the engine.

FREEWHEEL CONTROL: Disengages transmission for pushing or slowly towing the tractor with the engine off.

OPERATION



The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over the spectacles or standard safety glasses.

HOW TO USE YOUR TRACTOR

TO SET PARKING BRAKE (See Fig. 8)

Your tractor is equipped with an operator presence sensing switch. When engine is running, any attempt by the operator to leave the seat without first setting the parking brake will shut off the engine.

- Depress clutch/brake pedal into full "BRAKE" position and hold.
- Place parking brake lever in "ENGAGED" position and release pressure from clutch/brake pedal. Pedal should remain in "BRAKE" position. Make sure parking brake will hold tractor secure.

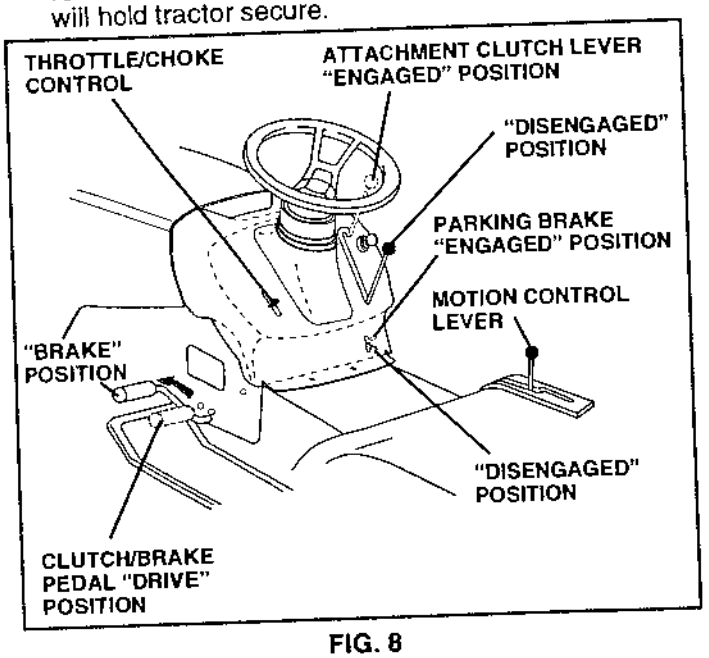


FIG. 8

STOPPING (See Fig. 8)

MOWER BLADES -

- Move attachment clutch lever to "DISENGAGED" position.

GROUND DRIVE -

- Depress clutch/brake pedal into full "BRAKE" position.
- Move motion control lever to neutral (N) position.

IMPORTANT: THE MOTION CONTROL LEVER DOES NOT RETURN TO NEUTRAL (N) POSITION WHEN THE CLUTCH/BRAKE PEDAL IS DEPRESSED.

ENGINE -

- Move throttle control to slow position.

NOTE: Failure to move throttle control to slow position and allowing engine to idle before stopping may cause engine to "backfire".

- Turn ignition key to "OFF" position and remove key. Always remove key when leaving tractor to prevent unauthorized use.
- Never use choke to stop engine.

NOTE: Under certain conditions when tractor is standing idle with the engine running, hot engine exhaust gases may cause "browning" of grass. To eliminate this possibility, always stop engine when stopping tractor on grass areas.

CAUTION: Always stop tractor completely, as described above, before leaving the operator's position; to empty grass catcher, etc.

TO USE THROTTLE CONTROL (See Fig. 8)

Always operate engine at full throttle.

- Operating engine at less than full throttle reduces the battery charging rate.
- Full throttle offers the best bagging and mower performance.

TO MOVE FORWARD AND BACKWARD (See Fig. 8)

The direction and speed of movement is controlled by the motion control lever.

- Start tractor with motion control lever in neutral (N) position.
- Release parking brake and clutch/brake pedal.
- Slowly move motion control lever to desired position.

TO ADJUST MOWER CUTTING HEIGHT (See Fig. 8)

The position of the attachment lift lever determines the cutting height.

- Grasp lift lever.
- Press plunger with thumb and move lever to desired position.

The cutting height range is approximately 1-1/2 to 4". The heights are measured from the ground to the blade tip with the engine not running. These heights are approximate and may vary depending upon soil conditions, height of grass and types of grass being mowed.

- The average lawn should be cut to approximately 2-1/2 inches during the cool season and to over 3 inches during hot months. For healthier and better looking lawns, mow often and after moderate growth.
- For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first cut relatively high; the second to desired height.

OPERATION

TO OPERATE MOWER (See Fig. 9)

Your tractor is equipped with an operator presence sensing switch. Any attempt by the operator to leave the seat with the engine running and the attachment clutch engaged will shut off the engine.

- Select desired height of cut.
- Start mower blades by engaging attachment clutch control.
- TO STOP MOWER BLADES - disengage attachment clutch control.

CAUTION: Do not operate the mower without either the entire grass catcher, on mowers so equipped, or the discharge guard in place.

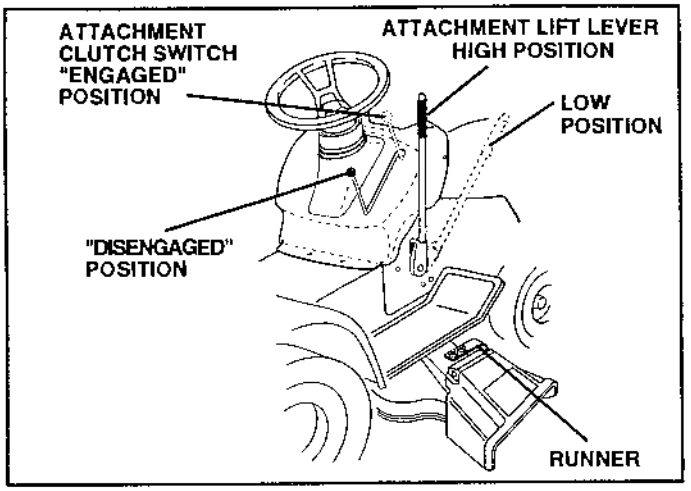


FIG. 9

TO OPERATE ON HILLS

CAUTION: Do not drive up or down hills with slopes greater than 15° and do not drive across any slope.

- Choose the slowest speed before starting up or down hills.
- Avoid stopping or changing speed on hills.
- If slowing is necessary, move throttle control lever to slower position.
- If stopping is absolutely necessary, push clutch/brake pedal quickly to brake position and engage parking brake.
- Move motion control lever to neutral (N) position.

IMPORTANT: THE MOTION CONTROL LEVER DOES NOT RETURN TO NEUTRAL (N) POSITION WHEN THE CLUTCH/BRAKE PEDAL IS DEPRESSED.

- To restart movement, slowly release parking brake and clutch/brake pedal.
- Slowly move motion control lever to slowest setting.
- Make all turns slowly.

TO TRANSPORT (See Fig. 10)

When pushing or towing your tractor, be sure to disengage transmission by placing freewheel control in freewheeling position. Free wheel control is located at the rear drawbar of tractor.

- Raise attachment lift to highest position with attachment liff control.
- Pull freewheel control knob out and hold in position by inserting retainer spring into forward hole of control rod.
- Do not push or tow tractor at more than two (2) MPH.
- To reengage transmission, reverse above procedure.

NOTE: To protect hood from damage when transporting your tractor on a truck or a trailer, be sure hood is closed and secured to tractor. Use an appropriate means of tying hood to tractor (rope, cord, etc.).

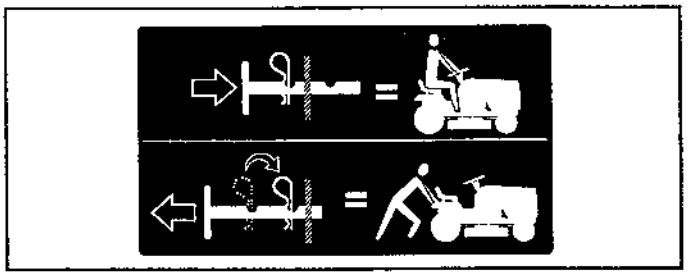


FIG. 10

BEFORE STARTING THE ENGINE

CHECK ENGINE OIL LEVEL (See Fig. 14)

- The engine in your tractor has been shipped, from the factory, already filled with summer weight oil.
- Check engine oil with tractor on level ground.
- Remove oil fill cap/dipstick and wipe clean, reinsert the dipstick and screw cap tight, wait for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.
- 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.

ADD GASOLINE

- Fill fuel tank. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octane. (Use of leaded gasoline will increase carbon and lead oxide deposits and reduce valve life). Do not mix oil with gasoline. Purchase fuel in quantities that can be used within 30 days to assure fuel freshness.

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 Instructions for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

CAUTION: Fill to bottom of gas tank filler neck. 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. 7)

When starting the engine for the first time or if the engine has run out of fuel, it will take extra cranking time to move fuel from the tank to the engine.

- Be sure freewheel control is in the transmission engaged position.
- Sit on seat in operating position, depress clutch/brake pedal and set parking brake.
- Place motion control lever in neutral (N) position.
- Move attachment clutch to "DISENGAGED" position.
- Move throttle control to choke position.

Note: Before starting, read the warm and cold starting procedures below.

- Insert key into ignition and turn key clockwise to "START" position and release key as soon as engine starts. Do not run starter continuously for more than fifteen seconds per minute. If the engine does not start after several attempts, move throttle control to fast position, wait a few minutes and try again. If engine still does not start, move the throttle control back to the choke position and retry.

WARM WEATHER STARTING (50° F and above)

- When engine starts, move the throttle control to the fast position.
- The attachments and ground drive can now be used. If the engine does not accept the load, restart the engine and allow it to warm up for one minute using the choke as described above.

COLD WEATHER STARTING (50° F and below)

- When engine starts, allow engine to run with the throttle control in the choke position until the engine runs roughly, then move throttle control to fast position. This may require an engine warm-up period from several seconds to several minutes, depending on the temperature.

AUTOMATIC TRANSMISSION WARM UP

- Before driving the unit in cold weather, the transmission should be warmed up as follows:
  - Be sure the tractor is on level ground.
  - Place the motion control lever in neutral. Release the parking brake and let the clutch/brake slowly return to operating position.
  - Allow one minute for transmission to warm up. This can be done during the engine warm up period.
- The attachments can also be used during the engine warm-up period after the transmission has been warmed up.

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.

PURGE TRANSMISSION

CAUTION: Never engage or disengage freewheel lever while the engine is running.

To ensure proper operation and performance, it is recommended that the transmission be purged before operating tractor for the first time. This procedure will remove any trapped air inside the transmission which may have developed during shipping of your tractor.

IMPORTANT: SHOULD YOUR TRANSMISSION REQUIRE REMOVAL FOR SERVICE OR REPLACEMENT, IT SHOULD BE PURGED AFTER REINSTALLATION BEFORE OPERATING THE TRACTOR.

- Place tractor safely on level surface with engine off and parking brake set.
- Disengage transmission by placing freewheel control in freewheeling position (See "TO TRANSPORT" in this section of manual).
- Sitting in the tractor seat, start engine. After the engine is running, move throttle control to slow position. With motion control lever in neutral (N) position, slowly disengage clutch/brake pedal.
- Move motion control lever to full forward position and hold for five (5) seconds. Move lever to full reverse position and hold for five (5) seconds. Repeat this procedure three (3) times.

NOTE: During this procedure there will be no movement of drive wheels. The air is being removed from hydraulic drive system.

- Move motion control lever to neutral (N) position. Shut-off engine and set parking brake.
- Engage transmission by placing freewheel control in driving position (See "TO TRANSPORT" in this section of manual).
- Sitting in the tractor seat, start engine. After the engine is running, move throttle control to half (1/2) speed. With motion control lever in neutral (N) position, slowly disengage clutch/brake pedal.
- Slowly move motion control lever forward, after the tractor moves approximately five (5) feet, slowly move motion control lever to reverse position. After the tractor moves approximately five (5) feet return the motion control lever to the neutral (N) position. Repeat this procedure with the motion control lever three (3) times.
- Your tractor is now purged and now ready for normal operation.

OPERATION

MOWING TIPS

- Tire chains cannot be used when the mower housing is attached to tractor.
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- Use the runner on the right hand side of mower as a guide. The blade cuts approximately an inch outside the runner (See Fig. 9).
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the machine. This will result in a more even distribution of clippings and more uniform cutting.
- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished (See Fig. 10).
- If grass is extremely tall, it should be mowed twice to reduce load and possible fire hazard from dried clippings. Make first cut relatively high; the second to the desired height.
- Do not mow grass when it is wet. Wet grass will plug mower and leave undesirable clumps. Allow grass to dry before mowing.
- Always operate engine at full throttle when mowing to assure better mowing performance and proper discharge of material. Regulate ground speed by selecting a low enough gear to give the mower cutting performance as well as the quality of cut desired.
- When operating attachments, select a ground speed that will suit the terrain and give best performance of the attachment being used.

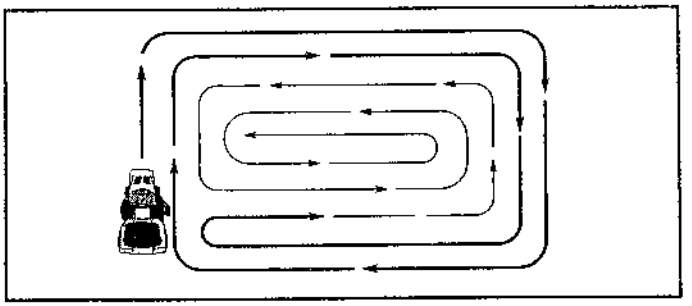


FIG. 10

MULCHING MOWING TIPS

IMPORTANT: FOR BEST PERFORMANCE, KEEP MOWER HOUSING FREE OF BUILT-UP GRASS AND TRASH. CLEAN AFTER EACH USE.

- The special mulching blade will recut the grass clippings many times and reduce them in size so that as they fall onto the lawn they will disperse into the grass and not be noticed. Also, the mulched grass will biodegrade quickly to provide nutrients for the lawn. Always mulch with your highest engine (blade) speed as this will provide the best recutting action of the blades.
- Avoid cutting your lawn when it is wet. Wet grass tends to form clumps and interferes with the mulching action. The best time to mow your lawn is the early afternoon. At this time the grass has dried and the newly cut area will not be exposed to the direct sun.
- For best results, adjust the mower cutting height so that the mower cuts off only the top one-third of the grass blades (See Fig. 11). For extremely heavy mulching, reduce your width of cut and mow slowly.
- Certain types of grass and grass conditions may require that an area be mulched a second time to completely hide the clippings. When doing a second cut, mow across or perpendicular to the first cut path.
- Change your cutting pattern from week to week. Mow north to south one week then change to east to west the next week. This will help prevent matting and graining of the lawn.

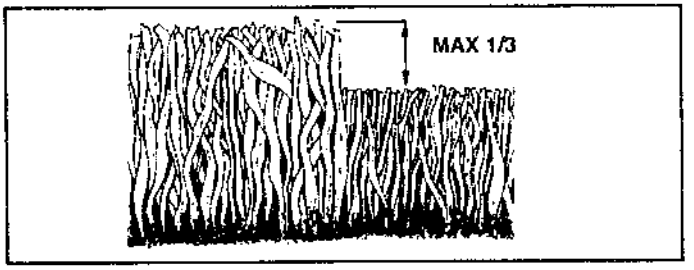


FIG. 11

CUSTOMER RESPONSIBILITIES

MAINTENANCE SCHEDULE FILL IN DATES AS YOU COMPLETE REGULAR SERVICE		BEFORE EACH USE	EVERY 8 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY SEASON	BEFORE STORAGE	SERVICE DATES
TRACTOR	Check Brake Operation	✔	✔						
	Check Tire Pressure	✔	✔						
	Check Operator Presence and Interlock Systems	✔							
	Check for Loose Fasteners	✔			✔7		✔		
	Sharpen/Replace Mower Blades			✔4					
	Lubrication Chart			✔			✔		
	Check Battery Level			✔6					
	Clean Battery and Terminals/Recharge			✔			✔		
	Check Transaxle Cooling			✔					
	Adjust Blade Belt(s) Tension				✔5				
	Adjust Motion Drive Belt(s) Tension				✔5				
ENGINE	Check Engine Oil Level	✔	✔						
	Change Engine Oil			✔1,2,3			✔		
	Clean Air Filter			✔2					
	Clean Air Screen			✔2					
	Inspect Muffler/Spark Arrester				✔				
	Replace Oil Filter (If equipped)				✔1,2				
	Clean Engine Cooling Fins				✔2				
	Replace Spark Plug				✔	✔			
	Replace Air Filter Paper Cartridge				✔2				
	Replace Fuel Filter					✔			

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.
3 - If equipped with oil filter, change oil every 50 hours.
4 - Replace blades more often when mowing in sandy soil.
5 - If equipped with adjustable system.
6 - Not required if equipped with maintenance-free battery.
7 - Tighten front axle pivot bolt to 35 ft.-lbs. maximum. Do not overtighten.

GENERAL RECOMMENDATIONS

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

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

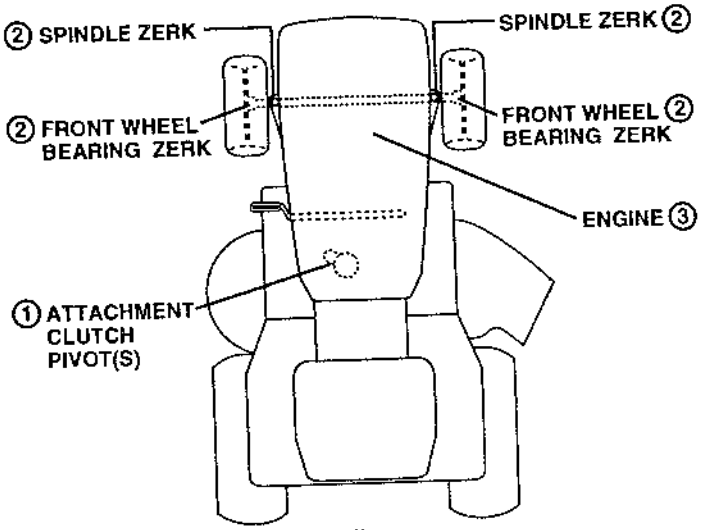
All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

- Once a year you should replace the spark plug, clean or replace air filter, and check blades 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 brake operation.
- Check tire pressure.
- Check for loose fasteners.

