# Owner's Manual

# **CRAFTSMAN®**

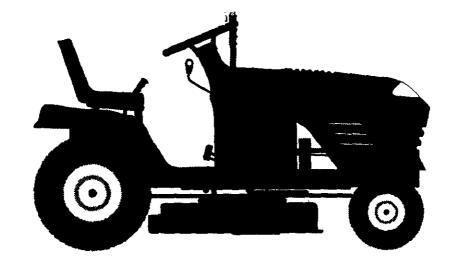
19.5 HP
ELECTRIC START
42" MOWER
AUTOMATIC
LAWN TRACTOR

Model No. 917.270922





- Assembly
- Operation
- Maintenance
- Repair Parts





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

# **CAUTION:**

Read and follow all Safety Rules and Instructions before operating this equipment.

For answers to your questions about this product, Call:

1-800-659-5917

Sears Craftsman Help Line 5 am - 5 pm, Mon - Sat

Sears, Roebuck and Co., Hoffman Estates, II 60179 Visit our Craftsman website:www.sears.com/craftsman

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### WARRANTY

LIMITED TWO YEAR WARRANTY ON CRAFTSMAN RIDING EQUIPMENT PARTS

For two (2) years from the date of purchase, if this Craftsman Riding Equipment is maintained, lubricated and tuned up according to the instructions in the owner's manual, Sears will repair or replace, free of charge, any parts found to be defective in material or workmanship. Warranty service is available free of charge by taking your Craftsman riding equipment to your nearest Sears Service Center. In-home warranty service is available but a trip charge will apply. This warranty applies only while this product is in the United States.

This Warranty does not cover:

- · Expendable items which become worn during normal use, such as blades, spark plugs, air cleaners, belts and oil filters.
- · Tire replacement or repair caused by punctures from outside objects, such as nails, thorns, stumps, or glass.
- · Repairs necessary because of operator abuse, including but not limited to, damage caused by towing objects beyond the capability of the riding equipment, impacting objects that bend the frame or crankshaft, or over speeding the engine.
- Repairs necessary because of operator negligence, including but not limited to, electrical and mechanical damage caused by improper storage, failure to use the proper grade and amount of engine oil, failure to keep the deck clear of flammable debris, or the failure to maintain the equipment according to the instructions contained in the owner's manual.
- · Engine (fuel system) cleaning or repairs caused by fuel determined to be contaminated or oxidized (stale). In general, fuel should be used within thirty (30) days of its purchase date.
- · Riding equipment used for commercial or rental purposes.

### LIMITED 90 DAY WARRANTY ON BATTERY

For ninety (90) days 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. Warranty service is available free of charge by taking your Craftsman riding equipment to your nearest Sears Service Center. In-home warranty service is available but a trip charge will apply. This warranty applies only while this product is in the United States. To locate the nearest sears service center or to schedule in-home warranty service,

simply contact sears at 1-800-4-my-home

This Warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

Sears, Roebuck and Co., D/817 WA, Hoffman Estates, IL 60179

# SAFETY RULES

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.

#### **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.

#### **SLOPE OPERATION**

Slopes are a major factor related to lossof-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.

#### 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.

## SAFETY RULES

- 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.

#### 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.











- 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.

# SAFETY RULES

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

ACAUTION: 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.

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

ACAUTION: 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.

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

#### **PRODUCT SPECIFICATIONS**

GASOLINE CAPACITY AND TYPE:	
OILTYPE (API-SF/SG/SH):	SAE 30 (ABOVE 32°F) SAE 5W-30 (BELOW 32°F)
OIL CAPACITY:	3.0PINTS
SPARK PLUG: (GAP: .030")	CHAMPION RJ19LM OR J19LM
VALVE ADJUSTMENT	INTAKE: .004"006" EXHAUST: .007"009"
GROUND SPEED (MPH):	FORWARD: 5.5 REVERSE: 2.4
TIRE PRESSURE:	FRONT: 14 PSI REAR: 10 PSI
CHARGING SYSTEM:	3 AMPS BATTERY 5 AMPS HEADLIGHTS
BATTERY:	AMP/HR: 30 MIN. CCA: 240 CASE SIZE:U1R
BLADE BOLT TORQUE:	27-35 FT. LBS

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

Should you experience any problem you cannot easily remedy, please contact your nearest authorized service center.

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".

#### REPAIR AGREEMENT

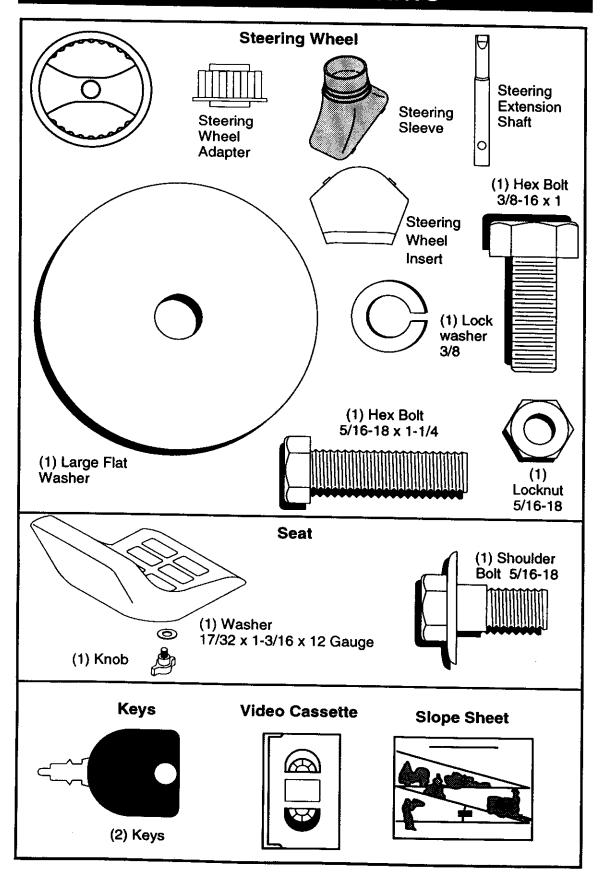
A Sears Repair Agreement is available on this product. Contact your nearest Sears store for details.

#### **CUSTOMER RESPONSIBILITIES**

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

AWARNING: This tractor is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brushcovered 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. In the state of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest authorized service center (See REPAIR PARTS section of this manual).

# **UNASSEMBLED PARTS**



# **ASSEMBLY**

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

#### TOOLS REQUIRED FOR ASSEMBLY

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

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

When right or left hand is mentioned in this manual, it means, from your point of view, 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 boxes from shipping carton.
- Cut, from top to bottom, along lines on all four corners of shipping carton, and lay panels flat.
- · Check for any additional loose parts or boxes and remove.

## **BEFORE REMOVING TRACTOR FROM SKID**

#### **ATTACH STEERING WHEEL**

#### ASSEMBLE EXTENSION SHAFT AND **BOOT**

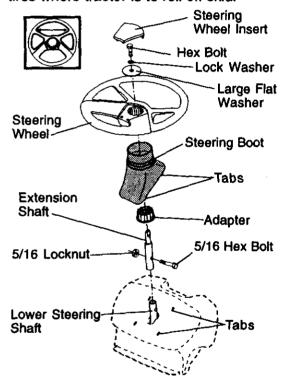
- · Slide extension shaft onto lower steering shaft. Align mounting holes in extension and lower shafts and install 5/16 hex bolt and locknut. Tighten securely.
- Place tabs of steering boot over tab slots in dash and push down to secure.

#### INSTALL STEERING WHEEL

- · Position front wheels of the tractor so they are pointing straight forward.
- Remove steering wheel adapter from steering wheel and slide adapter onto steering shaft extension.
- Position steering wheel so cross bars are horizontal (left to right) and slide inside boot and onto adapter.

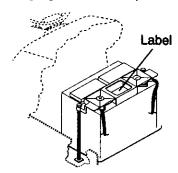
- Assemble large flat washer, 3/8 lock washer, 3/8 hex bolt and tighten securely.
- Snap steering wheel insert into center of steering wheel.
- · Remove protective materials from tractor hood and grill.

IMPORTANT: Check for and remove any staples in skid that may puncture tires where tractor is to roll off skid.



# HOW TO SET UP YOUR TRACTOR CHECK BATTERY

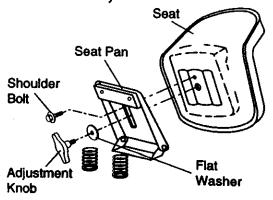
- · Lift hood to raised position.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps. (See "BATTERY" in Maintenance section of this manual for charging instructions).



#### **INSTALL SEAT**

Adjust seat before tightening adjustment knob.

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



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

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

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

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

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

- Be sure all the above assembly steps have been completed.
- Check engine oil level and fill fuel tank with gasoline.
- Place freewheel control in "transmission engaged" position.
- 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.

### **CHECK TIRE PRESSURE**

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

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

### **CHECK DECK LEVELNESS**

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

# CHECK FOR PROPER POSITION OF ALL BELTS

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

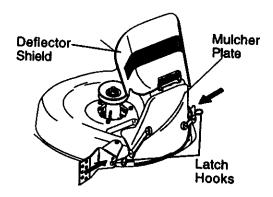
### **CHECK BRAKE SYSTEM**

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

# INSTALL MULCHER PLATE (If previously removed)

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

ACAUTION: 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.



# TO CONVERT TO BAGGING OR DISCHARGING

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

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

#### **✓** 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:

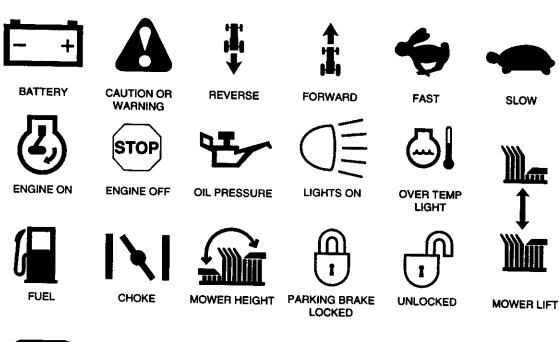
- ✓ All assembly instructions have been completed.
- ✓ No remaining loose parts in carton.
- ✓ Battery is properly prepared and charged. (Minimum 1 hour at 6 amps).
- ✓ Seat is adjusted comfortably and tightened securely.
- ✓ All tires are properly inflated. (For shipping purposes, the tires were overinflated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

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

# **OPERATION**

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







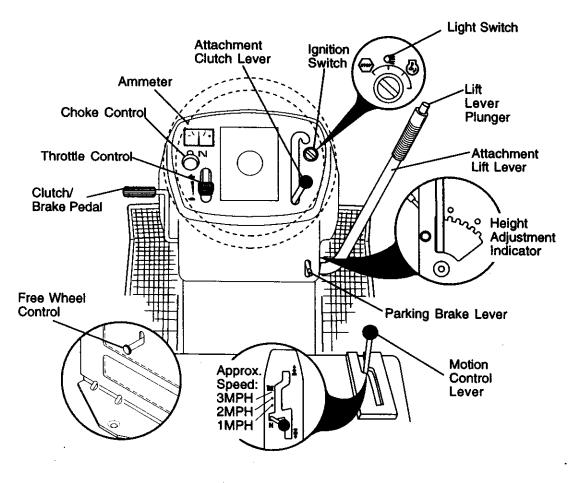


(Automatic Models only)

#### **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 locations of various controls and adjustments. Save this manual for future reference.



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

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

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

raise, lower, and adjust the mower deck or other attachments mounted to your tractor.

