### Owner's Manual

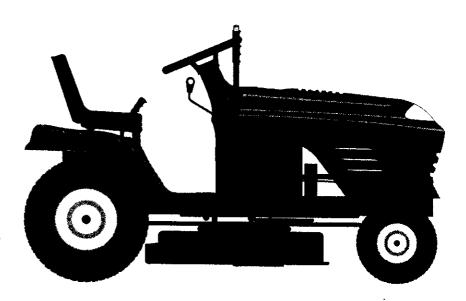
# **CRAFTZMAN®**

20.0 HP
ELECTRIC START
42" MOWER
6 SPEED TRANSAXLE:
LAWN TRACTOR

Model No. 917.270930



- Assembly
- Operation
- Maintenance
- Repair Parts





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

### **CAUTION:**

Read and follow all Safety Rules and Instructions before operating this equipment. For answers to your questions about this product, Call:

**1-800-659-5917 Sears Craftsman Help Line**5 am - 5 pm, Mon - Sat

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

| TABLE OF CONTENTS        |              |    |  |
|--------------------------|--------------|----|--|
| Warranty2                | Maintenance  | 17 |  |
| Safety Rules3            |              |    |  |
| Product Specifications 5 | Storage      | 27 |  |
| Assembly 7               |              |    |  |
| Operation 10             | Repair Parts |    |  |
| Maintenance Schedule17   |              |    |  |

### 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 mower-related 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.

### SAFETY RULES

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

#### SERVICE

- Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.
  - Use only an approved container.
  - Never rémove gas cap or add fuel with the engine running. Allow engine to cool before refueling. Do not smoke.
  - Never refuel the machine indoors.
  - Never store the machine or fuel container inside where there is an open flame, such as a water heater.

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











- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers or children even with the blades off.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and down for small children.
- Mow up and down slopes (15° Max), not across.

- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Use slow speed. Choose a low gear so that you will not have to stop or shift while on the slope.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.
- If machine stops while going uphill, disengage blades, shift into reverse and back down slowly.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.

### **SAFETY RULES**

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

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

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

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

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

#### **PRODUCT SPECIFICATIONS**

|                                   | TICATIONS           |
|-----------------------------------|---------------------|
| GASOLINE<br>CAPACITY<br>AND TYPE: | 3.5 GALLONS         |
| AND TYPE:                         | REGULAR             |
| OIL TYPE                          | SAE 30 (ABOVE 32°F) |
| (API-SF/SG/SH):                   |                     |
|                                   | (BELOW 32°F)        |
| OIL CAPACITY:                     | 3.0 PINTS           |
| 3                                 | CHAMPION RJ19LM     |
| (GAP: .030")                      | OR J19LM            |
| VALVE                             | INTAKE: .004"006"   |
| CLEARANCE:                        | EXHAUST: .007"009"  |
| GROUND SPEED                      | FORWARD:            |
| (MPH):                            | 1 <sup>st</sup> 1.2 |
|                                   | 2 <sup>ND</sup> 1.5 |
| ] .                               | 3 <sup>RD</sup> 2.4 |
| -                                 | 4 <sup>TH</sup> 3.5 |
|                                   | 5 <sup>TH</sup> 4.8 |
|                                   | 6 <sup>TH</sup> 5.3 |
|                                   | REVERSE: 1.5        |
| TIRE PRESSURE:                    |                     |
|                                   | REAR: 10 PSI        |
| CHARGING                          | 3 AMPS BATTERY      |
| SYSTEM:                           | 5 AMPS HEADLIGHTS   |
| BATTERY;                          | AMP/HR: 30          |
| 1                                 | MIN. CCA: 240       |
|                                   | CASE SIZE: U1R      |
| BLADE BOLT<br>TORQUE:             | 27–35 FT. LBS.      |
|                                   |                     |

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

Should you experience any problem you cannot easily remedy, please contact your nearest authorized service center/ department. We have competent, well-trained technicians and the proper tools to service or repair this tractor.

Please read and retain this manual. The instructions will enable you to assemble and maintain your tractor properly. Always observe the "SAFETY RULES".

#### REPAIR AGREEMENT

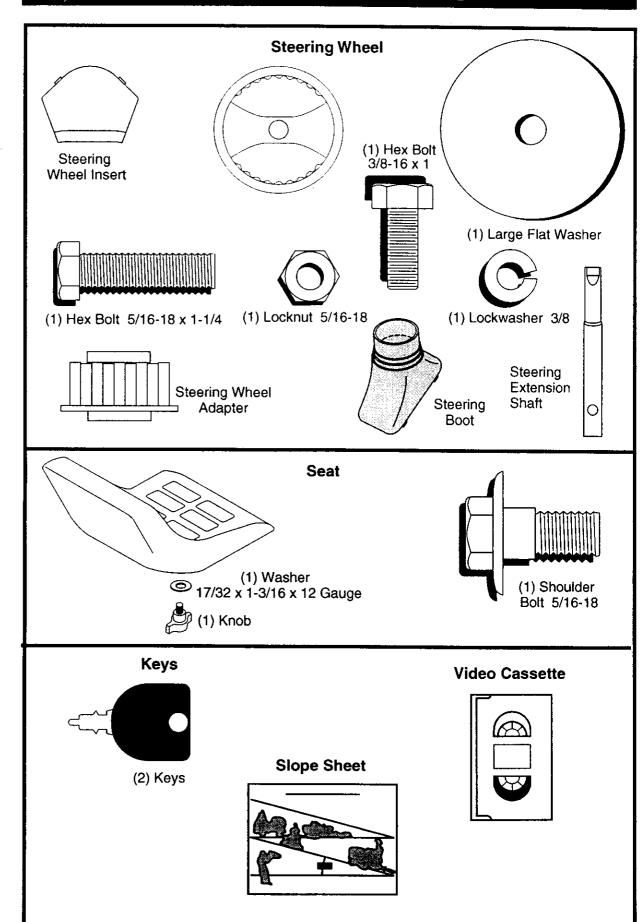
A Repair Agreement is available on this product. Contact your nearest Sears store for details.

#### **CUSTOMER RESPONSIBILITIES**

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

**AWARNING:** This tractor is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brushcovered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. In the state of California the above is required by law (Section 4442 of the California Public Resources Code), Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest authorized service center/ department (See REPAIR PARTS section of this manual).

## **UNASSEMBLED PARTS**



### **ASSEMBLY**

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

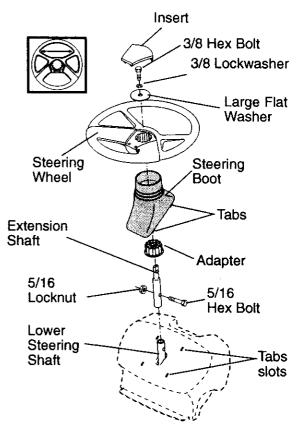
- Slide extension shaft onto lower steering shaft. Align mounting holes in extension and lower shafts and install 5/ 16 hex bolt and locknut. Tighten securely.
- Place tabs of steering boot over tab slots in dash and push down to secure.

#### **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.

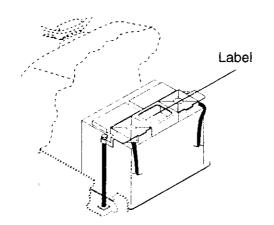
- Assemble large flat washer, 3/8 lock washer, 3/8 hex bolt and tighten securely.
- Snap steering wheel insert into center of steering wheel.
- Remove protective materials from tractor hood and grill.

**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

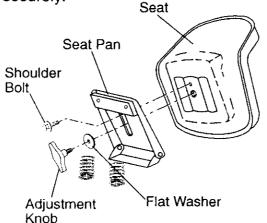
- Lift hood to raised position.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps. (See "BATTERY" in MAINTE-NANCE section of this manual for charging instructions).



#### **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
- 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 gearshift lever in neutral (N) position.
- · Roll tractor forward off skid.
- · Remove banding holding discharge guard up against tractor.

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

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

- · Be sure all the above assembly steps have been completed.
- Check engine oil level and fill fuel tank with gasoline.
- Sit on seat in operating position. depress clutch/brake pedal and set the parking brake.
- Place gear shift 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.
- Depress clutch/brake pedal into full "BRAKE" position and hold. Move gearshift lever to 1st gear.
- Slowly release clutch/brake pedal 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.

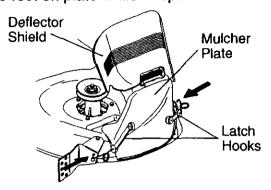
#### **INSTALL MULCHER PLATE** (If previously removed)

· 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:

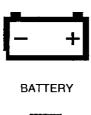
- ✓ All assembly instructions have been completed.
- ✓ No remaining loose parts in carton.
- ✓ Battery is properly prepared and charged.(Minimum 1 hour at 6 amps).
- ✓ Seat is adjusted comfortably and tightened securely.
- ✓ All tires are properly inflated. (For shipping purposes, the tires were overinflated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













**CAUTION OR** WARNING

REVERSE

**FORWARD** 

**FAST** 

SLOW













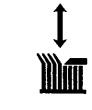
**ENGINE ON** 

**ENGINE OFF** 

OIL PRESSURE

LIGHTS ON

OVER TEMP LIGHT



**FUEL** 



CHOKE



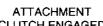
MOWER HEIGHT

PARKING BRAKE LOCKED



MOWER LIFT





















**CLUTCH ENGAGED** 

**REVERSE** 

**NEUTRAL** 

HIGH

LOW

**PARKING BRAKE** 





**ATTACHMENT** 











**KEEP AREA CLEAR** 

SLOPE HAZARDS (SEE SAFETY RULES SECTION)







FREE WHEEL (Automatic Models only)



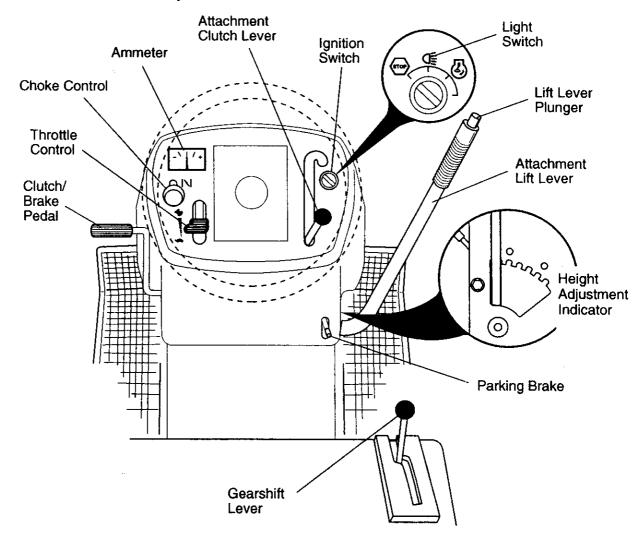


DANGER, KEEP HANDS AND FEET AWAY

#### **KNOW YOUR TRACTOR**

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

Compare the illustrations with your tractor to familiarize yourself with the 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.

**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 (-).

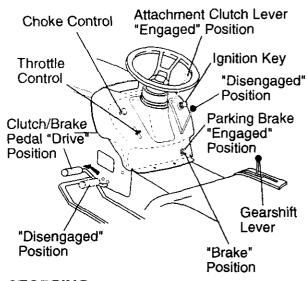


The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles, or standard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

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

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

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

#### TO USE THROTTLE CONTROL

Always operate engine at full throttle.

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

#### TO USE CHOKE CONTROL

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

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

#### TO MOVE FORWARD AND 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 position of the attachment lift lever determines the cutting height.

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

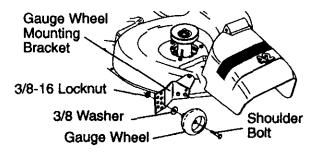
The cutting height range is approximately 1-1/2 to 4". The heights are measured from the ground to the blade tip with the engine not running. These heights are approximate and may vary depending upon soil conditions, height of grass and types of grass being mowed.

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

#### TO ADJUST GAUGE WHEELS

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.

