

MODEL NO. 944.604950

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



CRAFTSMAN®

18.0 HP ELECTRIC START 42" MOWER AUTOMATIC LAWN TRACTOR

- Assembly
- Operation
- Maintenance
- Service and Adjustments
- Repair Parts

A

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.
- Keep machine free of grass, leaves or other debris build-up which can touch hot exhaust / engine parts and burn. Do not allow the mower deck to plow leaves or other debris which can cause build-up to occur. Clean any oil or fuel spillage before operating or storing the machine. Allow machine to cool before storage.

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.



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



WARNING: 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.



WARNING: 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.

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PRODUCT SPECIFICATIONS

Gasoline Capacity and type:	1.25 Gallons Unleaded Regular		
Oil Type (API-SF-SJ):	SAE 10W30 (above 32°F) SAE 5W-30 (below 32°F)		
Oil Capacity:	W/ Filter: 4.0 Pints W/O Filter: 3.5 Pints		
Spark Plug: (Gap: .040")	Champion RC12YC		
Ground Speed (MPH):	Forward: Reverse:	5.5 2.4	
Tire Pressure:	Front: Rear:	14 PSI 10 PSI	
Charging System:	15 Amps @ 3	600 RPM	
Battery:	AMP/HR: MIN. CCA: Case Size:	280	
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".

MAINTENANCE AGREEMENT

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

CUSTOMER RESPONSIBILITIES

- · Read and observe the safety rules.
- Follow a regular schedule in maintaining, caring for and using your tractor.
- Follow the instructions under "Maintenance" 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).

WARRANTY

LIMITED TWO (2) YEAR WARRANTY ON CRAFTSMAN TRACTOR (RIDING EQUIPMENT)

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

FULL ONE (1) YEAR WARRANTY ON BATTERY

For one (1) year from date of purchase, if any battery included with this riding equipment proves defective in material or workmanship and our testing determines the battery will not hold a charge, Sears will replace the battery at no charge.

COMMERCIAL OR RENTAL USE

Warranty on Riding Equipment used for commercial or rental purposes is limited to ninety (90) days.

This Warranty does NOT cover:

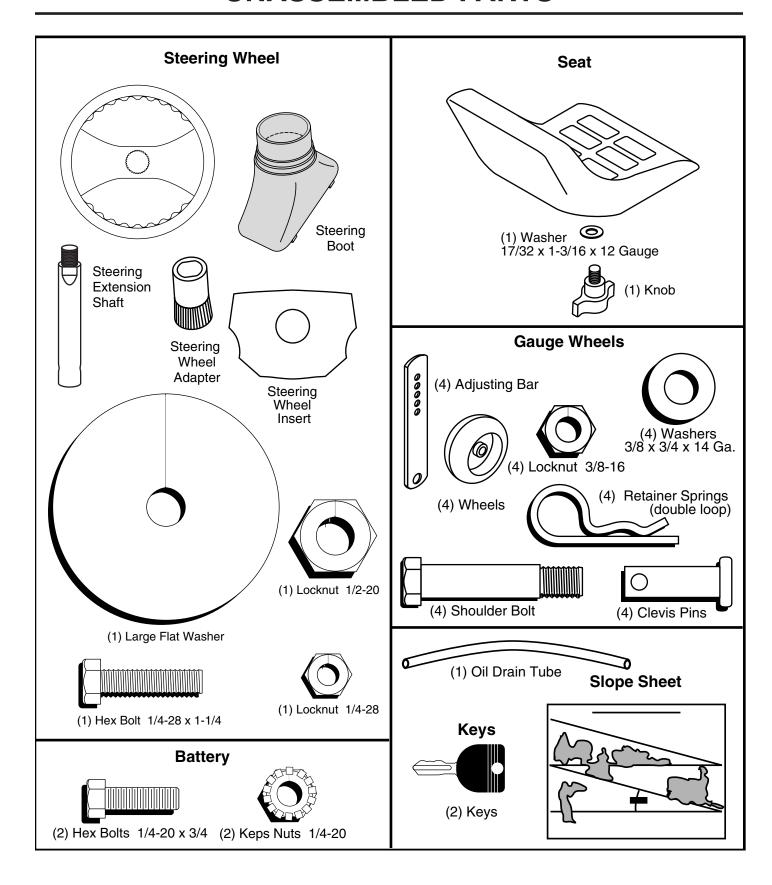
- 1. Pre-delivery set-up.
- 2. Tire replacement or repair caused by punctures from outside objects (such as nails, thorns, stumps, or glass).
- 3. Expendable items which become worn during normal use, such as blades, spark plug, air cleaners and belts.
- 4. Repairs necessary because of operator abuse or negligence, including damaged jackshaft or mandrel and the failure to operate and maintain the equipment according to the instructions contained in the Owner's Manual.
- 5. In Home service.

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

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

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

UNASSEMBLED PARTS



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) 3/4" wrench Pliers

(2) 7/16" wrenches Tire pressure gauge

Utility knife

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

TO REMOVE TRACTOR FROM CARTON

UNPACK CARTON

- Remove all accessible loose parts and parts cartons from carton.
- Cut along dotted lines on all four panels of carton.
 Remove end panels and lay side panels flat.
- Check for any additional loose parts or cartons and remove.

BEFORE REMOVING TRACTOR FROM SKID

ATTACH STEERING WHEEL (See Fig. 1)

ASSEMBLE EXTENSION SHAFT AND BOOT

 Slide extension shaft onto lower steering shaft. Align mounting holes in extension and lower shafts and install 1/4 hex bolt and locknut. Tighten securely.

IMPORTANT: TIGHTEN BOLT AND NUT SECURELY TO 10-12 FT. LBS TORQUE.

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

INSTALL STEERING WHEEL

- Position front wheels of the tractor so they are pointing straight forward.
- Remove steering wheel adapter from steering wheel and slide adapter onto steering shaft extension.
- Position steering wheel so cross bars are horizontal (left to right) and slide inside boot and onto adapter.
- Assemble large flat washer, 1/2 hex nut and tighten securely.
- Snap steering wheel insert into center of steering wheel.
- Remove protective materials from tractor hood and grill.

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

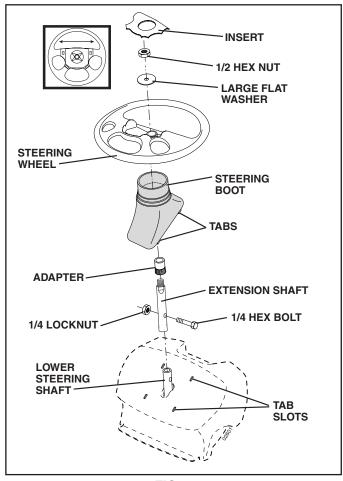


FIG. 1

HOW TO SET UP YOUR TRACTOR

INSTALL SEAT (See Fig. 2)

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 the cardboard packing and discard.
- Place seat on seat pan so head of shoulder bolts are positioned over the large slotted holes in pan.
- Push down on seat to engage shoulder bolts in slots and pull seat towards rear of tractor.
- Pivot seat and pan forward and assemble adjustment knob and flat washer loosely. Do not tighten.
- Lower seat into operating position and sit in 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.

ASSEMBLY

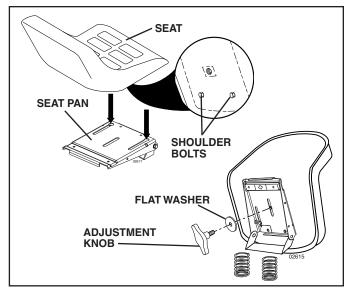


FIG. 2

CONNECT BATTERY (See Figs. 3 and 4)



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 seat pan to raised position.
- Remove terminal protective caps and discard.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps. (See "BATTERY" in the Maintenance section of this manual for charging instructions).
- First connect RED battery cable to positive (+) terminal with hex bolt and keps nut as shown. Tighten securely. Slide terminal cover over terminal.
- Connect BLACK grounding cable to negative (-) terminal with remaining hex bolt and keps nut. Tighten securely.

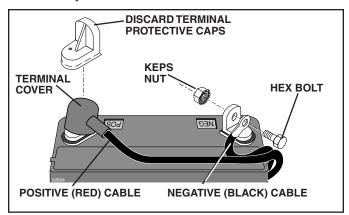


FIG. 3

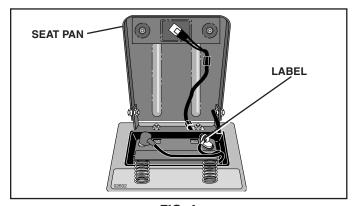


FIG. 4

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 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 "transmission disengaged position" (See "TO TRANSPORT" in the Operation section of this manual).
- · Roll tractor forward off skid.
- Remove banding holding the deflector shield up against tractor.

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

AWARNING: 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 (see "TO TRANSPORT" in Operation section of this manual).
- 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 "STOP" position.

Continue with the instructions that follow.

ASSEMBLY

INSTALL MULCHER PLATE (See Fig. 5) (If previously removed)

- 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 deflector shield from mower.

TO CONVERT TO BAGGING OR DISCHARGING

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

NOTE: It is not necessary to change blades. The mulcher blades are designed for discharging and bagging also.

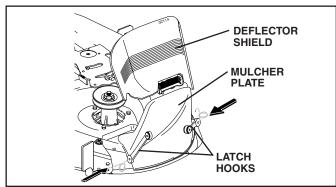


FIG. 5

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.
- Adjust gauge wheels before operating mower. See "TO ADJUST GAUGE WHEELS" in the Operation section of this manual.

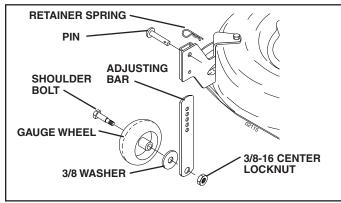


FIG. 6

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 DECK LEVELNESS

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

CHECK FOR PROPER POSITION OF ALL BELTS

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

CHECK BRAKE SYSTEM

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

✓ CHECKLIST

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

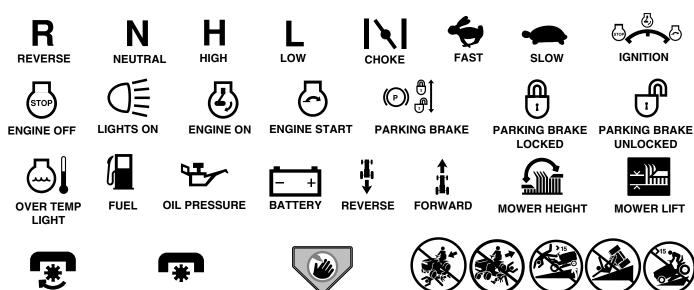
PLEASE REVIEW THE FOLLOWING CHECKLIST:

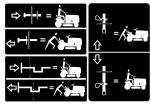
- ✓ All assembly instructions have been completed.
- ✓ No remaining loose parts in carton.
- ✓ Battery is properly prepared and charged. (Minimum 1 hour at 6 amps).
- Seat is adjusted comfortably and tightened securely.
- ✓ All tires are properly inflated. (For shipping purposes, the tires were overinflated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

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

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

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





CLUTCH ENGAGED CLUTCH DISENGAGED

ATTACHMENT

ATTACHMENT

FREE WHEEL (Automatic Models only)



Failure to follow instructions could result in serious injury or death. The safety alert symbol is used to identify safety information about hazards which can result in death, serious injury and/or property damage.



DANGER, KEEP HANDS **AND FEET AWAY**











SLOPE HAZARDS KEEP AREA CLEAR (SEE SAFETY RULES SECTION)



DANGER indicates a hazard which, if not avoided, will result in death or serious injury.



WARNING indicates a hazard which, if not avoided, could result in death or serious injury.



CAUTION indicates a hazard which, if not avoided, might result in minor or moderate injury.

CAUTION when used without the alert symbol, indicates a situation that could result in damage to the tractor and/or engine.



HOT SURFACES indicates a hazard which, if not avoided, could result in death, serious injury and/or property damage.



FIRE indicates a hazard which, if not avoided, could result in death, serious injury and/or property damage.

