

GTH225

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.
- Data indicates that operators, age 60 years and above, are involved in a large percentage of riding mower-related injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.

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.



SAFETY RULES

Safe Operation Practices for Ride-On Mowers



- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers or children even with the blades off.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- 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.
- Mow up and down slopes (15° Max), 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.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.
- If machine stops while going uphill, disengage blades, shift into reverse and back down slowly.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.



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



CAUTION: Do not coast down a hill in neutral, you may lose control of the tractor.



CAUTION: Tow only the attachments that are recommended by and comply with specifications of the manufacturer of your tractor. Use common sense when towing. Operate only at the lowest possible speed when on a slope. Too heavy of a load, while on a slope, is dangerous. Tires can lose traction with the ground and cause you to lose control of your tractor.



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

WARNING

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

PRODUCT SPECIFICATIONS

GASOLINE CAPACITY AND TYPE:	3.5 GALLONS UNLEADED REGULAR
OIL TYPE (API-SF/SG):	SAE 10W-30 (above 32°F) SAE 5W-30 (below 32°F)
OIL CAPACITY:	W/FILTER: 4.2 PINTS W/OFILTER: 3.7 PINTS
SPARK PLUG: (GAP: .030")	CHAMPION RC12YC
GROUND SPEED (MPH):	FORWARD: 0 – 5.8 REVERSE: 0 – 2.1
TIRE PRESSURE:	FRONT: 14 PSI REAR: 10 PSI
CHARGING SYSTEM:	15 AMPS @ 3600 RPM
BATTERY:	AMP/HR: 35 MIN. CCA: 280 CASE SIZE: U1R
BLADE BOLT TORQUE:	27–35 FT. LBS.

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".

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.

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).

In the state of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands.

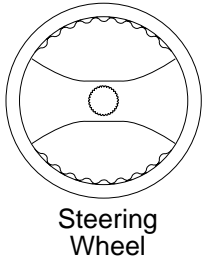
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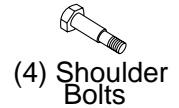
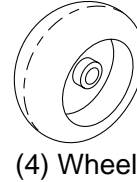
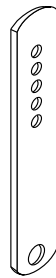
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CONTENTS OF HARDWARE PACK

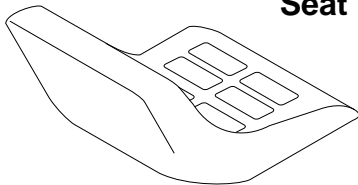
Steering Wheel



Gauge Wheels

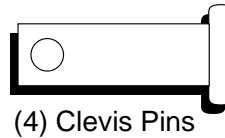
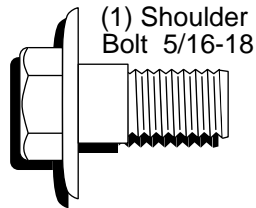


Seat

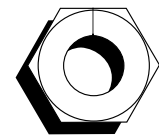
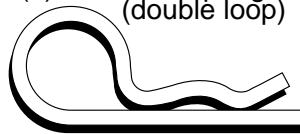


(1) Washer
17/32 x 1-3/16 x 12 Gauge

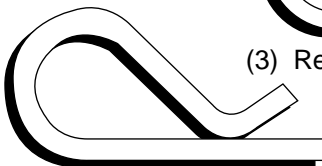
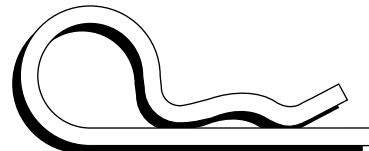
(1) Knob



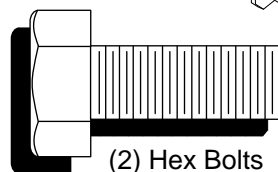
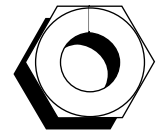
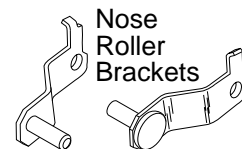
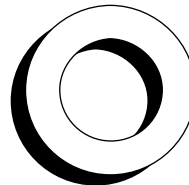
(4) Retainer Springs
(double loop)



Mower



Nose Roller



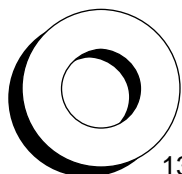
Bumper



(2) End Caps

(2) Extension Bracket

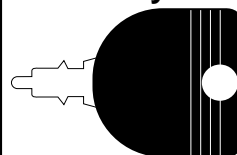
(4) Carriage Bolts
3/8-16 x 1-1/4



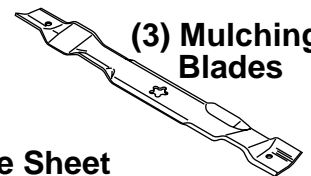
(4) Crownlock Nuts 3/8-16



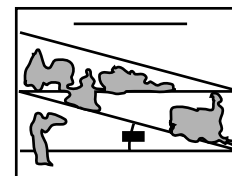
Keys



(3) Mulching Blades



Slope Sheet



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.

- (1) Tire pressure gauge
- (2) 9/16" wrenches
- (1) Utility knife
- (1) 1/2" wrench
- (1) 3/4" socket w/drive ratchet

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.
- Cut, from top to bottom, along lines on all four corners of carton, and lay panels flat.
- Remove mower and packing materials.
- Check for any additional loose parts or cartons and remove.

BEFORE ROLLING TRACTOR OFF SKID

ATTACH STEERING WHEEL (See Fig. 1)

- Remove hex bolt, lock washer and large flat washer from steering shaft.
- Position front wheels of the tractor so they are pointing straight forward.
- Position steering wheel so cross bars are horizontal (left to right) and slide onto adapter.
- Secure steering wheel to steering shaft with hex bolt, lock washer and large flat washer previously removed. 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.

HOW TO SET UP YOUR TRACTOR

CHECK BATTERY (See Fig. 2)

- Lift hood to raised position.
- 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. (See "BATTERY" in CUSTOMER RESPONSIBILITIES section of this manual for charging instructions).

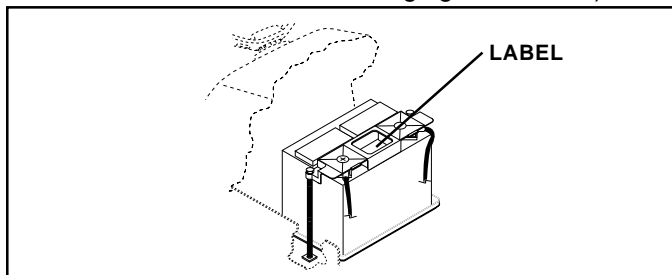


FIG. 2

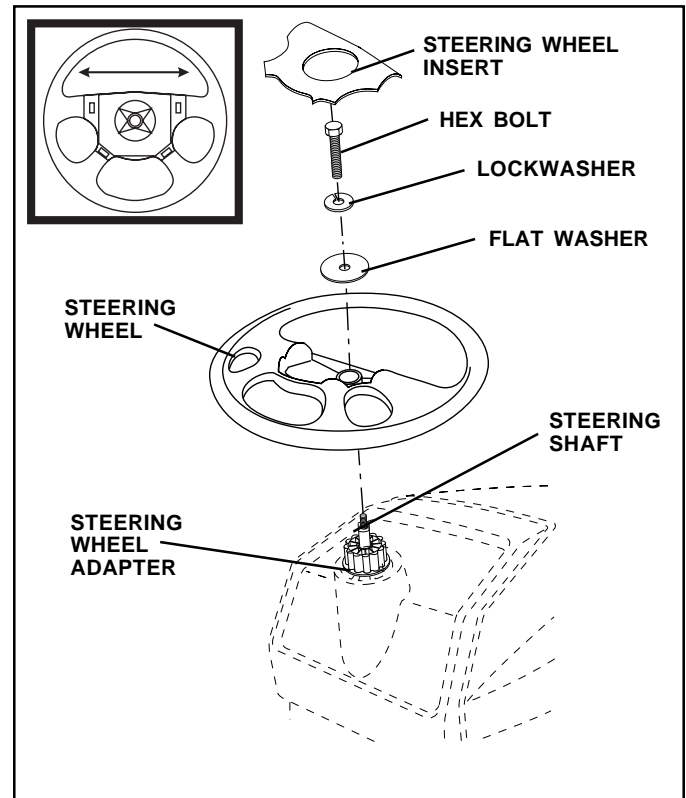


FIG. 1

INSTALL SEAT (See Fig. 3)

Adjust seat before tightening adjustment knob.

- Remove adjustment knob and flat washer securing seat to cardboard packing and set aside for assembly of seat to tractor.
- Pivot seat upward and remove from the cardboard packing. Remove cardboard packing and discard.
- Place seat on seat pan and assemble shoulder bolt. Tighten shoulder bolt securely.
- Assemble adjustment knob 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 knob securely.

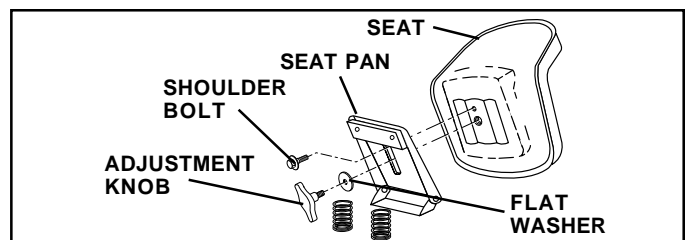


FIG. 3

ASSEMBLY

NOTE: You may now roll or drive your tractor off the skid. Follow the appropriate instruction below to remove the tractor from the skid.

TO ROLL TRACTOR OFF SKID (See Operation section, page 12, 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.

TO DRIVE TRACTOR OFF SKID (See Operation section, page 12, for location and function of controls)

WARNING: Before starting, read, understand and follow all instructions in the Operation section of this manual. Be sure tractor is in a well-ventilated area. Be sure the area in front of tractor is clear of other people and objects.

- Be sure all the above assembly steps have been completed.
 - Check engine oil level and fill fuel tank with gasoline.
 - Place freewheel control in "transmission engaged" position.
 - Sit on seat in operating position, depress clutch/brake pedal and set the parking brake.
 - Place motion control lever in neutral (N) position.
 - Press lift lever plunger and raise attachment lift lever to its highest position.
 - Start the engine. After engine has started, move throttle control to idle position.
 - Release parking brake.
 - Slowly move the motion control lever forward and slowly drive tractor off skid.
 - Apply brake to stop tractor, set parking brake and place motion control lever in neutral position.
 - Turn ignition key to "OFF" position.
- Continue with the instructions that follow.

TO ATTACH FRONT BUMPER (See Fig. 4)

NOTE: For ease of assembly, you may wish to obtain the assistance of another person for mounting bumper to tractor.

- Press or tap the end caps into ends of bumper tube.
- The existing top screw and the existing front screw must be removed from both sides and discarded.
- On both sides of chassis, position extension bracket as shown and loosely assemble to rear chassis hole with supplied 3/8-16 x 1-1/4 bolt. Do not tighten the brackets. Allow them to hang from the chassis.
- Position bumper and extension brackets so brackets can be slid inside flattened ends of bumper.
- Slide bumper onto brackets and pivot upwards to align center holes in extension brackets and tractor chassis.
- With holes aligned, install additional bolts.
- Tighten all four (4) bolts securely.

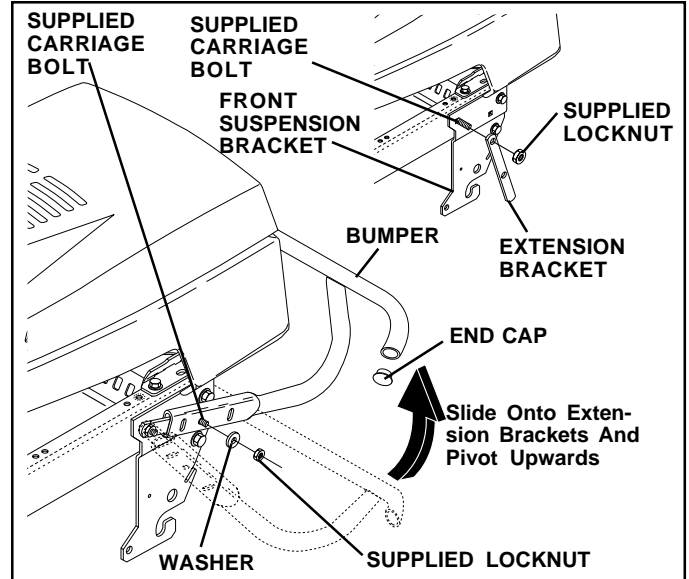


FIG. 4

TO ATTACH NOSE ROLLER (See Fig. 5)

- Position brackets, 17/32 x 7/8 x 16 gauge washers, and nose roller between deck mounting brackets as shown. Be sure to position brackets on correct side, as shown.
- Install 3/8-16 x 1 hex bolts and 3/8-16 lock nuts as shown. Tighten hardware securely.

NOTE: Be sure bracket tabs are positioned in tab holes in deck brackets.

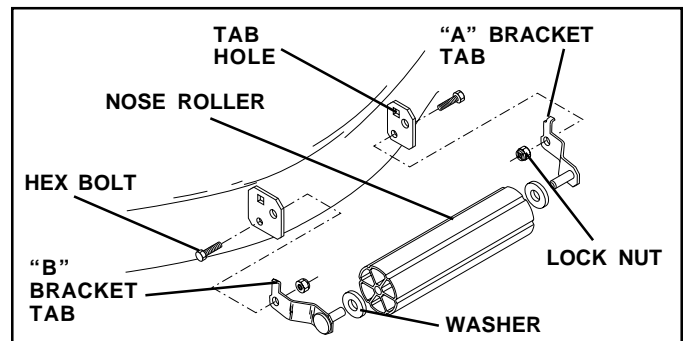


FIG. 5

ASSEMBLE GAUGE WHEELS TO MOWER DECK (See Fig. 6)

The gauge wheels are designed to keep the mower deck in proper position when operating mower. Be sure they are properly adjusted to ensure optimum mower performance.

- Slide gauge wheel bar down into bracket channel. Be sure that gauge wheel bar aligning holes are on top. Assemble gauge wheels as shown using shoulder bolts, 3/8 washers and 3/8-16 center locknuts and tighten securely.
- For ease of mower to tractor assembly, raise gauge wheels to highest position and retain with clevis pins and spring retainers.
- Adjust gauge wheels before operating mower. See "TO ADJUST GAUGE WHEELS" in the Operation section of this manual.

ASSEMBLY

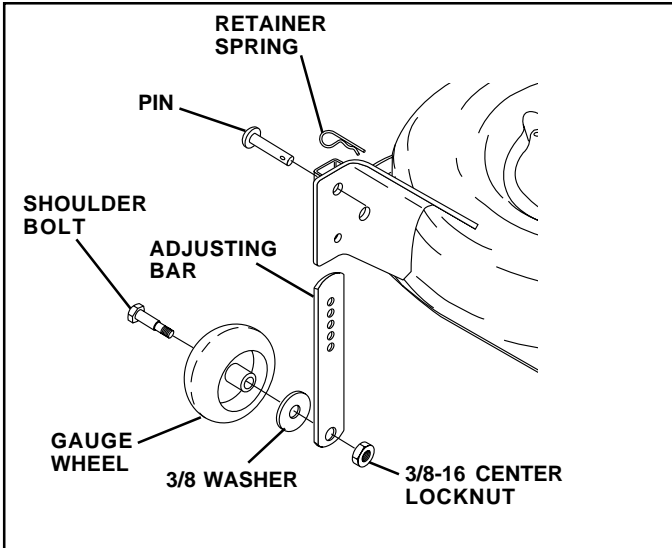


FIG. 6

IMPORTANT: FOR SHIPPING PURPOSES, THE MULCHER PLATE WAS PREATTACHED TO YOUR MOWER. THE MULCHER PLATE MUST ONLY BE USED WITH THE MULCHING BLADES THAT CAME PACKED SEPARATELY IN THE CARTON.

YOUR MOWER CAME FACTORY EQUIPPED WITH HIGH PERFORMANCE BLADES, WHICH ARE THE BEST BLADES FOR BAGGING AND DISCHARGING. TO USE YOUR MOWER WITH THE HIGH PERFORMANCE BLADES THE MULCHER PLATE MUST BE REMOVED FROM THE MOWER (SEE FIG. 7).

TO SET UP YOUR MOWER FOR MULCHING (See Fig. 7)

- Turn the mower over to allow access to blades.
- Remove hex bolt, lock washer and flat washer and remove high performance blades. Store in safe place.
- Install mulcher blades 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.

- Install mulcher plate if previously removed.

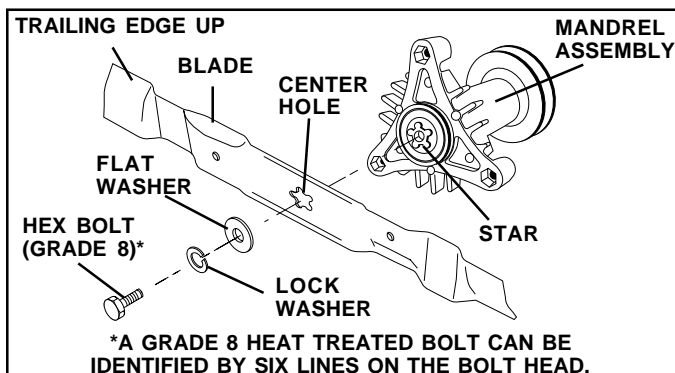


FIG. 7

TO INSTALL MULCHER PLATE (See Fig. 8)

NOTE: If you installed the mulching blades you will need to install the mulcher plate.

- Raise and hold deflector shield in upright position.
- Place front of mulcher plate over front of mower deck opening and slide into place, as shown.
- Hook front latch into hole on front of mower deck.
- Hook rear latch into hole on back of mower deck.



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.

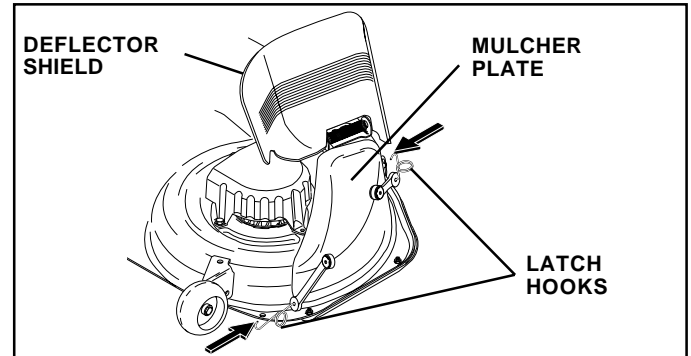


FIG. 8

TO CONVERT TO BAGGING OR DISCHARGING

NOTE: The mulcher blades will discharge and bag grass, but for best bagging and discharging install the high performance blades.