LUBRICATION CHART



① SAE 30 OR 10W30 MOTOR OIL
② GENERAL PURPOSE GREASE
③ REFER TO CUSTOMER RESPONSIBILITIES "ENGINE" SECTION

IMPORTANT: DO NOT OIL OR GREASE THE PIVOT POINTS WHICH HAVE SPECIAL NYLON BEARINGS. VISCOUS LUBRICANTS WILL ATTRACT DUST AND DIRT THAT WILL SHORTEN THE LIFE OF THE SELF-LUBRICATING BEARINGS. IF YOU FEEL THEY MUST BE LUBRICATED, USE ONLY A DRY, POWDERED GRAPHITE TYPE LUBRICANT SPARINGLY.

CUSTOMER RESPONSIBILITIES

TRACTOR

Always observe safety rules when performing any maintenance.

BRAKE OPERATION

If tractor requires more than six (6) feet stopping distance at high speed in highest gear, then brake must be adjusted. (See "TO ADJUST BRAKE" in the Service and Adjustments section of this manual).

TIRES

- Maintain proper air pressure in all tires (See "PRODUCT SPECIFICATIONS" on page 3 of this manual).
- Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

NOTE: To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

BLADE CARE

For best results mower blades must be kept sharp. Replace bent or damaged blades.

BLADE REMOVAL (See Fig. 12)

- Raise mower to highest position to allow access to blades.
- Remove hex bolt, lock washer and flat washer securing blade.
- Install new or resharpened blade with trailing edge up towards deck as shown.

IMPORTANT: TO ENSURE PROPER ASSEMBLY, CENTER HOLE IN BLADE MUST ALIGN WITH STAR ON MANDREL ASSEMBLY

- Reassemble hex bolt, lock washer and flat washer in exact order as shown.
- Tighten bolt securely (27-35 Ft. Lbs. torque).

IMPORTANT: BLADE BOLT IS GRADE 8 HEAT TREATED.

NOTE: We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

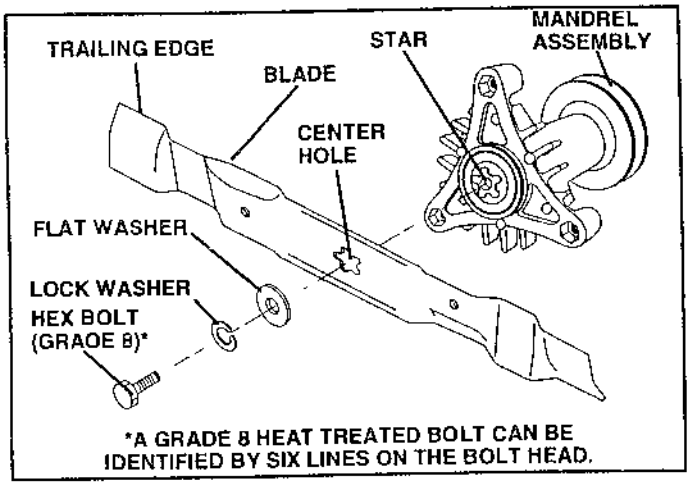


FIG. 12

TO SHARPEN BLADE (See Fig. 13)

Care should be taken to keep the blade balanced. An unbalanced blade will cause excessive vibration and eventual damage to mower and engine.

- The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen while on the mower.
- To check blade balance, you will need a 5/8" diameter steel bolt, pin, or a cone balancer. (When using a cone balancer, follow the instructions supplied with balancer).
- Slide blade on to an unthreaded portion of the steel bolt or pin and hold the bolt or pin parallel with the ground. If blade is balanced, it should remain in a horizontal position. If either end of the blade moves downward, sharpen the heavy end until the blade is balanced.

NOTE: Do not use a nail for balancing blade. The lobes of the center hole may appear to be centered, but are not.

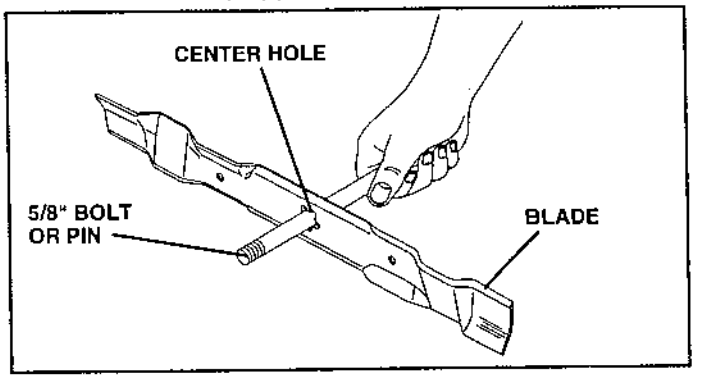


FIG. 13

BATTERY

Your tractor has a battery charging system which is sufficient for normal use. However, periodic charging of the battery with an automotive charger will extend its life.

- Keep battery and terminals clean.
- Keep battery bolts tight.
- Keep small vent holes open.
- Recharge at 6-10 amperes for 1 hour.

TO CLEAN BATTERY AND TERMINALS

Corrosion and dirt on the battery and terminals can cause the battery to "leak" power.

- Open battery box door.
- Disconnect BLACK battery cable first then RED battery cable and remove battery from tractor.
- Rinse the battery with plain water and dry.
- Clean terminals and battery cable ends with wire brush until bright.
- Coat terminals with grease or petroleum jelly.
- Reinstall battery (See "CONNECT BATTERY" in the Assembly section of this manual).

CUSTOMER RESPONSIBILITIES

V-BELTS

Check V-belts for deterioration and wear after 100 hours of operation and replace if necessary. The belts are not adjustable. Replace belts if they begin to slip from wear.

TRANSAXLE COOLING

The fan and cooling fins of transmission should be kept clean to assure proper cooling.

Do not attempt to clean fan or transmission while engine is running or while the transmission is hot.

- Inspect cooling fan to be sure fan blades are intact and clean.
- Inspect cooling fins for dirt, grass clippings and other materials. To prevent damage to seals, do not use compressed air or high pressure sprayer to clean cooling fins.

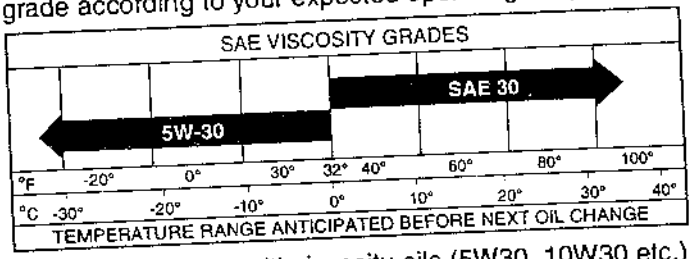
TRANSAXLE PUMP FLUID

The transaxle was sealed at the factory and fluid maintenance is not required for the life of the transaxle. Should the transaxle ever leak or require servicing, contact your nearest authorized service center/department.

ENGINE

LUBRICATION

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



NOTE: Although multi-viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, these multi-viscosity oils will result in increased oil consumption when used above 32°F. Check your engine oil level more frequently to avoid possible engine damage from running low on oil.

Change the oil after every 25 hours of operation or at least once a year if the tractor is not used for 25 hours in one year.

Check the crankcase oil level before starting the engine and after each eight (8) hours of operation. Tighten oil fill cap/dipstick securely each time you check the oil level.

TO CHANGE ENGINE OIL (See Fig. 14)

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

- Be sure tractor is on level surface.
- Oil will drain more freely when warm.
- Catch oil in a suitable container.
- Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine when changing oil.
- Remove drain plug.
- After oil has drained completely, replace oil drain plug and tighten securely.
- Refill engine with oil through oil fill dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PRODUCT SPECIFICATIONS" on page 3 of this manual.
- Use gauge on oil fill cap/dipstick for checking level. Be sure dipstick cap is tightened securely for accurate reading. Keep oil at "FULL" line on dipstick.

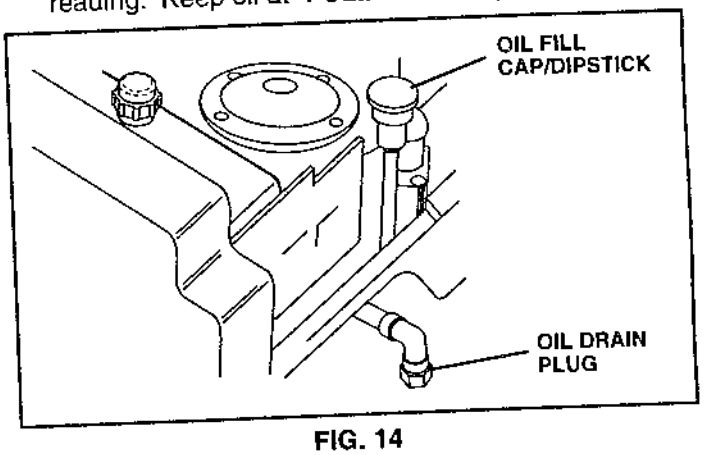


FIG. 14

AIR FILTER (See Fig. 15)

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.

- Remove knob(s) and cover.

TO SERVICE PRE-CLEANER

- Slide foam pre-cleaner off cartridge.
- 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.
- If very dirty or damaged, replace pre-cleaner.
- Reinstall pre-cleaner over cartridge.
- Reinstall cover and secure with knob(s).

TO SERVICE CARTRIDGE

- Remove cartridge nut.
- Carefully remove cartridge to prevent debris from entering carburetor. Clean base carefully to prevent debris from entering carburetor.
- Clean cartridge by tapping gently on flat surface. If very dirty or damaged, replace cartridge.
- Reinstall cartridge, nut, precleaner, cover and secure with knob(s).

IMPORTANT: PETROLEUM SOLVENTS, SUCH AS KEROSENE, ARE NOT TO BE USED TO CLEAN THE CARTRIDGE. THEY MAY CAUSE DETERIORATION OF THE CARTRIDGE. DO NOT OIL CARTRIDGE. DO NOT USE PRESSURIZED AIR TO CLEAN OR DRY CARTRIDGE.

CUSTOMER RESPONSIBILITIES

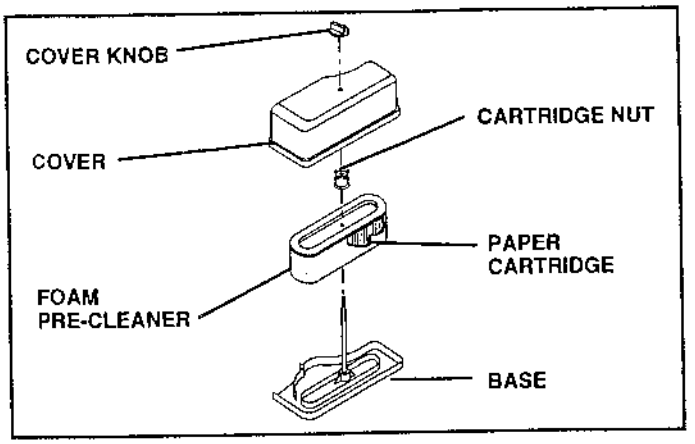


FIG. 15

CLEAN AIR SCREEN (See Fig. 16)

Air screen must be kept free of dirt and chaff to prevent engine damage from overheating. Clean with a wire brush or compressed air to remove dirt and stubborn dried gum fibers.

ENGINE COOLING FINS (See Fig. 16)

Remove any dust, dirt or oil from engine cooling fins to prevent engine damage from overheating.

- Remove screws from blower housing and lift housing and dipstick tube assembly oft engine.
- Cover oil fill opening to prevent entry of dirt.
- Use compressed air or stiff bristle brush to thoroughly clean engine cooling fins.
- To reassemble, reverse above procedure.

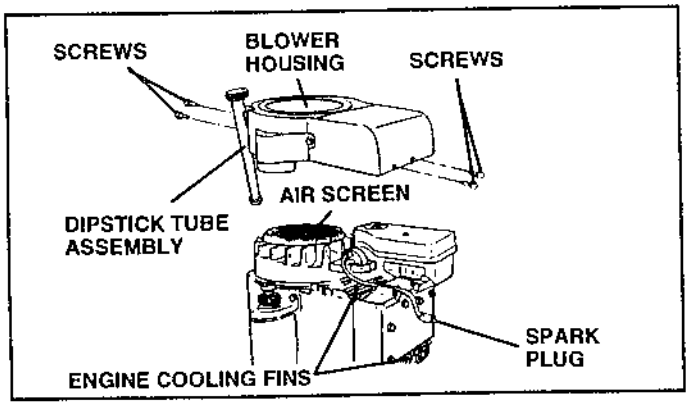


FIG. 16

MUFFLER

Inspect and replace corroded muffler and spark arrester (if equipped) as it could create a fire hazard and/or damage.

SPARK PLUGS

Replace spark plugs at the beginning of each mowing season or after every 100 hours of operation, whichever occurs first. Spark plug type and gap setting are shown in "PRODUCT SPECIFICATIONS" on page 3 of this manual.

IN-LINE FUEL FILTER (See Fig. 17)

The fuel filter should be replaced once each season. If fuel filter becomes clogged, obstructing fuel flow to carburetor, replacement is required.

- With engine cool, remove filter and plug fuel line sections.
- Place new fuel filter in position in fuel line with arrow pointing towards carburetor.
- Be sure there are no fuel line leaks and clamps are properly positioned.
- Immediately wipe up any spilled gasoline.

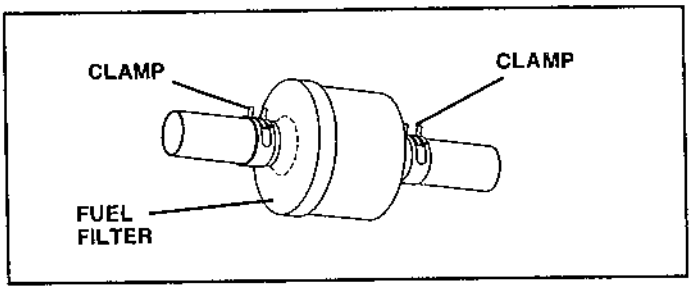


FIG. 17

CLEANING

- Clean engine, battery, seat, 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 tractor unless the electrical system, 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: BEFORE PERFORMING ANY SERVICE OR ADJUSTMENTS:

- **Depress clutch/brake pedal fully and set parking brake.**
- **Place motion control lever in neutral (N) position.**
- **Place attachment clutch in "DISENGAGED" position.**
- **Turn ignition key "OFF" and remove key.**
- **Make sure the blades and all moving parts have completely stopped.**
- **Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with plug.**

TRACTOR

TO REMOVE MOWER (See Fig. 18)

Mower will be easier to remove from the right side of tractor.

- Place attachment clutch in "DISENGAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- Roll belt off engine pulley.
- Disconnect clutch rod from clutch lever by removing retainer spring.
- Disconnect anti-sway bar from chassis bracket by removing retainer spring.
- Disconnect suspension arms from rear deck brackets by removing retainer springs.
- Disconnect front links from deck by removing retainer springs.
- Raise lift lever to raise suspension arms. Slide mower out from under tractor.

IMPORTANT: IF AN ATTACHMENT OTHER THAN THE MOWER IS TO BE MOUNTED TO THE TRACTOR, REMOVE THE FRONT LINKS.

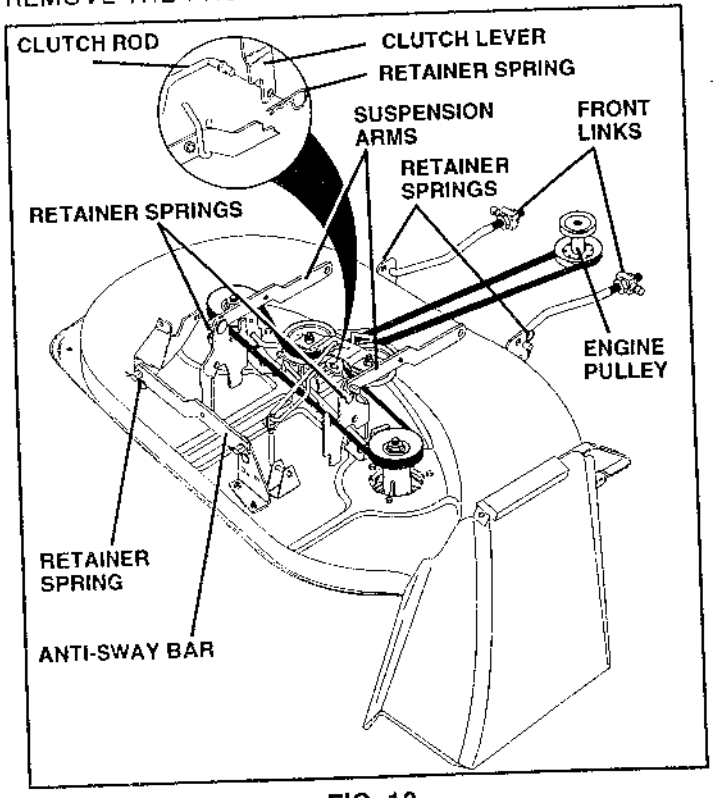


FIG. 18

TO INSTALL MOWER (See Fig. 18)

- Raise attachment lift lever to its highest position.
- Slide mower under tractor with discharge guard to right side of tractor.
- Lower lift lever to its lowest position.
- Install mower in reverse order of removal instructions.

