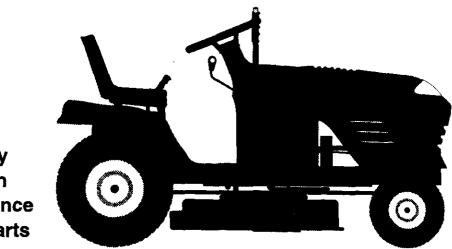
# Owner's Manual **CRAFTSMAN®** 20.5 HP ELECTRIC START 42" MOWER 6 SPEED TRANSAXLE LAWN TRACTOR



Model No. 917.270951



Safety

- Assembly
- Operation
- Maintenance
- Repair Parts

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# **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, IL 60179 Visit our Craftsman website: www.sears.com/craftsman

# TABLE OF CONTENTS

Warranty	2
Safety Rules	2
Product Specifications	5
Assembly	7
Operation	10
Maintenance Schedule	17

	j.
Maintenance	ļ
Service and Adjustments	i
Storage	
Troubleshooting	4 1
Repair Parts	4
Parts Ordering Back Cov	ì

# 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.









- 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.

- Never tamper with safety devices. Check their proper operation regularly.
- Keep machine free of grass, leaves, or other debris build-up. Clean oil or fuel spillage. Allow machine to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Never make adjustments or repairs with the engine running.
- Grass catcher components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
- Check brake operation frequently. Adjust and service as required.

# SAFETY RULES

ALook for this symbol to point out important safety precautions. It means CAUTION!!! BECOMEAWARE!!! 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.

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

#### **PRODUCT SPECIFICATIONS**

	a controlla
GASOLINE	3.5 GALLONS
CAPACITY	
AND TYPE:	REGULAR
OILTYPE	SAE 30 (ABOVE 32°F)
(API-SF/SG/SH):	SAE 5W-30
	(BELOW 32°F)
OIL CAPACITY:	
SPARK PLUG:	CHAMPION RJ19LM
(GAP: .030")	OR J19LM
VALVE	INTAKE: .004"006"
CLEARANCE:	EXHAUST: .007"009"
GROUND SPEED	FORWARD:
(MPH):	1 <sup>s⊤</sup> 1.2
	2 <sup>ND</sup> 1.5
	3 <sup>RD</sup> 2.3
	4 <sup>™</sup> 3.5
	5 <sup>™</sup> 4.8
	6 <sup>™</sup> 5.4
	REVERSE: 1.5
TIRE PRESSURE:	FRONT: 14 PSI
	REAR: 10 PSI
CHARGING	3 AMPS BATTERY
ISYSTEM:	5 AMPS
HEADLIGHTS	
BATTERY:	AMP/HR: 30
	MIN. CCA: 240
- <u></u>	CASE SIZE: U1R
BLADE BOLT	27–35 FT. LBS.
TORQUE:	

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 Sears 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".

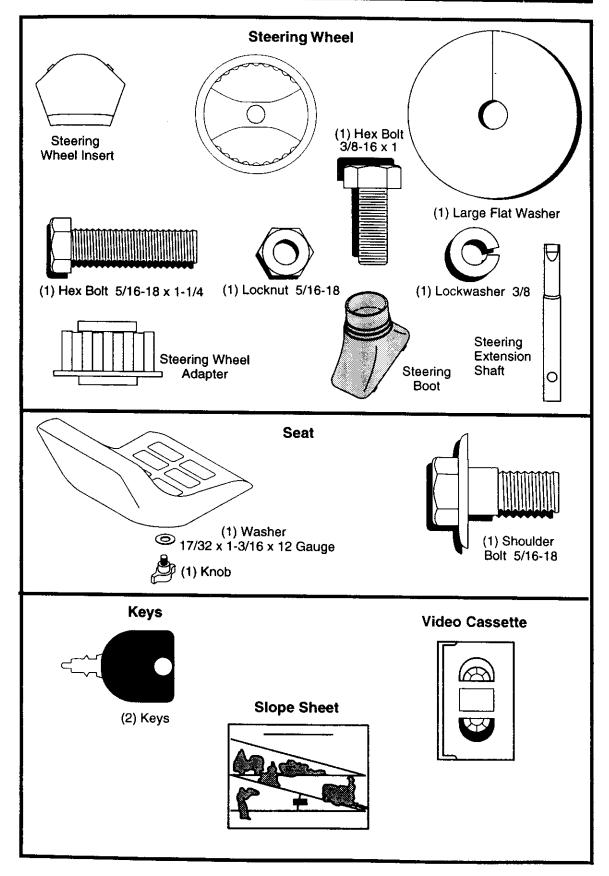
### **REPAIR AGREEMENT**

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 Sears Authorized Service Center (See REPAIR PARTS 5 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. Review the video cassette before you begin.

### TOOLS REQUIRED FOR ASSEMBLY

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

- (1) 9/16" wrench
- (2) 1/2" wrench (1) Pliers
- (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

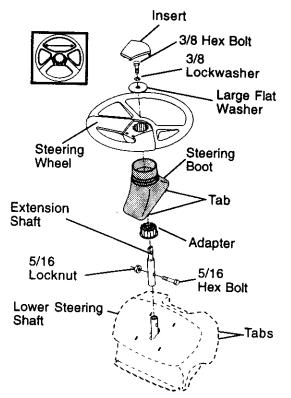
- Slide extension shaft onto lower steering shaft. Align mounting holes in extension and lower shafts and install 5/16 hex bolt and locknut. Tighten securely.
- Place tabs of steering boot over tab slots in dash and push down to secure.

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.

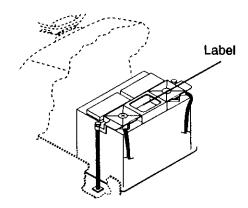
- Assemble large flat washer, 3/8 lock washer, 3/8 hex bolt and tighten securely.
- Snap steering wheel insert into center of steering wheel.
- Remove protective materials from tractor hood and grill.

**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 CONNECT BATTERY

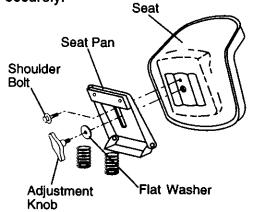
- · Lift hood to raised position.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps. (See "BATTERY" in MAINTENANCE section of this manual for charging instructions).



#### 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 carboard 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 your tractor off the skid. Follow the appropriate instruction below to remove the tractor from the skid.

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

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

### TO DRIVE TRACTOR OFF SKID (See Operation section 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 gearshift lever in neutral position.
- Turn ignition key to "OFF" position. Continue with the instructions that follow.

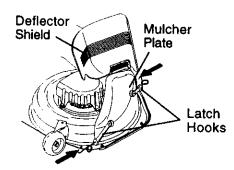
### **INSTALL MULCHER PLATE**

#### (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.

### **CHECK TIRE PRESSURE**

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

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

### CHECK DECK LEVELNESS

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

#### CHECK FOR PROPER POSITION OF ALL BELTS

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

### CHECK BRAKE SYSTEM

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

### ✓CHECKLIST

Before you operate and enjoy your new tractor, we wish to assure that you receive the best performance and satisfaction from this quality product.

Please review the following checklist:

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

While learning how to use your tractor, pay extra attention to the following important items:

- Engine oil is at proper level.
- ✓ Fuel tank is filled with fresh, clean, regular unleaded gasoline.
- Become familiar with all controls their location and function. Operate them before you start the engine.
- Be sure brake system is in safe operating condition.

# OPERATION

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

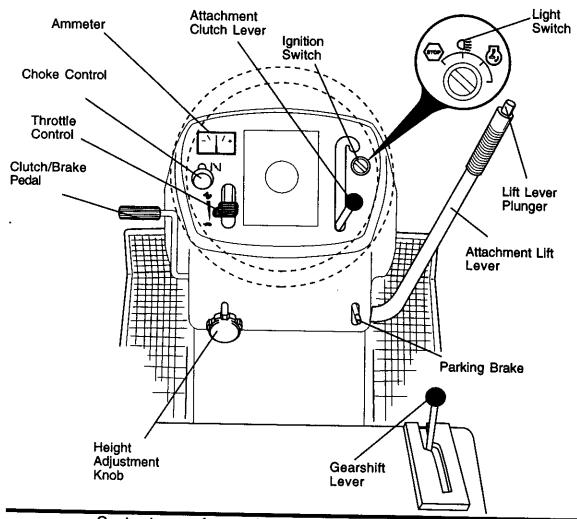


(Automatic Models only)

### **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.

ATTACHMENT CLUTCH LEVER: Used to engage the mower blades, or other attachments mounted to your tractor. LIGHT SWITCH: Turns the headlights on and off.

THROTTLE CONTROL: Used for starting and controlling engine speed.

CHOKE CONTROL: Used when starting a cold engine.

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

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

HEIGHT ADJUSTMENT KNOB: Used to adjust the mower cutting height. GEARSHIFT LEVER: Selects the speed and direction of tractor.

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

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

IGNITION SWITCH: Used for starting and stopping the engine.

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

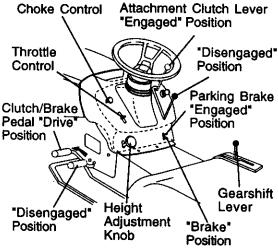


The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles, or standard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

### HOW TO USE YOUR TRACTOR

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. **TO SET PARKING BRAKE** 

- 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 tractor secure.



### STOPPING

#### 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 gearshift lever to neutral (N) position.

#### **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.

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

### 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.
   CHOKE CONTROL

### 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 BACKWARD

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

- Start tractor with clutch/brake pedal depressed and gearshift lever in neutral (N) position.
- Move gearshift lever to desired position.
- Slowly release clutch/brake pedal to start movement.

**IMPORTANT:** Bring tractor to a complete stop before shifting or changing gears. Failure to do so will shorten the useful life of your transaxle.

### TO ADJUST MOWER CUTTING HEIGHT

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

- Turn knob counterclockwise (r) to lower cutting height.

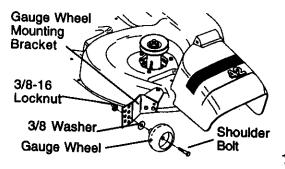
The cutting height range is approximately 1-1/2" to 4". The heights are measured from the ground to the blade tip with the engine not running. These heights are approximate and may vary depending upon soil conditions, height of grass and types of grass being mowed.

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

### TO ADJUST GAUGE WHEELS

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

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

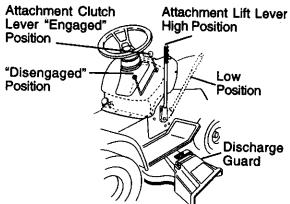


 Repeat for opposite side installing gauge wheel in same adjustment hole.
 TO OPERATE MOWER

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.

**ACAUTION:** Do not operate the mower without either the entire grass catcher, on mowers so equipped, or the discharge guard 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. A slope guide at the back of your manual is provided for your use.