- Remove mulcher plate and mulcher blades and install high performance blades, (see BLADE REMOVAL in the CUSTOMER RESPONSIBILITY section of this manual).
- Store mulcher blades and mulcher plate in a safe place. Your mower is now ready for discharging or installation of optional grass catcher accessory.

INSTALL MOWER AND DRIVE BELT (See Figs. 9 and 10)

Be sure tractor is on level surface and mower suspension arms are raised with attachment lift control. Engage parking brake.

- Cut and remove ties securing anti-sway bar and belts. Swing anti-sway bar to left side of mower deck.
- Slide mower under tractor with discharge guard to right side of tractor.

IMPORTANT: CHECK BELT FOR PROPER ROUTING IN ALL MOWER PULLEY GROOVES. INSTALL BELT INTO ELECTRIC CLUTCH PULLEY GROOVE.

- Install one front link in top hole of the L.H. front mower bracket and L.H. front suspension bracket. Retain with two single loop retainer springs as shown.
- Install second front link in R.H. front suspension bracket only and retain with single loop retainer spring as shown.
- Slide right side of mower back and install link in top hole of R.H. front mower bracket. Retain with single loop retainer spring as shown.

ASSEMBLY

- Turn height adjustment knob counterclockwise until it stops.
- Lower mower linkage with attachment lift control.
- Place the suspension arms on inward pointing deck pins. Retain with double loop retainer spring with loops down as shown.
- Connect anti-sway bar to chassis bracket under left footrest and retain with double loop retainer spring.
- Turn height adjustment knob clockwise to remove slack from mower suspension.
- Raise deck to highest position.
- Adjust gauge wheels before operating mower as shown in the Operation 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" section of this manual.

CHECK MOWER LEVELNESS

For best cutting results, mower 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, mower drive, 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.

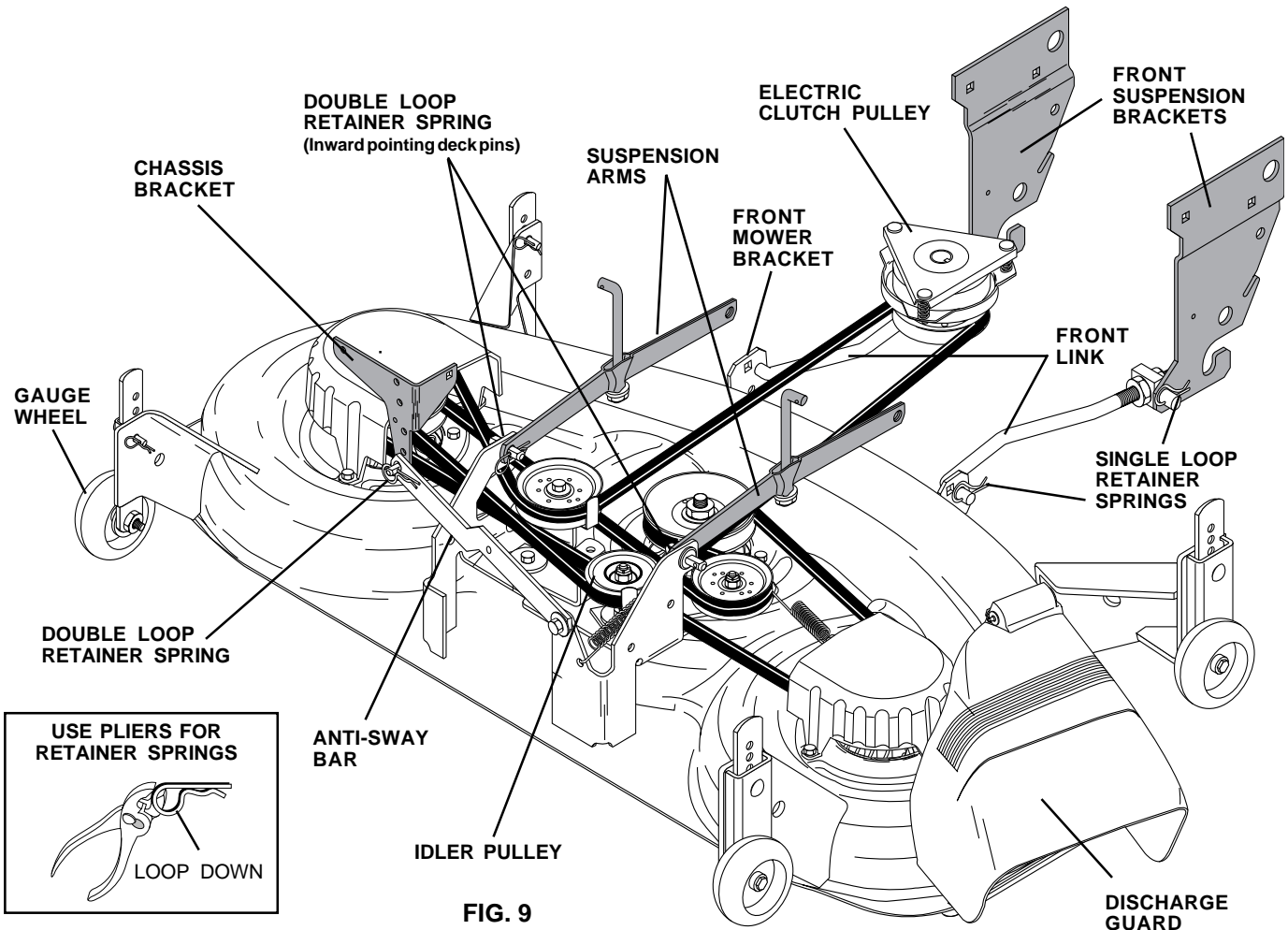


FIG. 9

ASSEMBLY

✓ **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:

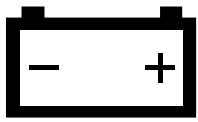
- ✓ All assembly instructions have been completed.
- ✓ No remaining loose parts in carton.
- ✓ Battery is properly prepared and charged. (Minimum 1 hour at 6 amps).
- ✓ Seat is adjusted comfortably and tightened securely.
- ✓ All tires are properly inflated. (For shipping purposes, the tires were overinflated 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



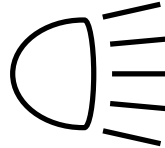
ENGINE ON



ENGINE OFF



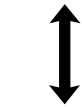
OIL PRESSURE



LIGHTS ON



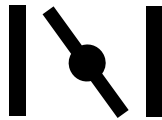
OVER TEMP LIGHT



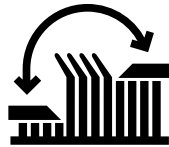
MOWER LIFT



FUEL



CHOKE



MOWER HEIGHT



PARKING BRAKE LOCKED



UNLOCKED



ATTACHMENT CLUTCH ENGAGED

R

REVERSE

N

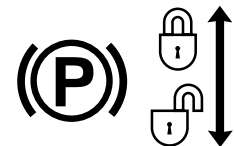
NEUTRAL

H

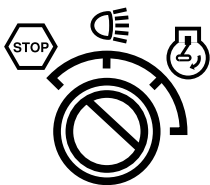
HIGH

L

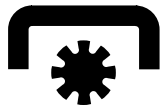
LOW



PARKING BRAKE



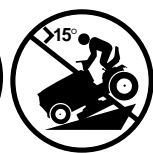
IGNITION



ATTACHMENT CLUTCH DISENGAGED

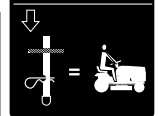
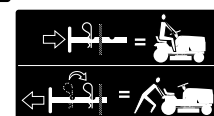
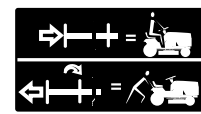
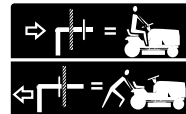


KEEP AREA CLEAR



SLOPE HAZARDS

(SEE SAFETY RULES SECTION)



FREE WHEEL
(Automatic Models only)



DANGER, KEEP HANDS AND FEET AWAY

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 location of various controls and adjustments. Save this manual for future reference.

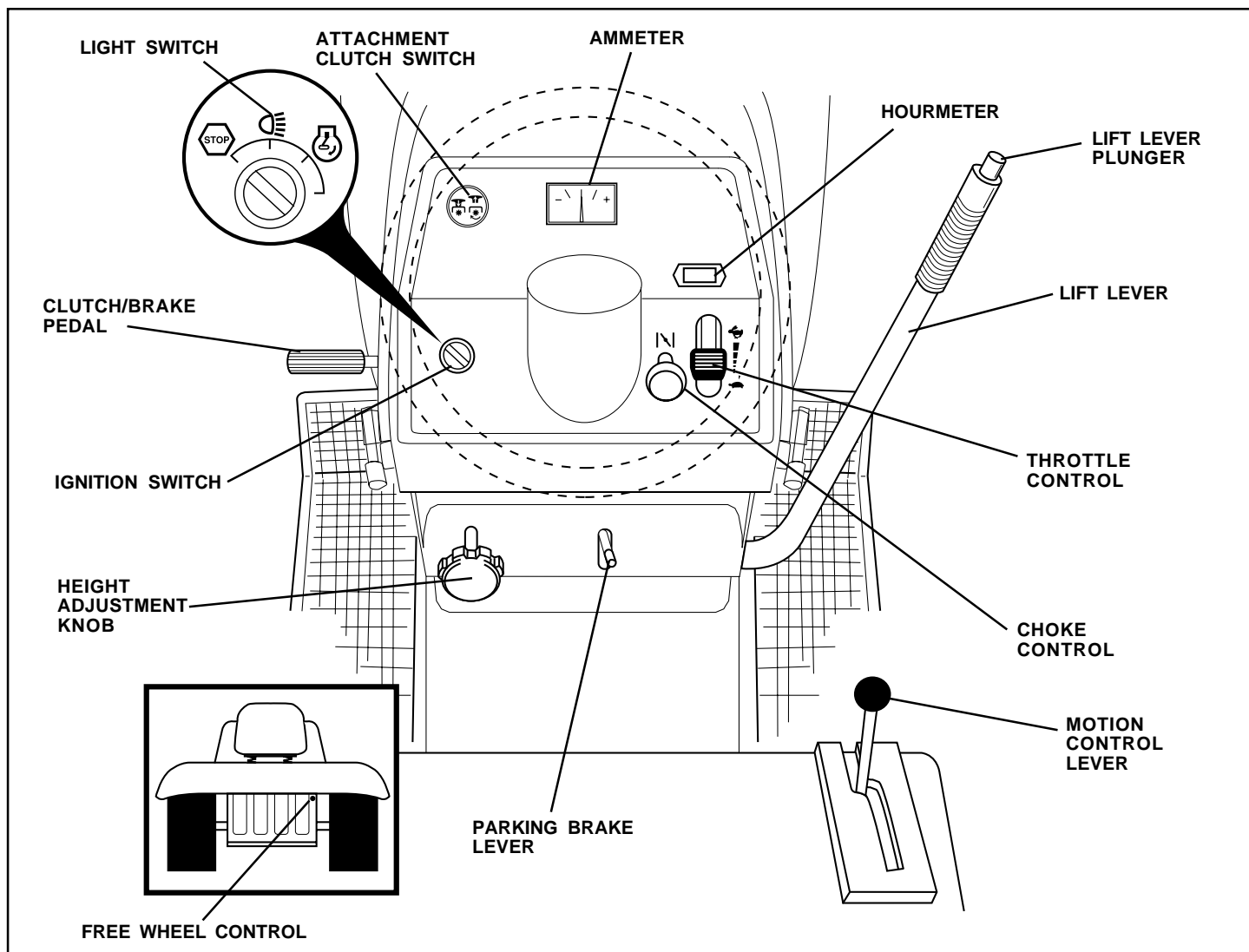


FIG. 10

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

ATTACHMENT CLUTCH SWITCH - Used to engage mower blades or other attachments mounted to your tractor.

LIFT LEVER - Used to raise and lower mower deck or other attachments mounted to your tractor.

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

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

MOTION CONTROL - Selects the speed and direction of tractor.

CHOKE CONTROL - Used when starting a cold engine.

LIGHT SWITCH - Turns the headlights on and off.

THROTTLE CONTROL - Used to control engine speed.

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

IGNITION SWITCH - Used to start and stop the engine.

HOURMETER - Indicates hours of operation.

PARKING BRAKE LEVER - Locks clutch/brake pedal into the brake position.

HEIGHT ADJUSTMENT KNOB - Used to adjust the mower height.

AMMETER - Indicates charging (+) or discharging (-) of battery.

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 spectacles or standard safety glasses.

HOW TO USE YOUR TRACTOR

TO SET PARKING BRAKE (See Fig. 11)

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.

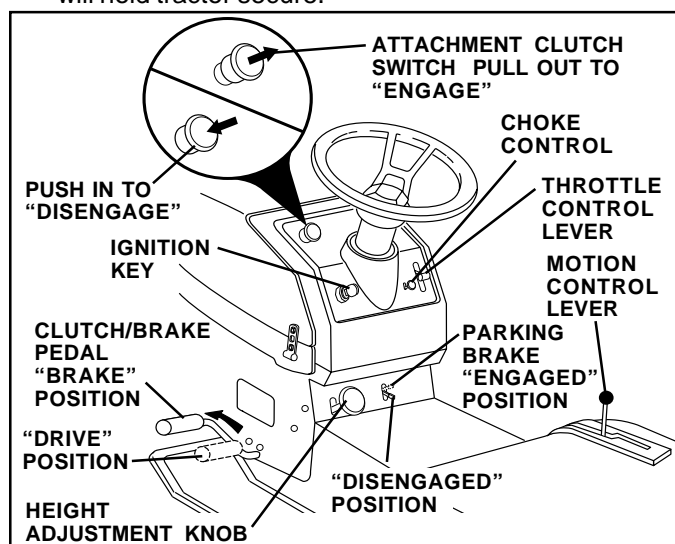


FIG. 11

STOPPING (See Fig. 11)

MOWER BLADES -

- To stop mower blades, move attachment clutch switch to "DISENGAGED" position.

GROUND DRIVE -

- To stop 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.

IMPORTANT: LEAVING THE IGNITION SWITCH IN ANY POSITION OTHER THAN "OFF" WILL CAUSE THE BATTERY TO BE DISCHARGED, (DEAD).

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. 11)

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 USE CHOKE CONTROL (See Fig. 11)

Use choke control whenever you are starting a cold engine. Do not use to start a warm engine.

- To engage choke control, pull knob out. Slowly push knob in to disengage.

TO MOVE FORWARD AND BACKWARD (See Fig. 11)

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. 11)

The cutting height is controlled by turning the height adjustment knob in desired direction.

- Turn knob clockwise (↻) to raise cutting height.
- Turn knob counterclockwise (↺) to lower cutting height.

The cutting height range is approximately 1-1/2" to 4-1/2". 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.

TO ADJUST GAUGE WHEELS (See Fig. 12)

Gauge wheels are properly adjusted when they are slightly off the ground when mower is at the desired cutting height in operating position. Gauge wheels then keep the deck in proper position to help prevent scalping in most terrain conditions.

OPERATION

- Be sure tractor is on a flat level surface.
- Lower mower and adjust mower to desired cutting height.
- Remove retainer spring and clevis pin which secure each gauge wheel bar.
- Lower gauge wheels to ground. Raise gauge wheels slightly to align holes in bracket and gauge wheel bar and insert clevis pin. Gauge wheels should be slightly off the ground.
- Replace retainer spring into clevis pin.

IMPORTANT: BE SURE TO READJUST GAUGE WHEELS IF YOU CHANGE THE CUTTING HEIGHT OF THE MOWER DECK.

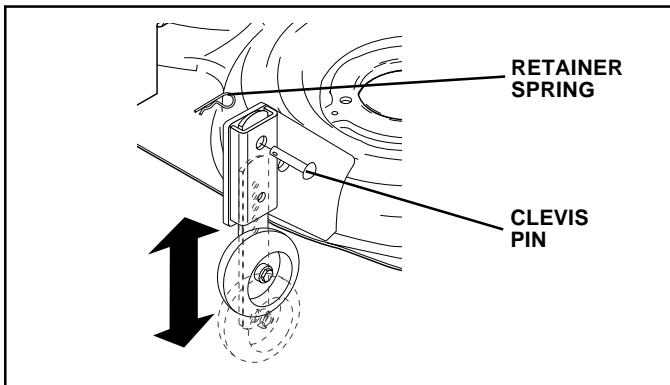


FIG. 12

TO OPERATE MOWER (See Fig. 13)

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.
- Lower mower with attachment lift control.
- Start mower blades by engaging attachment clutch control.
- TO STOP MOWER BLADES - disengage attachment clutch control.

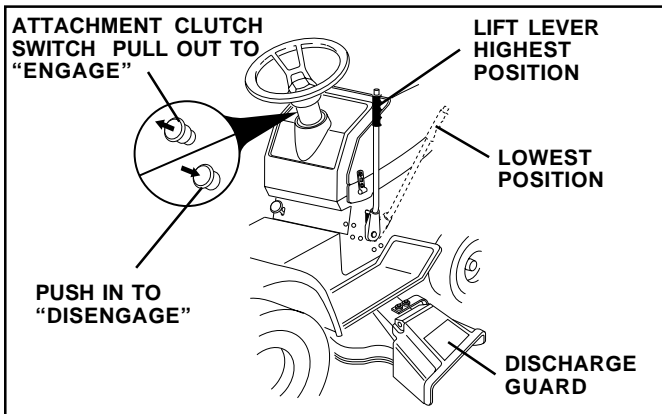
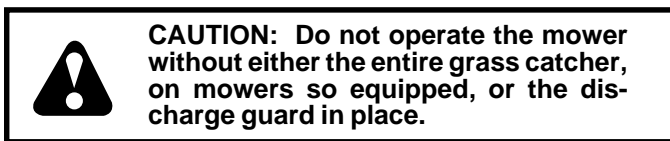


FIG. 13

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 Figs. 10 and 14)

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 lift control.
- Remove retainer spring from freewheel control rod.
- Push control rod in to disengage transmission and reinsert retainer spring into control rod hole now on back side of the bracket.
- 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.).

