# SEARS OWNER'S MANUAL

MODEL NO. 944.600901

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



# **CRAFTSMAN®**

# 20.0 HP ELECTRIC START 46" MOWER AUTOMATIC GARDENTRACTOR

- 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.

### TABLE OF CONTENTS

SAFETY RULES	2
PRODUCT SPECIFICATIONS	4
WARRANTY	4
<b>CUSTOMER RESPONSIBILITIES</b>	4, 17-20
ASSEMBLY	6-10
OPERATION	11-16

MAINTENANCE SCHEDULE	17
SERVICE AND ADJUSTMENTS	21-27
STORAGE	28
TROUBLESHOOTING	29-30
<b>REPAIR PARTS - TRACTOR</b>	32-49
REPAIR PARTS - ENGINE	50-57
PARTS ORDERING/SERVICE	BACK COVER

#### 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/O FILTER: 4.0 PINTS
SPARK PLUG: (GAP: .030")	CHAMPION RC12YC
GROUND SPEED (MPH):	FORWARD: 0 – 5.8 REVERSE: 0 – 2.1
TIRE PRESSURE:	FRONT: 14 PSI REAR: 10 PSI
CHARGING SYSTEM:	15 AMPS @ 3600 RPM
BATTERY:	AMP/HR: 35 MIN. CCA: 280 CASE SIZE: U1R
BLADE BOLT TORQUE:	27–35 FT. LBS.

#### 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:

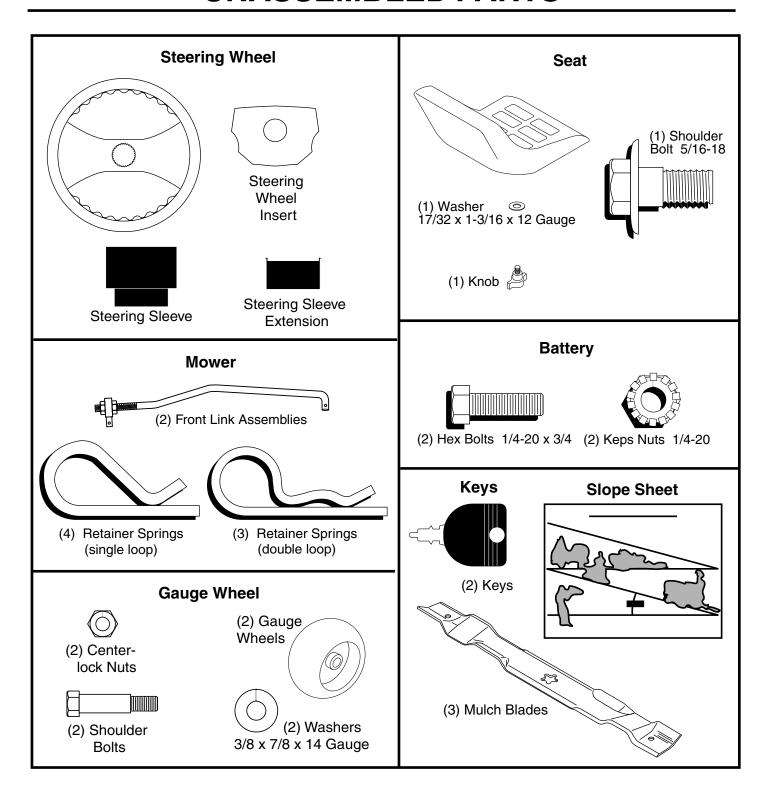
- 1. Pre-delivery set-up.
- 2. Tire replacement or repair caused by punctures from outside objects (such as nails, thorns, stumps, or glass).
- 3. Expendable items which become worn during normal use, such as blades, spark plug, air cleaners and belts.
- 4. Repairs necessary because of operator abuse 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.
- Cut, from top to bottom, along lines on all four corners of carton, and lay panels flat.
- Remove mower and packing materials.
- Check for any additional loose parts or cartons and remove.

# BEFORE REMOVING TRACTOR FROM SKID

#### ATTACH STEERING WHEEL (See Fig. 1)

- Remove hex bolt, lock washer and large flat washer from steering shaft.
- Position front wheels of the tractor so they are pointing straightforward.
- 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.

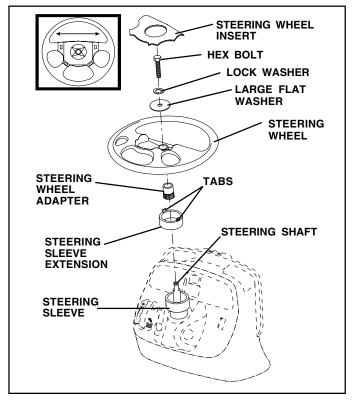


FIG. 1

#### **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.

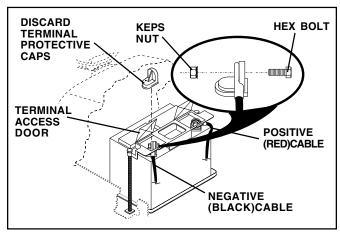


FIG. 2

#### **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.

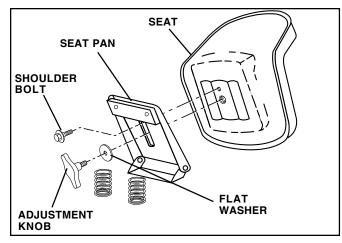


FIG. 3

**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 11, for location and function of controls)

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

# TO DRIVE TRACTOR OFF SKID (See Operation section, page 11, 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.

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

YOUR MOWER CAME FACTORY EQUIPPED WITH HIGH PERFORMANCE BLADES, WHICH ARE THE BEST BLADES FOR BAGGING AND DISCHARGING. TO USE YOUR MOWER WITH THE HIGH PERFORMANCE BLADES THE MULCHER PLATE MUST BE REMOVED FROM THE MOWER (SEE FIG. 4).

# TO SET UP YOUR MOWER FOR MULCHING (See Fig. 4)

- Turn the mower over to allow access to blades.
- Remove hex bolt, lock washer and flat washer and remove high performance blades. Store in safe place.
- Install mulcher blades with trailing edge up towards deck as shown.

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

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

IMPORTANT: BLADE BOLT IS GRADE 8 HEAT TREATED.

Install mulcher plate if previously removed.

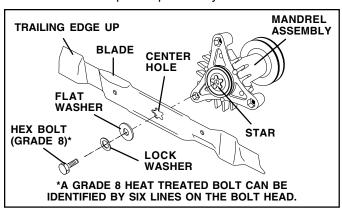


FIG. 4

#### TO INSTALL MULCHER PLATE (See Fig. 5)

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

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



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

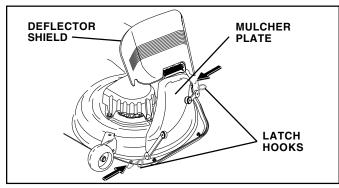


FIG. 5

# TO CONVERT TO BAGGING OR DISCHARGING

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

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

# INSTALL MOWER AND DRIVE BELT (See Figs. 6 and 7)

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 R.H. front mower bracket and R.H. front suspension bracket. Retain with two single loop retainer springs as shown.
- Install second front link in L.H. front suspension bracket only and 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 L.H. suspension arm on inward pointing deck pin. If necessary, rock and raise front of mower to align deck pin with the hole in suspension arm. Retain with double loop retainer spring with loops down as shown.
- Slide left side of mower back and install the unattached front link in top hole of the L.H. front mower bracket. Retain with single loop retainer spring as shown.
- Place the R.H. suspension arm on inward pointing deck pin. If necessary, rock and raise front of mower to align deck pin with the hole in suspension arm. Retain with double loop retainer spring with loops down as shown.

- Turn height adjustment knob clockwise to remove slack from mower suspension.
- Raise mower to highest position.
- Assemble gauge wheels (See "TO ADJUST GAUGE WHEELS" 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.

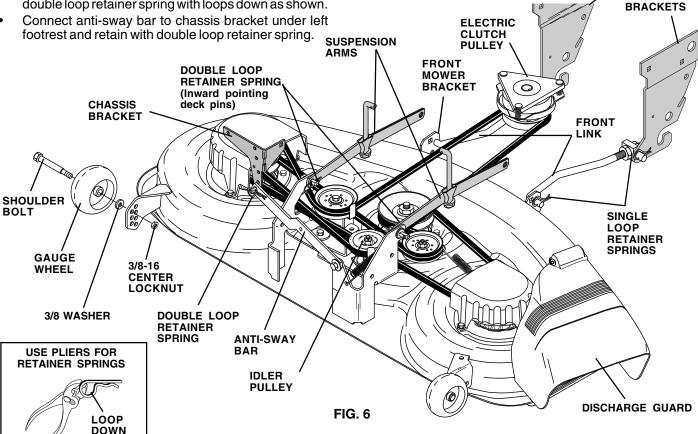
# CHECK FOR PROPER POSITION OF ALL BELTS

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.

SUSPENSION



9

#### **✓ 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.

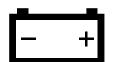
#### PLEASE REVIEW THE FOLLOWING CHECKLIST:

- ✓ 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** 





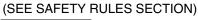






KEEP AREA CLEAR

**SLOPE HAZARDS** 



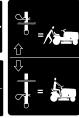


DANGER, KEEP HANDS AND FEET AWAY









**FREE WHEEL** (Automatic Models only)

#### **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.

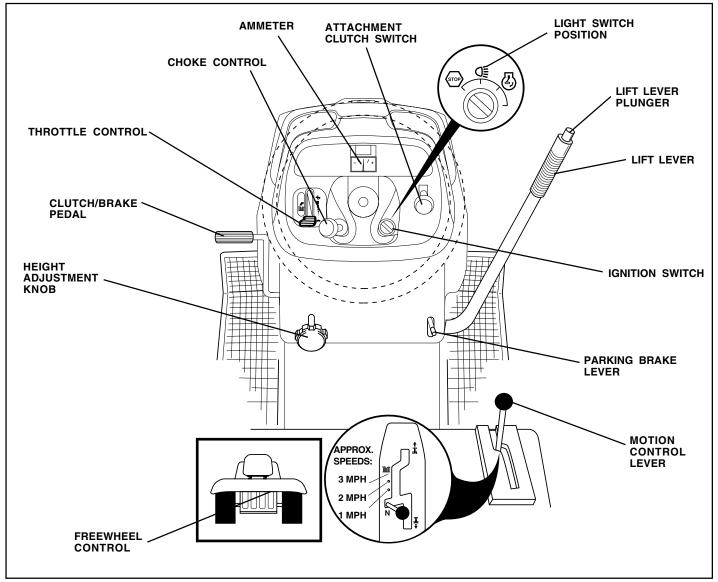


FIG. 7

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.

 $\label{limit} \textbf{LIFTLEVER} - \textbf{Used to raise and lower mower deck or other attachments mounted to your tractor.}$ 

**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.



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

#### **HOW TO USE YOUR TRACTOR**

#### TO SET PARKING BRAKE (See Fig. 8)

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

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

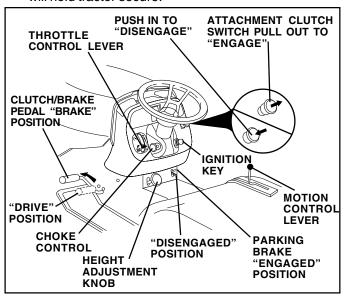


FIG. 8

#### STOPPING (See Fig. 8)

MOWER BLADES -

 To stop mower blades, move attachment clutch 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. 8)

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. 8)

Always operate engine at full throttle.

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

# TO MOVE FORWARD AND BACKWARD (See Fig. 8)

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

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

# TO ADJUST MOWER CUTTING HEIGHT (See Fig. 8)

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

- Turn knob clockwise  $( \curvearrowright)$  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 coolseason and to over 3 inches during hot months. For healthier and better looking lawns, mow often and after moderate growth.
- For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first cut relatively high; the second to desired height.

#### TO ADJUST GAUGE WHEELS (See Fig. 9)

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

- Adjust gauge wheels with tractor on a flat level surface.
- Adjust mower to desired cutting height (See "TO ADJUST MOWER CUTTING HEIGHT" in the Operation section of this manual).
- With mower in desired height of cut position, gauge wheels should be assembled so they are slightly off the ground. Install gauge wheel in appropriate hole with shoulder bolt, 3/8 washer, and 3/8-16 locknut and tighten securely.
- Repeat for opposite side installing gauge wheel in same adjustment hole.