- 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 gearshift lever to 1st gear. Be sure you have allowed room for tractor to roll slightly as you restart movement.
- To restart movement, slowly release parking brake and clutch/brake pedal.
- Make all turns slowly.

#### **TO TRANSPORT**

- Raise attachment lift to highest position with attachment lift control.
- When pushing or towing your tractor, be sure gearshift lever is in neutral (N) position.
- Do not push or tow tractor at more than five (5) MPH.

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

### TOWING CARTS AND OTHER ATTACHMENTS

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

### BEFORE STARTING THE ENGINE CHECK ENGINE OIL LEVEL

- The engine in your tractor has been shipped, from the factory, already filled with summer weight oil.
- Check engine oil with tractor on level ground.
- 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.

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

- Sit on seat in operating position, depress clutch/brake pedal and set parking brake.
- Place gear shift 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.
- The attachments can be used during the engine warm-up period and may require the choke control be pulled out slightly.

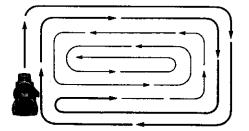
**NOTE:** A high altitude (above 3000 feet) or in cold temperatures (below 32 F) the carburetor fuel mixture may need to be adjusted for best engine performance. See "TO ADJUST CARBURETOR" in the Service and Adjustments section of this manual.

### MOWINGTIPS

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

mow in the opposite direction making left hand turns until finished

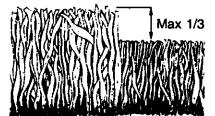
- If grass is extremely tall, it should be mowed twice to reduce load and possible fire hazard from dried clippings. Make first cut relatively high; the second to the desired height.
- Do not mow grass when it is wet. Wet grass will plug mower and leave undesirable clumps. Allow grass to dry before mowing.
- 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 the best 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.



#### EFERY 100 HOURS EVERY 25 HOURS ELERY SO HOURS EVERY & HOURS MAINTENANCE SCHEDULE EVENY SEASO BEFORESTOR FILL IN DATES BEFORE AS YOU COMPLETE **BEGULAR SERVICE** SERVICE DATES V **Check Brake Operation** 1 Check Tire Pressure V 1 Check Operator Presence and т Interlock Systems ✓ R Check for Loose Fasteners V 1 ⁄ А Sharpen/Replace Mower Blades 7 С Lubrication Chart V 1 Т **Check Battery Level** 1. 0 R Clean Battery and Terminals V V **Check Transaxle Cooling** V Adjust Blade Bett(s) Tension 15 Adjust Motion Drive Belt(s) Tension ¥5 Check Engine Oil Level V V Change Engine Oil 12 ✓ Clean Air Filter Ë V2 N Clean Air Screen V2 G Inspect Muffler/Spark Arrester V Replace Oil Filter (If equipped) 1.2 Ν **Clean Engine Cooling Fins** 1/2 F Replace Spark Plug V V **Replace Air Filter Paper Cartridge** 1/2 **Replace Fuel Filter** V

MAINTENANCE

1 - Change more often when operating under a heavy load or in high ambient temperatures. 5 - It equipped with adjustable syste

2 - Service more often when operating in dirty or dusty conditions 3 - If equipped with oil filter, change oil every 50 hours.

4 - Replace blades more often when mowing in sandy soil,

### **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.

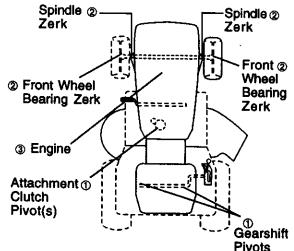
Some adjustments will need to be made periodically to properly maintain your tractor.

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.

- 8 Not required if equipped with maintenance-free battery. 7 - Tighten front axle pivot bolt to 35 ft.-Ibs. maximum. Do not overtighten

### LUBRICATION CHART



- ① SAE 30 or 10w30 Motor OIL
- ② General Purpose Grease

③ Refer to Maintenance "Engine" Section IMPORTANT: Do not oil or grease the pivo points which have special nylon bear-ings. 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 that operator presence and interlock systems are working properly. If your tractor does not function as described below, repair the problem immediately.

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

### **BLADE CARE**

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

#### **BLADE REMOVAL**

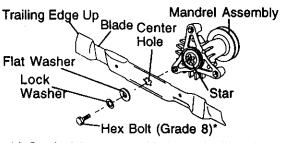
- Raise mower to highest position to allow access to blades.
- Remove hex bolt, lock washer and flat washer securing blade.

• Install new or resharpened blade with trailing edge up towards deck as shown.

**IMPORTANT:** To ensure proper assembly, center hole isn 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 it is 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 onto 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.

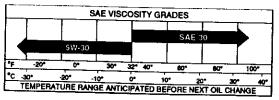
### TRANSAXLE COOLING

Keep transaxle free from build-up of dirt and chaff which can restrict cooling.

### 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.

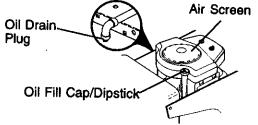
Change the oil after every 25 hours of operation or at least once a year if the tractor is not used for 25 hours in one year.

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.

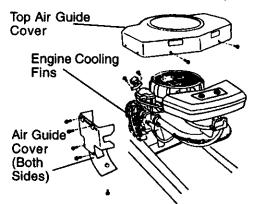


### **CLEAN AIR SCREEN**

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.

#### **ENGINE COOLING FINS**

Remove any dust, dirt or oil from engine cooling fins to prevent engine damage from overheating. Air guide covers must be removed. Remove side panels and hood (See "TO REMOVE HOOD AND GRILL ASSEMBLY" in the Service and Adjustments section of this manual).



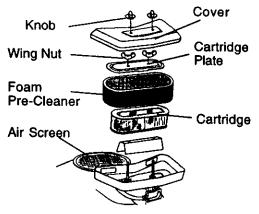
#### AIR FILTER

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



#### MUFFLER

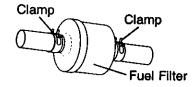
Inspect and replace corroded muffler and spark arrester (if equipped) as it could create a fire hazard and/or damage. SPARK PLUGS

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 automo-٠ tive type wax.

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.

We do not recommend using a garden

### SERVICE AND ADJUSTMENTS

**ACAUTION:** Before performing any service or adjustments:

- Depress clutch/brake pedal fully and set parking brake.
- Place gearshift 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.

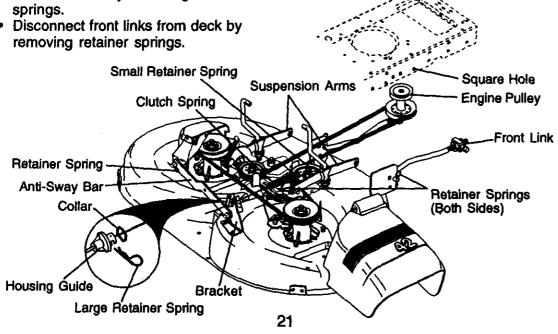
- Place attachment clutch in "DISEN-GAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- Roll belt off engine pulley.
- Remove small retainer spring, and lift clutch spring off pulley bolt.
- · Remove large retainer spring, slide collar off and push housing guide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

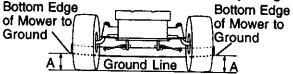
Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PROD-UCT SPECIFICATIONS" section of this manual). If tires are over or underinflated, you will not properly adjust your mower.

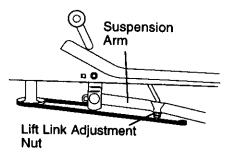
SIDE-TO-SIDE ADJUSTMENT

- · 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.





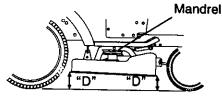
### FRONT-TO-BACK ADJUSTMENT

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

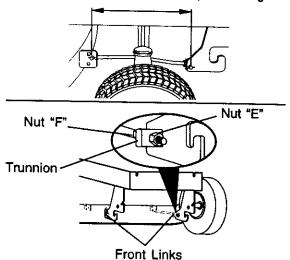
o obtain the best cutting results, the nower housing should be adjusted so hat the front is approximately 1/8" to 1/2" ower than the rear when the mower is in s highest position.

heck adjustment on right side of tractor. leasure distance "D" directly in front and shind the mandrel at bottom edge of ower 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 (See Illustration Next Page)

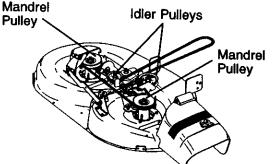
The mower blade drive belt may be replaced without tools. Park the tractor on level surface. Engage parking brake.

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.
- 22 Pull belt away from mower.

### **BELT INSTALLATION -**

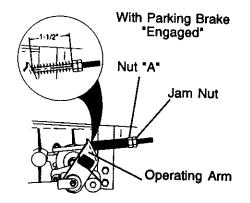
- Install new belt in reverse order of removal.
- Make sure belt is in all pulley grooves and inside all belt guides.
- Install mower in reverse order of removal instructions.



### TO ADJUST BRAKE

Your tractor is equipped with an adjustable brake system which is mounted on the right side of the transaxle. If tractor requires more than six (6) feet stopping distance at high speed in highest gear, then brake must be adjusted.

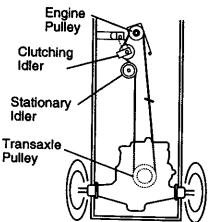
- Depress clutch/brake pedal and engage parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- If distance is other than 1-1/2", loosen jam nut and turn nut "A" until distance becomes 1-1/2". Retighten jam nut against nut "A".
- Road test tractor for proper stopping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



### 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. Remove belt upwards from transaxle pulley by deflecting belt keepers.
- Pull belt toward front of tractor and remove downwards from around engine pulley.
- Install new belt by reversing above procedure.



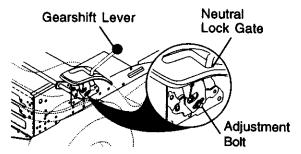
### TRANSAXLE GEAR SHIFT LEVER ADJUSTMENT

The transaxle should be in neutral when the gear shift lever is in neutral (N) (lock gate) position. The adjustment is preset at the factory; however, if adjustment is needed, proceed as follows:

• Make sure transaxle is in neutral (N). NOTE: When the tractor rear wheels move freely, the transaxle is in neutral.

- Loosen adjustment bolt in front of the right rear wheel.
- Position the gear shift lever in the neutral (N) position.

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



# 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.

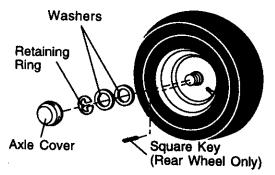
### FRONT WHEEL TOE-IN/CAMBER

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

**ACAUTION:** 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 MAINTANCE section of this manual).

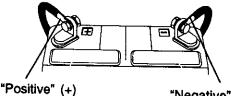
If "jumper cables" are used for emergency starting, follow this procedure: IMPORTANT: Your tractor Is equipped with a 12 volt negative grounded system. The other vehicle must also be a 12 volt negative grounded system. Do not use your tractor battery to start other vehicles.

