SEARS OWNER'S MANUAL

MODEL NO. 944.600940

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



CRAFTSMAN®

24.0 HP ELECTRIC START 50" MOWER AUTOMATIC GARDEN TRACTOR

- Assembly
- Operation
- Customer Responsibilities
- 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 mowerrelated injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.

II. SLOPE OPERATION

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

DO:

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

DO NOT:

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

III. CHILDREN

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

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

IV. SERVICE

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

SAFETY RULES

Safe Operation Practices for Ride-On Mowers











- Be sure the area is clear of other people before mowing.
 Stop machine if anyone enters the area.
- Never carry passengers or children even with the blades off.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and down for small children.
- Mow up and down slopes (15° Max), not across.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Use slow speed. Choose a low gear so that you will not have to stop or shift while on the slope.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.
- If machine stops while going uphill, disengage blades, shift into reverse and back down slowly.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.



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



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



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



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

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PRODUCT SPECIFICATIONS

GASOLINE CAPACITY AND TYPE:	3.5 GALLONS UNLEADED REGULAR
OIL TYPE (API-SF/SG/SH):	SAE 10W30 (above 32°F) SAE 5W-30 (below 32°F)
OIL CAPACITY:	W/FILTER: 4.5 PINTS W/OFILTER: 4.0 PINTS
SPARK PLUG: (GAP: .030")	CHAMPION RC12YC
VALVE CLEARANCE:	NOT ADJUSTABLE
GROUND SPEED (MPH):	FORWARD: 0 – 5.8 REVERSE: 0 – 2.1
TIRE PRESSURE:	FRONT: 14 PSI REAR: 10 PSI
CHARGING SYSTEM:	15 AMPS @ 3600 RPM
BATTERY:	AMP/HR: 35 MIN. CCA: 280 CASE SIZE: U1R
BLADE BOLT TORQUE:	27–35 FT. LBS.

MAINTENANCE AGREEMENT

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

CUSTOMER RESPONSIBILITIES

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

WARNING: This tractor is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

A spark arrester for the muffler is available through your nearest Sears Authorized Service Centre/Department (See REPAIR PARTS section of this manual).

CONGRATULATIONS on your purchase of a Sears 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 Sears Authorized Service Centre/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".

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:

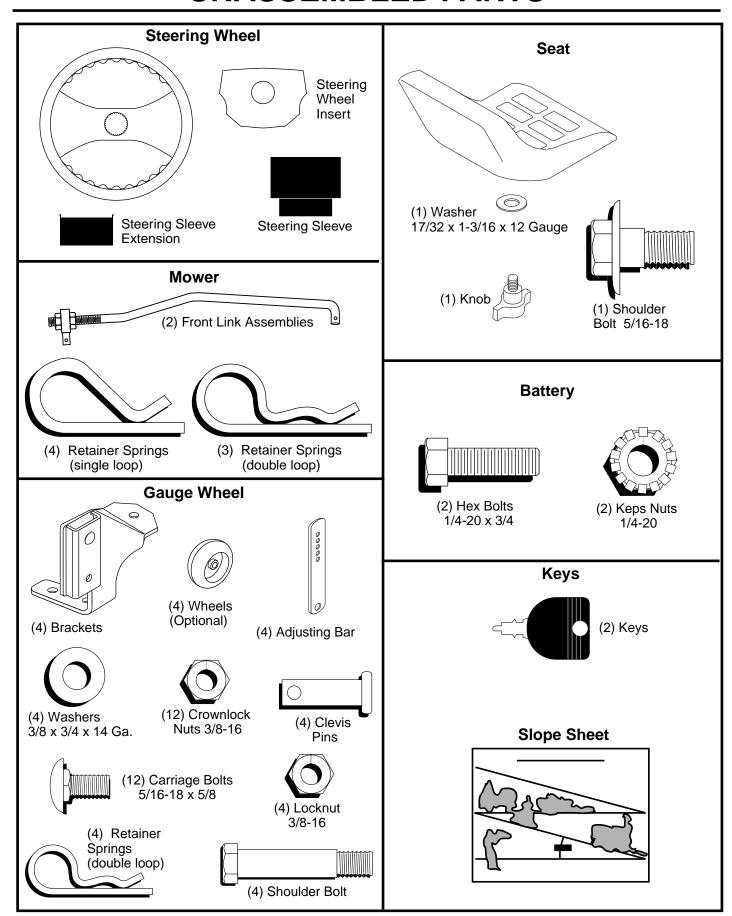
- 1. Pre-delivery set-up.
- 2. Tire replacement or repair caused by punctures from outside objects (such as nails, thorns, stumps, or glass).
- 3. Expendable items which become worn during normal use, such as blades, spark plug, air cleaners and belts.
- 4. Repairs necessary because of operator abuse 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



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

TOOLS REQUIRED FOR ASSEMBLY

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

(2) 7/16" wrenches (

(1) Tire pressure gauge

(1) 9/16" wrench

(1) Utility knife

(1) 1/2" wrench

(1) 3/4" socket w/drive ratchet

(1) Pliers

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

TO REMOVE TRACTOR FROM CARTON

UNPACK CARTON

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

BEFORE REMOVING TRACTOR FROM SKID

ATTACH STEERING WHEEL (See Fig. 1)

- Remove hex bolt, lock washer and large flat washer from steering shaft.
- Position from wheels of the tractor so they are pointing straight forward.
- Slide the steering sleeve over the steering shaft.
- Align tabs and press steering sleeve extension into bottom of steering wheel.
- Position steering wheel so cross bars are horizontal (left to right) and slide onto steering wheel adapter.
- Secure steering wheel to steering shaft with hex bolt, lock washer and large flat washer previously removed. Tighten securely.
- Snap steering wheel insert into center of steering wheel.
- Remove protective materials from tractor hood and grill.

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

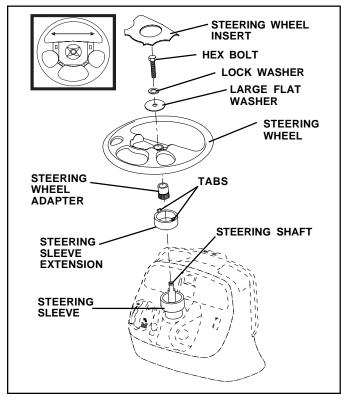


FIG. 1

HOW TO SET UP YOUR TRACTOR

CONNECT BATTERY (See Fig. 2)



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

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

- Lift hood to raised position.
- Open terminal access doors, remove terminal protective caps and discard.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps.
- First connect RED battery cable to positive (+) battery terminal with hex bolt and keps nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) battery terminal with remaining hex bolt and keps nut. Tighten securely.
- Close terminal access doors.

Use terminal access doors for:

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

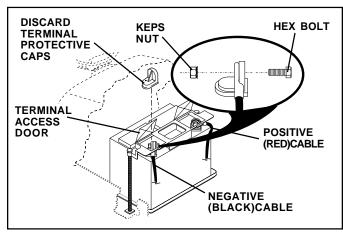


FIG. 2

INSTALL SEAT (See Fig. 3)

Adjust seat before tightening adjustment knob.

- Remove adjustment knob and flat washer securing seat to cardboard packing and set aside for assembly of seat to tractor.
- Pivot seat upward and remove from the cardboard packing. Remove cardboard packing and discard.
- Place seat on seat pan and assemble shoulder bolt.
 Tighten shoulder bolt securely.
- Assemble adjustment knob and flat washer loosely. Do not tighten.
- Lower seat into operating position and sit on seat.
- Slide seat until a comfortable position is reached which allows you to press clutch/brake pedal all the way down.
- Get off seat without moving its adjusted position.
- Raise seat and tighten adjustment knob securely.

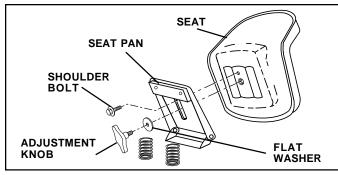


FIG. 3

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

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

- Press lift lever plunger and raise attachment lift lever to its highest position.
- Release parking brake by depressing clutch/brake pedal.
- Place freewheel control in freewheeling position to disengage transmission (See "TOTRANSPORT" in the Operation section of this manual).
- · Roll tractor forward off skid.
- Remove mower and packing materials.
- Remove ties from V-belts.

TO DRIVE TRACTOR OFF SKID (See Operation section, page 12, 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
- Sit on seat in operating position, depress clutch/brake pedal and set the parking brake.
- Place motion control lever in neutral (N) position.
- Press lift lever plunger and raise attachment lift lever to its highest position.
- Start the engine. After engine has started, move throttle control to idle position.
- Release parking brake.
- Slowly move the motion control lever forward and slowly drive tractor off skid.
- Apply brake to stop tractor, set parking brake and place motion control lever in neutral position.
- Turn ignition key to "OFF" position.

Continue with the instructions that follow.

ASSEMBLE GAUGE WHEELS AND BRACKETS TO MOWER DECK (See Fig. 4)

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.

- Attach front gauge wheel brackets marked front left (FL), front right (FR) to mower deck using (3) carriage bolts and (3) locknuts. For ease of installation do not tighten locknuts until all carriage bolts have been installed.
- Attach rear gauge wheel brackets marked rear left (R L), rear right (RR) to mower deck using (3) carriage bolts and (3) locknuts. For ease of installation do not tighten locknuts until all carriage bolts have been installed.
- 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 to highest position for ease of mower deck assembly.
- Adjust gauge wheels before operating mower as shown in the operation section of this manual.

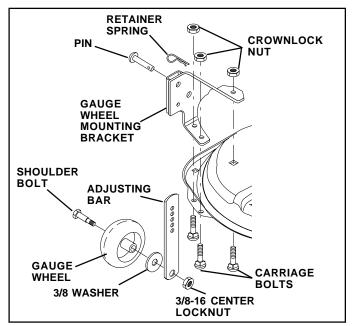


FIG. 4

INSTALL MOWER AND DRIVE BELT (See Figs. 4 and 5)

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

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

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

- Install one front link in top hole of the L.H. front mower bracket and L.H. front suspension bracket. Retain with two single loop retainer springs as shown.
- Install second front link in R.H. front suspension bracket only and retain with single loop retainer spring as shown.
- Slide right side of mower back and install link in top hole of R.H. front mower bracket. Retain with single loop retainer spring as shown.
- Turn height adjustment knob counterclockwise until it stops.
- Lower mower linkage with attachment lift control.
- Place the suspension arms on inward pointing deck pins. If necessary, rock and raise front of mower to align deck pins with the holes in suspension arms. Retain with double loop retainer springs with loops down as shown.
- Connect anti-sway bar to chassis bracket under left footrest and retain with double loop retainer spring.

- Turn height adjustment knob clockwise to remove slack from mower suspension.
- Raise deck to highest position.
- Adjust gauge wheels before operating mower as shown in the Operation section of this manual.

CHECK TIRE PRESSURE

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

 Reduce tire pressure to PSI shown in "PRODUCT SPECIFICATIONS" section of this manual.

CHECK MOWER LEVELNESS

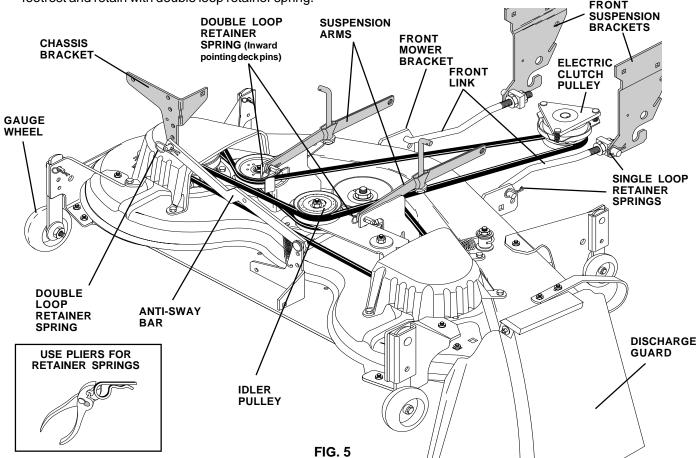
For best cutting results, mower should be properly leveled. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.

CHECK FOR PROPER POSITION OF ALL BELTS

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

CHECK BRAKE SYSTEM

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



✓ 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.

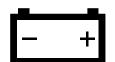
PLEASE REVIEW THE FOLLOWING CHECKLIST:

- ✓ 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 "PURGETRANSMISSION" in Operation section of this manual).

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



BATTERY



CAUTION OR WARNING



REVERSE



FORWARD



FAST



SLOW



ENGINE ON



ENGINE OFF



OIL PRESSURE



LIGHTS ON



OVER TEMP LIGHT



FUEL



CHOKE



MOWER HEIGHT



PARKING BRAKE **LOCKED**



UNLOCKED



MOWER LIFT



ATTACHMENT CLUTCH ENGAGED



REVERSE



NEUTRAL



HIGH



LOW



PARKING BRAKE





ATTACHMENT CLUTCH DISENGAGED







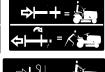




KEEP AREA CLEAR

SLOPE HAZARDS (SEE SAFETY RULES SECTION)









FREE WHEEL (Automatic Models only)



DANGER, KEEP HANDS AND FEET AWAY

KNOW YOUR TRACTOR

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

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

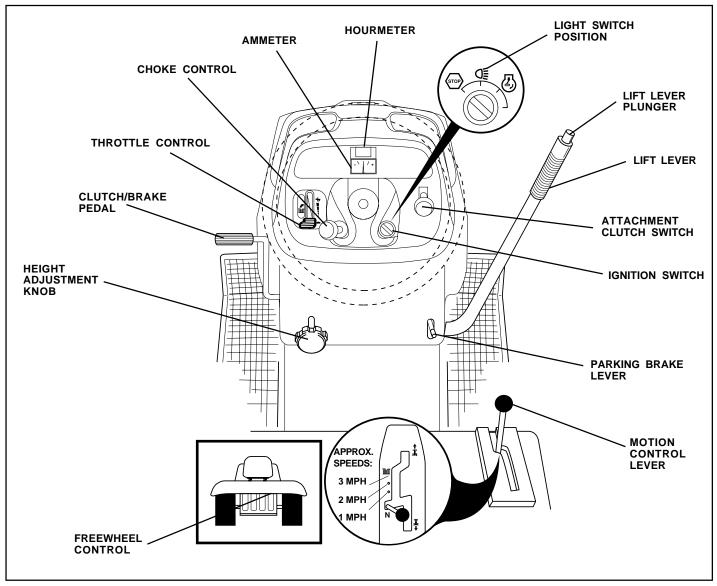


FIG. 6

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

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

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

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

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

CHOKE CONTROL - Used when starting a cold engine. **LIGHT SWITCH** - Turns the headlights on and off.