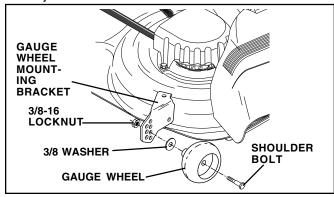


FIG. 9

#### TO OPERATE MOWER (See Figs. 6 and 10)

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

- 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.

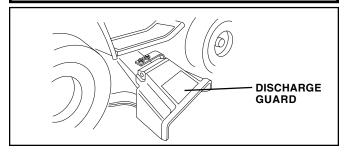


FIG. 10

#### 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 11)

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

- Raise attachment lift to highest position with attachment lift control.
- 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.).

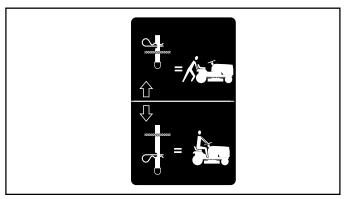


FIG. 11

#### 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. 12)**

- 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.

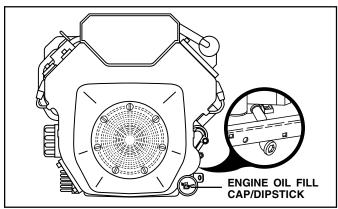


FIG. 12

#### 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. 8)

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 "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the tractor. This will result in a more even distribution of clippings and more uniform cutting.
- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished (See Fig. 13).
- 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.

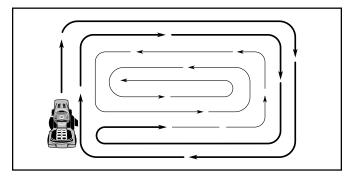


FIG. 13

AS	MAINTENANCE SCHEDUL LI IN DATES YOU COMPLETE GULAR SERVICE	.E	BEFORE S	EACHUS EVERY 8	HOURS HOURS	5 HOUR 15 HOUR EVERY 5	S HOUF O HOUF VERY	O HOU	EASON EFORE	SER'	VICE	DAT	ES
	Check Brake Operation	<b>V</b>	1										
	Check Tire Pressure	~	<b>V</b>										
т	Check Operator Presence and Interlock Systems	~											
ΙŖ	Check for Loose Fasteners	<b>/</b>				<b>1</b> 7		<b>/</b>					
AC	Sharpen/Replace Mower Blades			<b>✓</b> 4									
Ι¥	Lubrication Chart			<b>/</b>				<b>/</b>					
Ιċ	Check Battery Level			<b>1</b> 6									
R	Clean Battery and Terminals			<b>/</b>				<b>/</b>					
	Check Transaxle Cooling			/									
	Adjust Blade Belt(s) Tension					<b>1</b> 5							
	Adjust Motion Drive Belt(s) Tension					<b>1</b> 5							
	Check Engine Oil Level	<b>V</b>	1										
	Change Engine Oil			1,2,3				<b>/</b>					
lε	Clean Air Filter			<b>√</b> 2									
N	Clean Air Screen			<b>1</b> /2									
Ģ	Inspect Muffler/Spark Arrester				1								
I N E	Replace Oil Filter (If equipped)					1,2							
	Clean Engine Cooling Fins					<b>1</b> /2							
	Replace Spark Plug					1	1						
	Replace Air Filter Paper Cartridge					<b>1</b> 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.

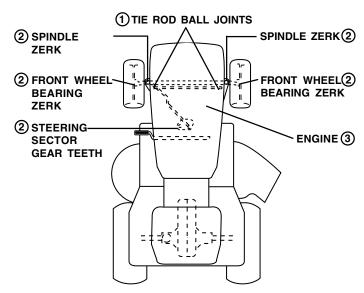
 Once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear. A new sparkplugand clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

#### **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. 14)**

- 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.

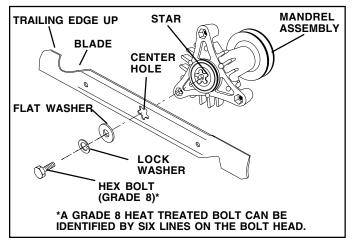


FIG. 14

#### TO SHARPEN BLADE (See Fig. 15)

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

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

- The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen while on the mower.
- To check blade balance, you will need a 5/8" diameter steel bolt, pin, or a cone balancer. (When using a cone balancer, follow the instructions supplied with balancer).

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

 Slide blade on to an unthreaded portion of the steel bolt or pin and hold the bolt or pin parallel with the ground. If blade is balanced, it should remain in a horizontal position. If either end of the blade moves downward, sharpen the heavy end until the blade is balanced.

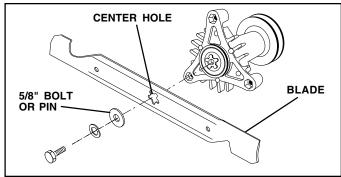


FIG. 15

#### **BATTERY**

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

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

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

#### TO CLEAN BATTERY AND TERMINALS

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

- 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.

#### 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.

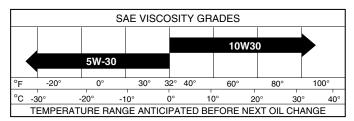
#### **V-BELTS**

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. 16)

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.

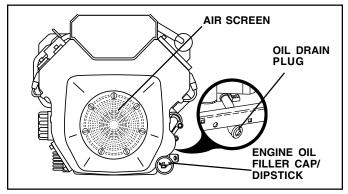


FIG. 16

#### CLEAN AIR SCREEN (See Fig. 16)

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

#### **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. 17)

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.

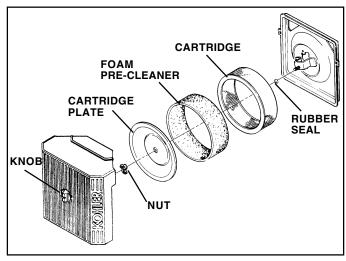


FIG. 17

#### **ENGINE OIL FILTER**

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

#### **MUFFLER**

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

#### SPARK PLUGS

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

#### **IN-LINE FUEL FILTER (See Fig. 18)**

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.

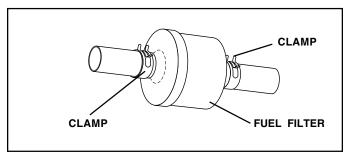


FIG. 18

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

#### TO REMOVE MOWER (See Fig. 19)

- 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

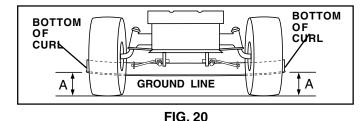
Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PROD-UCT SPECIFICATIONS" section of this manual). If tires are over or underinflated, you will not properly adjust your mower.

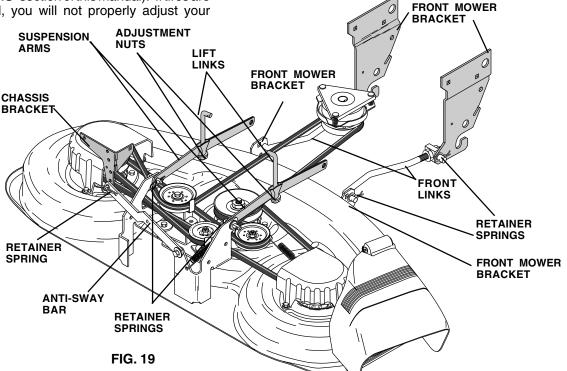
SIDE-TO-SIDE ADJUSTMENT (See Figs. 19 and 20)

- Raise mower to its highest position.
- Measure height from bottom of deck curl 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. 21 and 22)

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

To obtain the best cutting results, the mower housing should be adjusted so 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.

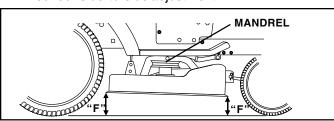


FIG. 21

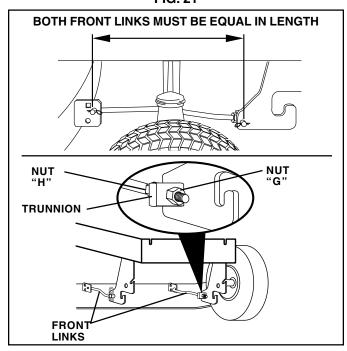


FIG. 22

#### TO REPLACE MOWER DRIVE BELT

MOWER DRIVE BELT REMOVAL (See Fig. 23)

- 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. 23)

- 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.

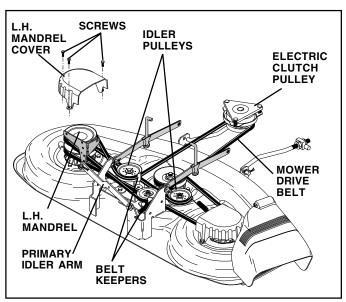


FIG. 23

# TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 24)

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-barbracket.
- 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).

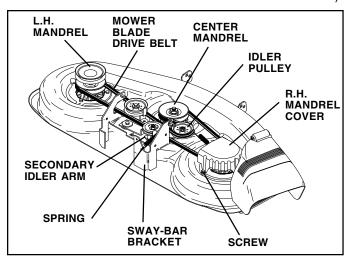


FIG. 24

# TO ADJUST ATTACHMENT CLUTCH (See Fig. 25)

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.

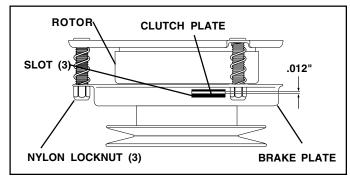


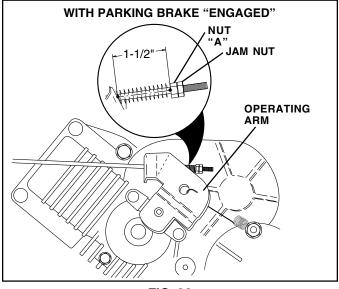
FIG. 25

#### TO ADJUST BRAKE (See Fig. 26)

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. 26

# TO REPLACE MOTION DRIVE BELT (See Fig. 27)

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.

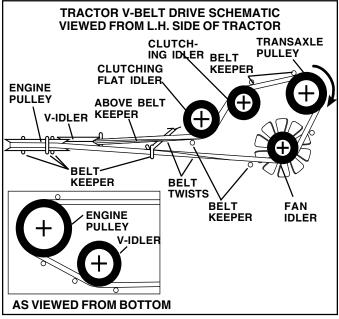


FIG. 27

# TO ADJUST MOTION CONTROL LEVER (See Fig. 28)

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.

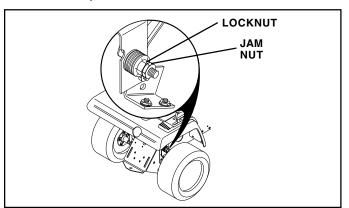
- Park tractor on level surface. Stop tractor by turning ignition key to "OFF" position and engage parking brake.
- Place motion control lever in neutral (N) position.
- While holding locknut, loosen jam nut
- Tighten locknut 1/4 turn.
- While holding locknut, tighten jam nut securely.

**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. 28** 

#### 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. 29)

- 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. 29 and 30)

- 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.

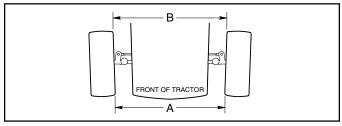


FIG. 29

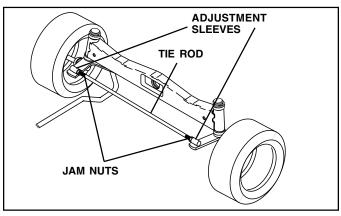


FIG. 30

#### TO REMOVE WHEEL FOR REPAIRS

FRONT WHEEL (See Fig. 31)

- 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.

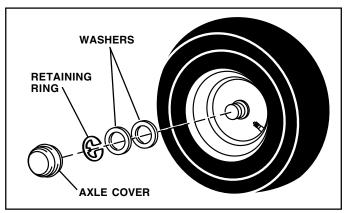


FIG. 31

# TO START ENGINE WITH A WEAK BATTERY (See Fig. 32)



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.

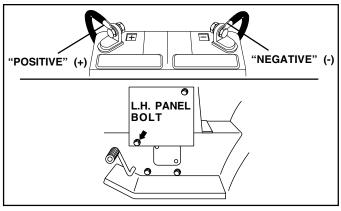


FIG. 32

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. 33)

- 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.