TO ATTACH JUMPER CABLES -

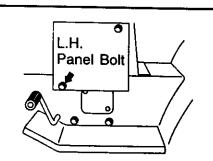
- Connect each end of the RED cable to the POSITIVE (+) terminal of each battery, taking care not to short against chassis.
- Connect one end of the BLACK cable to the NEGATIVE (-) terminal of fully charged battery.
- Connect the other end of the BLACK cable to good CHASSIS GROUND, away from fuel tank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



"Negative" (-)

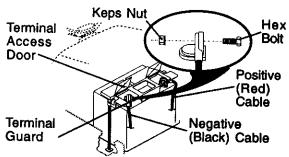


### **REPLACING BATTERY**

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

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

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



### 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.

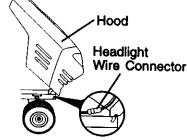
 Check wiring. See electrical wiring diagram in the Repair Parts section.

#### 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 procedures.



### 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 nonroad 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:

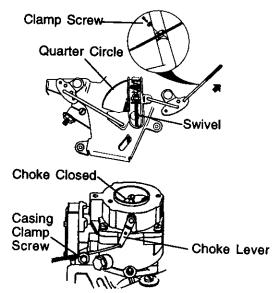
- With engine not running, move throttle control lever to fast position.
- Check that swivel is against side of quarter circle. If it is not, loosen cable clamp screw and pull cable back until swivel is against quarter circle. Tighten cable clamp screw securely.

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

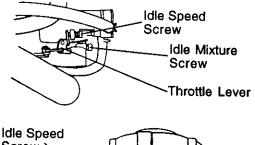
FINAL SETTING -

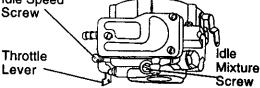
- Start engine and allow to warm for five minutes. Make final adjustments with engine running and shift/ motion control lever in neutral (N) position.
- With throttle control lever in slow position, hold throttle lever against idle speed screw and adjust idle speed screw to obtain 1200 to 1400 RPM.
- 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.

**ACAUTION:** 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. This will allow you to 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, boits 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 TERMI-NALS" 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 it 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 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> Loose or damaged wiring. <ul> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</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 fil- ter.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service and Adjustments section.</li> <li>Contact an authorized ser- vice center.</li> </ul>
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> <li>See "To Adjust Carburetor" in Service and Adjustments section.</li> <li>Contact an authorized service center.</li> </ul>
Engine will not turn over	<ul> <li>Clutch/brake pedal not depressed.</li> <li>Attachment clutch is en- gaged.</li> <li>Weak or dead battery.</li> <li>Blown fuse.</li> <li>Corroded battery termi- nals.</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.</li> </ul>
Engine clicks but will not start	<ul> <li>Weak or dead battery.</li> <li>Corroded battery terminals.</li> </ul>	<ul> <li>Recharge or replace battery.</li> <li>Clean battery terminals.</li> </ul>

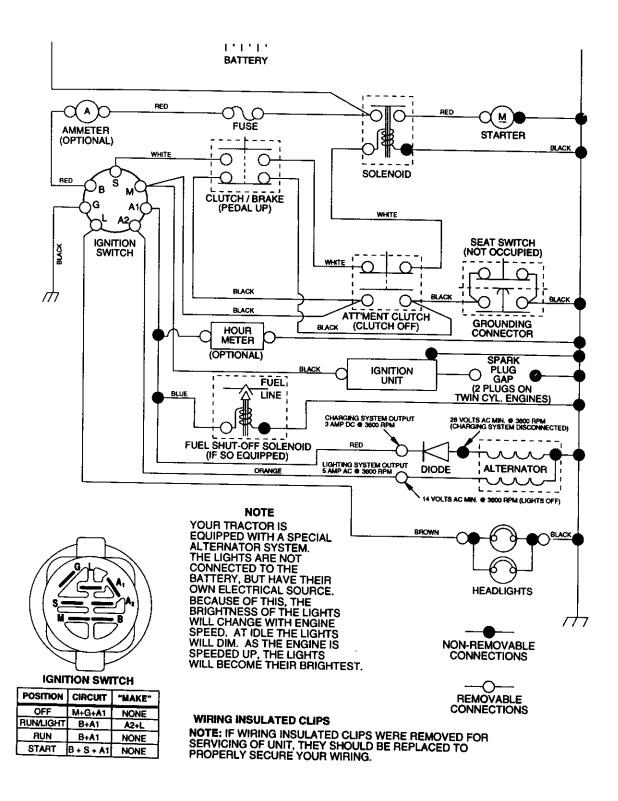
### **TROUBLESHOOTING CHART**

PROBLEM	CAUSE	CORRECTION
Engine clicks but will not start (cont'd)	<ul> <li>Loose or damaged wiring.</li> <li>Faulty solenoid or starter.</li> </ul>	<ul> <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" posi- tion.</li> <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> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> <li>Water in fuel.</li> <li>Water in fuel.</li> <li>Spark plug wire loose.</li> <li>Dirty engine air screen/ fins.</li> <li>Dirty/clogged muffler.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjust- ment.</li> <li>Engine valves out of ad- justment.</li> </ul>	<ul> <li>Set in "Higher Cut" position/ reduce speed.</li> <li>Adjust throttle control.</li> <li>Clean underside of mower housing.</li> <li>Clean/replace air filter.</li> <li>Check oil level/change oil.</li> <li>Clean and regap or change spark plug.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with fresh gasoline.</li> <li>Drain fuel tank and carbure- tor, refill tank with fresh gaso- line and replace fuel filter.</li> <li>Connect and tighten spark plug wire.</li> <li>Clean/replace muffler.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service and Adjustments section.</li> <li>Contact an authorized ser- vice center.</li> </ul>
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.Tighten blade bolt.</li> <li>Replace blade mandrel.</li> <li>Tighten loose part(s). Re- place damaged parts.</li> </ul>
Engine continues to run when opera- tor 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 autho- rized service center.</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 holes from buildup of</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>

### **TROUBLESHOOTING CHART**

PROBLEM	CAUSE	CORRECTION
Poor cut - uneven (cont'd)	grass, leaves, and trash around mandrels.	
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>
Poor grass dis- charge	<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>
Engine "backfires" when turning en- gine "OFF"	<ul> <li>Engine throttle control not set at "SLOW" position for 30 seconds before stopping engine.</li> </ul>	<ul> <li>Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.</li> </ul>

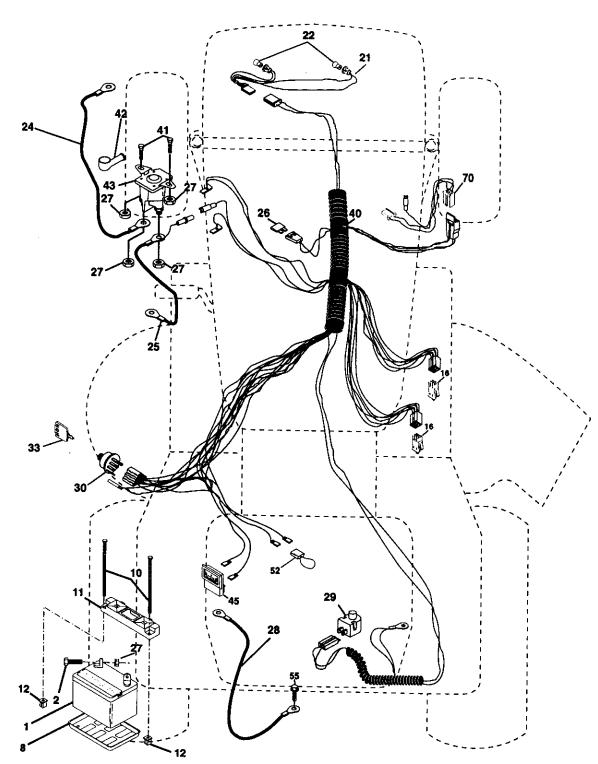
#### SCHEMATIC



# **REPAIR PARTS**

## TRACTOR-MODEL NUMBER 917.270951

ELECTRICAL



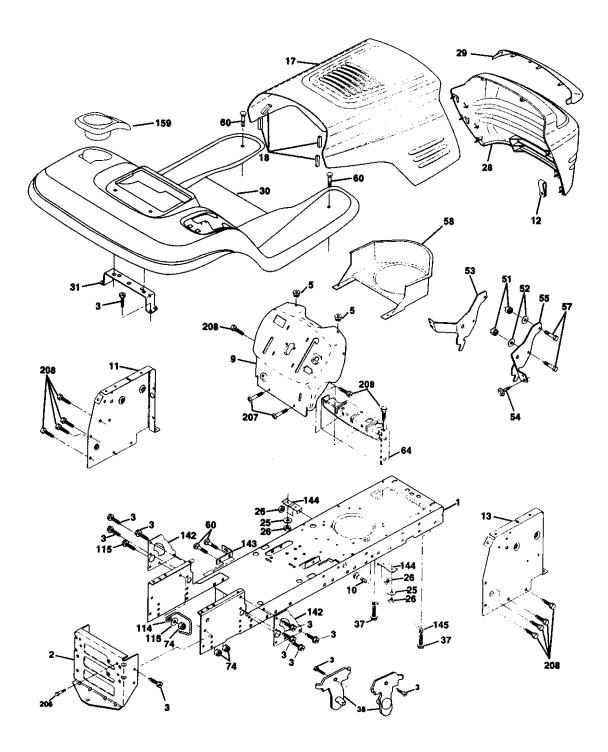
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### ELECTRICAL

ke No	Y PART D. NO.	DESCRIPTION
1	163465	Battery 12 VOLT 28 AMP
	74760412	Bolt Hex Hd 1/4-20unc x 3/4
	7603J	Case Battery
	145211	Bolt, Btr Front 1/4-20 x 7-1/2
	150109	Holddown Battery Front Mount
	145769	Nut, Push Nylon Battery Front 1/4
	153664	Switch, Interlock Push-In
	Std551125	Washer Lock 1/4
	73350400	Nut Jam Hex 1/4-20 Unc
	166182	Harness Light Socket (W/4152j)
	4152J	Bulb Light #1156
	4799J	Cable Battery
	146148	Cable Battery
	166180	Fuse
	73510400	Nut Keps Hex 1/4-20 Unc
	145491	Cable Ground
	121305X	Switch Seat
30		Switch Ign
	140403	Key Molded Craftsman
	170217	Hamess Ign
	71110408	Bolt Blk. Fin Hex 1/4-20 Unc x 1/2
	131563	Cover Terminal
	145673	Solenoid
	121433X	Ammeter Rectangular 6 Amp
	141940	Protection Wire Loop
	17490508	Screw Thdrol 5/16-18 x 1/2
10	170242	Harness Engine B&S