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

THROTTLE CONTROL - Used to control engine speed.

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

IGNITION SWITCH - Used to start and stop the engine.

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

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

HEIGHT ADJUSTMENT KNOB - Used to adjust the mower height.

HOURMETER - Indicates hours of operation.



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

HOW TO USE YOUR TRACTOR

TO SET PARKING BRAKE (See Fig. 7)

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.

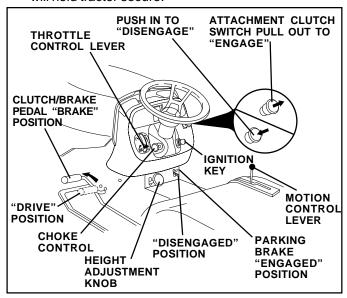


FIG. 7

STOPPING (See Fig. 7)

MOWER BLADES -

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

GROUND DRIVE -

- To stop ground drive, depress clutch/brake pedal into full "BRAKE" position..
- Move motion control lever to neutral (N) position.

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

ENGINE -

Move throttle control to slow position.

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

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

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

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



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

TO USE CHOKE CONTROL (See Fig. 7)

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

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

TO USE THROTTLE CONTROL (See Fig. 7)

Always operate engine at full throttle.

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

TO MOVE FORWARD AND BACKWARD (See Fig. 7)

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

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

TO ADJUST MOWER CUTTING HEIGHT (See Fig. 7)

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

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

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

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

TO ADJUST GAUGE WHEELS (See Fig. 8)

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.

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

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

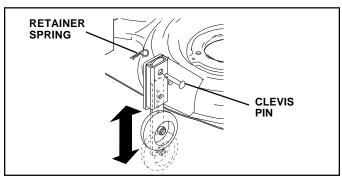


FIG. 8

TO OPERATE MOWER (See Figs. 6 and 7)

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

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



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

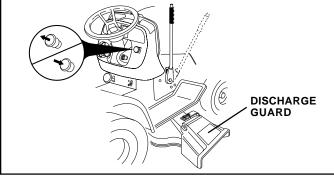


FIG. 9

TO OPERATE ON HILLS



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

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

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

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

TO TRANSPORT (See Figs. 6 and 10)

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

- Raise attachment lift to highest position with attachment lift control.
- Remove retainer spring from freewheel control rod.
- Push control rod in to disengage transmission and reinsert retainer spring into control rod hole now on back side of the bracket.
- Do not push or tow tractor at more than two (2) MPH.
- To reengage transmission, reverse above procedure.

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

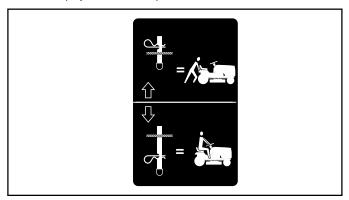


FIG. 10

TOWING CARTS AND OTHER ATTACH-MENTS

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 (See Fig. 11)

- The engine in your tractor has been shipped, from the factory, already filled with summer weight oil.
- Check engine oil with tractor on level ground.
- Unthread and remove oil fill cap/dipstick; wipe oil off. Reinsert the dipstick into the tube and rest oil fill cap on the tube. Do not thread the cap onto the tube. Remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.
- For cold weather operation you should change oil for easier starting (See "OIL VISCOSITY CHART" in the Customer Responsibilities section of this manual).
- To change engine oil, see the Customer Responsibilities section in this manual.

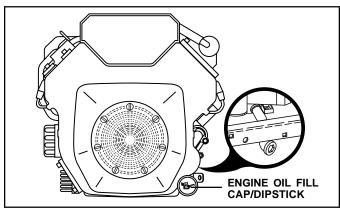


FIG. 11

ADD GASOLINE

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

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

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



CAUTION: Fill to bottom of gas tank filler neck. Do not overfill. Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.

TO START ENGINE (See Fig. 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 fast position
- Pull choke control out for a cold engine start attempt.
 For a warm engine start attempt the choke control may not be needed.

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

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

WARM WEATHER STARTING (50° F and above)

- When engine starts, slowly push choke control in until the engine begins to run smoothly. If the engine starts to run roughly, pull the choke control out slightly for a few seconds and then continue to push the control in slowly.
- The attachments and ground drive can now be used. If the engine does not accept the load, restart the engine and allow it to warm up for one minute using the choke as described above.

COLD WEATHER STARTING (50° F and below)

• When engine starts, slowly push choke control in until the engine begins to run smoothly. Continue to push the choke control in small steps allowing the engine to accept small changes in speed and load, until the choke control is fully in. If the engine starts to run roughly, pull the choke control out slightly for a few seconds and then continue to push the control in slowly. This may require an engine warm-up period from several seconds to several minutes, depending on the temperature.

AUTOMATIC TRANSMISSION WARM UP

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

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

PURGE TRANSMISSION



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

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

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

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

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

- Move motion control lever to neutral (N) position. 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

- Tire chains cannot be used when the mower housing is attached to tractor.
- Mower should be properly leveled for best mowing performance. See "TOLEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the tractor. This will result in a more even distribution of clippings and more uniform cutting.
- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished (See Fig. 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.

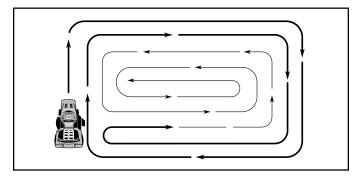


FIG. 12

AS	MAINTENANCE SCHEDUL L IN DATES YOU COMPLETE GULAR SERVICE	.E	BEFORE	EACHUS EVERY 8	HOURS WERY?	5 HOUR 5 HOUR VERY 5	OHOUP VERY	S HOUS	EASON EASON EFORE	STORA SER	G ^E VICE	E DAT	ΓES
	Check Brake Operation	V	1										
	Check Tire Pressure	~	/										
т	Check Operator Presence and Interlock Systems	~											
Ŗ	Check for Loose Fasteners	/				1 7		/					
ΙÀ	Sharpen/Replace Mower Blades			1 /4									
Ι¥	Lubrication Chart			/				/					
Ιċ	Check Battery Level			6									
R	Clean Battery and Terminals			/				1					
	Check Transaxle Cooling			/									
	Adjust Blade Belt(s) Tension					1 5							
	Adjust Motion Drive Belt(s) Tension					1 5							
	Check Engine Oil Level	1	1										
	Change Engine Oil			1,2,3				1					
lΕ	Clean Air Filter			√ 2									
N	Clean Air Screen			1/2									
Ģ	Inspect Muffler/Spark Arrester				1								
l I	Replace Oil Filter (If equipped)					1,2							
ΙË	Clean Engine Cooling Fins					1 2							
-	Replace Spark Plug					1	1						
	Replace Air Filter Paper Cartridge					1 /2							
	Replace Fuel Filter						1						

- 1 Change more often when operating under a heavy load or in high ambient temperatures.
- 2 Service more often when operating in dirty or dusty conditions.
- 3 If equipped with oil filter, change oil every 50 hours.
- 4 Replace blades more often when mowing in sandy soil.

- 5 If equipped with adjustable system.
- 6 Not required if equipped with maintenance-free battery.
- 7 Tighten front axle pivot bolt to 35 ft.-lbs. maximum. Do not overtighten.

GENERAL RECOMMENDATIONS

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

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

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

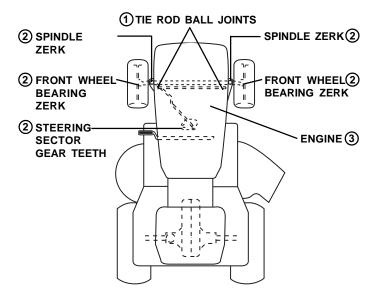
 Once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear. A new sparkplug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

BEFORE EACH USE

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

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

LUBRICATION CHART



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

TRACTOR

Always observe safety rules when performing any maintenance.

BRAKE OPERATION

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

TIRES

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

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

OPERATOR PRESENCE SYSTEM

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

- The engine should not start unless the clutch/brake pedal is fully depressed and 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. 13A)

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

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

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

IMPORTANT: BLADE BOLT IS GRADE 8 HEAT TREATED.

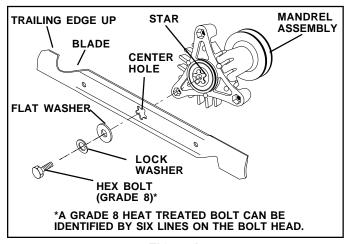


FIG. 13A

TO SHARPEN BLADE (See Fig. 13B)

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.

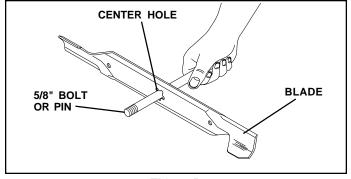


FIG. 13B

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.

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

TRANSAXLE COOLING

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

Do not attempt to clean fan or transmission while engine is running or while the transmission is hot. To prevent possible damage to seals, no 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.

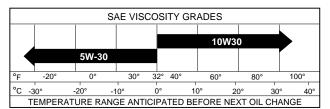
V-BELTS

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.

ENGINE

LUBRICATION

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



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

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

TO CHANGE ENGINE OIL (See Fig. 14)

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

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

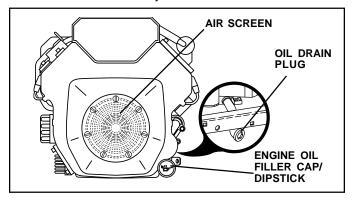


FIG. 14

CLEAN AIR SCREEN (See Fig. 14)

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

CLEAN AIR INTAKE/COOLING AREAS

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

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

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

AIR FILTER (See Fig. 15)

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

Service air cleaner more often under dusty conditions.

Loosen knob and remove cover.

TO SERVICE PRE-CLEANER

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

TO SERVICE CARTRIDGE

Replace a dirty, bent, or damaged cartridge.

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

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

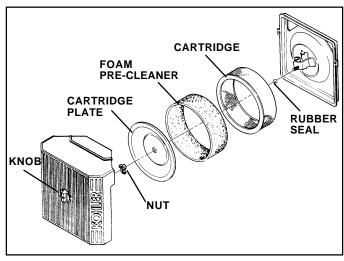


FIG. 15

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.

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.

IN-LINE FUEL FILTER (See Fig. 16)

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.

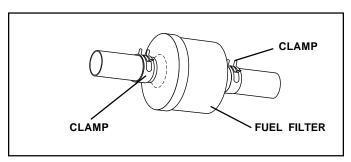


FIG. 16

CLEANING

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

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

CAUTION: BEFORE PERFORMING ANY SERVICE OR ADJUSTMENTS:

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

TRACTOR

TO REMOVE MOWER (See Fig. 17)

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

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

TO INSTALL MOWER

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

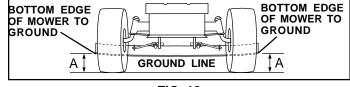
TO LEVEL MOWER HOUSING

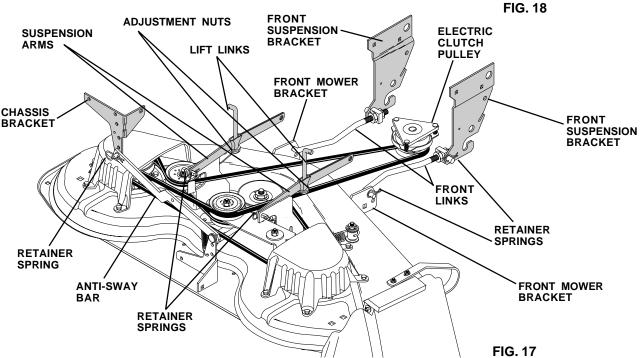
Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PROD-UCT SPECIFICATIONS" section of this manual). If tires are over or underinflated, you will not properly adjust your mower. SIDE-TO-SIDE ADJUSTMENT (See Figs. 17 and 18)

- Raise mower to its highest position.
- Measure height from bottom edge of mower to ground level at front corners of mower. Distance "A" on both sides of mower should be the same.
- If adjustment is necessary, make adjustment on one side of mower only.
- To raise one side of mower, tighten lift link adjustment nut on that side.
- To lower one side of mower, loosen lift link adjustment nut on that side.

NOTE: Each full turn of adjustment nut will change mower height about 3/16".

Recheck measurements after adjusting.