**CHOKE CONTROL** - Used when starting a cold engine.

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

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

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

and stopping the engine.

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

LIGHT SWITCH - Turns the headlights on and off.

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

THROTTLE CONTROL - Used to control engine speed.



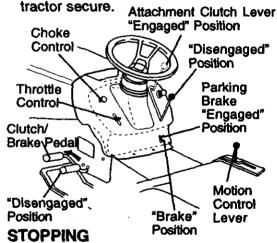
The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles or standard safety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

### HOW TO USE YOUR TRACTOR TO SET PARKING BRAKE

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 "EN-GAGED" position and release pressure from clutch/brake pedal. Pedal should remain in "BRAKE" position. Make sure parking brake will hold



#### **MOWER BLADES -**

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

#### **GROUND DRIVE -**

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

IMPÓRTANT: 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.

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

#### TO USE THROTTLE CONTROL

Always operate engine at full throttle.

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

#### TO USE CHOKE CONTROL

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

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

#### TO MOVE FORWARD AND BACK-WARD

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

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

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

The cutting height range is approximately 1-1/2 to 4". The heights are measured from the ground to the blade tip with the engine not running.

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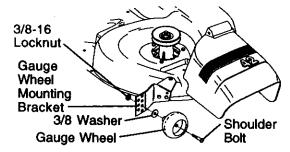
These heights are approximate and may vary depending upon soil conditions, height of grass and types of grass being mowed.

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

#### TO ADJUST GAUGE WHEELS

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 boit, 3/ 8 washer, and 3/8-16 locknut and tighten securely.
- Repeat for opposite side installing gauge wheel in same adjustment hole.



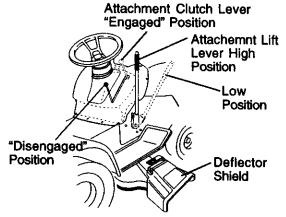
#### TO OPERATE MOWER

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.

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



#### TO OPERATE ON HILLS

ACAUTION: 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.

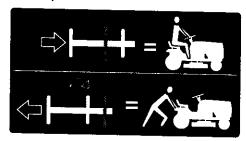
#### **TO TRANSPORT**

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

Raise attachment lift to highest position with attachment lift control.

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

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



# TOWING CARTS AND OTHER ATTACHMENTS

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

# BEFORE STARTING THE ENIGNE CHECK ENGINE OIL LEVEL

- The engine in your tractor has been shipped, from the factory, already filled with summer weight oil.
- Check engine oil with tractor on level ground.
- Remove oil fill cap/dipstick and wipe clean, reinsert the dipstick and screw cap tight, wait for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.
- For cold weather operation you should change oil for easier starting (See "OIL VISCOSITY CHART" in the Maintenance section of this manual).
- To change engine oil, see the Maintenance section in this manual.

#### ADD GASOLINE

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

IMPORTANT: When operating in temperatures below 32°F(0°C), use fresh, clean winter grade gasoline to help insure good cold weather starting. ▲ WARNING: Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Drain the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. See Storage Instructions for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may

A 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

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 "DISEN-GAGED" position.
- Move throttle control to fast position
- Pull choke control out for a cold engine start attempt. For a warm engine start attempt the choke control may not be needed.

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

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

# WARM WEATHER STARTING (50° F and above)

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

# COLD WEATHER STARTING (50° F and below)

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

#### **AUTOMATIC TRANSMISSION WARM UP**

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

 The attachments can be used during the engine warm-up period after the transmission has been warmed up and may require the choke control be pulled out slightly.

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

#### **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

IMPORTANT: Should your transmission require removal for service or replacement, it should be purged after reinstallation before operating the tractor.

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

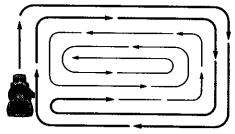
NOTE: During this procedure there will be no movement of drive wheels. The air is being removed from hydraulic drive system.

- Move motion control lever to neutral (N) position. Shut- off engine and set parking brake.
- Engage transmission by placing freewheel control in driving position (See "TO TRANSPORT" in this section of manual).

- Sitting in the tractor seat, start engine. After the engine is running, move throttle control to half (1/2) speed. With motion control lever in neutral (N) position, slowly disengage clutch/ brake pedal.
- Slowly move motion control lever forward, after the tractor moves approximately five (5) feet, slowly move motion control lever to reverse position. After the tractor moves approximately five (5) feet return the motion control lever to the neutral (N) position. Repeat this procedure with the motion control lever three (3) times.
- Your tractor is now purged and now ready for normal operation.

#### **MOWING TIPS**

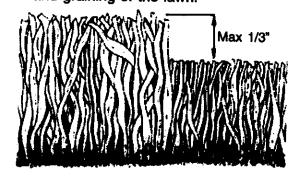
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the 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.
- If grass is extremely tall, it should be mowed twice to reduce load and possible fire hazard from dried clippings. Make first cut relatively high; the second to the desired height.
- Do not mow grass when it is wet. Wet grass will plug mower and leave undesirable clumps. Allow grass to dry before mowing.
- Always operate engine at full throttle when mowing to assure better mowing performance and proper discharge of material. Regulate ground speed by selecting a low enough gear to give the mower cutting performance as well as the quality of cut desired.
- When operating attachments, select a ground speed that will suit the terrain and give best performance of the attachment being used.



### **MULCHING MOWING TIPS**

IMPORTANT: For best performance, keep mower housing free of built-up grass and trash. Clean after each use.

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



# **MAINTENANCE**

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_	Replace Spark Plug	1			<u> </u>	1	1					+-	$\dashv$
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- 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 moving in sandy soil

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

### GENERAL RECOMMENDATIONS

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

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

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

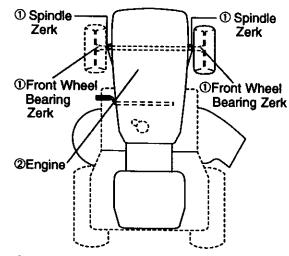
 Once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear. A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

### **BEFORE EACH USE**

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

Check for loose fasteners.

#### **LUBRICATION CHART**



①General Purpose Grease ②Refer to Maintenance "Engine" Section

IMPORTANT: Do not oil or grease the pivot points which have special nylon bearings. Viscous lubricants will attract dust and dirt that will shorten the life of the self-lubricating bearings. If you feel they must be lubricated, use only a dry, powdered graphite type lubricant sparingly.

#### TRACTOR

Always observe safety rules when performing any maintenance.

#### BRAKE OPERATION

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

#### **TIRES**

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

NOTE: To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion. OPERATOR PRESENCE SYSTEM Be sure operator presence and interlock systems are working properly. If your

tractor does not function as described, repair the problem immediately.

 The engine should not start unless the 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

#### **BLADE REMOVAL**

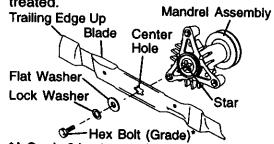
- Raise mower to highest position to allow access to blades.
- Remove hex bolt, lock washer and flat washer securing blade.
- Install new or resharpened blade with trailing edge up towards deck as shown.

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.



\*A Grade 8 heat treated bolt can be identified by six lines on the bolt head.

#### TO SHARPEN BLADE

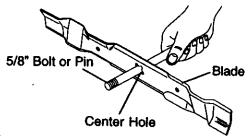
NOTE: We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

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.



#### BATTERY

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

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

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

TO CLEAN BATTERY AND TERMINALS Corrosion and dirt on the battery and terminals can cause the battery to "leak" power.

Remove terminal guard.

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

#### **V-BELTS**

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

#### TRANSAXLE COOLING

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

Do not attempt to clean fan or transmission while engine is running or while the transmission is hot. To prevent possible damage to seals, do not use high pressure water or steam to clean transaxle.

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

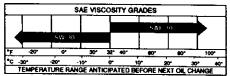
#### TRANSAXLE PUMP FLUID

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

#### **ENGINE**

#### LUBRICATION

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



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

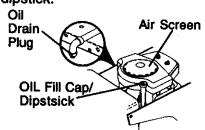
Change the oil after every 25 hours of operation or at least once a year if the tractor is not used for 25 hours in one year.

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

#### TO CHANGE ENGINE OIL

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. Be sure dipstick cap is tightened securely for accurate reading. Keep oil at "FULL" line on dipstick.



#### **CLEAN AIR SCREEN**

Air screen must be kept free of dirt and chaff to prevent engine damage from

overheating. Clean with a wire brush or compressed air to remove dirt and stubborn dried gum fibers.

# 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**

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

· Remove knob(s) and cover.

#### TO SERVICE PRE-CLEANER

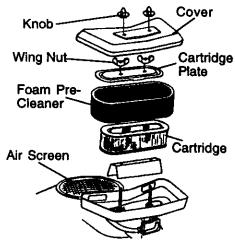
- Slide foam pre-cleaner off cartridge.
- · Wash it in liquid detergent and water.
- Squeeze it dry in a clean cloth.
- Saturate it in engine oil. Wrap it in clean, absorbent cloth and squeeze to remove excess oil.
- If very dirty or damaged, replace precleaner.
- Reinstall pre-cleaner over cartridge.
- Reinstall cover and secure with knob(s).

#### TO SERVICE CARTRIDGE

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

IMPORTANT: Petroleum solvents, such as kerosene, are not to be used to clean the cartridge. They may cause deteriora-

tion of the cartridge. Do not oil cartridge. Do not use pressurized air to clean or dry cartridge.



#### **MUFFLER**

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

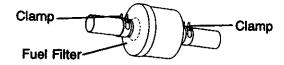
#### **SPARK PLUGS**

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**

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.



#### **CLEANING**

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

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

# SERVICE AND ADJUSTMENTS

▲ CAUTION: Before performing any service or adjustments:

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

# TRACTOR

### TO REMOVE MOWER

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

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

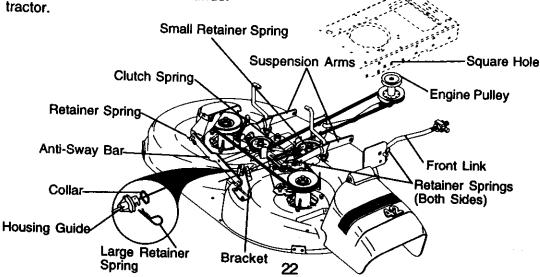
IMPORTANT: If an attachment other than the mower deck is to be mounted on the tractor, remove the front links and hook the clutch spring Into square hole in frame.

#### TO INSTALL MOWER

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

### TO LEVEL MOWER HOUSING

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



### TO LEVEL MOWER HOUSING

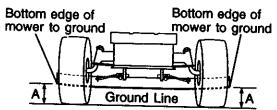
Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PROD-UCT SPECIFICATIONS" section of this manual). If tires are over or underinflated, you will not properly adjust your mower.

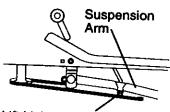
### SIDE-TO-SIDE ADJUSTMENT

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

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

Recheck measurements after adjusting.





Lift Link Adjustment Nut

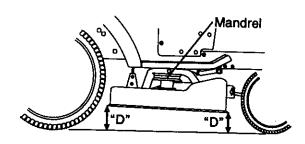
FRONT-TO-BACK ADJUSTMENT

IMPORTANT: Deck must be level side-to side. If the following front-to-back adjustment is necessary, be sure to adjust both front links equally so mower will stay level side-to-side.