KNOW YOUR TRACTOR

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

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

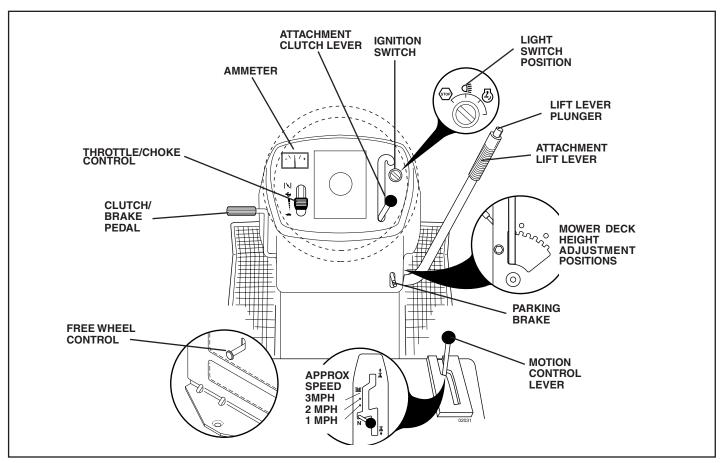


FIG. 7

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

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

LIGHT SWITCH POSITION - Turns the headlights on and off.

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

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

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

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

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

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

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

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

IGNITION SWITCH - Used for starting and stopping the engine.



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. 8)

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

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

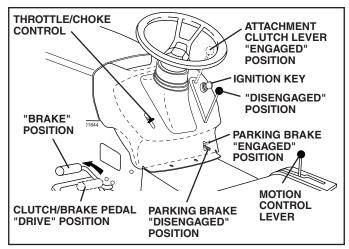


FIG. 8

STOPPING (See Fig. 8)

MOWER BLADES -

 To stop mower blades, move attachment clutch lever 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 between half and full speed (fast) position.

NOTE: Failure to move throttle control between half and full speed (fast) position, 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. 8)

Always operate engine at full throttle.

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

TO MOVE FORWARD AND BACKWARD (See Fig. 8)

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

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

TO ADJUST MOWER CUTTING HEIGHT (See Fig. 8)

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

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

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

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

TO ADJUST GAUGE WHEELS (See Fig. 9)

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.

NOTE: Adjust gauge wheels with tractor on a flat level surface.

- Adjust mower to desired cutting height (See "TO AD-JUST MOWER CUTTING HEIGHT" in the Operation section of this manual).
- 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.
- Be sure all gauge wheels are in the same setting.

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

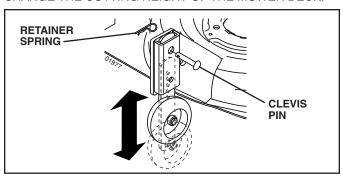


FIG. 9

TO OPERATE MOWER (See Fig. 10)

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. You must remain fully and centrally positioned in the seat to prevent the engine from hesitating or cutting off when operating your equipment on rough, rolling terrain or hills.

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



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

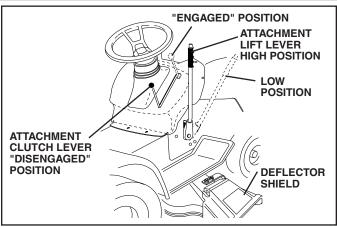


FIG. 10

TO OPERATE ON HILLS



WARNING: 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. 7 and 11)

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.
- Pull freewheel control out and down into the slot and release so it is held in the disengaged position.
- Do not push or tow tractor at more than two (2) MPH.
- To reengage transmission, reverse above procedure.

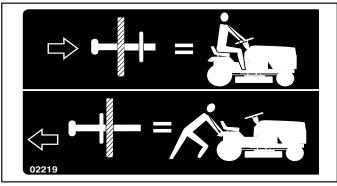


FIG. 11

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.).

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.

BEFORE STARTING THE ENGINE

CHECK ENGINE OIL LEVEL

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 Maintenance section of this manual).
- To change engine oil, see the Maintenance section in this manual.

ADD GASOLINE

Fill fuel tank to bottom of filler neck. Do not overfill.
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.



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

IMPORTANT: WHEN OPERATING IN TEMPERATURES BELOW32°F(0°C), USE FRESH, CLEAN WINTER GRADE GASOLINE TO HELP INSURE GOOD COLD WEATHER STARTING.

CAUTION: 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.

TO START ENGINE (See Fig. 7)

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

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

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

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

WARM WEATHER STARTING (50° F and above)

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

COLD WEATHER STARTING (50° F and below)

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

AUTOMATIC TRANSMISSION WARM UP

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

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

PURGE TRANSMISSION



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

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

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

- Place tractor safely on level surface with engine off and parking brake set.
- Disengage transmission by placing freewheel control in freewheeling position (See "TOTRANSPORT" in this section of manual).

- Sitting in the tractor seat, start engine. After the engine is running, move throttle control to slow position. With motion control lever in neutral (N) position, slowly disengage clutch/brake pedal.
- Move motion control lever to full forward position and hold for five (5) seconds. Move lever to full reverse position and hold for five (5) seconds. Repeat this procedure three (3) times.

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

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

MOWING TIPS

- 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 machine. This will result in a more even distribution of clippings and more uniform cutting.
- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished (See Fig. 12).

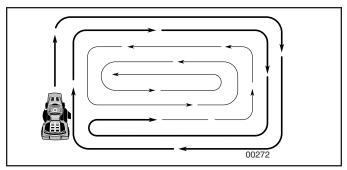


FIG. 12

- 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.

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, yet the newly cut area will not be exposed to direct sunlight.
- 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. 13). For extremely heavy mulching, reduce your width of cut on each pass and mow slowly.

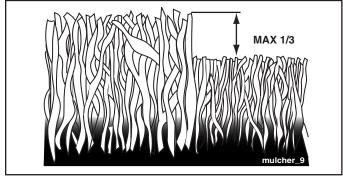


FIG. 13

- 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 (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.

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	Check Brake Operation	V	/									
	Check Tire Pressure	~	/									
т	Check Operator Presence and Interlock Systems	~										
R	Check for Loose Fasteners	V				1 5		1				
A	Sharpen/Replace Mower Blades			1 3								
C	Lubrication Chart			/				/				
ö	Check Battery Level			1 4								
R	Clean Battery and Terminals			/				/				
	Check Transaxle Cooling			/								
	Check V-Belts					/						
	Check Engine Oil Level	1	/									
	Change Engine Oil (with oil filter)				1 ,2			/				
E	Change Engine Oil (without oil filter)			1 ,2				/				
N	Clean Air Filter			✓ 2								
Ģ	Clean Air Screen			1 2								
N	Inspect Muffler/Spark Arrester				/							
E	Replace Oil Filter (If equipped)					1,2						3
_	Clean Engine Cooling Fins					1 2						aint_s
	Replace Spark Plug					1	1					icn-tra
	Replace Air Filter Paper Cartridge					1 2						maint_scn-tractore.new
	Replace Fuel Filter						/					e.new

- 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 Replace blades more often when mowing in sandy soil.
- 4 Not required if equipped with maintenance-free battery.
- 5 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.

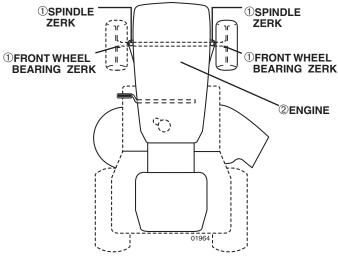
At least once a season, check to see if you should make any of the adjustments described in the Service and Adjustments section of this manual.

 Åt least 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.

LUBRICATION CHART



- **1**GENERAL PURPOSE GREASE
- **2REFER TO MAINTENANCE "ENGINE" SECTION**

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

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 brake pedal is fully depressed and attachement 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. 14)

- Raise mower to highest position to allow access to blades.
- Remove blade 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 blade bolt, lock washer and flat washer in exact order as shown.
- Tighten blade bolt securely (27-35 Ft. Lbs. torque).

IMPORTANT: BLADE BOLT IS HEATTREATED. IF BOLT NEEDS REPLACING, REPLACE ONLY WITH APPROVE BOLT SHOWN IN THE REPAIR PARTS.

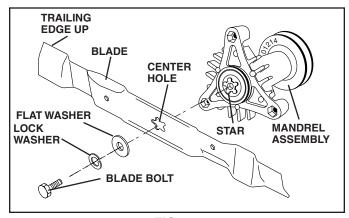


FIG. 14

TO SHARPEN BLADE (See Fig. 15)

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.

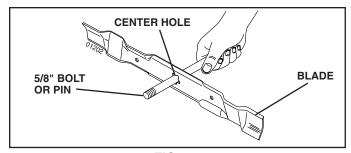


FIG. 15

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.

NOTE: The original equipment battery on your tractor is maintenance free. Do not attempt to open or remove caps or covers. Adding or checking level of electrolyte is not necessary.

TO CLEAN BATTERY AND TERMINALS

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

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

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 transmission fan and cooling fins 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. To prevent possible damage to seals, do not use high pressure water or steam to clean transaxle.

- 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-SJ. Select the oil's SAE viscosity grade according to your expected operating temperature.

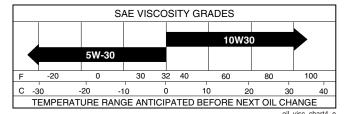


FIG. 16

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.

TO CHANGE ENGINE OIL (See Figs. 16 and 17)

Determine temperature range expected before oil change. All oil must meet API service classification SF-SJ.

- 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 yellow cap from end of drain valve and install the drain tube onto the fitting.

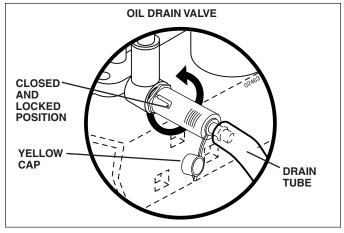


FIG. 17

- Unlock drain valve by pushing inward and turning counterclockwise.
- To open, pull out on the drain valve.
- After oil has drained completely, close and lock the drain valve by pushing inward and turning clockwise until the pin is in the locked position as shown.
- Remove the drain tube and replace the cap onto to the bottom fitting of the drain valve.
- 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.

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.

CLEAN AIR SCREEN

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.

AIR FILTER (See Fig. 18)

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

Service air cleaner more often under dusty conditions.

- Remove knob and cover.
- Remove wing nut and air cleaner from base.

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.

- Reinstall the pre-cleaner (cleaned and oiled) over the paper cartridge.
- Reassemble air cleaner, wing nut, cover and tighten knob securely.

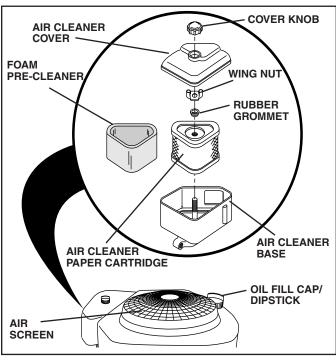


FIG. 18

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.

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. 19)

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.

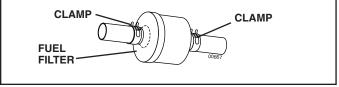


FIG. 19

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 or pressure washer to clean your tractor unless the engine and transmission are covered to keep water out. Water in engine or transmission will shorten the useful life of your tractor. Use compressed air or a leaf blower to remove grass, leaves and trash from tractor and mower.



WARNING: TO AVOID SERIOUS INJURY, BEFORE PERFORMING ANY SERVICE OR ADJUST-MENTS:

- 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 to "STOP" and remove key.
- Make sure the blades and all moving parts have completely stopped.
- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with plug.

TRACTOR

TO REMOVE MOWER (See Fig. 20)

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

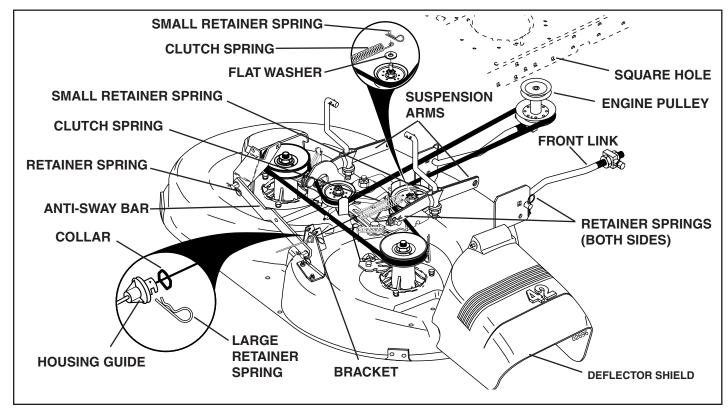
- Place attachment clutch in "DISENGAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- Roll belt off engine pulley.
- Remove small retainer spring, and remove clutch spring off pulley bolt.
- Remove large retainer spring, slide collar off and push housing guide out of bracket.
- Disconnect anti-swaybar from chassis bracket by removing retainer spring.
- Disconnect suspension arms from rear deck brackets by removing retainer springs.
- Disconnect front links from deck by removing retainer springs.