TO LEVEL MOWER HOUSING

Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PRODUCT SPECIFICATIONS" on page 3 of this manual). If tires are over or underinflated, you will not properly adjust your mower.

SIDE-TO-SIDE ADJUSTMENT (See Figs. 19 and 20)

- Raise mower to its highest position.
- At the midpoint of both sides of mower, measure height from bottom edge of mower to ground. Distance "A" on both sides of mower should be the same or within 1/4" of each other.
- If adjustment is necessary, make adjustment on one side of mower only.
- To raise one side of mower, tighten lift link adjustment nut on that side.
- To lower one side of mower, loosen lift link adjustment nut on that side.

NOTE: Three full turns of adjustment nut will change mower height about 1/8".

- Recheck measurements after adjusting.

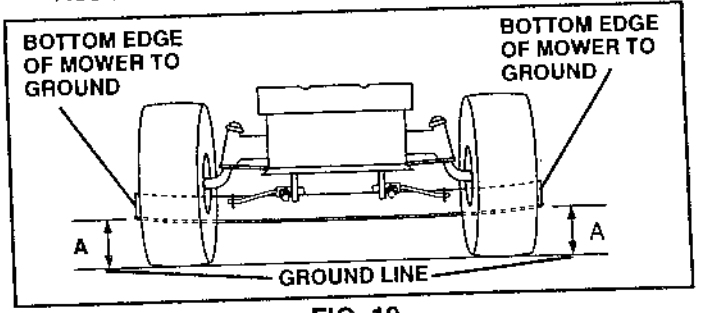


FIG. 19

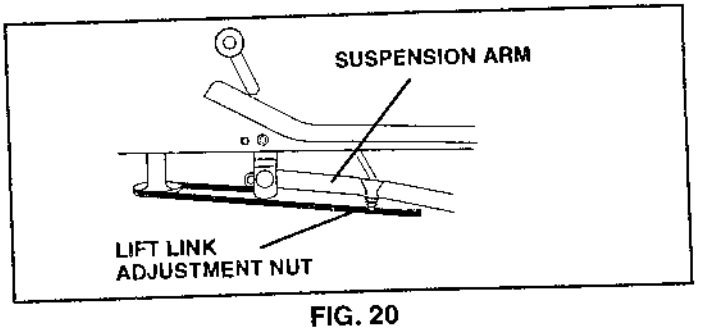


FIG. 20

SERVICE AND ADJUSTMENTS

FRONT-TO-BACK ADJUSTMENT (See Figs. 21 and 22)

IMPORTANT: DECK MUST BE LEVEL SIDE-TO-SIDE. IF THE FOLLOWING FRONT-TO-BACK ADJUSTMENT IS NECESSARY, BE SURE TO ADJUST BOTH FRONT LINKS EQUALLY SO MOWER WILL STAY LEVEL SIDE-TO-SIDE.

To obtain the best cutting results, the mower housing should be adjusted so that the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

Check adjustment on right side of tractor. Measure distance "D" directly in front and behind the mandrel at bottom edge of mower housing as shown.

- Before making any necessary adjustments, check that both front links are equal in length. Both links should be approximately 10-3/8".
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of mower loosen nut "E" on both front links an equal number of turns.
- When distance "D" is 1/8" to 1/2" lower at front than rear, tighten nuts "F" against trunnion on both front links.
- To raise front of mower, loosen nut "F" from trunnion on both front links. Tighten nut "E" on both front links an equal number of turns.
- When distance "D" is 1/8" to 1/2" lower at front than rear, tighten nut "F" against trunnion on both front links.
- Recheck side-to-side adjustment.

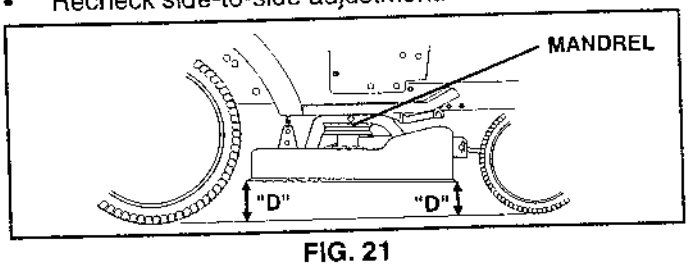


FIG. 21

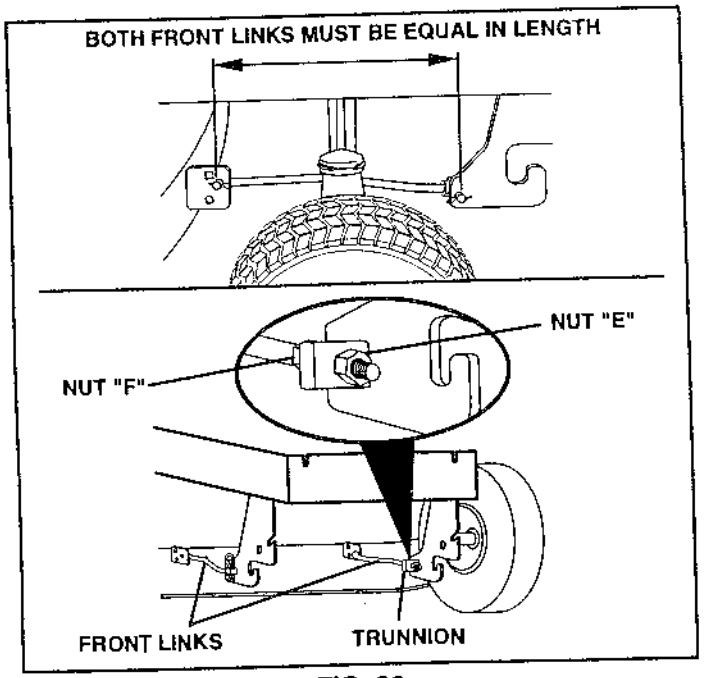


FIG. 22

TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 23)

The mower blade drive belt may be replaced without tools. Park the tractor on level surface. Engage parking brake.

BELT REMOVAL -

- Place attachment clutch in "DISENGAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- Roll belt off engine pulley.
- Disconnect R.H. suspension arm from rear deck bracket by removing retainer spring.
- Work belt off both mandrel pulleys and idler pulleys.
- Pull belt away from mower.

BELT INSTALLATION -

- Install new belt in reverse order of removal.
- Make sure belt is in all pulley grooves and inside all belt guides.

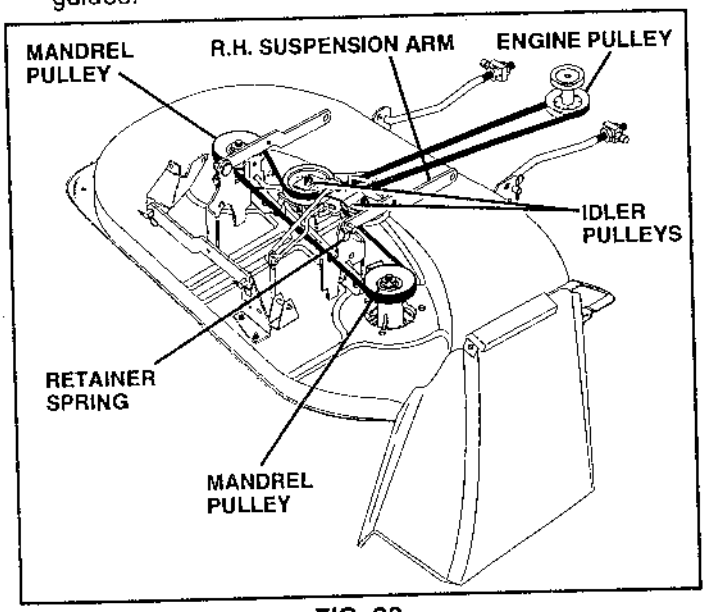


FIG. 23

TO ADJUST BRAKE (See Fig. 24)

Your tractor is equipped with an adjustable brake system which is mounted on the side of the transaxle.

If tractor requires more than six (6) feet stopping distance at high speed in highest gear, then brake must be adjusted.

- Depress clutch/brake pedal and engage parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- If distance is other than 1-9/16", loosen jam nut and turn nut "A" until distance becomes 1-9/16". Retighten jam nut against nut "A".
- Road test tractor for proper stopping distance as stated above. Readjust if necessary. If stopping distance is still greater than six (6) feet in highest gear, further maintenance is necessary. Contact your nearest authorized service center/department.

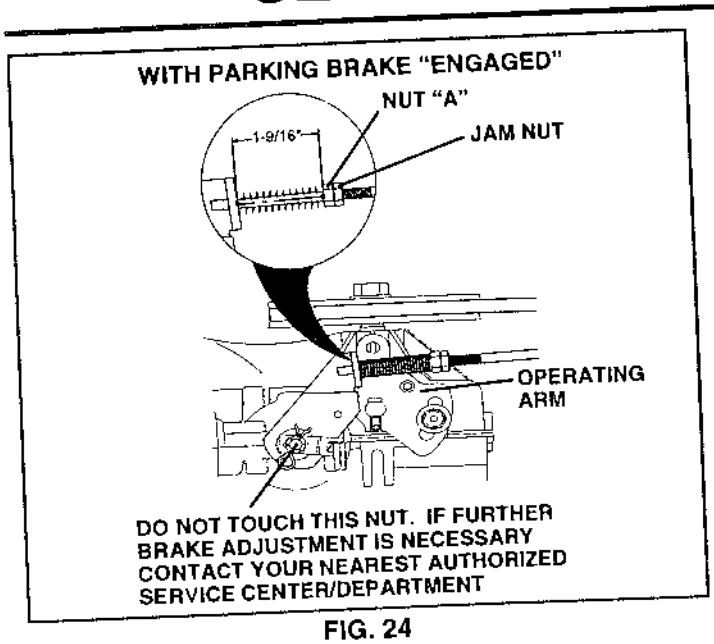


FIG. 24

TO REPLACE MOTION DRIVE BELT (See Fig. 25)

Park the tractor on level surface. Engage parking brake. For assistance, there is a belt installation guide decal on bottom side of left footrest.

- Remove mower (See "TO REMOVE MOWER" in this section of this manual.)
- Remove belt from stationary idler and clutching idler.
- Pull belt slack toward rear of tractor. Carefully remove belt upwards from transmission input pulley and over cooling fan blades.
- Pull belt toward front of tractor and remove downward from around engine pulley.
- Install new belt by reversing above procedure.

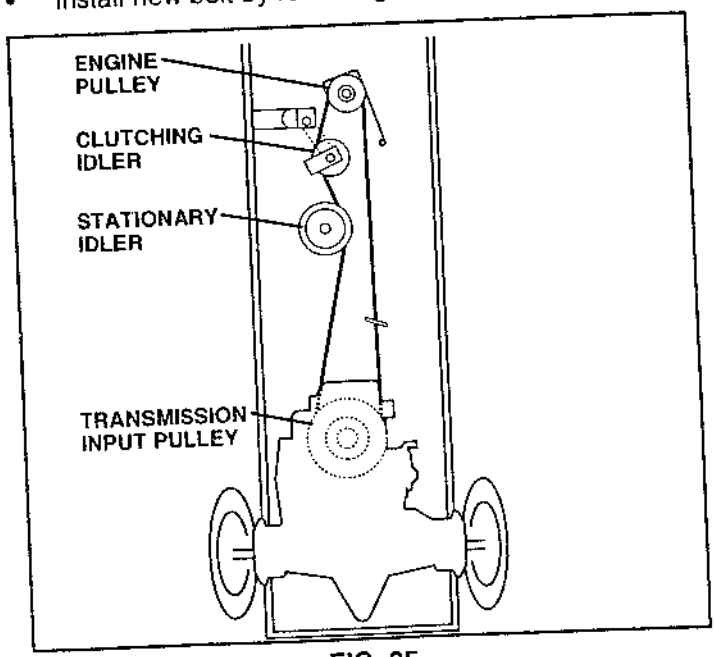


FIG. 25

TO ADJUST MOTION CONTROL LEVER (See Fig. 26)

The motion control lever has been preset at the factory and adjustment should not be necessary.

If for any reason the motion control lever will not hold its position while at a selected speed, it may be adjusted at the friction pack located on the right side of transmission.

- Park tractor on level surface. Stop tractor by turning ignition key to "OFF" position, and engage parking brake.
- Adjust motion control lever by tightening adjustment locknut one half (1/2) turn.

NOTE: If for any reason the effort to move the motion control lever becomes too excessive, reverse the above adjustment procedure by loosening locknut 1/4 to 1/2 turn.

Road test tractor after adjustment and repeat procedure if necessary.

TRANSMISSION REMOVAL/REPLACEMENT

Should your transmission require removal for service or replacement, it should be purged after reinstallation and before operating the tractor. See "PURGE TRANSMISSION" in the Operation section of this manual.

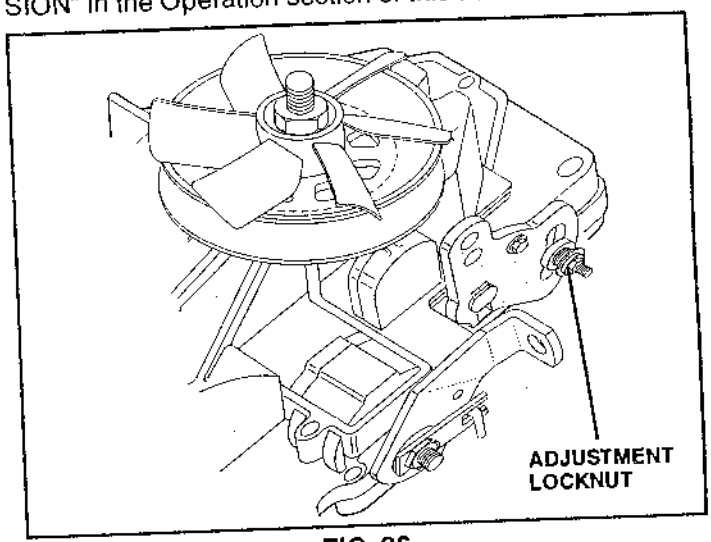


FIG. 26

TO ADJUST STEERING WHEEL ALIGNMENT

If steering wheel crossbars are not horizontal (left to right) when wheels are positioned straight forward, remove steering wheel and reassemble per instructions in the Assembly section of this manual.

FRONT WHEEL TOE-IN/CAMBER

The front wheel toe-in and camber are not adjustable on your tractor. If damage has occurred to affect the front wheel toe-in or camber, contact your nearest authorized service center/department.

SERVICE AND ADJUSTMENTS

TO REMOVE WHEEL FOR REPAIRS (See Fig. 27)

- Block up axle securely.
- Remove axle cover, retaining ring and washers to allow wheel removal (rear wheel contains a square key - Do not lose).
- Repair tire and reassemble.
- On rear wheels only: align grooves in rear wheel hub and axle. Insert square key.
- Replace washers and snap retaining ring securely in axle groove.
- Replace axle cover.

NOTE: To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

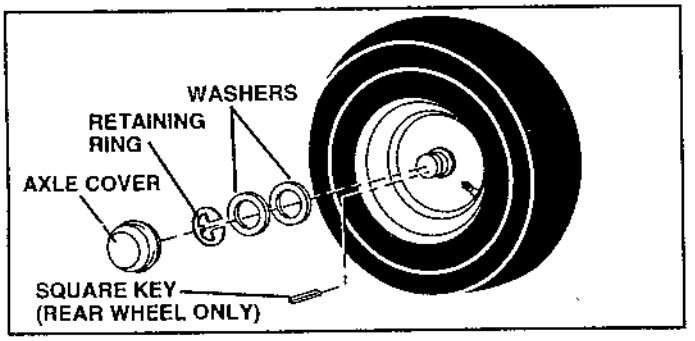


FIG. 27

TO START ENGINE WITH A WEAK BATTERY (See Fig. 28

CAUTION: Lead-acid batteries generate explosive gases. Keep sparks, flame and smoking materials away from batteries. Always wear eye protection when around batteries.

If your battery is too weak to start the engine, it should be recharged. If "jumper cables" are used for emergency starting, follow this procedure:

IMPORTANT: YOUR TRACTOR IS EQUIPPED WITH A 12 VOLT NEGATIVE GROUNDED SYSTEM. THE OTHER VEHICLE MUST ALSO BE A 12 VOLT NEGATIVE GROUNDED SYSTEM. DO NOT USE YOUR TRACTOR BATTERY TO START OTHER VEHICLES.

TO ATTACH JUMPER CABLES -

- Connect each end of the RED cable to the POSITIVE (+) terminal of each battery, taking care not to short against chassis.
- Connect one end of the BLACK cable to the NEGATIVE (-) terminal of fully charged battery.
- Connect the other end of the BLACK cable to good CHASSIS GROUND, away from fuel tank and battery.

TO REMOVE CABLES, REVERSE ORDER -

- BLACK cable first from chassis and then from the fully charged battery.
- RED cable last from both batteries.