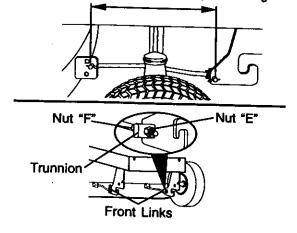
To obtain the best cutting results, the mower housing should be adjusted so that the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

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

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



Both Front Links Should be Equal in Length



# TO REPLACE MOWER BLADE DRIVE BELT

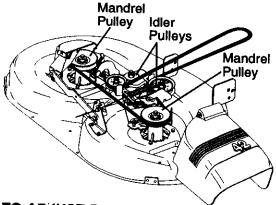
The mower blade drive belt may be replaced without tools. Park the tractor on level surface. Engage parking brake.

#### **BELT REMOVAL -**

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

#### **BELT INSTALLATION -**

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



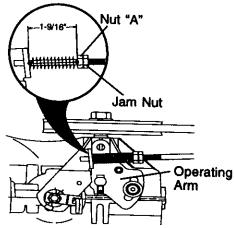
### TO ADJUST BRAKE

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

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

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

### With Parking Brake "Engaged"

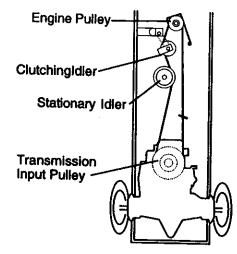


Do not touch this nut. If further brake adjustment is necessary contact your nearest authorized service center/department

### TO REPLACE MOTION DRIVE BELT

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

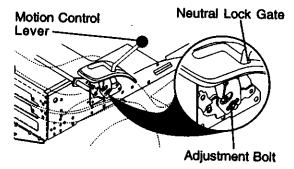
- Remove mower (See "TO REMOVE MOWER" in this section of this manual.)
- Remove belt from stationary idler and clutching idler.
- Pull belt slack toward rear of tractor. Carefully remove belt upwards from transmission input pulley and over cooling fan blades.
- Pull belt toward front of tractor and remove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



# TRANSAXLE MOTION CONTROL LEVER NEUTRAL ADJUSTMENT

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

- Loosen adjustment bolt in front of the right rear wheel, and lightly tighten.
- Start engine and move motion control lever until tractor does not move forward or backward.
- Hold motion control lever in that position and turn engine off.
- While holding motion control lever in place, loosen the adjustment bolt.
- Move motion control lever to the neutral (N) (lock gate) position.
- Tighten adjustment bolt securely.
   NOTE: If additional clearance is needed to get to adjustment bolt, move mower deck height to the lowest position.
   After above adjustment is made, if the tractor still creeps forward or backward while motion control lever is in neutral position, follow these steps:
- · Loosen the adjustment bolt.
- Move the motion control lever 1/4 to 1/2 inch in the direction it is trying to creep.
- Tighten adjustment bolt securely.
- Start engine and test.
- If tractor still creeps, repeat above steps until satisfied.



#### TRANSMISSION REMOVAL/REPLACE-MENT

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.

# TO ADJUST STEERING WHEEL ALIGNMENT

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

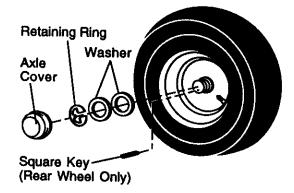
### FRONT WHEEL TOE-IN/CAMBER

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

### TO REMOVE WHEEL FOR REPAIRS

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

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



# TO START ENGINE WITH A WEAK BATTERY

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

If your battery is too weak to start the engine, it should be recharged. (See "BATTERY" in the MAINTENANCE section of this manual).

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

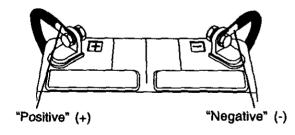
IMPORTANT: Your tractor is equipped with a 12 volt negative grounded system. The other vehicle must also be a 12 volt negative grounded system. Do not use your tractor battery to start other vehicles.

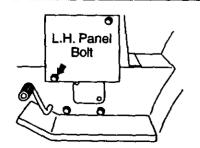
#### TO ATTACH JUMPER CABLES -

- 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.



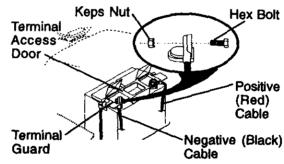


#### REPLACING BATTERY

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

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

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



#### 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.

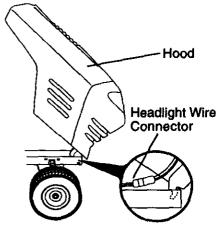
 Check wiring. See electrical wiring diagram in the Repair Parts section.

### TO REPLACE FUSE

Replace with 15 amp automotive-type plug-in fuse. The fuse holder is located behind the dash.

# TO REMOVE HOOD AND GRILL ASSEMBLY

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



#### **ENGINE**

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

# TO ADJUST THROTTLE CONTROL CABLE

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 swivel is against side of quarter circle. If it is not, loosen cable clamp screw and pull cable back until swivel is against quarter circle.

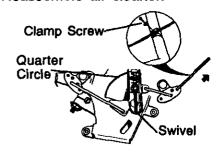
Tighten cable clamp screw securely.

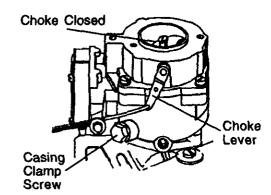
#### TO ADJUST CHOKE CONTROL

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.





#### TO ADJUST CARBURETOR

The carburetor has been preset at the factory and adjustment should not be necessary. However, minor adjustment may be required to compensate for differences in fuel, temperature, altitude or load. If the carburetor does need adjustment, proceed as follows: In general, turning the mixture screw in (clockwise) decreases the supply of fuel to the engine giving a leaner fuel/air mixture. Turning the mixture screw 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 and choke are adjusted properly (see above).
- With engine off turn idle mixture screw in (clockwise) closing it finger tight and

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then turn out (counterclockwise) 1-1/4 to 1-1/2 turns.

#### FINAL SETTING -

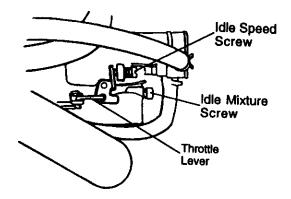
- Start engine and allow to warm for five minutes. Make final adjustments with engine running and shift/ motion control lever in neutral (N) position.
- With throttle control lever in slow position, hold throttle lever against idle speed screw and adjust idle speed screw to obtain 1200 to 1400 RPM.
- While still holding throttle lever against idle speed screw, turn idle mixture screw in (clockwise) until engine begins to die and then turn out (counterclockwise) until engine runs rough. Turn screw to a point midway between those two positions.
- Continue to hold throttle lever against idle speed screw and adjust idle speed screw to obtain 900 to 1200 RPM. Release throttle lever.

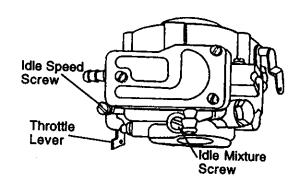
### **ACCELERATION TEST-**

 Move throttle control lever from slow to fast position. If engine hesitates or dies, turn idle mixture screw 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.

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

#### **BATTERY**

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

#### **ENGINE**

#### **FUEL SYSTEM**

IMPORTANT: It is important to prevent gum deposits from forming in essential fuel system parts such as carburetor, fuel filter, fuel hose, or tank during storage. Also, experience indicates that alcohol blended fuels called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

- 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 Maintenance section of this manual). CYLINDER(S)

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

#### OTHER

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

**IMPORTANT:** Never cover tractor while engine and exhaust areas are still warm.

# TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION				
Will not start	<ul> <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> </ul>	<ul> <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 carbure tor, refill tank with fresh gasoline and replace fuel filter.</li> </ul>				
	<ul> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> <li>Service Adjustments</li> <li>Engine valves out of adjustment.</li> </ul>	Check all wiring				
Hard to start	<ul> <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> <li>Engine valves out of adjustment.</li> </ul>	<ul> <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> </ul>				
Engine will not turn over	<ul> <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> </ul>	<ul> <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> </ul>				
Engine clicks but will not start	<ul> <li>Weak or dead battery.</li> <li>Corroded battery terminals.</li> <li>Loose or damaged wiring.</li> <li>Faulty solenoid or starter.</li> </ul>	<ul> <li>Recharge or replace battery.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace solenoid or starter.</li> </ul>				
Loss of power	<ul> <li>Cutting too much grass/too fast.</li> <li>Throttle in "CHOKE" position.</li> </ul>	<ul> <li>Set in "Higher Cut" position/ reduce speed.</li> <li>Adjust throttle control.</li> </ul>				

# TROUBLESHOOTING CHART

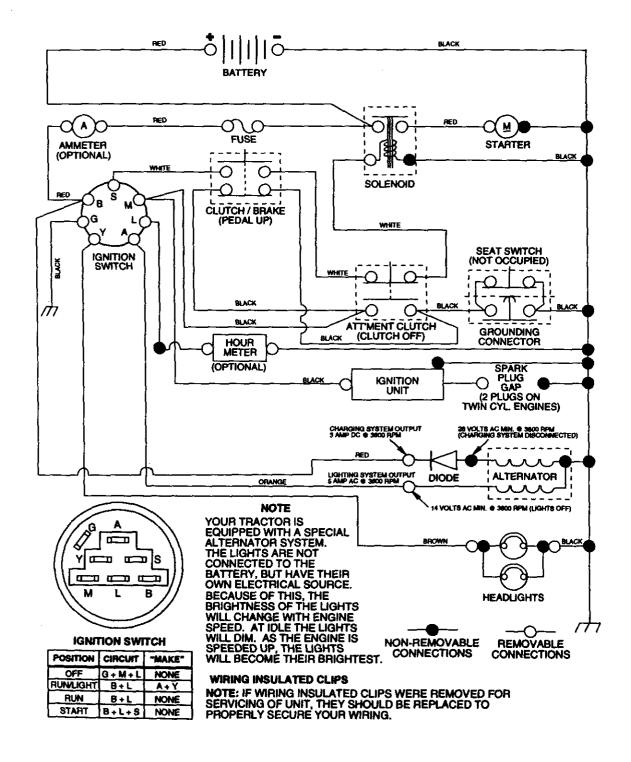
PROBLEM	PROPIEM CHART						
	CAUSE	CORRECTION					
Loss of power (Continued)	<ul> <li>Build-up of grass, leaves and trash under mower.</li> <li>Dirty air filter.</li> <li>Low oil level/dirty oil.</li> <li>Faulty spark plug.</li> </ul>	<ul> <li>Clean underside of mower housing.</li> <li>Clean/replace air filter.</li> <li>Check oil level/change oil.</li> <li>Clean and regap or change spark plug.</li> </ul>					
	Dirty fuel filter.     Stale or dirty fuel.	<ul> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with fresh gasoline.</li> </ul>					
	Water in fuel.      Spark plug wire loose.	<ul> <li>Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>Connect and tighten spark</li> </ul>					
	Dirty engine air screen/fins.	plug wire. • Clean engine air screen/ fins.					
	<ul> <li>Dirty/clogged muffler.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> </ul>	Clean/replace muffler. Check all wiring. See "To Adjust Carburetor" in Service Adjustments section.					
	Engine valves out of adjustment.	Contact an authorized service center/department.					
Excessive vibration	<ul> <li>Worn, bent or loose blade.</li> <li>Bent blade mandrel.</li> <li>Loose/damaged part(s).</li> </ul>	<ul> <li>Replace blade.</li> <li>Tighten blade bolt.</li> <li>Replace blade mandrel.</li> <li>Tighten loose part(s).</li> <li>Replace damaged parts.</li> </ul>					
Engine continues to run when operator leaves seat with attachment clutch engaged	<ul> <li>Faulty operator-safety presence control system.</li> </ul>	<ul> <li>Check wiring, switches and connections. If not corrected, contact an authorized service center/department.</li> </ul>					
Poor cut - uneven	<ul> <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 from build-up of grass, leaves, and trash around mandrels.</li> </ul>	<ul> <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> </ul>					
Mower blades will not rotate	<ul> <li>Obstruction in clutch mechanism.</li> <li>Worn/damaged mower drive belt.</li> <li>Frozen idler pulley.</li> <li>Frozen blade mandrel.</li> </ul>	<ul> <li>Remove obstruction.</li> <li>Replace mower drive belt.</li> <li>Replace idler pulley.</li> <li>Replace blade mandrel.</li> </ul>					

### TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION			
Poor grass discharge	<ul> <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> </ul>	<ul> <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> </ul>			
Headlight(s) not working (if so equipped)	<ul> <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> </ul>	<ul> <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> </ul>			
Battery will not charge	<ul> <li>Bad battery cell(s).</li> <li>Poor cable connections.</li> <li>Faulty regulator (if so equipped).</li> <li>Faulty alternator.</li> </ul>	<ul> <li>Replace battery.</li> <li>Check/clean all connections.</li> <li>Replace regulator.</li> <li>Replace alternator.</li> </ul>			
Loss of drive	<ul> <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> </ul>	<ul> <li>Place freewheel control in "engaged" position.</li> <li>Replace motion drive belt.</li> <li>Purge transmission.</li> </ul>			
Engine "backfires" when turning engine "OFF"	Engine throttle control not set at "SLOW" position for 30 seconds stopping engine.	Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.			