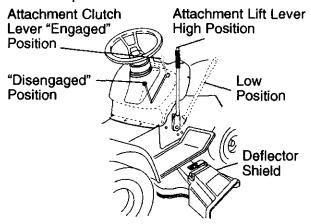


#### TO OPERATE MOWER

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.
- 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 deflector shield in place.



#### TO OPERATE ON HILLS

**▲CAUTION:** 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.

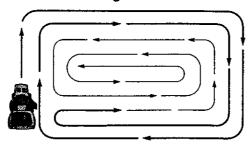
## COLD WEATHER STARTING (50° F AND BELOW)

- 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.

#### **MOWING TIPS**

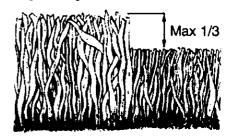
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to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



#### **MAINTENANCE**

| AS  | MAINTENANCE SCHEDUL<br>L IN DATES<br>YOU COMPLETE<br>GULAR SERVICE | .E | EFORE    | ENCHUS<br>ENCHUS | NOURS<br>VERY 2 | HOURS<br>VERY S | HOUR | S HOUP<br>OD HOUP<br>VERY BY | ASON<br>ASON | SER' | SE<br>VICE | DAT | ES     |
|-----|--|----|----------|------------------|-----------------|-----------------|------|------------------------------|--------------|------|------------|-----|--------|
|     | Check Brake Operation  | V  | 1        |                  |                 |                 |      |                              |              |      |            |     |        |
|     | Check Tire Pressure  | 1  | 1        |                  |                 |                 |      |                              |              |      |            |     |        |
| Т   | Check Operator Presence and<br>Interlock Systems                   | V  |          |                  |                 |                 |      |                              |              |      |            |     |        |
| R   | Check for Loose Fasteners  | V  |          |                  |                 | 1/7             |      | 1                            |              |      |            |     |        |
| A   | Sharpen/Replace Mower Blades                                       |    |          | 1.               |                 |                 |      |                              |              |      |            |     |        |
| C   | Lubrication Chart  |    |          | /                |                 |                 |      | <b>V</b>                     |              |      |            |     |        |
| ò   | Check Battery Level  |    |          | <b>1</b> 6       |                 |                 |      |                              |              |      |            |     |        |
| R   | Clean Battery and Terminals  |    |          | <b>/</b>         | l               |                 |      | V                            |              |      |            |     |        |
|     | Check Transaxle Cooling  |    |          | /                |                 |                 |      |                              |              |      |            | I   | $\Box$ |
|     | Adjust Blade Belt(s) Tension                                       |    |          |                  |                 | <b>1</b> 5      |      |                              |              |      |            |     |        |
|     | Adjust Motion Drive Belt(s) Tension                                |    |          |                  |                 | <b>√</b> 5      |      |                              |              |      |            |     |        |
| Г   | Check Engine Oil Level   | 1  | <b>V</b> |                  |                 |                 |      |                              |              |      |            |     |        |
|     | Change Engine Oil  |    |          | 1.2,3            |                 |                 |      | 1                            |              |      |            |     | , i    |
| E   | Clean Air Filter   |    |          | 1/2              |                 |                 |      |                              |              |      |            |     |        |
| N   | Clean Air Screen   |    |          | 1/2              |                 | 1               |      |                              |              |      |            |     |        |
| G   | Inspect Muffler/Spark Arrester                                     |    | Т        |                  | 1               |                 |      |                              |              |      |            |     |        |
| l ¦ | Replace Oil Filter (If equipped)                                   |    |          |                  |                 | <b>1</b> 1.2    |      |                              |              |      |            |     |        |
| F   | Clean Engine Cooling Fins  |    |          |                  |                 | 1/2             | Ī    |                              |              |      |            |     |        |
| -   | Replace Spark Plug   |    |          |                  |                 | 1               | 1    |                              |              |      |            |     |        |
|     | Replace Air Filter Paper Cartridge                                 |    |          |                  |                 | 1/2             |      |                              |              |      |            |     |        |
|     | Replace Fuel Filter  |    |          |                  |                 |                 | 1    |                              |              |      |            |     |        |

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

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

#### GENERAL RECOMMENDATIONS

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

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

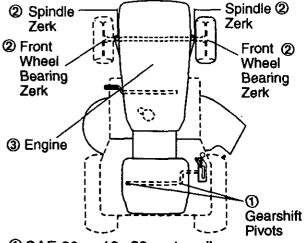
All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

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

#### **BÉFORE EACH USE**

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

#### LUBRICATION CHART



- ① SAE 30 or 10w30 motor oil
- ② General Purpose Grease
- 3 Refer to Maintenance "ENGINE" Section

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

#### TRACTOR

Always observe safety rules when performing any maintenance.

#### **BRAKE OPERATION**

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

#### **TIRES**

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

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

#### **OPERATOR PRESENCE SYSTEM**

Be sure 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.

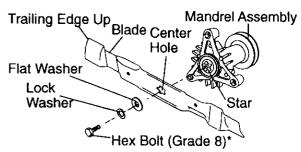
#### **BLADE REMOVAL**

- 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 is 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.

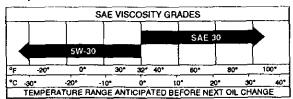
#### TRANSAXLE COOLING

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.



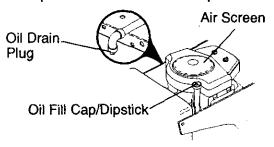
NOTE: Although multi-viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, these multi-viscosity oils will result in increased oil consumption when used above 32°F. Check your engine oil level more frequently to avoid possible engine damage from running low on oil. Change the oil after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

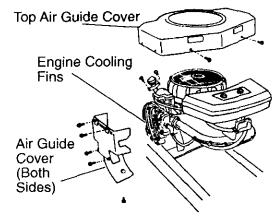


#### **CLEAN AIR SCREEN**

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.

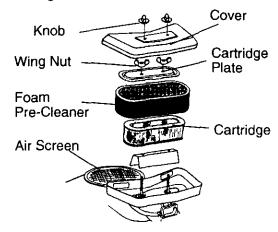
#### TO SERVICE PRE-CLEANER

- 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.

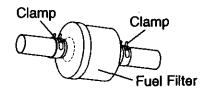
#### SPARK PLUGS

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 automotive type wax.

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

### **SERVICE AND ADJUSTMENTS**

**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.

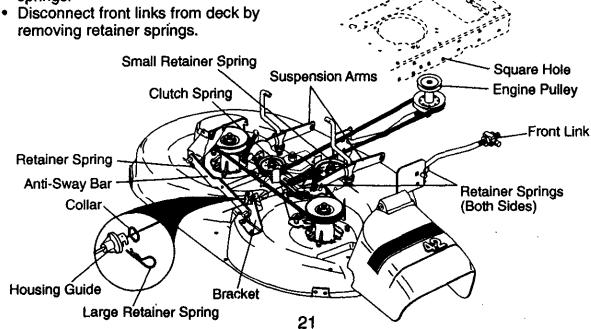
removing retainer springs.

 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

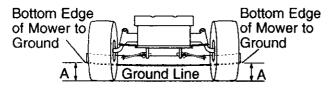
Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PROD-UCT SPECIFICATIONS" section of this manual). If tires are over or underinflated, you will not properly adjust your mower.

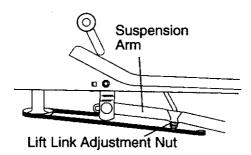
#### SIDE-TO-SIDE ADJUSTMENT

- · 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.





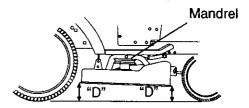
#### FRONT-TO-BACK ADJUSTMENT

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

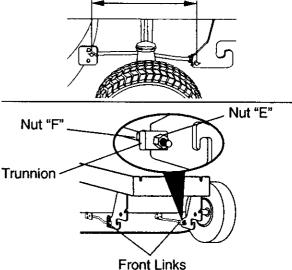
To obtain the best cutting results, the mower housing should be adjusted so that the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

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

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



Both Front Links Should be Equal in Length



## TO REPLACE MOWER BLADE DRIVE BELT (See Illustration Next Page)

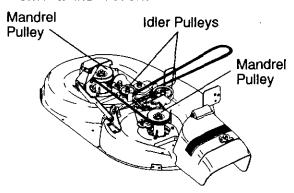
The mower blade drive belt may be replaced without tools. Park the tractor on level surface. Engage parking brake.

#### **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.
- 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.

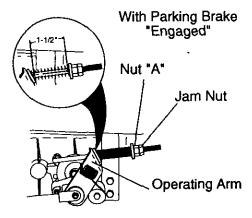


#### TO ADJUST BRAKE

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.

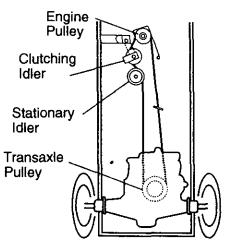
- Depress clutch/brake pedal and engage parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- If distance is other than 1-1/2", loosen jam nut and turn nut "A" until distance becomes 1-1/2". Retighten jam nut against nut "A".
- Road test tractor for proper stopping 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.

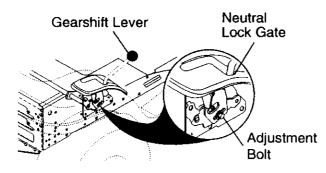
- Remove mower (See "TO REMOVE MOWER" in this section of this manual.)
- Remove belt from stationary idler and clutching idler.
- Pull belt slack toward rear of tractor.
   Remove belt upwards from transaxle pulley by deflecting belt keepers.
- Pull belt toward front of tractor and remove downwards from around engine pulley.
- Install new belt by reversing above procedure.



## TRANSAXLE GEAR SHIFT LEVER NEUTRAL 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.

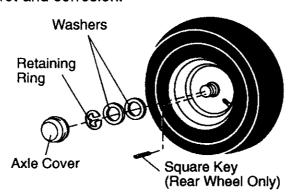
#### FRONT WHEEL TOE-IN/CAMBER

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:

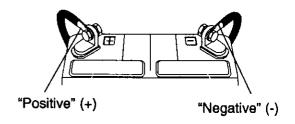
**IMPORTANT:** Your tractor is equipped with a 12 volt negative grounded system. The other vehicle must also be a 12 volt negative grounded system. Do not use your tractor battery to start other vehicles.

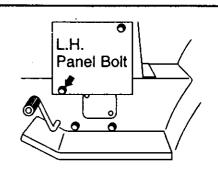
#### TO ATTACH JUMPER CABLES -

- 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.



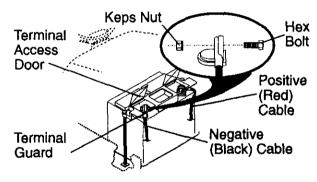


#### REPLACING BATTERY

**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.

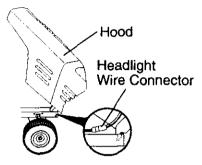
 Check wiring. See electrical wiring diagram in the Repair Parts section.

#### 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.



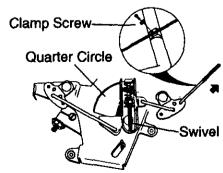
#### **ENGINE**

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

## TO ADJUST THROTTLE CONTROL CABLE

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

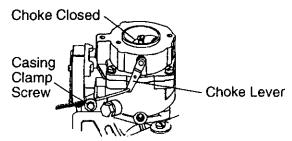
- With engine not running, move throttle control lever to fast position.
- Check that swivel is against side of quarter circle. If it is not, loosen cable clamp screw and pull cable back until swivel is against quarter circle. Tighten cable clamp screw securely.