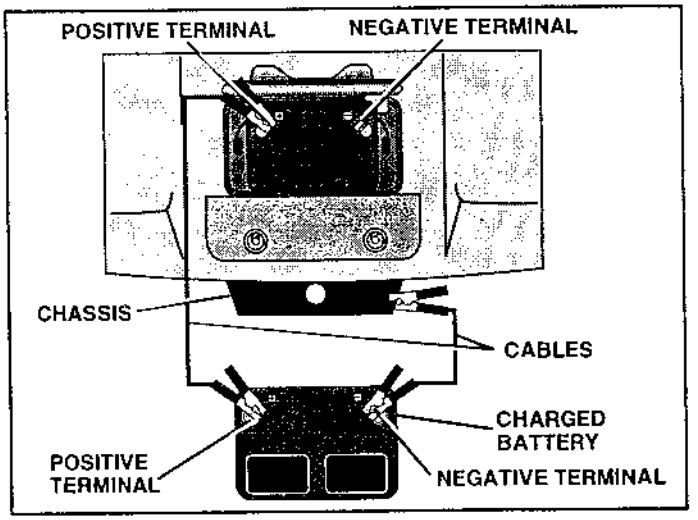


FIG. 28

TO REPLACE HEADLIGHT BULB

- Raise hood.
- Pull bulb holder out of the hole in the backside of the grill.
- Replace bulb in holder and push bulb holder securely back into the hole in the backside of the grill.
- Close hood.

INTERLOCKS AND RELAYS

Loose or damaged wiring may cause your tractor to run poorly, stop running, or prevent it from starting.

- Check wiring. See electrical wiring diagram in the Repair Parts section of this manual.

TO REPLACE FUSE

Replace with 30 amp automotive-type plug-in fuse. The fuse holder is located behind the dash.

TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 29)

- Raise hood.
- Unsnap headlight wire connector.
- Stand in front of tractor. Grasp hood at sides, tilt toward engine and lift off of tractor.
- To replace, reverse above procedures.

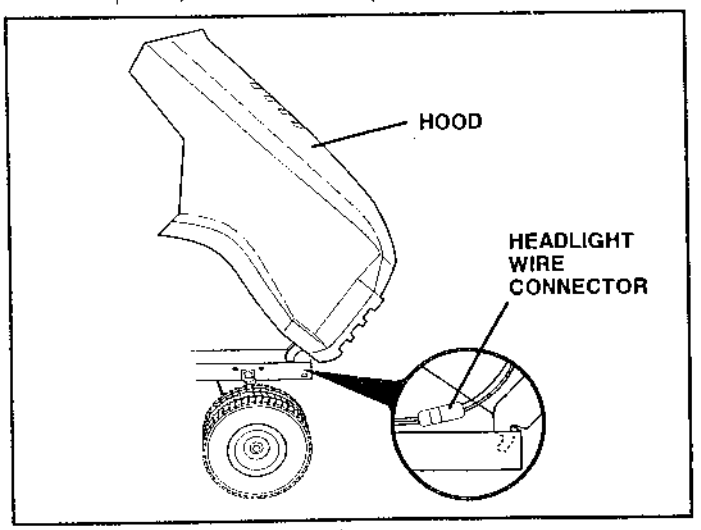


FIG. 29

SERVICE AND ADJUSTMENTS

ENGINE

TO ADJUST THROTTLE CONTROL CABLE (See Fig. 30)

The throttle control has been preset at the factory and adjustment should not be necessary. Check adjustment as described below before loosening cable. If adjustment is necessary, proceed as follows:

- With engine not running, move throttle control lever from slow to choke position. Slowly move lever from choke to fast position.
- Check that holes "A" in governor control lever and hole in governor plate line-up. If holes "A" are not aligned, loosen clamp screw and move throttle cable until holes are aligned. Tighten clamp screw securely.

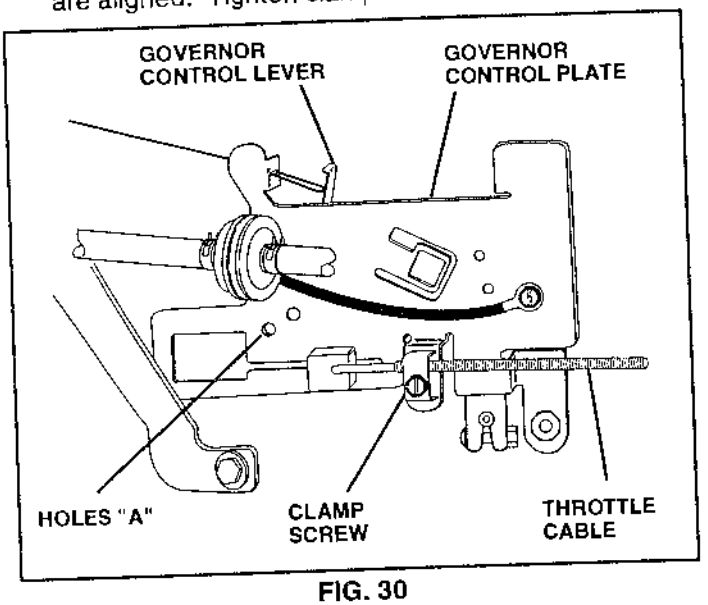


FIG. 30

TO ADJUST CARBURETOR

The carburetor has been preset at the factory and adjustment should not be necessary. However, minor adjustment may be required to compensate for differences in fuel, temperature, altitude or load. If the carburetor does need adjustment, see engine manual.

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 PROPER EQUIPMENT AND EXPERIENCE TO MAKE ANY NECESSARY ADJUSTMENTS.

STORAGE

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

CAUTION: Never store the tractor 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.

TRACTOR

Remove mower from tractor for winter storage. When mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Store in a clean, dry area.

- Clean entire tractor (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.

BATTERY

- Fully charge the battery for storage.
- After a period of time in storage, battery may require recharging.
- To help prevent corrosion and power leakage during long periods of storage, battery cables should be disconnected and battery cleaned thoroughly (see "TO CLEAN BATTERY AND TERMINALS" in the Customer Responsibilities section of this manual).
- After cleaning, leave cables disconnected and place cables where they cannot come in contact with battery terminals.
- Be sure battery drain tube is securely attached.
- If battery is removed from tractor for storage, do not store battery directly on concrete or damp surtaces.

ENGINE

FUEL SYSTEM

IMPORTANT: IT IS IMPORTANT TO PREVENT GUM DEPOSITS FROM FORMING IN ESSENTIAL FUEL SYSTEM PARTS SUCH AS 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 engine oil. (See "ENGINE" in the Customer Responsibilities section of this manual).

CYLINDER(S)

- Remove spark plug(s).
- Pour one ounce of oil through spark plug hole(s) into cylinder(s).
- Turn ignition key to "START" position for a few seconds to distribute oil.
- Replace with new spark plug(s).

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 tractor indoors and cover it to give protection from dust and dirt.
- Cover your tractor 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 tractor to rust.

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

TROUBLESHOOTING POINTS

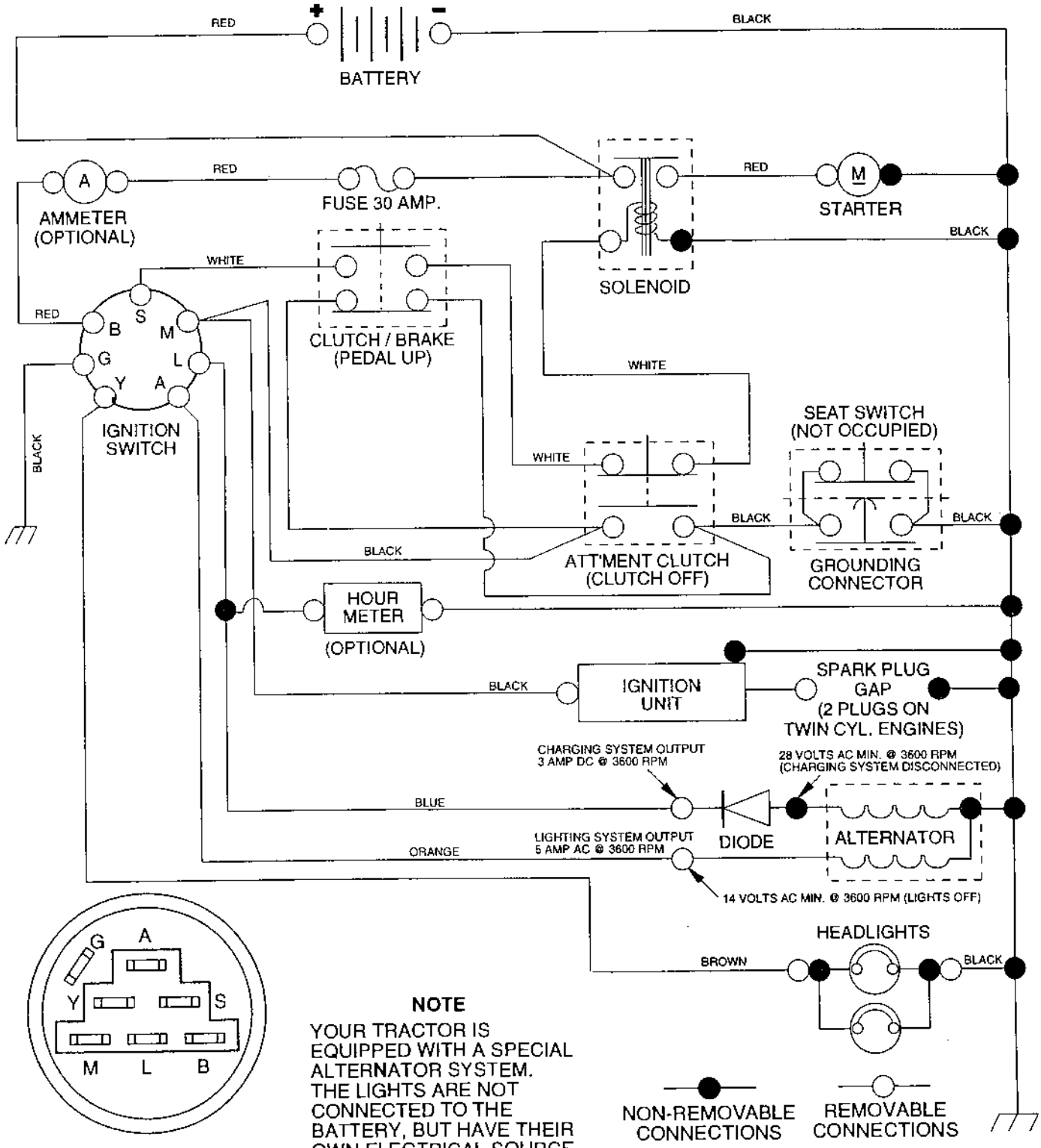
PROBLEM	CAUSE	CORRECTION
Will not start	1. Out of fuel. 2. Engine not "CHOKED" properly. 3. Engine flooded. 4. Bad spark plug. 5. Dirty air filter. 6. Dirty fuel filter. 7. Weter in fuel. 8. Loose or damaged wiring. 9. Carburetor out of adjustment. 10. Engine valves out of adjustment.	1. Fill fuel tank. 2. See "TO START ENGINE" in Operation section. 3. Wait several minutes before attempting to start. 4. Replace spark plug. 5. Clean/replace air filter. 6. Replace fuel filter. 7. Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter. 8. Check all wiring. 9. See "To Adjust Carburetor" in Service Adjustments section. 10. Contact en authorized service center/departmant.
Hard to start	1. Dirty air filtar. 2. Bad spark plug. 3. Weak or dead battery. 4. Dirty fuel filter. 5. Stale or dirty fuel. 6. Loose or damaged wiring. 7. Carburetor out of adjustment. 8. Engine valves out of adjustment.	1. Clean/replace air filter. 2. Replace spark plug. 3. Recharge or replace battery. 4. Replace fuel filter. 5. Drain fuel tank and refill with fresh gasoline. 6. Check all wiring. 7. Sea "To Adjust Carburetor" in Service Adjustments section. 8. Contact an authorized service center/department.
Engine will not turn over	1. Clutch/brake pedal not depressed. 2. Attachment clutch is engaged. 3. Weak or dead battery. 4. Blown fuse. 5. Corroded battery terminals. 6. Loose or damaged wiring. 7. Faulty ignition switch. 8. Faulty solenoid or starter. 9. Faulty operator presence switch(es).	1. Depress clutch/brake pedal. 2. Disengage attachment clutch. 3. Recharge or replace battery. 4. Replace fuse. 5. Clean battery terminals. 6. Check all wiring. 7. Check/replace ignition switch. 8. Check/replace solenoid or starter. 9. Contact an authorized service center/department.
Engine clicks but will not start	1. Week or dead battery. 2. Corroded battery terminals. 3. Loose or damaged wiring. 4. Faulty solenoid or starter.	1. Recharge or replace battery. 2. Clean battery terminals. 3. Check all wiring. 4. Check/replace solenoid or starter.
Loss of power	1. Cutting too much grass/too fast. 2. Throttle in "CHOKE" position. 3. Build-up of grass, leaves and trash under mower. 4. Dirty air filter. 5. Low oil level/dirty oil. 6. Faulty spark plug. 7. Dirty fuel filter. 8. Stale or dirty fuel. 9. Water in fuel. 10. Spark plug wire loose. 11. Dirty engine air screen/fins. 12. Dirty/clogged muffler. 13. Loose or dameged wiring. 14. Carburetor out of adjustment. 15. Engine valves out of adjustment.	1. Set in "Higher Cut" position/reduce speed. 2. Adjust throttle control. 3. Clean underside of mower housing. 4. Clean/replace air filter. 5. Check oil level/change oil. 6. Clean and regap or change spark plug.. 7. Replace fuel filter. 8. Drain fuel tank and refill with fresh gasoline. 9. Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter. 10. Connect and tighten spark plug wire. 11. Clean engine air screen/fins. 12. Clean/replace muffler. 13. Check all wiring. 14. See "To Adjust Carburetor" in Service Adjustments section. 15. Contact an authorized service center/department.
Excessive vibration	1. Worn, bent or loose blade. 2. Bent blade mandrel. 3. Loose/damaged part(s).	1. Replace blade. Tighten btade bolt. 2. Replace blade mandrel. 3. Tighten loose part(s). Replace damaged parts.

TROUBLESHOOTING POINTS

PROBLEM	CAUSE	CORRECTION
Engine continues to run when operator leaves seat with attachment clutch engaged	1. Faulty operator-safety presence control system.	1. Check wiring, switches and connections. If not corrected, contact an authorized service center/ department.
Poor cut - uneven	1. Worn, bent or loose blade. 2. Mower deck not level. 3. Buildup of grass, leaves, and trash under mower. 4. Bent blade mandrel. 5. Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.	1. Replace blade. Tighten blade bolt. 2. Level mower deck. 3. Clean underside of mower housing. 4. Replace blade mandrel. 5. Clean around mandrels to open vent holes.
Mower blades will not rotate	1. Obstruction in clutch mechanism. 2. Worn/damaged mower drive belt. 3. Frozen idler pulley. 4. Frozen blade mandrel.	1. Remove obstruction. 2. Replace mower drive belt. 3. Replace idler pulley. 4. Replace blade mandrel.
Poor grass discharge	1. Engine speed too slow. 2. Travel speed too fast. 3. Wet grass. 4. Mower deck not level. 5. Low/uneven tire air pressure. 6. Worn, bent or loose blade. 7. Buildup of grass, leaves and trash under mower. 8. Mower drive belt worn. 9. Blades improperly installed. 10. Improper blades used. 11. Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.	1. Place throttle control in "FAST" position. 2. Shift to slower speed. 3. Allow grass to dry before mowing. 4. Level mower deck. 5. Check tires for proper air pressure. 6. Replace/sharpen blade. Tighten blade bolt. 7. Clean underside of mower housing. 8. Replace mower drive belt. 9. Reinstall blades sharp edge down. 10. Replace with blades listed in this manual. 11. Clean around mandrels to open vent holes.
Headlight(s) not working (if so equipped)	1. Switch is "OFF". 2. Bulb(s) burned out. 3. Faulty light switch. 4. Loose or damaged wiring. 5. Blown fuse.	1. Turn switch "ON". 2. Replace bulb(s). 3. Check/replace light switch. 4. Check wiring and connactions. 5. Replace fuse.
Battery will not charge	1. Bad battery cell(s). 2. Poor cable connections. 3. Faulty regulator (if so equipped). 4. Faulty alternator.	1. Replace battery. 2. Check/clean all connections. 3. Replace regulator. 4. Replace alternator.
Loss of drive	1. Freewheel control in "disengaged" position. 2. Motion drive belt worn, damaged, or broken. 3. Air trapped in transmission during shipment or servicing.	1. Place freewheel control in "engaged" position. 2. Replace motion drive belt. 3. Purge transmission.
Engine "backfires" when turning engine "OFF"	1. Engine throttle control not set at "SLOW" position for 30 seconds before stopping engine.	1. Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

SCHEMATIC



IGNITION SWITCH

POSITION	CIRCUIT	"MAKE"
OFF	G + M + L	NONE
RUN/LIGHT	B + L	A + Y
RUN	B + L	NONE
START	B + L + S	NONE

NOTE

YOUR TRACTOR IS EQUIPPED WITH A SPECIAL ALTERNATOR SYSTEM. THE LIGHTS ARE NOT CONNECTED TO THE BATTERY, BUT HAVE THEIR OWN ELECTRICAL SOURCE. BECAUSE OF THIS, THE BRIGHTNESS OF THE LIGHTS WILL CHANGE WITH ENGINE SPEED. AT IDLE THE LIGHTS WILL DIM. AS THE ENGINE IS SPEEDED UP, THE LIGHTS WILL BECOME THEIR BRIGHTEST.