 Raise lift lever to raise suspension arms. Slide mower out from under tractor.

IMPORTANT: IF AN ATTACHMENT OTHER THAN THE MOWER DECK IS TO BE MOUNTED ON THE TRACTOR, REMOVE THE FRONT LINKS AND HOOKTHE CLUTCH SPRING INTO SQUARE HOLE IN FRAME.

TO INSTALL MOWER (See Fig. 20)

- Raise attachment lift lever to its highest position.
- Slide mower under tractor with deflector shield to right side of tractor.
- Lower lift lever to its lowest position.
- Connect front links to mower deck and secure with retainer springs..
- Connect suspension arms to rear deck brackets and secure with retainer springs.
- Connect anti-swaybar to chassis bracket and secure with retainer spring.
- Push clutch cable housing guide into bracket, slide collar onto guide and secure with large retainer spring.



- Place flat washer and clutch spring on idler pulley bolt and secure with small retainer spring.
- Install belt onto engine pulley.

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. 21 and 22)

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

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

Recheck measurements after adjusting.

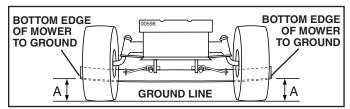


FIG. 21

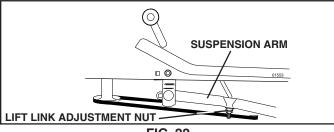


FIG. 22

FRONT-TO-BACK ADJUSTMENT (See Figs. 23 and 24) IMPORTANT: DECK MUST BE LEVEL SIDE-TO-SIDE. IF THE FOLLOWING FRONT-TO-BACK ADJUSTMENT IS NECESSARY, BE SURE TO ADJUST BOTH FRONT LINKS EQUALLY SO MOWER WILL STAY LEVEL SIDE-TO-SIDE.

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

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

- Before making any necessary adjustments, check that both front links are equal in length.
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of mower loosen nut "E" on both front links an equal number of turns.

- When distance "D" is 1/8" to 1/2" lower at front than rear, tighten nuts "F" against trunnion on both front links.
- To raise front of mower, loosen nut "F" from trunnion on both front links. Tighten nut "E" on both front links an equal number of turns. The two front links must remain equal in length.
- When distance "D" is 1/8" to 1/2" lower at front than rear. tighten nut "F" against trunnion on both front links.
- Recheck side-to-side adjustment.

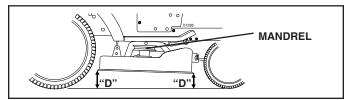


FIG. 23

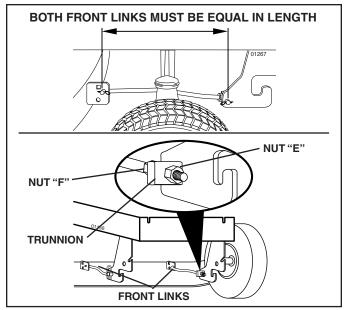


FIG. 24

TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 25)

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

BELT REMOVAL -

- Remove mower from tractor (See "TO REMOVE MOWER" in this section of this manual).
- Work belt off both mandrel pulleys and idler pulleys.
- Pull belt away from mower.

BELT INSTALLATION -

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

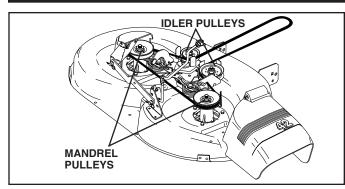


FIG. 25

TO CHECK AND ADJUST BRAKE (See Fig. 26)

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

If tractor requires more than five (5) feet to stop at highest speed in highest gear on a level, dry concrete or paved surface, then brake must be checked and adjusted.

TO CHECK BRAKE

- Park tractor on a level, dry concrete or paved surface, depress clutch/brake pedal all the way down and engage parking brake.
- Disengage transmission by placing freewhel control in "transmission disengaged" position. Pull freewheel control out and into the slot and release so it is held in the disengaged position.

The rear wheels must lock and skid when you try to manually push the tractor forward. If the rear wheels rotate, the brake needs to be adjusted or the pads need to be replaced.

TO ADJUST BRAKE

- Depress clutch/brake pedal all the way down and engaģe parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- If distance is other than 1-9/16", loosen jam nut and turn nut "A" until distance becomes 1-9/16". Retighten jam nut against nut "A".
- Engage transmission by placing freewheel control in "transmission engaged" position.
- Road test tractor for proper stopping distance as stated above. Readjust if necessary. If stopping distance is still greater than five (5) feet in highest gear, further maintenance is necessary. Replace brake pads or contact a qualified service center.

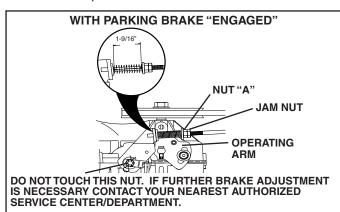


FIG. 26

TO REPLACE MOTION DRIVE BELT (See Fig. 27)

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

BELT REMOVAL -

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

NOTE: Observe entire motion drive belt and position of all belt guides and keepers.

- Remove belt from stationary idler and clutching idler.
- Remove belt downward from around engine pulley.
- Pull belt slack toward rear of tractor. Carefully remove belt upwards from transmission input pulley and over cooling fan blades.
- Remove belt from center span keeper and pull belt away from tractor. BELT INSTALLATION -

- Carefully work new belt down around transmission cooling fan and onto the input pulley.
- Slide belt into the center span keeper.
- Pull belt toward front of tractor and roll around the top groove of engine pulley.
- Install belt through stationary idler and clutching
- Make sure belt is in all pulley grooves and inside all belt guides and keepers.
- Install mower (See "TO INSTALL MOWER" in this section of manual).

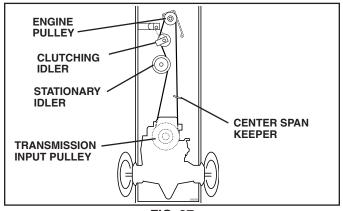


FIG. 27

TRANSAXLE MOTION CONTROL LEVER **NEUTRAL ADJUSTMENT(See Fig. 28)**

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

- Loosen adjustment bolt in front of the right rear wheel, and lightly tighten.
- Start engine and move motion control lever until tractor does not move forward or backward.
- Hold motion control lever in that position and turn engine
- While holding motion control lever in place, loosen the adjustment bolt.
- Move motion control lever to the neutral (N) (lock gate) position.
- . Tighten adjustment bolt securely.

NOTE: If additional clearance is needed to get to adjustment bolt, move mower deck height to the lowest position.

After above adjustment is made, if the tractor still creeps forward or backward while motion control lever is in neutral position, follow these steps:

- Loosen the adjustment bolt.
- Move the motion control lever 1/4 to 1/2 inch in the direction it is trying to creep.
- Tighten adjustment bolt securely.
- Start engine and test.
- If tractor still creeps, repeat above steps until satisfied.

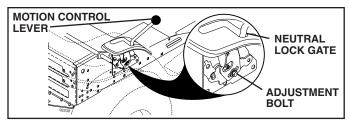


FIG. 28

TRANSMISSION REMOVAL/REPLACEMENT

Should your transmission require removal for service or replacement, it should be purged after reinstallation and before operating the tractor. See "PURGETRANSMISSION" in the 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/CAMBER

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

TO REMOVE WHEEL FOR REPAIRS (See Fig. 29)

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

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

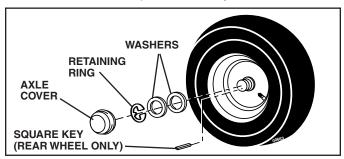


FIG. 29

TO START ENGINE WITH A WEAK BATTERY (See Fig. 30)



WARNING: 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 Maintenance section of this manual).

If "jumper cables" are used for emergency starting, follow this procedure:

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

TO ATTACH JUMPER CABLES -

- Connect one end of the RED cable to the POSITIVE (+) terminal of each battery(A-B), taking care not to short against tractor chassis.
- Connect one end of the BLACK cable to the NEGATIVE
 (-) terminal (C) of fully charged battery.
- Connect the other end of the BLACK cable (D) 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.

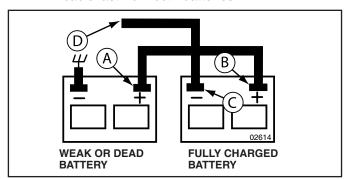


FIG. 30

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.

TO REPLACE FUSE

Replace with 20 amp automotive-type plug-in fuse. The fuse holder is located behind the dash.

TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 31)

- 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.

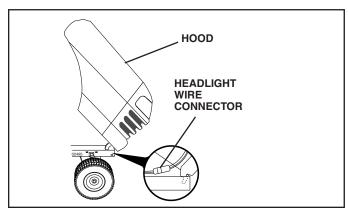


FIG. 31

ENGINE

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

TO ADJUST THROTTLE CONTROL CABLE (See Fig. 32)

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

- With engine not running, move throttle control lever from slow to choke position. Slowly move lever from choke to fast position.
- Check to see if hole in throttle lever and hole in speed control bracket are aligned.
- If holes are not aligned, loosen cable clamp screw and align the holes by inserting a pencil or a 1/4" drill bit through both holes.
- Pull throttle cable up to remove slack and tighten cable clamp screw. Remove alignment pencil or drill bit.

TO ADJUST CARBURETOR (See Fig. 33)

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

In general, turning the adjusting needles **in** (clockwise) decreases the supply of fuel to the engine giving a leaner fuel/air mixture. Turning the adjusting needles **out** (counterclockwise) increases the supply of fuel to the engine giving a richer fuel/air mixture.

IMPORTANT: DAMAGETOTHENEEDLES AND THE SEATS IN CARBURETOR MAY RESULT IF NEEDLE IS TURNED IN TOO TIGHT.

NOTE: The carburetor on this engine is low emission. It is equipped with an idle fuel adjusting needle with a limiter cap, which allows some adjustment within the limits allowed by the cap. Do not attempt to remove the limiter cap. The limiter cap cannot be removed without breaking the adjusting needle.

- Be sure you have a clean air filter and the throttle control cable is adjusted properly (see above).
- Start engine and allow to warm for five minutes. Make adjustments with engine running and shift/motion control lever in neutral (N) position.
- Idle speed setting With throttle control lever in slow position, engine should idle at 1750 RPM. If engine idles too slow or fast, turn idle speed adjusting screw in or out until correct idle is attained.
- <u>Idle fuel needle setting</u> With throttle control lever in slow position, turn idle fuel adjustment needle **in** (clockwise) until engine begins to die and then turn **out** (counterclockwise) until engine runs rough. Turn needle to a point midway between those two positions.
- Recheck idle speed. Readjust if necessary.

ACCELERATION TEST -

 Move throttle control lever from slow to fast position. If engine hesitates or dies, turn idle fuel adjusting needle out (counterclockwise) 1/8 turn. Repeat test and continue to adjust, if necessary, until engine accelerates smoothly.

High speed stop is factory adjusted. Do not adjust - 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, CONTACTYOUR NEAREST AUTHORIZED SERVICE CENTER/DEPARTMENT, WHICH HAS PROPER EQUIPMENT AND EXPERIENCE TO MAKE ANY NECESSARY ADJUSTMENTS.

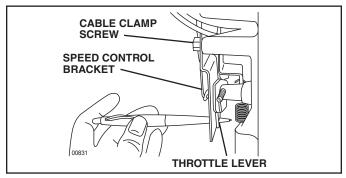


FIG. 32

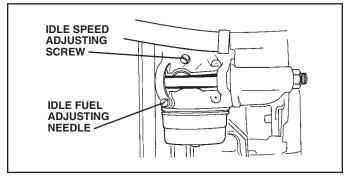


FIG. 33

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.



WARNING: 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 Maintenance 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 Maintenance 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 Maintenance 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.

- Empty the fuel tank by starting 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 empty 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 Maintenance 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 COVERTRACTOR WHILE ENGINE AND EXHAUST AREAS ARE STILL WARM.