#### TO ADJUST CHOKE CONTROL

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

- With engine not running, move choke control (located on dash panel) to full choke position.
- Remove air cleaner cover, filter and cartridge plate to expose carburetor choke (see "AIR FILTER" in the 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 -

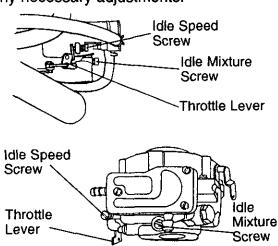
- Start engine and allow to warm for five minutes. Make final adjustments with engine running and shift/ motion control lever in neutral (N) position.
- With throttle control lever in slow position, hold throttle lever against idle speed screw and adjust idle speed screw to obtain 1200 to 1400 RPM.
- 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, bolts and screws are securely fastened. Inspect moving parts for damage, breakage and wear. Replace if necessary.
- Touch up all rusted or chipped paint surfaces; sand lightly before painting.

#### **BATTERY**

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

#### **ENGINE**

#### **FUEL SYSTEM**

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

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

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

#### **ENGINE OIL**

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

#### CYLINDER(S)

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

#### OTHER

- Do not store gasoline from one season to another.
- Replace your gasoline can if 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> <li>Loose or damaged wiring.</li> <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 carburetor, refill tank with fresh gasoline and replace fuel filter.</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> |
| 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 engaged.</li> <li>Weak or dead battery.</li> <li>Blown fuse.</li> <li>Corroded battery terminals.</li> <li>Loose or damaged wiring.</li> <li>Faulty ignition switch.</li> <li>Faulty solenoid or starter.</li> <li>Faulty operator presence switch(es).</li> </ul> | <ul> <li>Depress clutch/brake pedal.</li> <li>Disengage attachment clutch.</li> <li>Recharge or replace battery.</li> <li>Replace fuse.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace ignition switch.</li> <li>Check/replace solenoid or starter.</li> <li>Contact an authorized service center.</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>  |

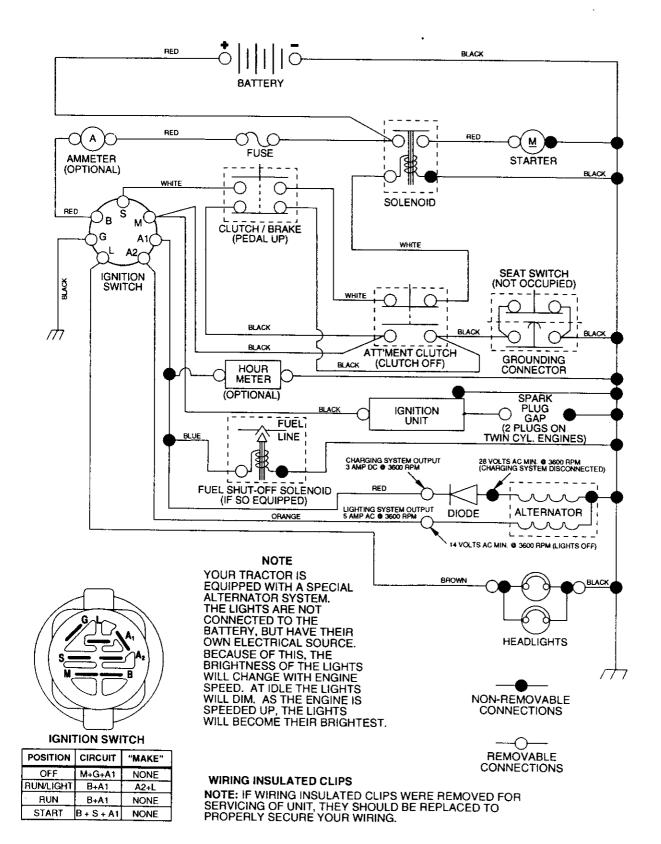
### TROUBLESHOOTING CHART

| 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" position.</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>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 adjustment.</li> <li>Engine valves out of adjustment.</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 with fresh gasoline and replace fuel filter.</li> <li>Connect and tighten spark plug wire.</li> <li>Clean engine air screen/fins.</li> <li>Clean/replace muffler.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service and Adjustments section.</li> <li>Contact an authorized service 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). Replace damaged parts.</li> </ul>   |
| Engine continues<br>to run when opera-<br>tor leaves seat with<br>attachment clutch<br>engaged | Faulty operator-safety presence control system.   | Check wiring, switches and connections. If not corrected, contact an authorized service center.   |
| 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> </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> </ul>  |

### TROUBLESHOOTING CHART

| PROBLEM  | CAUSE   | CORRECTION   |
|--|---|--|
| Poor cut - uneven<br>(cont'd)                        | Clogged mower deck vent<br>holes from buildup of<br>grass, leaves, and trash<br>around mandrels.  | Clean around mandrels to open vent holes.  |
| Mower blades will<br>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-<br>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"<br>when turning en-<br>gine "OFF" | Engine throttle control not<br>set at "SLOW"<br>position for 30 seconds<br>before stopping engine.  | Move throttle control to<br>"SLOW" position and allow<br>to idle for 30 seconds before<br>stopping engine.   |

#### **SCHEMATIC**



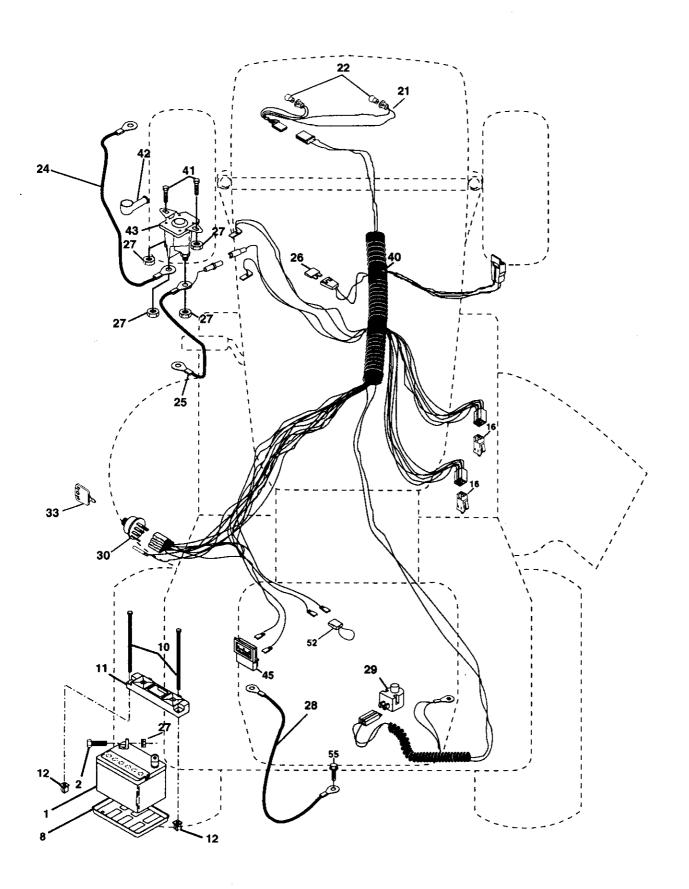
31

42

### REPAIR PARTS

### **TRACTOR -- MODEL NUMBER 917.270930**

### **ELECTRICAL**

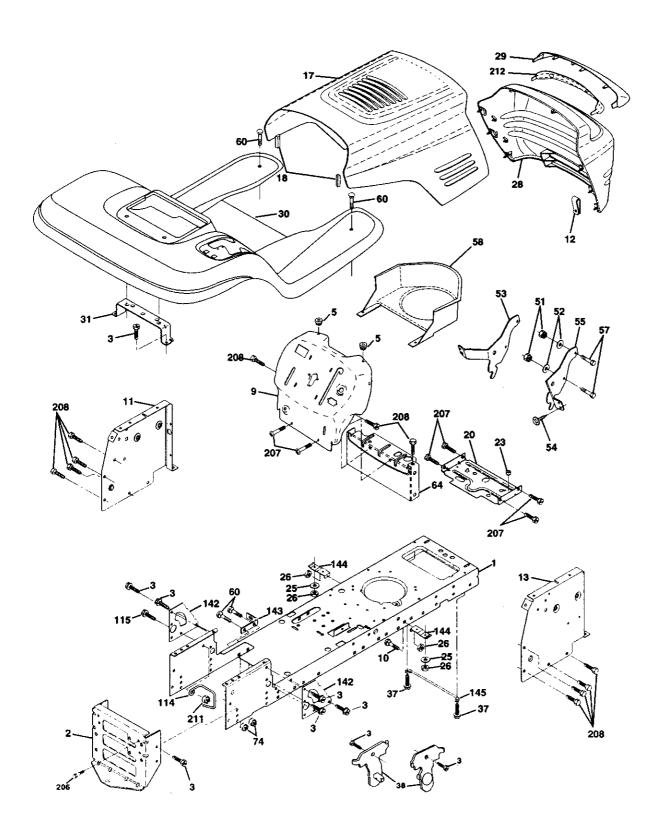


#### **ELECTRICAL**

| KE | Y PART   |                                    |
|----|----------|------------------------------------|
| NO | D. NO.   | DESCRIPTION                        |
| 1  | 163465   | Battery 12 VOLT 28 AMP             |
|    | 74760412 | Bolt Hex Hd 1/4-20unc x 3/4        |
|    | 7603J    | Case Battery                       |
|    | 145211   | Boit, 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          |
|    | 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                        |
|    | 163968   | 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               |
| 55 | 17490508 | Screw Thdrol 5/16-18 x 1/2         |