#### TRACTOR -- MODEL NUMBER 917.270922

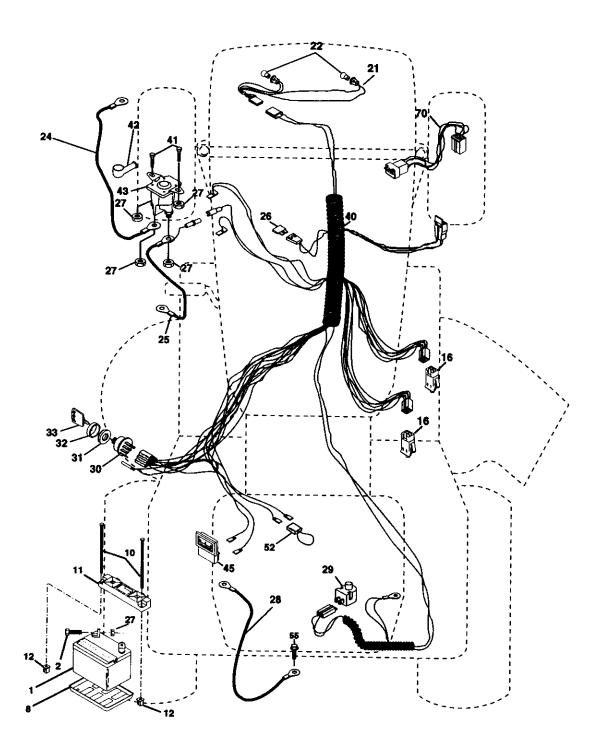
#### **SCHEMATIC**



# REPAIR PARTS

# TRACTOR -- MODEL NUMBER 917.270922

### **ELECTRICAL**



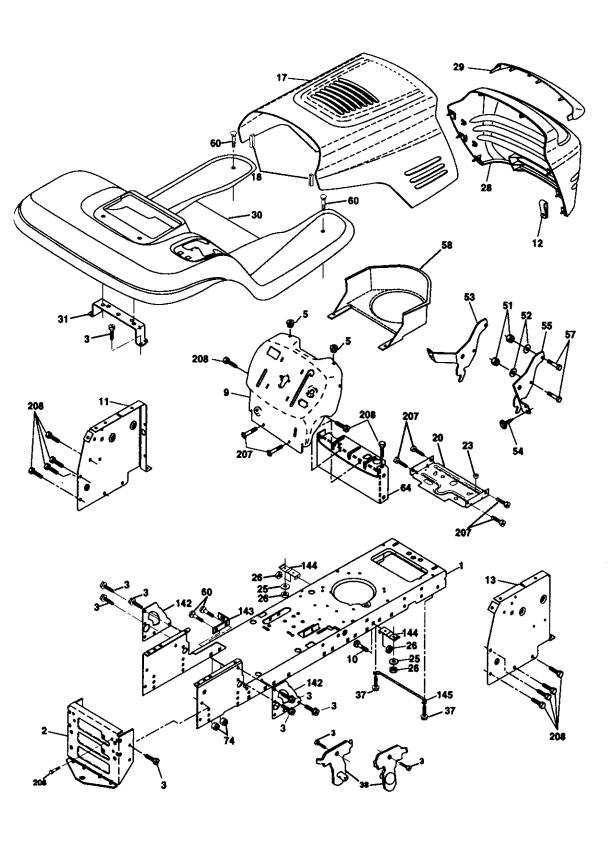
## TRACTOR -- MODEL NUMBER 917.270922

### **ELECTRICAL**

KEY PART NO. NO.		DESCRIPTION			
1	163465	Battery			
2	74760412	Bolt, Hex 1/4-20 x 3/4			
8	7603J	Tray, Battery			
	145211	Bolt, Btr Front 1/4-20 x 7-1/2			
11	150109	Holddown Battery Front Mount			
12	145769	Nut, Push Nylon Battery Front 1/4			
	153664	Switch Interlock Push-In			
21	166182	Harness, Light Socket (w/4152J)			
	4152J	Light Bulb			
	4799J	Cable, Battery			
	146148	Cable, Battery			
	166180	Fuse			
	73510400	Nut Keps Hex 1/4-20 Unc			
	145491	Cable, Ground			
	121305X	Switch, Seat			
30		Switch, Ignition			
	124211X	Nut			
	141226	Cover			
	109310X	Key, Molded			
40		Hamess, Ignition			
41	71110408	Bolt Blk Fin Hex 1/4-20 UNC x 1/2			
42	131563	Cover, Terminal			
	145673	Solenoid			
	121433X	Ammeter Rectangular 6 Amp			
	141940	Protection Wire Loop (Hour Meter)			
	17490508	Screw Thdrol 5/16-18 x 1/2			
70	173957	Harness Engine			

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

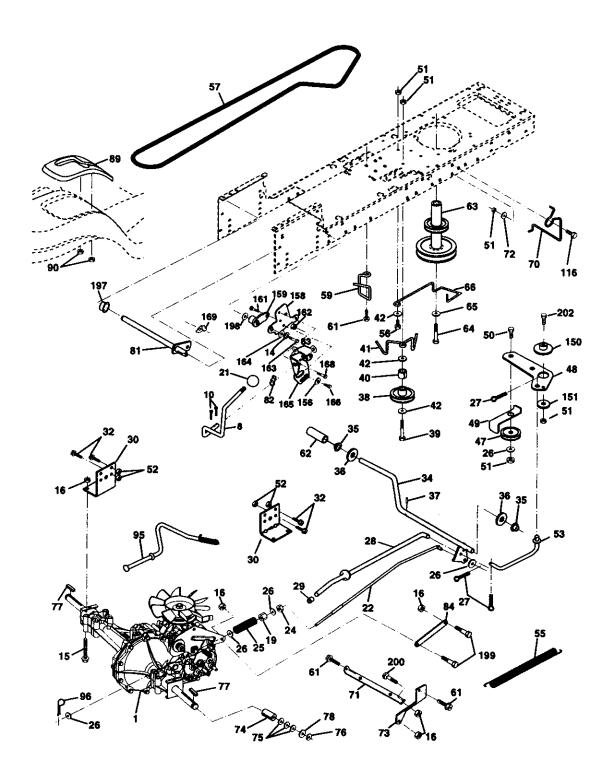
# TRACTOR - - MODEL NUMBER 917.270922 CHASSIS AND ENCLOSURES



## TRACTOR - - MODEL NUMBER 917.270922 CHASSIS AND ENCLOSURES

KE		
NC	). NO.	DESCRIPTION
1	169830	Chassis
2	169061	Drawbar
3	17060612	Screw 3/8-16 x 3/4
5	155272	BumperHood/Dash
9		Dash
10		Bolt, Carriage 3/8-16 x 1
11		Panel, Dash, LH
12		Clip Tinnerman Grille P/L
13		Panel, Dash, RH
1/	144983X558	Hood Assembly
18		Bumber Hood
20 23		Plate Mtg Battery Fuel Tank
23 25		Bushing, Snap, Nylon, Fuel Line
25 26		Washer 13/32 x 13/16 x 12 Gauge
28	STD541437 166271X558	Locknut, Hex, with Insert 3/8-16 UNC
29		Grille
30		Lens, Grille
31	139976	Fender/Footrest
37	17490508	Bracket, Fender/Support
38	169834	Screw, Thdrol. 5/16-18 x 1/2 TYT
51	73800400	Pivot Bracket Assembly, LH, Mower, Rear
52	19091416	Nut Lock W/insert 1/4 - 20 UNC Washer 9/32 X 7/8 X 16 Ga.
53	145201	Bracket Grille Pickoff LH
54	161464	Screw, Hex Wshd #8-18 x 7/8
55	145202	Bracket Grille Pickoff RH
57	STD552507	Bolt FinHex 1/4 -20 UNC X.75
58	140547	Air Duct
60	72140606	Bolt Rdhd Sqnk 3/8-16 UNC x 3/4
64	154798	Dash Lower STLT
74		Nut Crownlock 3/8-16 UNC
142	165867	Plate Reinforcement STLT
	154966	Bracket Swaybar Chassis
	154207	Bracket Footrest STLT
145	156524	Rod Pivot Chassis/Hood
206	170165	Bolt Shoulder 5/16-18TT
207	17670508	Screw Thdrol 5/16-18 x 1/2
	17670608	Screw Thdrol 3/8-16 x 1/2
	5479J	Plug Button