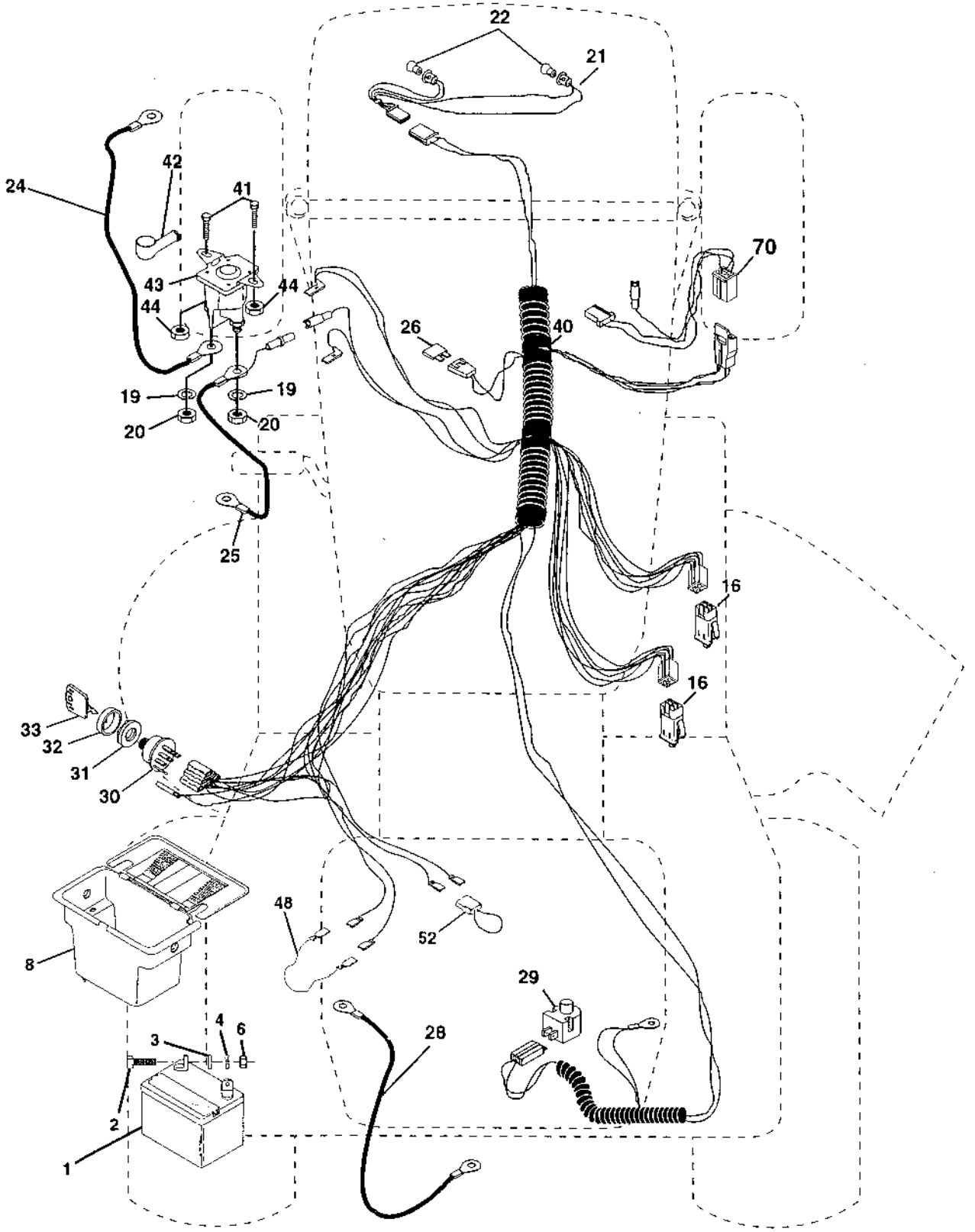
WIRING INSULATED CLIPS

NOTE: IF WIRING INSULATED CLIPS WERE REMOVED FOR SERVICING OF UNIT, THEY SHOULD BE REPLACED TO PROPERLY SECURE YOUR WIRING.

REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

ELECTRICAL



REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

ELECTRICAL

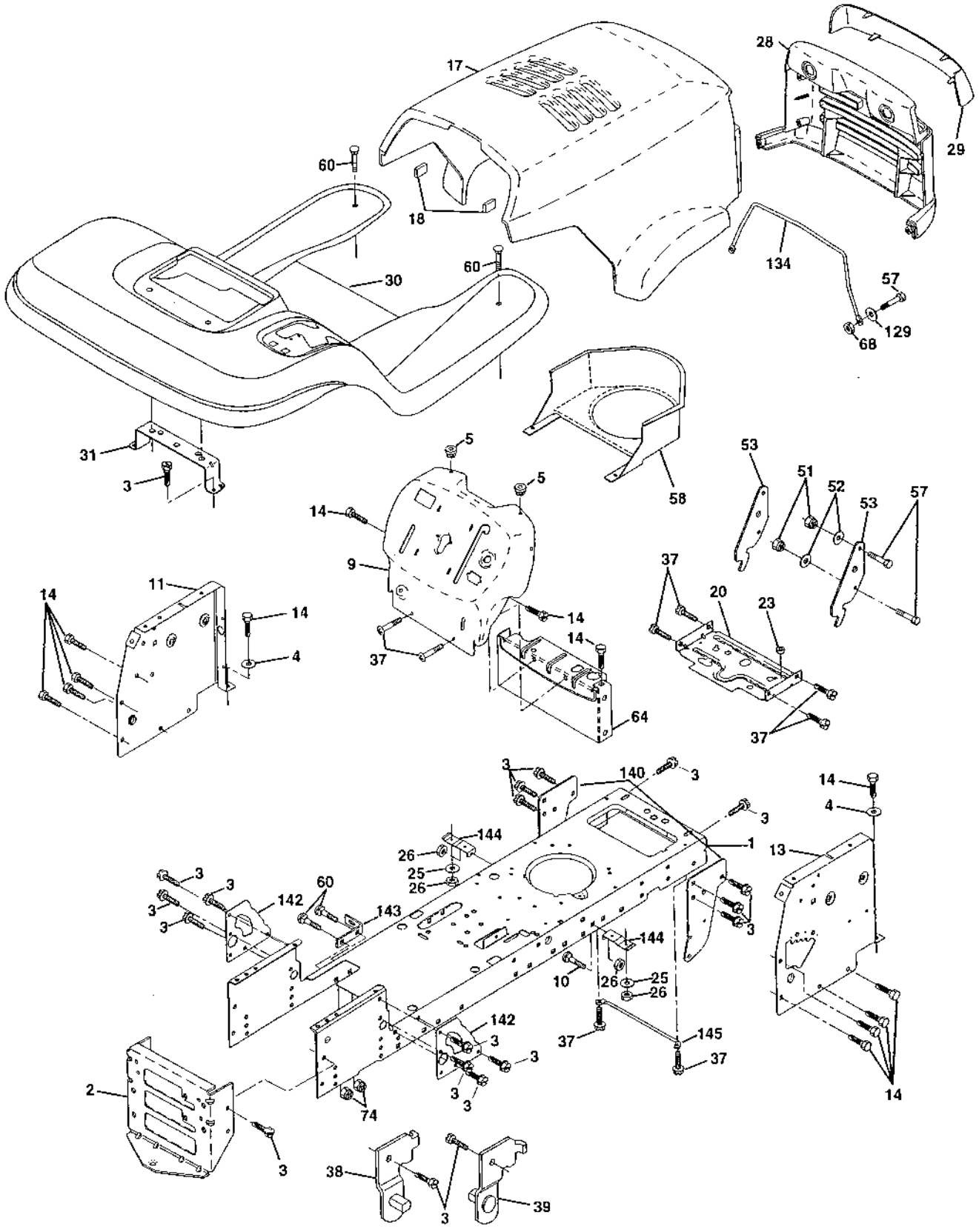
KEY NO.	PART NO.	DESCRIPTION
1	532144925	Battery 12 Volt 25 AMP
2	874760412	Bolt Hex Hd 1/4-20unc X 3/4
3	819091016	Washer 9/32 X 5/8 X 16 Ga.
4	810040400	Washer Lock Hvy Helical 1/4
6	873220400	Nut Fin Hex 1/4-20 Unc
8	532156417	Case Battery Mech Hinge
16	532153664	Switch Interlock Push-In
19	810090400	Washer Lock 1/4
20	873350400	Nut Jam Hex 1/4-20 Unc
21	532136850	Harness Asm Light W/4152j
22	532004152	Bulb Light #1156
24	532124780	Cable Battery 6 Ga 11" red
25	532146147	Cable Battery 6 Ga 44" red w/16 wire
26	532108824	Fuse 30 AMP Auto Green
28	532124773	Cable Ground 6 Ga 12" black
29	532121305	Switch Plunger Nc Gray
30	532140301	Switch Ign 4 pos w/lights
31	532124211	Nut Ignition
32	532141226	Cover Sw Ignition
33	532122147	Key Ign Modelled Generic
40	532156442	Harness Ign.
41	871110408	Bolt Blk Fin Hex 1/4 - 20 x 1/2
42	532131563	Cover Terminal Red
43	532145673	Solenoid
44	873640400	Nut Keps Hex 1/4-20 Unc
48	532140844	Adapter Ammeter Rectangular
52	532141940	Protection Wire Loop
70	532140413	Harness, Eng. B&S Dual

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

REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

CHASSIS AND ENCLOSURES



REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

CHASSIS AND ENCLOSURES

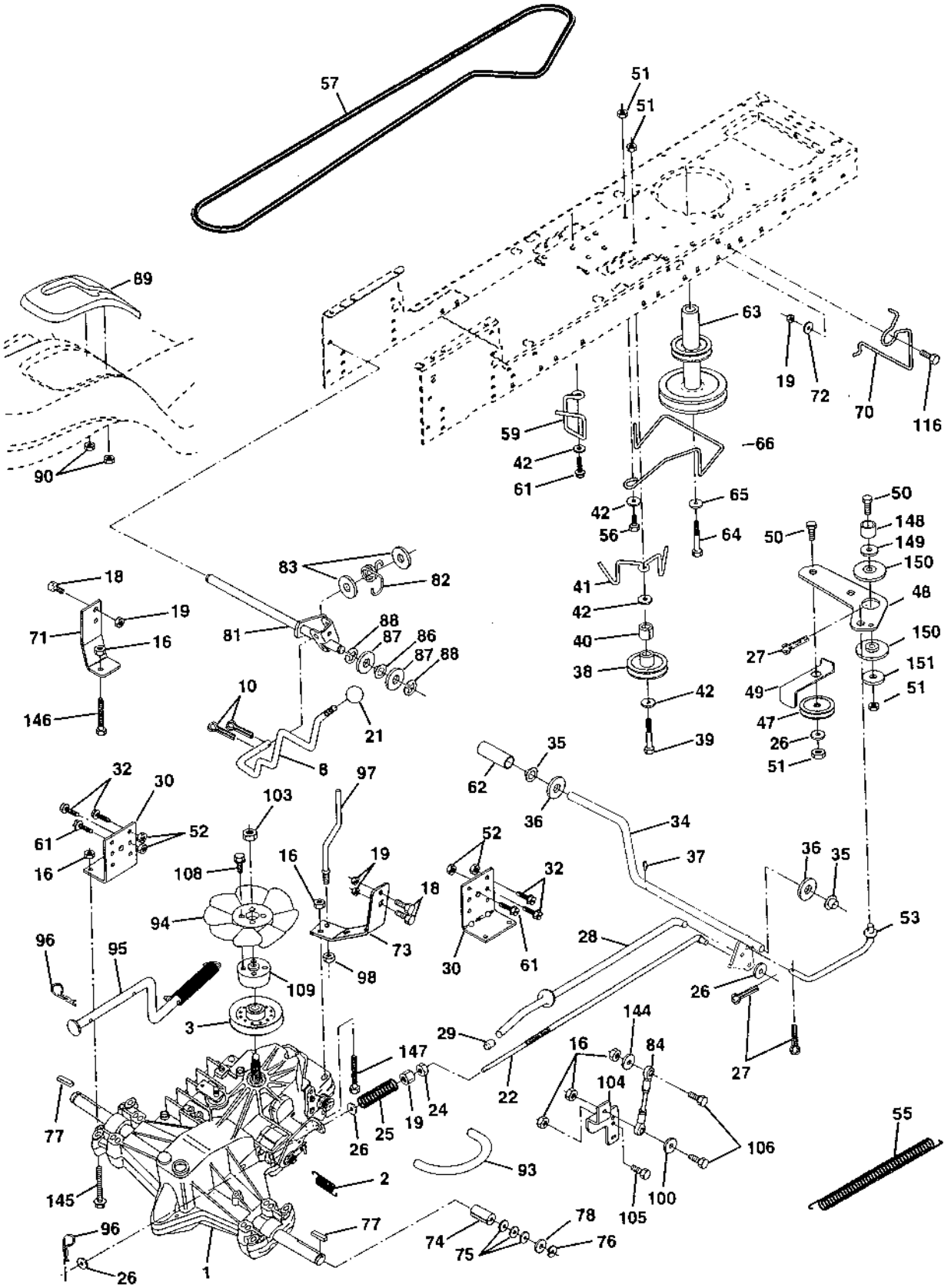
KEY NO.	PART NO.	DESCRIPTION
1	532160392	Chassis Weldment
2	532140356	Drawbar, Stretch
3	817490612	Screw Thdrol 3/8-16x3/4 Ty-tt
4	819131216	Washer 13/32 x 3/4 x 16 Ga.
5	532155272	Bumper Hood/Dash
9	532162742	Dash P/L M, N/AMM N/HM
10	872140608	Bolt Carriage 3/8-16 x 1
11	532155927	Panel Dash Lh
13	532157262	Panel Dash Rh
14	817490608	Screw Thdrol 3/8-16x1/2 Ty-tt
17	532165378	Hood LT/PL Husqvarna
18	532126938	Bumper Hood
20	532156437	Plate Mtg Battery Fuel Tank Fr
23	532124028	Bushing
25	819131312	Washer 13/32 X 13/16 X 12 Ga
26	873800600	Nut Lock Hex W/Ins 3/8-16 Unc
28	532165379	Grille LT/PL Husqvarna
29	532165380	Lens LT/PL Husqvarna
30	532156489	Fender Footrest STLT Pnt
31	532139976	Bracket Support Fender
37	817490508	Screw Thdrol 6/16-18 x 1/2 TYT
38	532139886	Bracket, Asm. Pivot, L.H., Mower Rear
39	532139887	Bracket, Asm. Pivot, R.H., Mower Rear
51	873800400	Nut Lock Hex W/Ins 1/4-20
52	819091416	Washer 9/32 x 7/8 x 16 Ga.
53	532150067	Bracket Pnt. Pick off LT/PL Husqvarna
57	874780412	Bolt Hex 1/4-20 x 3/4
58	532150127	Air Duct Engine P/L
60	872140606	Bolt Rdhd Sqnk 3/8-16unc x 3/4
64	532154798	Dash Lower STLT
68	873510400	Nut Keps Hex 1/4-20unc
74	873680600	Nut Crownlock 3/8-16 UNC
129	819091016	Washer 9/32 x 5/8 x 16 Ga.
134	532160219	Rod Support Hood LT/PL Husq.
140	532158418	Bracket Suspension Front
142	532156095	Plate Reinforcement STLT
143	532154966	Bracket Swaybar Chassis
144	532154207	Bracket Pnt Footrest STLT
145	532156524	Rod Pivot Chassis/Hood
--	532005479	Plug Button