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

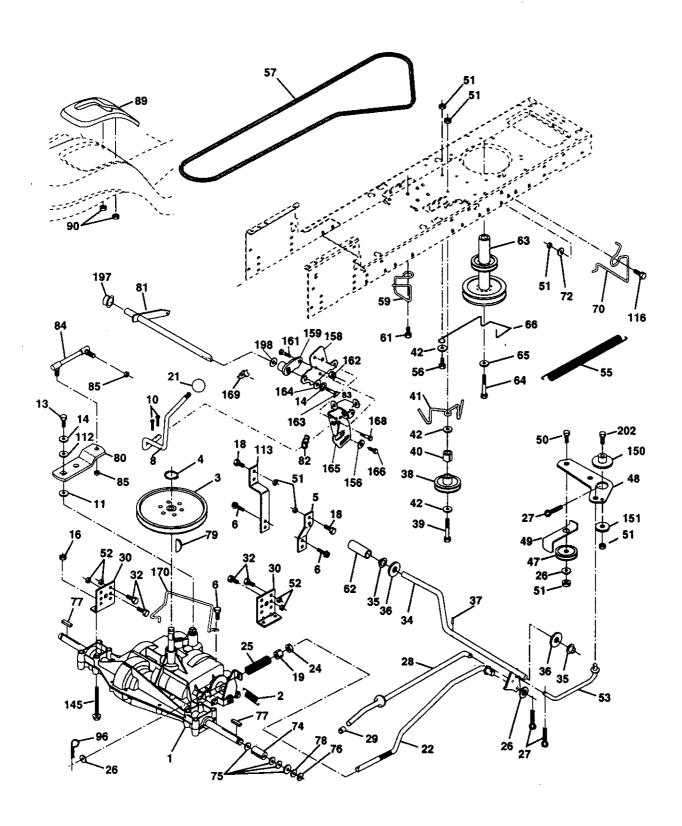
# TRACTOR -- MODEL NUMBER 917.270930 CHASSIS AND ENCLOSURES



### HASSIS AND ENCLOSURES

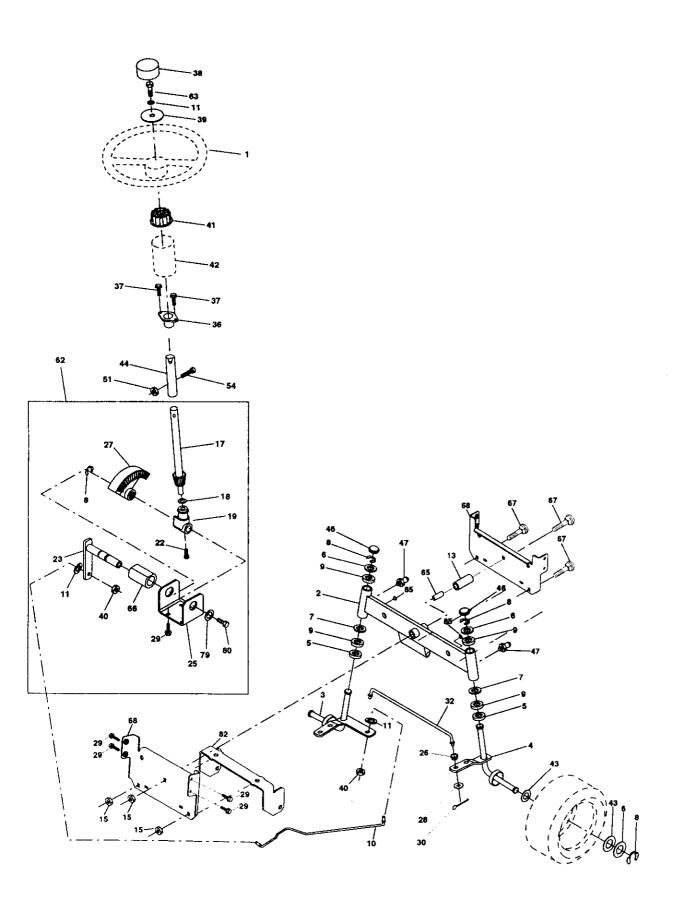
| KE<br>NO | Y PART<br>. NO.          | DESCRIPTION   |
|----------|--------------------------|---|
| 1        | 169830                   | Chassis Assembly  |
| 2        | 169061                   | Drawbar   |
| 3        | 17060612                 | Screw 3/8-16 x 3/4                                      |
| 5        | 155272                   | Bumper Hood/Dash  |
| 9        | 168337X013               | Dash  |
| 10       |                          | Bolt, Carriage 3/8-16 x 1                               |
| 11       | 155927                   | Panel, Dash, L.H.                                       |
| 12       | 145660                   | Clip Tinnerman Grille P/L                               |
| 13       | 172107X010               | Panel, Dash, R.H.                                       |
| 17       | 144983X558               | Hood Assembly   |
| 18       | 126938X                  | Bumper Hood   |
| 20       | 156437                   | Plate Mtg Battery Fuel Tank                             |
| 23       | 124028X                  | Bushing, Snap, Nylon, Fuel Line                         |
| 25       | 19131312                 | Washer 13/32 x 13/16 x 12 Gauge                         |
| 26<br>28 | STD541437                | Locknut, Hex, with Insert 3/8-16 Unc                    |
| 29       | 156725X558               | Grille/Lens Asm   |
| 30       | 155217X599<br>164918X558 | Lens, Grille  |
| 31       | 139976                   | Fend/Ftrest   |
| 37       | 17490508                 | Bracket, Fender Support                                 |
| 38       | 169834                   | Screw Thdrol 5/16-18 x 1/2                              |
| 51       | 73800400                 | Pivot Bracket Assembly, L.H.                            |
| 52       | 19091416                 | Nut Lock w/Insert 1/4-20 UNC Washer 9/32 x 7/8 x 16 Ga. |
| 53       | 145201                   | Bracket Grille Pickoff LH                               |
| 54       | 161464                   | Screw Hex Wshd 8-18 x 7/8                               |
| 55       |                          | Bracket Grille Pickoff RH                               |
| 57       |                          | Bolt, Fin Hex 1/4-20 UNC x .75                          |
| 58       | 140547                   | Air Duct P/L B&S  |
| 60       |                          | Bolt Rdhd Sqnk 3/8-16 UNC x 3/4                         |
|          | 154798                   | Dash Lower STLT   |
| 74       |                          | Nut Crownlock 3/8-16 UNC                                |
|          | 158112                   | Keeper Belt Rear Lh Stl                                 |
| 115      | 17060620                 | Screw 3/8-16 x 1-1/4                                    |
| 142      | 165867                   | Plate Reinforcement STLT                                |
| 143      | 154966                   | Bracket Swaybar Chassis                                 |
| 144      | 154207                   | Bracket Pnt Footrest STLT                               |
| 145      | 156524                   | Rod Pivot Chassis/Hood                                  |
| 206      | 170165                   | Bolt Shoulder 5/16-18 TT                                |
| 207      | 17670508                 | Screw Thdrol 5/16-18 x 1/2                              |
| 208      | 17670608                 | Screw Thdrol 3/8-16 x 1/2                               |
| 211      | 145212                   | Nut Hexflange Lock                                      |
| 212      | 165919                   | Insert Lens Reflective                                  |
|          | 5479J                    | Plug Button   |
|          |                          |   |

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



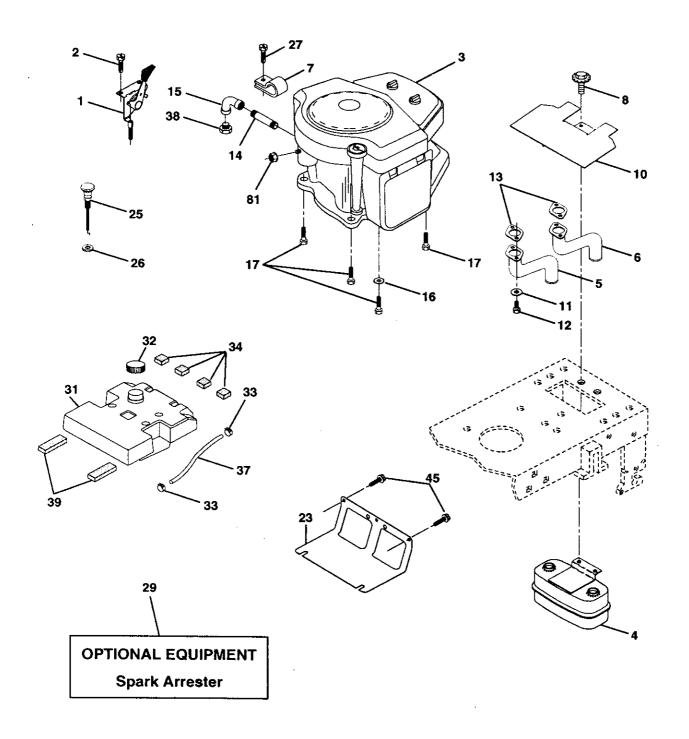
### **GROUND DRIVE**

|          | Y PART<br>D. NO.     | DESCRIPTION                                     | KEY PART<br>NO. NO.       | DESCRIPTION                             |
|----------|----------------------|---|---------------------------|---|
| 1        |                      | Transaxie (See Breakdown)                       |                           |   |
| •        |                      | Peerless 206-545C                               | 62 8883R<br>63 140186     | Cover, Pedal                            |
| 2        | 146682               | Spring, Return, Brake                           | 64 71170764               | Pulley, Engine                          |
| 3        | 123666X              | Pulley, Transaxle                               |                           | Bolt, Hex 7/16-20 x 4 Grade 5           |
| 4        | 12000028             | Ring, Retainer                                  | 65 STD551143<br>66 154778 | Washer                                  |
| 5        | 121520X              | Strap, Torque                                   | 66 154778<br>70 134683    | Keeper, Belt, Engine, Fool-Proof        |
| 6        | 17060512             | Screw 5/16-18 x 3/4                             | 72 19132012               | Guide, Mower Drive Belt, R.H.           |
| 8        | 165866               | Rod Shifter Fender STLT                         | 74 137057                 | Washer 13/32 x 1-1/4 x 12 Ga.           |
| 10       | STD561210            | Pin, Cotter                                     | 75 121749X                | Spacer, Axle                            |
| 11       | 105701X              | Washer, Shift Plate                             | 76 STD581075              | Washer 25/32 x 1-1/4 x 16 Ga.<br>E-Ring |
| 13       | 74550412             | Bolt 1/4-28 UNF W/Patch Gr. 8                   | 77 123583X                | Key, Square 2.0 x .1845/.1865           |
| 14       | 10040400             | Washer Lock Hvy Helical                         | 78 121748X                | Washer 25/32 x 1-5/8 x 16 Ga            |
| 16       | STD541431            | Nut Lock Hx W/Ins 5/16-18 Unc                   | 79 STD580025              | Key Woodruff                            |
| 18       | STD523710            | Bolt Fin Hex 3/8-16UNC x 1 Gr 5                 | 80 145090                 | Arm, Shift                              |
| 19       | STD541437            | Nut   | 81 165592                 | Shaft Asm Cross Tapered 650 20          |
| 21       | 106933X              | Knob  | 82 165711                 | Spring, Torsion                         |
| 22       | 130804               | Rod, Brake                                      | 83 19171216               | Washer 17/32 x 3/4 x 16 Ga.             |
| 24       | STD541237            | Nut   | 84 166231                 | Link Transaxle                          |
| 25       | 106888X              | Spring, Brake Rod                               | 85 150360                 | Nut, Nylock                             |
|          | STD551037            | Washer  | 89 158391X428             | Console, Shift, STLT                    |
| 27       | STD561210            | Pin   | 90 124346X                | Nut, Self-Thding, Wsh Hd 1/4            |
| 28       |                      | Rod, Parking Brake                              | 96 STD624003              | Retainer Spring 1"                      |
|          | 71673                | Cap, Parking Brake                              | 112 19091210              | Washer 9/32 x 3/4 x 10 Gauge            |
| 30       | 169592               | Bracket, Transaxle                              | 113 127285X               | Strap Torque 90 Degrees                 |
| 32       | STD523107            | Bolt  | 116 72110610              | Bolt Rdhd Sqneck 3/8-16 x 1.25          |
| 34<br>35 | 155071               | Shaft Assembly, Foot Pedal                      | 145 74490540              | Bolt, Hex Flghd 5/16-18 Gr. 5           |
| 36       | 120183X<br>STD551062 | Bearing, Nylon                                  | 150 165850                | Bushing Bellcrank Grd. Drive            |
| 37       |                      | Washer  | 151 19133210              | Washer 13/32 x 2 x 10 Ga.               |
| 38       | STD571810<br>131494  | Roll Pin  | 156 166002                | Washer Strted 5/16ID x 1.125            |
| 39       | STD523727            | Pulley, Idler, Flat                             | 158 165589                | Bracket Shift Mount                     |
|          | 4470J                | Bolt Spann Calls 205 - 50                       | 159 165494                | Hub Tapered Flange Shift Lt             |
| 41       | 165838               | Spacer, Split .395 x .59                        | 161 72140406              | Bolt Rdhd Sqnk 1/4-20 x 3/4 Gr.5        |
| 42       | 19131312             | Keeper, Belt, Idler                             | 162 73680400              | Nut Crownlock 1/4-20 Unc                |
| 47       | 127783               | Washer 13/32 x 13/16 x 12 Ga.                   | 163 74780416              | Bolt Hex Fin 1/4-20Unc x 1 Gr 5         |
| 48       | 154407               | Pulley, Idler, V-Groove, Plastic                | 164 19091010              | Washer 5/8 x .281 x 10 Ga               |
| 49       | 123205X              | Bellcrank Clutch Grnd Drv Stl<br>Retainer, Belt | 165 165623                | Bracket Pivot Lever                     |
| 50       | STD523715            | Bolt  | 166 166880                | Screw 5/16-18 x 5/8                     |
| 51       | STD541437            | Nut Crown Lock 3/8-16 UNC                       | 168 165492                | Bolt Shoulder 5/16-18 x .561            |
| 52       | STD541431            | Nut Crown Lock 5/16-18 UNC                      | 169 165580                | Plate Fastening Lt                      |
| 53       | 105710X              | Link, Clutch                                    | 170 165849                | Keeper Belt Transaxle Gear              |
| 55       | 105709X              | Spring, Clutch Return                           | 197 169613                | Nyliner Snap-In                         |
| 56       | STD523712            | Bolt Fin Hex 3/8-16 x 1-1/4                     | 198 169593                | Washer Nyliner                          |
| 57       | 130801               | V-Belt, Ground Drive                            | 202 72110612              | Bolt Carr. SH 3/8-16 x 1-1/2 Gr. 5      |
| 59       | 169691               | Keeper, Beit, Center Span                       | 204 17060516              | Screw 5/16-18 x 1 SMGML                 |
| 61       | 17060612             | Screw 3/8-16 x 3/4                              | NOTE: All compo           | enent dimensions given in U.S.          |
|          | <del></del>          |   | inches 1 inc              | on of A man                             |