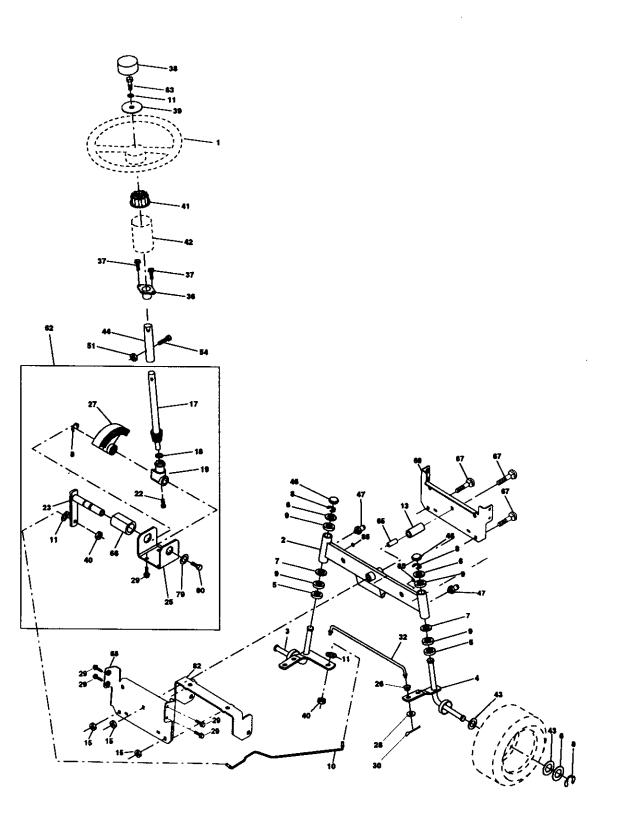
#### **GROUND DRIVE**



#### **GROUND DRIVE**

KE			KE	Y	PART	
NC	). NO.	DESCRIPTION	NO		NO.	DESCRIPTION
1		Transaxle (See Breakdown)	65	STDS	51143	Washer
8	165866	Hydro Gr 314-0510		1547		Keeper Belt Engine Hydro
10	STD561210	Rod Shift Fender Adjust Pin Cotter 1/8 x 1 CAD		1346		Guide Belt RH Engine
14	10040400	Washer Lock Hvy Helical	71	1691		Strap Torque Lh
15	74490544	Bolt Hex FLGHD 5/16-18 GR.5	72	1913		Washer 13/32 x 1-1/4 x 12 Ga.
16	STD541431	Nut Lock Hex W/Ins. 5/16-18 Unc	73 74	16918 16949		Strap Torque Rh
19	STD541437	Nut Lock Hex W/Wsh 3/8-16 Unc		12174		Spacer, Split
21	130564	Knob, Deluxe 1/2-13	76		81075	Washer 25/32 x 1-1/4 x 16 Ga. E-Ring
22	169498	Rod, Brake Hydro	77	1235		Key, Šquare
24	73350600	Nut, Hex Jam 3/8-16 Unc	78	12174		Washer 25/32 x 1-5/8 x 16 Ga.
25	106888X	Spring, Brake Rod	81	16559		Shaft Asm Cross
26	STD551037	Washer	82	1657		Spring Torsion
27	STD561210	Pin Cotter 1/8 x 3/4 CAD.	83	1917		Washer 17/32 x 3/4 x 16 Ga.
28	145204	Rod, Parking Brake	84	16959	94	Link Transaxle
29 30	71673	Cap, Parking Brake	89	16489	90X428	Console, Shift
32	169592	Bracket, Transaxle	90	12434	46X	Nut Self-Thd Wsh-hd 1/4 Zinc
34	74760512 155071	Bolt Hex Hd 5/16-18 Unc x 3/4	95	17020		Control Bypass
35	120183X	Shaft, Foot Pedal		44971		Retainer Spring 1" Zinc/Cad
36	19211616	Bearing, Nylon Washer		72110		Bolt Carr. 3/8-16 x 1.25
37	1572H	Pin, Roll		16585		Bushing Bellcrank Grd Drive
38	131494	Pulley, Idler, Flat		19133		Washer 13/32 x 2 x 10 Ga.
39	72110622	Bolt		16600		Washer Strted 5/16ID x 1.125
40	4470J	Spacer, Split	150	16558 16549	39	Bracket Shift Mount
41	165838	Keeper, Belt Idler		72140		Hub Tappered Flange Shift Lt
42	19131312	Washer 13/32 x 13/16 x 12 Ga.		73680		Bolt Rdhd Sqnk 1/4-20 x 3/4 Gr. 5
47	127783	Pulley, Idler, V-Groove		74780		Nut Crownlock 1/4-20 Unc
48	154407	Bellcrank Clutch Grnd Drv STL		19091		Bolt Hex Fin 1/4-20 Unc x 1 Gr. 5
49	123205X	Retainer, Belt		16562		Washer 5/8 x .281 x 10 Ga Bracket Pivot Lever
50	STD523715	Bolt		16688		Screw 5/16-18 x 5/8
51	STD541437	Nut Crownlock 3/8-16 UNC		16549		Bolt Shoulder 5/16-18 x .561
52 53	STD541431	Nut, Crownlock 5/16-18 Unc		16558		Plate Fastening Lt
55	105710X	Link, Clutch		16961		Nyliner Snap-In
56	105709X STD523712	Spring, Return, Clutch		16959		Washer Nyliner
57	140294	Bolt Hex 3/8-16 x 1-1/4		16961	_	Bolt Shoulder 5/16-18UNC
59	169691	V-Belt, Ground Drive		72140		Bolt RDHD SQNK 5/16-18UNC x 1
61	17060612	Keeper, Center Span	202	72110	612	Bolt Carr SH 3/8-16 x 1-1/2Gr.5
62	8883R	Screw 3/8-16 x 3/4 Cover, Pedal				
63	140186	Pulley, Engine	NOT	E: All	compone	nt dimensions given in U.S. inches
	71170764	Bolt Hex 7/16-20 x 4 Gr. 5		1 i	nch = 25.4	mm
		DORTHOX // 10-20 X 4 GI. 5				

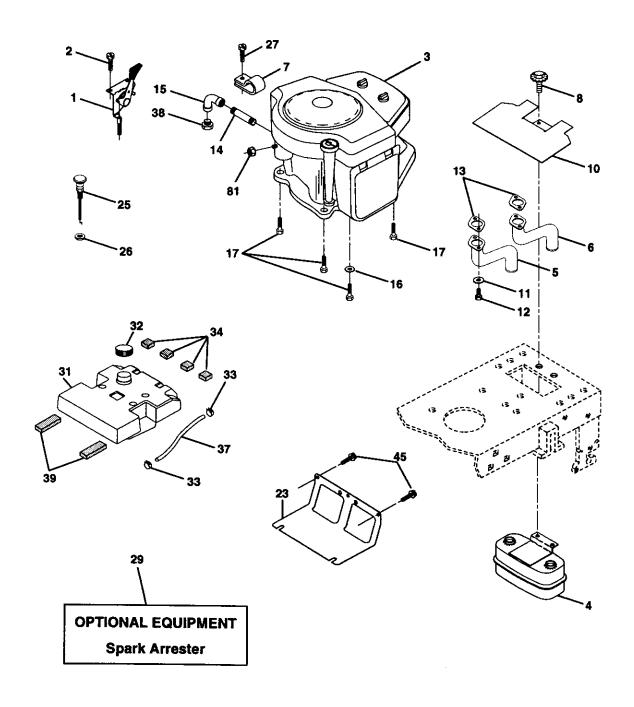
## TRACTOR - - MODEL NUMBER 917.270922 STEERING ASSEMBLY



#### STEERING ASSEMBLY

K		•
N	O. NO.	DESCRIPTION
1	139768	Steering Wheel
2	154427	Front Axle Assembly
3	169840	Spindle Assembly, L.H.
4	169839	Spindle Assembly, R.H.
5	6266H	Bearing, Race, Thrust, Hardened
6	121748X	Washer 25/32 x 1-5/8 x 16 Gauge
7	19272016	Washer 27/32 x 1-1/4 x 16 Gauge
8	12000029	Ring, Klip
9		Bearing, Steering Column
10		Link, Drag
11		Washer, Lock
13		Spacer, Bearing, Front Axle
15		Nut, Hextlange Lock
17		Shaft Assembly, Steering
18		Washer, Thrust 515 x 750 x 033
19		Support, Shaft
22		Screw hex Wshhd Torx
23		Pittman Shaft Assembly
25		Bracket, Steering
26 27		Bushing, Link, Drag
28		Gear, Sector
29		Washer 13/32 x 7/8 x 16 Gauge
30		Screw 3/8-16 x 3/4
32		Pin
36		Rod, Tie
37		Bushing, Steering
	139769	Screw TT #10-32 x 5 x 3/8 Flange
39		Insert, Steering Wheel
40	STD541537	Washer 13/32 x 2-3/8 x 12 Gauge
41	100711L	Lock Nut Center 3/8-24 UNF
42	145054X428	Adaptor, Steering Wheel
43	121749X	Boot, Steering Dash P/L Mtl Blk
44	153720	Washer 25/32 x 1-1/4 x 16 Gauge
46	121232X	Extension Steering Non-Adjust Cap, Spindle
47	6855M	Fitting, Grease
51	73800500	Nut Lock Hx W/Ins 5/16-18 UNC
54	74780520	Bolt Fin Hex 5/16-18 UNC x 1-1/4
62		Kit, Steering Assembly, Service
63	74780616	Bolt Fin Hex 3/8-16 unc. x 1 Gr. 5
65	160367	Spacer Brace Axle
66	154404	Bearing Arm Pittman
67	72110618	Bolt Rhnd Sqnk 3/8-16 x 2-1/4
68	169827	Brace Axle
79	19132012	Washer 13/32 x 1-1/4 x 12 Ga
80	74950612	Bolt Hex Nylon 3/8-16 x 3/4
82	169835	Bracket Susp Chassis Front
85	133835	Fastener Christmas Tree

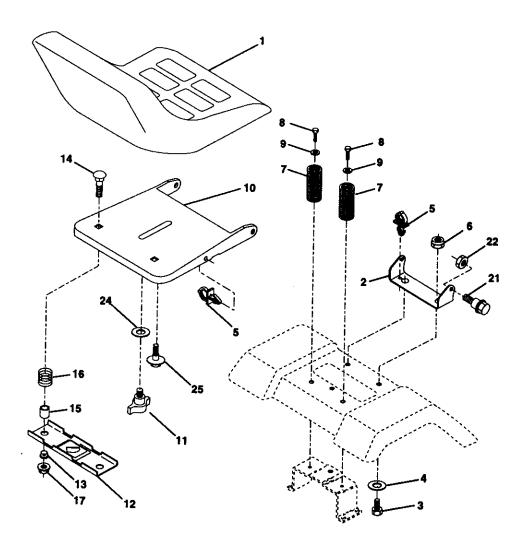
#### **ENGINE**



#### **ENGINE**

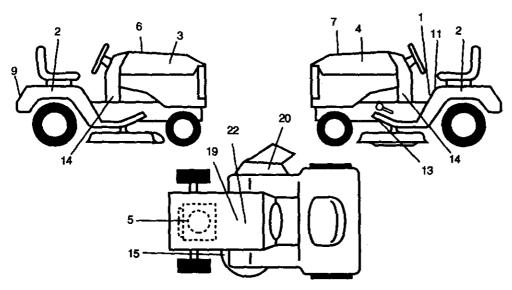
KE		г
NC	). NO.	DESCRIPTION
1	162152	Control Throt Paddle 32 22
2	17720410	Screw Hex Thd Cut 1/4-20x5/8 T
3	440000	Engine (See Breakdown) Prings Model No. 464707 0447 Fe
4 5	149723	manior Exitansi
6	144069	Exhaust Asm. Left
7	144068	Exhaust Asm. Right
8	138129 150176	Clamp Tube Double Engine
	145552	Bolt 5/16 - 18 UNC X 3/4 W/Sems
11	STD551125	Heat Shield Lt
12	STD522507	Washer Lock Hvy. Helical 1/4
	165287	Bolt Fin Hex 1/4-20 x 3/4 Gasket Muffler
14	13280336	Nipple Pipe 4-1/2"
15	13200300	Elbow Std 90 Degree 3/8-18 Npt
16	STD551237	Washer Lock Ext Tooth 3/8
17	17490624	Screw Thdrol 3/8-16x1-1/2 Tytt
23	169837	Shield Browning/Debris Guard
25	145996	Control Choke
26	73920600	Nut Keps 3/8-24 Unf
27	152927	Screw TT #10-32 x 5 x 3/8 Flange
29	137180	Arrestor Spark
	157103	Tank Fuel 3 50 Rear
32	161696	Cap Fuel Guage STLT
	123487X	Clamp Hose Blk
	106082X 8543R	Spacer Pad
38	0040H	Line Fuel
	109227X	Plug Oil Drain (See Engine Breakdown)
	17060612	rau idier 1.75 x .75 x .06
_ 7	128861	Screw 3/8-16 x SMGML
٠.	-2007	Nut, Flange 1/4-20 Starter Nut