FRONT-TO-BACK ADJUSTMENT (See Figs. 19 and 20)

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 the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

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

- Before making any necessary adjustments, check that both front links are equal in length.
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of mower housing, loosen nut "G" on both front links an equal number of turns.
- When distance "F" is 1/8" to 1/2" lower at front than rear, tighten nut "H" against trunnion on both front links.
- To raise front of mower housing, loosen nut "H" from trunnion on both front links. Tighten nut "G" on both front links an equal number of turns.
- When distance "F" is 1/8" to 1/2" lower at front than rear, tighten nut "H" against trunnion on both front links.

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

Recheck side-to-side adjustment.

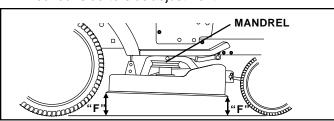


FIG. 19

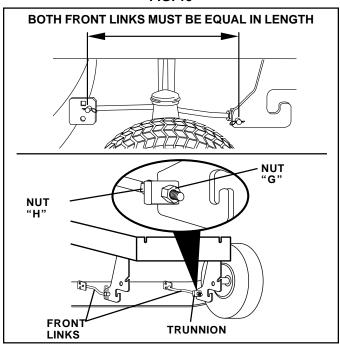


FIG. 20

TO REPLACE MOWER DRIVE BELT

MOWER DRIVE BELT REMOVAL (See Fig. 21)

- Park tractor on a level surface. Engage parking brake.
- Remove screws from L.H. mandrel cover and remove cover.
- Roll belt over the top of L.H. mandrel pulley.
- Remove belt from electric clutch pulley.
- Remove belt from idler pulleys.
- Remove any dirt or grass clippings which may have accumulated around mandrels and entire upper deck surface.
- Check primary idler arm and two idlers to see that they rotate freely.
- Be sure spring is securely hooked to primary idler arm and bolt in mower housing.

MOWER DRIVE BELT INSTALLATION (See Fig. 21)

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

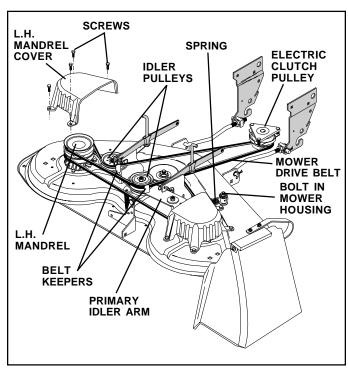


FIG. 21

TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 22)

Park the tractor on level surface. Engage parking brake.

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

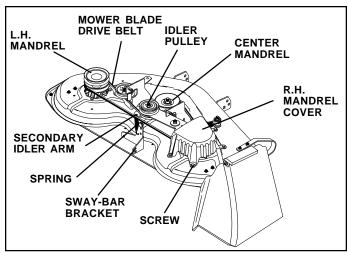


FIG. 22

TO ADJUST ATTACHMENT CLUTCH (See Fig. 23)

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

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

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

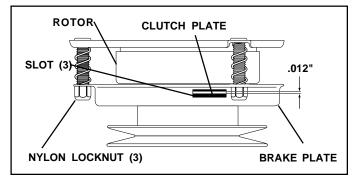


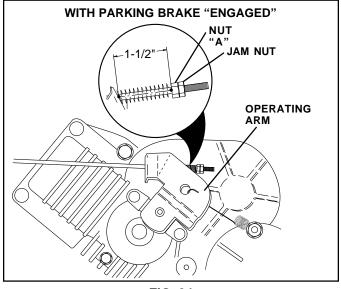
FIG. 23

TO ADJUST BRAKE (See Fig. 24)

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

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

- Depress clutch/brake pedal and engage parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- If distance is other than 1-1/2", loosen jam nut and turn nut "A" until distance becomes 1-1/2". Retighten jam nut against nut "A".
- Road test tractor for proper stopping distance as stated above. Readjust if necessary. If stopping distance is still greater than six (6) feet in highest gear, further maintenance is necessary. Contact your nearest authorized service center/department.



23 FIG. 24

TO REPLACE MOTION DRIVE BELT (See Fig. 25)

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

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

BELT REMOVAL -

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

BELT INSTALLATION -

- Place V part of belt into grooves on engine pulley and front V-idler, making sure to route belt inside of all belt keepers.
- Route belt on right side, coming from V-idler, towards back of tractor, above midspan belt keeper and to top of transaxle pulley.
- Route belt on left side, coming from engine pulley, towards back of tractor and through loop in midspan belt keeper.
- Place V part of belt into grooves on transaxle and fan idler pulleys, making sure to route belt inside of all belt keepers.
- Retighten belt keeper above transaxle pulley.
- Place belt around clutching idlers as shown, making sure to route belt inside of all belt keepers.
- Check to be sure belt is positioned correctly and is on proper side of all belt keepers.
- Reinstall mower.

IMPORTANT: CHECK BRAKE ADJUSTMENT.

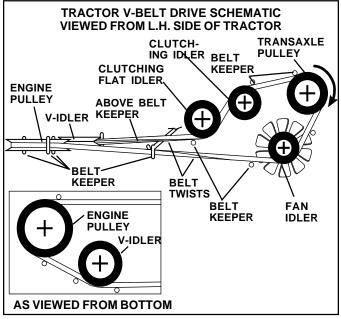


FIG. 25

TO ADJUST MOTION CONTROL LEVER (See Fig. 26)

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

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

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

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

Road test tractor after adjustment and repeat procedure if necessary.

TRANSMISSION REMOVAL/REPLACEMENT

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

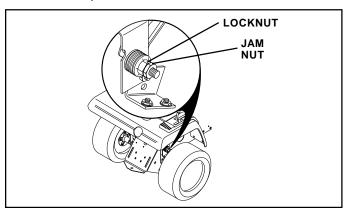


FIG. 26

TO ADJUST STEERING WHEEL ALIGNMENT

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

FRONT WHEEL TOE-IN ADJUSTMENT

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

TO CHECK TOE-IN (See Fig. 27)

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

TO ADJUST TOE-IN (See Figs. 27 and 28)

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

FRONT WHEEL CAMBER

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

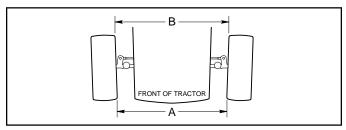


FIG. 27

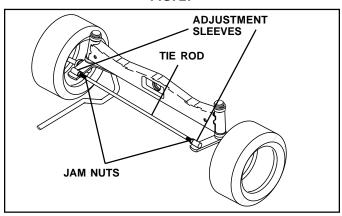


FIG. 28

TO REMOVE WHEEL FOR REPAIRS

FRONT WHEEL (See Fig. 29)

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

REAR WHEEL-

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

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

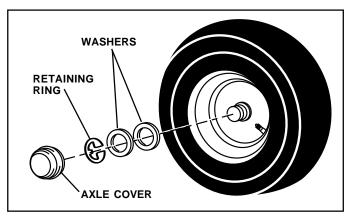


FIG. 29

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



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

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

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

TO ATTACH JUMPER CABLES -

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

TO REMOVE CABLES, REVERSE ORDER -

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

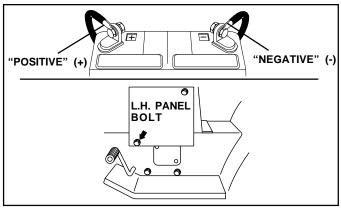


FIG. 30

25

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

TO ADJUST ATTACHMENT LIFT SPRING (See Fig. 31)

- While holding spring bushing with wrench, loosen jam nut.
- Turn adjustment bolt clockwise to extend spring and reduce lift effort for heavier attachments.
- Turn adjustment bolt counterclockwise for lighter attachments.
- · Retighten jam nut against spring bushing.

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

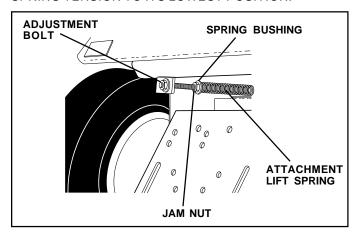


FIG. 31

TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 32)

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

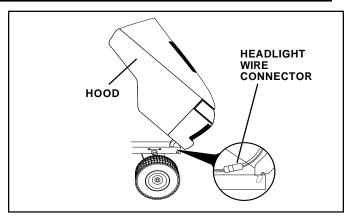


FIG. 32

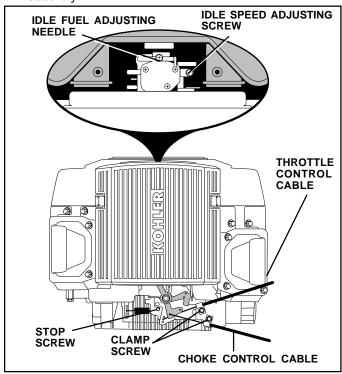
ENGINE

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

TO ADJUST THROTTLE CONTROL CABLE (See Fig. 33)

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

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



26 FIG. 33

TO ADJUST CHOKE CONTROL (See Figs. 33 and 34)

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

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

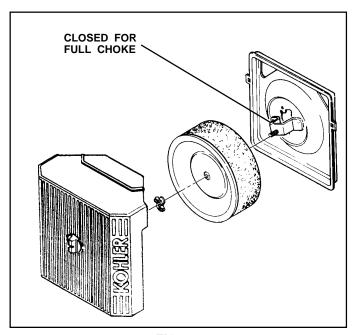


FIG. 34

TO ADJUST CARBURETOR (See Fig. 34)

The carburetor has been present at the factory and adjustment should not be necessary. However, minor adjustment may be required to compensate for differences in fuel, temperature, altitude or load. If the carburetor does need adjustment, 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: DAMAGE TO THE NEEDLES AND THE SEATS IN CARBURETOR MAY RESULT IF SCREW IS TURNED IN TOO TIGHT.

PRELIMINARY SETTING -

- Be sure you have a clean air filter, and the throttle control cable is adjusted properly (see "TO ADJUST THROTTLE CONTROL CABLE" in the Service and Adjustments section of this manual).
- With engine off turn idle fuel adjusting needle in (clockwise) closing it finger tight and then turn out (counterclockwise) 1 turn.

FINAL SETTING -

- Start engine and allow to warm for five minutes. Make final adjustments with engine running and shift/motion control lever in neutral (N) position.
- The high idle is set at the factory and cannot be adjusted.
- Idle speed setting With throttle control lever in slow position, engine should idle at 1200 RPM. If engine idles too slow or fast, turn idle speed adjusting screw in or out until correct idle is attained.
- Idle fuel needle setting With throttle control lever in slow position, turn idle fuel adjusting needle in (clockwise) until engine speed decreases and then turn out (counterclockwise) approximately 3/4 turn to obtain the best low speed performance.
- 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, CONTACT YOUR NEAREST AUTHORIZED SERVICE CENTER/DEPARTMENT, WHICH HAS PROPER EQUIPMENT AND EXPERIENCE TO MAKE ANY NECESSARY ADJUSTMENTS.

STORAGE

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



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

TRACTOR

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

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

BATTERY

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

ENGINE

FUEL SYSTEM

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

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

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

ENGINE OIL

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

CYLINDER(S)

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

OTHER

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

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

TROUBLESHOOTING POINTS

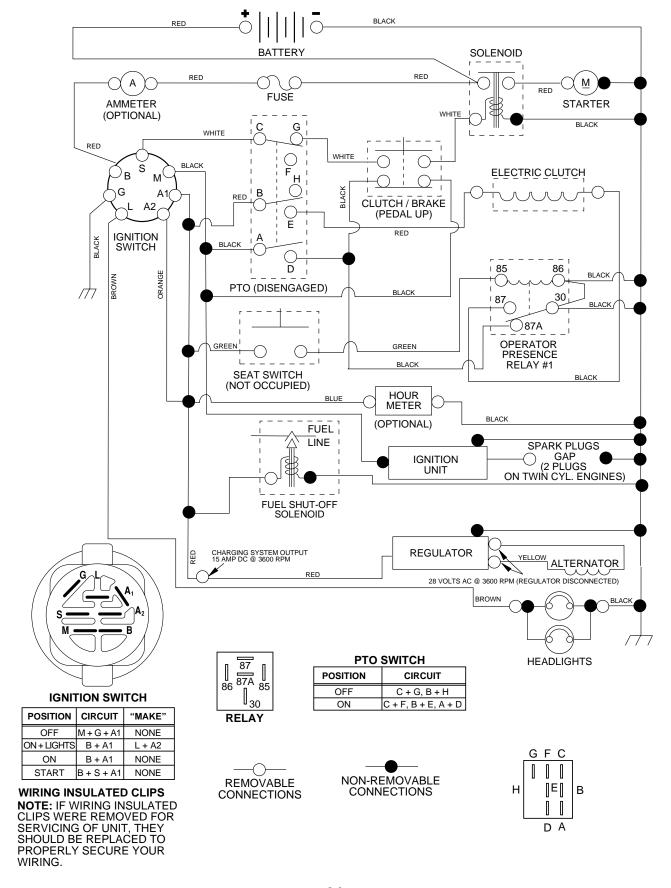
PROBLEM	CAUSE	CORRECTION			
Will not start	 Out of fuel. Engine not "CHOKED" properly. Engine flooded. Bad spark plug. Dirty air filter. Dirty fuel filter. Water in fuel. Loose or damaged wiring. Carburetor out of adjustment. 	 Fill fuel tank. See "TO START ENGINE" in Operation section. Wait several minutes before attempting to start. Replace spark plug. Clean/replace air filter. Replace fuel filter. Drain 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. Drain fuel tank and refill with fresh gasoline. Check all wiring. See "To Adjust Carburetor" in Service Adjustments section. Contact an authorized service center/department. 			
Engine will not turn over	 Clutch/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 clutch/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	 Cutting too much grass/too fast. Throttle in "CHOKE" position. Build-up of grass, leaves and trash under mower. Dirty air filter. Low oil level/dirty oil. Faulty spark plug. Dirty fuel filter. Stale or dirty fuel. Water in fuel. Spark plug wire loose. Dirty engine air screen/fins. Dirty/clogged muffler. Loose or damaged wiring. Carburetor out of adjustment. Engine valves out of adjustment. 	 Set in "Higher Cut" position/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. Drain fuel tank and refill with fresh gasoline. Drain 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) burned out. Faulty light switch. Loose or damaged wiring. Blown fuse. 	 Turn switch "ON". Replace bulb(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 at "SLOW" position for 30 seconds before stopping engine.	Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.				