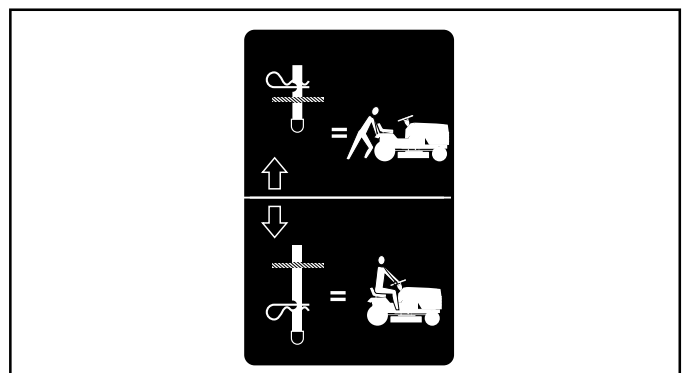


FIG. 14

TOWING CARTS AND OTHER ATTACHMENTS

Tow only the attachments that are recommended by and comply with specifications of the manufacturer of your tractor. Use common sense when towing. Too heavy of a load, while on a slope, is dangerous. Tires can lose traction with the ground and cause you to lose control of your tractor.

OPERATION

BEFORE STARTING THE ENGINE

CHECK ENGINE OIL LEVEL (See Fig. 15)

- 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.
- Unthread and remove oil fill cap/dipstick; wipe oil off. Reinsert the dipstick into the tube and rest oil fill cap on the tube. Do not thread the cap onto the tube. 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.

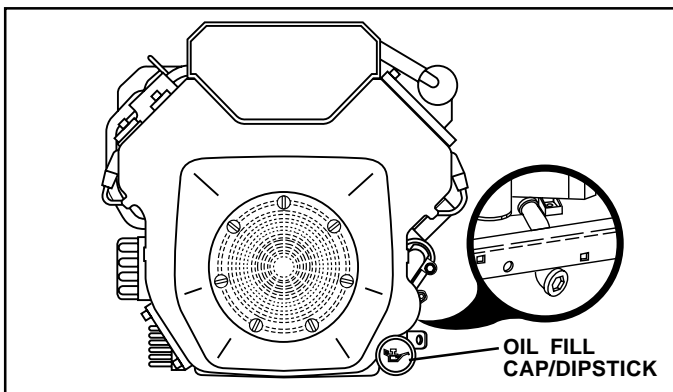


FIG. 15

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.

TO START ENGINE (See Fig. 11)

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 fast position
- Pull choke control out for a cold engine start attempt. For a warm engine start attempt the choke control may not be needed.

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, push choke control in, wait a few minutes and try again. If engine still does not start, pull the choke control out and retry.

WARM WEATHER STARTING (50° F and above)

- When engine starts, slowly push choke control in until the engine begins to run smoothly. If the engine starts to run roughly, pull the choke control out slightly for a few seconds and then continue to push the control in slowly.
- 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, slowly push choke control in until the engine begins to run smoothly. Continue to push the choke control in small steps allowing the engine to accept small changes in speed and load, until the choke control is fully in. If the engine starts to run roughly, pull the choke control out slightly for a few seconds and then continue to push the control in slowly. 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 be used during the engine warm-up period after the transmission has been warmed up and may require the choke control be pulled out slightly.

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.

OPERATION

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 this 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 this 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 ready for normal 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.
- 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 tractor. 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. 16).
- 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.

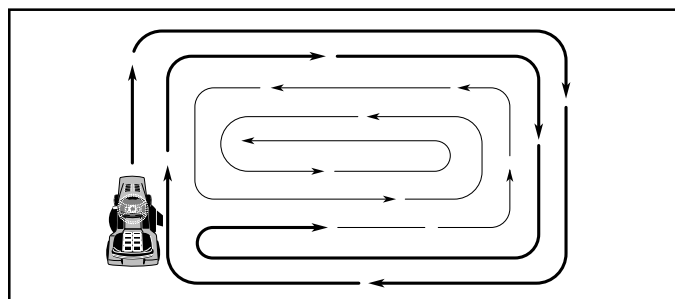


FIG. 16

OPERATION

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. 17). For extremely heavy mulching, reduce your width of cut on each pass 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.

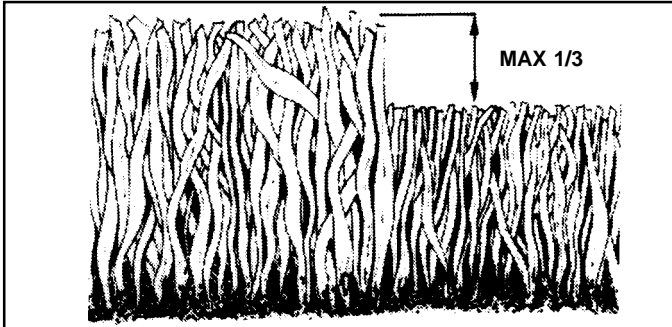


FIG. 17

CUSTOMER RESPONSIBILITIES

MAINTENANCE SCHEDULE		SERVICE INTERVALS							SERVICE DATES				
		BEFORE EACH USE	EVERY 8 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY SEASON	BEFORE STORAGE					
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			✓				✓					
	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.

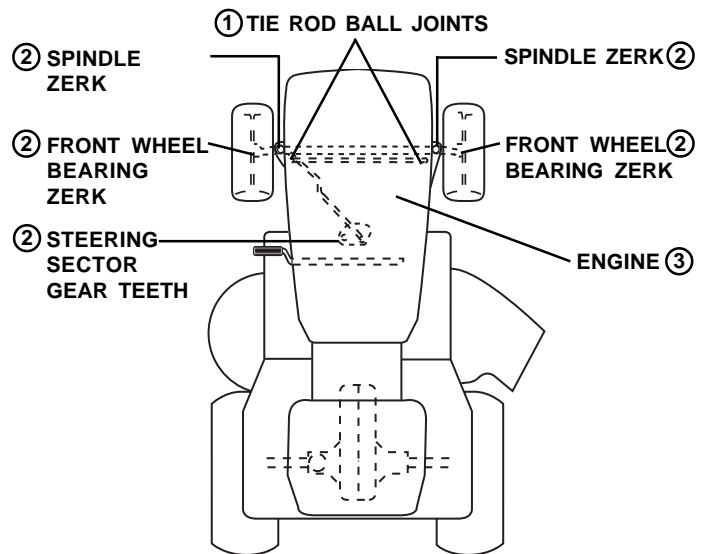
- Once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear. A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

BEFORE EACH USE

- Check engine oil level.
- Check brake operation.
- Check tire pressure.
- Check operator presence and interlock systems for proper operation.
- Check for loose fasteners.

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.

LUBRICATION CHART



- ① SPRAY SILICONE LUBRICANT (MOVE BOOTS TO LUBRICATE)
 ② GENERAL PURPOSE GREASE
 ③ REFER TO CUSTOMER RESPONSIBILITIES "ENGINE" SECTION

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" section 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.

OPERATOR PRESENCE SYSTEM

Be sure operator presence and interlock systems are working properly. If your tractor does not function as described, repair the problem immediately.

- The engine should not start unless the clutch/brake pedal is fully depressed and attachment clutch control is in the disengaged position.
- When the engine is running, any attempt by the operator to leave the seat without first setting the parking brake should shut off the engine.
- When the engine is running and the attachment clutch is engaged, any attempt by the operator to leave the seat should shut off the engine.
- The attachment clutch should never operate unless the operator is in the seat.

BLADE CARE

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

BLADE REMOVAL (See Fig. 18)

- 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.

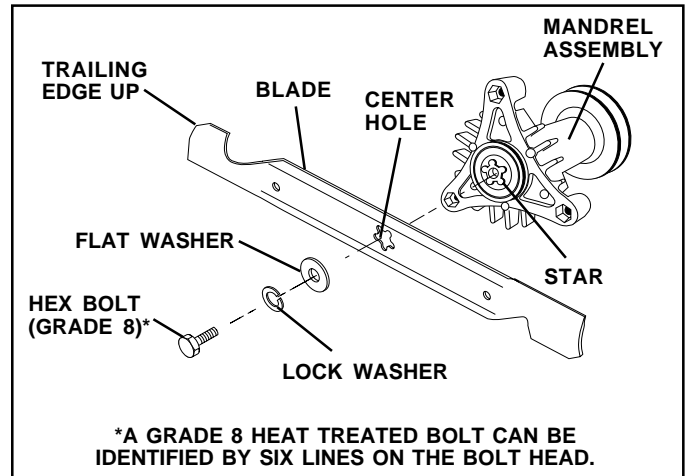


FIG. 18

TO SHARPEN BLADE (See Fig. 19)

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

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).

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

- 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.

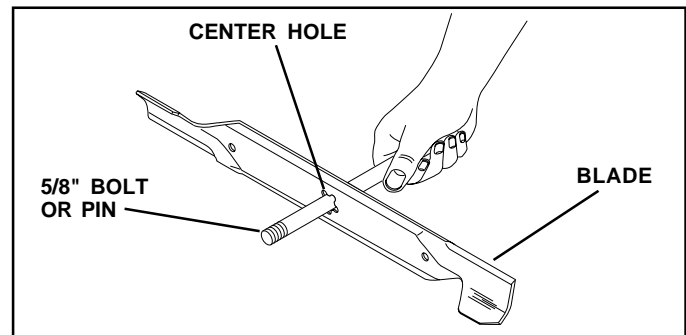


FIG. 19

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.

CUSTOMER RESPONSIBILITIES

TO CLEAN BATTERY AND TERMINALS

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

- Remove terminal guard.
- 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 “REPLACING BATTERY” in the SERVICE AND ADJUSTMENTS section of this manual).

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.

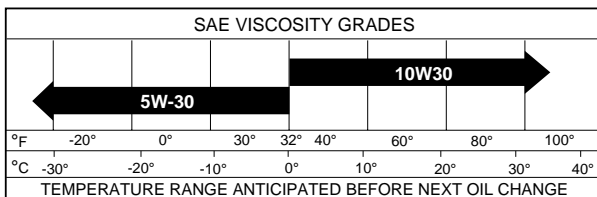


FIG. 20

Change the oil after every 50 hours of operation or at least once a year if the tractor is not used for 50 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 Figs. 20 and 21)

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

- 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” section of this manual.
- Use gauge on oil fill cap/dipstick for checking level. Insert dipstick into the tube and rest the oil fill cap on the tube. Do not thread the cap onto the tube when taking reading. Keep oil at “FULL” line on dipstick. Tighten cap onto the tube securely when finished.

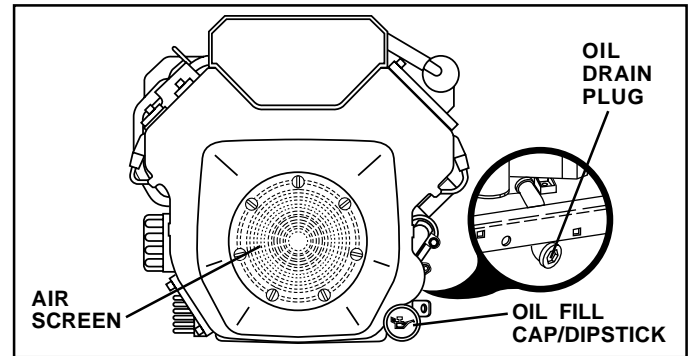


FIG. 21

CLEAN AIR SCREEN (See Fig. 21)

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.

CLEAN AIR INTAKE/COOLING AREAS

To insure proper cooling, make sure the grass screen, cooling fins, and other external surfaces of the engine are kept clean at all times.

Every 100 hours of operation (more often under extremely dusty, dirty conditions), remove the blower housing and other cooling shrouds. Clean the cooling fins and external surfaces as necessary. Make sure the cooling shrouds are reinstalled.

NOTE: Operating the engine with a blocked grass screen, dirty or plugged cooling fins, and/or cooling shrouds removed will cause engine damage due to overheating.

AIR FILTER (See Fig. 22)

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

Service air cleaner more often under dusty conditions.

- Loosen knob and remove cover.

CUSTOMER RESPONSIBILITIES

TO SERVICE PRE-CLEANER

- Slide foam pre-cleaner off cartridge.
- Wash it in liquid detergent and water.
- Squeeze it dry in a clean cloth. Allow it to dry.
- Saturate it in engine oil. Wrap it in clean, absorbent cloth and squeeze to remove excess oil.

TO SERVICE CARTRIDGE

- Replace a dirty, bent, or damaged cartridge.

NOTE: Do not wash the paper cartridge or use pressurized air, as this will damage the cartridge.

- Remove nut and cartridge plate.
- Reinstall the pre-cleaner (cleaned and oiled) over the paper cartridge.
- Check rubber seal for damage and proper position around stud. Replace if necessary.
- Reassemble air cleaner, cartridge plate, and nut.
- Reinstall air cleaner cover and secure by tightening knob.

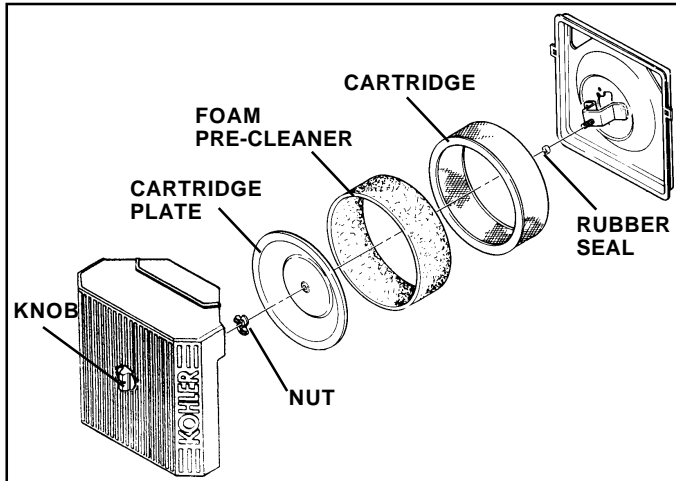


FIG. 22

ENGINE OIL FILTER

Replace the engine oil filter every season or every other oil change if the tractor is used more than 100 hours in one year.

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" section of this manual.

IN-LINE FUEL FILTER (See Fig. 23)

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.

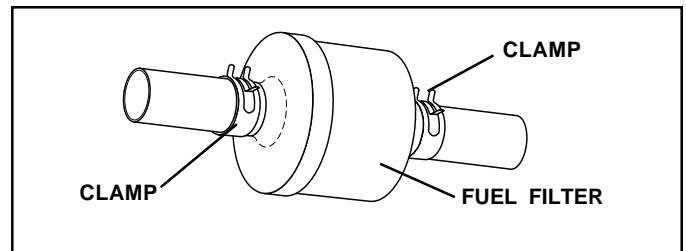


FIG. 23

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.

TO REMOVE MOWER (See Fig. 24)

- Place attachment clutch in "DISENGAGED" position.
- Turn height adjustment knob to lowest setting.
- Lower mower to its lowest position.
- Remove retainer spring holding anti-swaybar to chassis bracket and disengage anti-swaybar from bracket.
- Remove retainer springs from suspension arms at deck and disengage arms from deck.
- Raise attachment lift to its highest position.
- Remove two retainer springs from each front link and remove links.
- Slide mower forward and remove belt from electric clutch pulley.
- Slide mower out from under right side of tractor.

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

TO INSTALL MOWER

Follow procedure described in "INSTALL MOWER AND DRIVE BELT" in the Assembly section of this manual.

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" section of this manual). If tires are over or underinflated, you will not properly adjust your mower.

SIDE-TO-SIDE ADJUSTMENT (See Figs. 24 and 25)

- Raise mower to its highest position.
- Measure height from bottom edge of mower to ground level at front corners of mower. Distance "A" on both sides of mower should be the same.
- 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: Each full turn of adjustment nut will change mower height about 3/16".

- Recheck measurements after adjusting.

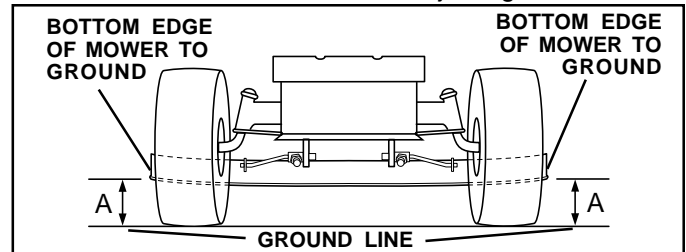


FIG. 25

FRONT-TO-BACK ADJUSTMENT (See Figs. 26 and 27) -

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.

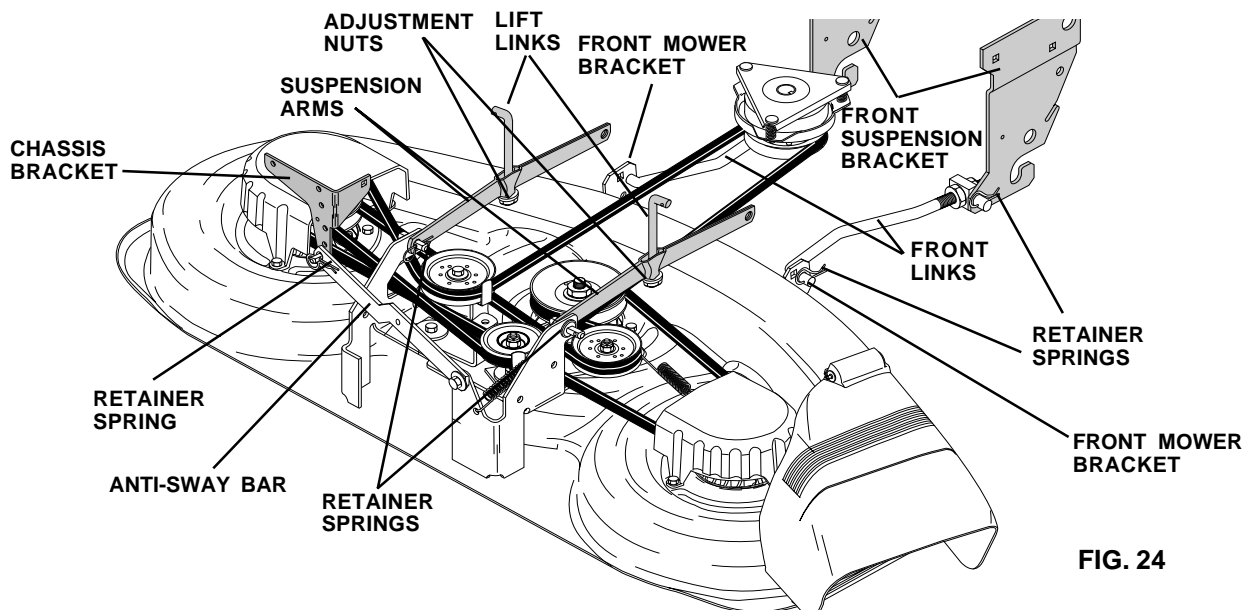


FIG. 24

SERVICE AND ADJUSTMENTS

To obtain the best cutting results, the mower housing should be adjusted so 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 "F" directly in front of 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.
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of mower housing, loosen nut "G" on both front links an equal number of turns.
- When distance "F" is 1/8" to 1/2" lower at front than rear, tighten nut "H" against trunnion on both front links.
- To raise front of mower housing, loosen nut "H" from trunnion on both front links. Tighten nut "G" on both front links an equal number of turns.
- When distance "F" is 1/8" to 1/2" lower at front than rear, tighten nut "H" against trunnion on both front links.