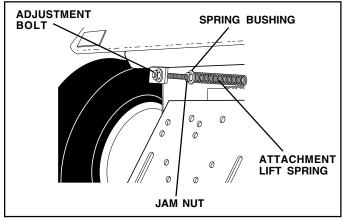


FIG. 33

# TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 34)

- 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.

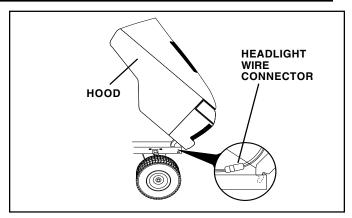


FIG. 34

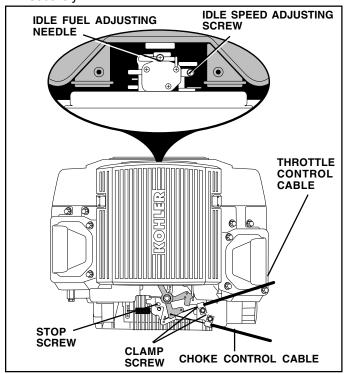
#### **ENGINE**

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. 35)

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. 35

# TO ADJUST CHOKE CONTROL (See Figs. 35 and 36)

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.

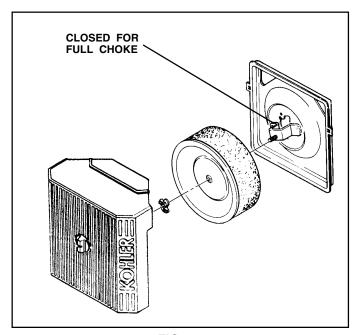


FIG. 36

#### TO ADJUST CARBURETOR (See Fig. 36)

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**

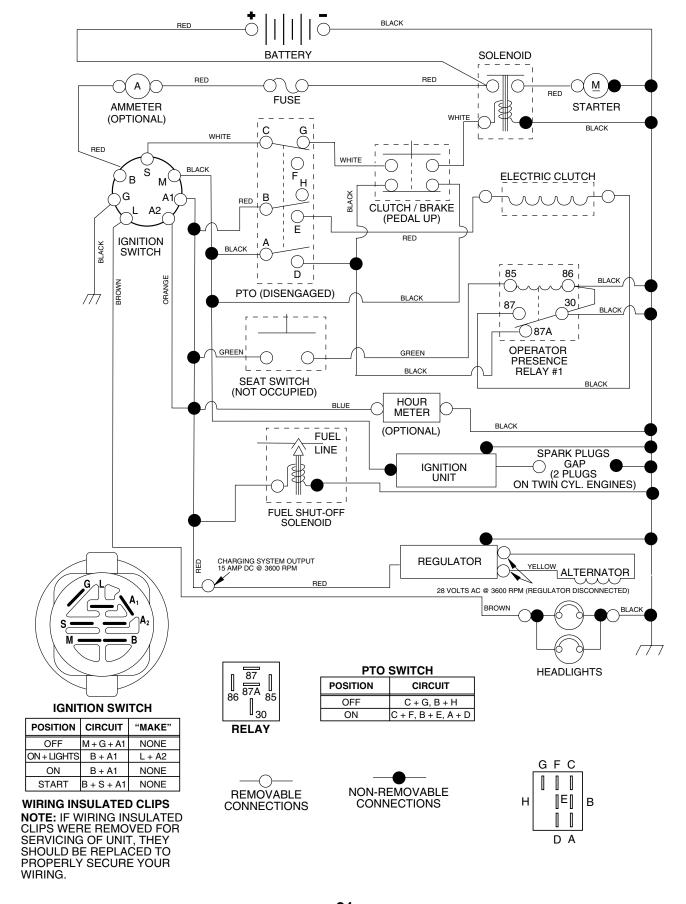
PROBLEM	CAUSE	CORRECTION				
Will not start	<ol> <li>Out of fuel.</li> <li>Engine not "CHOKED" properly.</li> <li>Engine flooded.</li> <li>Bad spark plug.</li> <li>Dirty air filter.</li> <li>Dirty fuel filter.</li> <li>Water in fuel.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> </ol>	<ol> <li>Fill fuel tank.</li> <li>See "TO START ENGINE" in Operation section.</li> <li>Wait several minutes before attempting to start.</li> <li>Replace spark plug.</li> <li>Clean/replace air filter.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>				
Hard to start	<ol> <li>Dirty air filter.</li> <li>Bad spark plug.</li> <li>Weak or dead battery.</li> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> </ol> 8. Engine valves out of adjustment.	<ol> <li>Clean/replace air filter.</li> <li>Replace spark plug.</li> <li>Recharge or replace battery.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with fresh gasoline.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>				
Engine will not turn over	<ol> <li>Clutch/brake pedal not depressed.</li> <li>Attachment clutch is engaged.</li> <li>Weak or dead battery.</li> <li>Blown fuse.</li> <li>Corroded battery terminals.</li> <li>Loose or damaged wiring.</li> <li>Faulty ignition switch.</li> <li>Faulty solenoid or starter.</li> <li>Faulty operator presence switch(es).</li> </ol>	<ol> <li>Depress clutch/brake pedal.</li> <li>Disengage attachment clutch.</li> <li>Recharge or replace battery.</li> <li>Replace fuse.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace ignition switch.</li> <li>Check/replace solenoid or starter.</li> <li>Contact an authorized service center/department.</li> </ol>				
Engine clicks but will not start	Weak or dead battery.     Corroded battery terminals.     Loose or damaged wiring.     Faulty solenoid or starter.	<ol> <li>Recharge or replace battery.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace solenoid or starter.</li> </ol>				
Loss of power	1. Cutting too much grass/too fast. 2. Throttle in "CHOKE" position. 3. Build-up of grass, leaves and trash under mower. 4. Dirty air filter. 5. Low oil level/dirty oil. 6. Faulty spark plug. 7. Dirty fuel filter. 8. Stale or dirty fuel. 9. Water in fuel.  10. Spark plug wire loose. 11. Dirty engine air screen/fins. 12. Dirty/clogged muffler. 13. Loose or damaged wiring. 14. Carburetor out of adjustment.	<ol> <li>Set in "Higher Cut" position/reduce speed.</li> <li>Adjust throttle control.</li> <li>Clean underside of mower housing.</li> <li>Clean/replace air filter.</li> <li>Check oil level/change oil.</li> <li>Clean and regap or change spark plug.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with fresh gasoline.</li> <li>Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>Connect and tighten spark plug wire.</li> <li>Clean engine air screen/fins.</li> <li>Clean/replace muffler.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>				
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	<ol> <li>Worn, bent or loose blade.</li> <li>Mower deck not level.</li> <li>Buildup of grass, leaves, and trash under mower.</li> <li>Bent blade mandrel.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ol>	<ol> <li>Replace blade. Tighten blade bolt.</li> <li>Level mower deck.</li> <li>Clean underside of mower housing.</li> <li>Replace blade mandrel.</li> <li>Clean around mandrels to open vent holes.</li> </ol>				
Mower blades will not rotate	<ol> <li>Obstruction in clutch mechanism.</li> <li>Worn/damaged mower drive belt.</li> <li>Frozen idler pulley.</li> <li>Frozen blade mandrel.</li> </ol>	<ol> <li>Remove obstruction.</li> <li>Replace mower drive belt.</li> <li>Replace idler pulley.</li> <li>Replace blade mandrel.</li> </ol>				
Poor grass discharge	<ol> <li>Engine speed too slow.</li> <li>Travel speed too fast.</li> <li>Wet grass.</li> <li>Mower deck not level.</li> <li>Low/uneven tire air pressure.</li> <li>Worn, bent or loose blade.</li> <li>Buildup of grass, leaves and trash under mower.</li> <li>Mower drive belt worn.</li> <li>Blades improperly installed.</li> <li>Improper blades used.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ol>	<ol> <li>Place throttle control in "FAST" position.</li> <li>Shift to slower speed.</li> <li>Allow grass to dry before mowing.</li> <li>Level mower deck.</li> <li>Check tires for proper air pressure.</li> <li>Replace/sharpen blade. Tighten blade bolt.</li> <li>Clean underside of mower housing.</li> <li>Replace mower drive belt.</li> <li>Reinstall blades sharp edge down.</li> <li>Replace with blades listed in this manual.</li> <li>Clean around mandrels to open vent holes.</li> </ol>				
Headlight(s) not working (if so equipped)	<ol> <li>Switch is "OFF".</li> <li>Bulb(s) burned out.</li> <li>Faulty light switch.</li> <li>Loose or damaged wiring.</li> <li>Blown fuse.</li> </ol>	<ol> <li>Turn switch "ON".</li> <li>Replace bulb(s).</li> <li>Check/replace light switch.</li> <li>Check wiring and connections.</li> <li>Replace fuse.</li> </ol>				
Battery will not charge	<ol> <li>Bad battery cell(s).</li> <li>Poor cable connections.</li> <li>Faulty regulator (if so equipped).</li> <li>Faulty alternator.</li> </ol>	<ol> <li>Replace battery.</li> <li>Check/clean all connections.</li> <li>Replace regulator.</li> <li>Replace alternator.</li> </ol>				
Loss of drive	<ol> <li>Freewheel control in "disengaged" position.</li> <li>Motion drive belt worn, damaged, or broken.</li> <li>Air trapped in transmission during shipment or servicing.</li> </ol>	<ol> <li>Place freewheel control in "engaged" position.</li> <li>Replace motion drive belt.</li> <li>Purge transmission.</li> </ol>				
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.				

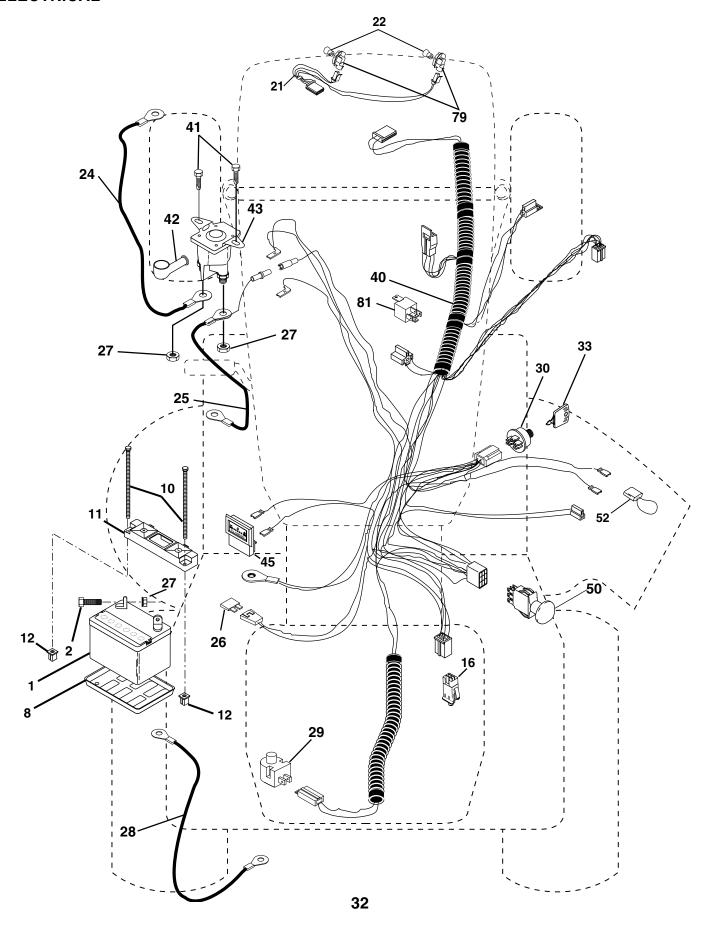
#### TRACTOR - - MODEL NUMBER 944.600901