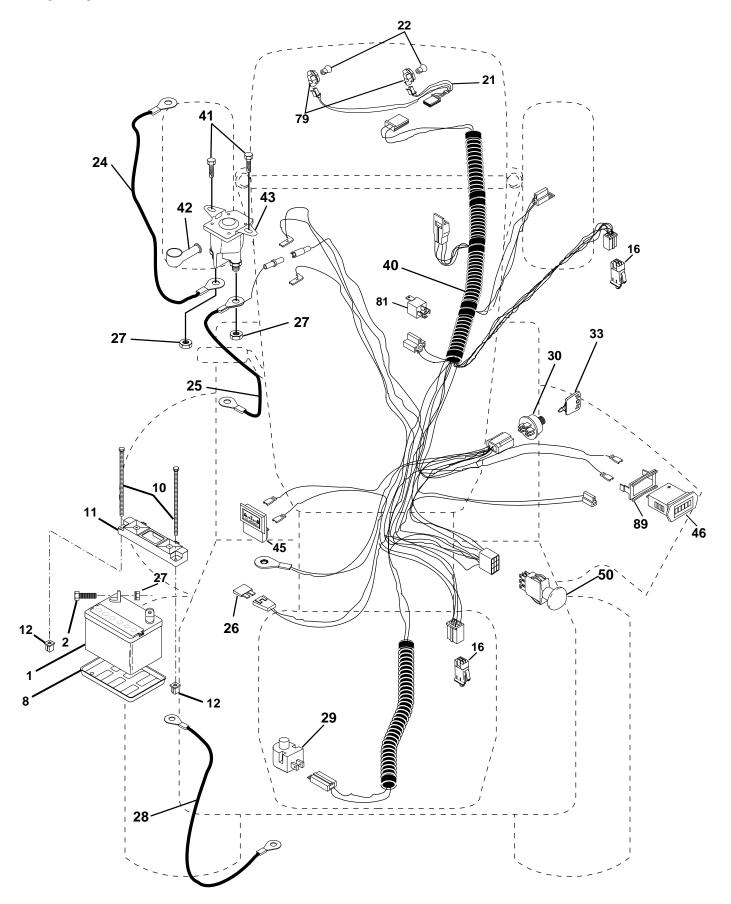
TRACTOR - - MODEL NUMBER 944.600940

SCHEMATIC



TRACTOR - - MODEL NUMBER 944.600940

ELECTRICAL



TRACTOR - - MODEL NUMBER 944.600940

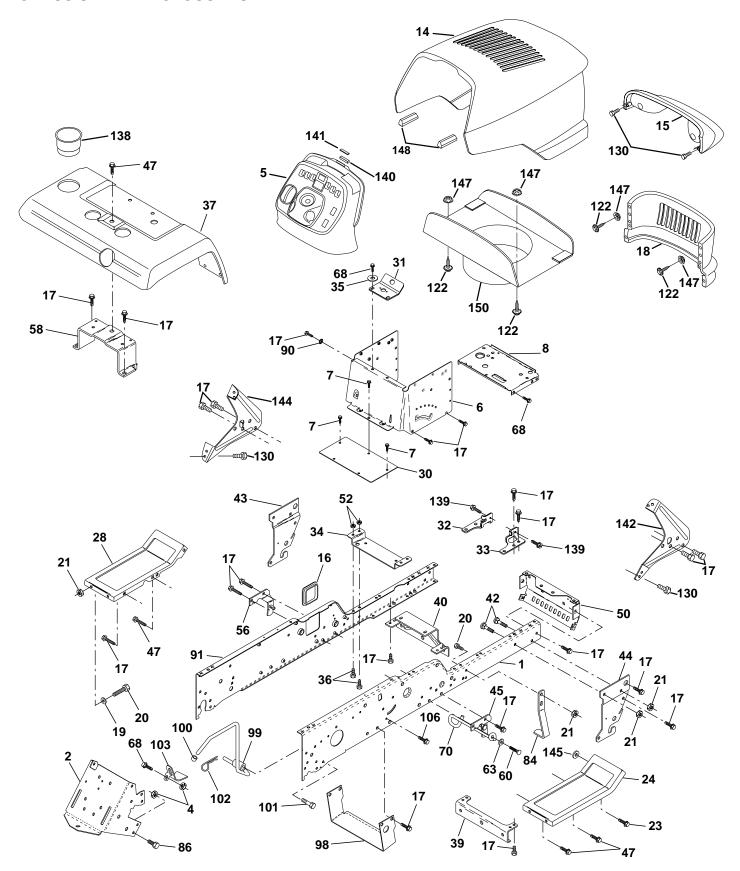
ELECTRICAL

KEY NO.	PART NO.	DESCRIPTION
1 2 8 10 11 12 16 21 22 42 25 26 27 28 29 30 33 40 41 42 43 45 46 50 81 79 89	145769 153664 166184R 4152J 4014J 146686 108824X 73510400 170697 160784 163968 140403 170238 17720408 131563 145673 122822X 169635 169416 109748X	Battery Bolt Hex Head 1/4-20 x 3/4 Tray, Battery Bolt Btr Frt 1/4-20 X 7.5 zinc Holdown Battery Front Mount Nut Push Nylon 1/4" Switch Interlock Push-In Harness Headlight Bulb Light Cable Battery Cable Battery Fuse Hex Keps Nut 1/4-20 Unc Cable, Ground Switch, Plunger Normal OP Olive Switch, Ign Key Harness, Ignition Screw Thd Cut 1/4-20 x 1/2 T 1/23 Cover Terminal Red Solenoid Ammeter Meter Hour Switch, PTO Relay Asm. Bulbholder Asm Bracket Snap-In Hourmeter

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

TRACTOR - - MODEL NUMBER 944.600940

CHASSIS AND ENCLOSURES



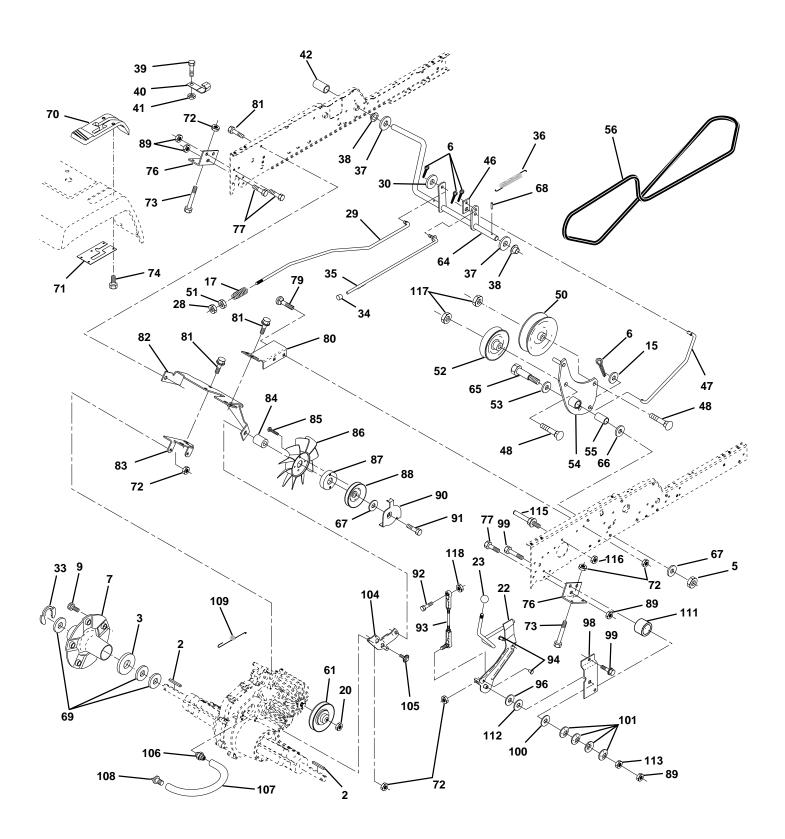
TRACTOR - - MODEL NUMBER 944.600940

CHASSIS AND ENCLOSURES

KEY PART KE NO. NO. DESCRIPTION NO		
21 STD541437 Nut, Crownlock 3/8-16 Unc 10 23 17490616 Screw Thdrol 3/8-16 x 1 TY-TT 10 24 145243X558 Footrest, RH 10 28 145244X558 Footrest, LH 10 30 145052 Saddle, Hydro 1995 12 31 161419 Bracket Supt 1-pc VGT Steering 13 32 161327 Bracket Pivot Chassis Lh 13 33 161326 Bracket Pivot Chassis Rh 13 34 142131 Bracket, Engine Support Rear 14 35 19111116 Washer 11/32 x 11/16 x 16 Ga. 14 36 74780512 Bolt, Fin Hex 5/16-18 x 3/4 14 37 167287X558 Fender, Pnt. Stealth 14 39 136961 Bracket, Axle Front 14 40 156111 Bracket, Support Axle/Engine 14 42 STD533710 Bolt, Carriage 3/8-16 x 1 14 43 136939 Bracket, Spnsn Front Lh 15 44 136940 Bracket, Spnsn Front Rh	3 163975X428 Cupholder YTGT 4 161330 Bolt Shoulder 5/16 - 18 T 5 163806 Magnet Stealth YTGT 6 163805 Striker Plate Stealth YTG 7 161897 Bracket Dash Stealth Rh 8 161900 Bracket Dash Stealth Lh 9 19131414 Washer Flat 13/32 x 7/8 9 162967 Fastner Nutpal	assis Lh -1/4 Ga. /2 er Inc x 1 Γοοth 3/8 -3/4 TT GT T X 14 Ga.