NOTE: Each full turn of nut "G" will change dim. "F" by approximately 3/8".

- Recheck side-to-side adjustment.

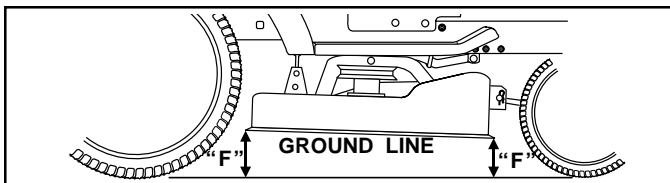


FIG. 26

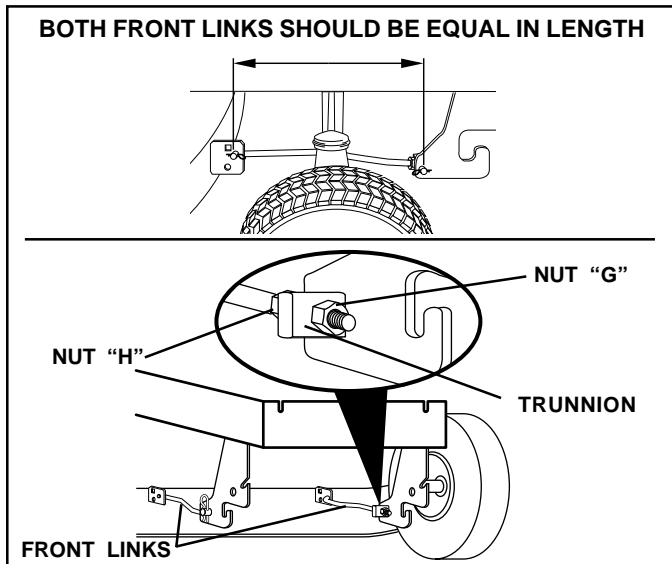


FIG. 27

TO REPLACE MOWER DRIVE BELT

MOWER DRIVE BELT REMOVAL (See Fig. 28) -

- Park tractor on a level surface. Engage parking brake.
- Remove screws from L.H. mandrel cover and remove cover.
- Roll belt over the top of L.H. mandrel pulley.
- Remove belt from electric clutch pulley.
- Remove belt from idler pulleys.

- Remove any dirt or grass clippings which may have accumulated around mandrels and entire upper deck surface.
- Check primary idler arm and two idlers to see that they rotate freely.
- Be sure spring is securely hooked to primary idler arm and bolt in mower housing.

MOWER DRIVE BELT INSTALLATION (See Fig. 28) -

- Install belt in both idlers. Make sure belt is in both belt keepers at the idlers as shown.
- Install new belt onto electric clutch pulley.
- Roll belt into upper groove of L.H. mandrel pulley.
- Carefully check belt routing making sure belt is in the grooves correctly and inside belt keepers.
- Reassemble L.H. mandrel cover.

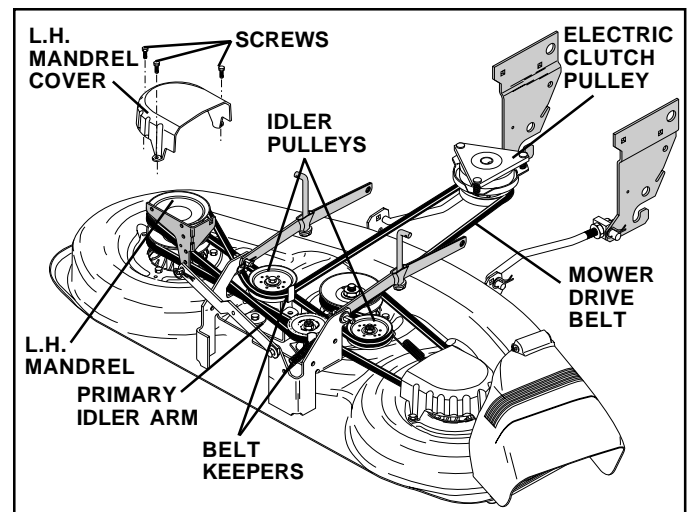


FIG. 28

TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 29)

Park the tractor on level surface. Engage parking brake.

- Remove mower drive belt (See "TO REPLACE MOWER DRIVE BELT" in this section of this manual).
- Remove mower (See "TO REMOVE MOWER" in this section of this manual).
- Remove screws from R.H. mandrel cover and remove cover. Unhook spring from bolt on mower housing.
- Carefully roll belt off R.H. mandrel pulley.
- Remove belt from center mandrel pulley, idler pulley, and L.H. mandrel pulley.
- Remove any dirt or grass which may have accumulated around mandrels and entire upper deck surface.
- Check secondary idler arm and idler to see that they rotate freely.
- Be sure spring is hooked in secondary idler arm and sway-bar bracket.
- Install new belt in lower groove of L.H. mandrel pulley, idler pulley, and center mandrel pulley as shown.
- Roll belt over R.H. mandrel pulley. Make sure belt is in all grooves properly.
- Reconnect spring to bolt in mower housing and reinstall R.H. mandrel cover.

SERVICE AND ADJUSTMENTS

- Reinstall mower to tractor (See "INSTALL MOWER AND DRIVE BELT" in the Assembly section of this manual).
- Reassemble mower drive belt (See "TO REPLACE MOWER DRIVE BELT" in this section of this manual).

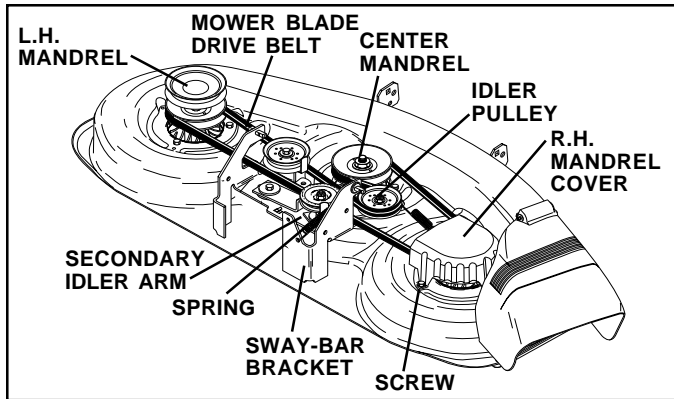


FIG. 29

TO ADJUST ATTACHMENT CLUTCH (See Fig. 30)

The electric clutch should provide years of service. The clutch has a built-in brake that stops the pulley within 5 seconds. Eventually, the internal brake will wear which may cause the mower blades to not engage, or, to not stop as required. Adjustments should be made by your nearest authorized service center/department.

- Make sure attachment clutch and ignition switches are in "OFF" position.
- Adjust the three nylon locknuts until space between clutch plate and rotor measures .012" at all three slot locations cut in side of brake plate.

NOTE: After installing a new electric clutch, run tractor at full throttle and engage and disengage electric clutch 10 cycles to wear in clutch plate.

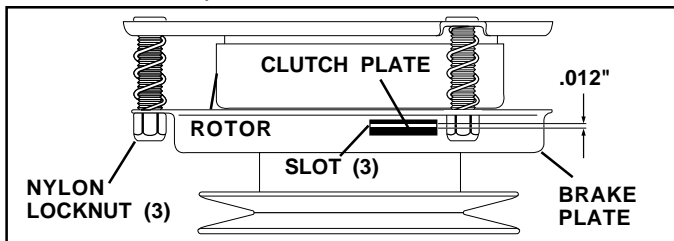


FIG. 30

TO ADJUST BRAKE (See Fig. 31)

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 1-1/2", loosen jam nut and turn nut "A" until distance becomes 1-1/2". 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.

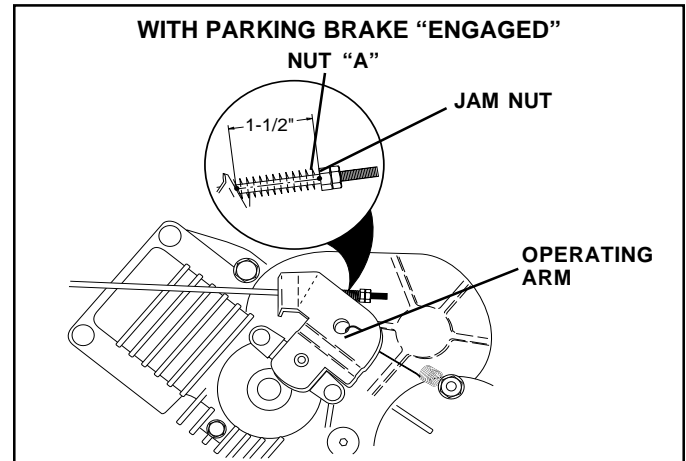


FIG. 31

TO REPLACE MOTION DRIVE BELT (See Fig. 32)

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

- Remove mower (See "TO REMOVE MOWER" in this section of this manual.)

BELT REMOVAL -

- Engage parking brake (creates slack in belt).
- Remove belt from clutching and fan idler pulleys.
- Loosen belt keeper above transaxle pulley.
- Remove belt from transaxle pulley.
- Remove belt from engine pulley and front V-idler pulley.
- Pull belt out of all belt keepers and remove from tractor.

BELT INSTALLATION -

- Place V part of belt into grooves on engine pulley and front V-idler, making sure to route belt inside of all belt keepers.
- Route belt on right side, coming from V-idler, towards back of tractor, above midspan belt keeper and to top of transaxle pulley.
- Route belt on left side, coming from engine pulley, towards back of tractor and through loop in midspan belt keeper.

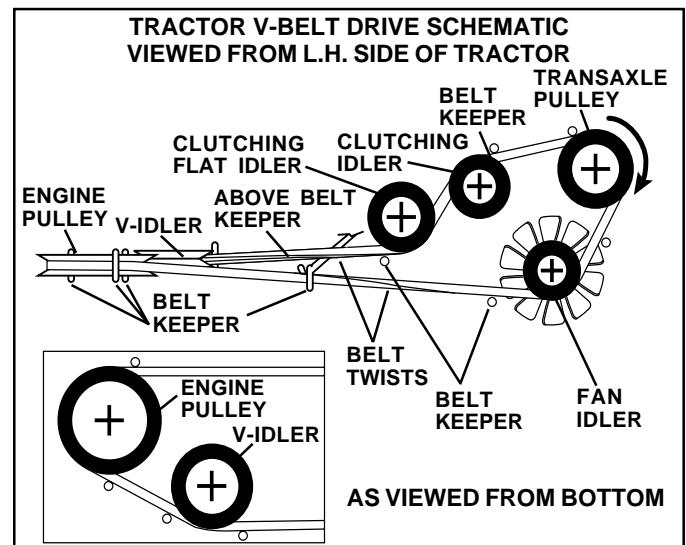


FIG. 32

SERVICE AND ADJUSTMENTS

- Place V part of belt into grooves on transaxle and fan idler pulleys, making sure to route belt inside of all belt keepers.
- Retighten belt keeper above transaxle pulley.
- Place belt around clutching idlers as shown, making sure to route belt inside of all belt keepers.
- Check to be sure belt is positioned correctly and is on proper side of all belt keepers.
- Reinstall mower.

IMPORTANT: CHECK BRAKE ADJUSTMENT.

TO ADJUST MOTION CONTROL LEVER (See Fig. 33)

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 chassis.

- Park tractor on level surface. Stop tractor by turning ignition key to "OFF" position and engage parking brake.
- Place motion control lever in neutral (N) position.
- While holding locknut, loosen jam nut
- Tighten locknut 1/4 turn.
- While holding locknut, tighten jam nut securely.

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 turn.

Road test tractor after adjustment and repeat procedure if necessary.

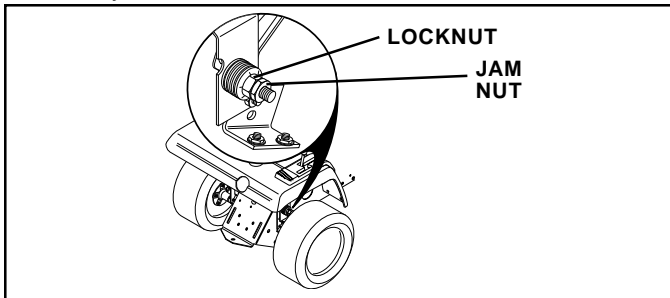


FIG. 33

TRANSMISSION REMOVAL/REPLACEMENT

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

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 ADJUSTMENT

Front wheel toe-in is required for proper steering operation. Toe-in was set at the factory and adjustment should not be necessary. If parts in the front axle or steering mechanism have been replaced or damaged, check toe-in and adjust if necessary.

TO CHECK TOE-IN (See Fig. 34) -

- Position front wheels straight ahead.
- Measure distance between wheels at front and rear of tires (dimensions "A" and "B").
- Front dimension "A" should be 1/8" to 1/4" less than rear dimension "B".

TO ADJUST TOE-IN (See Figs. 34 and 35) -

- Loosen jam nuts at adjustment sleeves on tie rod.
- Adjust tie rod until dimension "A" is 1/8" to 1/4" less than dimension "B".
- Tighten jam nuts securely.

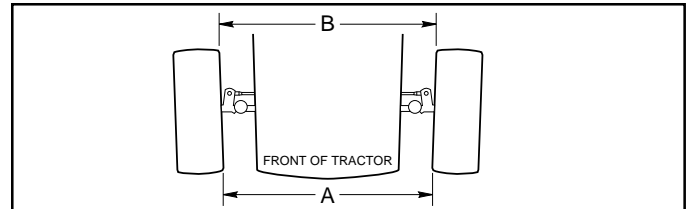


FIG. 34

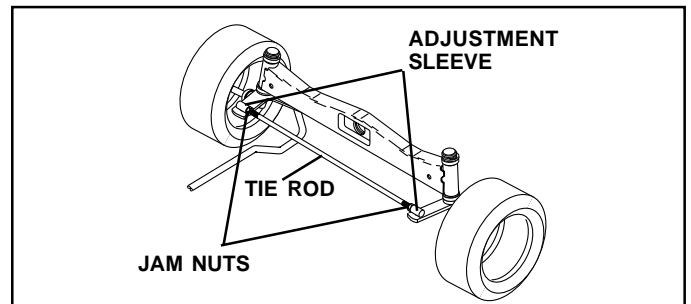


FIG. 35

FRONT WHEEL CAMBER

The front wheel camber is not adjustable on your tractor. If damage has occurred to affect the front wheel camber, contact your nearest authorized service center/department.

TO REMOVE WHEEL FOR REPAIRS

FRONT WHEEL (See Fig. 36)

- Block up axle securely.
- Remove axle cover, retaining ring and washers to allow wheel removal.
- Repair tire and reassemble.
- Replace washers and snap retaining ring securely in axle groove.
- Replace axle cover.

REAR WHEEL -

- Block rear axle securely.
- Remove five (5) hub bolts to allow wheel removal.
- Repair tire and reassemble. Replace and tighten hub bolts securely.

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.

SERVICE AND ADJUSTMENTS

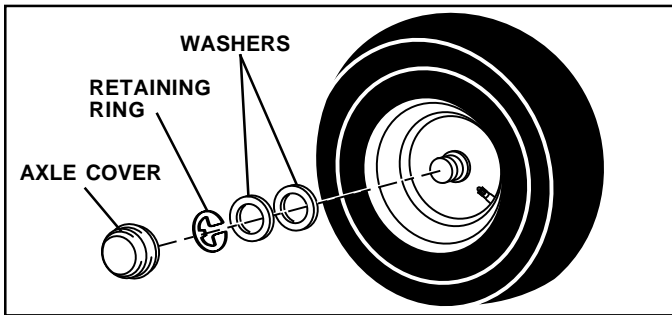


FIG. 36

TO START ENGINE WITH A WEAK BATTERY (See Fig. 37A)



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. (See "BATTERY" in the CUSTOMER RESPONSIBILITIES section of this manual).

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.

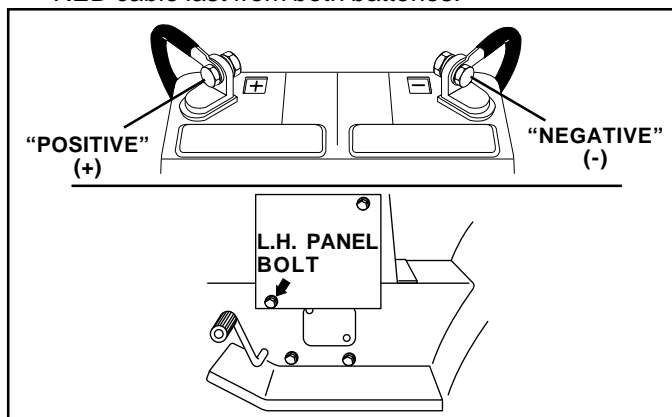


FIG. 37A

REPLACING BATTERY (See Fig. 37B)



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.

- Lift hood to raised position.
- Remove terminal guard.
- Disconnect BLACK battery cable then RED battery cable and carefully remove battery from tractor.
- Install new battery with terminals in same position as old battery.
- Reinstall terminal guard.
- First connect RED battery cable to positive (+) battery terminal with hex bolt and keps nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) battery terminal with remaining hex bolt and keps nut. Tighten securely.
- Close terminal access doors.
- Close hood.

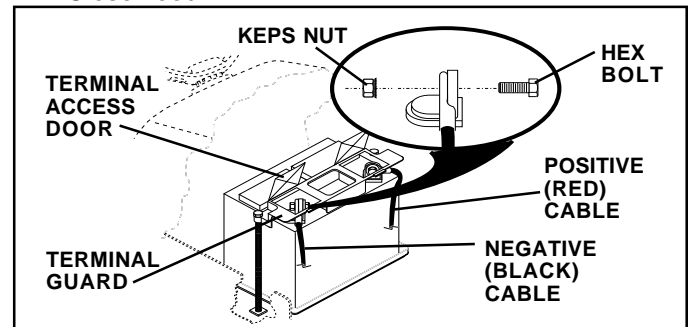


FIG. 37B

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 ADJUST ATTACHMENT LIFT SPRING (See Fig. 38)

- While holding spring bushing with wrench, loosen jam nut.

SERVICE AND ADJUSTMENTS

- Turn adjustment bolt clockwise to extend spring and reduce lift effort for heavier attachments.
- Turn adjustment bolt counterclockwise for lighter attachments.
- Retighten jam nut against spring bushing.