TROUBLESHOOTING POINTS

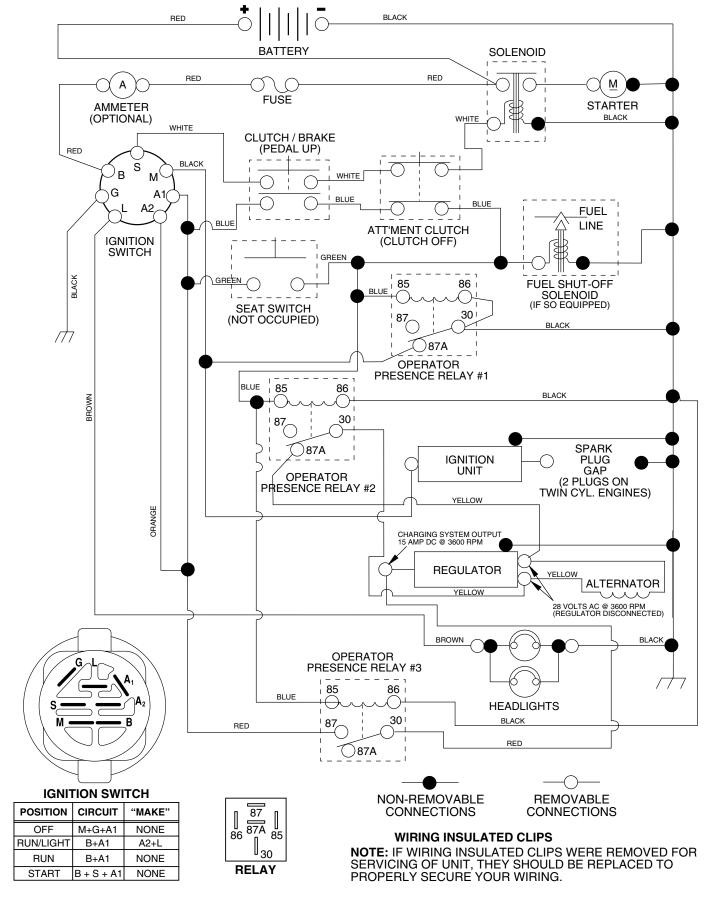
PROBLEM	CAUSE	CORRECTION
Will not start	 Out of fuel. Engine not "CHOKED" properly. Engine flooded. Bad spark plug. Dirty air filter. Dirty fuel filter. Water in fuel. Loose or damaged wiring. Carburetor out of adjustment. 	 Fill fuel tank. See "TO START ENGINE" in Operation section. Wait several minutes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

TROUBLESHOOTING POINTS

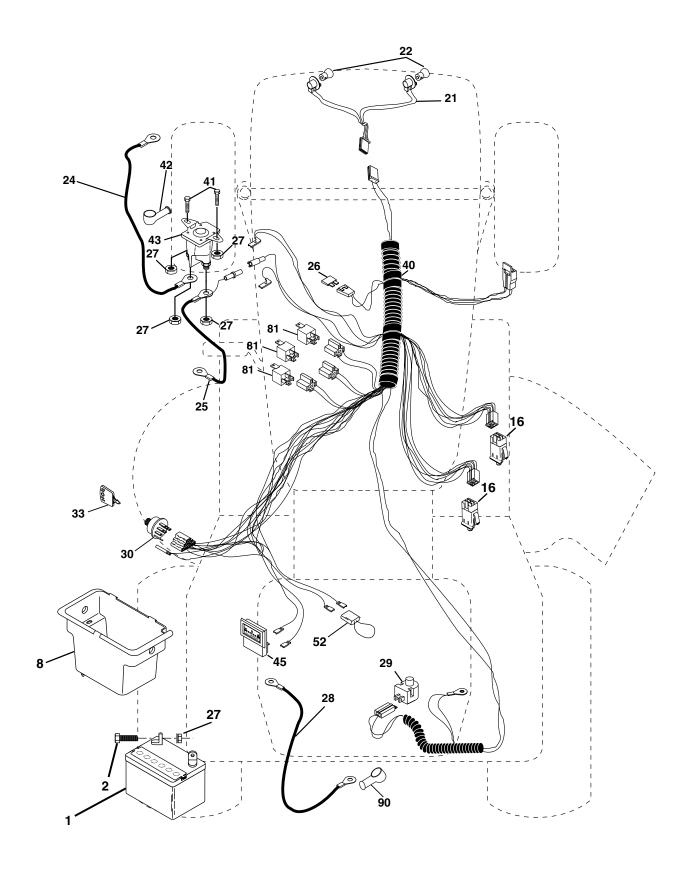
PROBLEM	CAUSE	CORRECTION
Engine continues to run when operator leaves seat with attachment clutch engaged	Faulty operator-safety presence control system.	Check wiring, switches and connections. If not corrected, contact an authorized service center/department.
Poor cut - uneven	 Worn, bent or loose blade.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

TRACTOR - - MODEL NUMBER 944.604950

SCHEMATIC



ELECTRICAL



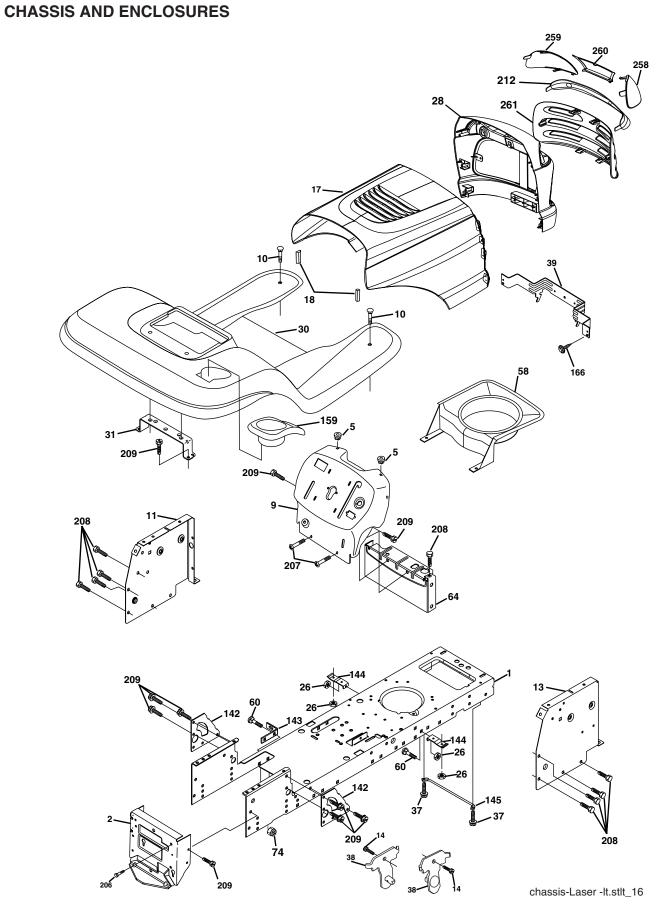
TRACTOR - - MODEL NUMBER 944.604950

ELECTRICAL

KEY NO.		DESCRIPTION
8 16 21 22 24 25 26 27 28 29 30 33 40 41 42 43 45 52	4799J 146147 175158 73510400 4207J 160784 175566 140403 179722 71110408	Battery 12 Volt 35 Amp Bolt Hex Hd 1/4-20 unc x 3/4 Case Battery Switch Interlock Push-In Harness Asm Light W/4152J Bulb Light #1156 Cable Battery 6 Ga. 11"red Cable Battery 6 Ga. w/16 wire,red Fuse 20 AMP Nut Kep Hex 1/4-20 Cable Ground 6 Ga. 12" black Switch Plunger Olive Switch Ign Key Ign Harness Ign Bolt Blk Fin Hex 1/4-20 unc x 1/2 Cover Terminal Red Solenoid Ammeter Protection Wire Loop (Hourmeter) Relay Asm. Cover Terminal Battery

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

TRACTOR - - MODEL NUMBER 944.604950

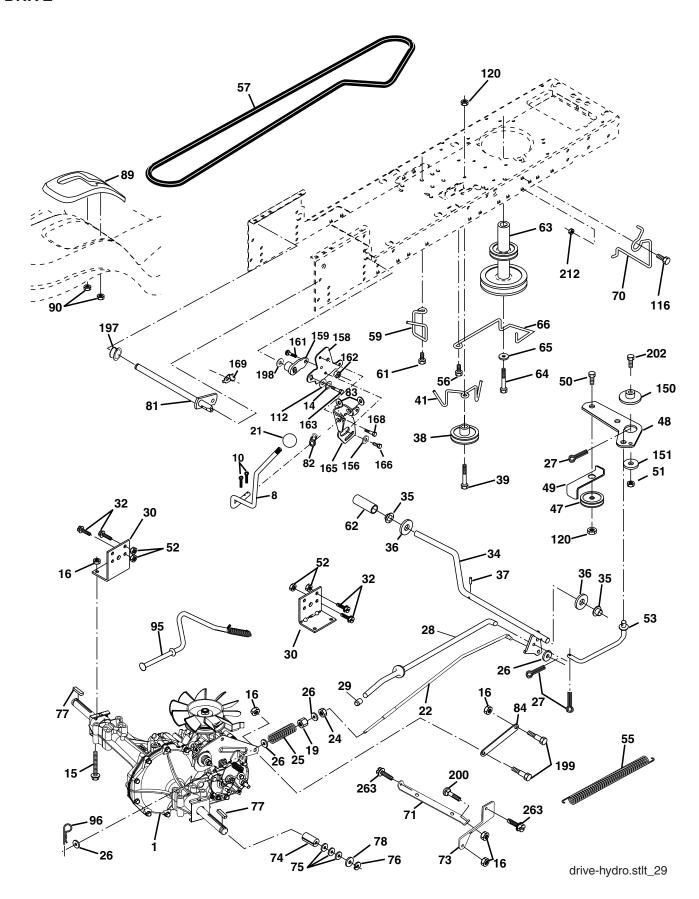


TRACTOR - - MODEL NUMBER 944.604950 CHASSIS AND ENCLOSURES

KEY NO.	PART NO.	DESCRIPTION
1	174619	Chassis
2	176554	Drawbar
5	155272	Bumper Hood/Dash
9	168337X011	
10	STD533710	
11	174996	Panel Dash Lh
13		Panel Dash Rh
14 17	17490608 185682X613	Screw Thdrol 3/8-16 x 1/2
18	184921	Bumper Hood
26	STD541437	·
28	184247	Grille/Len Laser (Includes Key Nos. 212, and 258 - 261)
30		Fender Footrest
31	139976	Bracket Support Fender
37	17490508	Screw Thdrol 6/16-18 x 1/2 TYT
38	175710	Bracket, Assembly Pivot
39	174714	Bracket Pivot Laser
58	150127	Duct Air
60	STD533707	
64	154798	Dash Lower STLT
74	STD541437	
142 143	175702 186689	Plate Reinforcement STLT Bracket Swaybar Chassis
144	175582	Bracket Pnt Footrest STLT
145	156524	Rod Pivot Chassis/Hood
159	155123X428	
166	171875	Screw HwHd Hi-Lo #13-16 x 3/4
206	170165	Bolt Shoulder 5/16-18
207	17670508	Screw Thdrol 5/16-18 x 1/2
208	17670608	Screw Thdrol 3/8-16 x 1/2
209	17000612	Screw Hex Wsh Thdr. 3/8-16 x 3/4
212		Insert Lens Reflective
258	184245X599	Lens Laser Clear RH
259		Lens Laser Clear LH
260		
261 	184258X428 5479J	Plug Button
	J+13J	Tiug Dullon