TRACTOR - - MODEL NUMBER 944.600940

GROUND DRIVE



TRACTOR - - MODEL NUMBER 944.600940

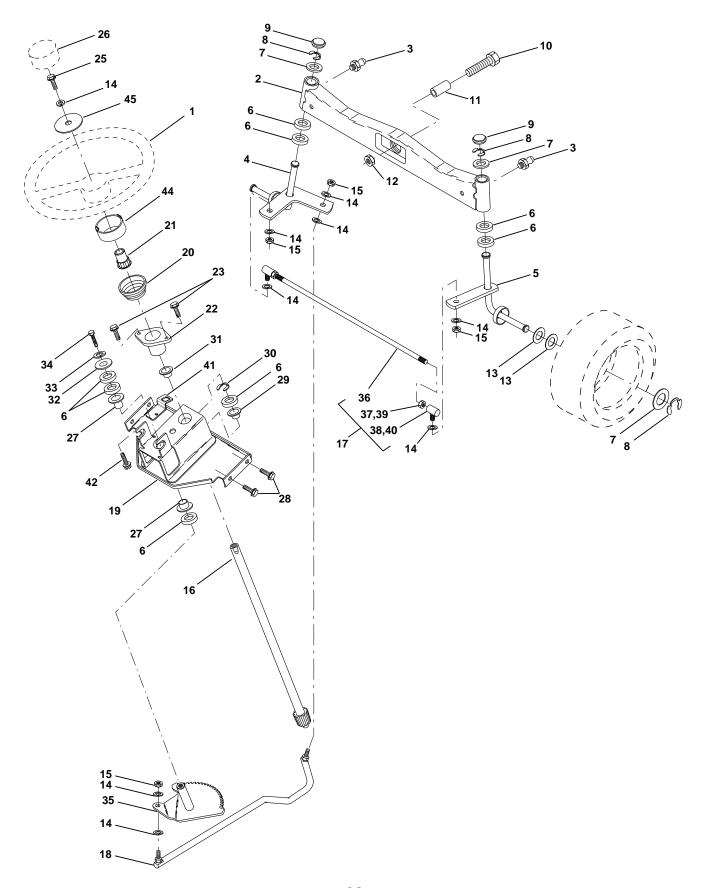
GROUND DRIVE

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
		Key 1/4 x 2.5 Washer Thrust Axle Harden Nut Crownlock 3/8-16 Pin Cotter 1/8 x 3/4 Wheel Hub Asm. Bolt Hub Washer 13/32 x 13/16 x 16 Ga Spring Rod Brake Nut Hex Jam Toplock 1/2-20 Shift Arm Asm Knob Nut Brake Rod Washer 13/32 x 1 x 16 Ga. Ring E Cap Plunger Rod Parking Brake Spring Drive Ground Washer 25/32 x 1-1/4 x 16 Gauge Nyliner, Bushing Screw Fin #10-24 x 1 Actuator Interlock Switch Nut Lock #10-24 Cover Pedal Retainer Spring Clutch Rod Bolt Carriage 3/8-16 x 1-1/2 Gr 5 Pulley Idler Flat Nut Crownlock 3/8-16 UNC Pulley Idler Grooved Washer Hartdened Idler Clutch 98 Arm Asm Bearing, Idler V-Belt Bolt Fin Hex 7/16-14 x 1-1/2 Pullery Transaxle	NO. 71 72 73 74 76 77 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 96 98 99 100 101 104 105 106 107 108 109 111 112 113	NO. 151179 STD541431 74490548 142432 140481 74760716 STD533106 140484 17490612 150586 140479 140490 17541020 140462 140491 161592 73680700 140489 17490644 74760520 140502 133835 141103 141004 17490624 126881X 156106 140480 17580408 142918 154739 142917 140929 156240 156104 73220700	Plate Console Shift Locknut Hex W/Washer Insert Bolt Hex FLGHD 5/16-18 x 3 Gr.5 Screw Hex Wsh. Hi-Lo 1/4-1/2 Bracket Transaxle Bolt Fin Hex 7/16-14 x 1 Bolt Carriage 5/16-18 x 5/8 Bracket Torque RH Screw Thdrol 3/8-16 x 3/4 Bracket Mount Torque/Fan Strap Torque Mid Spacer Screw #10-24 x 1-1/4 Fan 7" Hydro Adapter Fan Pulley Idler V-Groove Flange Nut Crownlock 7/16-14 UNC Keeper Belt Screw Thdrol 3/8-16 x 2-3/4 Bolt Fin Hex 5/16-18 x 1.25 Link Shift Asm Fastner Christmas Tree Washer Nickel Plated Bracket Shift Screw Thdrol 3/8-16 x 1-1/2 Washer Compression Washer Bellville Bracket Idler Screw Tap 1/4-20 x 1/2 O-Ring Asm Hydro Gear 70110 Line Fuel Hydro 15" VGT Serv Cap Asm Vent Hydro Gear 70109 Spring Return Brake Spacer Shift Lever VGTH Washer Nylon High Temp Nut Hex ASF 7/16-14 UNC
65 66 67 68	67609 140296 19131312 STD571812	Shaft Asm Brake Parking Clutch Bolt Shoulder Washer Hardened Washer 13/32 x 13/16 x 12 Ga Pin Roll	116 117	123405X 73900500 73900600 73800500 163198	Keeper Belt T/A Gnd Dr LR Nut Lock Hex Flange 5/16-18 Nut Lock Flg. 3/8-16 UNC Nut Lock Hex w/Ins. 5/16-18 Unc Transaxle Hydro
69 70	123800X 164892X428	Washer Console Shift	NOTE		at disconsisses since in LLC inches

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

TRACTOR - - MODEL NUMBER 944.600940

STEERING ASSEMBLY



TRACTOR - - MODEL NUMBER 944.600940

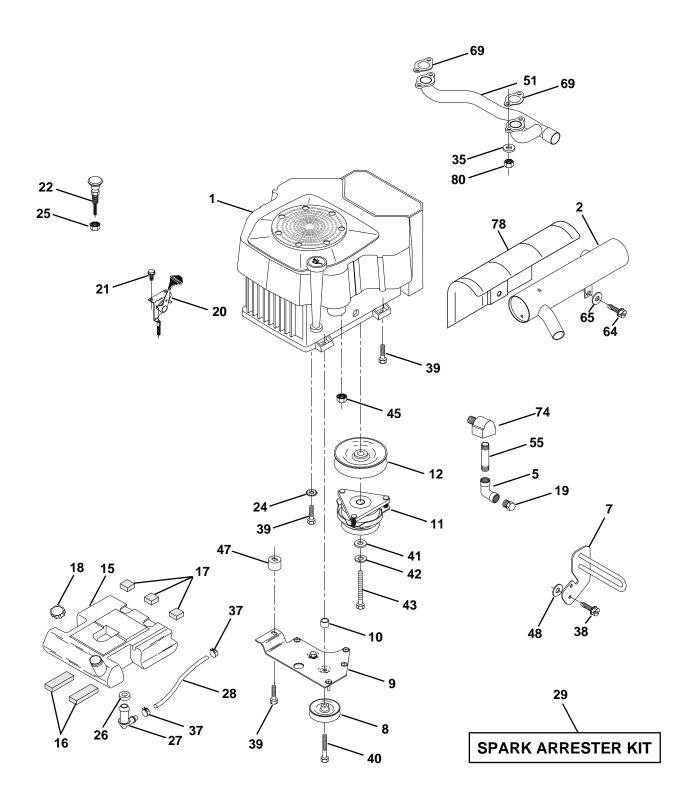
STEERING ASSEMBLY

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 21	159944X428 137094 6855M 161849 161848 6266H 121748X 12000029 121232X 74781044 136518 73901000 121749X STD551137 STD541537 145103 137347 137155 156011 163887 159945	Wheel, Steering Axle Asm., Front Fitting, Grease Spindle Asm, LH Spindle Asm., RH Bearing, Race Thrust Harden Washer 25/32 x 1-5/8 x 16 Ga. Ring, Klip#T5304-75 Cap, Spindle Bolt, Fin Hex 5/8-11 x 2-3/4 Spacer, Brg. Axle Front Nut, Lock Flange 5/8-11 Unc Washer 25/32 x 1-1/4 x 16 Ga. Washer, Lock Hvy Hlcl Spr 3/8 Nut Lock Center 3/8-24 UNF Shaft Asm., Steering Rod Asm., Tie Ball J Ball Vgt (Inc. Key No. 36-40) Draglink, Ball Joint Solid Vgt Support Asm., Steering Vgt Boot Steering Stealth GTYT Adapter, Wheel Steering
22 23 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 44 45	155105 155105 152927 STD523710 159946X428 3366R 17000612 104239X 12000034 138136 19111610 STD551131 STD523107 138059 137156 73360600 109850X 73700600 109851X 155246 17490508 160135 19132411	Bushing, Strg. Screw Bolt, Fin Hex 3/8-16 x 1 Gr. 5 Insert Cap Strg Wh Bearing, Col. Strg. Screw 3/8-16 x 3/4 Bearing, Flange Ring, Klip Truarc #5304-75 Bushing, Nyliner Snap Washer 11/32 x 1 x 10 Ga. Washer, Lock Hvy Hlcl Spr 5/16 Bolt, Hex Hd 5/16-18 x 3/4 Gear, Sector Steering Tie Rod Jam Nut RH Thread Joint Asm. Ball RH Thread Joint Asm. Ball LH Thread Bracket Switch Interlock VGT 97 Screw Thdrol. 5/16-18 x 1/2 TYT Extension Steering Premium Washer 13/32 x 1-1/20 x 11 Ga.

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

TRACTOR - - MODEL NUMBER 944.600940

ENGINE



TRACTOR - - MODEL NUMBER 944.600940

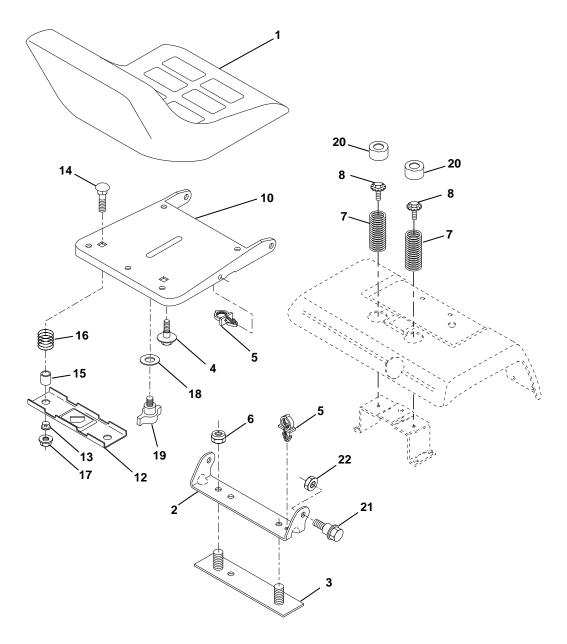
ENGINE

KEY NO.	PART NO.	DESCRIPTION
1		Engine (See Breakdown)
0	404000	Kohler Model CV22S-75518
2 5	161063 13200300	Muffler VGT Side Mount Elbow STD 90 Degree 3/8 - 18 NPT
7	151396	Muffler Asm Guard
8	121361X	Pulley V-Idler
9	150828	Keeper Asm Belt Engine VGT 96
10	105432X	Bushing Clutch Electric
11 12	140923 143996	Pulley Engine VGT Flect Clutch
15	151346	Pulley Engine VGT Elect Clutch Tank Fuel Rear 3.50 YT/GT 96
16	109227X	Pad Spacer
17	106082X	Pad Spacer
18 19	161493	Cap Asm Fuel W/Gauge
20	13290300 164067	Plug Oil Drain (See Engine Breakdown) Control Throttle
21	164863	Screw Hwhd Hi-Lo #13-16 x 3/4
22	164415	Control Choke
24	STD551237	Lockwasher Ext Tooth 3/8
25 26	73920600 3645J	Nut Keps 3/8 - 24 UNF
27	139277	Bushing Stem Tank Fuel
28	7834R	Fuel Line
29	132920	Spark Arrester Kit
33	STD551437	Nut Lock Hex w/Ins. 3/8 - 16
35 37	10010500 123487X	Washer Slit
38	17060620	Clamp Hose Screw 3/8-16 x 1-1/4
39	17490636	Screw TT 3/8-16 x 2-1/4 Unc Screw TT 3/8-16 x 4
40	17490664	
41	126197X	Washer 1-1/2 OD X 15/32 ID X .250
42 43	STD551143 150280	Washer Lock 7/16 Bolt Hex 7/16 - 20 X 4 - 1/4 Ga 5
45	73510400	Nut Keps Hex 1/4-20 Unc
47	142040	Spacer Engine
48	19132007	Washer 13/32 x 1-1/4 x 7 Ga.
51	161231	Manifold VGT CV Carb 1-1/4
54 55	19131414 13280336	Washer Flat 13/32 x 7/8 x 14 Ga. Nipple Pipe 4-1/2"
64	17000612	Screw 3/8-16 x 3/4
65	19131614	Washer 13/32 x 1 x 14 Ga.
69	24-041-02	Gasket
74 70	162295	Elbow Street Brass
78 80	164323 M73030800	Shield Muffler Stealth CV.VGT Nut Flange M8-1.25
00	1417 0000000	Tract languisto 1.20

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

TRACTOR - - MODEL NUMBER 944.600940

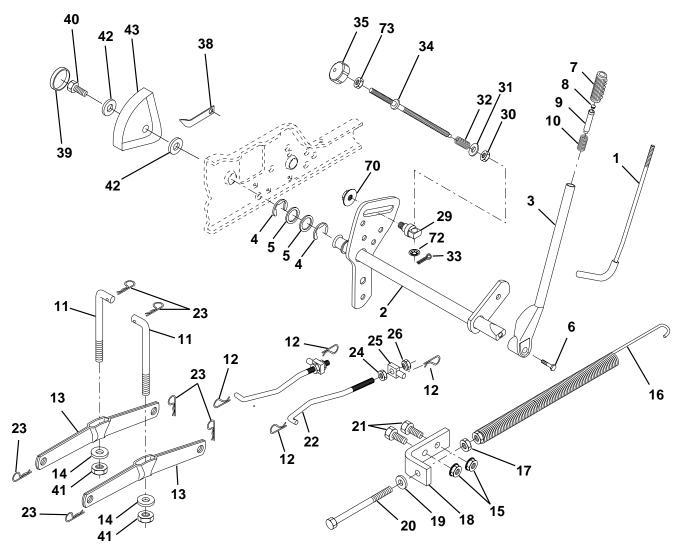
SEAT ASSEMBLY



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	140124	Seat	14	72050412	Bolt, Carriage 1/4-20 x 1-1/2
2	140551	Bracket, Pivot Seat	15	121249X	Spacer, Split
3	140675	Strap, Fender Asm.	16	123740X	Spring, Cprsn.
4	127018X	Bolt, Shoulder 5/16-18 x .62	17	123976X	Nut, Lock 1/4 Lg. Flg. Gr. 5
5	145006	Clip, Push-In Hinged	18	19171912	Washer 17/32 x 1-3/16 x 12 Ga.
6	STD541437	Nut, Crownlock 3/8-16	19	166369	Knob, Seat
7	124181X	Spring, Seat Cprsn.	20	124238X	Cap, Spring Seat Blk
8	171877	Bolt 5/16-18 UNC x 3/4 w/Sems	21	171852	Bolt 5/16-18
10	155925	Pan, Seat	22	STD541431	Nut, Crownlock 5/16-18
12 13	121246X 121248X	Bracket, Mounting Switch Bushing, Snap	NOT	E: All compor 1 inch = 25	nent dimensions given in U.S. inches i.4 mm