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

REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

DRIVE



REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

DRIVE

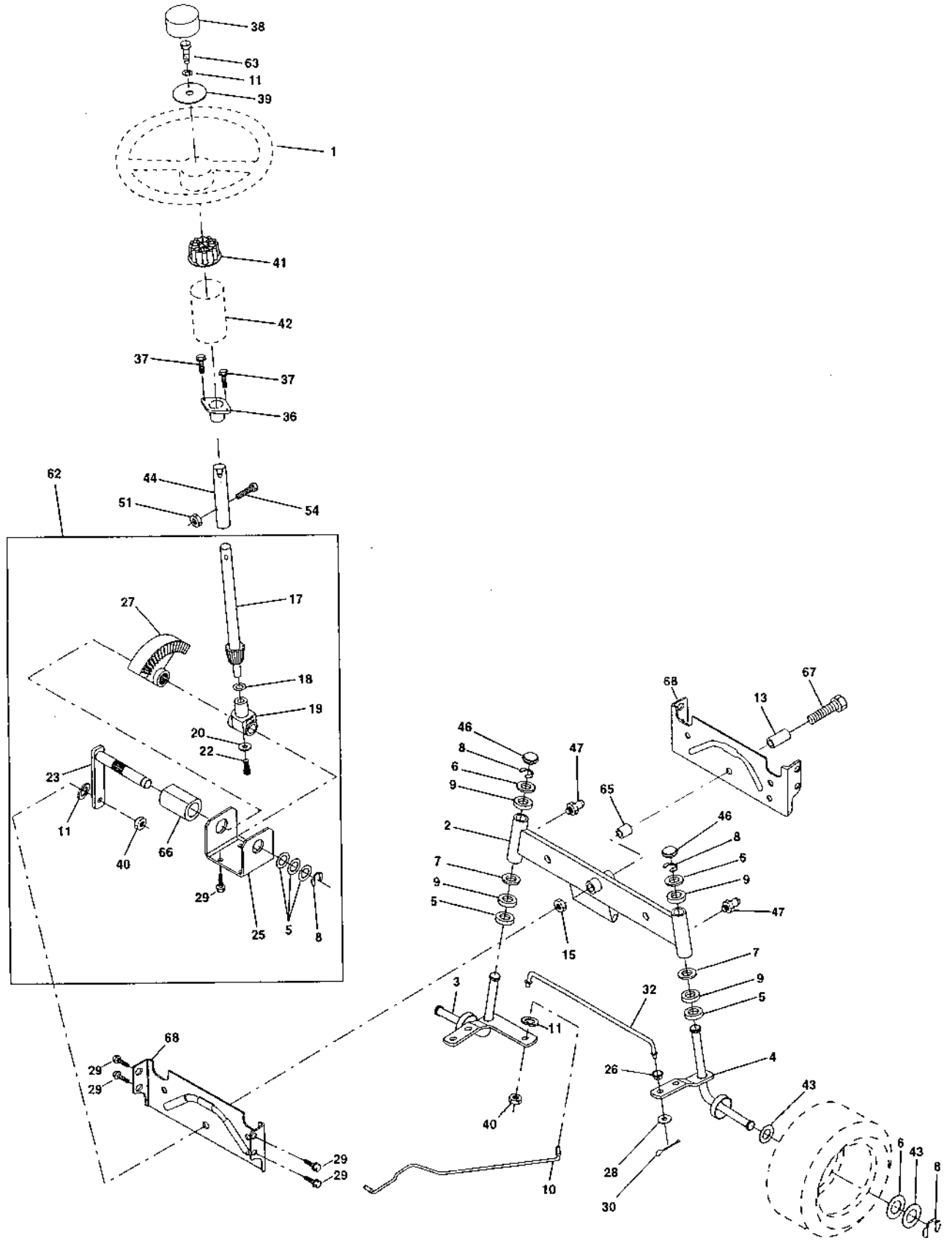
KEY NO.	PART NO.	DESCRIPTION
1	532140607	Transaxle (See Breakdown) Hydro Gear, Model No. 319-0500
2	532142431	Spring, Return, Brake
3	532144698	Pulley, Transaxle
8	532154792	Rod Shift Fender STLT
10	876020416	Pin Cotter 1/8 x 1 CAD
16	873800500	Nut Lock Hex W/Ins. 5/16-18 Unc P
18	874780616	Bolt Fin Hex 3/8-16 Unc x 1 Gr. 5
19	873800600	Nut Lock Hex W/Wsh 3/8-16 Unc
21	532121274	Knob, Duckhead 1/2-13
22	532145627	Rod, Brake Hydro
24	873350600	Nut
25	532106888	Spring, Brake Rod
26	819131316	Washer
27	876020412	Pin Cotter 1/8 x 3/4 CAD.
28	532145204	Rod, Parking Brake
29	532071673	Cap, Parking Brake
30	532130807	Bracket, Transaxle
32	874760512	Bolt Hex Hd 5/16-18 Unc x 3/4
34	532155071	Shaft, Foot Pedal
35	532120183	Bearing, Nylon
36	819211616	Washer
37	532124963	Pin, Roll
38	532123674	Pulley, Idler, Flat
39	874760644	Bolt
40	532124965	Spacer, Split
41	532154777	Keeper, Belt Idler
42	819131312	Washer 13/32 x 13/16 x 12 Gauge
47	532127783	Pulley, Idler, V-Groove
48	532154407	Bellcrank Clutch Grnd Prv STL
49	532123205	Retainer, Belt
50	874760624	Bolt
51	873680600	Nut
52	873680500	Nut Crownlock 5/16-18
53	532105710	Link, Clutch
55	532105709	Spring, Return, Clutch
56	874760620	Bolt Fin Hex 3/8-16 UNC x 1-1/4
57	532141416	V-Belt, Ground Drive
59	532140312	Keeper, Center Span
61	817490612	Screw Thdrol. 3/8-16 x 3/4 Ty. TT
62	532124872	Cover, Pedal
63	532140186	Pulley, Engine
64	871170764	Bolt Hex 7/16-20 x 4 Gr 5
65	810040700	Washer
66	532154778	Keeper Belt Engine Hydro
70	532134683	Guide Belt Mower Drive RH
71	532141417	Strap Torque Lh Hydro
72	819132012	Washer 13/32 x 1-1/4 x 12 Ga.
73	532141418	Strap Torque Rh Hydro
74	532121199	Spacer, Split
75	532121749	Washer 25/32 x 1-1/4 x 16 Gauge
76	812000001	E-Ring
77	532123583	Key, Square
78	532121748	Washer 25/32 x 1-5/8 x 16 Gauge
81	532156048	Shaft Asm. Cross Hydro
82	532123782	Spring Torsion T/A
83	819171216	Washer 17/32 x 3/4 x 16 Ga.
84	532141423	Rod, Tie Hydro
86	532157480	Bushing
87	819212016	Washer 21/32 x 1-1/4 x 16 Ga.
88	812000008	Ring Klip #5304-62
89	532158388	Console, Shift
90	532124346	Nut, Self-Thd Wsh-hd 1/4 Zinc
93	532142564	Line Fuel Hydro 4"
94	532140462	Fan, Hydro 7"
95	532144643	Control Asm Bypass Hydro
96	532124788	Retainer Spring 1" Zinc/Cad
97	532144201	Keeper Belt Rh Hydro
98	873510600	Nut Keps Hex 3/8-16 Unc
100	819111216	Washer 11/32 x 3/4 x 16 Ga.
103	873940800	Nut Nylon Insert 1/2-20 Unf.
104	532141421	Arm, Control Hydro
105	871070516	Screw Cap Hex 5/16 x 18 x 1
106	874780520	Bolt Fin Hex 5/16-18 Unc x 1-1/4
108	817541026	Screw Hex Wh Hd #10-24 x
109	532145098	Adaptor Fan Hydro LT Hyd Alum
116	872110610	Bolt Rdhd Sq. Neck 3/8-16 x 1.25
144	819111016	Washer 11/32 x 5/8 x 16 Ga.
145	874490540	Bolt Hex Flghd 5/16-18 x Gr. 5
146	874490536	Bolt Hex Flghd 5/16-18 x 2-1/4
147	874490524	Bolt hex Flghd 5/16-18 x 1-1/2
148	532159103	Spacer
149	532122052	Spacer Retainer PM Mower
150	532150935	Bushing Nylon Collered
151	819133210	Washer 13/32 x 2 x 10 Ga.

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

REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

STEERING ASSEMBLY



REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

STEERING ASSEMBLY

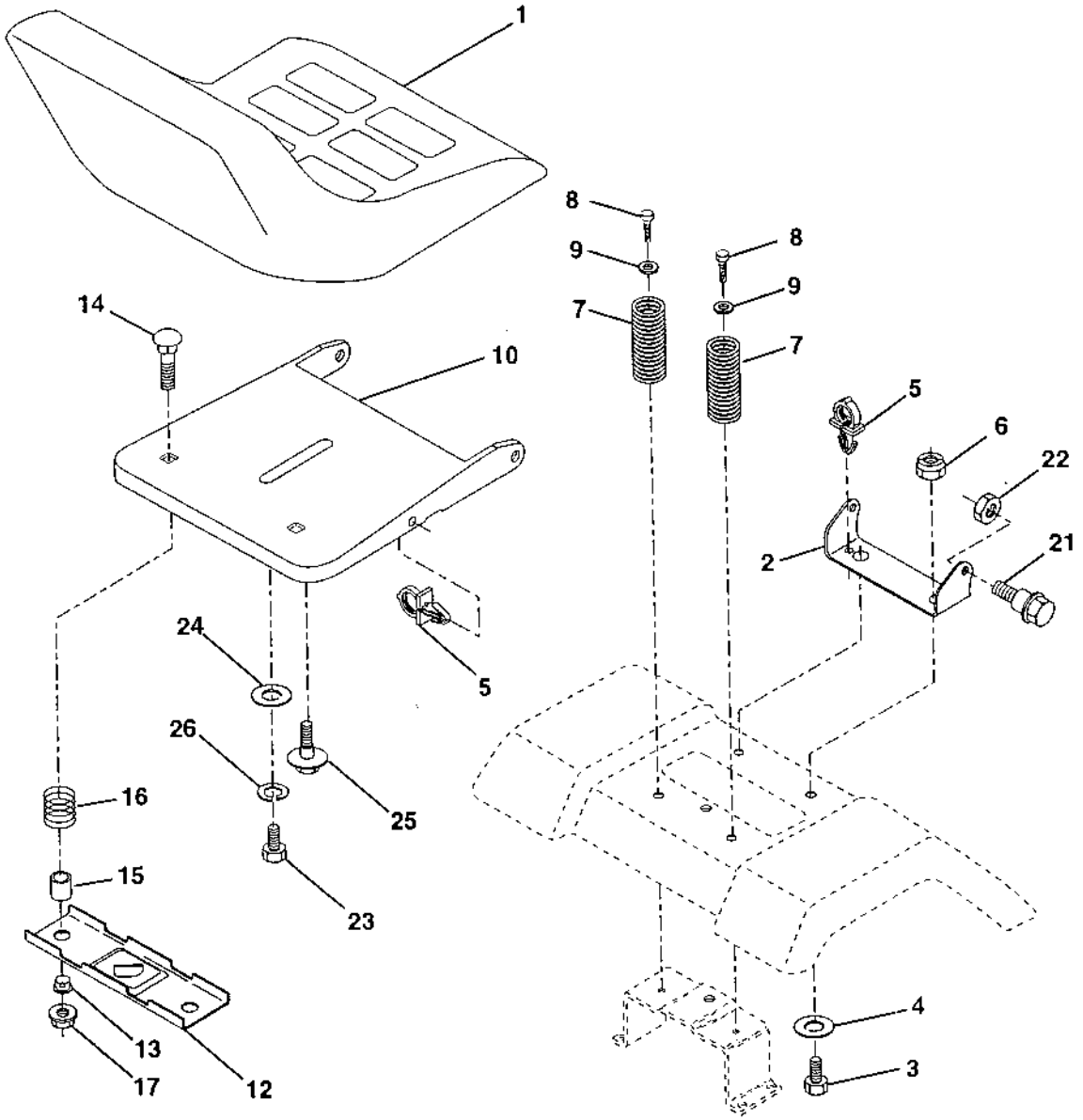
KEY NO.	PART NO.	DESCRIPTION
1	532124415	Wheel Steering
2	532154427	Axle Asm STMP Dropped STL
3	532156483	Spindle Asm LH
4	532157473	Spindle Asm RH
5	532124931	Bearing Race Thrust Harden
6	532121748	Washer 25/32 X 1-5/8 X 16 Ga
7	819272016	Washer 27/32 X 1-1/4 X 16 Ga
8	812000029	Ring Klip #t5304-75
9	532124937	Bearing Col Strg Blk
10	532156438	Link Drag Extended Stamp
11	810040600	Washer Lock Hvy Hlcl Spr 3/8
13	532154779	Bearing Axle STLT/GT
15	873901000	Nut Lock Flange 5/8-11 Unc
17	532156546	Shaft Asm Strg
18	532057079	Washer Thrust 515x 750x 033
19	532124035	Support Shaft
20	532126684	Washer Shim 1/4 X 5/8 X 062
22	871200410	Screw Hex Socket 1/4-20 x 5/8
23	532127501	Shaft Asm Pittman
25	532154406	Bracket Steering
26	532126847	Bushing Link Drag Blk LR
27	532136874	Gear Sector
28	819131416	Washer 13/32 X 7/8 X 16 Ga
29	817490612	Screw Thdrol 3/8-16x3/4 Ty-tt
30	876020412	Pin Cotter 1/8 X 3/4 Cad
32	532130465	Rod Tie Wire Form 19 75 Mech
36	532155099	Bushing Strg
37	532152927	Screw
38	532124416	Insert Cap Strg Wh Au
39	819133808	Washer 13/32 X 2-3/8 X 8 Ga
40	532124701	Lock nut
41	532100711	Adaptor Wheel Strg
42	532155092	Boot Steering Shaft
43	532121749	Washer 25/32 X 1 1/4 X 16 Ga
44	532153720	Extension Steering Shaft LR/LT
46	532121232	Cap Spindle Fr Top Blk
47	532124836	Fitting Grease
51	873800500	Nut Lock Hex w/Ins 5/16-18
54	874780520	Bolt Fin Hex 5/16-18 Unc x 1-1/4
62	532156594	Kit, Steering Assembly Svc
63	874780616	Bolt Fin Hex 3/8-16unc x 1 Gr. 5
65	532154780	Spacer Axle
66	532154404	Bearing Arm Pittman
67	874781044	Bolt, Fin Hex 5/8-11 UNC x 2-3/4
68	532154429	Axle, Brace

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

REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

SEAT ASSEMBLY



KEY NO.	PART NO.	DESCRIPTION
1	532140838	Seat
2	532140551	Bracket Pivot Seat 8 720
3	874760616	Bolt Fin Hex 3/8-16unc X 1
4	819131610	Washer 13/32 X 1 X 10 Ga
5	532145006	Clip Push-In
6	873800600	Nut Hex w/Ins. 3/8-16 Unc
7	532124181	Spring Seat Cprsn 2 250 Blk Zi
8	817490616	Screw Thdrol 3/8-16 X 1 Ty-tt
9	819131614	Washer 13/32 X 1 X 14 Ga.
10	532155925	Pan Seat
12	532121246	Bracket Mounting Switch
13	532121248	Bushing Snap Blk Nyl 50 Id

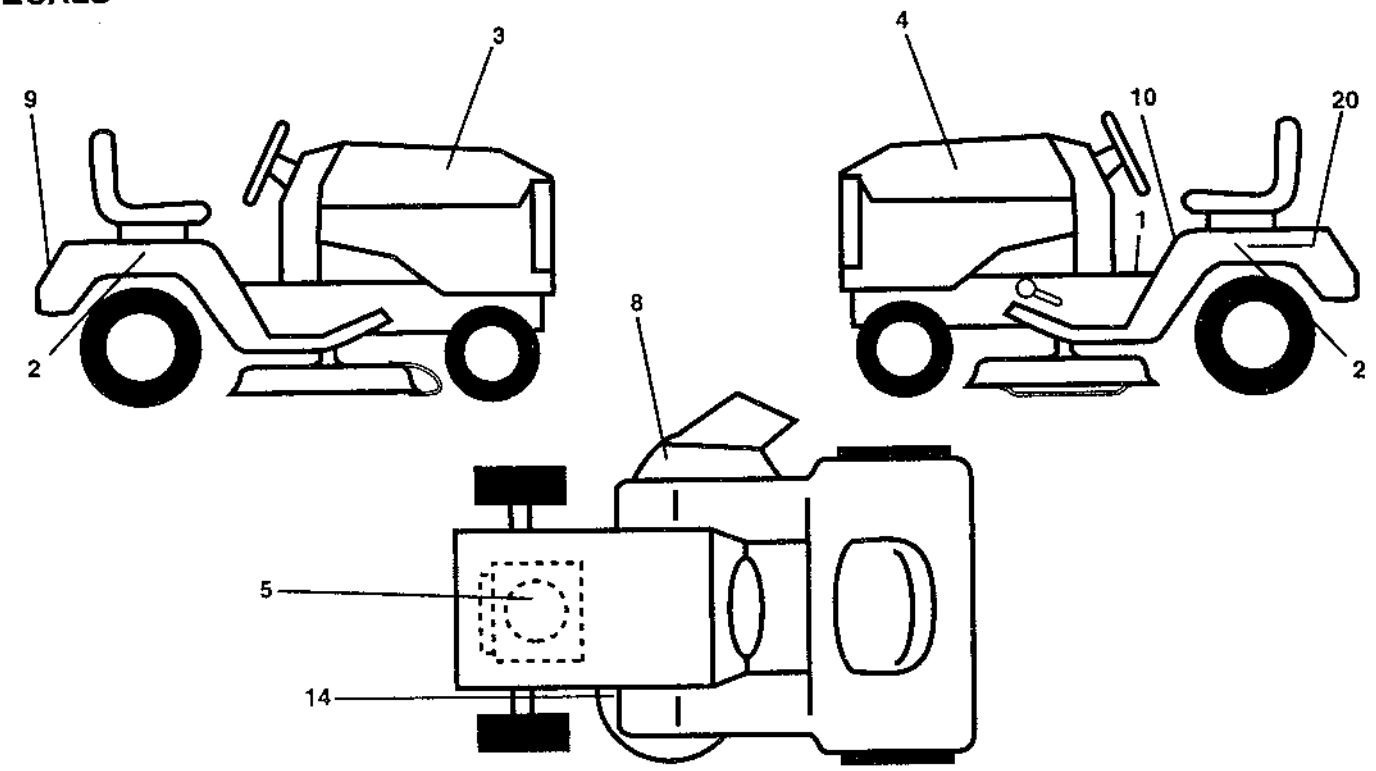
KEY NO.	PART NO.	DESCRIPTION
14	872050412	Bolt Rdhd Sqnk 1/4-20x1-1/2
15	532134300	Spacer Split 28x 96 Yel Zinc
16	532121250	Spring Cprsn 1 27 Blk Pnt
17	532123976	Nut Lock 1/4 Lge Flg Gr 5 Zinc
21	532153236	Bolt Shoulder 5/16-18 Unc
22	873800500	Nut Hex Lock W/Ins 5/16-18
23	874780814	Bolt, Hex Head, Fin 1/2-13 x 7/8 Grade 5
24	819171912	Washer 17/32 X 1-3/16 X 12 Ga.
25	532127018	Bolt Shoulder 5/16-18 X 62
26	810040800	Washer Lock