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

DRIVE



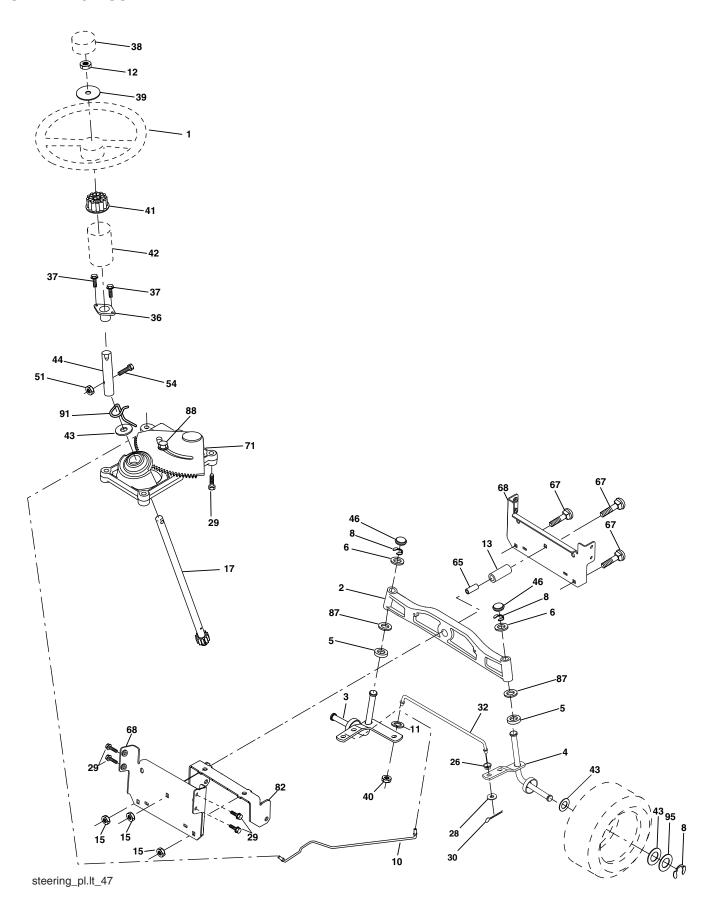
TRACTOR - - MODEL NUMBER 944.604950

DRIVE

KEY PAR NO. NO.	т	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 8 165 10 STI 14 100 15 744 16 STI 19 STI 21 106 22 169 24 STI 25 106 26 STI 27 STI 28 175 29 716 30 169 32 STI 34 175 35 120 36 STI 37 STI 38 179 39 721 41 175 47 127 48 154 49 123 50 721 51 STI 52 STI 53 105 56 170 57 140 59 169 61 171 62 888 63 175	592 0523107 578 1183X 0551062 0571810 1114 10622 5556 783 407 205X 10612 0541437 0541431 710X 7709X 160620 1294 1691 20614 133R	Transaxle (See Breakdown) Hydro Gear Model 314-0510 Rod Shift Pin Cotter 1/8 x 1 CAD Washer Lock Hvy. Helical Bolt, Hex FLGHD 5/16-18 Gr. 5 Nut Lock Hex W/Ins 5/16-18 unc P Nut Lock Hex W/Wsh 3/8-16 unc Knob Rod, Brake Hydro Nut Spring, Brake Rod Washer Pin Cotter 1/8 x 3/4 CAD. Rod, Parking Brake Cap, Parking Brake Bracket, Transaxle Bolt Hex Hd 5/16-18 unc x 3/4 Shaft, Foot Pedal Nibbed Bearing, Nylon Washer Pin, Roll Pulley, Idler, Composite Bolt Rdhd 3/8-16 unc x 2-3/4 Gr. 5 Keeper, Belt Retainer Pulley, Idler, V-Groove Bellcrank Clutch Grnd Drv STL Retainer, Belt Bolt Carr Sh 3/8-16 x 1-1/2 Gr.5 Nut Crownlock 3/8-16 unc Nut Crownlock 5/16-18 unc Link, Clutch Spring, Return, Clutch Screw 3/8-16 x 1.0 V-Belt, Ground Drive Keeper, Center Span Screw 3/8-16 x 3/4 Cover, Pedal Pulley, Engine	70 71 73 74 75 76 77 78 81 82 83 84 89 90 95 96 112 150 151 156 158 165 163 165 166 168 169 197 198 199 200 202 212 263	134683 169183 169182 137057 121749X STD581075 123583X 121748X 165596 165711 19171216 169594	Keeper Belt Engine Strap Torque Lh Hydro Strap Torque Rh Hydro Spacer, Split Washer 25/32 x 1-1/4 x 16 Ga. E-Ring Key, Square Washer 25/32 x 1-5/8 x 16 Ga. Shaft Asm. Cross Spring Torsion Washer 17/32 x 3/4 x 16 Ga. Link, Transaxle Console, Shift Nut Self Thd Wsh-Hd 1/4 Zinc Control Asm Bypass Hydro Retainer Spring 1" Zinc/Cad Washer 9/32 x 3/4 x 10 Ga. Bolt Rdhd Sq. Neck 3/8-16 x 1 Nut Lock Flg 3/8-16 unc Spacer Retainer Washer 13/32 x 2 x 10 Ga. Washer Srrted 5/16 ID x 1 x .125 Bracket Shift Mount Hub Shift Bolt Rdhd Sqnk 1/4-20 unc x 1 Gr. 5 Nut Crownlock 1/4-20 unc x 1 Gr. 5 Bracket Pivot Lever Screw 5/16-18 x 5/8 Bolt Shoulder 5/16-18 x .561 Plate Fastening LT Nyliner Snap-In 5/8" ID Washer Nyl 7/8" ID x .105" Bolt Shoulder 5/16-18 unc Bolt Rdhd Sqnk 5/16-18 unc Bolt Rdhd Sqnk 5/16-18 unc Bolt Rdhd Sqnk 5/16-18 unc x 1 Bolt 3/8-16 x 1-3/4 Gr. 5 Nut Hex Flange Lock Screw 3/8-16 x .75
65 STI	937 0551143 778	Bolt, Hex, 7/16-20 x 4 x Gr.5 Washer Keeper Belt Engine	NOTI	E: All compone 1 inch = 25.	ent dimensions given in U.S. inches 4 mm

TRACTOR - - MODEL NUMBER 944.604950

STEERING ASSEMBLY



TRACTOR - - MODEL NUMBER 944.604950

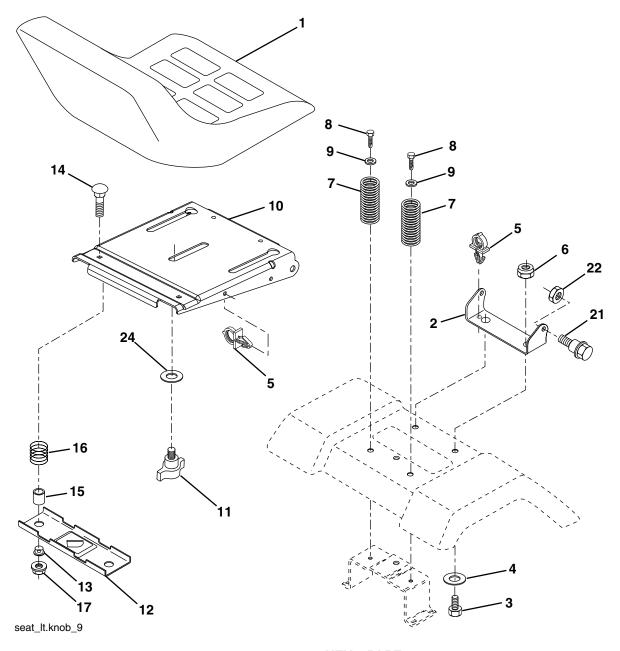
STEERING ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 8 10 11 2 3 15 7 26 8 29 30 2 36 37 38 39 40 41 42 43 44 65 1 54 65 67 88 91 95	184704X428 184706 169840 169839 6266H 121748X 12000029 175121 STD551137 73940800 136518 145212 180641 126847X 19131416 17000612 STD561210 130465 155099 152927 159946X428 19182411 73540600 159945 145054X428 121749X 180640 184946X505 73540400 71130420 160367 72110618 169827 175146 169835 173966 175118 175553 188967	Wheel Steering Axle Asm Spindle Asm LH Spindle Asm RH Bearing Race Thrust Harden Washer 25/32 x 1-5/8 x 16 Ga. Ring Klip #t5304-75 Link Drag Extended Stamp Washer Lock Hvy Hlcl Spr 3/8 Nut Hex Jam Toplock 1/2-20 unf Spacer Bearing Axle Nut Hex Flange Lock Shaft Asm Strg Bushing Link Drag Blk LR Washer 13/32 x 7/8 x 16 Ga. Screw 3/8-16 x 3/4 Pin Cotter 1/8 x 3/4 Cad Rod Tie Wire Form 19 75 Mech Bushing Strg Screw Insert Cap Strg Wh Au Washer 9/16 x 1-1/2 11 Ga. Nut Crownlock 3/8-24 Adaptor Wheel Strg

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

TRACTOR - - MODEL NUMBER 944.604950

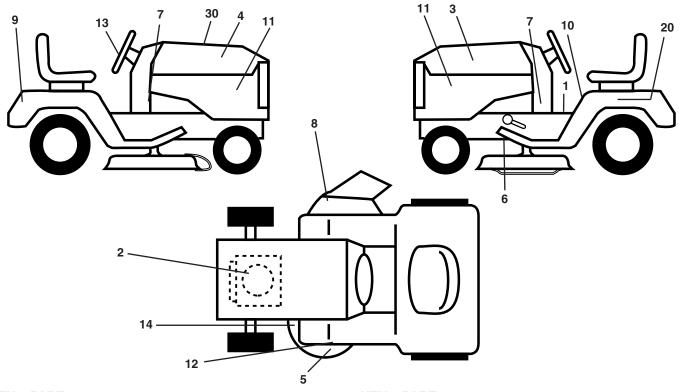
SEAT ASSEMBLY



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3	180597 180166 71110616	Seat Bracket Pivot Seat 8 720 Bolt Fin Hex 3/8-16 unc x 1	12 13 14	121246X 121248X 72050412	Bracket Mounting Switch Bushing Snap Blk Nyl 50 Id Bolt Rdhd Sgnk 1/4-20 x 1-1/2
4 5	19131610 145006	Washer 13/32 x 1 x 10 Ga. Clip Push-In	15 16	134300 121250X	Spacer Split 28x 96 Yel Zinc Spring Cprsn 1 27 Blk Pnt
6	STD541437	Nut Hex w/Ins. 3/8-16 unc	17	123976X	Nut Lock 1/4 Lge Flg Gr. 5 Zinc
7	124181X	Spring Seat Cprsn 2 250 Blk Zi	21	171852	Bolt Shoulder 5/16-18 unc
8	17000616	Screw 3/8-16 x 1.5	22	STD541431	Nut Hex Lock W/Ins 5/16-18
	19131614	Washer 13/32 x 1 x 14 Ga.	24	19171912	Washer 17/32 x 1-3/16 x 12 Ga.
10	180186	Pan Seat	NOTI	E: All compon	ent dimensions given in U.S. inches
11	166369	Knob Seat		1 inch = 25.	4 mm

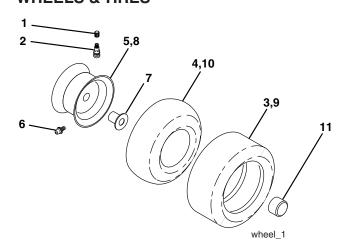
TRACTOR - - MODEL NUMBER 944.604950

DECALS



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	157032	Decal Fend STLT Oper	12	179128	Decal Mower "B" "42"
2	177374	Decal Engine	13	164065	Decal Strng Whl.
3	186281	Decal Hood LH	14	160396	Decal V-Belt Schematic
4	186280	Decal Hood RH	20	149517	Decal Bat Dan/Psn
5	172331	Decal Deck Heavy Duty	30	191191	Decal Replacement Parts
6	146046	Decal V Belt Drive Sch		138311	Decal Handle Lft Height Adjust
7	177350	Decal Lower Dash		166960	Decal Bypass
8	170563	Decal Warning		184310X428	Pad Footrest LH STLT
9	186282	Decal Craftsman		184311X428	Pad Footrest RH STLT
10	157140	Decal Fender Danger Eng/Fr		191282	Manual Owner's (English)
11	186283	Decal Side Panel		191283	Manual Owner's (French)

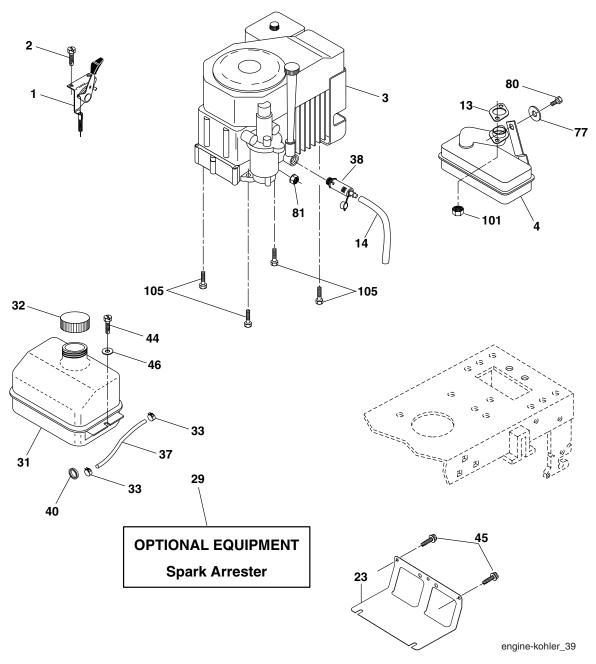
WHEELS & TIRES



KEY NO.	PART NO.	DESCRIPTION
1	59192	Cap Valve Tire
2	65139	Stem Valve
3	106222X	Tire F
4	59904	Tube Front (Service Item Only)
5	106732X624	Rim Asm 6" front Service
6	278H	Fitting Grease (Front Wheel Only)
7	9040H	Bearing Flange (Front Wheel Only)
8	106108X624	Rim Asm 8" rear Service
9	122082X	Tire R
10	7152J	Tube Rear (Service Item Only)
11	104757X428	Cap Axle Blk 1 50 x 1 00
	144334	Sealant, Tire (10 oz. Tube)