#### **SEAT ASSEMBLY**



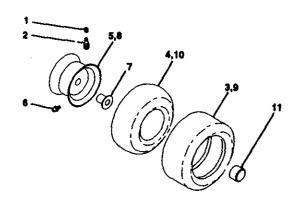
KE NC		Description	KE NC	-	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12	140123 140551 71110616 19131610 145006 STD541437 124181X 17000616 19131614 155925 166369 121246X	Seat 3450 Blk/blk Craftsman Bracket Pnt Pivot Seat (blk ) Bolt Fin Hex 3/8-16unc X 1 Washer 13/32 X 3/4 X 10 Ga Clip Push In Hinged Nut Hex Lock w/lns 3/8-16 Unc Spring Seat Cprsn 2 250 Blk Zi Screw 3/8-16 X 1.5 SMGML Washer 13/32 X 1 X 14 Ga Pan Pnt Seat (blk ) Knob Seat Bracket Pnt Mounting Switch	13 14 15 16 17 21 22 24 25 NO	12124 72050 13430 12125 12397 17185 STD54 19171 12701	1412 10 60X 66X 2 41431 912	Bushing Snap Blk Nyl 50 Id Bolt Rdhd Sht Nk 1/4-20x1-1/2 Spacer Split 28 X 96 Zinc Spring Cprsn 1 27 Blk Pnt Nut Lock 1/4 Lge Flg Gr 5 Zinc Bolt Shoulder 5/16-18 Unc-2A Nut Hex Lock w/Ins 5/16-18 Washer 17/32 X 1-3/16 X 12 Ga. Bolt Shoulder 5/16-18 X 62 ent dimensions given in U.S. inches

#### **DECALS**



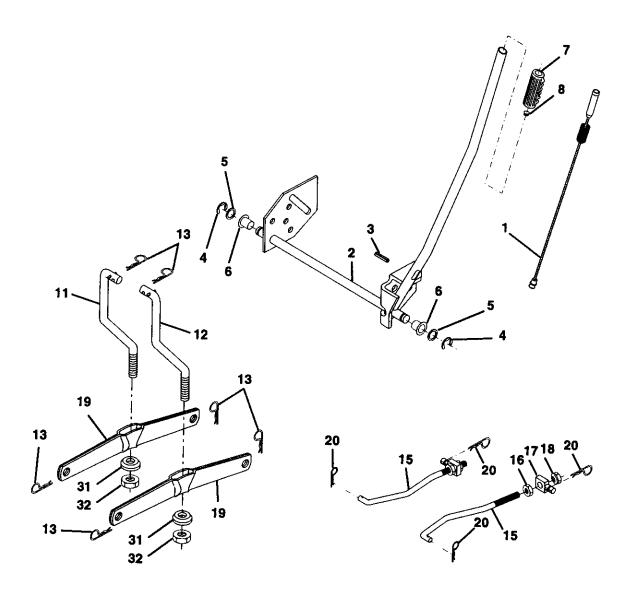
KE NO		DESCRIPTION	KE NC		PART NO.	DESCRIPTION
1 2	156439 163205	Decal Fender Danger Sears Decal Fend Auto Sears Gold	13 14	14604 16325	9	Decal V-belt Dr Sch Tractor E Decal Dash Panel
3 4	171696 171697	Decal Hood Rh Craftsman Decal Hood Lh Craftsman	15 19	16039 13804	7	Decal Mower Drive Schematic Decal, Battery Diehard Sears
5 6	165392 133644	Decal Engine H/P Decal Maint Customer	20 22	16688 14951	6	Decal Deck Mower EZ3 Decal Battery
7 9	171809 163204	Sears Dom Decal Replacement Srs Decal Fender Craftsman Gold		16921 13831	-	Decal By Pass Lt Hydro Decal Lift Handle Pad Footrest Lh STLT
11	156811	Decal Fender STLTH Oper Inst E/S			9X428 0	Pad Footrest Rh STLT Manual, Owner's (English) Manual, Owner's (Spanish)

#### WHEELS & TIRES



NO		DESCRIPTION
1	59192	Valve Cap, Tire
2	65139	Stem, Valve
3	106222X	Tire, Front
4	59904	Tube, Front Tire
		(Not Provided, Service Item Only)
5	106732X427	Rim, Front
6	278H	Fitting, Grease (Front Wheel Only)
7	9040H	Bearing, Flange (Front Wheel Only)
8	106108X427	Rim. Rear
9	122082X	Tire, Rear
10	7152J	Tube, Rear Tire
-		(Not Provided, Service Item Only)
11	104757X	Cap, Axle
	144334	Sealant, Tire (10 oz. Tube)
		•

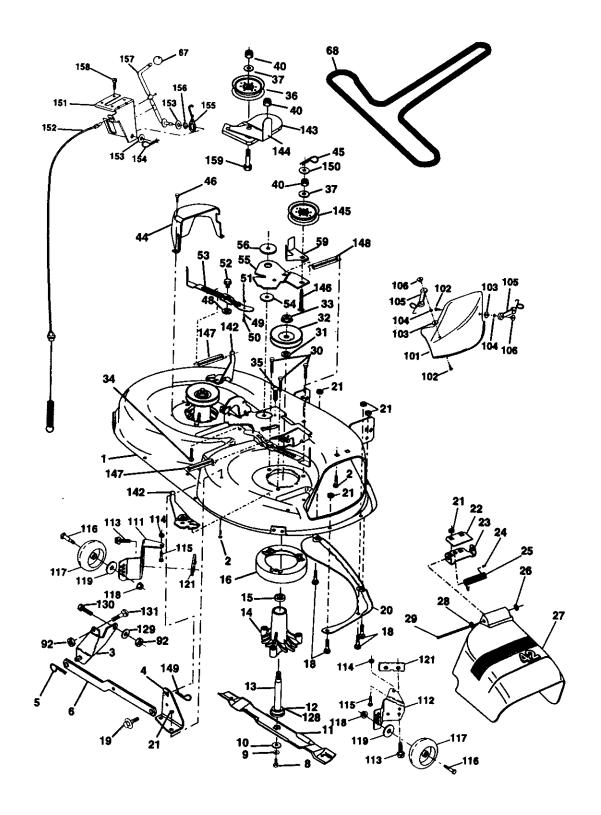
#### LIFT ASSEMBLY



#### LIFT ASSEMBLY

KE	Y PART	i
NC	D. NO.	DESCRIPTION
13 15 16 17 18 19 20	120183X 125631X 122365X 139865 139866	Lift Lever Inner Wire Asm. Shaft Asm. Lift Pin Groove E Ring Washer 21/32 x 1 x 21 Ga. Bearing Nylong Grip Handle Fluted Button Plunger Read Link Asm Lift L.H. Link Asm Lift R.H. Retainer Spring Link Front Nut Jam Hex 1/2-13 Unc Trunnion Blk Zinc Nut Lock w/Wsh 1/2-13 Unc Arm Suspension Mower Retainer Spring Bearing, Pvt. Lift. Spherical
		Nut Crownlock 3/8-24

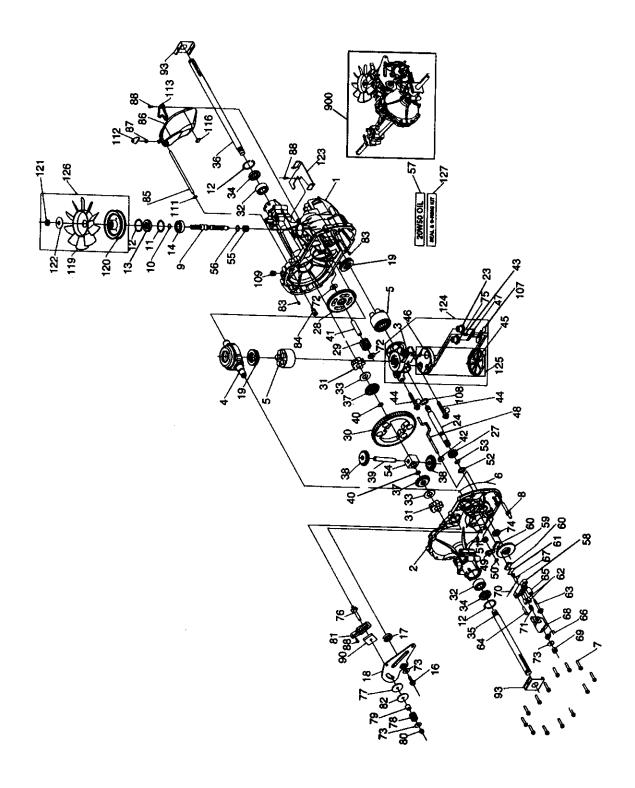
#### **MOWER DECK**



#### **MOWER DECK**

KE NO	EY PAI		KE	-	PART	
		22301th 11014	NO	•	NO.	DESCRIPTION
1 2	165892 STD533107	Mower Housing	59	1410	)43	Guard, Tuv Idler (94)
3	138017		67	1498		Knob Custom Oval
	130017	Bracket Assembly, Sway Bar, Front	68	1449		V-Belt
4	165460	Bracket Sway Bar 38/42"	92	STD	541437	Locknut, Hex W/Wsh 3/8-16 UNC
5	STD624008	Retainer Spring		1364		Cover Mulching 42" Black
6	130832	Arm, Suspension, Rear	102	7116	31010	Screw Truss Hd Phil10-24 x5/8
8	850857	Bolt, Hex 3/8-24 x 1.25 Gr. 8	103	1906	1216	Washer#10
9	STD551137	Washer, Lock	104	STD	551110	Washer Lock
10	140296	Washer, Hardened		1607		Latch Asm Bagger
11		Blade, Mulching		2029 1551		Nut Weld
12		Bearing, Ball	140	1551		Bracket Gauge, Wheel LH
13	137645	Shaft Assembly, Mandrel, Vente			96 0512	Bracket, Gauge, Wheel RH
14	100774	(Incl. Key Number 6)			0500	Screw 5/16-18 x 3/4
	128774	Housing, Mandrel, Vented	115	7211	0504	Nut, Hex Keps 5/16-18 UNC
	110485X 140329	Bearing, Ball, Mandrel	116	4898	H	Bolt, Carriage 5/16 UNC x 1/2 Bolt, Shoulder
	72140505	Stripper, Vented Mower Deck		1657		Wheel, Gauge
	132827	Bolt, Carriage 5/16-18 x 5/8	118	7393	0600	Nut, Crownlock 3/8-16
	159770	Bolt, Shoulder Baffle, Vortex	119	1912	1414	Washer 13/32 x 7/8 x 14 Ga.
21	STD541431	Nut, Crownlock 5/16-18 UNC	121	1437	23	Bracket
22	134753	Stiffener Bracket	128	1533		Washer Felt
23	131267	Bracket, Deflector	129	1913		Washer 13/32 x 13/16 x 12 Ga.
24		Cap, Sleeve	130	STD	23/10	Bolt, Fin Hex 3/8-16 UNC x 1 Gr 5
25	123713X	Spring, Torsion, Deflector	131	SIDS	33710	Bolt Right Sank 3/8-16 LINC v 1
26	110452X	Nut, Push		1658	90	Arm Spring Brake Mower
	130968X428			1571( 1586)		Bracket Arm Idler 42"
	19111016	Washer 11/32 x 5/8 x 16 Ga.		16588		Keeper Belt 42" Clutch Cable
	131491	Rod, Hinge		16589		Pulley Idler Flat Bolt Carraige Idler
	157722	Screw Thdrol Rolling Wsh Hd		1313		Spring Extension
	129963 153535	Washer, Spacer	148	1690		Spring Return Idler
	137266	Pulley, Mandrel		16589		Retainer Spring Yellow Zinc
34	STD533717	Nut, Toplock, Flanged Bolt	150	1909	1210	Washer 9/32 x 3/4 x 16 Ga.
	133835	Fastner, Christmas Tree	151	16967	<b>70</b>	Bracket Clutch
	131494	Pulley, idier, Flat		16967	76 (	Cable Clutch 42"
37	19131316	Washer 13/32 x 13/16 x 16 Ga.		16967	74	Washer flat 3/8" Type B
40	STD541437	Nut, Crownlock 3/8-16 UNC		16967	5	Spring Retainer
44	140088	Guard, Mandrel, L.H.		16967	•	Spring Retention Lever
	STD624003	Retainer	100	16967		Spacer
	137729	Screw, Thd. Roll 1/4-20 x 5/8	150	16966 17720		Rod Clutch
48	.000	Washer, Hardened				Screw Hex Thd Cut 1/4-20 x 5/8
49 50	155066 131340	Roller Assembly, Cam Follower		13079		Bolt Right Sqn 3/8-16 Unc x 1-3/4
51	STD541410	Bolt, Shoulder #10-24 Grade 5				Mandrel Assembly (Includes Key Numbers 8-10, 12-15, 31 and 32)
52	139888	Locknut Bolt Shoulds-5/49 49 49 4	••	16958	ıs İ	Mower Deck, Complete (Std deck
53	131845	Bolt, Shoulder 5/16-18 UNC				order separately mulcher plate
54	133943	Arm Assembly, Pad, Brake Washer, Hardened			(	components key nos. 101-106)
55	155046	Arm, Idler				,
	165723	Spacer, Retainer	NOTE	: All c	omponent	dimensions given in U.S.inches
				1 inc	h = 25.4 m	m Sinchalona Sinan III (1'2'IUCU62
					#60.7 III	n++