IMPORTANT: DO NOT ADJUST FOR MAXIMUM SPRING TENSION WHEN USING LIGHT ATTACHMENTS SUCH AS A MOWER. ADJUST LIFT LEVER SPRING TO AID IN LIFTING ATTACHMENT. DO NOT OVERPOWER SPRING. WHEN REMOVING ATTACHMENT, ALWAYS ADJUST SPRING TENSION TO ITS LOWEST POSITION.

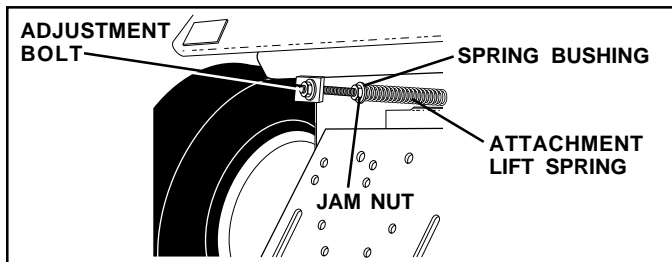


FIG. 38

TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 39)

- 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 procedure.

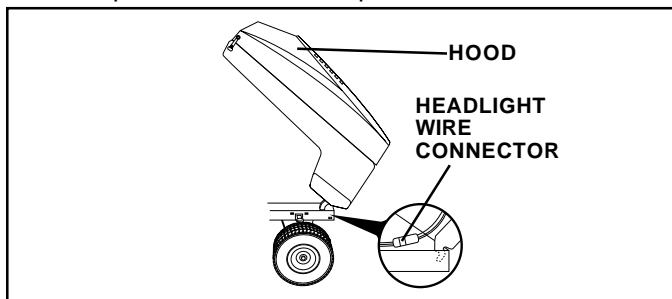


FIG. 39

ENGINE

TO ADJUST THROTTLE CONTROL CABLE (See Fig. 40)

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 to fast position.
- Check that speed control lever is against stop screw. If it is not, loosen casing clamp screw and pull throttle cable until lever is against screw. Tighten clamp screw securely.

TO ADJUST CHOKE CONTROL (See Figs. 40 and 41)

The choke 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:

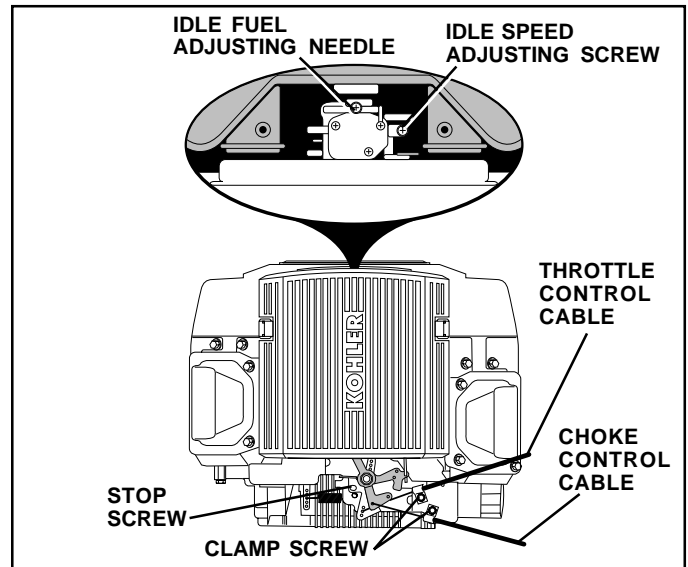


FIG. 40

- With engine not running, move choke control (located on dash panel) to full choke position.
- Remove air cleaner cover, filter and cartridge plate to expose carburetor choke (See "AIR FILTER" in the Customer Responsibilities section of this manual).
- Choke should be closed. If it is not, loosen casing clamp screw and move choke cable until choke is completely closed. Tighten casing clamp screw securely.
- Reassemble air cleaner.

TO ADJUST CARBURETOR (See Fig. 40)

The carburetor has been present 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.

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

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

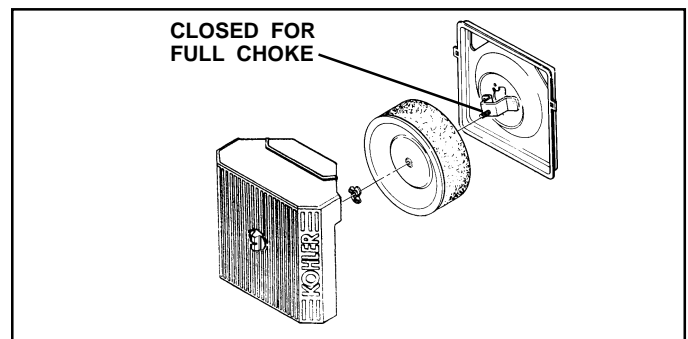


FIG. 41

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.
- If battery is removed from tractor for storage, do not store battery directly on concrete or damp surfaces.

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

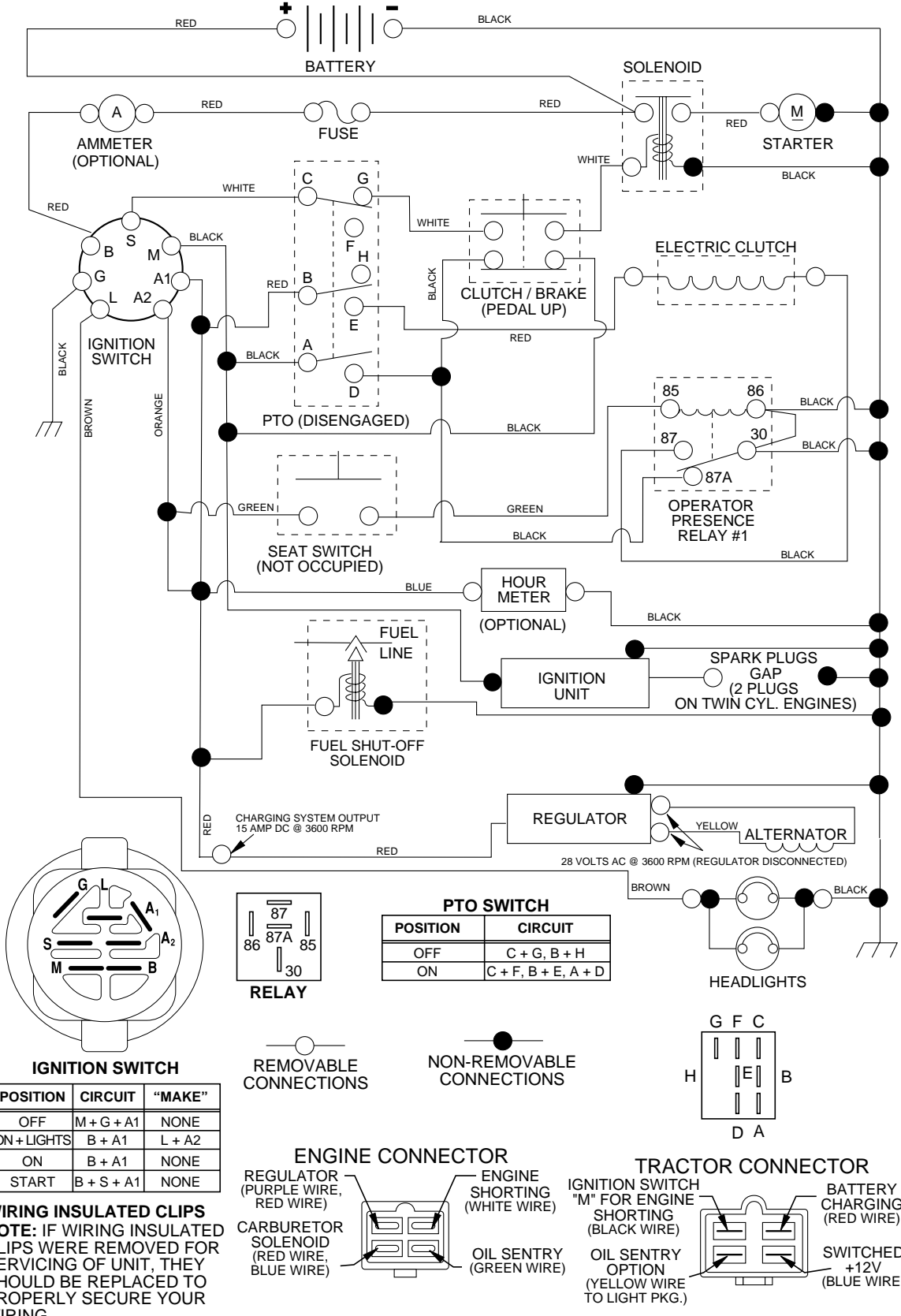
PROBLEM	CAUSE	CORRECTION
Will not start	<ol style="list-style-type: none"> 1. Out of fuel. 2. Engine not "CHOKED" properly. 3. Engine flooded. 4. Bad spark plug. 5. Dirty air filter. 6. Dirty fuel filter. 7. Water in fuel. 8. Loose or damaged wiring. 9. Carburetor out of adjustment. 10. Engine valves out of adjustment. 	<ol style="list-style-type: none"> 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 an authorized service center/department.
Hard to start	<ol style="list-style-type: none"> 1. Dirty air filter. 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. 	<ol style="list-style-type: none"> 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. See "To Adjust Carburetor" in Service Adjustments section. 8. Contact an authorized service center/department.
Engine will not turn over	<ol style="list-style-type: none"> 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). 	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Weak or dead battery. 2. Corroded battery terminals. 3. Loose or damaged wiring. 4. Faulty solenoid or starter. 	<ol style="list-style-type: none"> 1. Recharge or replace battery. 2. Clean battery terminals. 3. Check all wiring. 4. Check/replace solenoid or starter.
Loss of power	<ol style="list-style-type: none"> 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 damaged wiring. 14. Carburetor out of adjustment. 15. Engine valves out of adjustment. 	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Worn, bent or loose blade. 2. Bent blade mandrel. 3. Loose/damaged part(s). 	<ol style="list-style-type: none"> 1. Replace blade. Tighten blade 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	<ol style="list-style-type: none"> 1. Faulty operator-safety presence control system. 	<ol style="list-style-type: none"> 1. Check wiring, switches and connections. If not corrected, contact an authorized service center/department.
Poor cut - uneven	<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Obstruction in clutch mechanism. 2. Worn/damaged mower drive belt. 3. Frozen idler pulley. 4. Frozen blade mandrel. 	<ol style="list-style-type: none"> 1. Remove obstruction. 2. Replace mower drive belt. 3. Replace idler pulley. 4. Replace blade mandrel.
Poor grass discharge	<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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)	<ol style="list-style-type: none"> 1. Switch is "OFF". 2. Bulb(s) burned out. 3. Faulty light switch. 4. Loose or damaged wiring. 5. Blown fuse. 	<ol style="list-style-type: none"> 1. Turn switch "ON". 2. Replace bulb(s). 3. Check/replace light switch. 4. Check wiring and connections. 5. Replace fuse.
Battery will not charge	<ol style="list-style-type: none"> 1. Bad battery cell(s). 2. Poor cable connections. 3. Faulty regulator (if so equipped). 4. Faulty alternator. 	<ol style="list-style-type: none"> 1. Replace battery. 2. Check/clean all connections. 3. Replace regulator. 4. Replace alternator.
Loss of drive	<ol style="list-style-type: none"> 1. Freewheel control in "disengaged" position. 2. Motion drive belt worn, damaged, or broken. 3. Air trapped in transmission during shipment or servicing. 	<ol style="list-style-type: none"> 1. Place freewheel control in "engaged" position. 2. Replace motion drive belt. 3. Purge transmission.
Engine "backfires" when turning engine "OFF"	<ol style="list-style-type: none"> 1. Engine throttle control not set at "SLOW" position for 30 seconds before stopping engine. 	<ol style="list-style-type: none"> 1. Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.

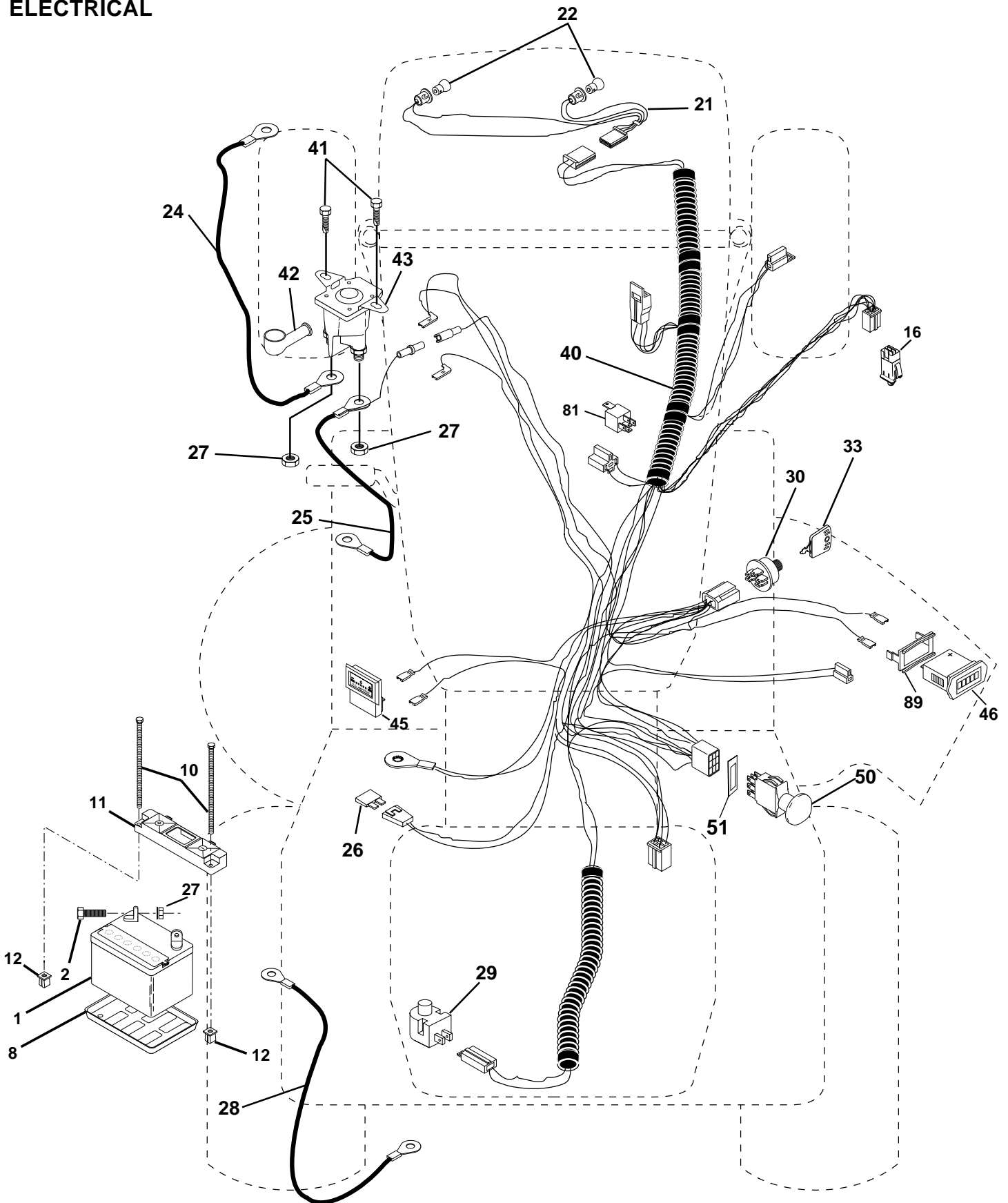
TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03

SCHEMATIC



REPAIR PARTS

TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03
ELECTRICAL



REPAIR PARTS

TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03

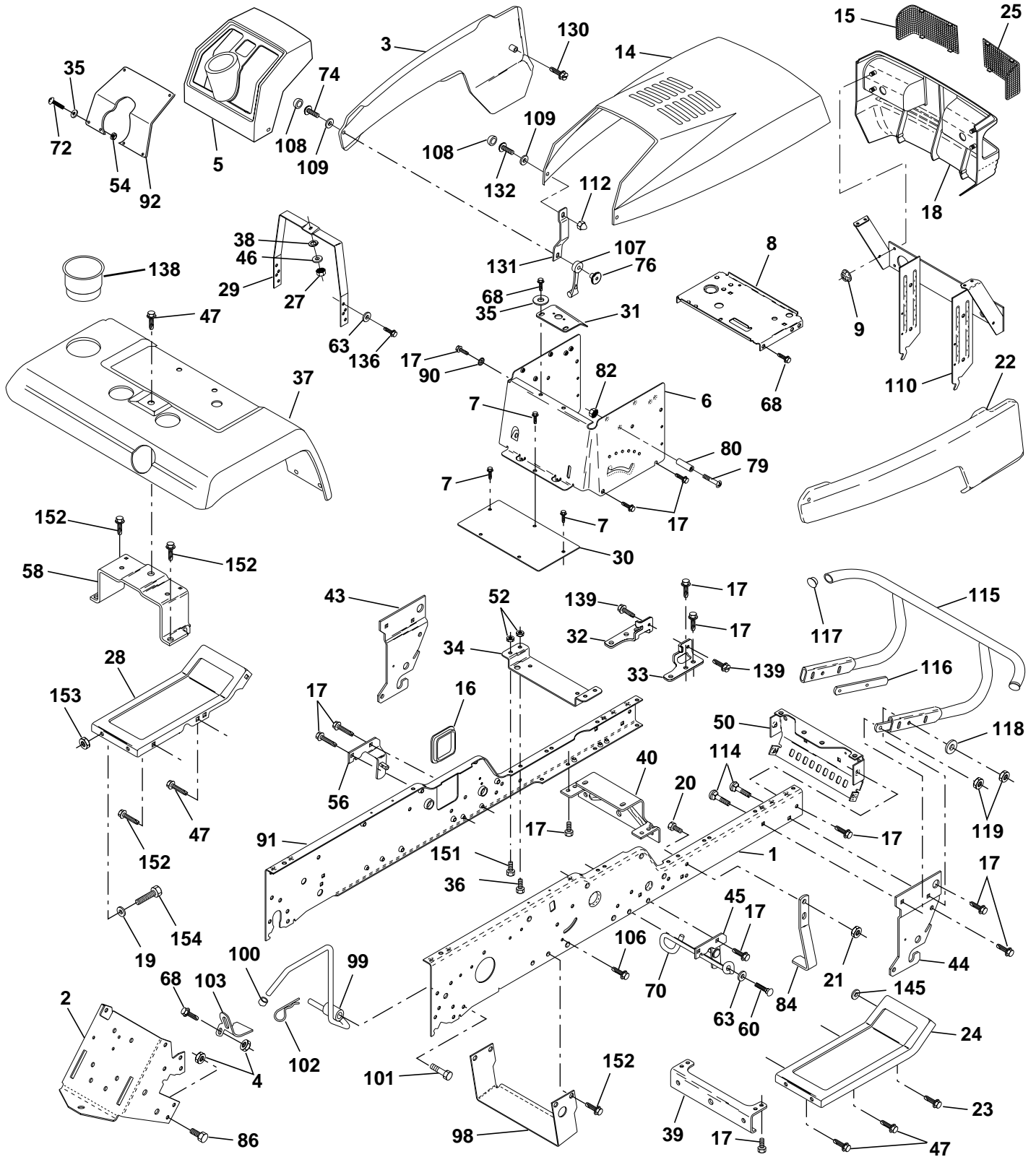
ELECTRICAL

KEY NO.	PART NO.	DESCRIPTION
1	532144927	Battery
2	532171017	Bolt Hex Head 1/4-20 x 3/4
8	532124886	Tray, Battery
10	532171327	Bolt, Btr Frt 1/4-20 x 7-1/2 Zinc
11	532150109	Holddown Battery Front Mount
12	532145769	Nut Push Nylon 1/4" Battery Frt.
16	532153664	Switch Interlock Push-In
21	532166182	Harness Socket Light w/4152J
22	532004152	Bulb Light
24	532004014	Cable, Starter
25	532146686	Cable, Battery
26	532108824	Fuse
27	532171018	Nut Keps Hex 1/4-20 UNC
28	532170697	Cable, Ground
29	532160784	Switch, Plunger
30	532163968	Switch, Ign
33	532140401	Key
40	532166176	Harness Ign.
41	532171323	Screw 1/4-20 x 1/2
42	532131563	Cover, Terminal Red
43	532145673	Solenoid
45	532122822	Ammeter Rectangular
46	532169635	Meter Hour Snap-In
50	532169417	Switch, PTO
51	532140405	Ring Retainer PTO
62	532110143	Bulb, Light Pkg.
81	532109748	Relay Asm.
89	532169639	Bracket Snap-In Hourmeter