TRACTOR - - MODEL NUMBER 944.604950

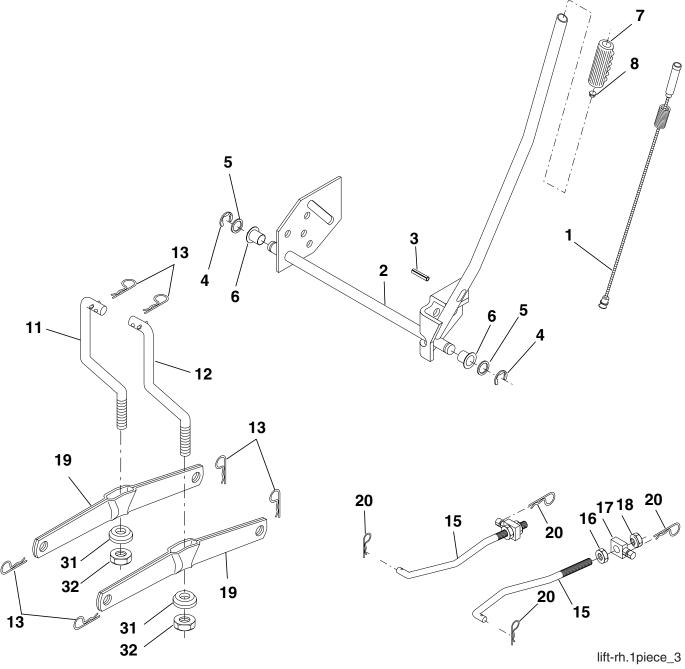
ENGINE



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	170548X505	Control Throt Paddle	38	181654	Plug Drain Oil Easy
2	17720408	Screw Hex Thd Cut 1/4-20 x 1/2	40	124028K	Bushing Snap Nyl Blk Fuel Line
3		Engine (See Breakdown)	44	17670412	Screw Hexwsh Thdrol 1/4-20 x 3/4
		Kohler Model CV492-27506	45	17000612	Screw Hex Wsh Thdrol 3/8-16 x 3/4
4	174667	Muffler Exhaust	46	19091416	Washer 9/32 x 7/8 x 16 Ga.
13	12-041-03	Gasket Muffler	77	19101216	Washer 5/16 x 3/4 x 16 Ga.
14	148456	Tube Drain Oil Easy	80	74760508	Bolt Hex Hd 5/16-18 unc x 1/2
23	169837	Shield BRN/DBR Guard	81	73510400	Nut Keps Hex 1/4-20
29	137180	Arrestor Spark	101	184362	Nut Flange M8-1.25
31	184900	Tank Fuel 1.25	105	17120616	Screw 3/8-16 x 1
32	140527	Cap Fuel Gauge	NOTE	A II	
33	123487X	Clamp Hose Blk	NOTE		nent dimensions given in U.S. inches
37	137040	Line Fuel		1 inch = 25	.4 [[[[]]

TRACTOR - - MODEL NUMBER 944.604950

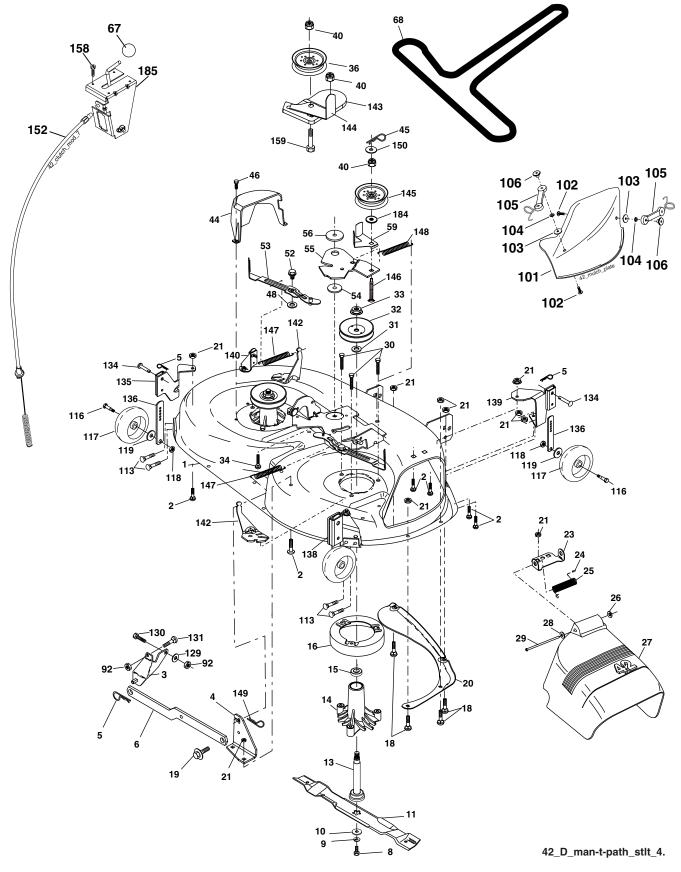
MOWER LIFT



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	159460	Wire Asm Inner W/Plunger	13	STD624008	Retainer Spring
2	159471	Shaft Asm Lift	15	173288	Link Front
3	105767X	Pin Groove	16	73350800	Nut Jam Hex 1/2-13 unc
4	STD581062	E Ring	17	175689	Trunnion Blk Zinc
5	19211621	Washer 29/32 x 1-1/4 x 21 Ga.	18	73800800	Nut Lock W/Wsh 1/2-13 unc
6	120183X	Bearing Nylon Blk .629 ID	19	139868	Arm Suspension Rear
7	125631X	Grip Handle Fluted	20	163552	Spring Retainer
8	122365X	Button, Plunger	31	169865	Bearing Pvt. Lift
11	139865	Link Lift Lh Fixed Length	32	73540600	Nut Lock 3/8-24
12	139866	Link Lift Rh Fixed Length	NOTI	E: All compon	ent dimensions given in U.S. inches

TRACTOR - - MODEL NUMBER 944.604950

MOWER DECK

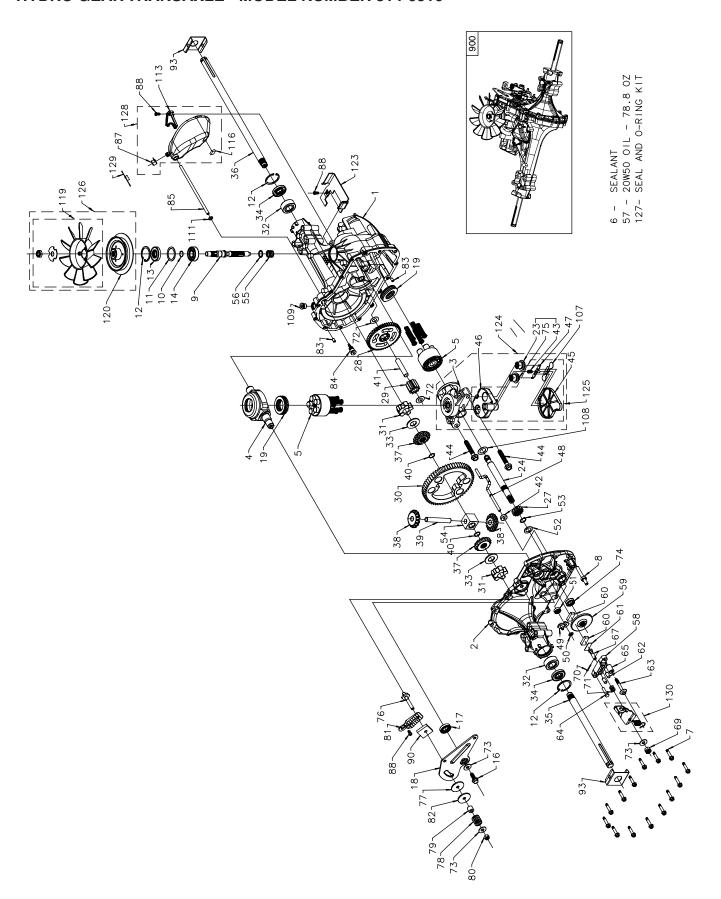


TRACTOR - - MODEL NUMBER 944.604950

MOWER DECK

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	182032	Mower Deck Assembly, 42"	67	184939	Knob Custom Oval Red
2	STD533107	Bolt	68	144959	V-Belt
3	138017	Bracket Assembly, Sway Bar, Front	92	STD541437	Nut
4	165460	Bracket Sway Bar 38/42" Deck	101	136420	Mulcher Cover
5	STD624008	Retainer Spring	102	71081010	Screw
6	178024	Bar Sway Deck	103	19061216	Washer #10
8	850857	Bolt, Hex 3/8-24 x 1.25 Gr. 8	104	STD551110	
9	STD551137	Washer, Lock	105	160793	Latch Assembly, Bagger
10	140296	Washer, Hardened	106	2029J	Nut, Weld
		(The following blades are available)	113	17060512	Screw 5/16-18 x 3/4
11	134149	Blade, 42" Mulching Std (For mulch-	116	184219	Bolt, Shoulder
		ing mowers only)	117	174873	Wheel, Gauge
	139775	Blade, 42" Mulching Premium (For	118	73930600	Nut, Centerlock 3/8-16
		better wear when mulching)	119	STD551037	Washer 3/8 x 7/8 x 14 Ga.
	138971	Blade, 42" Hi-Lift (For bagging or	129	19131312	Washer 13/32 x 13/16 x 12 Ga.
		discharging)	130	STD523710	
13	137645	Shaft Assembly, Mandrel, Vented	131	STD533710	Bolt, Rdhd Sqnk 3/8-16 unc x 1
14	128774	Housing, Mandrel, Vented	134	156941	Pin Head Rivet
15	110485X	Bearing, Ball, Mandrel	135	159765	Bracket, Gauge, Wheel L.H. Rear
16	174493	Stripper, Vented Mower Deck	136	155986	Bar Adjusting Gauge Whl
18	72140505	Bolt, Carriage 5/16-18 x 5/8	138	159763	Bracket Asm Whl. Ga. Rear RH
19	132827	Bolt, Shoulder	139	159767	Bracket, Gauge, Wheel R.H. Front
20 21	159770 STD541431	Baffle, Vortex Nut Crownlock 5/16-18 unc	140 142	159768 165890	Bracket Asm. Whl. Ga. Front LH
23			142		Arm Spring Brake Mower
23 24	177563 105304X	Bracket, Deflector Cap, Sleeve	143	157109 158634	Bracket Arm Idler 42" Keeper Belt 42" Clutch Cable
25	123713X	Spring, Torsion, Deflector	145	165888	Pulley Idler Flat
26	110452X	Nut, Push	146	171977	Bolt Carriage Idler
27	130968X428	Shield, Deflector	147	131335	Spring Extension
28	19111016	Washer 11/32 x 5/8 x 16 Ga.	148	169022	Spring Extension Spring Return Idler
29	131491	Rod, Hinge	149	165898	Retainer Spring Yellow Zinc
30	173984	Screw Thdrol Washer Head	150	19091210	Washer 9/32 x 3/4 x 10 Ga.
31	187690	Washer, Spacer	152	169676	Cable Clutch 42 In
32	153535	Pulley, Mandrel	158	17720408	Screw Hex Thd Cut 1/4-20 x 5/8
33	178342	Nut, Toplock, Flanged	159	72140614	Bolt Rdhd Sqn 3/8-16 unc x 1-3/4
34	72110612	Bolt Carr. Sh 3/8-16 x 1-1/2 Gr. 5	184	19131410	Washer 13/32 x 7/8 x 10 Ga.
36	131494	Pulley, Idler, Flat	185	188234	Head Asm. Cable Clutch
40	73900600	Nut Lock Flg 3/8-16 unc		130794	Mandrel Assembly (Includes Hous-
44	140088	Guard, Mandrel, L.H.			ing, Shaft and Shaft Hardware Only
45	STD624003	Retainer			- Pulley Not Included)
46	137729	Screw, Thd. Roll 1/4-20 x 5/8		186917	Replacement Mower Complete
48	133944	Washer, Hardened			(Std. Deck-Order separately
52	139888	Bolt, Shoulder 5/16-18 unc			mulcher cover, and guage wheel
53	184907	Arm Assembly, Pad, Brake			components key nos. 101 - 106,
54	178515	Washer, Hardened			and 116 - 119,)
55	155046	Arm, Idler			
56	165723	Spacer, Retainer	NOTE	E: All compon	ent dimensions given in U.S. inches
59	141043	Guard, TUV Idler		1 inch = 25	.4 mm