#### **SCHEMATIC**



### TRACTOR - - MODEL NUMBER 944.600901

#### **ELECTRICAL**



#### TRACTOR - - MODEL NUMBER 944.600901

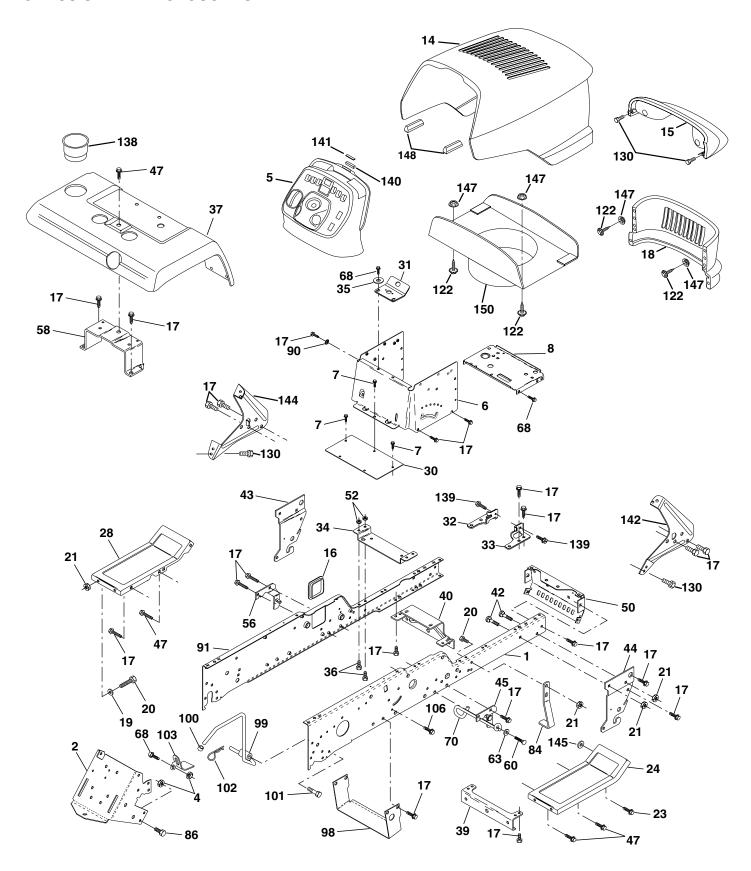
#### **ELECTRICAL**

KEY PA	ART O.	DESCRIPTION
2 74 8 76 10 14 11 15 12 14 16 15 21 16 22 41 24 40 25 14 26 10 27 73 28 17 29 16 30 16 33 14 40 17 41 17 42 13 43 14 45 12 50 16 52 14 81 10	4927 760412 03J 5211 0109 5769 3664 6184 52J 14J 6686 8824X 510400 0697 0784 3968 0403 0238 720408 1563 5673 2822X 9416 1940 9748X	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 Nut Keps Hex 1/4-20 Unc Cable, Ground Switch, Plunger Switch, Ign Key Harness, Ignition Screw 1/4-20 x 1/2 Cover, Terminal Red Solenoid Ammeter Switch, PTO Protection Wire Loop Relay Asm. Socket, Light Bulb

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

#### TRACTOR - - MODEL NUMBER 944.600901

### **CHASSIS AND ENCLOSURES**



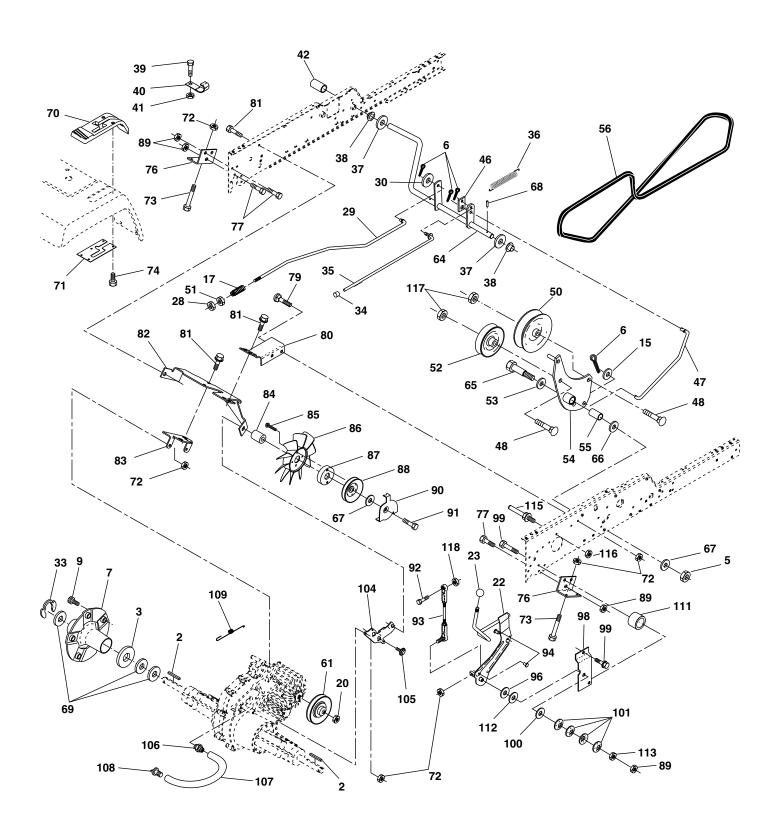
#### TRACTOR - - MODEL NUMBER 944.600901

#### **CHASSIS AND ENCLOSURES**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	150253	Rail, Frame RH	50	152728	Bracket, Chassis Front
2	140506	Drawbar, Gt	52	STD541431	Nut, Crownlock 5/16-18
4	73680700	Nut, Crownlock 7/16-14Unc	56	154914	Bracket Asm., Susp Chassis Lh
5	163976X428	Dash	58	137113	Bracket Asm., Fender
6	157882	Dash Asm., Lower	60	17060620	Screw Thdrol 3/8-16 x 1-1/4
7	17720408	Screw, Thd Cut 1/4-20 x 1/2	63	19131614	Washer 13/32 x 1 x 14 Ga.
8	145166	Support, Battery	68	17490508	Screw, Thd 5/16-18 x 1/2
14	161023X558	Hood Asm., Pnt	70	137159	Guide, Belt Mid Span
15	160568	Lens, Asm Headlight bar	84	142992	Stop, Over Center Mower
16	121794X	Cover, Access	86	74760716	Bolt, Fin Hex 7/16-14 Unc x 1
17	17060612	Screw, 3/8-16 x 3/4	90	11050600	Washer, Lock External Tooth 3/8
18	160564X558	Grille	91	170755	Rail, Frame Lh
19	19131312	Washer 13/32 x 13/16 x 12 Ga.	98	140503	Bracket Skid Chassis
20	STD523710	Bolt, Fin Hex 3/8-16 x 1	99	140871	Rod By Pass
21	STD541437	Nut, Crownlock 3/8-16 Unc	100	71673	Cap Parking Brake Rod
23	17060616	Screw 3/8-16 x 1	101	17490628	Screw Thdrol 3/8-16 x 1-3/4
24	145243X558	Footrest, RH	102	STD624003	Retainer, Spring
28	145244X558	Footrest, LH	103	142273	Lock, By Pass
30	145052	Saddle, Hydro 1995	106	138776	Bolt 5/16-18 Type TT
31	161419	Bracket, Supt 1-pc VGT Steering	122	161464	Screw Hex Wshd 8-18 x 7/8
32	161327	Bracket, Pivot Chassis LH	130	164863	Screw HWHD Hi-Lo #13-16 x 3/4
33	161326	Bracket, Pivot Chassis RH	138	163975X428	CupholderYTGT
34	142131	Bracket, Engine Support Rear	139	161330	Bolt Shoulder 5/16-18 TT
35	19111116	Washer 11/32 x 11/16 x 16 Ga.	140	163806	Magnet YTGT
36	74780512	Bolt, Fin Hex 5/16-18 x 3/4	141	163805	Stricker Plate YTGT
37	167287X558	Fender, Pnt.	142	161897	Bracket Dash RH
39	136961	Bracket, Axle Front	144	161900	Bracket Dash LH
40	156111	Bracket, Support Axle/Engine	145	19131414	Washer Flat 13/32 x 7/8 x 14 Ga.
42	STD533710	Bolt, Carriage 3/8-16 x 1	147	162967	Fastener Nutpal
43	136939	Bracket, Spnsn Front Lh	150	161237	Duct Heat Hood
44	136940	Bracket, Spnsn Front Rh			
45	154913	Bracket Asm., Susp Chassis Rh	NOTE	· All compone	nt dimensions given in U.S. inches
47	17670608	Screw Thdrol 3/8-16 x 1/2 TYT	NOTE.	1 inch = 25.4	

### TRACTOR - - MODEL NUMBER 944.600901

#### **GROUND DRIVE**



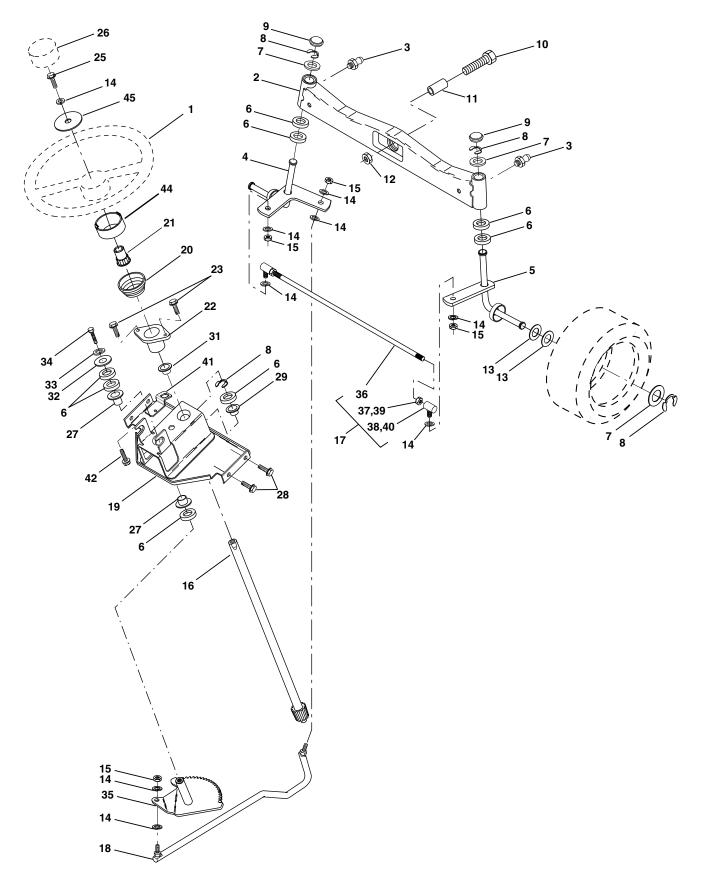
### TRACTOR - - MODEL NUMBER 944.600901

### **GROUND DRIVE**

KEY PART NO. NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
2 7070E 3 7563R 5 STD54143 6 STD56121 7 140507 9 140080 15 19131316 17 140921 20 STD54135 22 156103 23 130564 28 STD54123 29 140494 30 19131616 33 12000053 34 71673 35 137648 36 149412 37 121749X 38 150035 39 STD51101 40 5304J 41 STD54141 42 8883R 46 145170	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 UNF 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	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	STD541431 74490548 142432 140481 74760716 STD533106 140484 17060612 150586 140479 140490 17541020 140462 140491 161592 73680700 140489 17490644 74760520 140502 133835 141103 141004 17060624 126881X	Nut Crownlock 5/16-18 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 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 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 3/8-16 x 1-1/2 Washer Compression
47 138228 48 72110612 50 131494 51 STD54143 52 139123 53 207J 54 161590 55 105706X 56 140218 61 140488 64 154752 65 67609 66 140296 67 19131312 68 STD57181 69 123800X 70 164892X42 71 151179	Pulley Idler Grooved Washer Hartdened Arm Asm Idler Clutch 98 Bearing, Idler V-Belt Pullery Transaxle Shaft Asm Brake Parking Clutch Bolt Shoulder Washer Hardened Washer 13/32 x 13/16 x 12 Ga Pin Roll Washer	101 104 105 106 107 108 109 111 112 113 115 116 117 118	156106 140480 17580408 142918 154739 142917 140929 156240 156104 73220700 123405X 73900500 73900600 73800500 163198 : All compone 1 inch = 25.	Washer Bellville Bracket Idler Screw Tap 1/4-20 x 1/2 O-Ring Asm. Hydro Ger 70110 Line Fuel Hydro 15" Vgt Serv Cap Asm Vent Hydro Gear 70109 Spring Return Brake Spacer Shift Leer Vgth Washer Nylon High Temp Nut, Hex Asf 7/16-14 UNC Keeper Belt T/A Gnd Dr. LR Nut Lock Hex Flange 5/16-18 Nut Lock Flange 3/8-16 UNC Nut Lock Hx W/Ins 5/16-18 UNC Transaxle Hydro