NOTE: All component dimensions given in U. S. inches 1 inch = 25/4 mm

### TRACTOR -- MODEL NUMBER 917.270951 CHASSIS AND ENCLOSURES



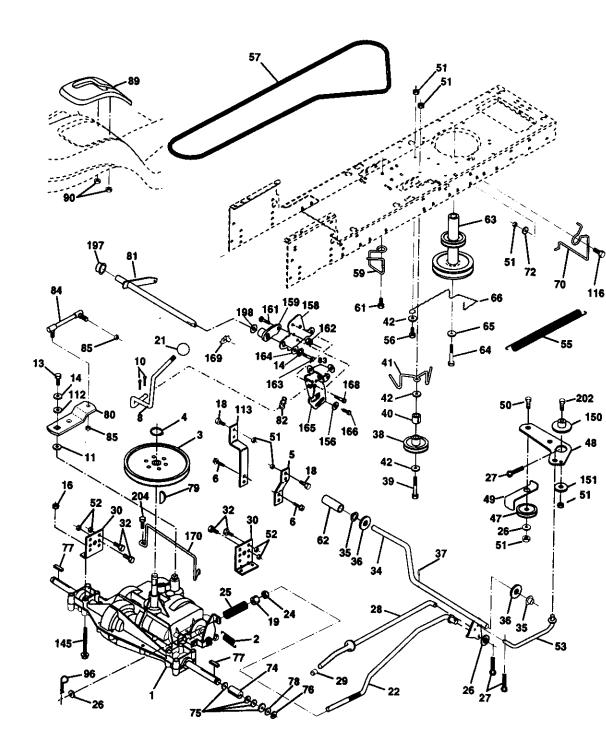
### TRACTOR -- MODEL NUMBER 917.270951 CHASSIS AND ENCLOSURES

KEY	( PART	
NO	. NO.	DESCRIPTION
1	169830	Chassis Assembly
2	169061	Drawbar
3	17060612	Screw 3/8-16 x 3/4
5	155272	Bumper Hood/Dash
9	168337X013	Dash
10	STD533710	Bolt, Carriage 3/8-16 x 1
11 12	155927	Panel, Dash, L.H.
13	145660	Clip Tinnerman Grille P/L
17	169118 144983X558	Panel, Dash, R.H.
18	126938X	Hood Assembly
20	156437	BumperHood
23	124028X	Plate Mtg Battery Fuel Tank
25	19131312	Bushing, Snap, Nylon, Fuel Line Washer 13/32 x 13/16 x 12 Gauge
26	STD541437	Locknut, Hex, with Insert 3/8-16 Unc
28	166271X558	Grille w/Clips MS-558
29	155217X599	Lens, Grille
30	164919X558	Fend/Ftrest
31	139976	Bracket, Fender Support
37	17490508	Screw Thdrol 5/16-18 x 1/2
38	169834	Pivot Bracket Assembly, L.H.
51	73800400	Nut Lock w/Insert 1/4-20 UNC
52	19091416	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 57	145202	Bracket Grille Pickoff RH
	STD522507 140547	Bolt, Fin Hex 1/4-20 UNC x .75
60		Air Duct P/L B&S
64	154798	Bolt Rdhd Sqnk 3/8-16 UNC x 3/4 Dash Lower STLT
74	STD541437	Nut Crownlock 3/8-16 UNC
	158112	Keeper Belt Rear Lh Stl
	17060620	Screw 3/8-16 x 1-1/4
	19131614	Washer 13/32 x 1 x 14 Ga.
142	165867	Plate Reinforcement STLT
143	154966	Bracket Swaybar Chassis
	154207	Bracket Pnt Footrest STLT
	156524	Rod Pivot Chassis/Hood
	155123X428	Cuphoider
	170165	Bolt Shoulder 5/16-18 TT
	17670508 17670608	Screw Thdrol 5/16-18 x 1/2
200	17070008	Screw Thdrol 3/8-16 x 1/2

NOTE: All component dimensions given in U. S. inches 1 inch = 25/4 mm

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### TRACTOR -- MODEL NUMBER 917.270951 GROUND DRIVE



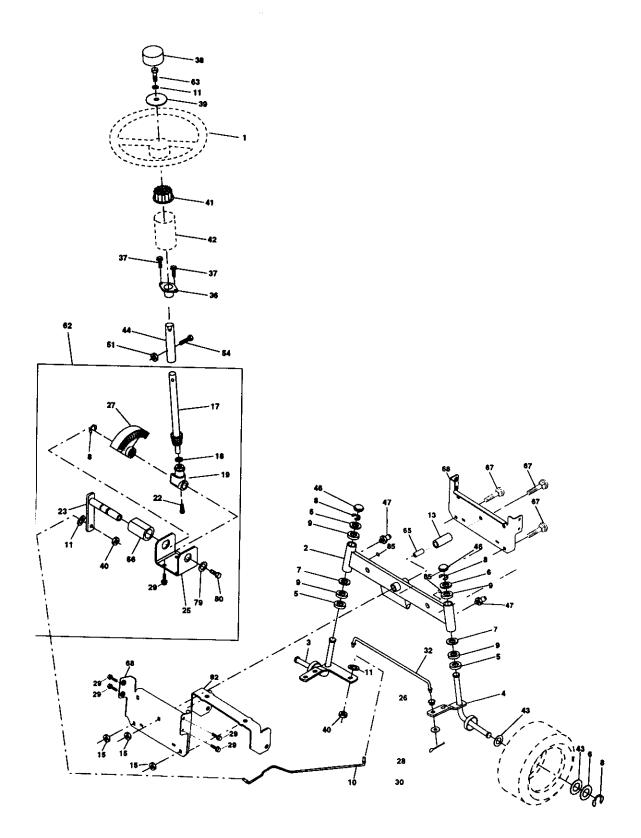
#### **GROUND DRIVE**

#### KEY PART **KEY PART** NO. NO. DESCRIPTION NO. NO. Transaxle (See Breakdown) 1 . . . . . . . . 62 8883R Peerless 206-545C 63 140186 Spring, Return, Brake Pulley, Transaxle 2 146682 64 71170764 123666X з 65 **Ring**, Retainer 12000028 4 66 154778 5 121520X Strap, Torque 70 134683 6 17060512 Screw 5/16-18 x 3/4 19132012 72 **Rod Shifter Fender STLT** 165866 8 74 137057 10 STD561210 Pin, Cotter 75 121749X 105701X Washer, Shift Plate 11 76 77 78 Bolt 1/4-28 UNF W/Patch Gr. 8 13 74550412 123583X 14 10040400 Washer Lock Hvy Helical 121748X STD523710 18 Bolt Fin Hex 3/8-16UNC x 1 Gr 5 79 19 STD541437 Nut 80 145090 21 106933X Knob 81 165592 22 130804 Rod, Brake 82 165711 24 STD541237 Nut 83 19171216 25 106888X Spring, Brake Rod 84 166231 26 STD551037 Washer 85 150360 27 STD561210 Pin 89 28 145204 Rod, Parking Brake 90 124346X 29 71673 Cap, Parking Brake 96 30 169592 Bracket, Transaxle 112 19091210 31 127275X Keeper, Belt, L.H. 113 127285X 32 STD523107 Bolt 116 72110610 34 155071 Shaft Assembly, Foot Pedal 145 74490540 35 120183X Bearing, Nylon 150 165850 36 STD551062 Washer 151 19133210 37 STD571810 Roll Pin 156 166002 38 131494 Pulley, Idler, Flat 158 165589 39 STD523727 Bolt 159 165494 40 4470J 161 72140406 41 165838 162 73680400 42 19131312 Washer 13/32 x 13/16 x 12 Ga. 163 74780416 47 127783 Pulley, Idier, V-Groove, Plastic 164 19091010 48 154407 Beilcrank Clutch Grnd Drv Stl 165 165623 49 123205X Retainer, Belt 166 166880 50 STD523715 Bolt 168 165492 51 STD541437 Nut Crown Lock 3/8-16 UNC 169 165580 52 STD541431 Nut Crown Lock 5/16-18 UNC 170 165849 Link, Clutch 53 105710X 197 169613 55 105709X Spring, Clutch Return 198 169593 56 STD523712 Bolt Fin Hex 3/8-16 x 1-1/4 202 72110612 57 130801 V-Belt, Ground Drive 204 17060516 58 Keeper, Belt, R.H. 127274X 59 169691 Keeper, Belt, Center Span 61 17060612 Screw 3/8-16 x 3/4

#### DESCRIPTION

Cover, Pedal Pulley, Engine Bolt, Hex 7/16-20 x 4 Grade 5 STD551143 Washer Keeper, Belt, Engine, Fool-Proof Guide, Mower Drive Belt, R.H. Washer 13/32 x 1-1/4 x 12 Ga. Spacer, Axle Washer 25/32 x 1-1/4 x 16 Ga. STD581075 E-Ring Key, Šquare 2.0 x .1845/.1865 Washer 25/32 x 1-5/8 x 16 Ga STD580025 Key Woodruff Arm. Shift Shaft Asm Cross Tapered 650 20 Spring, Torsion Washer 17/32 x 3/4 x 16 Ga. Link Transaxle Nut, Nylock Console, Shift, STLT Nut, Self-Thding, Wsh Hd 1/4 158391X428 STD624003 **Retainer Spring 1**\* Washer 9/32 x 3/4 x 10 Gauge Strap Torque 90 Degrees Bolt Rdhd Sqneck 3/8-16 x 1.25 Bolt, Hex Fighd 5/16-18 Gr. 5 Bushing Bellcrank Grd. Drive Washer 13/32 x 2 x 10 Ga. Washer Srited 5/16ID x 1.125 Bracket Shift Mount Hub Tapered Flange Shift Lt Bolt Rohd Sqnk 1/4-20 x 3/4 Gr.5 Nut Crownlock 1/4-20 Unc Bolt Hex Fin 1/4-20Unc x 1 Gr 5 Washer 5/8 x .281 x 10 Ga Bracket Pivot Lever Screw 5/16-18 x 5/8 Bolt Shoulder 5/16-18 x .561 Plate Fastening Lt Keeper Belt Transaxle Gear Nyliner Snap-In Washer Nyliner Bolt Carr. SH 3/8-16 x 1-1/2 Gr. 5 Screw 5/16-18 x 1 SMGML

