### Owner's Manual

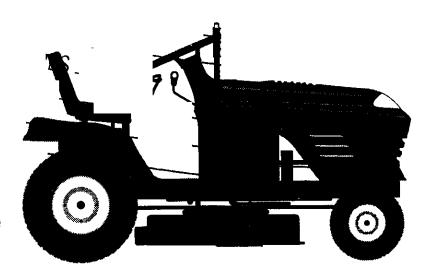
# CRAFTSMAN°

19.0 HP
ELECTRIC START
42" MOWER
6 SPEED TRANSAXLE
LAWN TRACTOR

Model No **917.27077**1



- Safety
- Assembly
- Operation
- Maintenance
- Repair Parts





### **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

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#### WARRANTY

### LIMITED TWO YEAR WARRANTY ON CRAFTSMAN RIDING EQUIPMENT

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.

This Warranty does not cover:

- Expendable items which become worn during normal use, such as blades, spark plugs, air cleaners, belts, etc.
- Tire replacement or repair caused by punctures from outside objects, such as nails, thorns, stumps, or glass.
- Repairs necessary because of operator abuse, negligence, improper storage or accident or the failure to maintain the equipment according to the instructions contained in the owner's manual.
- 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. In-home warranty service on your Craftsman riding equipment is available at no charge for 30 days from the date of purchase. Please contact your nearest service center. After 30 days from the date of purchase, warranty service is available by taking your Craftsman riding equipment to your nearest Sears Service Center. (In-home warranty service will still be available after 30 days from the date of purchase but a standard trip charge will apply). This warranty applies only while this product is in the United States. This Warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

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### SAFETY RULES

#### **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.

#### SAFETY RULES

- 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.

#### **SLOPE OPERATION**

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

#### DO:

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

#### DO NOT:

- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.
- Do not mow near drop-offs, ditches, or embankments. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.
- Do not mow on wet grass. Reduced traction could cause sliding.

- Do not try to stabilize the machine by putting your foot on the ground.
- Do not use grass catcher on steep slopes.

#### CHILDREN

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

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

#### SERVICE

- Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.
  - Use only an approved container.
  - Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling. Do not smoke.
  - Never refuel the machine indoors.
  - Never store the machine or fuel container inside where there is an open flame, such as a water heater.
- Never run a machine inside a closed area.
- Keep nuts and bolts, especially blade attachment bolts, tight and keep equipment in good condition.
- Never tamper with safety devices.
   Check their proper operation regularly.
- Keep machine free of grass, leaves, or other debris build-up. Clean oil or fuei spillage. Allow machine to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.

### SAFETY RULES

- 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.
- 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.

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.

- 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.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.

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

	400
HORSEPOWER:	19.0
GASOLINE CAPACITY AND TYPE:	3.5 GALLONS UNLEADED REGULAR
OIL TYPE (API-SF/SG/SH):	SAE 30 (above 32°F) SAE 5W-30 (below 32°F)
OIL CAPACITY:	W/ FILTER: 3.5 PINTS W/O FILTER: 3.0 PINTS
SPARK PLUG: (GAP: .030")	Champion RJ19LM OR J19LM
VALVE CLEARANCE:	INTAKE: .004"006" EXHAUST: .007"009"
GROUND SPEED (MPH):	FORWARD:  1ST 1.2  2ND 1.5  3RD 2.4  4TH 3.5  5TH 4.8  6TH 5.4  REVERSE: 1.5
TIRE PRESSURE:	FRONT: 14 PSI REAR: 10 PSI
CHARGING SYSTEM:	3 AMPS BATTERY 5 AMPS HEADLIGHTS
BATTERY:	AMP/HR: 30 MIN. CCA: 240 CASE SIZE: U1R
BLADE BOLT TORQUE:	27–35 FT. LBS.

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

Should you experience any problem you cannot easily remedy, please contact your nearest Sears Authorized Service Center. We have competent, well-trained technicians and the proper tools to service or repair this tractor.