#### **STEERING**

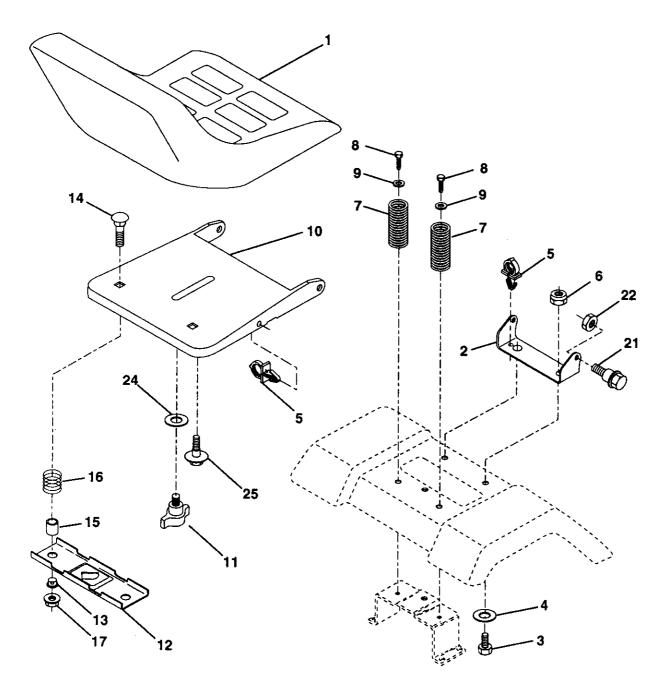
| KEY PART |                    | DEGODIETION                       |
|----------|--------------------|-----------------------------------|
| NC       | ). NO.             | DESCRIPTION                       |
| 1        | 139768             | Steering Wheel                    |
| 2        | 154427             | 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       | 136518             | Spacer, Bearing, Axle             |
| 15       | 145212             | Nut, Hexflange Lock               |
| 17       | 156546             | Shaft Assembly, Steering          |
| 18       | 57079              | Washer, Thrust .515 x .750 x .033 |
| 19       | 160395             | Support, Shaft                    |
| 22       | 165857             | Screw Hex Wshhd Torx              |
| 23<br>25 | 165851             | Pittman Shaft Assembly            |
| 25<br>26 | 154406             | Bracket, Steering                 |
| 27       | 126847X            | Bushing, Link, Drag               |
| 28       | 136874<br>19131416 | Gear, Sector                      |
| 29       | 17060612           | Washer 13/32 x 7/8 x 16 Gauge     |
| 30       | STD561210          | Screw 3/8-16 x 3/4<br>Pin         |
| 32       | 130465             |                                   |
| 36       | 155099             | Rod, Tie                          |
| 37       | 152927             | Bushing, Steering<br>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       | 121232X            | Cap, Spindle                      |
| 47       | 6855M              | Fitting, Grease                   |
| 51       | STD541431          | Nut Lock Hex w/lns. 5/16-18 UNC   |
| 54       | 74780520           | Bolt Fin Hex 5/16-18 UNC x 1-1/4  |
| 62       | 167902             | Kit Steering Asm Service          |
| 63       | STD523710          | Bolt, Fin Hex 3/8-16 UNC x 1 Gr 5 |
| 65       | 160367             | Spacer Axle                       |
| 66       | 154404             | Bearing Arm Pittman               |
| 67       | 72140618           | Bolt RDHD SQ 3/8-16 x 2-1/4       |
| 68       | 169827             | Axle, Brace                       |
|          | 19132012           | Washer 13/32 x 1-1/4 x 12 Ga      |
|          | 74950612           | Bolt Hex Nylon 3/8-16 x 3/4       |
| 82       | 169835             | Bracket Susp Chassis Front        |
|          | 133835             | Fastner Christmas Tree            |
|          |                    |                                   |



#### NGINE

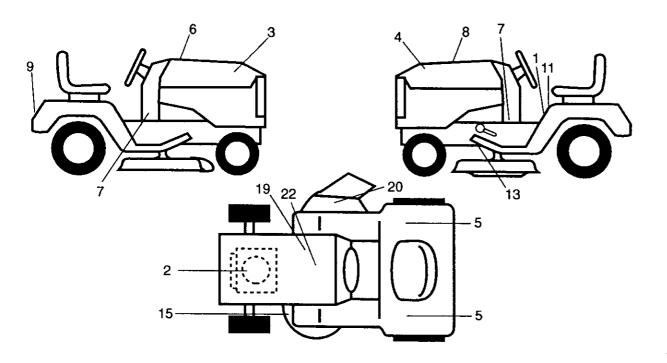
| KEY         |           |   |
|-------------|-----------|---|
| NO.         | NO.       | DESCRIPTION                                     |
| 1           | 162152    | Control, Throt Paddle 32 22                     |
| 2           | 17720410  | Screw, Hex Thd Cut 1/4-20 x 5/8                 |
| 2<br>3<br>4 |           | Engine, B&S, (See Breakdown) No. 461707-0145-E3 |
| 4           | 149723    | Muffler Exhaust                                 |
| 5<br>6<br>7 | 144069    | Exhaust Asm. Left                               |
| 6           | 144068    | Exhaust Asm. Right                              |
|             | 138129    | Clamp Tube Double Engine                        |
| 8           | 150176    | Bolt 5/16-18unc x 3/4 W/Sems                    |
|             | 145552    | Heat Shield Lt                                  |
|             | STD551125 | Washer Lock Hvy. Helical 1/4                    |
|             | STD522507 | Bolt Fin Hex 1/4-20Unc x .75                    |
|             | 165287    | Gasket, Muffler                                 |
|             | 13280336  | Nipple, Pipe 4-1/2                              |
|             | 13200300  | Elbow, Standard 90°, 3/8-18 NPT                 |
|             | STD551237 | Washer Lock Ext Tooth 3/8                       |
|             | 17490624  | Screw Thdrol 3/8-16x1-1/2 Tytt                  |
|             | 169837    | Shield, Brn/Dbr Guard                           |
|             | 145996    | Control Choke                                   |
|             | 73920600  | Nut Keps 3/8-24 Unf                             |
|             | 152927    | Screw TT #10-32 x 5 x 3/8 Flange                |
|             | 137180    | Arrestor, Spark                                 |
|             | 157103    | Tank, Fuel                                      |
|             | 161696    | Cap Fuel Guage                                  |
| 33          | 123487X   | Clamp, Hose                                     |
| 34          | 106082X   | Spacer Pad                                      |
| 37          | 8543R     | Line, Fuel                                      |
| 38          | 40000714  | Plug, Oil Drain (See Engine Breakdown)          |
| 39          | 109227X   | Pad Idler                                       |
|             | 17000612  | Screw Hexwsh Thdr 3/8-16 x 3/4                  |
| 81          | 73510400  | Nut Keps Hex 1/4-20 Unc                         |
|             |           |   |

#### **SEAT ASSEMBLY**



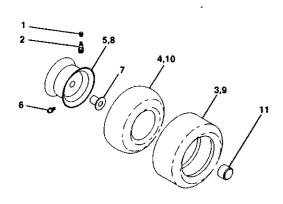
| KE<br>NO  | D. NO.  | DESCRIPTION  | KEY<br>NO.  | PART<br>NO. | DESCRIPTION  |
|---|---|--|---|-------------|--|
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12 | 140123<br>140551<br>71110616<br>19131610<br>145006<br>STD541437<br>124181X<br>17000616<br>19131614<br>155925<br>166369<br>121246X | Seat 3350 Blk/blk Craftsman Bracket Pnt Pivot Seat (blk ) Bolt Fin Hex 3/8-16unc X 1 Washer 13/32 X 3/4 X 10 Ga Clip Push In Hinged Nut Hex Lock w/ins 3/8-16 Unc Spring Seat Cprsn 2 250 Blk Zi Screw 3/8-16 x 1.5 SMGML Washer 13/32 X 1 X 14 Ga Pan Pnt Seat (blk ) Knob Seat Bracket Pnt Mounting Switch | 14 72<br>15 13<br>16 12<br>17 12<br>21 17<br>22 S<br>24 19<br>25 12 |             | 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/lns 5/16-18 Washer 17/32 X 1-3/16 X 12 Ga. Bolt Shoulder 5/16-18 X 62 ment dimensions given in U. S. nch = 25.4 mm |

### **DECALS**

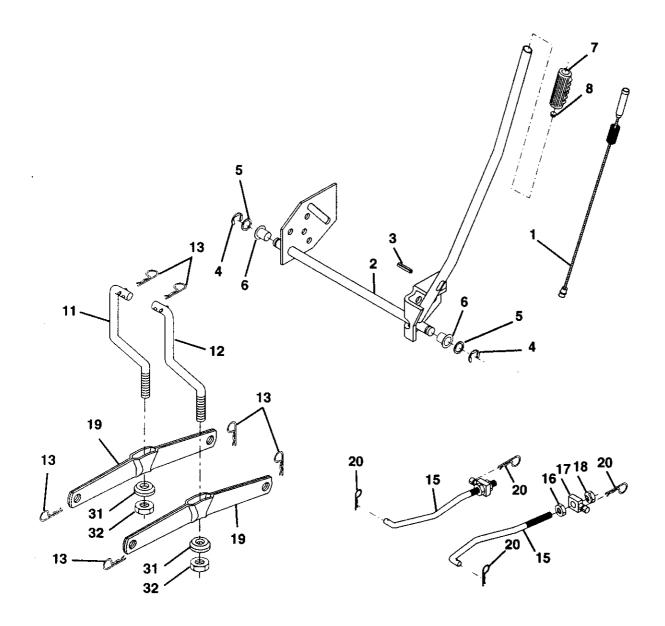


|    | Y PART<br>. NO.             | DESCRIPTION                      |     | / PART<br>NO. | DESCRIPTION                  |
|----|-----------------------------|----------------------------------|-----|---------------|------------------------------|
| 1  | 156439                      | Decal, Fender Danger Sears       | 13  | 146046        | Decal, V-Belt Dr Sch Tractor |
| 2  | 165407                      | Decal, Engine                    | 15  | 160396        | Decal, Mower Drive Schematic |
| 3  | 171696                      | Decal, Hood, R.H.                | 19  | 138047        | Decal, Battery Diehard Sears |
| 4  | 171 <del>6</del> 9 <b>7</b> | 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  | 163257                      | Decal, Panel Dash B&S            |     | 165800X428    | Pad Footrest LH STLT         |
| 8  | 171808                      | Decal, Rplcmnt                   |     | 165799X428    | Pad Footrest RH STLT         |
| 9  | 163204                      | Decal, Fender, Craftsman         |     | 174495        | Owner's Manual, English      |
| 11 | 156368                      | Decal, Fender STLT Oper Inst E/S | - • | 174496        | Owner's Manual, Spanish      |