STEERING



KEY PART

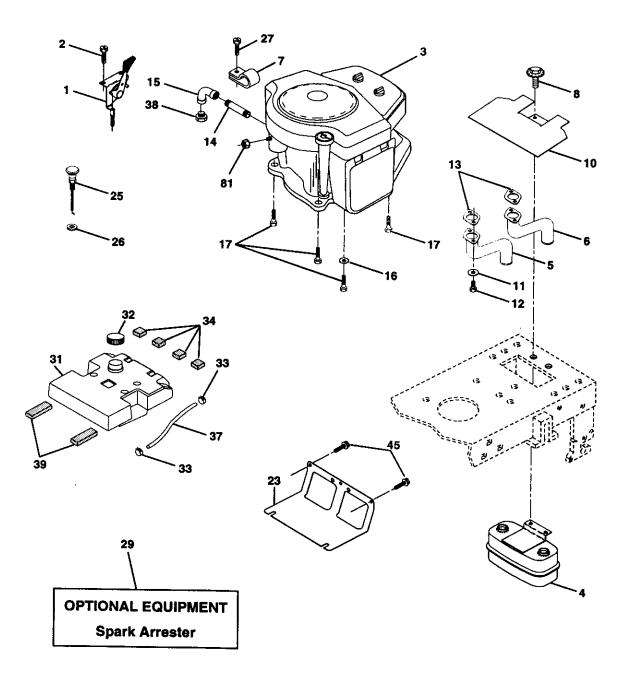
### STEERING

NO.	NO.	DESCRIPTION
1	139768	Steering Wheel
2	154427	Axle Assembly STMP Dropped STL
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	3366R	Bearing, Steering Column
10	169832	Draglink
11	STD551137	Washer, Lock
13 15	136518	Spacer, Bearing, Axle
17	145212 156546	Nut, Hexflange Lock Shaft Assembly, Steering
18	57079	Washer, Thrust .515 x .750 x .033
19	160395	Support, Shaft
22	165857	Screw Hex Wshhd Torx
23	165851	Pittman Shaft Assembly
25	154406	Bracket, Steering
26	126847X	Bushing, Link, Drag
27	136874	Gear, Sector
28	19131416	Washer 13/32 x 7/8 x 16 Gauge
29	17060612	Screw 3/8-16 x 3/4
30	STD561210	Pin
32	130465	Rod, Tie
36	155099	Bushing, Steering
37	152927	Screw
38	139769	Insert, Steering Wheel
39	19133812	Washer 13/32 x 2-3/8 x 12 Gauge
40	STD541537	Gripco Nut
41	100711L	Adaptor, Steering Wheel
42	145054X428	Boot, Steering Shaft
43	121749X	Washer 25/32 x 1-1/4 x 16 Gauge
44	153720	Extension Shaft Steering LR.LT
46 47	121232X	Cap, Spindle
51	6855M	Fitting, Grease
54	STD541431 74780520	Nut Lock Hex w/Ins. 5/16-18 UNC Bolt Fin Hex 5/16-18 UNC x 1-1/4
62		Kit Steering Asm Service
63		Bolt, Fin Hex 3/8-16 UNC x 1 Gr 5
65	160367	Spacer Axle
66		Bearing Arm Pittman
67		Bolt RDHD SQNK 3/8-16 x 2-1/4
68		Axle, Brace
79		Washer 13/32 x 1-1/4 x 12 Ga
80	74950612	Bolt Hex Nylon 3/8-16 x 3/4
82		Bracket Susp Chassis Front
85	133835	Fastner Christmas Tree

NOTE: All component dimensions given in U. S. inches 1 inch = 25/4 mm

.

## ENGINE



#### ENGINE

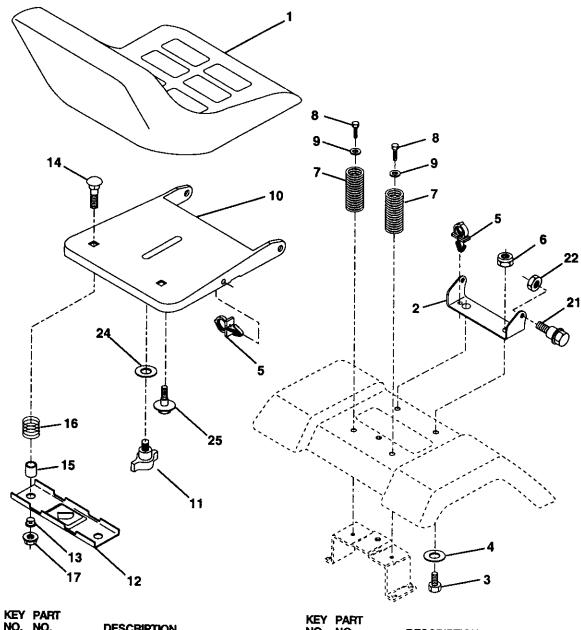
ı

KEY PART NO. NO.	DESCRIPTION
	DESCRIPTION Control, Throt Paddle 32 22 Screw, Hex Thd Cut 1/4-20 x 5/8 Engine, B&S, (See Breakdown) No. 461707-0145-E1 Muffler Exhaust Exhaust Asm. Left Exhaust Asm. Right Clamp Tube Double Engine Bolt 5/16-18unc x 3/4 W/Sems Heat Shield Lt Washer Lock Hvy. Hellcal 1/4 Bolt Fin Hex 1/4-20Unc x .75 Gasket, Muffler Nipple, Pipe 4-1/2 Elbow, Standard 90°, 3/8-18 NPT Washer Lock Ext Tooth 3/8 Screw Thdrol 3/8-16x1-1/2 Tytt Shield, Bm/Dbr Guard Control Choke Nut Keps 3/8-24 Unf Screw TT #10-32 x 5 x 3/8 Flange Arrestor, Spark Tank, Fuel Cap Fuel Guage Clamp, Hose Spacer Pad Line, Fuel Plug, Oil Drain (See Engine Breakdown)
39 109227X 45 17060612 81 128861	Pad Idler Screw 3/8-16 x 3/4 SMGML Nut Flange 1/4-20 Starter Nut

**NOTE:** All component dimensions given In U. S. inches 1 inch = 25/4 mm

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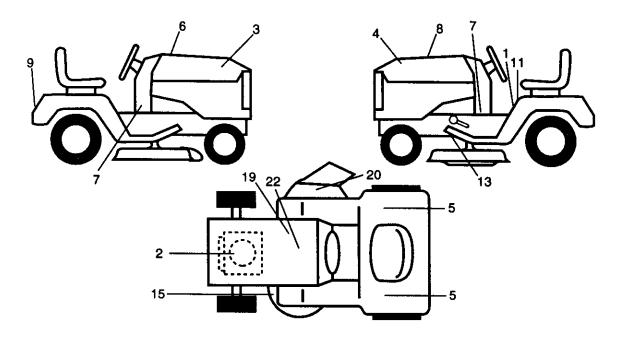
SEAT ASSEMBLY



NO.	NO.	DESCRIPTION
1	140123	Seat 3350 Blk/blk Craftsman
2	140551	Bracket Pnt Pivot Seat (blk )
3	71110616	Bolt Fin Hex 3/8-16unc X 1
4	19131610	Washer 13/32 X 3/4 X 10 Ga
5	145006	Clip Push In Hinged
6	STD541437	Nut Hex Lock w/Ins 3/8-16 Unc
7	124181X	Spring Seat Cprsn 2 250 Blk Zi
8	17000616	Screw 3/8-16 x 1.5 SMGML
9	19131614	Washer 13/32 X 1 X 14 Ga
10	155925	Pan Pnt Seat (blk )
11	166369	Knob Seat
12	121246X	Bracket Pnt Mounting Switch

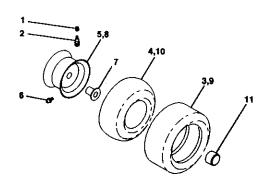
KEY PART NO. NO.	DESCRIPTION
<ol> <li>121248X</li> <li>72050412</li> <li>134300</li> <li>121250X</li> <li>121250X</li> <li>123976X</li> <li>171852</li> <li>STD541431</li> <li>19171912</li> <li>127018X</li> </ol>	Bushing Snap Blk Nyl 50 Id Bolt Rdhd Sht Nk 1/4-20x1-1/2 Spacer Split 28 X 96 Zinc Spring 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

## DECALS



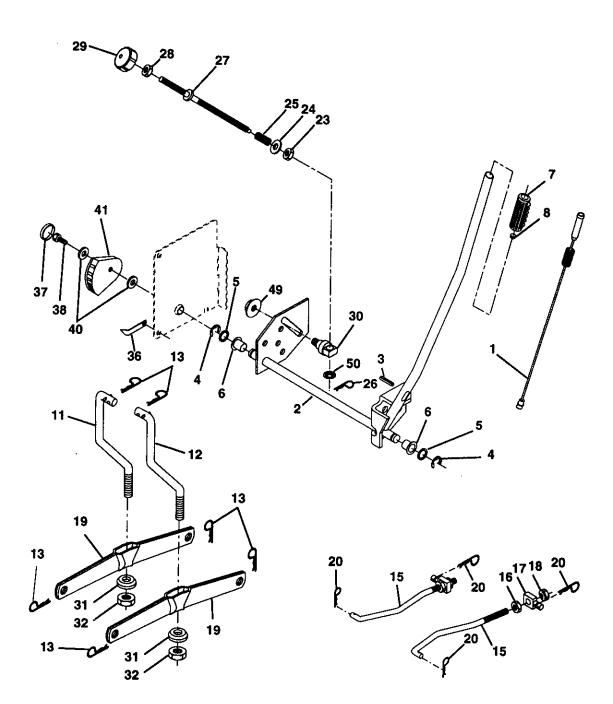
KEY NO.		DESCRIPTION		PART NO.	DESCRIPTION
1	156439	Decal, Fender Danger Sears	13	146046	Decal, V-Belt Dr Sch Tractor
2	170933	Decal, Engine	15	160396	Decal, Mower Drive Schematic
3	171696	Decal, Hood, R.H.	19	138047	Decal, Battery Diehard Sears
4	171697	Decal, Hood, L.H.	20	166887	Decal, Deck Mower EZ3
5	163207	Decal, Fender	22	149516	Decal, Battery
6	133644	Decal, Maintenance		138311	Decal, Lift Handle
7	166927	Decal, Panel Dash B&S		165800X428	Pad Footrest LH STLT
8	171808	Decal, Rpicmnt		165799X428	Pad Footrest RH STLT
9	163204	Decal, Fender, Craftsman Gold		172817	Owner's Manual, English
11	156368	Decal, Fender STLT Oper Inst E/S	• •	172818	Owner's Manual, Spanish

WHEELS AND TIRES



KE	y part			
NO	. NO.	DESCRIPTION		
1	59192	Valve Cap, Tire		
	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		Rim, Rear		
-	122082X	Tire, Rear		
10	7152J	Tube, Rear Tire		
		(Not Provided, Service Item		
		Only)		
11	104757X	Cap, Axle		
••	144334	Sealant, Tire 10 oz.		
NOTE: All component dimensions given in U. S. inches 1 inch = 25/4 mm				