TRACTOR - - MODEL NUMBER 944.600940

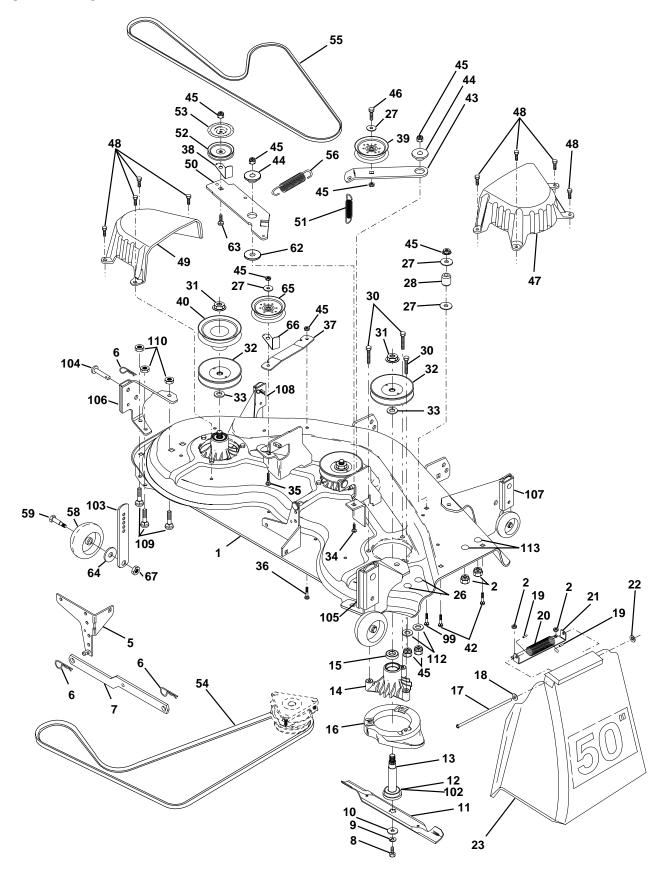
LIFT ASSEMBLY



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2	121006X 159187	Rod Asm., Lever Shaft Asm., Lift Vgt	23 24	STD624008 73350800	Retainer, Spring Nut, Jam Hex 1/2-13 Unc
3 4	159189 12000022	Lever Asm., Lift Rh E-Ring Truarc#5133-87	25 26	130171 73800800	Trunnion Nut, Lock W/Wsh 1/2-13 Unc
5	19292016	Washer 29/32 x 1-1/4 x 16 Ga.	29	150233	Trunnion Inf. Height
6	71110624	Bolt, Fin Hex 3/8-16 x 1-1/2	30	110807X	Nut, Special
7 8	125631X 122365X	Grip, Handle Fluted Button, Plunger	31 32	STD551037 137150	Washer 13/32 x 5/8 x 16 Ga. Spring, Compression Inf Hgt
9	122364X	Plunger, Lever Lift	33	STD560907	Pin, Cotter 3/32 x 1/2
10	2876H	Spring 2-1/8"	34	137167	Rod, Adj Lift
11	146704	Link Lift	35	138057	Knob, Inf 3/8-16 Unc
12	163552	Retainer, Spring	38	155097	Pointer, Height Indicator
13	139868	Arm, Suspension Vgt	39	123935X	Plug, Hole
14 15	140302 STD541437	Bearing, Pvt. Lift Spherical Nut, Crownlock 3/8-16 Unc	40 41	17490512 73540600	Screw Thdrol 5/16-18 x 3/4 Nut, Crownlock 3/8-24
16	674A247	Spring Asm., Assist Lift	42	19112410	Washer 11/32 x 1-1/2 x 10 Ga.
17	STD541237	Nut, Hex Jam 3/8-16 Unc	43	123934X	Scale, Indicator Height
18	143363	Bracket, Spring Assist	70	145212	Nut, Hexflange Lock
19	STD551037	Washer 13/32 x 13/16 x 16 Ga.	72	110452X	Nut Push Phos. & Oil
20 21 22	5328J STD523710 127218	Bolt, Adjust Spring Assist Bolt, Fin Hex 3/8-16 x 1 Link, Front	NOT	E: All compone 1 inch = 25	ent dimensions given in U.S. inches .4 mm

TRACTOR - - MODEL NUMBER 944.600940

MOWER DECK

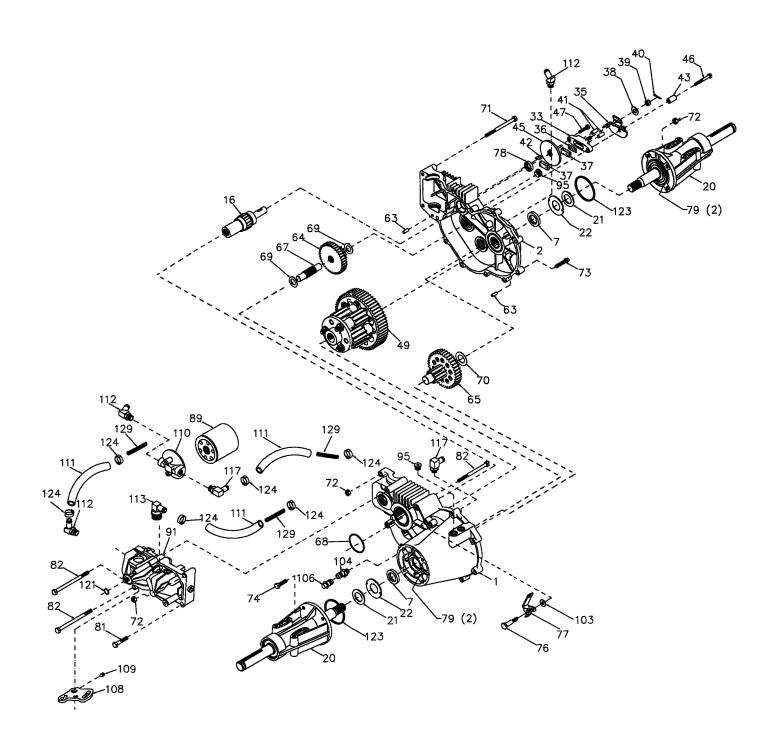


TRACTOR - - MODEL NUMBER 944.600940

MOWER DECK

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2	156990 STD541431	Deck Asm., Mower 50" Vented Nut, Crownlock 5/16-18	44 45	122052X STD541431	Spacer, Retainer Nut, Crownlock 3/8-16 Unc
5	138457	Bracket Asm., Sway Bar	46	74760628	Bolt, Fin Hex 3/8-16 Unc x 1-3/4
6	STD624008	Retainer, Spring	47	137200	Cover, Mandrel RH
7	130832	Arm Suspension, Rear	48	137729	Screw, Thd Roll 1/4-20 x 5/8
8	850857	Bolt 3/8-24 x 1.25 Gr. 8 Patched	49	136574	Cover, Mandrel LH
9 10	STD551137 140296	Washer, Lock Hvy 3/8 Unplated Washer, Hard Blade Mower Vented	50 51	137272 137273	Arm, Idler Primary Spring, Secondary
11	137380	Blade, 50" Mulching (Originally	52	139245	Pulley, Idler V Groove
	107000	equipped with)	53	137789	Shield, Idler
	156468	Blade Thick Hi-Lift Premium 50" (For	54	139573	V-Belt, Mower Primary
		better wear)	55	144959	V-Belt, Mower Secondary
12	129895	Bearing, Ball #6204 (Mandrel)	56	138687	Spring, Primary
13	137553	Shaft Asm., W/Lower Brg (Includes Key No. 12)	58 59	133957 137644	Wheel, Gauge Bolt, Shoulder
14	137152	Housing, Mandrel 50" Vent	62	133943	Washer Hardened
15	110485X	Bearing, Ball Mandrel	63	72110612	Bolt Carriage 3/8-16 x 1-1/2
16	140329	Stripper, Mower Vented	64	19121414	Washer 3/8 x 7/8 x 14 Ga.
17	106735X	Rod, Hinge	65	151831	Pulley Idler Flat Mower
18	19111016	Washer 11/32 x 5/8 x 16 Ga.	66	156009	Keeper, Belt Idler 50" Vent
19 20	105304X 123713X	Spring, Torsion Deflector Spring, Torison Delector	67 99	73930600 STD533717	Nut, Center Lock 3/8-16 Bolt, Carriage 3/8-16 x 1-3/4 Gr. 5
21	137607	Bracket, Deflector	102	153390	Washer Felt
22	110452X	Nut, Push	103	155986X505	Bar Pnt. Adjusting Wheel Guage
23	110509X	Shield, Deflector Mower	104	156941	Pin Head Rivet
26	STD533707	Bolt RDHD Sht SQNK 3/8-16 x 3/4	105	156852	Bracket Whl Ga. Asm. Rear Rh 50"
27 28	STD551037 132823	Washer 13/32 x 13/16 x 16 Ga.	106 107	156853 156854	Bracket Whi Ga. Asm. Rear Lh 50"
20 30	157722	Spacer, Spring Stop Idler Screw Thd Rolling Washer Head	107	156856	Bracket Whl Ga. Asm. Front Rh 50" Bracket Whl Ga. Asm. Front Lh 50"
31	137266	Nut, Flg Top Lock Cntr 9/16		72010505	Bolt Carriage 5/16-18 x 5/8
32	153535	Pulley, Mandrel		73980500	Nut Crownlock 5/16-18
33	129963	Washer, Spacer Mower Vented		19171216	Washer 17/32 x 3/4 x 16 Ga.
34	72140610	Bolt, Carriage 3/8-16 x 1-1/4		72110504	Bolt Carr. 5/16 - UNC x 1/2
35 36	72110616 72110608	Bolt, Carriage 3/8-16 x 2 Bolt, Carriage 3/8-16 x 1 Gr. 5		143651	Mandrel Asm (Includes Key Nos. 8-10, 12-15, 31 and 33)
37	137166	Stiffener, Arm Idler		158325	Mower Asm Service (Std. Deck -
38	156085	Keeper, Belt Idler		100020	Order separately all Nose Roller and
39	131494	Pulley, Ídler Flat			all Gauge Wheel components)
40	136572	Pulley, Driven			
42	STD533107	Bolt, Carriage 5/16-18 Unc x 3/4	NOT		nent dimensions given in U.S. inches
43	136460	Arm, Idler Secondary		1 inch = 25	o.4 mm

TRACTOR - - MODEL NUMBER 944.600940 HYDRO GEAR TRANSAXLE - - MODEL NUMBER 222-3010L

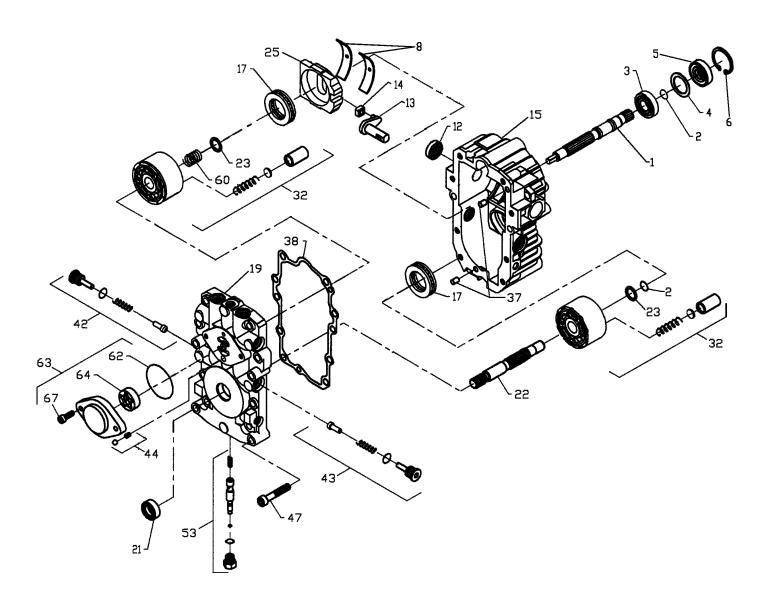


TRACTOR - - MODEL NUMBER 944.600940 HYDRO GEAR TRANSAXLE - - MODEL NUMBER 222-3010L

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	164591	Assembly, Housing, LH	72	153767	Locknut, Hex 5/16-18
2	164592	Assembly, Housing, RH	73	142904	Bolt, Hex 5/16-18 x 1-1/2
7	153765	Oil Seal .984 x 1.5 x .25	74	142905	Hex Cap Screw 5/16-18 x 1
16	142876	Brake Shaft Assembly	76	142907	Shoulder Bolt
20	142877	Axle Mounting Horn Assembly	77	142908	Freewheel Actuating Arm
21	142878	Washer 1.0 x 1.63 x .08	78	142909	Oil Seal .625 x 1.0 x .25
22	142879	Washer 1.0 x 2.06 x .09	79	153768	Grease (10 oz. Tube)
33	142929	Brake Yoke Assembly	81	142910	Bolt, Hex 5/16-18 x 1-3/4
35	142880	Brake Arm	82	142911	Bolt 5/16-18 x 4-1/2
36	142882	Puck Plate	89	142912	Filter, Spin On
37	142883	Brake Puck	91	153769	Pump, BDU-10L-122
38	142884	Washer 7/8 O.D. x 7/16 x .060	95	142914	Plug, Straight Thread
39	142885	Nut, Castle 5/16-24	103	142916	Washer
40	142886	Cotter Pin	104	142917	Vent Cap Assembly
41	142887	Brake Actuating Pin	106	142918	Fitting O-Ring Assembly
42	142888	Hi Pro Key	108	142919	Control Arm
43	142889	Spacer_	109	142920	Set Screw
45	142890	Brake Disc	110	142921	Filter Head
46	142891	Bolt 1/4-20 x 1-1/2	111	150820	Hose 1/2"
47	142892	Bolt 1/4-20 x 1	112	150823	Fitting, 1/2" Beaded 90° 7/8 SAE
49	153766	Differential Assembly	113	150821	Fitting, 1/2" Beaded 60° 9/16
63	142894	DowelPin	117	150822	Fitting, 1/2" Beaded 90° 9/16
64	150818	Reduction Gear,	123	150824	O Ring
		14 Teeth to 38 Teeth	124	150825	Pinch Clamp
65	142897	Final Drive Pinion Assembly	129	153771	Spring, Long
67	142898	Jackshaft			
68	142899	O-Ring			
69	142900	Washer 5/8 X 1-5/32	NOT		ent dimensions given in U.S. inches
70	142901	Washer 7/8 X 1-1/2		1 inch = 25 .	.4 mm
71	142902	Bolt, Hex 5/16-18 x 3.5			