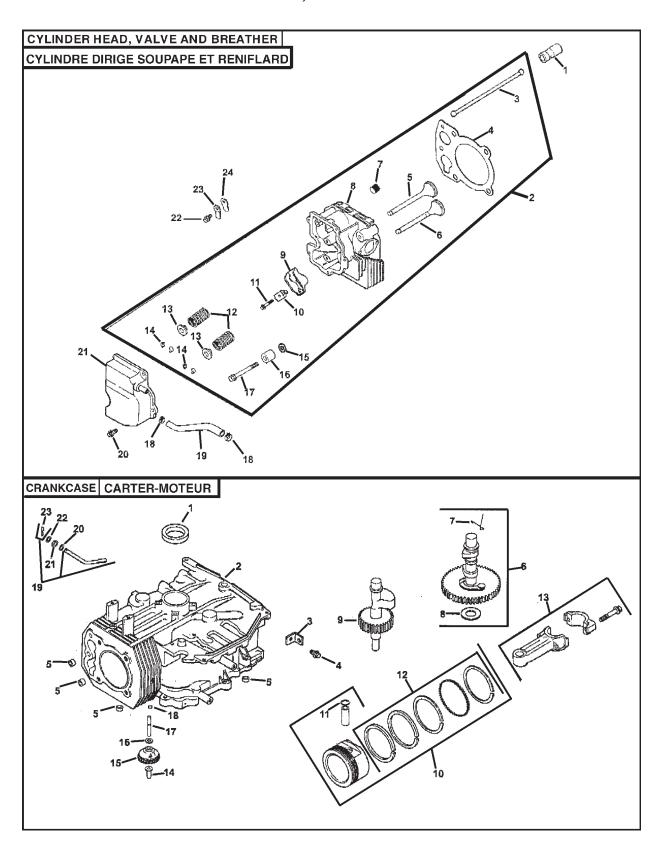
TRACTOR - - MODEL NUMBER 944.604950 HYDRO GEAR TRANSAXLE - MODEL NUMBER 314-0510



TRACTOR - - MODEL NUMBER 944.604950 HYDRO GEAR TRANSAXLE - MODEL NUMBER 314-0510

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	170351	Kit, Main Housing Main Housing, Machined Bushing .865 X .985 X .790	71 72 73	170417 170418 142884	Brake Spring Washer (310-0750) Washer, Flat
2	170352	Kit, Side Housing Side Housing, Machined Bushing .865 X .985 X .790	74 75 76	170419 170420 170421	Seal, Oil Ass'y Check Plug Bolt, Stud 5/16-24
3	170353	Bushing .624 X .719 X .562 Kit, Center Section Center Section, Machined Bushing .707 X .788 X .501	77 78 79	170422 142969 142980	Puck, Friction Spring Spacer
4 5	170354 169898	Bushing .707 X .788 X .591 Swashplate, Trunnion Machined Kit, Cylinder Block (10cc) Block - Cylinder	80 81 82 83	150778 170423 170424 161168	Nut, Nylon Insert Hex Lock 5/16-24 Wedge, Friction Clip, Washer Pin
0	170000	Piston Spring, Compression Washer Thrust	84 85 87	170425 170426 173160	Fitting, 5/16 X Sae 5/32 Tube Hose, Expansion Tank Cap, Vent
6 7 8 9	178322 170356 170357 170358	Sealant Tube Hexflange Screw 1/4-20 X 1.25 Stud, 5/16-24 Hex Double End Shaft, Input	88 90 93 107	178334 170430 170431 170432	Bolt, Self Tapping (BDR) Puck, Inner Wedge Spring Clip, Housing Deflector
10 11 12	170359 170360 169870	Retaining Ring Spacer Retaining Ring	108	170433 170434	Washer, Motor Shaft .71ID X 1.15OD X .03 Thick Plug, Straight Thread 9/16-18
13 14 16 17	170361 173158 170362 170363	Seal, Lip .67 X 1.58 X .276 Bearing, Ball 6203 (BDR) Hex Flange Head Screw 1/4-20 X 1.25 Seal, Lip 18 X 32 X 7	111 113 119	170435 170437 191031	O-ring .7 X .301 ID Bracket, Support Expansion Tank Kit, Fan - Washer - Nut Fan, 7 In
18 19 23	170364 173159 170365	Arm, Control Bearing, Thrust (10cc) Check Plug Assembly	120	188312	Hex Lock Nut 1/2-20 (Nylon Insert) Washer, Or Slotted, .53 X 1.63 X .06 Pulley
24 27 28 29	170366 170367 170368 170369	Shaft Motor Gear, Pinion, 13t 10t / 48t Gear Gear, 10t Jackshaft	123 124	178800 170444	Belt Keeper Kit, Center Section Filter Bypass Center Section Machining Base Filter W/ Poppet
30 31 32	170370 170371 170389	60t Bullgear Sleeve Bearing .75 X 1.75 X .625 Sleeve Bearing (Outboard) .75 X 1.575 X .625			Check Plug Assembly, .027 Washer Check Plug Assembly, Washer Spring, Bypass Actuator, Bypass
33 34 35	142991 170390 170391	Washer Lip Seal, Axle Shaft Shaft, Axle (Keyed, R.h.)			Deflector Bottom, Filter Bushing, .707 X .788 X .591
36 37 38 39 40	170392 150792 150793 150809 170393	Shaft, Axle (Keyed, L.h.) Gear, Splined Diff. (210-1000 & 310-0750) Gear, Miter Diff. (210-1000 & 310-0750) Differential Shaft (310-0750) Retaining Ring		125 170445	Kit, Filter Bottom, Filter Spring, Bypass Actuator, Bypass Deflector
41 42 43 44	170394 170395 170396 150797	Pin, Jackshaft Magnet, Ring Spring, Bypass Bolt 3/8-24 X 2-1/2	126	191028	Base, Filter W/ Poppet Kit, Fan/pulley Hex Jam 1/20-20 (Nylon Inser) Washer, OD Slotted, .53 X 1.63 X .06
45 46 47	170397 170398 170399	Filter Base, Filter Actuator, Bypass	127	170447	Fan, 7 In Pulley Kit, Seal
48 49 50 51 52	170400 170401 170402 170403 170404	Rod, Bypass Actuator Arm, Bypass Retaining Ring .25 External Seal, Lip .741 X .25 X .25 Washer, Flat 0.050" (210-1000)			Lip Seal .67 X 1.58 X .276 Lip Seal 18 X 32 X 7 Lip Seal .706 X 1.584 X .25 Lip Seal .741 X .250 X .250 Tc Oil Seal .625 X 1.0 X .25
53 54 55 56 57	170405 170406 142977 142978	Retaining Ring Bearing, Center Block Spring, Helical Compression Washer, Block Thrust 20W-50 Oil	128	173165	O-ring .07 X .301 ID Kit, Expansion Tank Tank, Expansion Cap, Vent Bolt, Solf Tanging 10.32 X 1/2
58 59 60 61	142929 170408 142883 142882	Kit, Brake Yoke Rotor, Brake Brake Puck Brake Puck Plate	129 130	191032 186352	Bolt, Self Tapping 10-32 X 1/2 Bracket, Support Expansion Tank Silicon Sponge 1/2 X 1/2 X 3/16 Cap, Expansion Tank Shipping Kit, Brake Arm And Spring
62 63 64 65	170409 170410 142892 170411	Pin, Brake Actuating Hfhcs 1/4-20 X 2 W/patch, Special Flange Bolt, Nylok Spacer, Brake Torsion Spring			Arm, Brake Spring, Brake Arm Bias Instruction Sheet
67 69 70	170411 170413 170415 170416	Bolt, Square Head - Brake Nut, Castle 5/16-24 Pin, Cotter 3/32x3/4	NOTE 25.4 n		dimensions given in U.S. inches 1 inch =

TRACTOR - - MODEL NUMBER 944.604950 KOHLER ENGINE - MODEL NUMBER CV492, TYPE NUMBER 27506



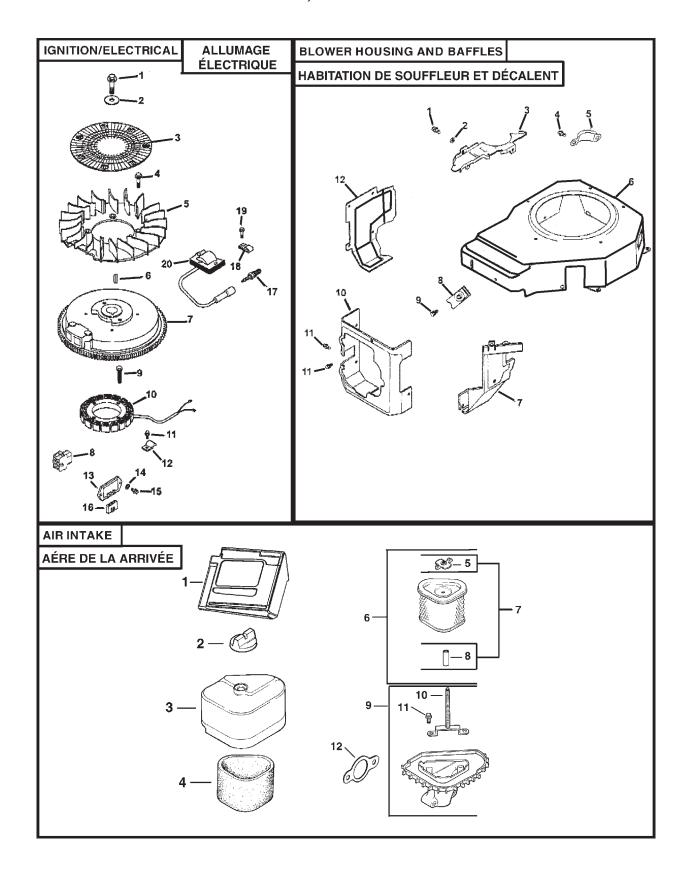
TRACTOR - - MODEL NUMBER 944.604950 KOHLER ENGINE - MODEL NUMBER CV492, TYPE NUMBER 27506

CYLINDER HEAD/VALVE/BREATHER

CRANKCASE

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2		Lifter, valve (2) Kit, cylinder head (Includes 3-17, Gaskets 12 041 01-S (Qty. 2),	1 2	12-032-03-S	Seal, crankshaft Block, cylinder (Use Short Block 12 522 49)
	_	12 041 02-S, & 12 041 03-S)	3	12-445-02-S	
3		Rod, push (2)	4 5		Screw, hex. flange M8x1.25x25
4		Gasket, cylinder head	5 6		Dowel, locating (4) Kit, camshaft (Includes 7,8)
5		Valve, intake (Std.)	7		Spring, actuating
6		Valve, intake (.25) Valve, exhaust (Std.)	8	12-009-31-3	Shim, camshaft (A.R.) blue
O		Valve, exhaust (310.)	O		Shim, camshaft (A.R.) red
7		Plug, allen hd. pipe 1/8"			Shim, camshaft (A.R.) yellow
8		Cylinder Head			Shim, camshaft (A.R.) green
9		Arm, rocker (2)			Shim, camshaft (A.R.) gray
10		Pivot, rocker arm (2)			Shim, camshaft (A.R.) black
11	M-640034-S	Screw, hex. flange M6xl.0x34 (2)			Shim, camshaft (A.R.) white
12	12-089-01-S	Spring, valve (2)	9		Shaft, balance
13	12-173-01-S	Cap, valve spring (2)	10		Piston w/Ring Set (Std.) (Includes 11,12)
14	12-755-03-S	Kit, retainer (2)		12-8/4-11-S	Piston w/Ring Set (.08)
15		Washer, plain 13/32"		12-874-08-5	Piston w/Ring Set (.25)
16		Spacer, head bolt exhaust port	11		Piston w/Ring Set (.50) Retainer, piston pin (2)
17 18		Screw, hex. flange M10x1.5x81 (5)	11 12	12 010 02-3	Ring Set (Std.)
19	12 226 02 8	Clamp, hose (2) Hose, breather	12	12-108-07-S	Ring Set (3td.)
20	M-645020-S	Screw, hex. flange M6x1.0x20 (5)			Ring Set (.50)
21	12-096-07-S	Cover, valve w/nipple	13		Connecting Rod (Std.)
22		Screw, hex. flange M5x0.8x10			Connecting Rod (.25)
23		Retainer, breather reed	14	12-380-01-S	Pin, governor regulating
24		Reed, breather	15	12-043-05-S	Gear, governor
		,	16		Washer, plain 6 mm
			17		Shaft, governor gear
			18	52-139-09-S	
			19	12-755-64-S	Kit, gov. cross shaft w/clip (Includes 23)
			20	X-25-102-S	Washer, plain 1/4"
			21	12-032-01-S	Seal, governor cross shaft
			22 23		Washer, plain 6 mm Clip, hitch pin
			20	12-134-03-3	Olip, filtori pili