### TRACTOR - - MODEL NUMBER 944.600901

### STEERING ASSEMBLY



### TRACTOR - - MODEL NUMBER 944.600901

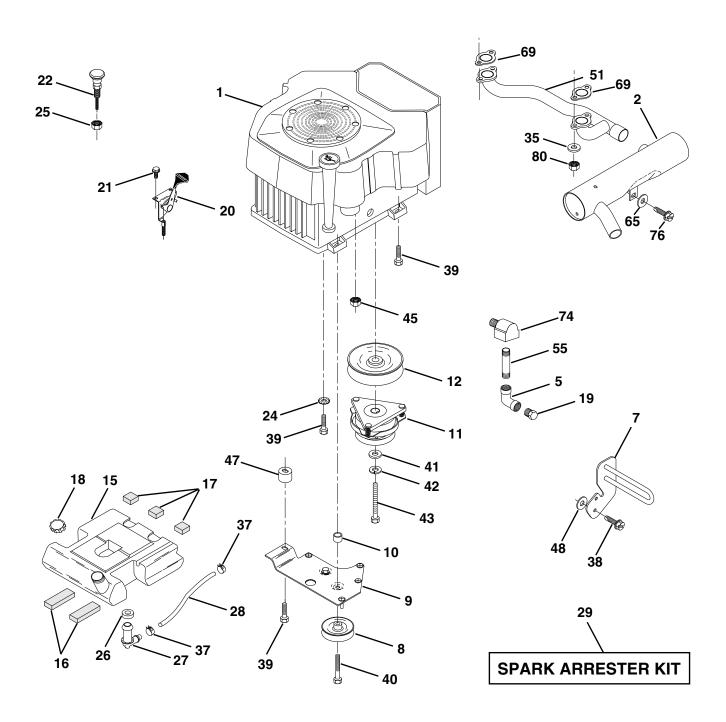
### STEERING ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
1	159944X428	Wheel, Steering
2	137094	Axle Asm., Front
3	6855M	Fitting, Grease
4	161849	Spindle Asm, LH
5 6	161848	Spindle Asm., RH
7	6266H 121748X	Bearing, Race Thrust Harden Washer 25/32 x 1-5/8 x 16 Ga.
8	12000029	Ring, Klip #T5304-75
9	121232X	Cap, Spindle
10	74781044	Bolt, Fin Hex 5/8-11 x 2-3/4
11	136518	Spacer, Brg. Axle Front
12	73901000	Nut, Lock Flange 5/8-11 Unc
13	121749X	Washer 25/32 x 1-1/4 x 16 Ga.
14	STD551137	Washer, Lock Hvy Hlcl Spr 3/8
15 16	STD541537	Nut Lock Center 3/8-24 Unf
16 17	145103 137347	Shaft Asm., Steering Rod Asm., Tie Ball J Ball Vgt (Inc.Key No. 36-40)
18	137155	Draglink, Ball Joint Solid Vgt
19	156011	Support Asm., Steering Vgt
20	163887	Boot Steering Stealth GTYT
21	159945	Adapter, Wheel Steering
22	155105	Bushing, Strg.
23	152927	Screw
25	STD523710	Bolt, Fin Hex 3/8-16 x 1 Gr. 5
26 27	159946X428 3366R	Insert Cap Strg WH Bearing, Col. Strg.
28	17000612	Screw Hexwsh thdr 3/8-16 x 3/4
29	104239X	Bearing, Flange
31	138136	Bushing, Nyliner Snap
32	19111610	Washer 11/32 x 1 x 10 Ga.
33	STD551131	Washer, Lock Hvy Hlcl Spr 5/16
34	STD523107	Bolt, Hex Hd 5/16-18 x 3/4
35	138059	Gear, Sector Steering
36	137156	Tie Rod
37 38	73360600 109850X	Jam Nut RH Thread Joint Asm. Ball RH Thread
39	73700600	Jam Nut LH Thread
40	109851X	Joint Asm. Ball LH Thread
41	155246	Bracket Switch Interlock Vgt 97
42	17490508	Screw Thdrol 5/16-18 x 1/2 Tyt
44	160135	Extension Steering
45	19132411	Washer 13/32 x 1-1/2 x 11 Ga.

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

### TRACTOR - - MODEL NUMBER 944.600901

### **ENGINE**



### TRACTOR - - MODEL NUMBER 944.600901

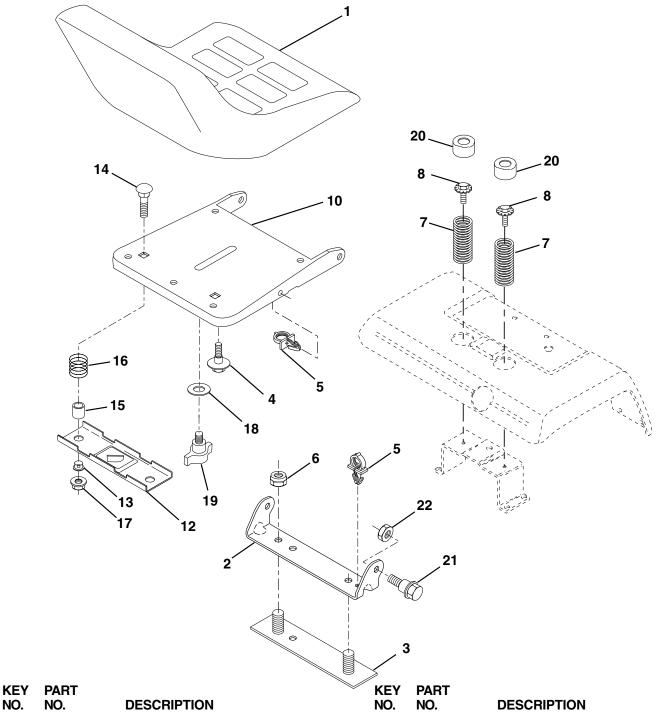
### **ENGINE**

KEY NO.	PART NO.	DESCRIPTION
1		Engine (See Breakdown) Kohler CV20S-65566
2	161063	Muffler (Inc. Key No. 34)
5	13200300	Elbow STD 90 Degree 3/8-18 NPT
7	151396	Muffler Assembly Guard
8 9	121361X 150828	Pulley V-Idler
10	105432X	Keeper Asm Belt Engine Vgt 96 Bushing
11	140923	Clutch Electric
12	143996	Pulley Engine Grnd Drive
15	151346	Tank Fuel Rear 3.50 YT/GT
16	109227X	Pad Spacer
17	106082X	Pad Spacer
18	161493	Cap Asm Fuel w/Gauge Vented
19	13290300	Plug Oil Drain (Order From Engine Manufacturer)
20	164067	Control Throttle
21 22	164863	Screw HWHD Hi-Lo #13-16 x 3/4
22 24	164415 STD551237	Control Choke Lockwasher Ext Tooth 3/8
25	73920600	Nut Keps 3/8-24 UNF
26	3645J	Bushing
27	139277	Stem Tank Fuel
28	7834R	FuelLine
29	132920	Spark Arrester Kit
35	10010500	Washer Split
37	123487X	Clamp Hose
38	17060620	Screw 3/8-16 x 1-1/4 SMGML Tap/R
39	17490636	Screw 3/8 - 16 x 2-1/4 UNC TT
40 41	17490664 126197X	Screw 3/8 - 16 x 4 UNC TT Washer 1-1/2 OD X 15/32 ID X .250
42	STD551143	Washer Lock 7/16
43	150280	Bolt Hex 7/16-20 X 4-1/4 Ga 5 1.38
45	73510400	Nut Keps Hex 1/4-20 Unc
47	142040	Spacer Engine CV22 Round PM
48	19132007	Washer 13/32 x 1-1/4 x 7 Ga.
51	161231	Manifold Pipe
55	13280336	Nipple Pipe 4-1/2"
65	19131614	Washer 13/32 x 1 x 14 Ga.
69	24-041-02	Gasket
74 76	162295	Elbow Street Brass
76 80	17000612 M73030800	Screw Hexwsh thdr 3/8-16 x 3/4 Nut Flange M8-1.25
80	1017 3030000	INULT Iding 6 MO-1.20

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

### TRACTOR - - MODEL NUMBER 944.600901

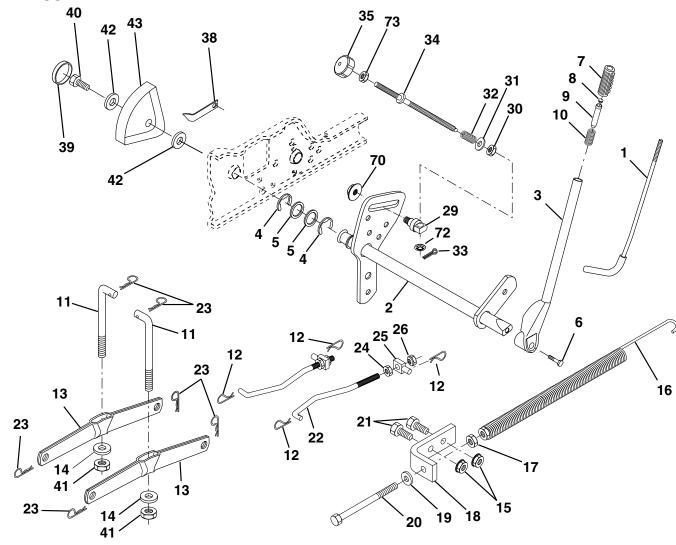
### **SEAT ASSEMBLY**



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

### TRACTOR - - MODEL NUMBER 944.600901

### LIFT ASSEMBLY

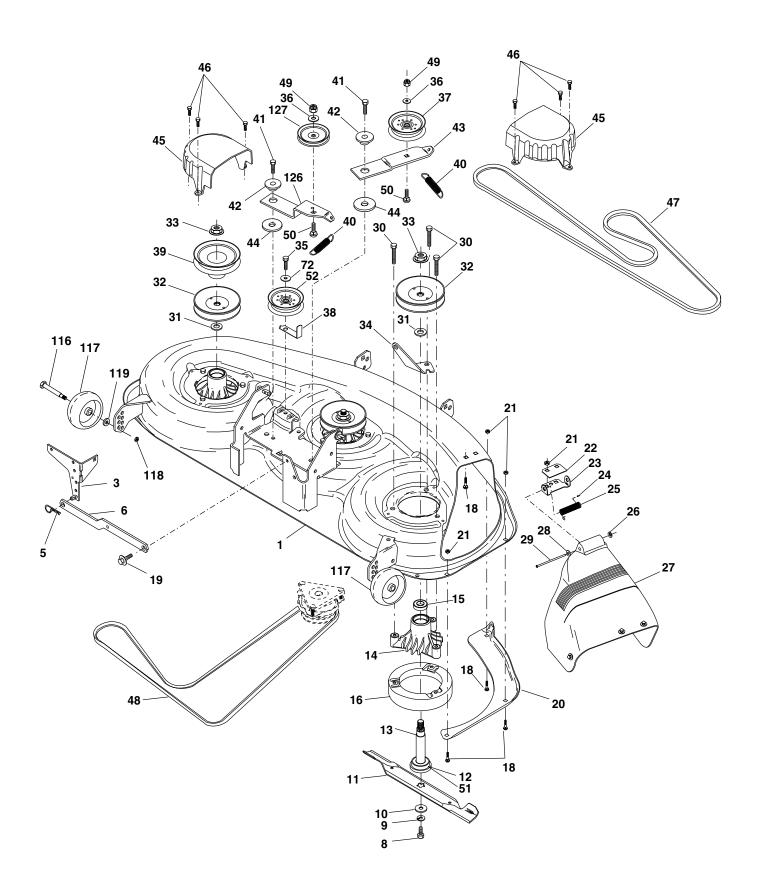


KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	121006X	Rod Asm., Lever	23	STD624008	Retainer, Spring
2	159187	Shaft Asm., Lift Vgt	24	73350800	Nut, Jam Hex 1/2-13 Unc
3	159189	Lever Asm., Lift Rh	25	130171	Trunnion
4	12000022	E-Ring Truarc #5133-87	26	73800800	Nut, Lock W/Wsh 1/2-13 Unc
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	125631X	Grip, Handle Fluted	31	19131016	Washer 13/32 x 5/8 x 16 Ga.
8	122365X	Button, Plunger	32	137150	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	140302	Bearing, Pvt. Lift Spherical	40	17060516	Screw 5/16-18 x 3/4
15	STD541437	Nut, Crownlock 3/8-16 Unc	41	73540600	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	19131316	Washer 13/32 x 13/16 x 16 Ga.	72	110452X	Nut, Push Phos & Oil
20	5328J	Bolt, Adjust Spring Assist	73	73350600	Nut Hex Jam 3/8-16 Unc
21	STD523710	Bolt, Fin Hex 3/8-16 x 1			
22	127218	Link, Front	NOTE	: All compone	ent dimensions given in U.S. inches