TRACTOR - - MODEL NUMBER 944.600940

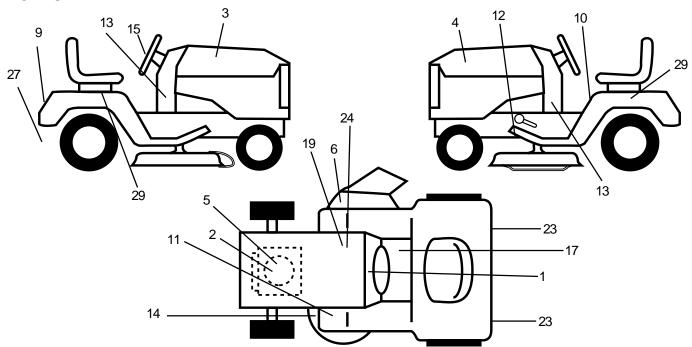
HYDRO GEAR PUMP - MODEL NUMBER BU-10L-122



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 8 12 13 14 15 17 19 21	144569 122716X 122745X 122715X 122700X 122699X 122767X 122717X 122748X 122749X 144571 122770X 153801 122722X	Shaft, Pump Ring, Retaining Bearing, Ball Spacer Seal, Lip Ring, Retaining Bearing, Cradle Seal, Lip Arm, Trunnion Guide, Slot Housing Kit, Transmission Bearing, Thrust, Ball Center Section Kit Seal, Lip	25 32 37 38 42 43 44 47 53 60 62 63 64 67	127148X 142938 122786X 122718X 144578 144579 122752X 127153X 142977 144581 144582 144583 144584	Swashplate, Variable Block Assembly Pin, Stainless, Headless Gasket, Center Section Check Valve Kit Check Valve Kit Charge Relief Kit Screw, Socket Head, Cap Bypass Valve Kit Block Spring O-Ring Charge Pump Kit Gerotor Assembly Screw, Socket Head, Cap
22 23	144573 142978	Shaft, Motor Washer, Block Thrust		153769	Pump Assembly, Complete

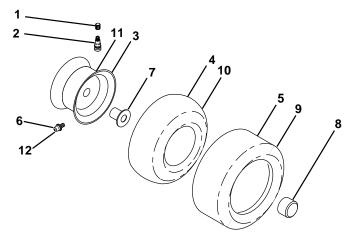
TRACTOR - - MODEL NUMBER 944.600940

DECALS



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 9 0	164097 164759 171702 171703 164884 137259 163204	Decal, Dash Decal, Eng Lg Decal, Hood, Craftsman, RH Decal, Hood, Craftsman, LH Decal, Blower Hsng Decal, Warning, Multi-Lang Decal, Fender, Craftsman	15 17 19 23 24 27 29	164065 140837 138047 106202X 149517 142342 163223	Decal, Steering Wheel Decal, Saddle Brake Parking Decal, Battery Reflector, Taillight Decal, Btry Dngr/Psn Decal, Drawbar Decal, Handle Lift (Lift Handle)
10 11 12 13 14	157140 101892X 146790 163267 160397	Decal, Danger Decal, Clutch/Brake Decal, V-Belt Drive Schematic Decal, Dash Panel Decal, V-Belt Schematic		138311 157199X428 172445 172446	Decal, Handle Lift (Lift Handle) Pad Ftrest R Br Sq Craftsman 95 Manual, Owner's (English) Manual, Owner's (French)

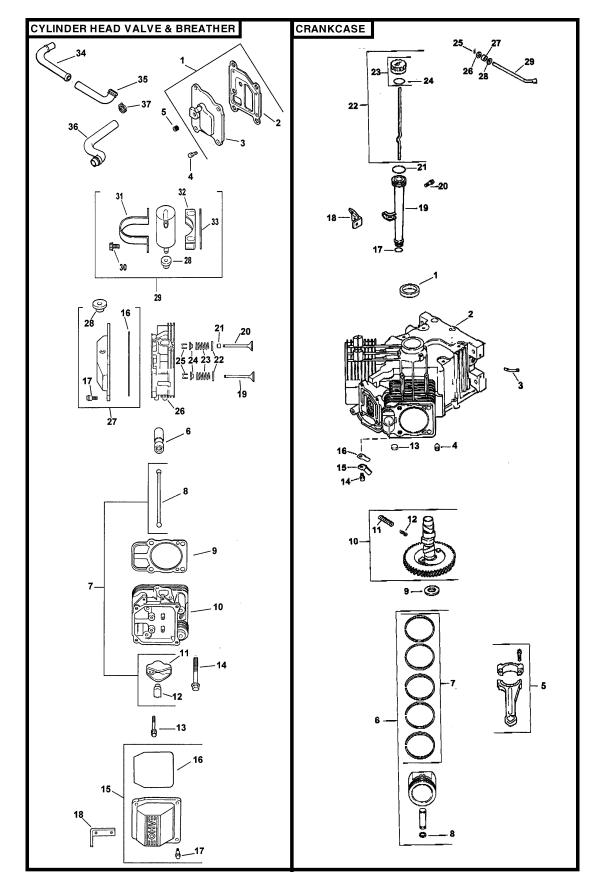
WHEELS & TIRES



KEY NO.	PART NO.	DESCRIPTION
1	59192	Cap, Valve, Tire
2	65139	Stem, Valve
3	148736X427	Rim Assembly, Front
4	8134H	Tube, Front (Service Item Only)
5	148741	Tire, Front
6	278H	Fitting, Grease (Front Wheel Only)
7	9040H	Bearing, Flange (Front Wheel Only)
8	104757X	Cap, Axle (Front Wheel Only)
9	151607	Tire, Rear
10	7154J	Tube, Rear (Service Item Only)
11	148738X427	Rim Ássembly, Rear
12	6856M	Fitting, Grease
	144334	Sealant, Tire (10 oz. Tube)

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

TRACTOR - - MODEL NUMBER 944.600940 KOHLER ENGINE - MODEL NUMBER CV22S-75518



TRACTOR - - MODEL NUMBER 944.600940

KOHLER ENGINE - MODEL NUMBER CV22S-75518

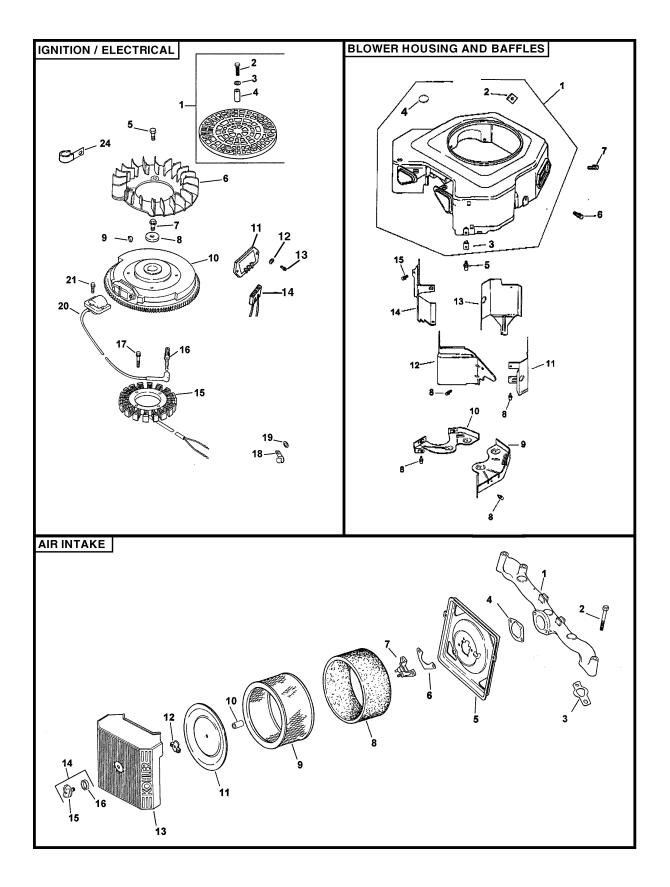
HEAD/VALVE/BREATHER

	' PART NO.	DESCRIPTION	CRA	NKCASE	
1.	24-033-03-S	Kit, breather cover w/gasket (Includes 2,3)		' PART NO.	DESCRIPTION
2. 3. 4. 5. 6. 7. 8. 9.	24-041-23-S 24-096-59-S M-645020-S X-75-23-S 25-351-01-S 24-755-66-S 24-411-05-S 24-041-40-S 24-318-12-S	Gasket, breather Cover, breather Screw, hex. flange M6x1.0x20 (4) Plug, allen hd. 1/8" Lifter, valve (4) Kit, valve train (Includes 8,11,12) Rod, push (4) Gasket, cylinder head (2) Head assembly, #2 cylinder	1. 2. 3. 4. 5.	12-380-17-S 24-067-13-S 24-067-14-S 24-874-09-S	Seal, oil front Crankcase (USE: Miniblock) Fitting Pin, dowel locating (6) Connecting Rod (Std.) (2) Connecting Rod (.25) (2) Piston w/Ring Set (Std.) (2) (Includes 7,8)
11. 12. 13.	25-186-01-S 24-599-01-S M-640034-S	Arm, rocker (4) Pivot, rocker arm (4) Screw, hex. flange M6x1.0x34 (4)		24-874-10-S 24-874-11-S 24-874-15-S	Piston w/Ring Set (.25) (2) Piston w/Ring Set (.50) (2) Kit, piston w/ring set (.08)
14. 15.	24-086-44-S 24-755-74-S	Screw, hex. flange M10x1.5x90 (8) Kit, valve cover - plain (Includes 16,17)	7.	24-108-08-S 24-108-09-S 24-108-10-S	Ring Set (Std.) (2) Ring Set (.25) (2) Ring Set (.50) (2)
16. 17.	24-153-16-S 24-086-32-S	O-Ring Screw, shoulder (4)	8. 9.	12-422-09-S	Retainer, piston pin (4) Shim, camshaft (A.R.)
18. 19.	24-445-01-S 24-016-01-S 24-016-02-S	Strap, lifting Valve, exhaust (Std.) (2) Valve, exhaust (.25) (2)		12-422-13-S 12-422-07-S 12-422-08-S	Shim, camshaft (A.R.) Shim, camshaft (A.R.) Shim, camshaft (A.R.)
20.	24-017-01-S 24-017-02-S	Valve, intake (Std.) (2) Valve, intake (.25) (2)		12-422-10-S 12-422-11-S	Shim, camshaft Shim, camshaft (A.R.)
21. 22. 23.	24-032-05-S 235011-S 24-089-02-S	Seal, valve stèm (2) Retainer, spring (4) Spring, valve (4)	10. 11.	12-422-12-S 24-010-06-S	Shim, camshaft (A.R.) Camshaft (Includes 11,12)
23. 24. 25.	12-173-01-S 12-755-03-S	Spring, valve (4)` Cap, valve spring (4) Kit, retainer (4)	11. 12. 13.	24-089-34-5	Spring, ACR (Heavy) S Spring, ACR (Light) Plug, cup
26.	24-318-11-S	Head assembly, #1 cylinder	14. 15.	M-0545010-S 24-018-04-S	Screw, hex. flange M5x0.8x10 (2) Retainer, reed (2)
27.	24-755-76-S	Kit, valve cover - breather (Incl.16,17,28)	17.		Reed, breather (2) O-Ring, lower oil fill tube
28. 29.	25-313-02-S 24-755-57-S	Grommet, rubber Kit, breather separator (Includes 28,30-33)	18. 19. 20.	12-123-04-S	Bracket, oil fill tube Tube, oil fill Screw, hex. flange M5x0.8x16
30. 31. 32.	M-545016-S 24-445-02-S 24-126-44-S	Screw, hex. flange M5x0.8x16 (2) Strap, breather Bracket, breather separator	21. 22. 23.	12-153-02-S 24-038-04-S	O-Ring, upper oil fill tube Dipstick assembly (Includes 23,24)
33. 34.	24-112-12-S 24-294-06-S	Spacer Fitting	24.	24-755-46-S 12-153-03-S	Kit, oil fill cap (Includes 24) O-Ring, dipstick
35. 36. 37.	24-326-13-S 24-326-14-S X-426-9-S	Hose, breather Hose, breather Clamp, hose (2)	25. 26. 27. 28.	12-380-04-S M-631005-S 12-032-01-S X-25-102-S	Pin, hitch Washer, plain 6 mm Seal, governor cross shaft Washer, plain 1/4"
			29.	24-144-01-S	Shaft, governor cross

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

TRACTOR - - MODEL NUMBER 944.600940

KOHLER ENGINE - MODEL NUMBER CV22S-75518



TRACTOR - - MODEL NUMBER 944.600940

BLOWER HOUSING & BAFFLES

KEY PART

KOHLER ENGINE - MODEL NUMBER CV22S-75518

DESCRIPTION

IGNITION/CHARGING

KEY PART NO. NO.