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

REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

DECALS

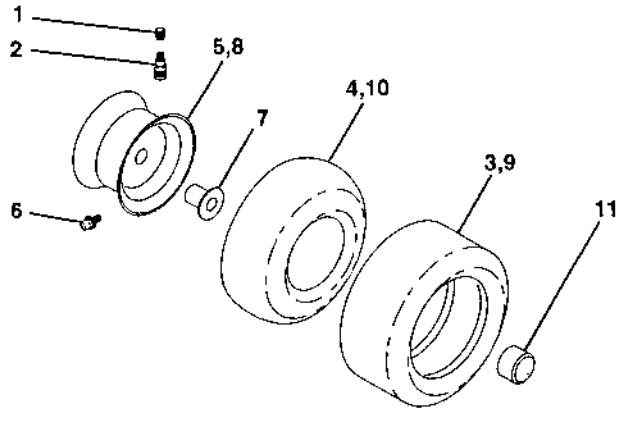


KEY NO.	PART NO.	DESCRIPTION
1	532157032	Decal Oper. Step Thru Eng/Fr
2	532157007	Decal Fender Auto Husq Radius
3	532157193	Decal Hood RH
4	532157195	Decal Hood LH
5	532165285	Decal HP Engine
8	532137259	Decal Warning
9	532150617	Decal Fender Husq
10	532157140	Decal Fender Danger Eng/Fr
14	532136832	Decal V-Belt Schematic
20	532145005	Decal Bat Dan/Psn
--	532154515	Pad Footrest LH STLT
--	532154516	Pad Footrest RH STLT
--	532138311	Decal Handle Lft Height Adjust
--	532142341	Decal Drawbar Cntrl Mvt Hyd
--	532165356	Manual Owner's (English)
--	532165357	Manual Owner's (French)

Available accessories not included with tractor:

--	MK380	Mulcher Kit with Blades
--	C38	Grass Catcher

WHEELS & TIRES



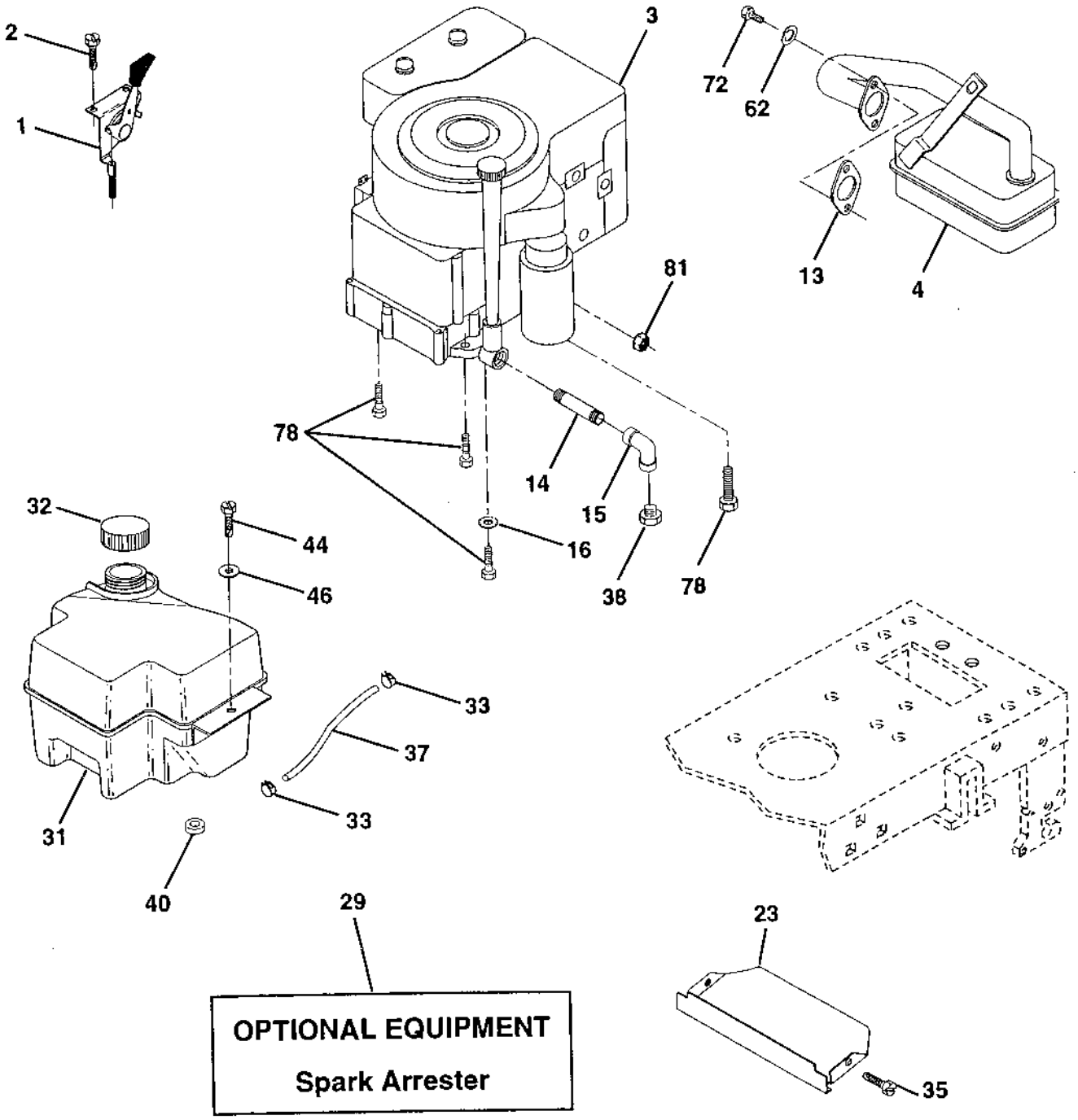
KEY NO.	PART NO.	DESCRIPTION
1	532059192	Cap Valve Tire
2	532065139	Stem Valve
3	532106222	Tire F Ts 15 X 6 0 - 6 Service
4	532059904	Tube Front (Service Item Only)
5	532138336	Rim Asm 6"front Silver Service
6	532124957	Fitting Grease (Front Wheel Only)
7	532124959	Bearing Flange (Front Wheel Only)
8	532138337	Rim Asm 8"rear Silver Service
9	532124635	Tire R Ts 18x8 5-8 C Service
10	532124926	Tube Rear (Service Item Only)
11	532104757	Cap Axle Blk 1 50 X 1 00
--	532144334	Sealant, Tire (10 oz. Tube)

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

REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

ENGINE



REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

ENGINE

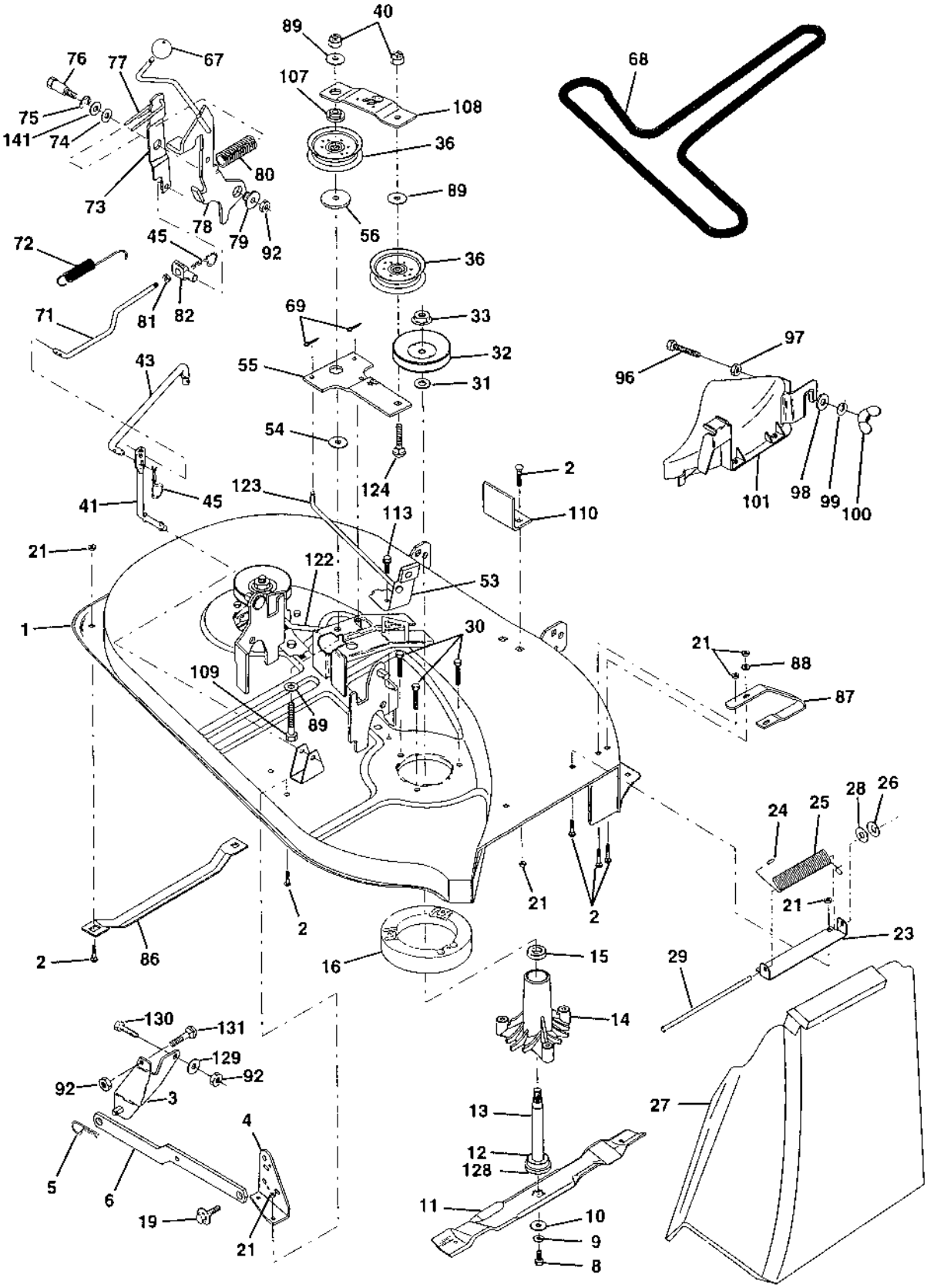
KEY NO.	PART NO.	DESCRIPTION
1	532140310	Control Th/ch 23 5 LH Flag
2	817720410	Screw Hex Thd Cut 1/4-20x5/8 T
3	- - - - - - - -	Engine, Briggs 289707
4	532137348	Muffler LT B&S 12/12.5/13HP
13	532272293	Gasket Eng 1 313 Id Tin Plated
14	813280324	Nipple Pipe 3/8 Npt X 3"
15	813200300	Elbow Std 90 Degree 3/8-18 Npt
16	811050600	Washer Lock Ext Tooth 3/8
23	532159880	shield Brn/Dbr Guard
29	532137180	Kit Spark Arrestor (Flat Scrn)
31	532161911	Tank Fuel Front 2 00
32	532140527	Cap Asm Fuel W/sym Vented
33	532123487	Clamp Hose Black
35	817490512	Screw
37	532137040	Line Fuel 20"
38	- - - - - - - -	Plug Oil Drain (Order From Engine Manufacturer)
40	532124028	Bushing Snap Nyl Blk Fuel Line
44	817490412	Screw Hexwsh Thdrol 1/4-20x3/4
46	819091416	Washer 9/32 X 7/8 X 16 Ga
62	810040500	Washer Lock Hvy Hlcl Spr 5/16
72	871070512	Screw Hexhd Cap 5/16-18x 3/4
78	817490620	Screw Thdrol 3/8-16x1-1/4 TYTT
81	532128861	Nut Flange 1/4-20 Starter Nut

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

REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

MOWER DECK



REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

MOWER DECK

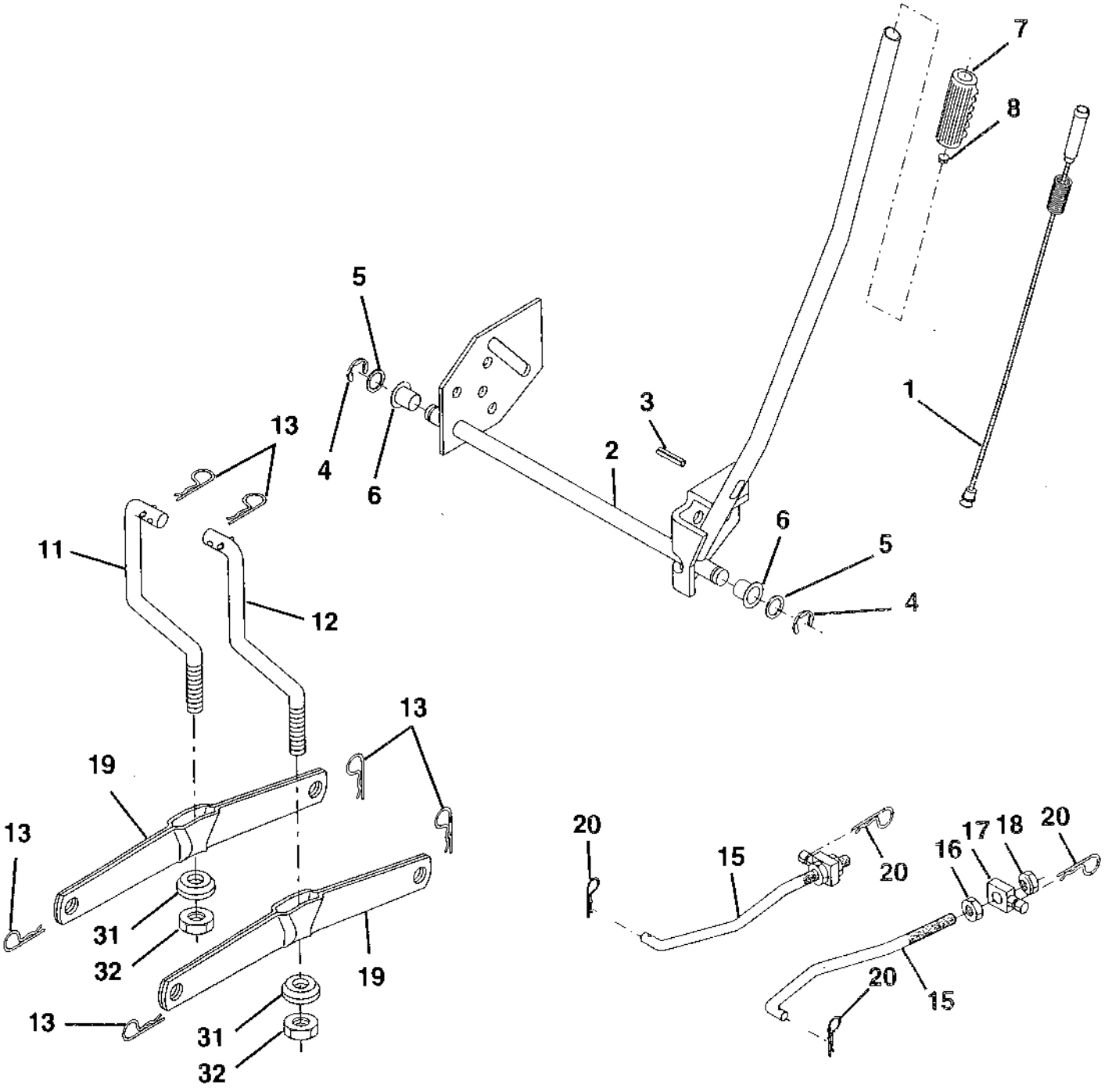
KEY NO.	PART NO.	DESCRIPTION
1	532142829	Deck Asm Weldment
2	872140506	Bolt Rdhd Sqnk 5/16-18unc X3/4
3	532138017	Bracket Asm Fr Sway Bar 38/42
4	532138440	Bracket Asm Deck Sway Bar
5	532124670	Retainer Spring
6	532130832	Arm Suspension Rear
8	532850857	Bolt 3/8 - 24 X 1.25 Gr 8
9	810030600	Washer Lock Hvy 3/8
10	532140296	Washer Hard Blade Mower Vented
11	532134148	Blade Mower Mulching 38"
12	532129895	Bearing Ball #6024 (Mandrel)
13	532137645	Shaft Asm W/lower Bearing
14	532128774	Housing Mandrel Vented
15	532110485	Bearing Ball Mandrel
16	532140329	Stripper Mower Vented
19	532132827	Bolt Shoulder
21	873680500	Nut Crownlock 5/16-18 UNC
23	532137607	Bracket Deflector Mower
24	532105304	Cap Sleeve 80x 112 Blk Mower
25	532123713	Spring Torsion Deflector 2 52
26	532110452	Nut Push Phos & Oil
27	532106736	Shield Deflector
28	819111016	Washer 11/32 X 5/8 X 16 Ga
29	532106735	Rod Hinge
30	532157722	Screw Thdrol Rolling Washer Head
31	532129963	Washer Spacer Mower Vented
32	532153532	Pulley Mandrel
33	532137266	Nut 9/16 Toplock Flng Oil Dip
36	532131494	Pulley Idler Flat 3 060
40	873680600	Nut Crownlock 3/8-16 UNC
41	532133551	Rod Pivot W/nibs
43	532133504	Rod Clutch Secondary
45	532124788	Spring Retainer 1" Zinc/cad
53	532130840	Asm Brake
54	532133943	Washer Hardened
55	532133840	Arm Idler
56	532122052	Spacer Retainer Pm Mower
67	532162132	Knob Rd 7/16-14 Plstc Thds Blk
68	532144200	V-Belt Mower
69	876020312	Pin, Cotter 3/32 x 3/4
71	532142427	Rod Clutch Primary 38/42
72	532131870	Spring Return
73	532127847	Arm Clutch Secondary
74	532121748	Washer 25/32 X 1-5/8 X 16 Ga
75	812000029	Ring Klip #t5304-75
76	532128903	Bolt Shoulder 3/8-16 Unc 1 44
77	532127845	Keeper Spring 4 000
78	532160570	Arm Asm Clutch Primary
79	532127498	Bushing 747 Od X 794 Lg Brass
80	532153701	Spring Clutch Mower
81	873350600	Nut Hex Jam 3/8-16
82	532142028	Trunnion Adj 94
86	532125074	Runner, LH
87	532128772	Runner, RH
88	819111216	Washer 11/32 x 3/4 x 16 Ga.
89	819131612	Washer 13/32 x 1 x 12 Ga.
92	873800600	Nut Lock Hex W/Ins 3/8-16 Unc
96	874930620	Bolt 3/8-16 x 1-1/4 Mulcher
97	873930600	Nut Crownlock 3/8-16 UNC
98	819132016	Washer 13/32 x 1-1/4 x 16 Ga.
99	810040600	Washer Lock Hvy Hlcl Spr 3/8
100	532135651	Nut Wing
101	532132803	Cover Asm Mulching 38"
107	532133502	Spacer, Retainer
108	532133503	Stiffener, Idler Arm
109	874760640	Bolt, Hex Head 3/8-16 x 2-1/2
110	532142587	Upstop Deck Front 38"
113	817490512	Screw Thdrol 5/16-18 X 3/4
122	532131289	Rod, Brake, LH
123	532131288	Rod, Brake, RH
124	872110614	Bolt, Carriage 3/8-16 x 1-3/4
128	532153390	Washer Felt
129	819131312	Washer 13/32 x 13/16 x 12 Ga.
130	874780616	Bolt, Fin Hex 3/8-16 UNC x 1 Gr. 5
131	872140608	Bolt, Rdhd Sqnk 3/8-16 x 1
141	532124931	Washer Thrust .75 x 1.230
- -	532130794	Mandrel Asm Service (Includes Key Nos. 8-10, 12-15, 31 and 33)
- -	532142820	Mower Deck Complete (Std. Deck - order separately mulcher plate components key nos. 96-101)