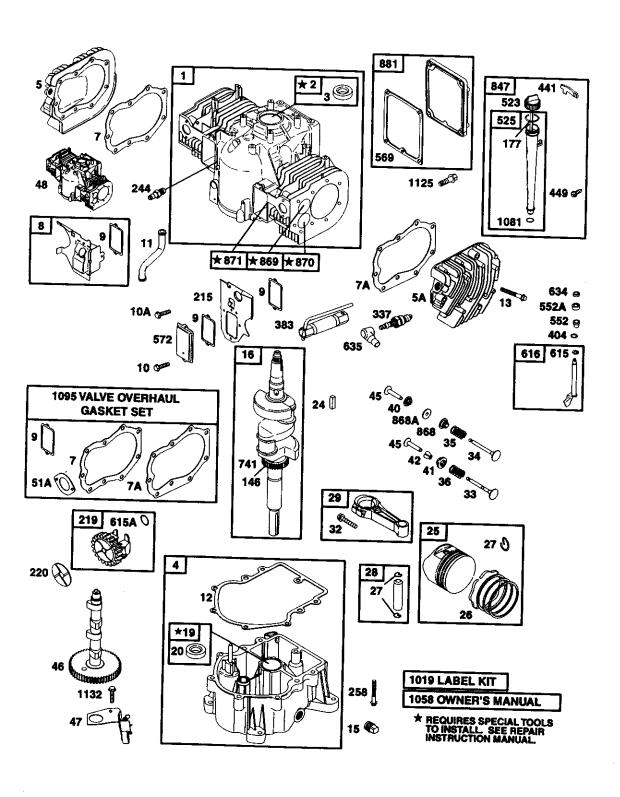
## TRACTOR - - MODEL NUMBER 917.270922 HYDRO GEAR TRANSAXLE - - MODEL NUMBER 314-0510



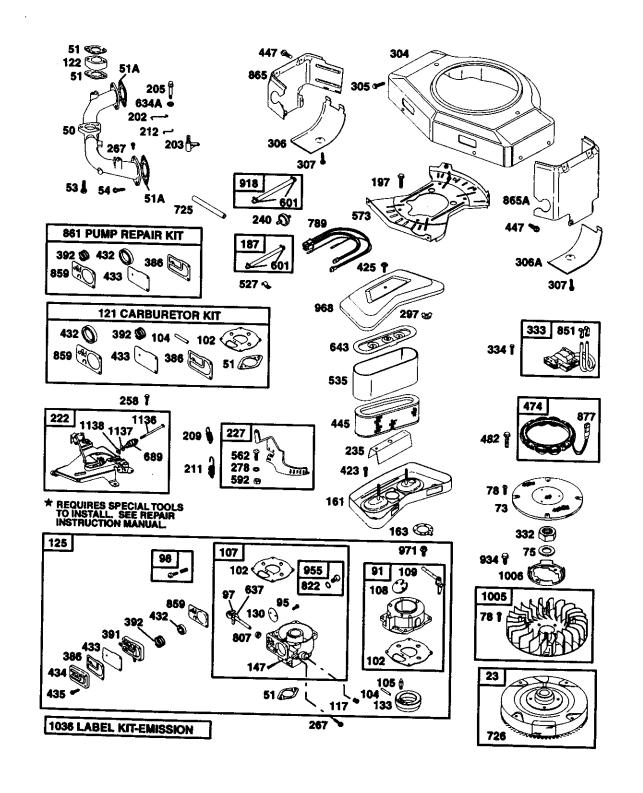
## TRACTOR - - MODEL NUMBER 917.270922 HYDRO GEAR TRANSAXLE - - MODEL NUMBER 314-0510

KE	YPART				
	. NO.	DESCRIPTION		/ PART	OF COMPTON
•••		DESCRIPTION	NU	. NO.	DESCRIPTION
1	170351	Main Housing, Assembly	59	170408	Potor Proko
2	170352	Side Housing, Assembly	60	142883	Rotor, Brake Brake Puck
3	170353	Center Section, Assembly		142881	Puck Plate
4	170354	Swashplate, Trunion Machined		142887	Brake Actuating Pin
5	169898	Block - Assembly	63	170410	Highes 1/4-20x2 W/
6	170355	Sealant 10.5 Oz		.,,,,,	Patch, Special Flange
7	170356	Hex Flange Screw 1/4-20 X 1.25	64	142892	Bolt, 1/4-20 X 1 W/Patch
8	170357	Stud, 5/16-24 Hex Double End	65	170411	Spacer
9	170358	Shaft, Input		170412	Spring, Brake Arm Bias
10	170359	Ring - Retaining		170413	Sq. Hd. Bolt 5/16-24-Ribbed
11	170360	Spacer	68	170414	Arm, Brake
12	169870	Ring - Retaining		170415	Slotted Hex Nut 5/16-24
13	170361	Seal, Lip .67 X 1.58 X .276	70	170416	Cotter Pin 3/32 X 3/4
14	169869	Ball Brg 17mm ld X 40mm Od X	71	170417	Compression Spring Brake Anti-
		12mm			Drag
16	170362	Hex Flange Head Screw 5/16-	72	170418	Washer, Ht .5 I.D. X 1 O.D. X
		24X0.75			.032
17	170363	Lip Seal 18 X 32 X 7	73	142884	Flat - Washer 11/32 I.D. X 7/8
18	170364	Arm, Control			O.D
19	150771	Bearing, 30x52x13 Thrust	74	170419	Oil Seal .625 X 1.0 X .25
23	170365	Check Plug Assembly, Washer	75	170420	Check Plug Assembly, .027,
24	170366	Shaft, Motor			Washer
27	170367	Gear - Pinion, 13t	76	170421	Stud, 5/16-24 Friction Pack
28	170368	10t/48t Gear	77	170422	Puck, .330 X 1.50 X .0975
29	170369	Gear, 10t Jackshaft	78	142969	Spring, Helical Comp
30	170370	60t Buli Gear		142980	Spacer
31	170371	Sleeve Bearing .75 X 1.575 X	80	150778	Hex Lock Nut 5/16-24Unjf(Nylon
		.625			Insert)
32	170389	SleeveBearing(Outboard)	81	170423	Wedge, Friction Pack
		.75x1.750x.625	82	170424	Clip, Washer .316x1.50x.1046
33	142991	Washer, 3/4 ld X 1-1/2 Od X .13			(Plated)
٠.		Thk	83	161162	Pin, Standard Headless
	170390	Lip Seal Axle Seal		170425	Fitting, 5/16 Sae 5/32 Tube
35	170391	Shaft, Axle .75 X 11.39 (Key,	85	170426	Hose, Expansion Tank
-00	470000	R.H.)	86	170427	Expansion Tank
36	170392	Shaft, Axle .75 X 16.99 (Key,	87	170424	Cap - Poppet Valve
07	450700	L.H.)		170429	Bolt, Self Tapping 10-32 X 1/2
37	150792	Miter Gear (Splined)	90	170430	Puck, Inner Wedge
	150793	Miter Gear 15t (0.5 ld)	93	170431	Spring Clip - Housing Thrust
	150809	Shaft		170432	Deflector
40 41	170393	Ring, Spiral Retaining	108	170433	Washer, Motor Shaft
	170394	Pin, Jackshaft			.71idx1.15odx.030thk
43	170395	Magnet, Ring	109	170434	Plug, Sae #6
44	170396	Spring, Bypass	111	170435	O-Ring .07 X .301 I.D.
44	150797	Hydro Mtg Screw 3/8-24 X 2.5	112	170436	Shield, Vent
45	170207	Long		170437	Bracket, Support Expansion Tank
45 46	170397	Filter	116	170438	Silicon Sponge
47	170398	Base, Filter	119	170439	Fan, 7 In.
48	170999 170400	Actuator, Bypass	120	170440	Pulley
	170401	Rod, Bypass Actuator	121	170441	Hex Lock Nut 1/2-20 (Nylon
	170202	Arm, Bypass			Insert)
51	170403	Retaining Ring .250 External		170442	Washer, Belleville
52	170404	Seal, Lip .741 X .250 X .250 Tc		170443	Belt Keeper
		Flat Washer, 5/8 ld X 1.0 Od X	124	170444	Center Section-Filter-Bypass
53	170405	.05 Thk			Assembly
54	170406	Retaining Ring		170445	Filter Assembly
	142977	Bearing, Center Block		170446	Fan - Pulley Service Assembly
	142978	Spring - Helical Compression Washer		170447	Seal - O-Ring Kit
57	150798	20w-50 Oil	900	166768	Transaxle Complete
	170407	Brake Yoke			·
		PIRUS I UNG	NOT	E: All compon	ent dimensions given in U.S. inches
			ווו	ch = 25.4 mm	

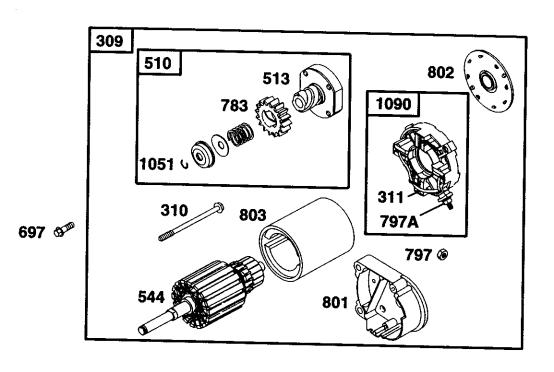
# TRACTOR - - MODEL NUMBER 917.270922 BRIGGS & STRATTON ENGINE-MODEL NUMBER 461707, TYPE NUMBER 0145-E3