	110.	BEGGINI FIGH		NO.	DESCRIPTION
1.	54-755-15-S	Kit, grass screen (Includes 2-4,and 24 113 18)	1.	24-027-20-S	Housing, blower (Includes 2-4)
2.	M-403025-S	Screw, hex. cap M4x0.7x25 (4)		24-021-20-3	(Incl. M-0545010 & 24 063 36)
3.	X-25-92-S	Washer, plain 5/16" (4)	2.	24-100-01-S	Nut, plastic (3)
4.	24-112-04-S	Spacer, grass screen (4)	3.	24-100-02-S	Nut, plastic (2)
5.	25-086-47-S	Bolt, shoulder (4)		25-139-16-S	Plug, button 9/16"
<u>6</u> .	24-157-03-S	Fan	5.	M-567020-S	Screw, hex. flange M5x0.8x20 (4)
7. 8.	12-086-14-S	Screw, hex. flange M10x1.5x46	6. 7.		Screw, hex. flange M5x0.8x16 (3)
o. 9.	12-468-03-S X-42-15-S	Washer, plain 3/8". Key	7. 8.	M-0551016-S M-0645016-S	Screw, hex. flange M5x0.8x16 Screw, hex. flange M6x1.0x16 (6)
10.	24-025-11-S	Flywheel	9.	24-146-16-S	Plate, backing - # 2 side
11.	25-403-03-S	Rectifier-regulator	10.	24-146-20-S	Plate, backing - # 1 side
	X-25-92-S	Washer, plain 3/16" (2)		24-063-20-S	Baffle, cylinder barrel-# 2 side
13.	24-086-18-S	Screw, phillips hd. 11-16x7/8 (2)	12.	24-063-14-S	Baffle, valley - #2 side
	236602-S	Connector (3 contact)		24-063-30-S	Baffle, cylinder barrel-# 1 side
15.	54-755-09-S	Kit, 15 amp stator (Includes 24 126 71)	14. 15.	24-063-23-S M-545010-S	Baffle, valley - #1 side Screw, hex. flange M5x0.8x10 (2)
16.	12-132-06-S	Spark Plug (2)	13.	141-343010-3	Screw, nex. nange wisko.ox to (2)
17.	M-548025-S	Screw, hex. cap M5x0.8x25 (2)	NOT	ILLUSTRATED)
18.	48-154-02-S	Clip, cable		24-096-66-S	Cover, control
_	X-25-63-S	Washer, plain 1/4"		24-086-06-S	Screw, phillips hd. 11-16x3/4" (2
	24-584-01-S	Module, ignition (2)			
21.	M-545020-S	Screw, hex flange			
24.	2-351-73-S	M5x0.8x20(4) Clip, cable	ΔIR	INTAKE/FILTR	ATION
		•			(III)
NOT	ILLUSTRATED			PART	
	24-126-71-S	Bracket, stator wire	NO.	NO.	DESCRIPTION
	X-22-11-S 24-176-12-S	Washer, lock 1/4" Harness, wiring	1.	24-164-06-S	Manifold, intake
	24-170-12-3	Lead, black (rectreg. 4" - 18	2.		Screw, hex. flange M6x1.0x55 (4)
		gauge	3.	24-041-01-S	Gasket, intake manifold (2)
	25-518-28-S	insulated grip barrel eyelets)			(-)
	24-113-18-S	Decal, grass screen	4.	24-041-14-S	Gasket, air cleaner base
	12-454-01-S	Tie, wire	5.	24-094-18-S	Base, air cleaner
	X-468-1-S	Tie, cable (3)	6. 7.	24-041-13-S	Gasket, fuel spitback cup
			7. 8.	24-109-09-S 24-083-05-S	Cup, fuel spitback Precleaner, element
			9.	24-083-03-S	Element, air cleaner
			10.		Seal, breather
			11.	24-096-01-S	Cover, inner air cleaner
			12.	12-100-01-S	Wing Nut
			13.		Cover, air cleaner
			4.4	E	
			14.	54-755-01-S	Kit, knob with seal
			14. 15.	54-755-01-S 25-341-03-S	(Includes 15 & 16) Knob, cover

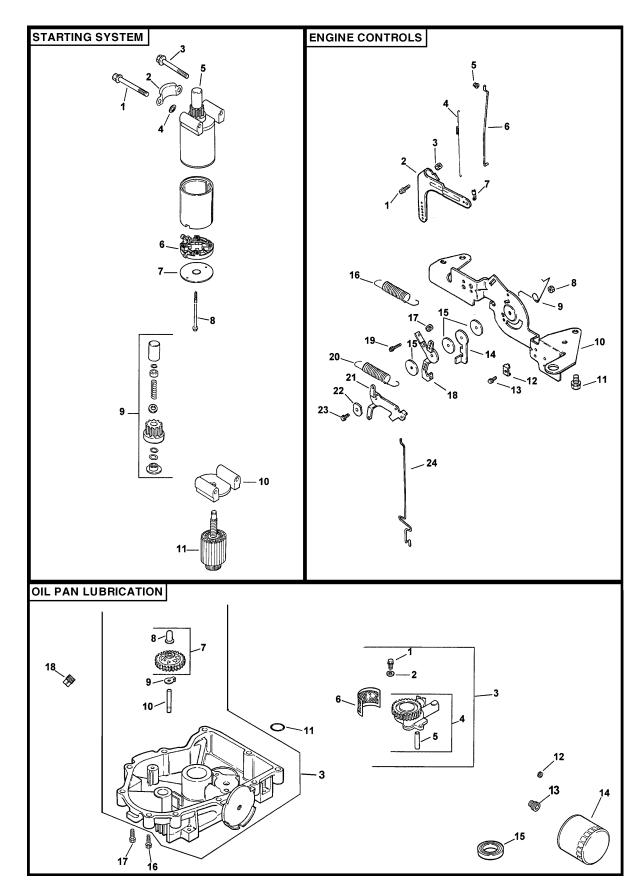
NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

O-Ring

15. 25-341-03-S 16. 24-153-15-S

TRACTOR - - MODEL NUMBER 944.600940

KOHLER ENGINE - MODEL NUMBER CV22S-75518



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STARTING SYSTEM

KEY NO.	PART NO.	DESCRIPTION
4. 5. 6. 7. 8. 9.	M-0839070-S 24-096-05-S M-0839080-S 12-468-01-S 25-098-05-S 12-221-01-S 12-227-13-S 12-211-01-S 12-755-54-S 12-227-06-S 12-170-05-S	Screw, hex. flange M8x1.25x70 Cover, pinion Screw, hex. flange M8x1.25x80 Washer, plain 11/32" (3) Starter, (Includes 6-11) Kit, brush Cap Bolt, thru (2) Kit, drive Cap, drive end Armature

ENGINE CONTROLS

LINGINE CONTROLS					
KEY NO.	PART NO.	DESCRIPTION			
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 20. 21. 22.	24-086-43-S 24-090-07-S 24-468-01-S 24-089-15-S M-446030-S 24-090-13-S M-545020-S 24-089-38-S 24-090-05-S	Screw, hex. flange M6x1.0x25 Lever, governor Nut, hex. flange M6x1.0 Spring, linkage Bushing, linkage retaining Linkage, throttle Bushing, throttle linkage Nut, hex. lock M5x0.8 Spring, choke return Bracket, control Screw, hex. flange M6x1.0x16 (4) Clamp, cable (2) Screw, hex. flange M5x0.8x16 (2) Lever, thorttle actuator Washer, plain 5.5 mm (3) Spring, governor Nut, hex M4x0.7 Lever, throttle control Screw, hex. flange M5x0.8x20 Spring, throttle limiter Lever, choke Washer, spring 1/4" Screw, hex. cap M4x0.7x25			
24.	24-079-05-S	Linkage, choke			
NOT	ILLUSTRATED M-545016-S	Screw, hex. flange M5X0.8X16 (Goes into 24-126-56 as a positive throttle stop)			

OIL PAN/LUBRICATION

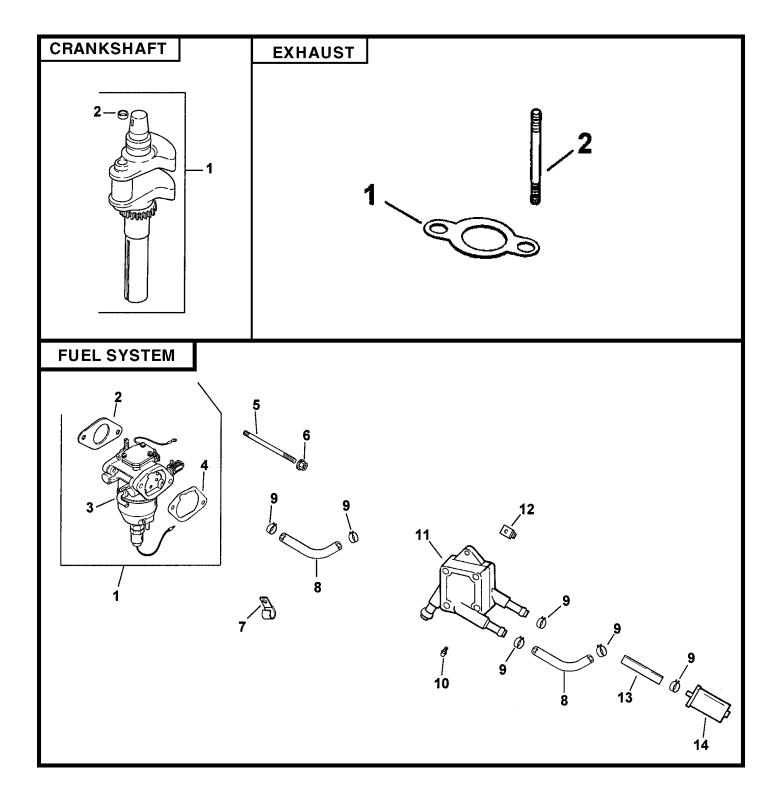
KEY NO.	PART NO.	DESCRIPTION
1.		Screw, hex. flange M6x1.0x25 (2)
2.		Washer, plain 6 mm (2)
3.	24-199-07-S	Pan, oil assembly
4	24 202 00 6	(Includes 1,2,&4-10)
	24-393-08-S	Oil pump assembly (Includes 5)
	24-123-05-S	Tube, oil pickup
	24-162-26-S	Screen, oil
7.	24-043-12-S	Kit, governor gear w/pin
	_	(Includes 8)
8.	12-380-01-S	Pin, governor regulating
9.	52-448-02-S	Tab, locking
10.	12-144-02-S	Shaft, governor gear
11.	24-153-08-S	O-Ring
12.	X-75-32-S	Plug, hex. ctsk. 3/8"
	24-136-01-S	Nipple, oil filter
	52-050-02-S	Filter, oil
	52-032-08-S	Seal, oil (PTO end)
_	24-086-17-S	Screw, hex. flange M8x1.25x45
	24-086-16-S	Screw, hex. flange M8x1.25x45 (9)
	X-75-10-S	Plug, sq. hd. solid 3/8" N.P.T.F.
10.	V-12-10-2	riug, sq. iiu. soilu 3/6 N.F.T.F.
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NOTE: All component dimensions given in U.S. inches

1 inch = 25.4 mm

TRACTOR - - MODEL NUMBER 944.600940

KOHLER ENGINE - MODEL NUMBER CV22S-75518

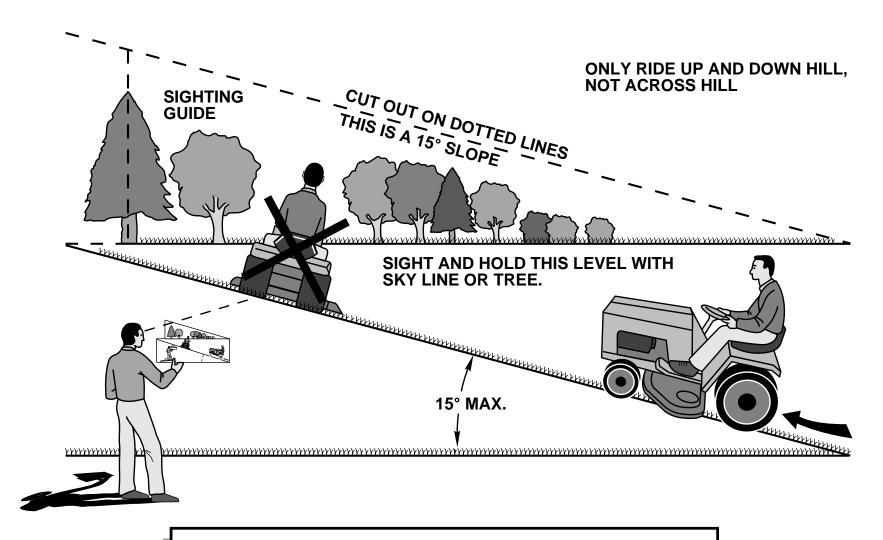


TRACTOR - - MODEL NUMBER 944.600940 KOHLER ENGINE - MODEL NUMBER CV22S-75518

CRANKSHAFT			FUEL SYSTEM		
	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
2.	24-014-72-S 52-139-09-S	Crankshaft (Includes 2) Plug, cup	1. 2. 3.	24-853-25-S 24-041-15-S 	Kit, carburetor w/gaskets (Includes 2-4) Gasket, carburetor Carburetor assembly (For information only not available separately)
KEY	AUST PART NO.	DESCRIPTION	5. 6.	M-0629095-S M-0641060-S	
1. 2. 	24-041-02-S 25-072-04-S 24 522 16 24 782 05-S 24 755 03-S	Gasket, exhaust (2) Stud, M8x1.25x33 (4) Short Block Miniblock Gasket Set	7. 8. 9. 10. 11. 12.	47-154-01-S 24-353-03-S X-426-9-S 24-086-12-S 24-393-04-S 24-100-01-S 25-353-03-S 24-050-02-S	Clip, cable Line, fuel 10-5/8" (2) Clamp, hose (6) Screw, hex. cap. M6x1.7x18 (2) Pump, fuel - pulse Nut, plastic (2) Line, fuel 13-1/2" Filter, fuel
			NOT	ILLUSTRATED 24-757-18-S 24-757-19-S	Kit, overhaul w/gaskets Kit, choke repair w/gaskets
				24-757-20-S 24-757-22-S	Kit, gasket Kit, solenoid replacement w/ gaskets
			NOT	E: All compor	ent dimensions given in U.S. inches 4 mm

SERVICE NOTES

SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION





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

SEARS

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MODEL NO. 944.600940

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