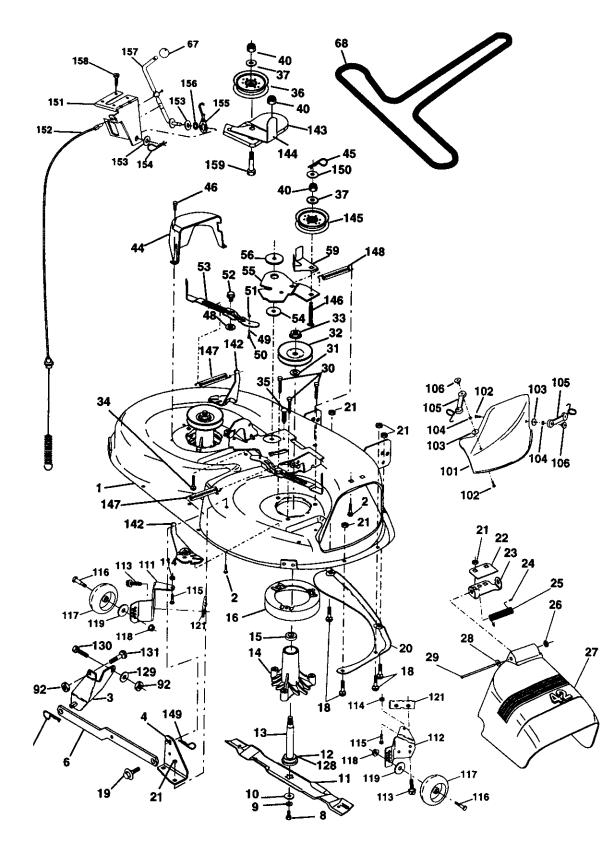
## TRACTOR -- MODEL NUMBER 917.270951 LIFT ASSEMBLY



#### LIFT ASSEMBLY

1       159460       Lift Lever Inner Wire Assembly         2       159471       Shaft Assembly, Lift         3       105767X       Pin, Groove         4       1200002       E-Ring         5       19211621       Washer 21/32 x 1 x 21 Gauge         6       120183X       Bearing, Nylon         7       125631X       Grip, Handle, Fluted         8       122365X       Button, Plunger, Red         11       139865       Link, Lift, L.H.         12       139866       Link, Lift, R.H.         13       STD624008       Retainer Spring         15       167253       Link, Front         16       73350800       Nut, Hex, Jam 1/2-13 UNC         17       130171       Trunnion         18       73680800       Nut Lock 1/2-13 UNC         19       139868       Arm, Suspension, Rear         20       163552       Retainer Spring	KE NO	Y PART . NO.	DESCRIPTION				
3       105767X       Pin, Groove         4       12000002       E-Ring         5       19211621       Washer 21/32 x 1 x 21 Gauge         6       120183X       Bearing, Nylon         7       125631X       Grip, Handle, Fluted         8       122365X       Button, Plunger, Red         11       139865       Link, Lift, L.H.         12       139866       Link, Lift, R.H.         13       STD624008       Retainer Spring         15       167253       Link, Front         16       73350800       Nut, Hex, Jam 1/2-13 UNC         17       130171       Trunnion         18       73680800       Nut Lock 1/2-13 UNC         19       139868       Arm, Suspension, Rear         20       163552       Retainer Spring			Lift Lever Inner Wire Assembly				
4       12000002       E-Ring         5       19211621       Washer 21/32 x 1 x 21 Gauge         6       120183X       Bearing, Nylon         7       125631X       Grip, Handle, Fluted         8       122365X       Button, Plunger, Red         11       139865       Link, Lift, L.H.         12       139866       Link, Lift, R.H.         13       STD624008       Retainer Spring         15       167253       Link, Front         16       73350800       Nut, Hex, Jam 1/2-13 UNC         17       130171       Trunnion         18       73680800       Nut Lock 1/2-13 UNC         19       139868       Arm, Suspension, Rear         20       163552       Retainer Spring	2						
5       19211621       Washer       21/32 x 1 x 21 Gauge         6       120183X       Bearing, Nylon         7       125631X       Grip, Handle, Fluted         8       122365X       Button, Plunger, Red         11       139865       Link, Lift, L.H.         12       139866       Link, Lift, R.H.         13       STD624008       Retainer Spring         15       167253       Link, Front         16       73350800       Nut, Hex, Jam 1/2-13 UNC         17       130171       Trunnion         18       73680800       Nut Lock 1/2-13 UNC         19       139868       Arm, Suspension, Rear         20       163552       Retainer Spring	3						
6       120183X       Bearing, Nylon         7       125631X       Grip, Handle, Fluted         8       122365X       Button, Plunger, Red         11       139865       Link, Lift, L.H.         12       139866       Link, Lift, R.H.         13       STD624008       Retainer Spring         15       167253       Link, Front         16       73350800       Nut, Hex, Jam 1/2-13 UNC         17       130171       Trunnion         18       73680800       Nut Lock 1/2-13 UNC         19       139868       Arm, Suspension, Rear         20       163552       Retainer Spring							
7       125631X       Grip, Handle, Fluted         8       122365X       Button, Plunger, Red         11       139865       Link, Lift, L.H.         12       139866       Link, Lift, R.H.         13       STD624008       Retainer Spring         15       167253       Link, Front         16       73350800       Nut, Hex, Jam 1/2-13 UNC         17       130171       Trunnion         18       73680800       Nut Lock 1/2-13 UNC         19       139868       Arm, Suspension, Rear         20       163552       Retainer Spring							
8         122365X         Button, Plunger, Red           11         139865         Link, Lift, L.H.           12         139866         Link, Lift, R.H.           13         STD624008         Retainer Spring           15         167253         Link, Front           16         73350800         Nut, Hex, Jam 1/2-13 UNC           17         130171         Trunnion           18         73680800         Nut Lock 1/2-13 UNC           19         139868         Arm, Suspension, Rear           20         163552         Retainer Spring							
11       139865       Link, Lift, L.H.         12       139866       Link, Lift, R.H.         13       STD624008       Retainer Spring         15       167253       Link, Front         16       73350800       Nut, Hex, Jam 1/2-13 UNC         17       130171       Trunnion         18       73680800       Nut Lock 1/2-13 UNC         19       139868       Arm, Suspension, Rear         20       163552       Retainer Spring			Gnp, Hangle, Fluteg				
12       139866       Link, Lift, R.H.         13       STD624008       Retainer Spring         15       167253       Link, Front         16       73350800       Nut, Hex, Jam 1/2-13 UNC         17       130171       Trunnion         18       73680800       Nut Lock 1/2-13 UNC         19       139868       Arm, Suspension, Rear         20       163552       Retainer Spring							
13         STD624008         Retainer Spring           15         167253         Link, Front           16         73350800         Nut, Hex, Jam 1/2-13 UNC           17         130171         Trunnion           18         73680800         Nut Lock 1/2-13 UNC           19         139868         Arm, Suspension, Rear           20         163552         Retainer Spring							
15       167253       Link, Front         16       73350800       Nut, Hex, Jam 1/2-13 UNC         17       130171       Trunnion         18       73680800       Nut Lock 1/2-13 UNC         19       139868       Arm, Suspension, Rear         20       163552       Retainer Spring							
16         73350800         Nut, Hex, Jam         1/2-13 UNC           17         130171         Trunnion         18         73680800         Nut Lock 1/2-13 UNC           19         139868         Arm, Suspension, Rear         20         163552         Retainer Spring							
17         130171         Trunnion           18         73680800         Nut Lock 1/2-13 UNC           19         139868         Arm, Suspension, Rear           20         163552         Retainer Spring							
18         73680800         Nut Lock 1/2-13 UNC           19         139868         Arm, Suspension, Rear           20         163552         Retainer Spring							
19139868Arm, Suspension, Rear20163552Retainer Spring							
20 163552 Retainer Spring	19	139868	Arm, Suspension, Rear				
	20	163552					
23 110807X Nut, Special	23	110807X	Nut, Special				
24 19131016 Washer 13/32 x 5/8 x 16 Gauge			Washer 13/32 x 5/8 x 16 Gauge				
25 2876H Spring							
26 169484 Retainer Clip			RetainerClip				
27 126971X Rod, Adjust, Lift							
28 73350600 Nut, Hex, Jam 3/8-16 UNC							
29 138057 Knob, Inf. 3/8-16							
30 150233 Trunnion, Inf Height							
31 140302 Bearing, Pvt, Lift Special							
32 73540600 Nut, Crownlock 3/8-24							
36 155097 Pointer Height Indicator							
37 123935X Plug Hole							
38         17060516         Screw 5/16-18 x 1 SMGML           40         19112410         Washer 11/32 x 1-1/2							
	40	15112410					
			Nut Flange Look				
49 145212 Nut Flange Lock 50 110452X Nut Push Phos & Oil			Nut Push Phos & Oil				