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

REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

MOWER LIFT



REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

MOWER LIFT

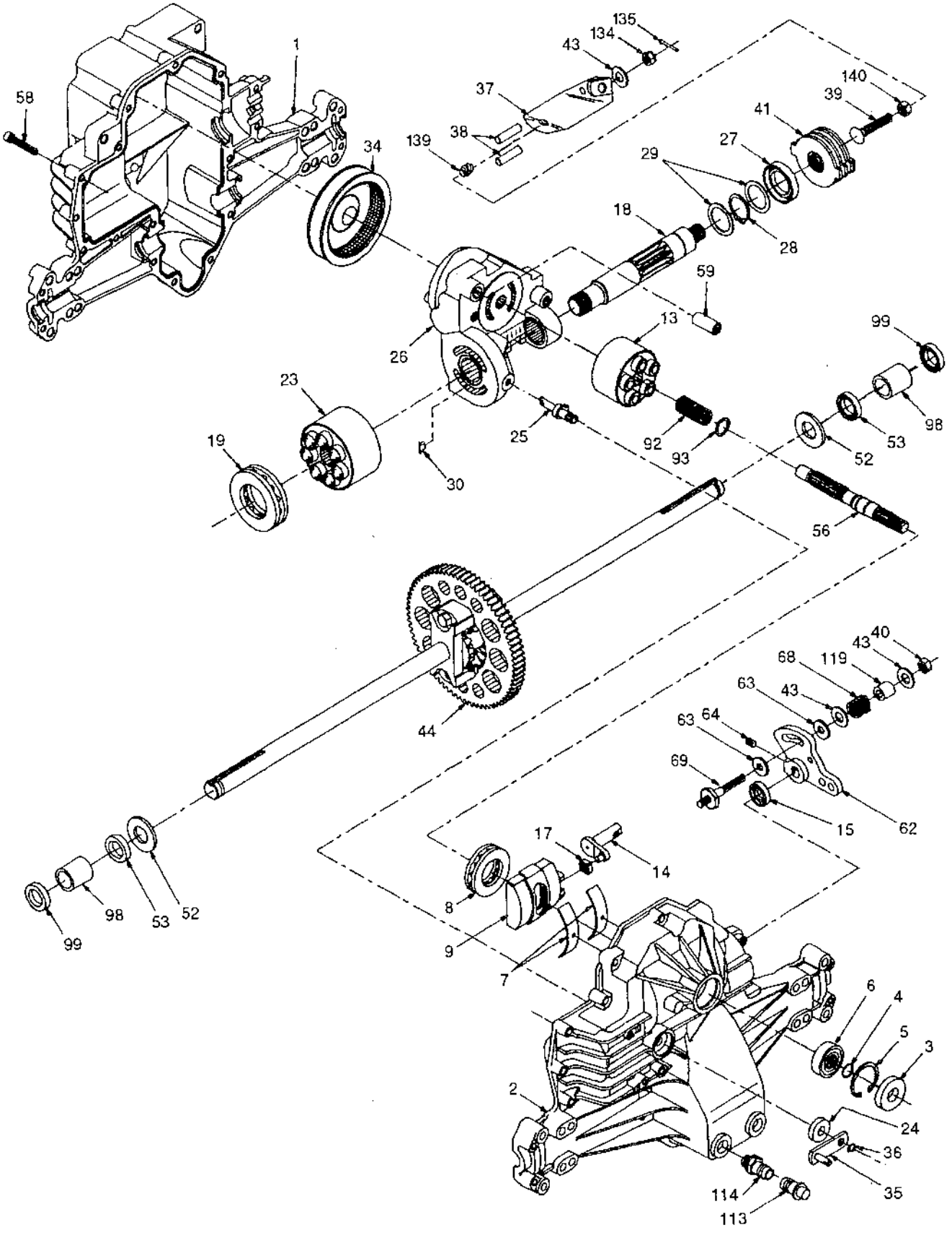
KEY NO.	PART NO.	DESCRIPTION
1	532159460	Wire Asm Inner W/plunger LT
2	532159471	Shaft Asm Lift
3	532105767	Pin Groove
4	812000002	E Ring #5133-62
5	819211621	Washer PLTD 21/32 X 1 X 21ga
6	532120183	Bearing Nylon Blk 629 Id
7	532109413	Grip Handle Bicycle
8	532124526	Button Plunger Black
11	532139865	Link Lift LH
12	532139866	Link Lift RH
13	532124670	Retainer Spring
15	532127218	Link Front
16	873350800	Nut Jam Hex 1/2-13 Unc
17	532130171	Trunnion Blk Zinc
18	873680800	Nut Crownlock 1/2-13 Unc
19	532139868	Arm Suspension Rear
20	532163552	Spring, Retainer
31	532140302	Bearing Pvt. Lift Spherical
32	873540600	Nut Crownlock 3/8-24

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

REPAIR PARTS

TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

HYDRO GEAR TRANSAXLE - MODEL NUMBER 319-0500



REPAIR PARTS

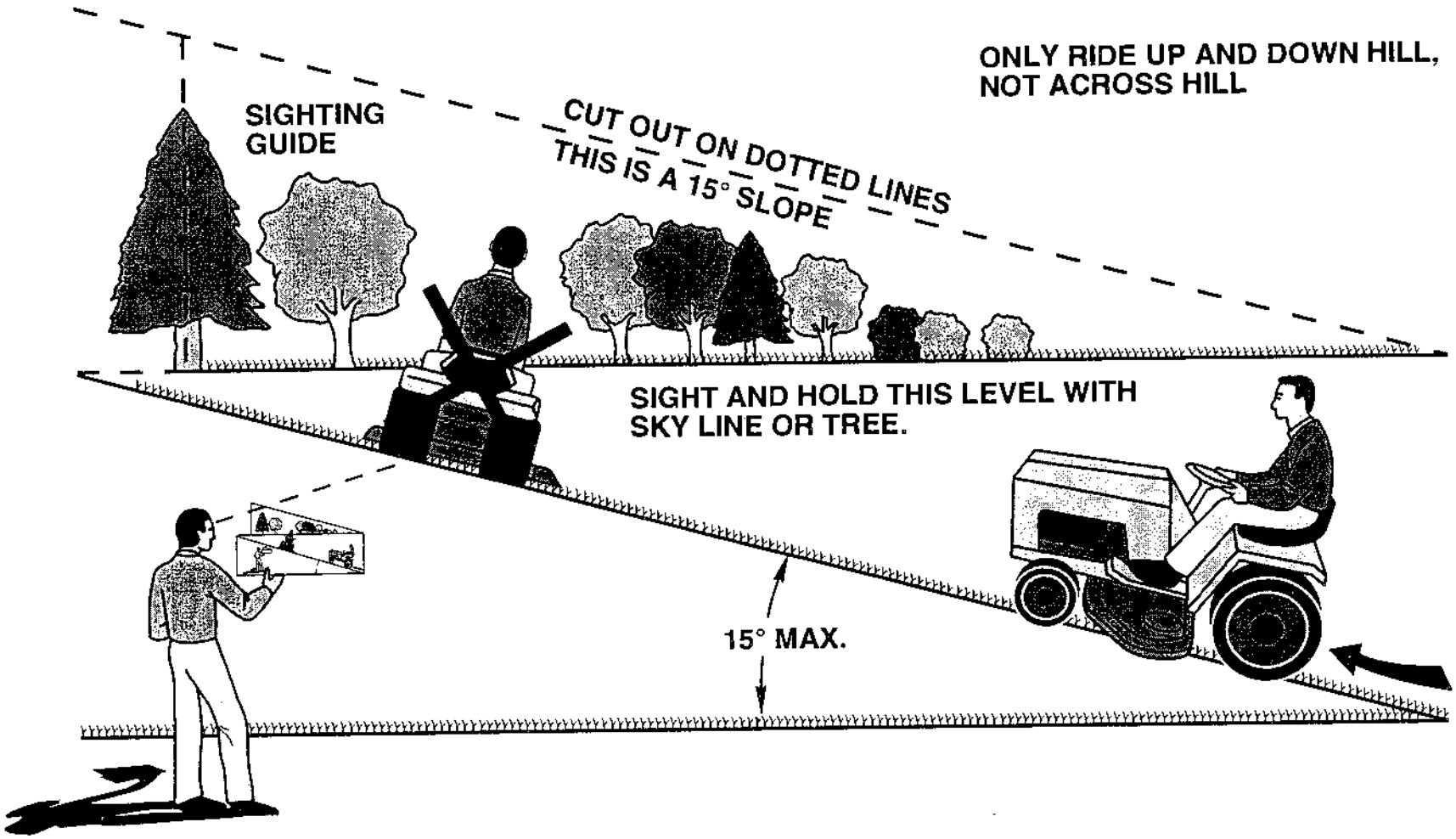
TRACTOR - MODEL NO. LTH120 (954140003D), PRODUCT NO. 954 14 00-03

HYDRO GEAR TRANSAXLE - MODEL NUMBER 319-0500

KEY NO.	PART NO.	DESCRIPTION
1	142986	Housing, Lower
2	142987	Assembly, Upper Housing
3	142932	Seal, Lip
4	142928	Ring, Wire Retaining
5	142933	Ring, Retaining
6	142934	Bearing, Shaft Ball
7	142935	Bearing, Cradle
8	150771	Bearing, Thrust 30 x 52 x 13
9	142937	Swashplate, Variable
13	142938	Block, Cylinder Assembly
14	142939	Arm, Trunnion
15	142940	Seal, Lip
17	142941	Guide, Slot
18	150772	Shaft, Motor
19	150773	Bearing, Thrust 42 x 68 x 16
23	142944	Block, Cylinder Assembly
24	142945	Seal, Lip 10 x 25 x 7
25	142946	Actuator, Bypass
26	150774	Center Section Assembly Kit
27	142948	Seal, Lip 26 x 42 x 8
28	142949	Ring, Retaining
29	142950	Washer 26 x 35 x 1
30	150787	Nut, Jam
34	142951	Oil Filter Element
35	142952	Arm, Bypass
36	142953	Ring, Retaining
37	142954	Arm, Actuating
38	142955	Pin, Actuating
39	150777	Bolt 5/16-24 x 1-3/4
40	150778	Locknut, Hex 5/16-24 UNJC
41	142958	Brake Rotor/Stator Kit
43	142884	Washer 7/16 x 7/8 x .060
44	142990	Differential Assembly
52	142991	Washer 3/4 x 1.5 x .13
53	142961	Seal .75 x 1.25 x .250
56	142963	Shaft, Input
58	142964	Bolt 1/4-20 x 1.38
59	142965	Pin .5 OD x .43 ID x .750
62	142966	Arm, Control
63	142967	Puck, Dampener
64	142920	Set Screw
68	142969	Spring
69	144610	Stud 5/16-24
92	142977	Spring, Block
93	142978	Washer, Block Thrust
98	142993	Sleeve Bearing
99	142976	Seal, Wiper
113	142917	Cap, Vent Assembly
114	142918	Fitting, O-Ring Assembly
119	142980	Spacer
134	144607	Nut, Castle 5/16-24
135	144608	Pin, Cotter
139	150775	Spring, Compression
140	150776	Nut, Hex 5/16-24

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

SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



Operate your Tractor 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.

Husqvarna

WARRANTY STATEMENT

SECTION 1: LIMITED WARRANTY

Husqvarna Forest & Garden Company ("Husqvarna") warrants Husqvarna product to the original purchaser to be free from defects in material and workmanship from the date of purchase for the "Warranty Period" of the product as set forth below:

Lifetime Warranty: All tiller tines, trimmer shafts, ignition coils and modules on hand held product.

2 Year Warranty: Riding lawn mowers, yard and garden tractors, walk behind mowers, tillers, trimmers, brushcutters, snow blowers, handheld blowers, hedge trimmers, and electrical products for noncommercial, nonprofessional, noninstitutional or nonincome producing use, except as herein stated.

Emission control system components necessary to comply with CARB-95 and EPA regulations, except for those components which are part of engine systems manufactured by third party engine manufacturers for which the purchaser has received a separate warranty with product information supplied at time of purchase.

1 Year Warranty: Chain saws, clearing saws and backpack blowers for noncommercial, nonprofessional, noninstitutional or nonincome producing use. Trimmer models 120, 125, 122, 132, 225, 232 and 235 used for commercial purposes.

90 Day Warranty: Any Husqvarna product used for rental, commercial, institutional, professional or income producing use except as otherwise provided herein.

30 Day Warranty: Husqvarna bow guide and replacement parts.

SECTION 2: HUSQVARNA'S OBLIGATIONS UNDER THE WARRANTY

Husqvarna will repair or replace defective components without charge for parts or labor if a component fails because of a defect in material or workmanship during the warranty period.

SECTION 3: ITEMS NOT COVERED BY THIS WARRANTY

The following items are not covered by this warranty:

(1) Normal customer maintenance items which become worn through normal regular use, including, but not limited to, belts, blades, blade adapters, bulbs, filters, guide bars, lubricants, rewind springs, saw chain, spark plugs, starter ropes and tines;
(2) Natural discoloration of material due to ultraviolet light;
(3) Engine and drive systems not manufactured by Husqvarna; these items are covered by the respective manufacturer's warranty as provided in writing with the product information supplied at the time of purchase; all claims must be sent to the appropriate manufacturer;
(4) Lawn and garden attachments are covered by a third party which gives a warranty, all claims for warranty should be sent to the manufacturer; and
(5) Emission Control System components necessary to comply with CARB-95 and EPA regulations which are manufactured by third party engine manufacturer.

SECTION 4: EXCEPTIONS AND LIMITATIONS

This warranty shall be inapplicable to defects resulting from the following:

(1) Accident, abuse, misuse, negligence and neglect, including stale fuel, dirt, abrasives, moisture, rust, corrosion, or any adverse reaction due to incorrect storage or use habits;
(2) Failure to operate or maintain the unit in accordance with the Owner's/Operator's manual or instruction sheet furnished by Husqvarna;
(3) Alterations or modifications that change the intended use of the product or affects the product's performance, operation, safety, or durability, or causes the product to fail to comply with any applicable laws; or;
(4) Additional damage to parts or components due to continued use occurring after any of the above.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. HUSQVARNA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THESE PRODUCTS EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THESE PRODUCTS IS LIMITED IN DURATION TO THE WARRANTY PERIOD AS DEFINED IN THE LIMITED WARRANTY STATEMENT. HUSQVARNA RESERVES THE RIGHT TO CHANGE OR IMPROVE THE DESIGN OF THE PRODUCT WITHOUT NOTICE, AND DOES NOT ASSUME OBLIGATION TO UPDATE PREVIOUSLY MANUFACTURED PRODUCTS.

Some states do not allow the exclusion of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

SECTION 5: CUSTOMER RESPONSIBILITIES

The product must exhibit reasonable care, maintenance, operation, storage and general upkeep as written in the maintenance section of the Owner's/Operator's manual. Should an operational problem or failure occur, the product should not be used, but delivered as is to an authorized Husqvarna dealer for evaluation. Proof of purchase, as explained in section 6, rests solely with the customer.

SECTION 6: PROCEDURE TO OBTAIN WARRANTY CONSIDERATION

It is the Owner's and Dealer's responsibility to make certain that the Warranty Registration Card is properly filled out and mailed to Husqvarna Forest & Garden Company. This card should be mailed within ten (10) days from the date of purchase in order to confirm the warranty and to facilitate post-sale service.

Proof of purchase must be presented to the authorized Husqvarna dealer in order to obtain warranty service. This proof must include date purchased, model number, serial number, and complete name and address of the selling dealer.

To obtain the benefit of this warranty, the product believed to be defective must be delivered to an authorized Husqvarna dealer in a timely manner, no later than thirty (30) days from date of the operational problem or failure. The product must be delivered at the owner's expense. Pick-up and delivery charges are not covered by this warranty. An authorized Husqvarna dealer can be normally located through the "Yellow Pages" of the local telephone directory or by calling 1-800-HUSKY62 for a dealer in your area.

HUSQVARNA FOREST & GARDEN COMPANY
9006-J PERIMETER WOODS DRIVE
CHARLOTTE, NC 28216

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