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

REPAIR PARTS

TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03
CHASSIS AND ENCLOSURES



REPAIR PARTS

TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03

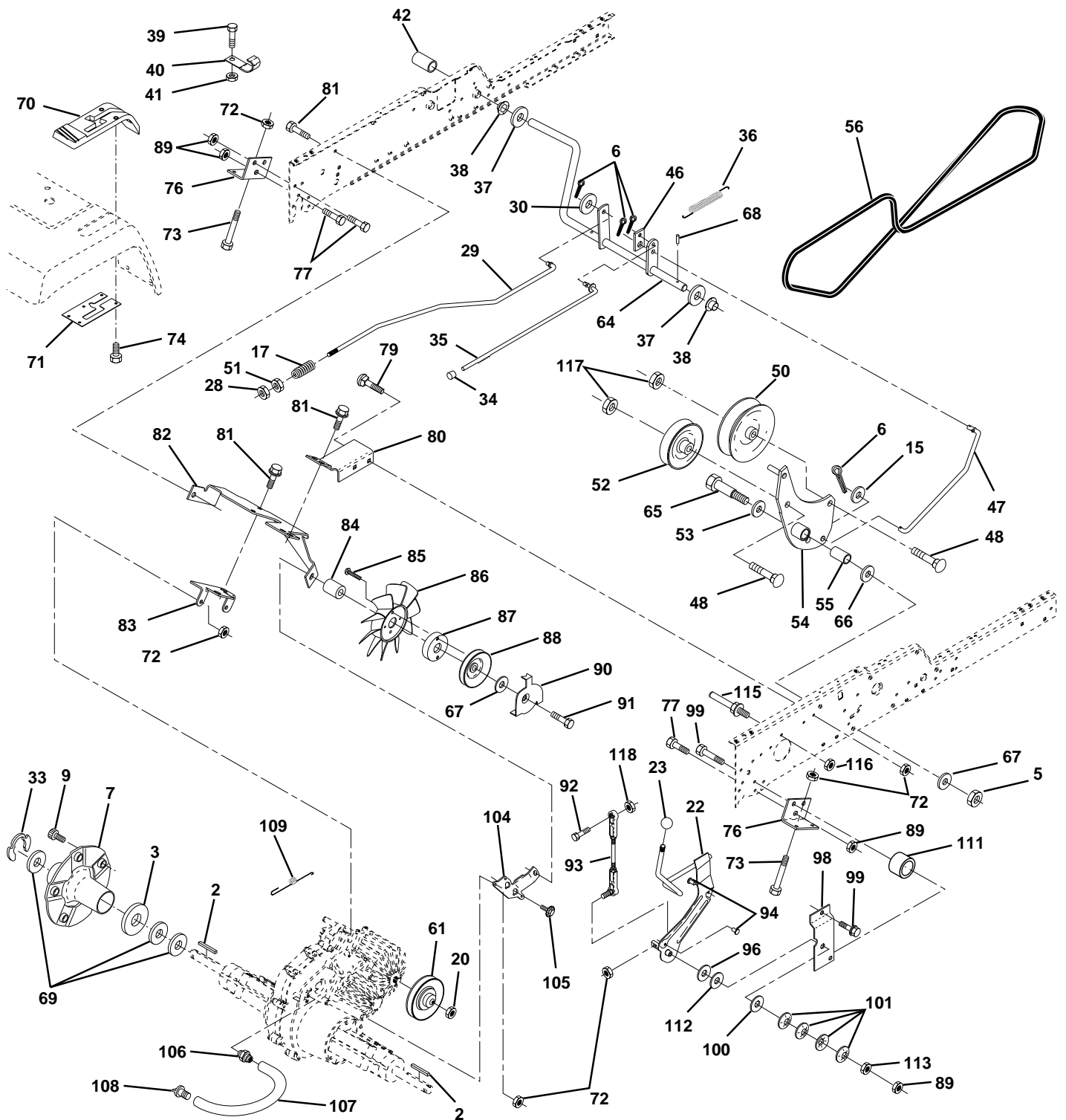
CHASSIS AND ENCLOSURES

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	532150253	Rail, Frame RH	63	532171236	Washer 13/32 x 1 x 14 Ga.
2	532140506	Drawbar, Gt	68	532171196	Screw, Thdrol 5/16-18 x 1/2
3	532150478	Panel Asm., Side LH	70	532137159	Guide, Belt Mid Span
4	532171331	Nut Crown Lock 7/16-14 Unc	72	532171194	Screw, Mach Trhd 5/16-18 x 3/4
5	532140452	Dash, Plastic Black	74	874191008	Screw, Machine #10-24
6	532157882	Dash 1-PCS, Lower	76	532125004	Nut, Weld #10-24
7	532171323	Screw, Thd Cut 1/4-20 x 1/2	79	532171346	Screw, Machine #10-24 x 1/4
8	532145166	Support, Battery	80	532171345	Spacer, Split
9	532108067	Nut Pal	82	532171347	Nut #10-24
14	532150477	Hood Asm., Pnt	84	532142992	Stop, Over Center 44" 20/23" T. 94
15	532168214	Lens, Headlight LH	86	532171330	Bolt, Fin Hex 7/16-14 Unc x 1
16	532121794	Cover, Access	90	532171217	Washer, Lock External Tooth 3/8
17	532171167	Screw, 3/8-16 x 3/4	91	532170755	Rail, Frame Lh
18	532157236	Grille	92	532171366	Plate, Silkscreen Dash
19	532171151	Washer 13/32 x 13/16 x 12 Ga.	98	532140503	Bracket Chassis Skid
20	532171339	Bolt, Fin Hex 3/8-16 x 1	99	532171332	Rod Asm. Bypass
21	532171168	Nut, Crownlock 3/8-16 Unc	100	532071673	Cap Brake Parking Red
22	532150479	Panel Side RH Husqvarna YTGT	101	532171334	Screw Thdrol. 3/8-16 x 1-3/4
23	532171235	Screw 3/8-16 x 1/2	102	532171333	Retainer Spring 1"
24	532147207	Footrest, RH	103	532142273	Bracket Lock Bypass
25	532168213	Lens Headlight RH	106	532171341	Screw Thdrol. Hex Hd Zinc Mwr
27	532171343	Nut Fin Hex 1/4-20	107	532109808	Latch, Chute Blk
28	532147203	Footrest, LH	108	532110356	Cap, Snap Black
29	532145205	Bracket, Support Dash	109	532110357	Cap, Washer Snap
30	532145052	Saddle	110	532150200	Pivot Asm. Grille/Hood Husq. VGT
31	532161419	Brace, Support Steering	112	532060867	Nut, Acorn, Hex #10-24
32	532161327	Bracket Asm., Frame Pivot Lh	114	532171335	Bolt, Carriage 3/8-16 x 1-1/4
33	532161326	Bracket Asm., Frame Pivot Rh	115	532150300	Bumper Asm.
34	532142131	Bracket, Engine Support Rear	116	532141461	Bracket Extension Bumper
35	532171349	Washer 11/32 x 11/16 x 16 Ga.	117	532143679	Plug Plastic
36	532171338	Bolt, Fin Hex 5/16-18 x 3/4	118	532171336	Washer 13/32 x 13/16 x 16 Ga.
37	532169426	Fender, Pnt.	119	532171141	Nut Crownlock 3/8-16 UNC
38	532171185	Washer, Lock 1/4	130	532171223	Screw, HwHd Hi-Lo #13-16 x 3/4
39	532136961	Bracket, Axle Front	131	532150195	Bracket Support Hood/Panel YP
40	532156111	Bracket, Support Axle/Engine	132	874291006	Screw Truss Hd. #10-24 x 3/8
43	532136939	Bracket, Spnsn Front Lh	136	532171154	Screw 3/8-16 x 3/4
44	532136940	Bracket, Spnsn Front Rh	138	532166625	Cupholder YTGT Grey
45	532154913	Bracket Asm., Susp Chassis Rh	139	532171348	Bolt, Shoulder 5/16-18
46	532171342	Washer 9/32 x 3/4 x 16 Ga.	145	532171465	Washer, Flat 13/32 x 7/8 x 14 Ga.
47	532171136	Screw Thdrol 3/8-16 x 1/2	151	532171340	Screw 5/16-18 x 3/4
50	532152728	Bracket, Chassis Front	152	532171154	Screw 3/8-16 x 3/4
52	532171248	Locknut, Hex W/Ins 5/16-18 Unc	153	532171141	Nut Crown Lock 3/8-16 Unc
54	532171195	Nut 5/16-18	154	532171375	Bolt Hex Fin 3/8-13 x 1" Blk
56	532154914	Bracket Asm., Susp Chassis Lh	--	532125085	Plug, Hole
58	532137113	Bracket Asm., Fender			
60	532171173	Screw Thdrol 3/8-16 x 1-1/4			

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

REPAIR PARTS

TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03
GROUND DRIVE



REPAIR PARTS

TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03

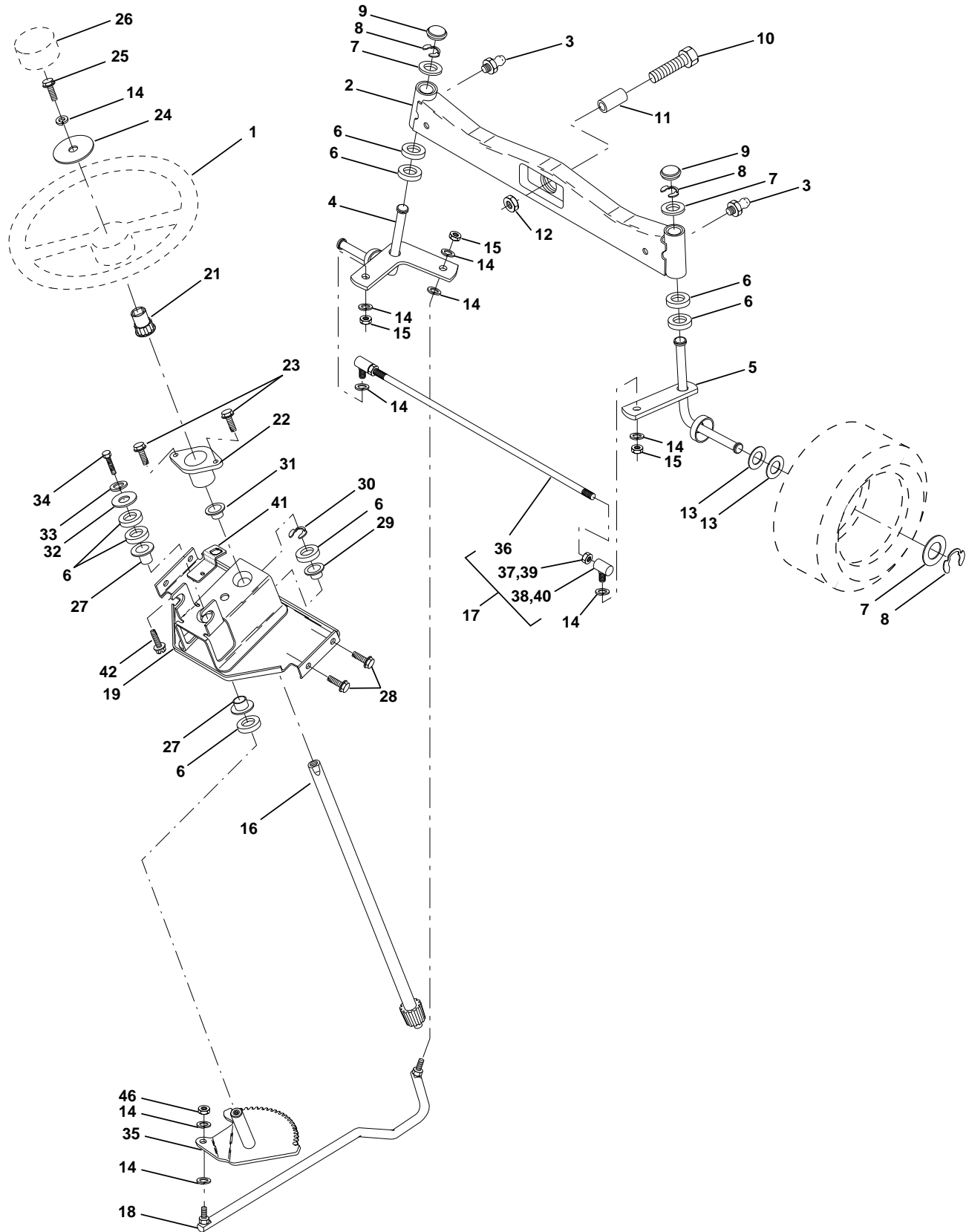
GROUND DRIVE

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	-----	Transaxle Hydro 222-3010 (Order parts from transaxle mfg.)	70	532166624	Console Hydro Fender
2	532007070	Key 1/4 x 2.5	71	532151179	Plate Console Shift
3	532007563	Washer Thrust Axle Harden	72	532171026	Nut Crownlock 5/16-18
5	532171168	Nut Crownlock 3/8-16	73	532171400	Bolt Hex Flghd 5/16-18 x 3 Gr. 5
6	532171165	Pin Cotter 1/8 x 3/4	74	532171370	Screw, Hex Wsh Hi-Lo 1/4-1/2
7	532140507	Wheel Hub Asm.	76	532140481	Bracket Transaxle
9	532171379	Bolt Hub	77	532171330	Bolt Fin Hex 7/16-14 x 1
15	532171168	Washer 13/32 x 13/16 x 16 Ga.	79	532171401	Bolt Carriage 5/16-18 x 5/8
17	532140921	Spring Rod Brake	80	532140484	Bracket Torque RH
20	532171128	Nut Hex Jam Toplock 1/2-20	81	532171154	Screw 3/8-16 x 3/4
22	532156103	Shaft Arm Asm	82	532150586	Bracket Mount Torque/Fan
23	532121274	Knob	83	532140479	Strap Torque Mid
28	532171163	Nut, Hex Jam 3/8-16	84	532140490	Spacer
29	532171404	Brake Rod	85	532171402	Screw #10-24 x 1-1/4
30	532171140	Washer 13/32 x 1 x 16Ga	86	532140462	Fan 7" Hydro
33	812000053	Ring E	87	532140491	Adapter Fan
34	532071673	Cap Plunger	88	532161592	Pulley Idler
35	532171459	Rod Parking Brake	89	532171331	Nut, Crownlock 7/16-14
36	532149412	Spring Drive Ground	90	532140489	Keeper Belt
37	532171038	Washer 25/32 x 1-1/4 x 16 Ga.	91	532171403	Screw Thdrol 3/8-16 x 2-3/4
38	532150035	Nyliner	92	532171409	Bolt Fin Hex 5/16-18 x 1.75
39	532171413	Screw Fin #10-24 x 1	93	532140502	Link Shift Asm
40	532005304	Actuator Interlock Switch	94	532133835	Fastner Christmas Tree
41	532171414	Nut Toplock #10-24 Unc	96	532141103	Washer Nickel Plated
42	532124872	Cover Pedal	98	532141004	Bracket Shift
46	532145170	Retainer Spring	99	532171411	Screw 3/8-16 x 1-1/2
47	532138228	Clutch Rod	100	532126881	Washer Compression
48	532171180	Bolt Carriage 3/8-16 x 1-1/2 Gr. 5	101	532156106	Washer Bellville
50	532131494	Pulley Idler Flat	104	532140480	Bracket Idler
51	532171408	Nut Lock Hex 3/8-16	105	532171399	Screw Tap 1/4-20 x 1/2
52	532139123	Pulley Idler Grooved	106	532142918	O-Ring Asm. Hydro Gear
53	532000207	Washer Hardened	107	532154739	Line Fuel Hydro
54	532161590	Clutch Arm Asm	108	532142917	Cap Vent
55	532105706	Bearing, Idler	109	532140929	Spring Return Brake
56	532140218	V-Belt	111	532156240	Spacer Shift Lever VGTH
61	532140488	Pullery Transaxle	112	532156104	Washer Nylon High Temp
64	532154752	Shaft Asm Brake Parking Clutch	113	532171412	Nut Hex ASF 7/16-14 UNC
65	532171423	Bolt Shoulder	115	532171428	Keeper Belt Gnd Dr.
66	532140296	Washer Hardened	116	532171429	Nut Lock Hex Flange 5/16-18
67	532171151	Washer 13/32 x 13/16 x 12 Ga	117	532171422	Nut Lock Flg. 3/8-16 UNC
68	532005142	Pin Roll	118	532171410	Nut Lock Hex w/Ins 5/16-18 Unc
69	532191378	Washer			