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

### TRACTOR - - MODEL NUMBER 944.600901

### **MOWER DECK**



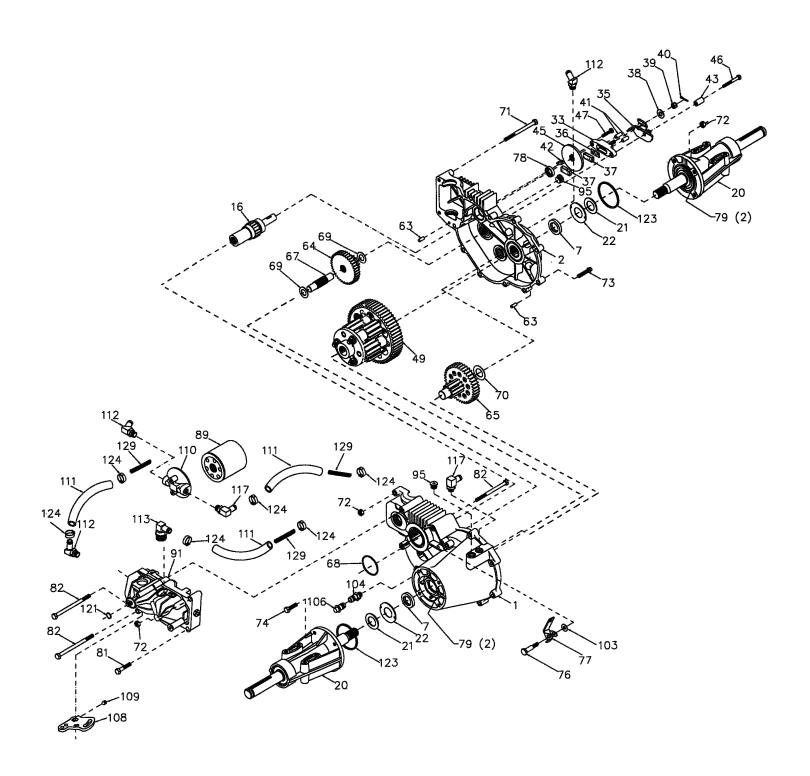
### TRACTOR - - MODEL NUMBER 944.600901

### **MOWER DECK**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	156948	Deck Weldment	31	129963	Washer, Spacer Mower Vented
2	138457	Bracket Asm., Sway Bar	32	153531	Pulley, Mandrel
5	STD624008	Retainer Spring	33	137266	Nut, Flg. Top Lock Cntr. 9/16
6	130832	Arm, Suspension, Rear (Sway Bar)	34	144945	Anchor, Spring Deck 46"
8	850857	Bolt, Patched 3/8-24 x 1-1/4 Gr. 8	35	17490628	Screw, Thdroll 3/8-16 x 1-3/4 Tytt
9	STD551137	Washer, Lock Hvy., Unplated 3/8	36	STD551037	Washer 13/32 x 13/16 x 16 Ga.
10	140296	Washer, Hard Blade, Mower Vented	37	131494	Pulley, Idler, Flat
11	170698	Blade, 46" High Performance	38	156086	Keeper, Belt, Idler
		(Originally equipped with)	39	144917	Pulley, Idler, Driven
		(Following Blades are Optional)	40	137273	Spring, Secondary 44/46/50 Vent
	157033	Blade Hi-Lift Premium 46" (For	41	17060620	Screw, 3/8-16 x 1-1/4 Tytt
		better bagging, especially in wet	42	156723	Spacer, Retainer
		conditions)	43	144949	Arm, Idler Secondary
	159705	Blade 46" Hi-lift Bahia (For better	44	133943	Washer, Hardened
		quality of cut in trash, pasture or	45	145059	Cover, Mandrel Deck
		bahia grass)	46	137729	Screw, Thdroll. 1/4-20 x 5/8
		<b>NOTE:</b> This blade does not work	47	144959	V-Belt, Mower, Secondary
		well in good quality grasses!!	48	148763	V-Belt, Mower, Primary
12	129895	Bearing, Ball, Mandrel #6204	49	STD541437	Nut, Crownlock 3/8-16 UNC
13	137553	Shaft Asm. w/Lower Bearing	50	72110612	Bolt, Carriage 3/8-16 x 1-1/2 Gr. 5
		(Includes Key No. 12)	51	153390	Washer Felt
14	137152	Housing, Mandrel	52	156493	Pulley Idler 46 Pri Drive 97
15	110485X	Bearing, Ball, Mandrel	72	19131616	Washer 13/32 x 1 x 16 Ga.
16	140329	Stripper, Mower Round	116	137644	Bolt, Shoulder
18	STD533106	Bolt, Carriage 5/16-18 x 5/8	117	133957	Gauge Wheel, Wide
19	132827	Bolt, Hex Head, Shoulder 5/16-18	118	73930600	Nut, Centerlock 3/8-16 UNC
20	145055	Baffle, Vortex Mower 46"	119	19121414	Washer 3/8 x 7/8 x 14 Ga.
21	STD541431	Nut, Crownlock 5/16-18 UNC	126	144948	Arm, Idler, Primary Deck 46"
22	134753	Stiffiner, Bracket	127	146763	Pulley, Idler, V-Groove Dim. 4.25
23	131267	Bracket, Deflector		166209	Deck Complete (Std. Deck-Order
24	105304X	Cap, Sleeve			separately mulcher plate and gauge
25	149287	Spring, Torsion, Deflector			wheel components Key Nos. 101-
26	110452X	Nut, Push		1.10051	106 and 116-118)
27	166883X428	Deflector Clipping 46" Blk		143651	Mandrel Asm. 44"/50" service
28	19111016	Washer 11/32 x 5/8 x 16 Ga.			(Includes Key Nos. 8-10, 12-15, 31
29	131491	Rod, Hinge			and 33)
30	157722	Screw, Thdroll Wsh Hd	NOTE	· All compone	ent dimensions given in LLS inches

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

# TRACTOR - - MODEL NUMBER 944.600901 HYDRO GEAR TRANSAXLE - - MODEL NUMBER 222-3010L

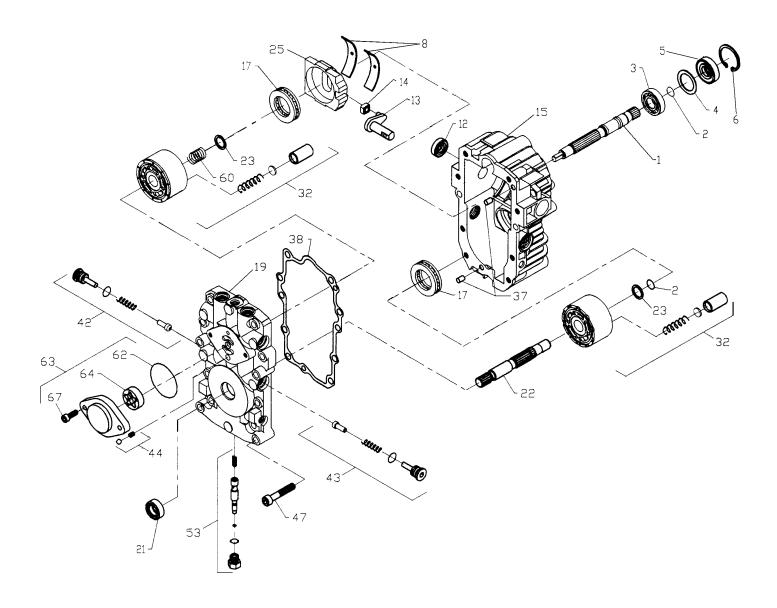


# TRACTOR - - MODEL NUMBER 944.600901 HYDRO GEAR TRANSAXLE - - MODEL NUMBER 222-3010L

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	96	153770	60° 7/18 SAE x 5/16 Fitting
40	142886	Cotter Pin	103	142916	Washer
41	142887	Brake Actuating Pin	104	142917	Vent Cap Assembly
42	142888	Hi Pro Key	106	142918	Fitting O-Ring Assembly
43	142889	Spacer	108	142919	Control Arm
45	142890	Brake Disc	109	142920	Set Screw
46	142891	Bolt 1/4-20 x 1-1/2	110	142921	FilterHead
47	142892	Bolt 1/4-20 x 1	111	150820	Hose 1/2"
49	153766	Differential Assembly	112	150823	Fitting, 1/2" Beaded 90° 7/8 SAE
63	142894	Dowel Pin	113	150821	Fitting, 1/2" Beaded 60° 9/16
64	150818	Reduction Gear,	117	150822	Fitting, 1/2" Beaded 90° 9/16
		14 Teeth to 38 Teeth	123	150824	O Ring
65	142897	Final Drive Pinion Assembly	124	150825	Pinch Clamp
67	142898	Jackshaft	129	153771	Spring, Long
68	142899	O-Ring			
69	142900	Washer 5/8 X 1-5/32			
70	142901	Washer 7/8 X 1-1/2	NOTI		dimensions given in U.S. inches
71	142902	Bolt, Hex 5/16-18 x 3.5		1 inch = 25.4 r	nm

### TRACTOR - - MODEL NUMBER 944.600901

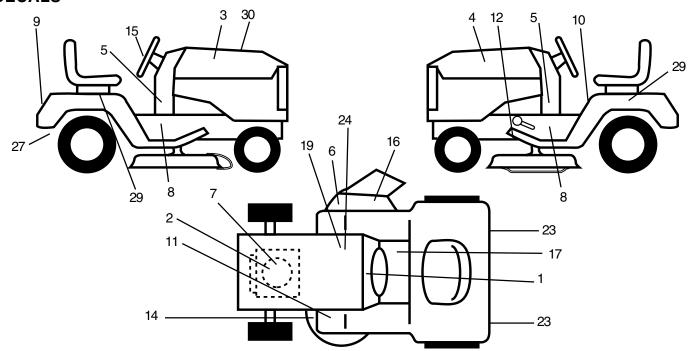
### **HYDRO GEAR PUMP - MODEL NUMBER BU-10L-122**



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 8 12 13 14 15 17 19 21 22 23	144569 122716X 122745X 122715X 122700X 122699X 122767X 122717X 122748X 122749X 144571 122770X 153801 122722X 144573 142978	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 Shaft, Motor Washer, Block Thrust	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
		48			

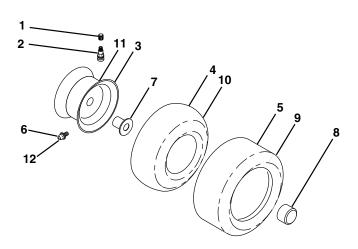
### TRACTOR - - MODEL NUMBER 944.600901

### **DECALS**



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
110.					
1	164095	Decal, Dash	15	164065	Decal, Ins. Whl. Strg.
2	164757	Decal, Engine	16	133179	Decal, Housing Mower
3	171702	Decal, Hood, Craftsman, RH	17	140837	Decal, Saddle Brake Parking
4	171703	Decal, Hood, Craftsman, LH	19	138047	Decal, Battery
5	163265	Decal, Dash	23	106202X	Reflector, Taillight
6	137259	Decal, Warning, Multi-Lang	24	149517	Decal, Btry Dngr/Psn
7	164884	Decal, Blower HSNG	27	142342	Decal, Drawbar
8	171705	Decal, Side Panel	29	163230	Decal, Fender Auto Trans
9	163204	Decal, Craftsman	30	172272	Decal, Replacement Parts
10	157140	Decal, Danger		138311	Decal, Handle Lift (Lift Handle)
11	101892X	Decal, Clutch/Brake		157199X428	Pad Footrest `
12	146790	Decal, V-Belt Drive Schematic		174422	Manual, Owner's (English)
14	160397	Decal, V-Belt Schematic		174423	Manual, Owner's (French)