### **WHEELS AND TIRES**



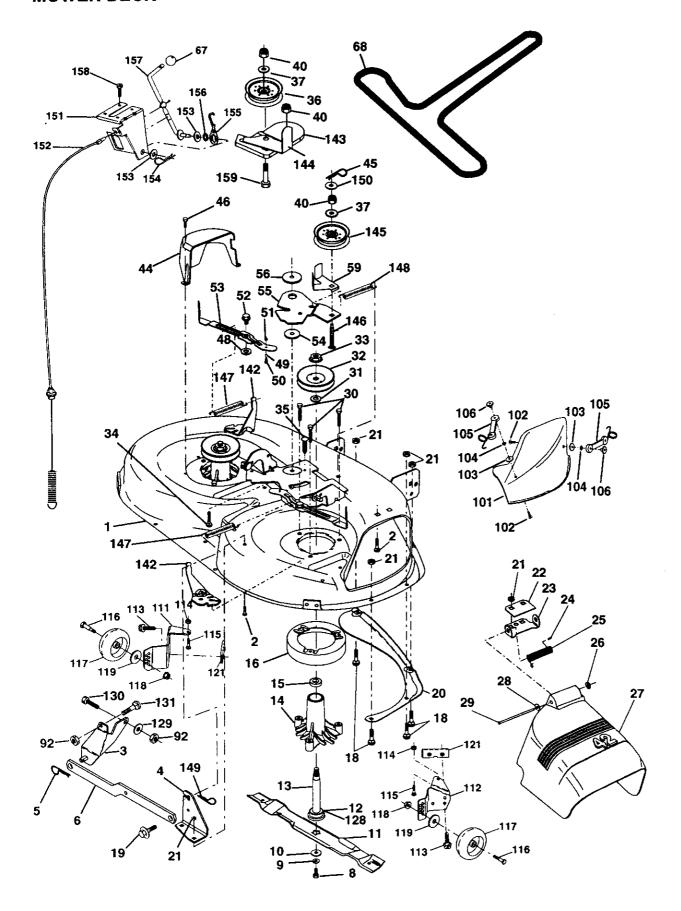
|   | Y PART     | DECORIDATION                 |  |  |
|---|------------|------------------------------|--|--|
| NO  | NO.        | DESCRIPTION                  |  |  |
| 1   | 59192      | Valve Cap, Tire              |  |  |
| 2   | 65139      | Stem, Valve                  |  |  |
| 3   | 106222X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



### JFT ASSEMBLY

| KEY | ' PART    |                                |
|-----|-----------|--------------------------------|
| NO. | NO.       | DESCRIPTION                    |
| 1   | 159460    | Lift Lever Inner Wire Assembly |
| 2   | 159471    | Shaft Assembly, Lift           |
| 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  | 173288    | Link, Front                    |
| 16  | 73350800  | Nut, Hex, Jam 1/2-13 UNC       |
| 17  | 130171    | Trunnion                       |
| 18  | 73800800  | Nut Lock w/Wsh 1/2-13 UNC      |
| 19  | 139868    | Arm, Suspension, Rear          |
| 20  | 163552    | Retainer Spring                |
| 31  | 169865    | Bearing, Pvt, Lift             |
| 32  | 73540600  | Nut, Crownlock 3/8-24          |
|     |           |                                |

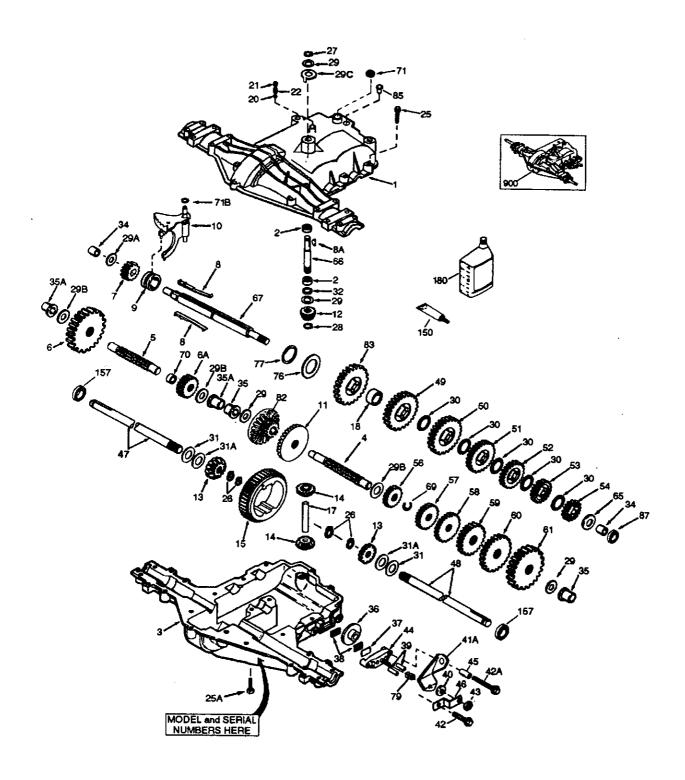
### **MOWER DECK**



### **MOWER DECK**

| KEY PART<br>NO. NO. | DESCRIPTION                     | KEY PART<br>NO. NO. | DECCRIPTION                                    |
|---------------------|---------------------------------|---------------------|--|
|                     |                                 |                     | DESCRIPTION                                    |
| 1 165892            | Mower Deck Assembly, 42"        | 67 149846           | Knob Custom Oval                               |
| 2 STD533107         | Bolt                            | 68 144959           | V-Belt   |
| 3 138017            | Bracket Assembly, Sway Bar,     | 92 STD541437        | Nut  |
|                     | Front                           | 101 136420          | Mulcher Cover                                  |
| 4 165460            | Bracket Sway Bar 38/42" Deck    | 102 71161010        | Screw  |
| 5 STD624008         |                                 | 103 19061216        | Washer #10                                     |
| 6 130832            | Arm, Suspension, Rear           | 104 STD551110       | Washer, Lock                                   |
| 8 850857            | Bolt, Hex 3/8-24 x 1.25 Gr. 8   | 105 160793          | Latch Assembly, Bagger                         |
| 9 STD551137         | Washer, Lock                    | 106 2029J           | Nut, Weld                                      |
| 10 140296           | Washer, Hardened                | 111 155197          | Bracket, Gauge, Wheel L.H.                     |
| 11 134149           | Blade, Mulching                 | 112 155198          | Bracket, Gauge, Wheel R.H.                     |
| 12 129895           | Bearing, Ball                   | 113 17060512        | Screw 5/16-18 x 3/4                            |
| 13 137645           | Shaft Assembly, Mandrel, Vented | 114 STD541431       | Nut, Hex, Keps 5/16-18 UNC                     |
|                     | (Includes Key Number 12)        | 115 72110504        | Bolt, Carriage 5/16 UNC x 1/2                  |
| 14 128774           | Housing, Mandrel, Vented        | 116 4898H           | Bolt, Shoulder                                 |
| 15 110485X          | Bearing, Ball, Mandrel          | 117 165746          | Wheel, Gauge                                   |
| 16 140329           | Stripper, Vented Mower Deck     | 118 73930600        | Nut, Centerlock 3/8-16                         |
| 18 72140505         | Bolt, Carriage 5/16-18 x 5/8    | 119 STD551037       | Washer 3/8 x 7/8 x 14 Gauge                    |
| 19 132827           | Bolt, Shoulder                  | 121 143723          | Bracket  |
| 20 159770           | Baffle, Vortex                  | 128 153390          | Washer Felt                                    |
| 21 STD541431        | Nut Crownlock 5/16-18 UNC       | 129 19131312        | Washer 13/32 x 13/16 x 12 Ga.                  |
| 22 134753           | Stiffener Bracket               | 130 STD523710       | Bolt, Fin Hex 3/8-16 UNC x 1                   |
| 23 131267           | Bracket, Deflector              |                     | Gr. 5  |
| 24 105304X          | Cap, Sleeve                     | 131 STD533710       | Bolt, Rdhd Sqnk 3/8-16UNC x 1                  |
| 25 123713X          | Spring, Torsion, Deflector      | 142 165890          | Am Spring Brake Mower                          |
| 26 110452X          | Nut, Push                       | 143 157109          | Bracket Arm Idler 42"                          |
| 27 130968X428       |                                 | 144 158634          | Keeper Belt 42" Clutch Cable                   |
| 28 19111016         | Washer 11/32 x 5/8 x 16 Ga.     | 145 165888          | Pulley Idler Flat                              |
| 29 131491           | Rod, Hinge                      | 146 165891          | Bolt Carriage Idler                            |
| 30 157722           | Screw Thdrol Washer Head        | 147 131335          | Spring Extension                               |
| 31 129963           | Washer, Spacer                  | 148 169022          | Spring Return Idler                            |
| 32 153535           | Pulley, Mandrel                 | 149 165898          | Retainer Spring Yellow Zinc                    |
| 33 137266           | Nut, Ťoplock, Flanged           | 150 19091216        | Washer 9/32 x 3/4 x 16 Ga.                     |
| 34 STD533717        | Bolt                            | 151 169670          | Bracket Clutch                                 |
| 35 133835           | Fastner, Christmas Tree         | 152 169676          | Cable Clutch 42 In                             |
| 36 131494           | Pulley, Idler, Flat             | 153 169674          | Washer Flat 3/8" Type B                        |
| 37 STD551037        | Washer 13/32 x 13/16 x 16       | 154 169675          | Spring Retainer                                |
|                     | Gauge                           | 155 169671          | Spring Retention Lever                         |
| 40 STD541437        | Nut Črownlock 3/8-16 UNC        | 156 169672          | Spacer   |
| 44 140088           | Guard, Mandrel, L.H.            | 157 169669          | Rod Clutch                                     |
| 45 STD624003        | Retainer                        | 158 17720410        | Screw Hex Thd Cut 1/4-20 x 5/8                 |
| 46 137729           | Screw, Thd. Roll 1/4-20 x 5/8   | 159 STD533717       | Bolt Rdhd Sqn 3/8-16Unc x 1-3/4                |
| 48 133944           | Washer, Hardened                | 130794              | Mandrel Assembly (Includes Key                 |
| 49 155066           | Roller Assembly, Cam Follower   |                     | Numbers 8-10, 12-15, 31 and 32)                |
| 50 131340           | Bolt, Shoulder #10-24 Grade 5   | 169583              | Mower Deck, Complete (Standard                 |
| 51 STD541410        | Locknut                         | <del></del>         | Deck, Order Separately Mulcher                 |
| 52 139888           | Bolt, Shoulder 5/16-18 UNC      |                     | Plate and Gauge Wheel                          |
| 53 131845           | Arm Assembly, Pad, Brake        |                     | Components, Key Nos. 101-106                   |
| 54 133943           | Washer, Hardened                |                     | and 111-121)                                   |
| 55 155046           | Arm, idler                      |                     |  |
| 56 165723           | Spacer, Retainer                | NOTE: All ocesses   | mont all manufactures in the 11 m              |
| 59 141043           | Guard, TUV Idler                | inches 1 in         | nent dimensions given in U.S.<br>nch = 25,4 mm |