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

REPAIR PARTS

TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03
STEERING ASSEMBLY



REPAIR PARTS

TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03

STEERING ASSEMBLY

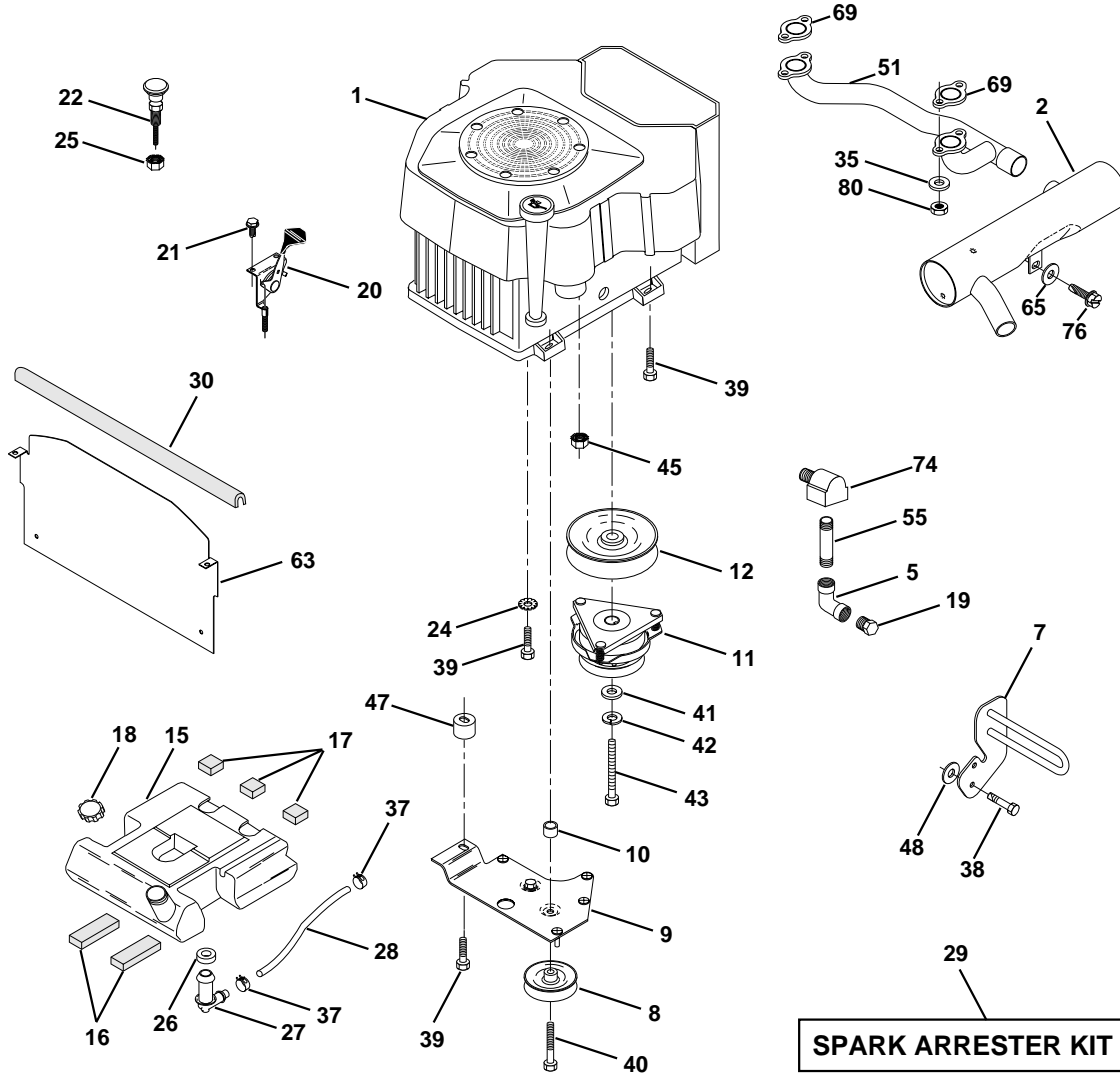
KEY NO.	PART NO.	DESCRIPTION
1	532166627	Wheel, Steering
2	532137094	Axle Asm., Front
3	532124836	Fitting, Grease
4	532161849	Spindle Asm, LH
5	532161848	Spindle Asm., RH
6	532124931	Bearing, Race Thrust Harden
7	532171039	Washer 25/32 x 1-5/8 x 16 Ga.
8	812000029	Ring, Klip #T5304-75
9	532121232	Cap, Spindle
10	532171415	Bolt, Fin Hex 5/8-11 x 2-3/4
11	532136518	Spacer, Brg. Axle Front
12	532171416	Nut, Lock Flange 5/8-11 Unc
13	532171038	Washer 25/32 x 1-1/4 x 16 Ga.
14	532171029	Washer, Lock Hvy Hlcl Spr 3/8
15	532171175	Nut, Lock Center 3/8-24 Unf
16	532145103	Shaft Asm., Steering
17	532137347	Rod Asm., Tie Ball J Ball Vgt (Inc. Key No. 36-40)
18	532137155	Draglink, Ball Joint Solid Vgt
19	532156011	Support Asm., Steering Vgt
21	532159945	Adapter, Wheel Steering
22	532155105	Bushing, Strg.
23	532171193	Screw
24	532171388	Washer 13/32 x 1-1/20 x 11 Ga.
25	532171427	Bolt, Fin Hex 3/8-16 x 1 Gr. 5
26	532166626	Cap , Wheel Steering
27	532124937	Bearing, Col. Strg.
28	532171154	Screw 3/8-16 x 3/4
29	532104239	Bearing, Flange
30	812000034	Ring, Klip Truarc #5304-75
31	532138136	Bushing, Nyliner Snap
32	532171425	Washer 11/32 x 1 x 10 Ga.
33	532171213	Washer, Lock Hvy Hlcl Spr 5/16
34	532171358	Bolt, Hex Hd 5/16-18 x 3/4
35	532138059	Gear, Sector Steering
36	532137156	Tie Rod
37	873360600	Jam Nut RH Thread
38	532109850	Joint Asm. Ball RH Thread
39	873700600	Jam Nut LH Thread
40	532109851	Joint Asm. Ball LH Thread
41	532155246	Bracket Switch Interlock VGT 97
42	532171169	Screw Thdrol 5/16-18 x 1/2 TYT
46	532171426	Nut Lock Center 3/8-24 Unf

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

REPAIR PARTS

TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03

ENGINE



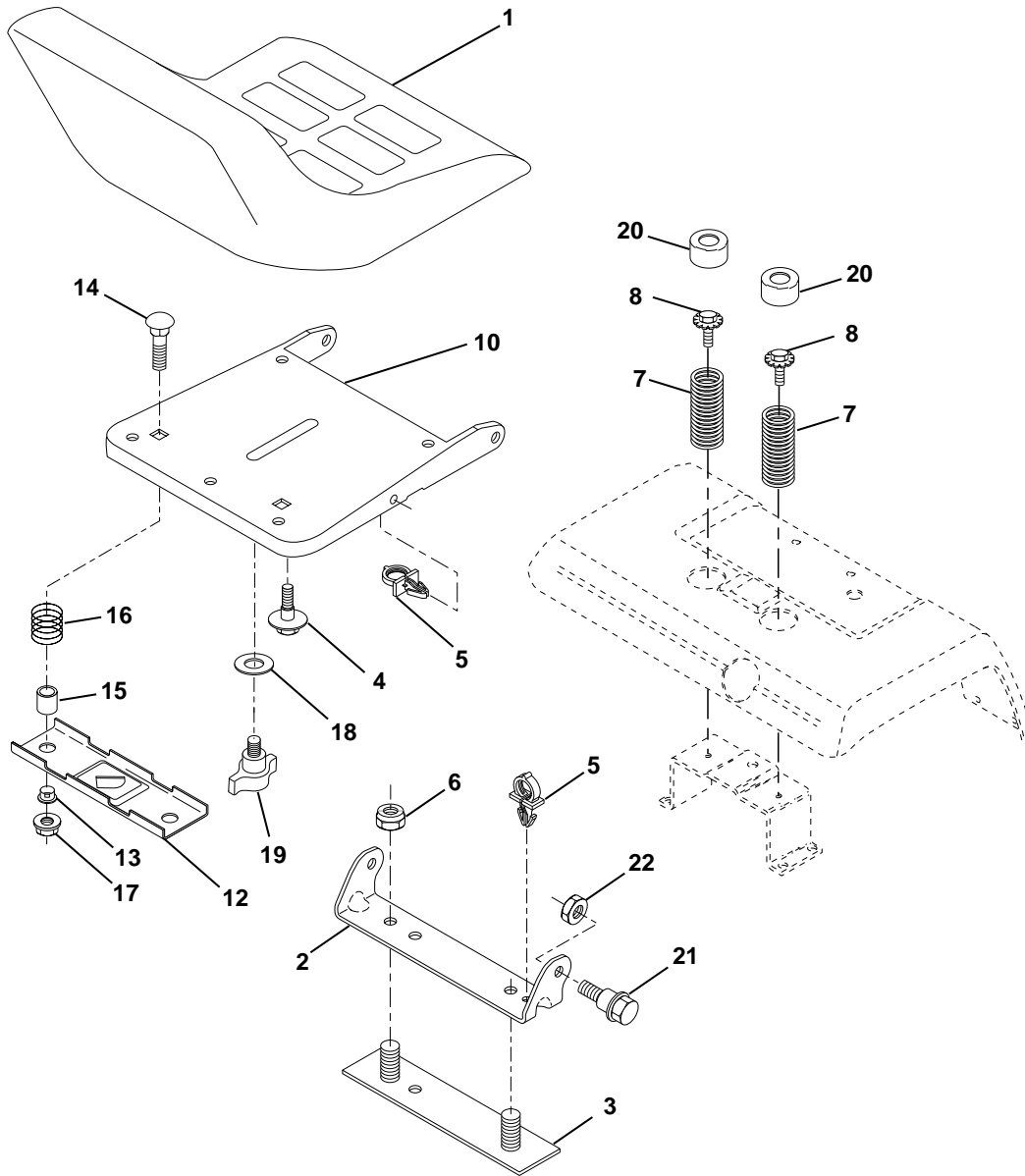
KEY NO.	PART NO.	DESCRIPTION
1	-----	Engine Kohler, Model No. CV22S (Order parts from engine manufacturer)
2	532161063	Muffler Side 1-1/4
5	532171215	Elbow STD 90 Degree 3/8-18 NPT
7	532151396	Muffler Assembly Guard
8	532121361	Pulley V-Idler
9	532150828	Keeper Asm Belt Engine VGT 96
10	532105432	Bushing
11	532140923	Clutch Electric
12	532143996	Pulley Engine VGT Elect Clutch
15	532151346	Tank Fuel Rear
16	532109227	Pad Spacer
17	532106082	Pad Spacer
18	532140527	Cap Asm Fuel W/Sym Vented
19	813290300	Plug Oil Drain (Order From Engine Manufacturer)
20	532132747	Control Throttle
21	532171192	Screw Hex Thd Cut 1/4-20 X 5/8
22	532132781	Control Choke
24	532171217	Washer Ext Tooth 3/8
25	532171350	Nut Keps 3/8 - 24 UNF
26	532124952	Bushing
27	532139277	Stem Tank Fuel
28	532124703	Fuel Line

KEY NO.	PART NO.	DESCRIPTION
29	532132920	Spark Arrester Kit
30	532161547	Extrusion Hood
35	532171467	Washer Split
37	532123487	Clamp Hose
38	532171466	Screw 3/8-16 x 1-1/4
39	532171476	Screw TT 3/8-16 x 2-1/4 UNC
40	532171479	Screw TT 3/8-16 x 4 UNC
41	532171480	Washer 1-1/2 OD X 15/32 ID X .250
42	532171220	Washer Lock 7/16
43	532171219	Bolt Hex 7/16-20 X 4-1/4 Ga 5
45	532171018	Nut Keps Hex 1/4-20 Unc
47	532142040	Spacer Engine
48	532171556	Washer 13/32 x 1-1/4 x 7 Ga.
51	532161231	Manifold Pipe VGT CV 1-1/4
55	532171470	Nipple, Pipe 4-1/2
63	532145549	Shield, Heat VGT YP/Husq.
65	532171236	Washer 13/32 x 1 x 14 Ga.
69	532163307	Gasket Kohler
74	532162295	Elbow Street Brass
76	532171154	Screw 3/8-16 x 3/4
80	532171468	Nut Flange M8-1.25

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

REPAIR PARTS

TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03
SEAT ASSEMBLY



KEY NO.	PART NO.	DESCRIPTION
1	532141525	Seat
2	532140551	Bracket, Pivot Seat
3	532140675	Strap, Fender
4	532171260	Bolt, Shoulder 5/16-18 X .62
5	532145006	Clip, Push In Hinged
6	532171141	Nut, Lock Hex W/Ins. 3/8-16 Unc
7	532124181	Spring, Seat Cprsn
8	532171376	Bolt 5/16-18unc x 3/4 W/Sems
10	532155925	Pan, Seat
12	532121246	Bracket, Mounting Switch
13	532121248	Bushing, Snap

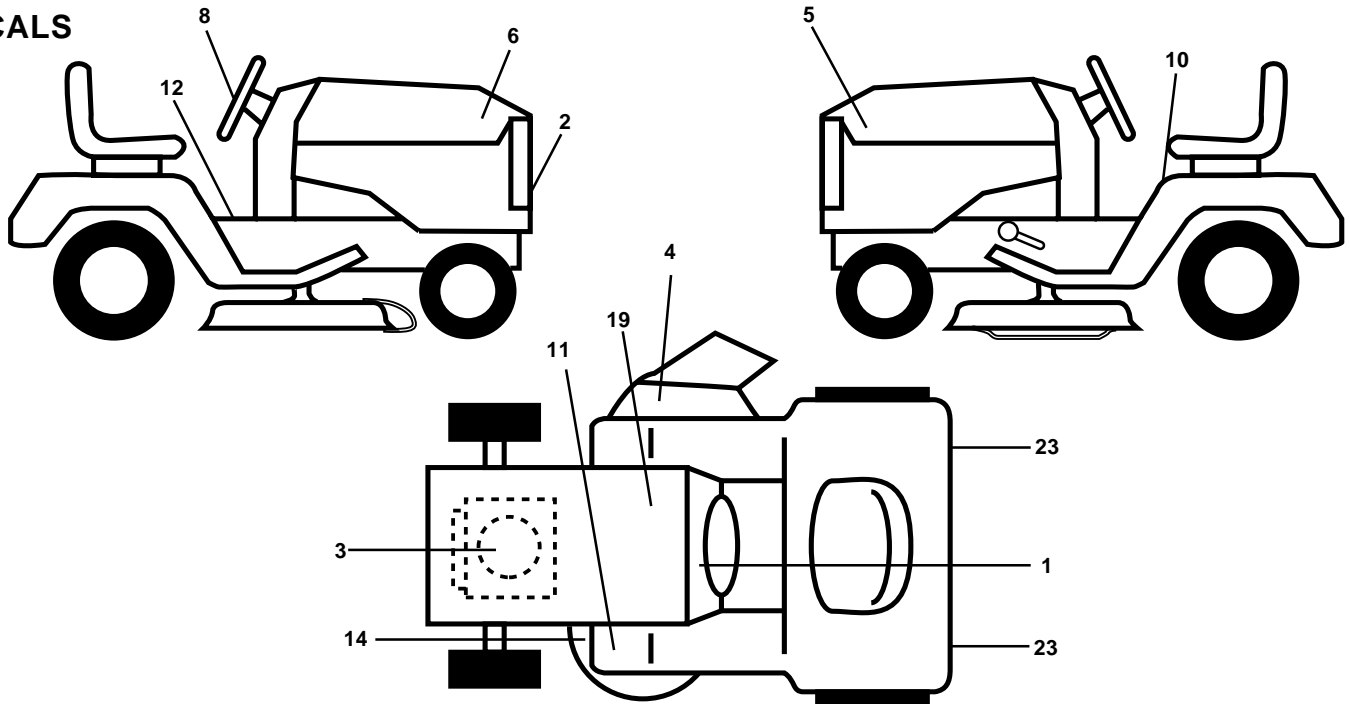
KEY NO.	PART NO.	DESCRIPTION
14	532171040	Bolt, Carriage 1/4-20 X 1-1/2
15	532121249	Spacer, Split
16	532123740	Spring, Cprsn
17	532171041	Nut, Lock 1/4 Lge Flg Gr. 5
18	532171261	Washer 17/32 X 1-3/16 X 12 Ga.
19	532166369	Knob, Seat
20	532124238	Cap, Spring Seat
21	532171130	Bolt, Shoulder 5/16-18 Unc-2A
22	532171026	Nut, Crownlock 5/16-18 Unc

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

REPAIR PARTS

TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03

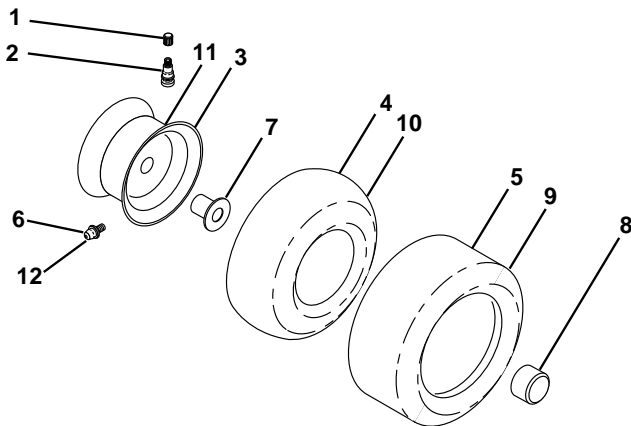
DECALS



KEY NO.	PART NO.	DESCRIPTION
1	532156964	Decal, Operating Instruction
2	532150616	Decal, Grille Husqvarna
3	532166106	Decal, HP Engine
4	532170563	Decal, Mower, Warning, Keep Hand Away
5	532170574	Decal, Hood LH GTH225
6	532170572	Decal, Hood RH GTH225
8	532170564	Decal, Wheel Steering Husq. Prem.
10	532157140	Decal, Danger
11	532101892	Decal, Clutch/Brake

KEY NO.	PART NO.	DESCRIPTION
12	532140837	Decal, Brake Parking Saddle
14	532160397	Decal, V-Belt Schematic
19	532145005	Decal, Battery
23	532106202	Reflector, Taillight
--	532138311	Decal, Handle Lft Height Adjust (Lift Handle)
--	532171237	Pad Ftrest Rbr Sq Generic
--	532142342	Decal, Drawbar Cntrl Mvt Hyd Gt
--	532171095	Manual, Owner's (English)
--	532171096	Manual, Owner's (French)