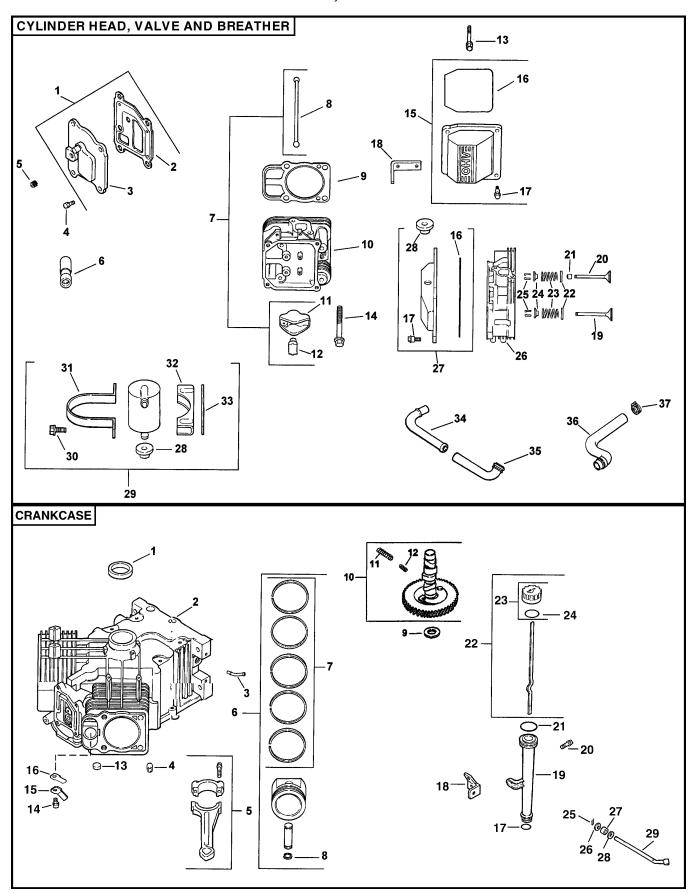
### **WHEELS & TIRES**



KEY NO.	PART NO.	DESCRIPTION
1	59192	Cap, Valve, Tire
2	65139	Stem, Valve
3	106228X427	Rim Assembly, Front
4	8134H	Tube, Front (Service Item Only)
5	106230X	Tire, Front
6	278H	Fitting, Grease (Front Wheel nly)
7	9040H	Bearing, Flange (Front Wheel Only)
8	104757X	Cap, Axle (Front Wheel Only)
9	105588X	Tire, Rear
10	7154J	Tube, Rear (Service Item Only)
11	106277X427	Rim Assembly, 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 944.600901



### TRACTOR - - MODEL NUMBER 944.600901

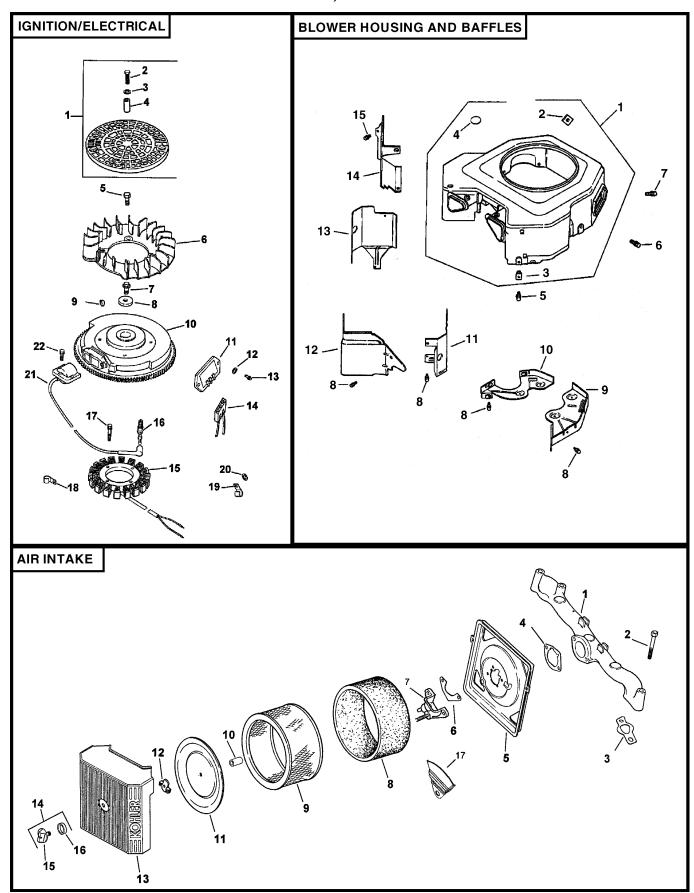
### **KOHLER ENGINE - MODEL NUMBER CV20S, TYPE NUMBER 65566**

### **HEAD/VALVE/BREATHER**

### **CRANKCASE**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	24-033-03-S	Kit, breather cover w/gasket (Includes 2,3)	1 2	24-032-01-S	Seal, oil front Crankcase
2	24-041-23-S	Gasket, breather	_		(USE: Miniblock 24 782 05)
3	24-096-59-S	Cover, breather	3	24-294-13-S	Fitting
4	M-645020	Screw, hex. flange M6x1.0x20 (4)	4	12-380-17-S	Pin, dowel locating (6)
5	X-75-23-S	Plug, allen hd. 1/8"	5	24-067-13-S	Connecting Rod (Std.) (2)
6	25-351-01-S	Lifter, valve (4)		24-067-14-S	Connecting Rod (.25) (2)
7	24-755-66-S	Kit, valve train (Includes 8,11,12)	6	24-874-01-S	Piston w/Ring Set (Std.) (2) (Includes
8	24-411-05-S	Rod, push (4)			7,8)
9	24-041-08-S	Gasket, cylinder head (2)		24-874-02-S	Piston w/Ring Set (.25) (2)
10	24-318-12-S	Head assembly, #2 cylinder		24-874-03-S	Piston w/Ring Set (.50) (2)
11	25-186-01-S	Arm, rocker (4)		24-874-14-S	Piston w/ring set (.08)
12	24-599-01-S	Pivot, rocker arm (4)	7.	24-108-01-S	Ring Set (Std.) (2)
13	M640034-S	Screw, hex. flange M6x1.0x34 (4)		24-108-02-S	Ring Set (.25) (2)
14	12-086-16-S	Screw, hex. flange M10x1.5x90 (8)		24-108-03-S	Ring Set (.50) (2)
15	24-755-7-S	Kit, valve cover - plain	8	24-018-01-S	Retainer, piston pin (4)
		(Includes 16,17)	9	12-422-09-S	Shim, camshaft (A.R.)
16	24-153-16-S	O-Ring		12-422-13-S	Shim, camshaft (A.R.)
17	24-086-32-S	Screw, shoulder (4)		12-422-07-S	Shim, camshaft (A.R.)
18	24-445-01-S	Strap, lifting		12-422-08-S	Shim, camshaft (A.R.)
19	24-016-01-S	Valve, exhaust (Std.) (2)		12-422-10-S	Shim, camshaft
	24-016-02-S	Valve, exhaust (.25) (2)		12-422-11-S	Shim, camshaft (A.R.)
20	24-017-01-S	Valve, intake (Std.) (2		12-422-12-S	Shim, camshaft (A.R.)
	24-017-02-S	Valve, intake (.25) (2)	10	24-010-06-S	Camshaft (Includes 11,12)
21	24-032-05-S	Seal, valve stem (2)	11	24-089-35-S	Spring acr (Heavy)
22	235011-S	Retainer, spring (4)	12	24-089-34-S	Spring acr (light)
23	24-089-02-S	Spring, valve (4)	13	52-139-09-S	Plug, cup
24	12-173-01-S	Cap, valve spring (4)	14	M-545010-S	Screw, hex. flange M5x0.8x10 (2)
25	12-755-03-S	Kit, retainer (4)	15	24-018-04-S	Retainer, reed (2)
26	24-318-11-S	Head assembly, #1 cylinder	16	24-402-05-S	Reed, breather (2)
27	24-755-76-S	Kit, valve cover - breather	17	12-153-01-S	O-Ring, lower oil fill tube
00	05 040 00 0	(Incl. 16,17,28)	18	24-126-19-S	Bracket, oil fill tube
28	25-313-02-S	Grommet, rubber	19	12-123-04-S	Tube, oil fill
29	24-755-57-S	Kit, breather separator	20	M-545016-S	Screw, hex. flange M5x0.8x16
00	M 545040 O	(Includes 28,30-33)	21	12-153-02-S	O-Ring, upper oil fill tube
30	M-545016-S	Screw, hex. flange M5x0.8x16 (2)	22	24-038-04-S	Dipstick assembly (Includes 22,23)
31	24-445-02-S	Strap, breather	23	24-755-46-S	Kit, oil fill cap (Includes 23)
32	24-126-44-S	Bracket, breather separator	24	12-153-03-S	O-Ring, dipstick
33	24-112-12-S	Spacer	25 26	12-380-04-S	Pin, hitch
34 25	24-294-06-S	Fitting	26 27	M-631005-S	Washer, plain 6 mm
35 36	24-326-13-S	Hose, breather	27	12-032-01	Seal, governor cross shaft
36	24-326-14-S	Hose, breather	28	X-25-102	Washer, plain 1/4"
37	X-426-9-S	Clamp, hose (2)	29	24-144-01-S-	Shaft, governor cross