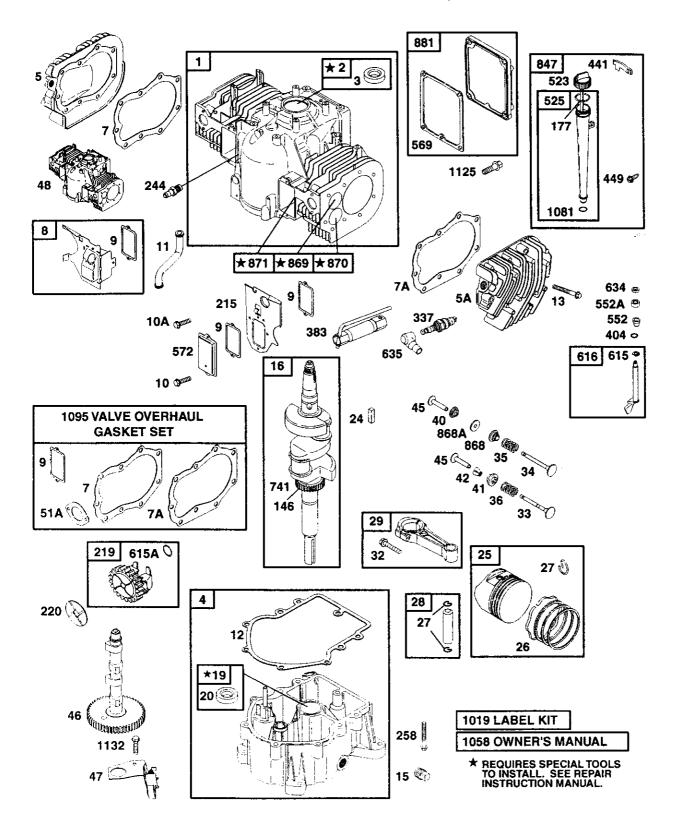
# TRACTOR -- MODEL NUMBER 917.270930 PEERLESS TRANSAXLE--MODEL NUMBER 206-545C



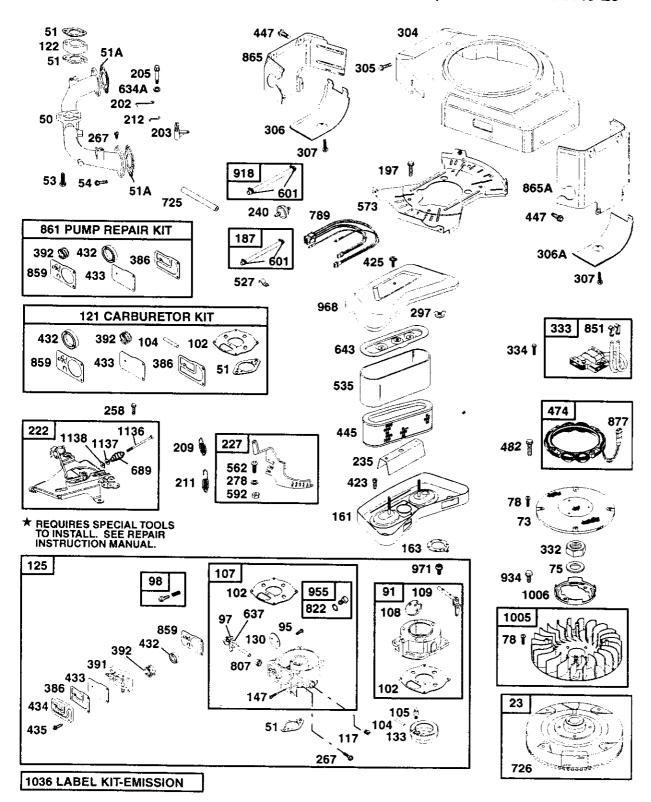
# TRACTOR -- MODEL NUMBER 917.270930 'EERLESS TRANSAXLE--MODEL NUMBER 206-545C

|            | PART<br>NO.       | DESCRIPTION                                 |           | PART<br>NO.        | DESCRIPTION                                       |
|------------|-------------------|---|-----------|--------------------|---|
|            | 772147            | Transaxle Cover                             | 39        | 786026             | Dowel Pin   |
|            | 780086A<br>770128 | Needle Bearing 5/8"                         | 40        | 792076A            | Flat Washer                                       |
|            | 776395            | Transaxle Case<br>Countershaft              | 41 A      | 790079             | .312 ID x .059W                                   |
|            | 776409            | Output Shaft                                | 42        | 792073A            | Brake Lever<br>Screw 1/4 - 20 x 1-1 /4"           |
|            | 778364            | Spur Gear (38 teeth)                        | 42A       |                    | Screw 1/4 - 20 x 1-1/4<br>Screw 1/4 - 20 x 2 1/4" |
| Α          | 778369            | Spur Gear (15 teeth)                        | 43        | 792075             | Locknut 5 / 16 - 24                               |
|            | 778330            | Spur Gear (11 teeth)                        | 44        | 790025             | Brake Pad Holder                                  |
|            | 792180            | Shift Key                                   | 45        | 786066             | Spacer .2625 x 1.0                                |
| Α          | 792047            | Woodruff Key #9                             | 46        | 786086             | Brake Lever Bracket                               |
| 0          | 784352<br>784378  | Shift Collar                                | 47        | 774690             | Axle (11-15 / 16" Long)                           |
| 1          | 778334            | Shift Rod & Fork Bevel Gear (30 teeth)      | 48        | 774691             | Axle (16 - 1 / 2" long)                           |
| 2          | 778309            | Input Bevel Pinion (13 teeth)               | 49<br>50  | 778356<br>778338   | Spur Gear (29 teeth)                              |
| 3          | 778368            | Bevel Gear (13 teeth)                       | 51        | 778354             | Spur Gear (27 teeth)<br>Spur Gear (23 teeth)      |
|            |                   | (Include, 14)                               | 52        | 778352             | Spur Gear (19 teeth)                              |
| 4          | 778368            | Bevel Pinion (13 teeth)                     | 53        | 778350             | Spur Gear (16 teeth)                              |
| _          |                   | (Include, 13)                               | 54        | 778346             | Spur Gear (15 teeth)                              |
| 5          | 778370            | Ring Gear (43 teeth)                        | 56        | 778355             | Spur Gear (11 teeth)                              |
| 7          | 786188            | Drive Pin                                   | 57        | 778337             | Spur Gear (13 teeth)                              |
| 8<br>0     | 786102<br>792077A | Spacer 1.130 X .695                         | 58        | 778353             | Spur Gear (17 teeth)                              |
| 1          | 792077A           | Ball 5/16" dia<br>Set Screw 3/8 - 16 x 3/8" | 59<br>60  | 778351             | Spur Gear (21 teeth)                              |
| 2          | 792079            | Spring .310 OD x .625 L                     | 61        | 778349<br>778345   | Spur Gear (24 teeth)                              |
| 5          | 792073A           | Screw 1/4 - 20 x 1-1/4"                     | 65        | 780189             | Spur Gear (25 teeth)<br>Flat Washer               |
| 5 <b>A</b> | 792177            | Screw 1/4-20 x 1-3/8"                       | •         | 700100             | .563 ID x .062W                                   |
| 6          | 792125            | Retaining Ring (pkg of 2)                   | 66        | 776422             | Input Shaft                                       |
| 7          | 792035            | Retaining Ring                              | 67        | 776396             | Shifter & Brake Shaft                             |
| 8          | 788040            | Retaining Ring                              | 69        | 792170             | Retaining Ring                                    |
| 9          | 780072            | Thrust Washer                               | 70        | 786187             | Spacer .890                                       |
| 9 <b>A</b> | 780160            | .627 ID x .031W<br>Thrust Washer            | 71<br>710 | 788069             | Square Cut Ring                                   |
| 977        | 700100            | .762 ID x .031W                             | 715<br>76 | 788092<br>780090   | "O" Ring  |
| 9B         | 780051            | Thrust Washer                               | 70        | 700090             | Flat Washer<br>1.128 ID x .058W                   |
|            |                   | .762 ID x .031W                             | 77        | 788078A            | Inverted Retaining Ring                           |
| 3C         | 780199            | Anti-Rotation Washer .632                   | 79        | 792144             | Spring .430 OD x .5000 L                          |
| )          | 780108            | Cup Washer                                  | 82        | 778333             | Bevel & Spur Gear (30 & 13                        |
|            | 700004            | 1.127 ID x .032W                            |           |                    | teeth)  |
| 1          | 780001            | Flat Washer                                 | 83        | 778338             | Spur Gear (27 teeth)                              |
|            |                   | .750 ID x .056W                             | 85        | 792154             | Oil Fill Plug                                     |
| 1 Δ        | 780195            | (Use As Needed)<br>Flat Washer              | 87        | 788089A            | Oil Seal 9 / 16"                                  |
| 173        | 700100            | .750 ID x .062W                             |           | 788093A            | Liquid Gasket RTV Silicone                        |
| 2          | 788083            | Oil Seal 5/8"                               |           | 788088A<br>730229A | Oil Seal 3 /4"<br>Gear Oil 80W90                  |
| ‡          | 780194            | Bushing .563                                |           | 794712             | Replacement MST                                   |
| 5          | 780193            | Flanged Bushing 5 / 8" ID                   |           |                    | 206-545C Transaxle                                |
|            | 780197            | Flanged Bushing .751                        |           |                    |   |
| 3          | 790075            | Brake Disk                                  | NOT       | E: All comp        | onent dimensions given in                         |
| 7          | 790007            | Brake Pad Plate                             |           | U.S. ind           | ches 1 inch = 25.4 mm                             |
| 3          | 799021            | Brake Pad (pkg of 2)                        |           |                    |   |

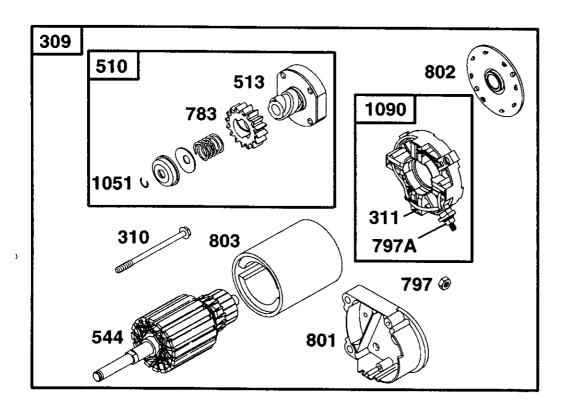
## TRACTOR -- MODEL NUMBER 917.270930 BRIGGS & STRATTON ENGINE-MODEL NUMBER 461707, TYPE NUMBER 0145-E3