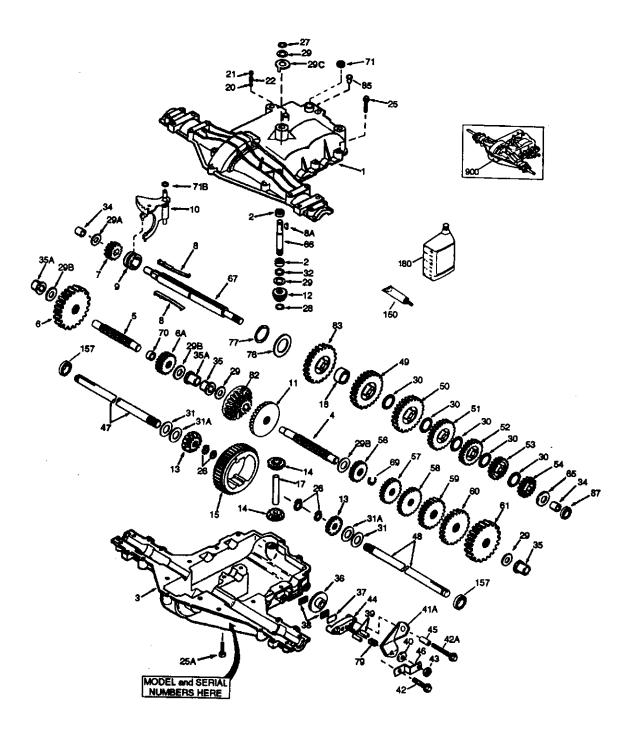
**MOWER DECK** 



## **MOWER DECK**

	' PART NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1	165892	Mower Deck Assembly, 42"	56 165723	-
ź	STD533107	Boit	59 141043	Spacer, Retainer
3	138017	Bracket Assembly, Sway Bar,	67 149846	Guard, TUV Idler
-		Front	68 144959	Knob Custorn Ovat V-Beit
4	165460	Bracket Sway Bar 38/42" Deck	92 STD541437	Nut
5	STD624008	Retainer Spring	101 136420	MulcherCover
6	130832	Arm, Suspension, Rear	102 71161010	Screw
8	850857	Bolt, Hex 3/8-24 x 1.25 Gr. 8	103 19061216	Washer #10
9	STD551137	Washer, Lock	104 STD551110	Washer, Lock
10	140296	Washer, Hardened	105 160793	Latch Assembly, Bagger
11	134149	Blade, Mulching	106 2029J	Nut, Weld
12	129895	Bearing, Ball	111 155197	Bracket, Gauge, Wheel L.H.
13	137645	Shaft Assembly, Mandrel, Vented	112 155198	Bracket, Gauge, Wheel R.H.
		(Includes Key	113 17060512	Screw 5/16-18 x 3/4
		Number 12)	114 STD541431	Nut, Hex, Keps 5/16-18 UNC
14	128774	Housing, Mandrel, Vented	115 72110504	Bolt, Carriage 5/16 UNC x 1/2
15	110485X	Bearing, Ball, Mandrel	116 4898H	Bolt, Shoulder
	140329	Stripper, Vented Mower Deck	117 165746	Wheel, Gauge
18	72140505	Bolt, Carriage 5/16-18 x 5/8	118 73930600	Nut, Centerlock 3/8-16
	132827	Bolt, Shoulder	119 STD551037	Washer 3/8 x 7/8 x 14 Gauge
	159770	Baffle, Vortex	121 143723	Bracket
21	STD541431	Nut Crownlock 5/16-18 UNC	128 153390	Washer Felt
22	134753	Stiffener Bracket	129 19131312	Washer 13/32 x 13/16 x 12 Ga.
23	131267	Bracket, Deflector	130 STD523710	Bolt, Fin Hex 3/8-16 UNC x 1
24	105304X	Cap, Sleeve		Gr. 5
25	123713X	Spring, Torsion, Deflector	131 STD533710	Bolt, Rdhd Sqnk 3/8-16UNC x 1
26	110452X	Nut, Push	142 165890	Arm Spring Brake Mower
27	130968X428	Shield, Deflector	143 15710 <del>9</del>	Bracket Arm Idler 42"
28	19111016	Washer 11/32 x 5/8 x 16 Ga.	144 158634	Keeper Belt 42" Clutch Cable
29 30	131491	Rod, Hinge	145 165888	Pulley Idler Flat
30	157722	Screw Thdroi Washer Head	146 165891	Bolt Carriage Idler
	129963 153535	Washer, Spacer	147 131335	Spring Extension
33	137266	Pulley, Mandrei	148 169022	Spring Return Idler
34	STD533717	Nut, Ťoplock, Flanged Bolt	149 165898	Retainer Spring Yellow Zinc
35	133835		150 19091216	Washer 9/32 x 3/4 x 16 Ga.
36	131494	Fastner, Christmas Tree	151 169670	Bracket Clutch
37	STD551037	Pulley, Idler, Flat Washer 13/32 x 13/16 x 16	152 169676	Cable Clutch 42 In
0,	010001007	Gauge	153 169674	Washer Flat 3/8" Type B
40	STD541437	NutCrownlock 3/8-16 UNC	154 169675	Spring Retainer
44	140088	Guard, Mandrel, L.H.	155 169671 156 169672	Spring Retention Lever
45	STD624003	Retainer	157 169669	Spacer
46	137729	Screw, Thd. Roll 1/4-20 x 5/8	158 17720410	Rod Clutch
48	133944	Washer, Hardened	159 STD533717	Screw Hex Thd Cut 1/4-20 x 5/8
49	155066	Roller Assembly, Cam Follower	130794	Bolt Rdhd Sqn 3/8-16Unc x 1-3/4
50	131340	Bolt, Shoulder #10-24 Grade 5	- 100704	Mandrel Assembly (Includes Key
51	STD541410	Locknut	169583	Numbers 8-10, 12-15, 31 and 32) Mower Deck, Complete (Standard
52	139888	Bolt, Shoulder 5/16-18 UNC		Deck, Order Separately Mulcher
53	131845	Arm Assembly, Pad, Brake		Plate and Gauge Wheel
54	133943	Washer, Hardened		Components, Key Nos. 101-106
55	155046	Arm, Idler		and 111-121)

## TRACTOR -- MODEL NUMBER 917.270951 PEERLESS TRANSAXLE--MODEL NUMBER 206-545C

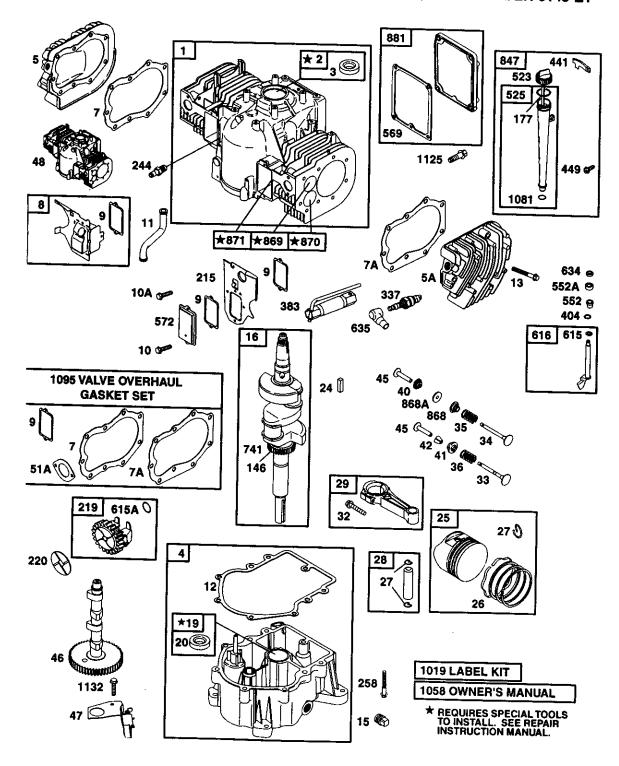


48

## TRACTOR -- MODEL NUMBER 917.270951 PEERLESS TRANSAXLE--MODEL NUMBER 206-545C

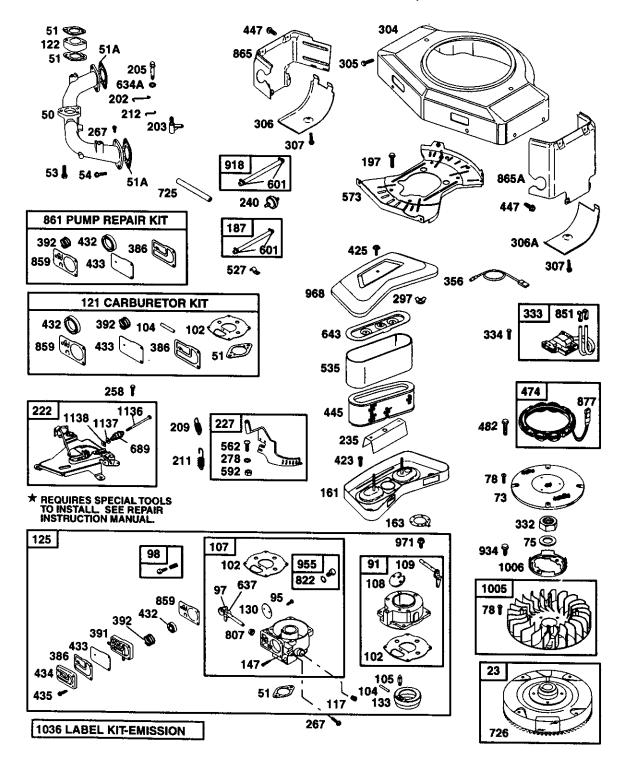
KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1 772147	Transaxle Cover	39 78602	26 Dowel Pin
2 780086/		40 79207	6A Flat Washer
3 770128	Transaxle Case		.312 ID x .059W
4 776395		41A 79007	9 Brake Lever
5 776409	Output Shaft	42 79207	
6 778364	Spur Gear (38 teeth)	42A 79208	B5A Screw 1/4 - 20 x 2 1/4"
6A 778369	Spur Gear (15 teeth)	43 79207	
7 778330	Spur Gear (11 teeth)	44 79002	25 Brake Pad Holder
8 792180	Shift Key	45 78606	6 Spacer .2625 x 1.0
8A 792047	Woodruff Key #9	46 78608	B Brake Lever Bracket
9 784352	Shift Collar	47 77469	
10 784378	Shift Rod & Fork	48 77469	)1 Axle (16 - 1 / 2" long)
11 778334	Bevel Gear (30 teeth)	49 77835	56 Spur Gear (29 teeth)
12 778309	Input Bevel Pinion (13 teeth)	50 77833	88 Spur Gear (27 teeth)
13 778368	Bevel Gear (13 teeth)	51 77835	54 Spur Gear (23 teeth)
	(Include, 14)	52 77835	52 Spur Gear (19 teeth)
14 778368	Bevel Pinion (13 teeth)	53 77835	
4.5. 5500000	(Include, 13)	54 77834	
15 778370	Ring Gear (43 teeth)	56 77835	
17 786188	Drive Pin	57 77833	
18 786102	Spacer 1.130 X .695	58 77835	
20 792077/		59 77835	· · · · · · · · · · · · · · · · · · ·
21 792078	Set Screw 3/8 - 16 x 3/8"	60 77834	
22 792079	Spring .310 OD x .625 L	61 77834	
25 792073/		65 78018	
25A 792177	Screw 1/4-20 x 1-3/8"		.563 ID x .062W
26 792125	Retaining Ring (pkg of 2)	66 77642	
27 792035	Retaining Ring	67 77639	
28 788040	Retaining Ring	69 79217	
29 780072	Thrust Washer	70 78618	• • • • • • • •
204 700400	.627 ID x .031W	71 78806	
29A 780160	Thrust Washer	71B 78809	
29B 780051	.762 ID x .031W	76 78009	
290 /00051	Thrust Washer		1.128 ID x .058W
29C 780199	.762 ID x .031W	77 78807	
	Anti-Rotation Washer .632	79 79214	
30 780108	Cup Washer	82 77833	
31 780001	1.127 ID x .032W		teeth)
31 780001	Flat Washer	83 77833	
	.750 ID x .056W	85 79215	
31A 780195	(Use As Needed)	87 78808	
SIM /60195	Flat Washer	150 78809	
32 788083	.750 ID x .062W	157 78808	
34 780194	Oil Seal 5/8" Buobing 562	180 73022	
35 780193	Bushing .563	900 79471	
35A 780197	Flanged Bushing 5 / 8" ID		206-545C Transaxle
36 790075	Flanged Bushing .751	NOTE	
37 790007	Brake Disk Brake Bad Blote	NOTE: All	component dimensions given in
38 799021	Brake Pad Plate Brake Pad (pkg of 2)	U.	S. inches 1 inch = 25.4 mm
00 100021	Brake Pad (pkg of 2)		



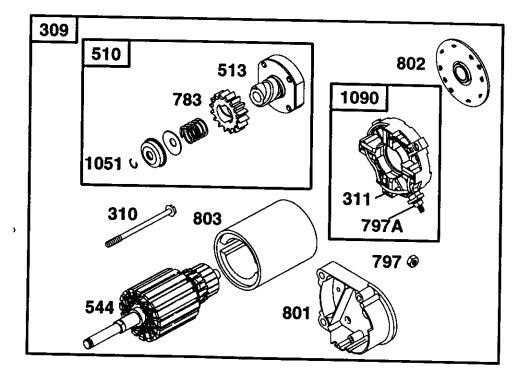


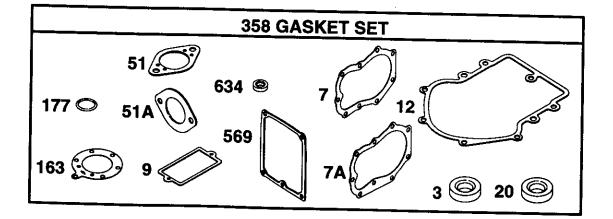
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## TRACTOR -- MODEL NUMBER 917.270951 BRIGGS & STRATTON ENGINE-MODEL NUMBER 461707, TYPE NUMBER 0145-E1