### TRACTOR - - MODEL NUMBER 944.600901



### TRACTOR - - MODEL NUMBER 944.600901

### **KOHLER ENGINE - MODEL NUMBER CV20S, TYPE NUMBER 65566**

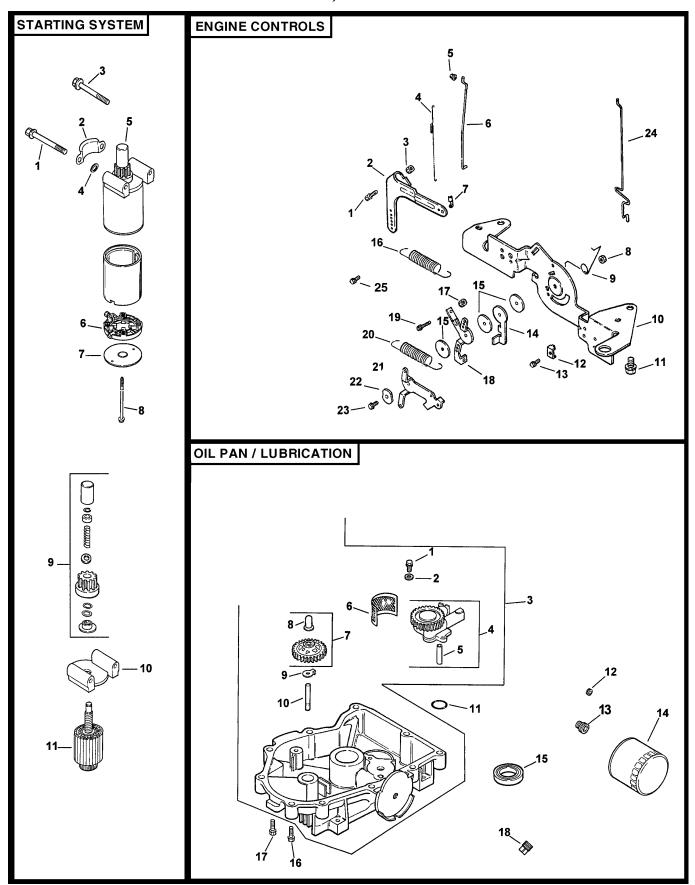
### **IGNITION/CHARGING**

### **BLOWER HOUSING & BAFFLES**

KEY	PART		KEY	PART	
NO.	NO.	DESCRIPTION	NO.		DESCRIPTION
	54.755.45.0	120			
1	54-755-15-S	Kit, grass screen	1	24-027-20-S	Housing, blower
•	14 400005 0	(Includes 2-4, and 24 113 18)		<b>.</b>	(Incl. 2-4)
2	M-403025-S	Screw, hex. cap M4x0.7x25 (4)	2	24-100-01-S	Nut plastic (3)
3	X-25-92-S	Washer, plain 5/16" (4)	3	25-139-16-S	Plug, button 9/16
4	24-112-04-S	Spacer, grass screen (4)	4	24-100-02-S	Nut, plastic (2)
5	25-086-47-S	Bolt, shoulder (4)	5	M-0545020-S	Screw, hex. flange M5x0.8x20 (4)
6	24-157-03-S	Fan	6	M-0545016-S	Screw, hex. flange M5x0.8x16 (3)
7	12-086-14-S	Screw, hex. flange M10x1.5x46	7	M-0551016-S	Screw, hex. flange M5x0.8x16
8	12-468-03-S	Washer, plain 3/8".	8	M-0645016-S	Screw, hex. flange M6x1.0x16 (6)
9		- Key	9	24-146-16-S	Plate, backing - # 2 side
10	24-025-04-S	Flywheel	10	24-146-20-S	Plate, backing - # 1 side
11	25-403-03-S	Rectifier-regulator	11	24-063-20-S	Baffle, cylinder barrel-# 2 side
12	X-25-92-S	Washer, plain 3/16" (2)	12	24-063-14-S	Baffle, valley - #2 side
13	24-086-18-S	Screw, phillips hd. 11-16x7/8 (2)	13	24-063-30-S	Baffle, cylinder barrel-# 1 side
14	236602-S	Connector (3 contact)	14	24-063-23-S	Baffle, valley - #1 side
15	54-755-09-S	Kit, 15 amp stator	15	M-545010-S	Screw, hex. flange M5x0.8x10 (2)
		(Includes 24 126 71)	NOT	ILLUSTRATED	
16	12-132-06-S	Spark Plug (2)		24-096-66-S	Cover, control
17	M-548025-S	Screw, hex. cap M5x0.8x25 (2)		24-086-06-S	Screw, phillips hd. 11-16x3/4" (2)
18	235173-S	Clip, cable			, ,
19	48-154-02-S	Clip, cable			
20	X-25-63-S	Washer, plain 1/4"			
21	24-584-01-S	Module, ignition (2)			
22	M-545020-S	Screw, hex. flange M5x0.8x20 (4)	AIRI	NTAKE/FILTR	ATION
NOT	ILLUSTRATED			-	-
	24-126-71-S	Bracket, stator wire	KEY	PART	
	X-22-11-S	Washer, lock 1/4"	NO.		DESCRIPTION
	24-176-79-S	Harness, wiring			
		Lead, black (rectreg. 5" - 12 gauge	1	24-164-06-S	Manifold, intake
	24-518-12-S	insulated grip barrel eyelets)	2	M-651055-S	Screw, hex. flange M6x1.0x55 (4)
	24-113-18-S	Decal, grass screen	3	24-041-01-S	Gasket, intake manifold (2)
	25-454-03-S	Tie, wire (3)	4	24-041-14-S	Gasket, air cleaner base
		-, - \-,	5	24-094-18-5	Rase air cleaner

	PART NO.	DESCRIPTION
1	24-164-06-S	Manifold, intake
2	M-651055-S	Screw, hex. flange M6x1.0x55 (4)
3	24-041-01-S	Gasket, intake manifold (2)
4	24-041-14-S	Gasket, air cleaner base
5	24-094-18-S	Base, air cleaner
6	24-041-13-S	Gasket, fuel spitback cup
7	24-109-09-S	Cup, fuel spitback
8	24-083-05-S	Precleaner, element
9	24-083-03-S	Element, air cleaner
10	231032-S	Seal, breather
11	24-096-01-S	Cover, inner air cleaner
12	12-100-01-S	Wing Nut
13	24-096-73-S	Cover, air cleaner
14	54-755-01-S	Kit, knob with seal
		(Includes 15 & 16)
15	24-153-15-S	O-Ring
16	25-341-03-S	Knob, cover
17	24-063-51-S	Baffle, fuel spit-back

### TRACTOR - - MODEL NUMBER 944.600901



### TRACTOR - - MODEL NUMBER 944.600901

### **KOHLER ENGINE - MODEL NUMBER CV20S, TYPE NUMBER 65566**

### **STARTING SYSTEM**

KEY NO.	PART NO.	DESCRIPTION
1	M-839070-S	Screw, hex. flange M8x1.25x70
2	24-096-05-S	Cover, pinion
3	M-839080-S	Screw, hex. flange M8x1.25x80
4	12-468-01-S	Washer, plain 11/32" (3)
5	25-098-05-S	Starter, (Includes 6-11)
6	12-221-01-S	Kit, brush
7	12-227-13-S	Cap
8	12-211-01-S	Bolt, thru (2)
9	12-755-54-S	Kit, drive
10	12-227-06-S	Cap, drive end
11	12-170-05-S	Armature

### **ENGINE CONTROLS**

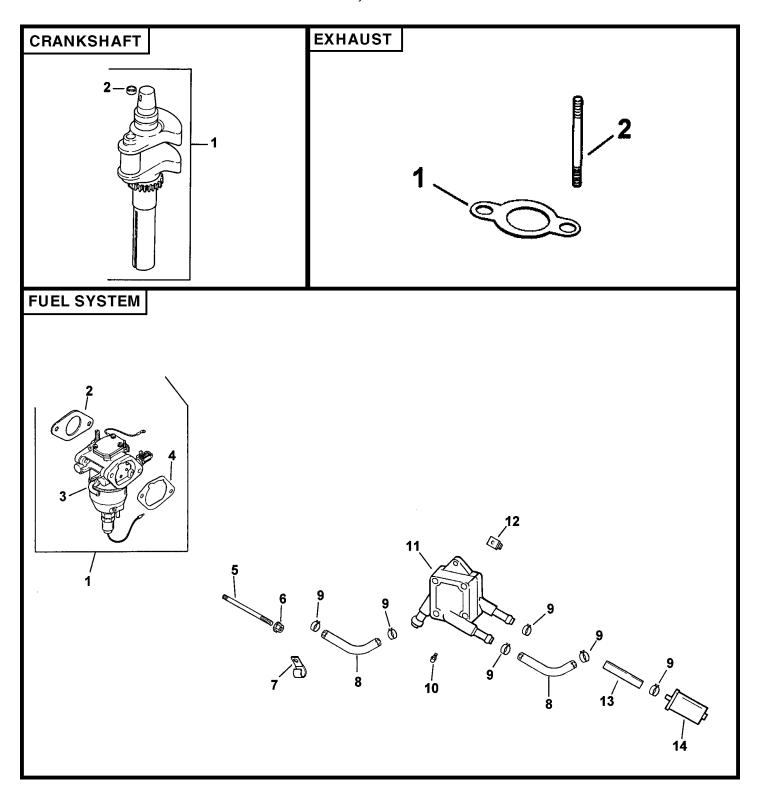
KEY	PART
	NIO

NO.	NO.	DESCRIPTION
1	SM-642025-S	Screw, hex. flange M6x1.0x25
2	24-090-14-S	Lever, governor
3	M-641060-S	Nut, hex. flange M6x1.0
4	24-089-01-S	Spring, linkage
5	25-158-08-S	Bushing, linkage retaining
6	24-079-04-S	Linkage, throttle
7	25-158-11-S	Bushing, throttle linkage
8	M-547050-S	Nut, hex. lock M5x0.8
9	24-089-03-S	Spring, choke return
10	24-126-56-S	Bracket, control
11	M-645016-S	Screw, hex. flange M6x1.0x16 (4)
12		Clamp, cable (2)
13		Screw, hex. flange M5x0.8x16 (1)
14	24-090-07-S	Lever, throttle actuator
15	24-468-01-S	Washer, plain 5.5 mm (3)
16		Spring, governor
17	M-446030-S	Nut, hex M4x0.7
18	24-090-13-S	Lever, throttle control
19	M-545020-S	Screw, hex. flange M5x0.8x20
20	24-089-51-S	Spring, throttle limiter
21	24-090-05-S	Lever, choke
22	41-468-03-S	Washer, spring 1/4"
23	M-403025-S	Screw, hex. cap M4x0.7x25
24	24-079-05-S	Linkage, choke
25	24-086-43-S	Screw, thread forming (2)

### **OIL PAN/LUBRICATION**

	PART NO.	DESCRIPTION
1	M-645025-S	Screw, hex. flange M6x1.0x25 (2)
2	M-631005-S	Washer, plain 6 mm (2)
3	24-199-07-S	Pan, oil assembly
		(Includes 1,2, & 4-10)
4	24-393-08-S	Oil pump assembly (Includes 5)
5	24-123-05-S	Tube, oil pickup
6	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"
13	24-136-01-S	Nipple, oil filter
14	52-050-02-S	Filter, oil
15	52-032-08-S	Seal, oil (PTO end)
16	24-086-17-S	Screw, hex. flange M8x1.25x45
17	24-086-16-S	Screw, hex. flange M8x1.25x45 (9)
18	X-75-10-S	Plug, sq. hd. solid 3/8" N.P.T.F.

### TRACTOR - - MODEL NUMBER 944.600901

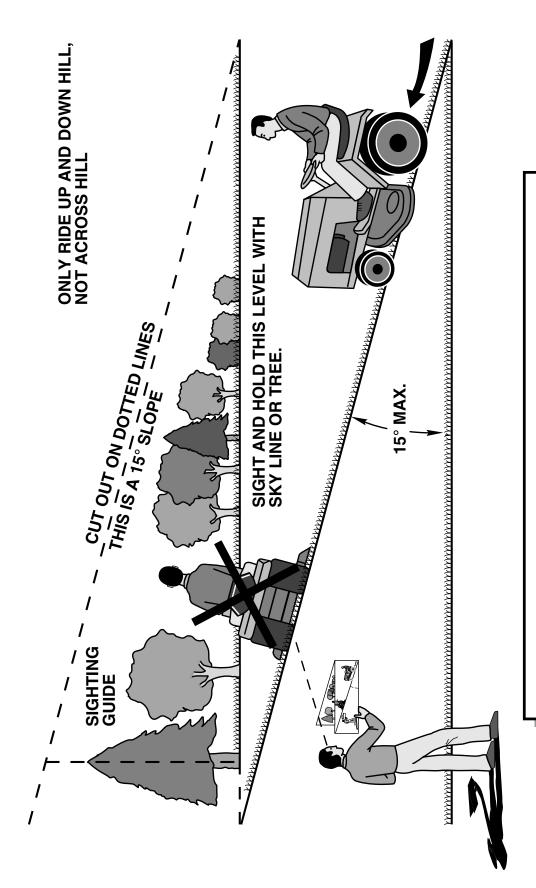


### TRACTOR - - MODEL NUMBER 944.600901

CRANKSHAFT			FUEL SYSTEM			
-		PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
	1 2	24-014-72-S 52-139-09-S	Crankshaft (Includes 2) Plug, cup	1	24-853-25-S	Kit, carburetor w/gaskets (Includes 2-4)
				2	24-041-15-S	Gasket, carburetor
_	:VU	AUST		3	24-053-25-S	Carburetor assembly (For information only not available separately) (Includes 24 757 18, 24-757-19, 24-757-20, 24-757-22)
_		AUSI		4	24-041-14-S	Gasket, air cleaner base
k	EV	PART		5	M-629095-S	Stud, M6x1.0x95 (2)
_		NO.	DESCRIPTION	6	M-641060-S	Nut, hex. flange M6x1.0 (2)
•		110.	DESCRIPTION	7	47-154-01-S	Clip, cable
	1	24-041-02-S	Gasket, exhaust (2)	8	24-353-03-S	Line, fuel 10-5/8" (2)
	2	25-072-04-S	Stud, M8x1.25x33 (4)	9	X-426-9-S	Clamp, hose (6)
NOTILLUSTRATED		· ·	10	24-086-12-S	Screw, hex. cap. M6x1.7x18 (2)	
		24-522-16	Short Block	11	24-393-16-S	Pump, fuel - pulse
		24-782-05	Miniblock	12	24-100-01-S	Nut, plastic (2)
		24-755-03-S	Gasket Set	13	15-353-04-S	Line, fuel 11-1/2"
				14	24-050-02-S	Filter, fuel
		NOTILLUSTRATED				
					24-757-18-S	Kit, overhaul w/gaskets
					24-757-19-S	Kit, choke repair w/gaskets
					24-757-20-S	Kit, gasket
					24-757-22-S	Kit, solenoid replacement w/gaskets

# **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 OWNER'S MANUAL

MODEL NO. 944.600901

HOW TO ORDER REPAIR PARTS

# **CRAFTZMAN®**

## 20.0 HP ELECTRIC START 46" MOWER AUTOMATIC GARDEN TRACTOR

Each tractor has its own model number. Each engine has its own model number.

The model number for your tractor will be found on the model plate located under the seat.

The model number for your engine will be found on the blower housing of the engine.

All parts listed herein may be ordered from any Sears Canada, Inc. Service Centre/Department and most Retail Stores.

### WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PRODUCT TRACTOR
- MODEL NUMBER 944.600901
- ENGINE MODEL NUMBER CV20S, TYPE NUMBER 65566
- PART NUMBER
- PART DESCRIPTION

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