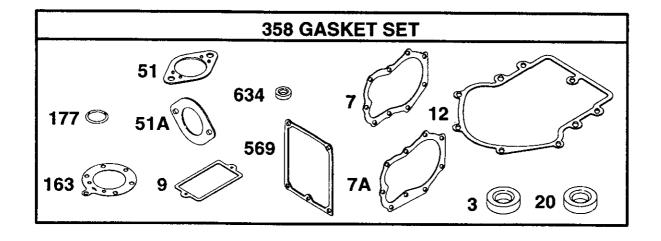


## TRACTOR -- MODEL NUMBER 917.270930 BRIGGS & STRATTON ENGINE-MODEL NUMBER 461707, TYPE NUMBER 0145-E3



## TRACTOR -- MODEL NUMBER 917.270930 BRIGGS & STRATTON ENGINE-MODEL NUMBER 461707, TYPE NUMBER 0145-E3





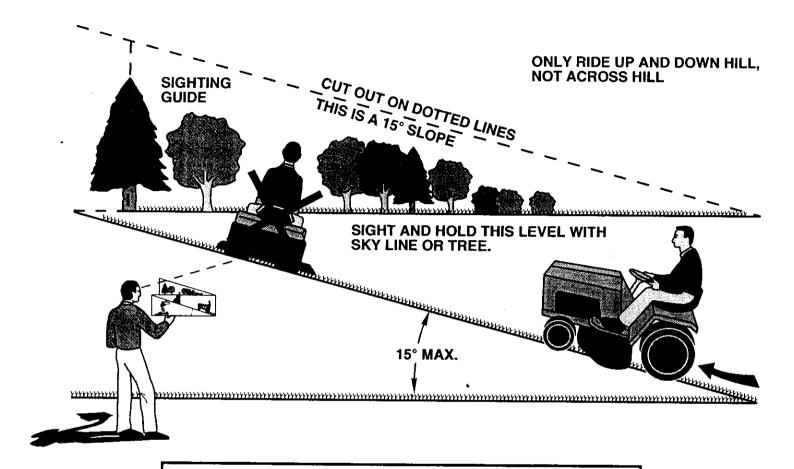
### 3RIGGS & STRATTON ENGINE-MODEL NUMBER 461707, TYPE NUMBER 0145-E3

| EY PART  | DESCRIPTION   | KEY PART<br>NO. NO.  | DESCRIPTION   |
|--|---|--|---|
| 1 498583<br>2 399265<br>3 391086<br>1 493304<br>5 691162<br>A 691163<br>7 271868<br>3 495754<br>9 27803<br>0 690334<br>0 690366<br>1 280225<br>2 273390<br>271188<br>271189<br>3 94565<br>9 4239<br>6 690666<br>9 399264 | Bushing/Seal Kit  ★ Seal-Oil Sump-Engine Head-Cylinder #1 Head-Cylinder #2  ★ Gasket-Cylinder Head #1  ★ Gasket-Cylinder Head #2 Breather Assembly (Cylinder #1)  ★ Gasket-Breather Screw (Breather Assembly) Screw (Breather Cover) Tube-Breather  ★ Gasket-Crankcase (.015" Thick, Std.)  ★ Gasket-Crankcase (.009" Thick)  Screw (Cylinder Head) Plug-Oil Drain Crankshaft | 95 690718<br>97 693485<br>98 807923<br>102 693509<br>104 693506<br>105 692078<br>107 693482<br>108 693505<br>109 693498<br>117 693538<br>693500<br>121 491539<br>122 281411<br>125 693479<br>130 693504<br>133 693512<br>146 94196<br>147 693508<br>161 691401<br>163 271411 ★<br>177 271170 ★<br>187 499167 | Screw (Throttle Valve) Shaft-Throttle Kit-Idle Speed Gasket-Carburetor Body Pin-Float Hinge Valve-Float Needle Body Assembly-Lower Valve-Choke Shaft-Choke Jet-Main Jet-Main (High Altitude) Carburetor Kit Spacer Carburetor Valve-Throttle Float-Carburetor Key-Timing Jet-Pilot Base-Air Cleaner Gasket-Air Cleaner Seal-O-Ring Line-Fuel (Cut to Required Length) |
| 0 291675<br>3 491180<br>4 222698<br>5 499180<br>499181<br>499182<br>499183   | ★ Seal-Oil<br>Flywheel<br>Key-Flywheel<br>Piston Assembly (Standard)<br>Piston Assembly (.010<br>"O.S.)<br>Piston Assembly (.020"<br>O.S.)<br>Piston Assembly (.030"<br>O.S.)   | 197 690364<br>202 690570<br>203 280997<br>205 690322<br>209 691273<br>211 261563<br>212 693985<br>215 690481<br>219 394348<br>220 690412   | Screw (Back Plate) Link-Mechanical Governor Crank-Bell Screw (Bell Crank) Spring-Governor Spring-Governor Link-Throttle Guide-Air Gear-Governor Washer-Thrust (Governor   |
| 6 499184<br>499284<br>499186<br>499187<br>7 691299<br>3 498319<br>3 498320<br>9 498541<br>9 498541<br>2 691133<br>3 390420   | Ring Set, Piston (.010 "O.S.) Ring Set, Piston (.020 "O.S.) Ring Set, Piston (.030 "O.S.) Lock-Piston Pin Pin Assembly, Piston (Std.) Pin Assembly-Piston (.005" O.S.) Rod-Connecting (Standard) Rod-Connecting (.020 U.S.) Screw (Connecting Rod) Valve-Exhaust (Include(s):   | 222 491282<br>227 491297<br>235 224995<br>240 394358<br>244 230318<br>258 94930<br>267 690316<br>278 691366<br>297 94289<br>304 691390<br>305 690960   | Gear) Bracket-Control Lever-Governor Shield-Fuel Spray Filter-Fuel Connector-Hose (Pulse Line) Screw (Engine Sump) Screw (Casing Clamp) Washer (Governor Lever) Nut-Wing (Air Filter Retainer) Housing-Blower Screw (Blower Housing)  |
| \$ 691302<br>5 65906<br>5 26828<br>0 221596<br>1 292260<br>2 494553<br>5 261368<br>5 691161<br>7 393415<br>3 498542<br>0 213290<br>1 271412<br>1A 270884<br>3 690321<br>1 93208<br>3 691438<br>5 225137<br>6 693483      | Short Block<br>Manifold-Intake  | 306 6904141 306A690435  RPM Settings:  | Shield-Cylinder Shield-Cylinder Low Speed: 1900-2100 High Speed: 3000-320 sket Set, Ref Number358. buretor Kit, Ref Number 121. ue Overhaul Kit, Ref Number I Pump Kit, Ref Number 861 onent dimensions given in U.S.   |

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

| 14534      |                  |          | TOTAL ENGINE MODEL NO                               |            |                   | 11 E NOMBEN 0143-E3                  |
|------------|------------------|----------|---|------------|-------------------|--------------------------------------|
| KEY<br>NO. | PART<br>NO.      |          | DESCRIPTION   | KEY<br>NO. | PART<br>NO.       | DESCRIPTION                          |
| 307        | 94930            |          | Screw (Cylinder Shield)                             | 797A       | 693167            | Nut (Starter Terminal)               |
| 309        | 497596           |          | Motor-Starter                                       | 801        | 394860            | Cap-Drive                            |
| 310        | 690323           |          | Bolt (Starter Motor)                                | 802        | 497607            | Cap-End                              |
| 311        | 497608           |          | Brush Set   | 803        | 691427            | Housing-Starter                      |
| 332        | 230674           |          | Nut (Flywheel)                                      | 807        | 693511            | Spacer                               |
| 333        | 394891           |          | Armature-Magneto                                    | 822        | 693497            | Washer-Seal                          |
| 334        | 94731            |          | Screw (Magneto Armature)                            |            |                   | (Throttle Shaft)                     |
| 337        | 802592           |          | Plug-Spark  | 847        | 495715            | Dipstick/Tube Assembly               |
| 358        | 495868           |          | Gasket Set  | 851        | 493880            | Terminal-Cable                       |
| 383        | 89838            |          | Wrench-Spark Plug                                   | 859        | 693488 ●+         | - Diaphragm-Fuel Pump                |
| 386        | 693490           | •+       | Gasket-Pump   | 861        | 693502            | Kit-Fuel Pump                        |
| 391        | 693487           | _        | Body-Pump   | 865        | 691196            | Cover-Air Guide                      |
| 392        | 693491           | •+       | Spring-Pump Diaphragm                               | 865A       | 691197            | Cover-Air Guide                      |
| 404        | 690442           |          | Washer (Governor Crank)                             | 868        | 497656            | Seal-Valve                           |
| 423        | 691100           |          | Screw (Air Cleaner Base)                            | 868A       | 273312            | Seal-Valve                           |
| 425        | 94823            | _        | Screw (Air Cleaner Cover)                           | 869        | 261463            | Seat-Valve (Intake)                  |
| 432        | 693492           | +        | Cap-Spring  | 870        | 262924            | Seat-Valve (Exhaust)                 |
| 433        | 693489           | <b>+</b> | Diaphragm-Fuel Pump                                 | 871        | 261961            | Bushing-Guide (Exhaust)              |
| 434        | 693493           |          | Cover-Diaphragm                                     |            | 231218            | Bushing-Guide (Intake)               |
| 435<br>441 | 693494           |          | Screw (Diaphragm Cover)                             | 877        | 393456            | Wire-Afternator                      |
| 441<br>445 | 691176           |          | Bracket-Oil Fill                                    | 881        | 495901            | Plate-Cover                          |
| 445<br>447 | 394019<br>690297 |          | Filter-Air  | 918        | 393815            | Hose-Vacuum                          |
| 449        | 94882            |          | Screw (Air Guide Cover)<br>Screw (Oil Fill Bracket) |            |                   | (Cylinder-To-Impulse Pump)           |
| 474        | 393474           |          | Alternator  | 934        | 94627             | (Cut to Required Length)             |
| 482        | 93621            |          | Screw (Alternator)                                  | 955        | 693513            | Screw (Fan Retainer)                 |
| 510        | 497606           |          | Drive-Starter                                       | 968        | 691207            | Plug-Carburetor<br>Cover-Air Cleaner |
| 513        | 398003           |          | Clutch-Drive  | 971        | 690720            |                                      |
| 523        | 691385           |          | Dipstick  | 371        | 090720            | Screw (Upper Body<br>To Lower Body)  |
| 525        | 690823           |          | Tube-Oil Fill                                       | 1005       | 498157            | Fan-Flywheel                         |
| 527        | 690423           |          | Clamp-Tube  | 1006       | 691247            | Retainer-Fan                         |
| 535        | 272490           |          | Filter-Air  | 1019       | 496726            | Label Kit                            |
| 544        | 497603           |          | Armature-Starter                                    | 1036       | 694979            | Label Kit-Emission                   |
| 552        | 690553           |          | Bushing (Governor Crank)                            | 1051       | 263080            | Ring-Retaining                       |
| 552A       |                  |          | Bushing (Governor Crank)                            | 1058       | 273688            | Owner's Manual                       |
| 562        | 690311           |          | Bolt-Carriage                                       | 1081       |                   | Seal-O-Ring                          |
|            |                  |          | (Governor Lever)                                    | 1090       | 497605            | Retainer-Brush                       |
| 569        | 272645           | *        | Gasket-Base   | 1095       | 498047            | Gasket Set-Valve Overhaul            |
| 572        | 690415           |          | Cover-Breather                                      | 1125       | 691104            | Screw (Cover Plate)                  |
|            |                  |          | (Cylinder #2)                                       | 1132       | 690353            | Screw (Oil Slinger)                  |
| 573        | 690764           |          | Plate-Back  | 1136       | 690329            | Screw `                              |
| 592        | 92278            |          | Nut (Governor Lever)                                |            |                   | (Governor, Control Rod)              |
| 601        | 95162            |          | Clamp-Hose  | 1137       | 690390            | Washer                               |
| 615        | 690328           |          | Retainer (Governor Crank)                           |            |                   | (Governor, Control Rod)              |
| 615A       |                  |          | Retainer-Governor Shaft                             | 1138       | 690330            | Nut                                  |
| 616        | 491530           |          | Crank-Governor                                      |            |                   | (Governor, Control Rod)              |
| 634        | 690657           | ×        | Seal-Governor Shaft                                 |            |                   |                                      |
| 634A       | 271013           |          | Washer-Foam   |            | 445777-002        | 7-E1 Replacement Engine              |
| 635<br>637 | 66538            |          | Boot-Spark Plug                                     | DO114      |                   |                                      |
| 643        | 693510           |          | Washer-Seal   | HPM S      | Settings:         | Low Speed: 1900-2100                 |
| 689        | 496700           |          | Retainer-Air Filter                                 |            |                   | High Speed: 3000-320                 |
| 697        | 690555<br>93585  |          | Spring-Friction                                     |            | Township of the A |                                      |
| 725        |                  |          | Screw (Drive Cap)                                   | *          |                   | Basket Set, Ref Number               |
| 725<br>726 | 280866           |          | Shield-Heat   | _          | 358.              |                                      |
| 741        | 391362<br>691285 |          | Gear-Ring   | •          |                   | Carburetor Kit, Ref Number           |
| 783        | 693059           |          | Gear-Startor  | •          | 121.              | Johns Overhaul VIII D-4              |
| 789        | 695050           |          | Gear-Starter Wiring Harness                         | ▼          |                   | /alue Overhaul Kit, Ref              |
| 797        | 94010            |          | Nut (Starter Terminal)                              |            | Number 109        |                                      |
|            | U-1010           |          | rad (Starter remillar)                              | +          |                   | uel Pump Kit, Ref Number             |
|            |                  |          |   |            | 861               |                                      |

### 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.

## Get it fixed, at your home or ours!

For repair of major brand appliances in your own home... no matter who made it, no matter who sold it!

**1-800-4-MY-HOME** SM Anytime, day or night (1-800-469-4663)

www.sears.com

To bring in products such as vacuums, lawn equipment and electronics for repair, call for the location of your nearest Sears Parts & Repair Center.

1-800-488-1222 Anytime, day or night

www.sears.com

For the replacement parts, accessories and owner's manuals that you need to do-it-yourself, call **Sears PartsDirect** SM!

**1-800-366-PART** 6 a.m. – 11 p.m. CST, (1-800-366-7278) 7 days a week

www.sears.com/partsdirect

To purchase or inquire about a Sears Service Agreement:

1-800-827-6655

7 a.m. - 5 p.m. CST, Mon. - Sat.

Para pedir servicio de reparación a domicilio, y para ordenar piezas con entrega a domicilio:

1-888-SU-HOGAR <sup>sм</sup>

(1-888-784-6427)

Au Canada pour service en français: 1-877-LE-FOYER <sup>SM</sup> (1-877-533-6937)



© Sears, Roebuck and Co.

® Registered Trademark / ™ Trademark of Sears, Roebuck and Co.
 ® Marca Registrada / ™ Marca de Fábrica de Sears, Roebuck and Co.