TRACTOR - - MODEL NUMBER 944.604950 KOHLER ENGINE - MODEL NUMBER CV492, TYPE NUMBER 27506



TRACTOR - - MODEL NUMBER 944.604950 KOHLER ENGINE - MODEL NUMBER CV492, TYPE NUMBER 27506

IGNITION/ELECTRICAL

KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	24-162-03-S 25-086-47-S 12-157-06-S X-42-15-S 12-025-15-S 12-155-09-S M-548025-S 237878-S M-545020-S	Washer, plain 3/8" Screen, grass Bolt, shoulder M6x1.0x16 (4) Fan Key Flywheel Connector Screw, hex. cap M5x0.8x25 (2) Kit, stator Screw, hex. flange M5x0.8x20 (2) Clip, cable (2) Regulator, rectifier - 15 amp Washer, lock 1/4" Screw, hex. flange M6x1.0x16 (2) Connector Spark Plug Clip, cable (2) Screw, hex. flange M5x0.8x10 (2)
NOT IL	LUSTRATED	
	12-176-44-S 24-518-12-S	, 3
	12-518-35-S	Lead, white (36" - 18 gauge - fully insulated push on tab and
	X-25-5-S	uninsulated socket terminals) Washer, plain 5/16" (attach ground lead and this washer to lift strap screw)

BLOWER HOUSING & BAFFLES

NOT ILLUSTRATED

KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11	24-468-10-S 12-146-07-S M-550010-S 24-096-05-S 12-027-76-S 12-063-18-S 25-154-02-S 12-086-37-S 12-063-20-S M-645016-S	Screw, hex. flange M5x0.8x10 (6) Washer, plain 1/4" Plate, blower housing Screw, hex. flange M5x0.8x10 Cover, pinion Housing, blower Baffle, intake side Clip, mounting (3) Screw, captive washer M5x0.8x20 (3) Baffle, cylinder head Screw, hex. flange M6x1.0x16 (2) Baffle, cylinder

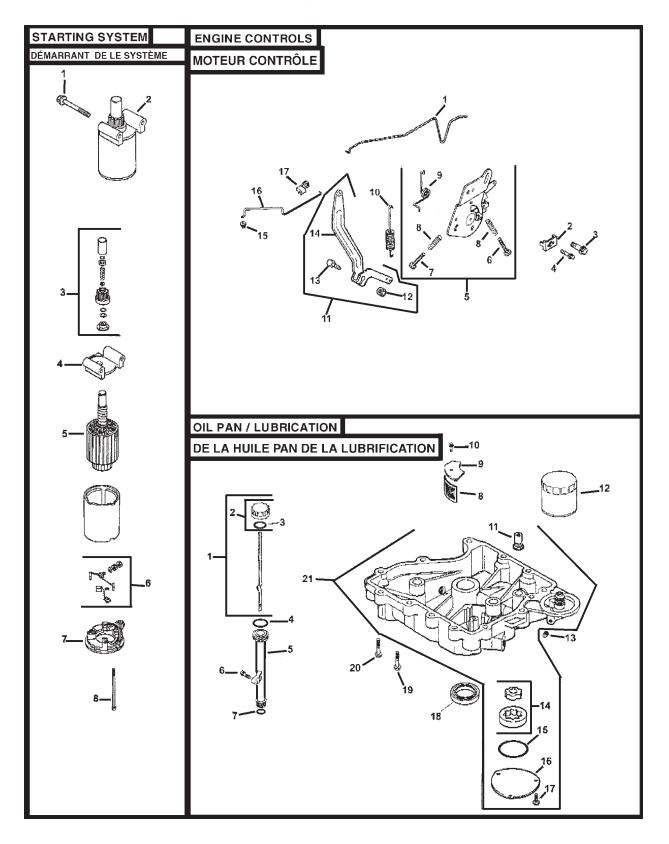
M-541050-S Nut, hex. flange M5x0.8

AIR INTAKE/FILTRATION

KEY NO.	PART NO.	DESCRIPTION		
1 2 3 4 5 6 7 8 9 10 11	12-096-24-S 12-083-12-S 12-100-08-S 12-083-10-S 12-743-12-S 12-032-11-S 12-094-07-S 12-072-04-S 12-086-01-S	Knob, air cleaner cover Cover, air cleaner Precleaner, element Wing Nut Kit, air cleaner element (Includes 5, 7, 8) Filter, element (Includes 5, 8)		
NOT ILLUSTRATED				

12-113-53-S Decal, air cleaner

TRACTOR - - MODEL NUMBER 944.604950 KOHLER ENGINE - MODEL NUMBER CV492, TYPE NUMBER 27506



TRACTOR - - MODEL NUMBER 944.604950 KOHLER ENGINE - MODEL NUMBER CV492, TYPE NUMBER 27506

STARTING SYSTEM

KEY	PART	
NO.	NO.	DESCRIPTION
1	M-839070-S	Screw, hex. flange M8x1.25x70 (2)
2	25-098-07-S	Starter assembly (Includes 3-8)
3	12-755-54-S	Kit, drive end
4	12-227-18-S	Cap, drive end
5	12-170-05-S	Armature
6	12-221-01-S	Kit, brush & spring
7	12-227-13-S	Cap, commutator end
8	12-211-01-S	Bolt, hex. flange 1/4-20x4-5/8 (2)

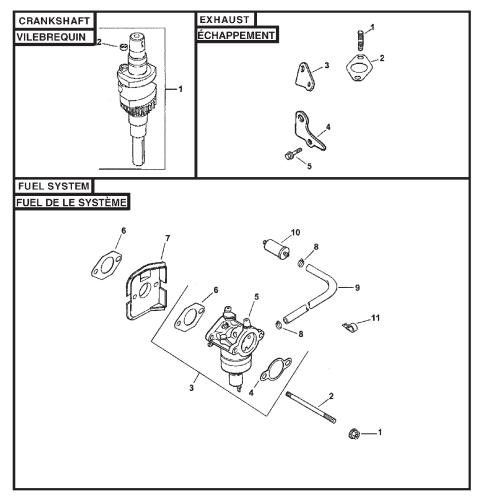
OIL PAN/LUBRICATION

KEY NO.	PART NO.	DESCRIPTION
1 2	12-038-01-S 25-755-13-S	1
3	12-153-03-S	, , ,
4	12-153-02-S	O-Ring, upper oil fill tube
5	12-123-04-S	Tube, oil fill
6	M-645025-S	Screw, hex. flange M6x1.0x25
7	12-153-01-S	
8	25-162-07-S	
9	12-096-03-S	
10	M-545016-S	
11	25-462-09-S	, - 1
12	52-050-02-S	, -
13	25-139-57-S	3, - 1,
14	12-393-01-S	- I-/ -
15	12-153-06-S	O-Ring, oil pump cover
16 17	12-096-34-S M-545016-S	Cover, oil pump
18	12-032-03-S	Screw, hex. flange M5x0.8x16 (3) Seal, oil (P.T.O. end)
19	24-086-16-S	
20	24-086-17-S	
21	12-199-56-S	Assembly, Pan, oil (Incl. 11,14-17)
	12 100 00 0	7.000011101y,1 at1, on (11101. 11,14 17)

ENGINE CONTROLS

KE NO	ΞΥ Ο.	PART NO.	DESCRIPTION
1 2 3		12-237-01-S 24-086-43-S	Linkage, choke Clamp, cable Screw, hex. flange
4 5		M-664020-S 12-536-10-S	, , , ,
6 7		M-443025-S M-443020-S	,
8		12-089-11-S 12-089-23-S	Spring, choke (2)
10 11		12-089-24-S 12-755-83-S	Spring, governor
12 13		12-100-07-S 52-211-04-S	Nut, hex flange 1/4-20
14 15		12-090-28-S 25-158-08-S	Lever, governor
16 17		12-079-10-S 25-158-11-S	Linkage, throttle

TRACTOR - - MODEL NUMBER 944.604950 KOHLER ENGINE - MODEL NUMBER CV492, TYPE NUMBER 27506



FUEL SYSTEM

KEY NO. 1 2 3	PART NO. M-641060-S M-629116-S 12-853-118-S	DESCRIPTION Nut, hex. flange M6x1.0 (2) Stud M6x1.0x116 (2) Kit, carburetor w/gasket (Includes 4,5,6 qty 1 Tie, cable 12-454-03-S, Terminal 25-452-20-S)
4 5	12-041-02-S 12-053-118	Gasket, air cleaner Carburetor assembly (For information only not available separately) (Includes Kit, float 12-757-02-S Kit, carburetor repair 12-757-
6 7 8 9 10 11 NOT II	12-041-01-S 12-265-06-S 25-237-14-S 52-353-22-S 25-050-03-S 47-154-01-S LUSTRATED *M-561010-S *X-22-11-S 12-757-02-S 12-757-03-S 12-041-01-S 12-041-05-S 12-041-06-S 12-032-06-S 12-757-33-S 12-041-06-S 12-041-06-S 12-1041-06-S 12-041-06-S 12-041-06-S 12-518-37-S	03-S, Kit, solenoid repair 12-757-33-S) Gasket, carburetor (2) Deflector, heat Clamp, hose (2) Line, fuel 12-1/4" Filter, fuel in-line Clip cable Screw, thread forming M5x0.8x10 Washer, lock 1/4" Kit, float Kit, carburetor repair Gasket, carburetor Gasket, air cleaner Gasket, bowl screw Seal, solenoid Kit, solenoid repair Gasket, bowl screw Tie cable Terminal Lead, red, (37" - 20 gauge - insulated socket and uninsulated socket terminals) *attaches carburetor ground lead to carb baffle.

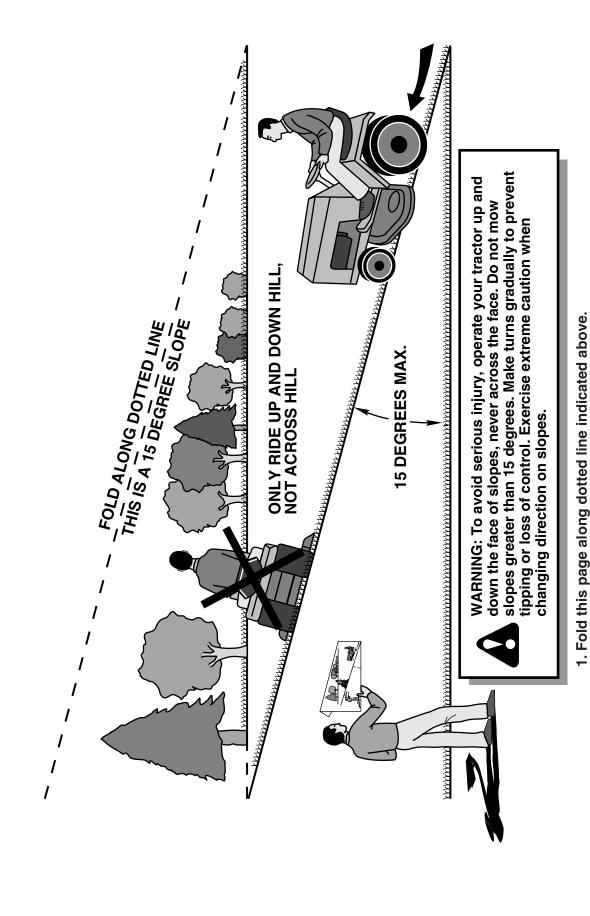
CRANKSHAFT

KEY NO.	PART NO.	DESCRIPTION
1 2	12-014-57-S 25-139-27-S	Crankshaft (Includes 2) Plug, cup

EXHAUST

KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5	25-072-04-S 12-041-03-S 12-126-11-S 12-445-06-S M-645025-S 12 522 49 12-755-93-S	Stud, M8x1.25x33(2) Gasket, exhaust manifold Bracket muffler Strap, lifting Screw, hex. flange M6xl.0x25 (2) Short Block Gasket Set

SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



3. Sight across the fold in the direction of hill slope you want to measure. 4. Compare the angle of the fold with the slope of the hill.

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