# TRACTOR -- MODEL NUMBER 917.270951 BRIGGS & STRATTON ENGINE-MODEL NUMBER 461707, TYPE NUMBER 0145-E1





52

# BRIGGS & STRATTON ENGINE-MODEL NUMBER 461707, TYPE NUMBER 0145-E1

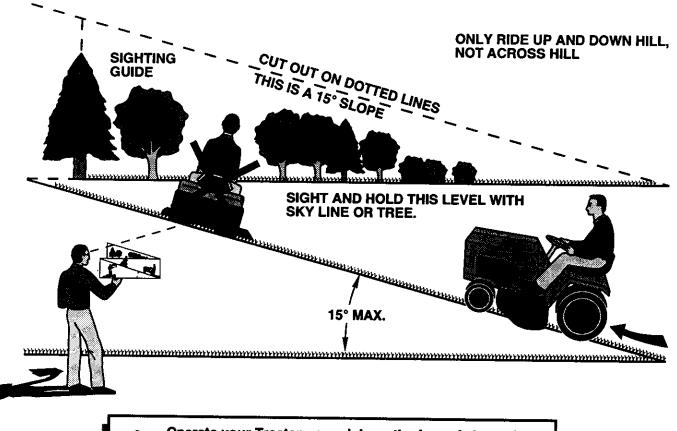
KEY NO.	PART NO.		DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	498583		Cylinder Assembly	48	498542	Short Block
2	399265		Bushing/Seal Kit	50	213290	Short Block Manifold-Intake
3	91086	*	Seal-Oil	51	271412 *	Gasket-Intake
4	493304		Sump-Engine	51Å	270884 **	Gasket-Intake
5	214517		Head-Cylinder #1	53	93970	Screw (Carburetor)
5A	214518		Head-Cylinder #2	54	93208	Screw (Intake Manifold)
7 7A	271969	<b>**</b>	Gasket-Cylinder Head #1	73	691438	Screen-Rotating
8	495754	<b>A V</b>	Gasket-Cylinder Head #2 Breather Assembly	75	222511	Washer (Flywheel)
•			(Cylinder #1)	78 91	691134	Screw (Flywheel Fan)
9	27803	**	Gasket-Breather	95	693483 690718	Body Assembly-Upper
10	94382		Screw (Breather Assembly)	97	693485	Screw (Throttle Valve) Shaft-Throttle
10A	94380		Screw (Breather Cover)	98	807923	Kit-Idle Speed
11	280225		Tube-Breather	102		Gasket-Carburetor Body
	273390	×	Gasket-Crankcase (.015"	104	693506 🗨	Pin-Float Hinge
	271188	+	Thick, Std.) Gasket-Crankcase (.005*	105	692078 🌒	Valve-Float Needle
	271100	^	Thick)	107	693482	Body Assembly-Lower
	271189	*	Gasket-Crankcase (.009*	108 109	693505	Valve-Choke
			Thick)	117	693498 693538	Shaft-Choke
13	94565		Screw (Cylinder Head)		693500	Jet-Main Jet-Main (High Altitude)
15	94239		Plug-Oil Drain	121	491539	Carburetor Kit
16	690666		Crankshaft	122	281411	Spacer
19 20	399264 291675	-	Bushing	125	693479	Carburetor
23	491180	×	Seal-Oil Flywheel	130	693504	Valve-Throttle
24	222698		Key-Flywheel	133	693512	Float-Carburetor
25	499180		Piston Assembly (Stan-	146 147	94196 693508	Key-Timing
			dard)	161	496599	Jet-Pilot Base-Air Cleaner
	499181		Piston Assembly (.010	163		Gasket-Air Cleaner
	400100		"O.S.)	177	271170 ★	Seal-O-Ring
	499182 499183		Piston Assembly (.020" O.S.)	187	299146	Line-Fuel (Čut to Required Length)
	499103		Piston Assembly (.030" O.S.)	197	95063	Screw (Back Plate)
26	499184		Ring Set, Piston (Stan-	202 203	262683 280997	Link-Mechanical Governor
			dard)	205	93971	Crank-Bell
	499285		Ring Set, Piston (.010	209	262352	Screw (Bell Crank) Spring-Governor
	400400		"O.S.)	211	261563	Spring-Governor
	499186		Ring Set, Piston (.020	212	693985	Link-Throttle
	499187		"O.S.) Ring Set, Piston (.030	215	224816	Guide-Air
	400107		"O.S.)	219 220	394348	Gear-Governor
27	263129		Lock-Piston Pin	220	222773	Washer-Thrust (Governor
28	498319		Pin Assembly, Piston (Std.)	222	491282	Gear) Bracket-Control
	498320		Pin Assembly-Piston (.005"	227	491297	Lever-Governor
29	498314		O.S.)	235	224995	Shield-Fuel Spray
25	490314		Rod-Connecting (Stan- dard)	240	394358	Filter-Fuel
	498541		Rod-Connecting (.020	244	230318	Connector-Hose (Pulse
			U.S.)	258	94930	Line) Screw (Engine Sump)
32	95017		Screw (Connecting Rod)	267	93897	Screw (Casing Clamp)
33	390420		Valve-Exhaust (Include(s):	278	94942	Washer (Governor Lever)
34	494553 691302		Keeper-Valve (Ref. No. 42))	297	94289	Nut-Wing (Air Filter
35	65906		Valve-Intake Spring-Valve (Intake)	00.4		Retainer)
36	26828		Spring-Valve (Exhaust)	304	691390	Housing-Blower
40	221596		Retainer-Valve (Exhaust)	305 306	690960 222846	Screw (Blower Housing)
41	292260		Retainer-Valve (Exhaust)	306A	223734	Shield-Cylinder Shield-Cylinder
42 45	494553		Keeper-Valve	307	94930	Screw (Cylinder Shield)
45 46	261368 214487		Tappet-Valve	309	497596	Motor-Starter
47	393415		Camshaft Slinger-Oil	310	94003	Bolt (Starter Motor)
				311	497608	Brush Set

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# BRIGGS & STRATTON ENGINE-MODEL NUMBER 461707, TYPE NUMBER 0145-E1

KEY NO.	PART NO.		DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
332	230674		Nut (Flywheel)	802	497607	Con End
333	394891		Armature-Magneto	803	497604	Cap-End Housing Storter
334	94731		Screw (Magneto Armature)	807	693511	Housing-Starter Spacer
337	802592		Plug-Spark	822	693497	Washer-Seal (Throttle
356 358	494705		Wire-Stop			Shaft)
383	495868		Gasket Set	847	495715	Dipstick/Tube Assembly
386	89838		Wrench-Spark Plug	851	493880	Terminal-Cable
391	693487	<b>#</b> +	Gasket-Pump Body-Pump	859	693488	+ Diaphragm-Fuel Pump
392	693491		Spring-Pump Diaphragm	861	393397	Kit-Fuel Pump
404	223882	•	Washer (Governor Crank)	865	224774	Cover-Air Guide
423	94674		Screw (Air Cleaner Base)	865A 868		Cover-Air Guide
425	94823		SCIEW (Air Cleaner Cover)	868A	497656 273312	Seal-Valve
432	693492	•+	Cap-Spring	869	261463	Seal-Valve
433	693489	•+	Diaphragm-Fuel Pump	870	262924	Seat-Valve (Intake)
434	693493		Cover-Diaphragm	871	261961	Seat-Valve (Exhaust)
435	693494		Screw (Diaphragm Cover)		231218	Bushing-Guide (Exhaust) Bushing-Guide (Intake)
441	222875		Bracket-Oil Fill	877	393456	Wire-Alternator
445 447	394019		Filter-Air	881	495901	Plate-Cover
449	93343 94882		Screw (Air Guide Cover)	918	393815	Hose-Vacuum (Cylinder-To-
474	93474		Screw (Oil Fill Bracket) Alternator			Impulse Pump)(Cut to
482	93621		Screw (Alternator)	004	0 4 9 9 7	Required Length)
510	497606		Drive-Starter	934	94627	Screw (Fan Retainer)
513	398003		Clutch-Drive	955 968	693513	Plug-Carburetor
523	494947		Dipstick	971	225008 805540	Cover-Air Cleaner
525	495348		Tube-Oil Fill	011	000040	Screw (Upper Body To
527	223167		Clamp-Tube	1005	498157	Lower Body) Fan-Flywheel
535	272490		Filter-Air	1006	224901	Retainer-Fan
544 552	97603 262332		Armature-Starter	1019	496726	Label Kit
552A			Bushing (Governor Crank)	1036		Label Kit-Emission
562	93853		Bushing (Governor Crank) Bolt-Carriage (Governor	1051	263080	Ring-Retaining
			Lever)	1058	273688	OwnerOs Manual
569	272645	*	Gasket-Base	1081	280860	* Seal-O-Ring
572	222892		Cover-Breather (Cylinder	1090	497605 498047	Retainer-Brush
			#2)	1125	94724	Gasket Set-Valve Overhaul
573	491304		Plate-Back		94675	Screw (Cover Plate)
592	92278		Nut (Governor Lever)	1136	94297	Screw (Oil Slinger) Screw (Governor, Control
301 315	95162		Clamp-Hose	-		Rod)
315 315A	94296 93898		Retainer (Governor Crank)	1137	220680	Washer (Governor, Control
316	491530		Retainer-Governor Shaft			Rod)
334	491287	+	Crank-Governor	1138	94298	Nut (Governor, Control Rod
34A	271013	<b>^</b>	Seal-Governor Shaft Washer-Foam			460707-0145-E1
335	66538		Boot-Spark Plug			Replacement Engine
337	693510		Washer-Seal			
343	496700		Retainer-Air Filter	*	Included in	Gasket Set. Def Number
389	262337		Spring-Friction	<b>^</b>	358.	Gasket Set, Ref Number
)97 /07	93585		Screw (Drive Cap)	•		Carburetor Kit, Ref Number
'25 '26	280866		Shield-Heat	-	121.	
'26 '41	91362 262989		Gear-Ring	•	Included in	Value Overhaul Kit, Ref
'83	693059		Gear-Timing Gear-Starter		Number 1(	095.
'97	94010		Nut (Starter Terminal)	+	Included in	Fuel Pump Kit, Ref Number
'97A	693167		Nut (Starter Terminal)		861	
101	394860		Cap-Drive			
				NOTE:	All compo	nent dimensions given in U.S.

# 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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