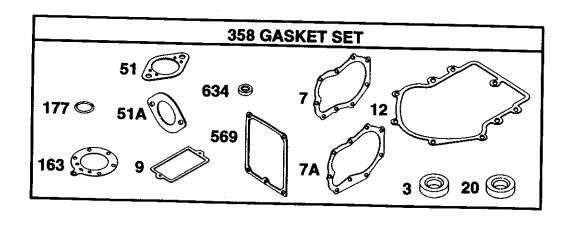


# TRACTOR - - MODEL NUMBER 917.270922 BRIGGS & STRATTON ENGINE-MODEL NUMBER 461707, TYPE NUMBER 0145-E3



# TRACTOR - - MODEL NUMBER 917.270922 BRIGGS & STRATTON ENGINE-MODEL NUMBER 461707, TYPE NUMBER 0145-E3





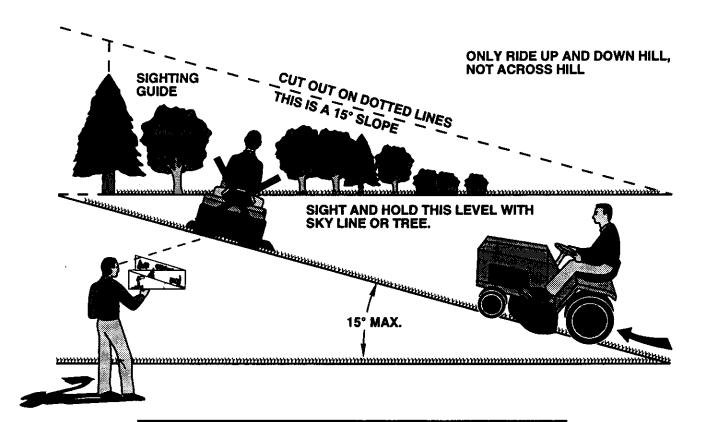
## BRIGGS & STRATTON ENGINE-MODEL NUMBER 461707, TYPE NUMBER 0145-E3

KEY	PART			KEY	PART	., .	E HOMBEN 0143-23
NO.	NO.		DESCRIPTION	NO.	NO.		DESCRIPTION
1	498583		Cylinder Assembly	97	693485		
2	399265		Bushing/Seal Kit	98	807923		Shaft-Throttle Kit-Idle Speed
3	391086	*	Seal-Oil	102	693509	•	Gasket-Carburetor Body
4	493304		Sump-Engine	104	693506	ě	Pin-Float Hinge
5	691162		Head-Cylinder#1	105	692078	ě	Valve-Float Needle
5A	691163		Head-Cylinder #2	107	693482		Body Assembly-Lower
7	271867	★◆	Gasket-Cylinder Head #1	108	693505		Valve-Choke
7A	271868	⋆◆	Gasket-Cylinder Head #2	109	693498		Shaft-Choke
8	495754		Breather Assembly	117	693538		Jet-Main
9	27803	⋆◆	(Cylinder #1) Gasket-Breather	121	693500 491539		Jet-Main (High Altitude) Carburetor Kit
10	690334	~ •	Screw (Breather Assembly)	122	281411		Spacer
10A	690366		Screw (Breather Cover)	125	693479		Carburetor
11	280225		Tube-Breather	130	693504		Valve-Throttle
12	273390	*	Gasket-Crankcase	133	693512		Float-Carburetor
			(.015" Thick, Std.)	146	94196		Key-Timing
	271188	*	Gasket-Crankcase	147	693508		Jet-Pilot
	071100		(.005" Thick)	161	691401		Base-Air Cleaner
	271189	×	Gasket-Crankcase	163 177	271411	*	Gasket-Air Cleaner
13	94565		(.009" Thick) Screw (Cylinder Head)	187	271170 499167	×	Seal-O-Ring
15	94239		Plug-Oil Drain	197	690364		Line-Fuel (Cut to Length) Screw (Back Plate)
16	690666		Crankshaft	202	690570		Link-Mechanical Governor
19	399264		Bushing	203	280997		Crank-Bell
20	291675	*	Seal-Oil	205	690322		Screw (Bell Crank)
23	491180		Flywheel	209	691273		Spring-Governor
24	222698		Key-Flywheel	211	261563		Spring-Governor
25	499180		Piston Assembly (Standard)	212	693985		Link-Throttle
	499181 499182		Piston Assembly (.010 O.S.)	215	690481		Guide-Air
	499183		Piston Assembly (.020*O.S.)	219 220	394348 690412		Gear-Governor
26	499184		Piston Assembly (.030"O.S.) Ring Set, Piston (Standard)	220	090412		Washer-Thrust
	499284		Ring Set, Piston (.010"O.S.)	222	491282		(Governor Gear) Bracket-Control
	499186		Ring Set, Piston (.020"O.S.)	227	491297		Lever-Governor
	499187		Ring Set, Piston (.030"O.S.)	235	224995		Shield-Fuel Spray
27	691299		Lock-Piston Pin	240	394358		Filter-Fuel
28	498319		Pin Assembly, Piston (Std.)	244	230318		Connector-Hose (Pulse Line)
28	498320		Pin Assembly-Piston	258	94930		Screw (Engine Sumo)
29	498314		(.005* O.S.)	267	690316		Screw (Casing Clamp)
29	498541		Rod-Connecting (Standard) Rod-Connecting (.020 U.S.)	278 297	691366 94289		Washer (Governor Lever)
32	691133		Screw (Connecting Rod)	304	691390		Nut-Wing (Air Filter Retainer) Housing-Blower
33	390420		Valve-Exhaust (Include(s):	305	690960		Screw (Blower Housing)
			494553 Keeper-Valve	306	6904141		Shield-Cylinder
			(Ref. No. 42))	306A	690435		Shield-Cylinder
34	691302		Valve-Intake				•
35 36	65906		Spring-Valve (Intake)	RPM S	ettings:		Low Speed: 1900-2100
40	26828 221596		Spring-Valve (Exhaust)				High Speed: 3000-320
41	292260		Retainer-Valve (Exhaust)	_A.	In almada at I.a.	^	
42	494553		Retainer-Valve (Exhaust) Keeper-Valve	*	included in	Gasi	ket Set, Ref Number 358.
45	261368		Tappet-Valve	•	Included in	Value	uretor Kit, Ref Number 121. e Overhaul Kit,
46	691161		Camshaft	•	Ref Numbe	r 109	5 Overnaul Kil,
47	393415		Slinger-Oil	+	Included in	Fuel	Pump Kit, Ref Number 861
48	498542		Short Block				
50	213290		Manifold-Intake	NOTE:	All compon	ent d	imensions given in U.S.
51 51A	271412	★●	Gasket-Intake		inches 1 inches	ch = 2	25.4 mm
53	270884 690321		Gasket-Intake				
54	93208		Screw (Carburetor)				
73	691438		Screw (Intake Manifold) Screen-Rotating				
75	225137		Screen-Hotating Washer (Flywheel)				
78	691134		Screw (Flywheel Fan)				
91	693483		Body Assembly-Upper				
95	690718		Screw (Throttle Valve)				
			•				

## BRIGGS & STRATTON ENGINE-MODEL NUMBER 461707, TYPE NUMBER 0145-E3

KEY	PART		KEY	PART	
NO.	NO.	DESCRIPTION	NO.	NO.	DESCRIPTION
307	94930	Screw (Cylinder Shield)	797A	693167	Nut (Starter Terminal)
309	497596	Motor-Starter	801	394860	Cap-Drive
310	690323	Bolt (Starter Motor)	802	497607	Cap-End
311	497608	Brush Set	803	691427	Housing-Starter
332	230674	Nut (Flywheel)	807	693511	Spacer Spacer
333	394891	Armature-Magneto	822	693497	Washer Seel (Throwing Object)
334	94731	Screw (Magneto Armature)	847	495715	Washer-Seal (Throttle Shaft) Dipstick/Tube Assembly
337	802592	Plug-Spark	851	493880	Terminal-Cable
358	495868	Gasket Set	859	693488	+ Diaphragm-Fuel Pump
383	89838	Wrench-Spark Plug	861	693502	Kit-Fuel Pump
386	693490	●+ Gasket-Pump	865	691196	Cover-Air Guide
391	693487	Body-Pump	865A	691197	Cover-Air Guide
392	693491	OH Spring-Pump Diaphragm	868	497656	Seal-Valve
404	690442	Washer (Governor Crank)	868A	273312	Seal-Valve
423	691100	Screw (Air Cleaner Base)	869	261463	Seat-Valve (Intake)
425	94823	Screw (Air Cleaner Cover)	870	262924	Seat-Valve (Exhaust)
432	693492	+ Cap-Spring	871	261961	Bushing-Guide (Exhaust)
433	693489	●+ Diaphragm-Fuel Pump		231218	Bushing-Guide (Intake)
434	693493	Cover-Diaphragm	877	393456	Wire-Alternator
435	693494	Screw (Diaphragm Cover)	881	495901	Plate-Cover
441	691176	Bracket-Oil Fill	918	393815	Hose-Vacuum
445	394019	Filter-Air			(Cylinder-To-Impulse Pump)
447	690297	Screw (Air Guide Cover)	•		(Cut to Length)
449	94882	Screw (Oil Fill Bracket)	934	94627	Screw (Fan Retainer)
474	393474	Alternator	955	693513	Plug-Carburetor
482	93621	Screw (Alternator)	968	691207	Cover-Air Cleaner
510	497606	Drive-Starter	971	690720	Screw
513	398003	Clutch-Drive			(Upper Body To Lower Body)
523	691385	Dipstick	1005	498157	Fan-Flywheel
525	690823	Tube-Oil Fill	1006	691247	Retainer-Fan
527	690423	Clamp-Tube	1019	496726	Label Kit
535	272490	Filter-Air	1036	694979	Label Kit-Emission
544	497603	Armature-Starter	1051	263080	Ring-Retaining
552	690553	Bushing (Governor Crank)	1058	273688	Owner's Manual
552A	690552	Bushing (Governor Crank)	1081	280860	★ Seal-O-Ring
562	690311	Bolt-Carriage	1090	497605	Retainer-Brush
		(Governor Lever)	1095	498047	Gasket Set-Valve Overhaul
569	272645	★ Gasket-Base	1125	691104	Screw (Cover Plate)
572	690415	Cover-Breather (Cylinder #2)	1132	690353	Screw (Oil Slinger)
573	690764	Plate-Back	1136	690329	Screw
592	92278	Nut (Governor Lever)			(Governor, Control Rod)
601	95162	Clamp-Hose	1137	690390	Washer
615	690328	Retainer (Governor Crank)			(Governor, Control Rod)
615A	690317	Retainer-Governor Shaft	1138	690330	Nut (Governor, Control Rod)
616	491530	Crank-Governor		445777-002	7-E1 Replacement Engine
634	690657	★ Seal-Governor Shaft			- Francisco - Ariginio
634A	271013	Washer-Foam	RPM Se	ettings:	Low Speed: 1900-2100
635	66538	Boot-Spark Plug			High Speed: 3000-320
637	693510	Washer-Seal			
643	496700	Retainer-Air Filter	*	Included in	Gasket Set, Ref Number 358.
689	690555	Spring-Friction	•	included in (	Carburetor Kit. Ref Number 121
697 725	93585	Screw (Drive Cap)	<b>•</b>	included in '	Value Overhaul Kit.
725	280866	Shield-Heat		Ref Number	1095.
726 741	391362	Gear-Ring	+	Included in I	Fuel Pump Kit, Ref Number 861
741 783	691285	Gear-Timing			
789	693059	Gear-Starter	NOTE:	All compone	ent dimensions given in U.S.
797	695050	Wiring Harness		inches 1 inc	h = 25.4 mm
131	94010	Nut (Štarter Terminal)			

#### 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.

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