WHEELS & TIRES



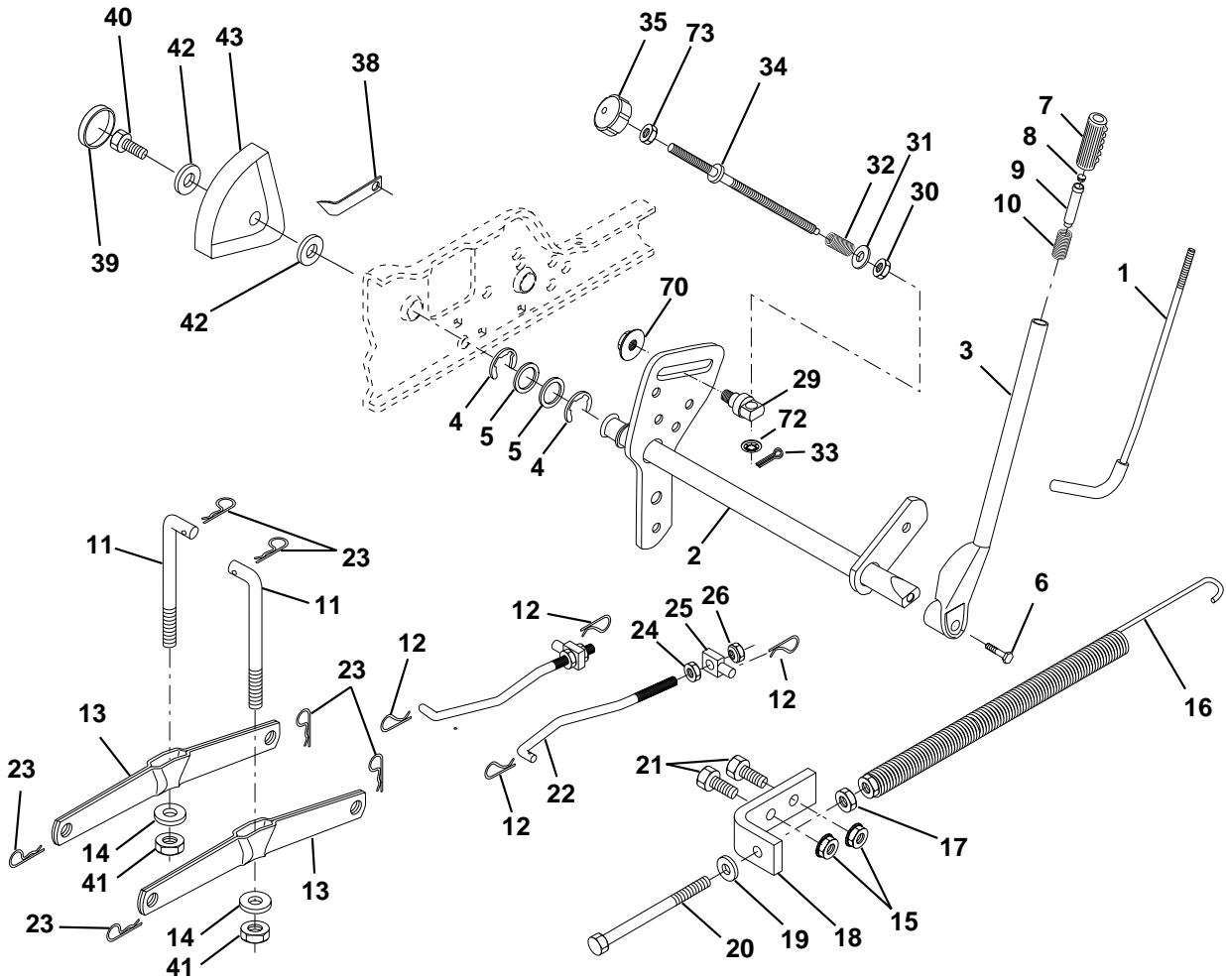
KEY NO.	PART NO.	DESCRIPTION
1	532059192	Cap, Valve, Tire
2	532065139	Stem, Valve
3	532144509	Rim Assembly, Front
4	532008134	Tube, Front (Service Item Only)
5	532106230	Tire, Front
6	532124860	Fitting, Grease
7	532124959	Bearing, Flange (Front Wheel Only)
8	532104757	Cap, Hub, Axle Blk.
9	532105588	Tire, Rear
10	532007154	Tube, Rear (Service Item Only)
11	532144510	Rim Assembly, Rear
12	532124957	Fitting, Grease
--	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. GTH225 (954140103A), PRODUCT NO. 954 14 01-03

LIFT ASSEMBLY



KEY NO.	PART NO.	DESCRIPTION
1	532121006	Rod Asm., Lever
2	532159187	Shaft Asm., Lift Vgt
3	532159189	Lever Asm., Lift Rh
4	812000022	E-Ring Truarc#5133-87
5	532171182	Washer 29/32 x 1-1/4 x 16 Ga.
6	532171362	Bolt, Fin Hex 3/8-16 x 1-1/2
7	532125631	Grip, Handle Fluted
8	532124526	Button, Plunger
9	532122364	Plunger, Lever Lift
10	532124874	Spring 2-1/8"
11	532146704	Link Lift
12	532171212	Retainer, Spring
13	532139868	Arm, Suspension Vgt
14	532140302	Bearing
15	532171168	Nut, Crownlock 3/8-16 Unc
16	532124687	Spring Asm., Assist Lift
17	532171357	Nut, Hex Jam 3/8-16 Unc
18	532143363	Bracket, Spring Assist
19	532171140	Washer 13/32 x 13/16 x 16 Ga.
20	532171418	Bolt, Adjust Spring Assist
21	532171339	Bolt, Fin Hex 3/8-16 x 1
22	532127218	Link, Front

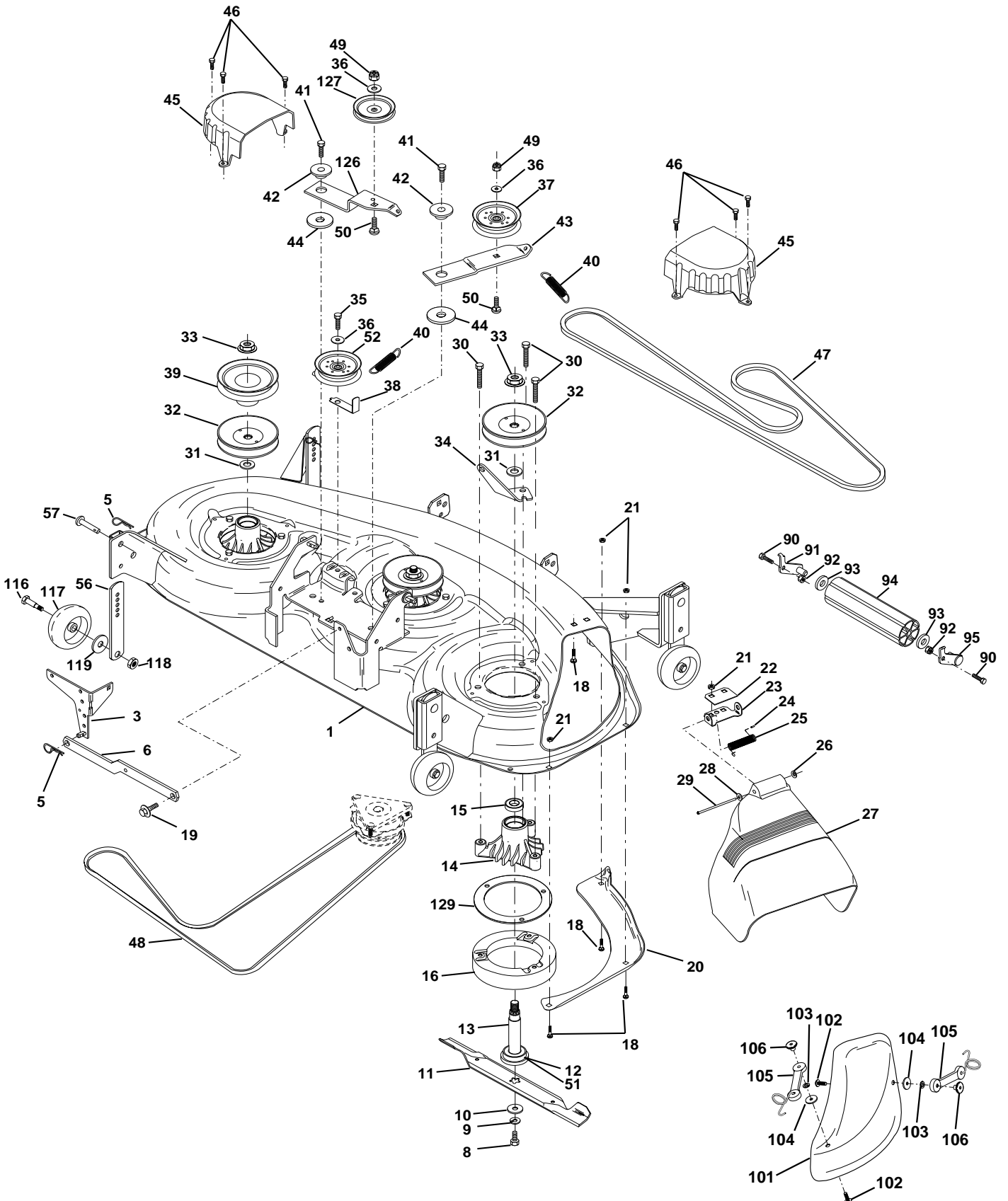
KEY NO.	PART NO.	DESCRIPTION
23	532171211	Retainer, Spring
24	873350800	Nut, Jam Hex 1/2-13 Unc
25	532130171	Trunnion
26	873680800	Nut, Crownlock 1/2-13 Unc
29	532171203	Trunnion, Infin Height
30	532171355	Nut, Special
31	532171207	Washer 13/32 x 5/8 x 16 Ga.
32	532137150	Spring, Compression Inf Hgt
33	532171359	Pin, Cotter 3/32 x 1/2
34	532171353	Rod, Adj Lift
35	532138057	Knob, Inf 3/8-16 Unc
38	532155097	Pointer, Height Indicator
39	532123935	Plug, Hole
40	532171210	Screw 5/16-18 x 1
41	873540600	Nut, Crownlock 3/8-24
42	532171209	Washer 11/32 x 1-1/2 x 10 Ga.
43	532123934	Scale, Indicator Height
70	532171178	Nut Hex Flange Lock
72	532110452	Nut Push Phos & Oil
73	532171357	Nut Hex Jam 3/8-16 Unc

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

REPAIR PARTS

TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03

MOWER DECK



REPAIR PARTS

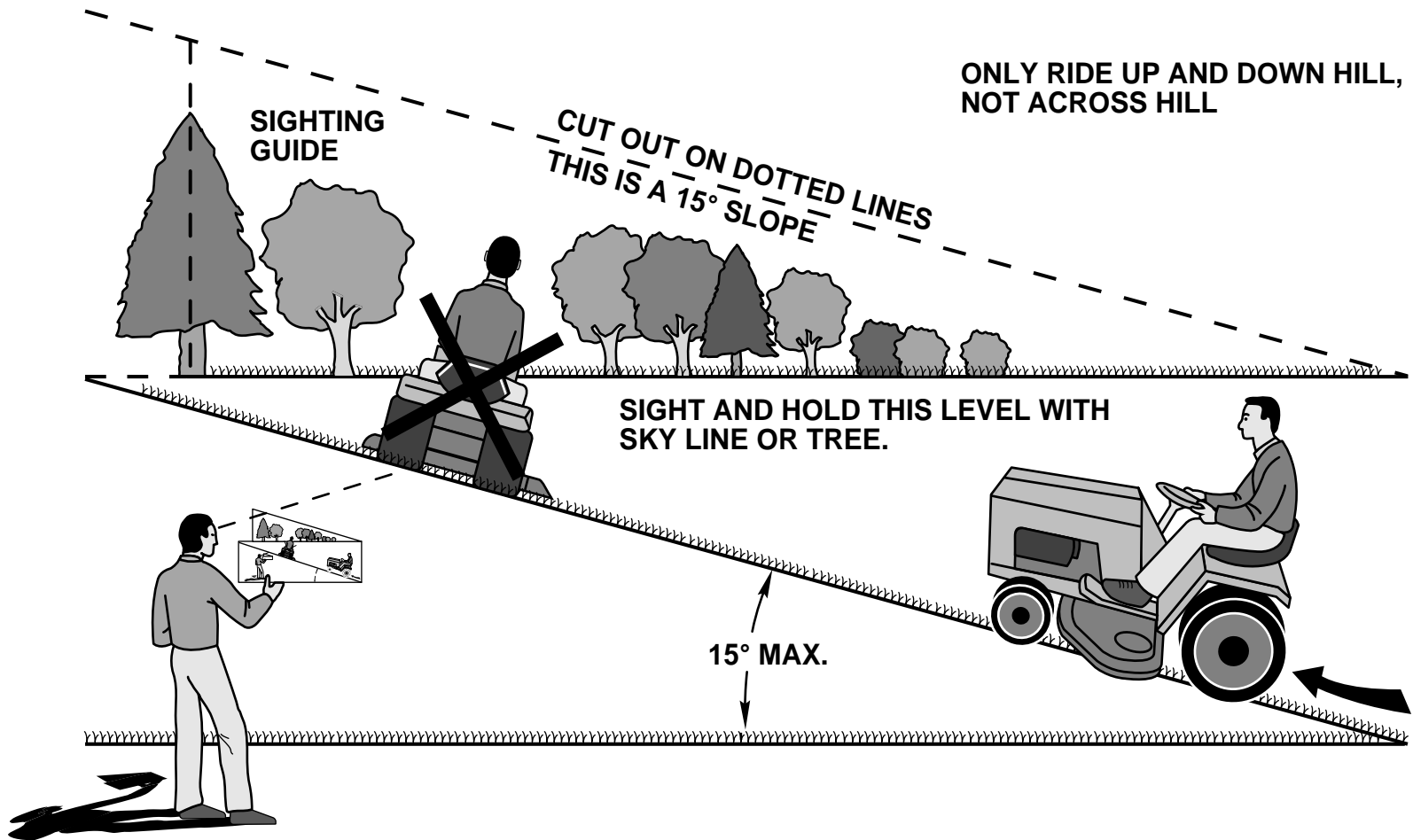
TRACTOR - MODEL NO. GTH225 (954140103A), PRODUCT NO. 954 14 01-03

MOWER DECK


KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	532164212	Deck Asm., Mower 46"	44	532133943	Washer, Hardened
3	532138457	Bracket Asm., Sway Bar	45	532145059	Cover, Mandrel Deck
5	532171211	Retainer Spring	46	532171253	Screw, Thdroll. 1/4-20 x 5/8
6	532130832	Arm, Suspension, Rear (Sway Bar)	47	532144959	V-Belt, Mower, Secondary
8	532850857	Bolt, Patched 3/8-24 x 1-1/4 Gr. 8	48	532148763	V-Belt, Mower, Primary
9	532171241	Washer, Lock Hvy., Unplated 3/8	49	532171168	Nut, Crownlock 3/8-16 UNC
10	532140296	Washer, Hard Blade, Mower Vented	50	532171180	Bolt, Carriage 3/8-16 x 1-1/2 Gr. 5
11	532163819	Blade, 46" Mulching	51	532153390	Washer Felt
12	532129895	Bearing, Ball, Mandrel #6204	52	532156493	Pulley Idler Flat 46 PRI drive
13	532137553	Shaft Asm. w/Lower Bearing (Includes Key No. 12)	56	532155986	Bar Pnt Adjusting Wheel Gauge
14	532137152	Housing, Mandrel	57	532171386	Pin Head Rivet
15	532110485	Bearing, Ball, Mandrel	90	532171375	Bolt Fin Hex 3/8-16 x 1
16	532140329	Stripper, Mower Round	91	532132274	Bracket Asm Noseroller LH
18	532171380	Bolt, Carriage 5/16-18 x 5/8	92	532171141	Nut Crownlock 3/8-16 UNC
19	532171252	Bolt, Hex Head, Shoulder 5/16-18	93	532171389	Washer 17/32 x 7/8 x 16 Ga.
20	532145055	Baffle, Vortex Mower 46"	94	532132264	Roller Nose
21	532171248	Nut, Crownlock 5/16-18 UNC	95	532132273	Bracket Asm Noseroller RH
22	532134753	Stiffener, Bracket	101	532145579	Cover, Mulching
23	532131267	Bracket, Deflector	102	871161010	Screw
24	532105304	Cap, Sleeve	103	810071000	Washer, Lock #10
25	532149287	Spring, Torsion, Deflector	104	819061216	Washer
26	532110452	Nut, Push	105	532160793	Latch Asm. Mulch/Bagger
27	532171384	Deflector Clipping Shield	106	532125004	Nut, Weld
28	532171222	Washer 11/32 x 5/8 x 16 Ga.	116	532171254	Bolt, Shoulder
29	532171385	Rod, Hinge	117	532133957	Gauge Wheel, Wide
30	532171244	Screw, Thdroll Washer Hd	118	532171255	Nut, Centerlock 3/8-16 UNC
31	532171245	Washer, Spacer Mower Vented	119	532171256	Washer 3/8 x 7/8 x 14 Ga.
32	532153531	Pulley, Mandrel	126	532144948	Arm, Idler, Primary Deck 46"
33	532171246	Nut, Flg. Top Lock Cntr. 9/16	127	532146763	Pulley, Idler, V-Groove Dim. 4.25
34	532144945	Anchor, Spring Deck 46"	129	532153183	Reinforcement Mandrel Ring
35	532171382	Screw, Thdroll 3/8-16 x 1-3/4 Tytt	--	532143651	Mandrel Asm 44"/50" Service (Includes Key No.s 8-10, 12-15, 31 and 33)
36	532171140	Washer 13/32 x 13/16 x 16 Ga.	--	532177107	Deck Complete (Std. Deck-Order separately mulcher plate and gauge wheel components Key Nos. 101-106 and 116-118)
37	532131494	Pulley, Idler, Flat			
38	532156086	Keeper, Belt, Idler			
39	532144917	Pulley, Idler, Driven			
40	532137273	Spring, Secondary 44/46/50 Vent			
41	532171173	Screw 3/8-16 x 1-1/4			
42	532165723	Spacer, Retainer Mower			
43	532144949	Arm, Idler Secondary			

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

SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



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 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