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

#### MAINTENANCE AGREEMENT

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

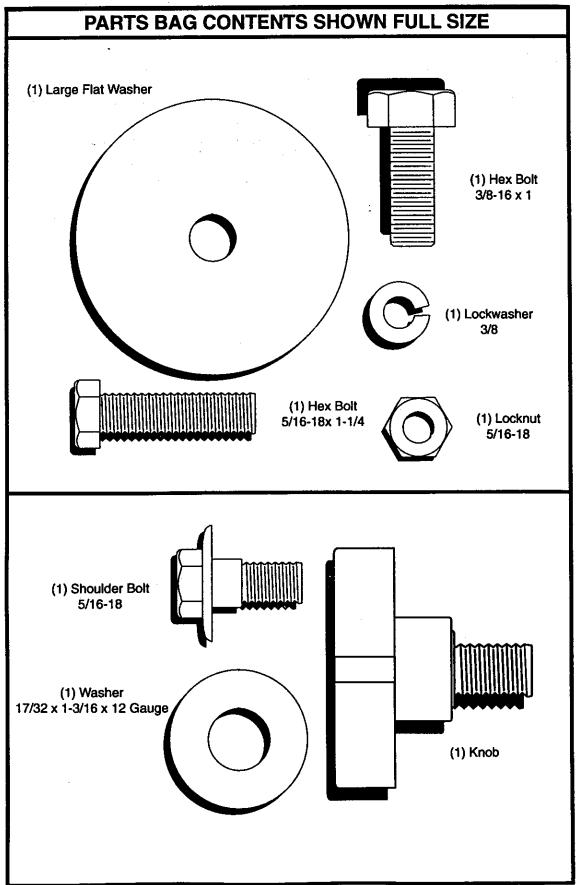
#### **CUSTOMER RESPONSIBILITIES**

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

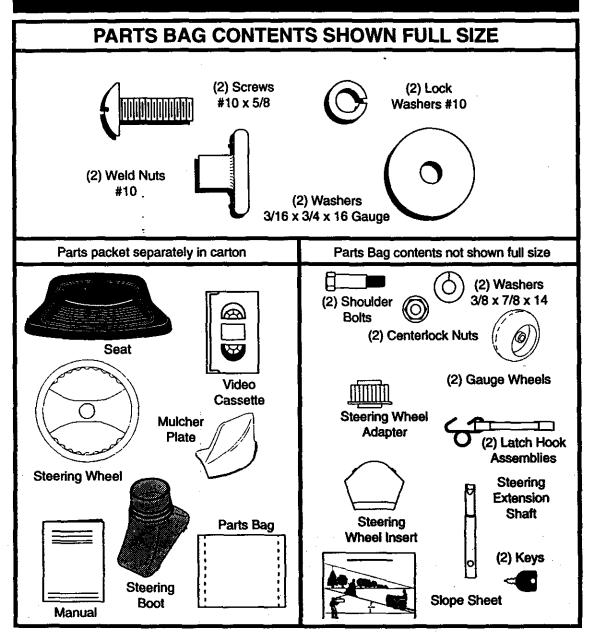
AWARNING: This tractor is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester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

In the state of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest Sears Authorized Service Center (See REPAIR PARTS section of this manual).

## **CONTENTS OF HARDWARE PACK**



### **CONTENTS OF HARDWARE PACK**



#### **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) Phillips Screwdriver
- (1) Pliers
- (1) Tire pressure
- (1) Utility knife
- gauge

(1) 3/4" Socket with drive ratchet 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 (See page 6).
- 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 ROLLING TRACTOR OFF 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.

**IMPORTANT:** Tighten bolt and nut securely to 18-22 ft. lbs. torque.

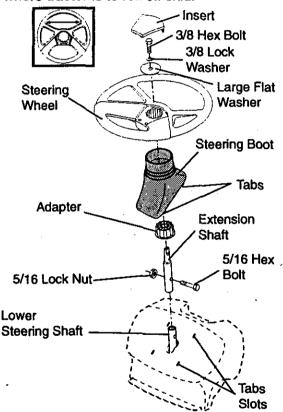
 Place tabs of steering boot over tab slots in dash and push down to secure.

#### **INSTALL STEERING WHEEL**

- Position front wheels of the tractor so they are pointing straight forward.
- Slide steering wheel 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.

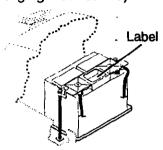


#### TO ROLL TRACTOR OFF SKID (See Operation section for location and function of controls)

- 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.

## HOW TO SET UP YOUR TRACTOR CONNECT BATTERY

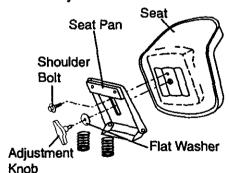
- · Lift hood to raised position.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps. (See "BATTERY" in MAINTENANCE section of this manual for charging instructions).



#### **INSTALL SEAT**

Adjust seat before tightening adjustment knob.

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



## ASSEMBLE GAUGE WHEELS TO MOWER DECK

The gauge wheels are designed to keep the mower deck in proper position when operating mower. Be sure they are properly adjusted to ensure optimum mower performance.

- Assemble 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.

Gauge Wheel Mounting
Bracket

3/8-16
Locknut
Shoulder Bolt

#### **INSTALL MULCHER PLATE**

3/8 Washer

 Install two latch hooks to mulcher plate using screw, washer, lock washer, and weld nut as shown.

Gauge Wheel

NOTE: Pre-assemble weld nut to latch hook by inserting weld nut from the top with hook pointing down.

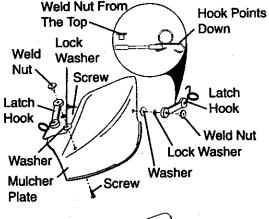
- · Tighten hardware securely.
- Raise and hold deflector shield in upright position.
- Place front of mulcher plate over front of mower deck opening and slide into place, as shown.
- Hook front latch into hole on front of mower deck.
- Hook rear latch into hole on back of mower deck.

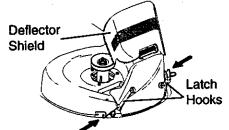
**ACAUTION:** Do not remove discharge guard from mower. Raise and hold guard when attaching mulcher plate and allow it to rest on plate while in operation.

## 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**

## PLEASE REVIEW THE FOLLOWING CHECKLIST:

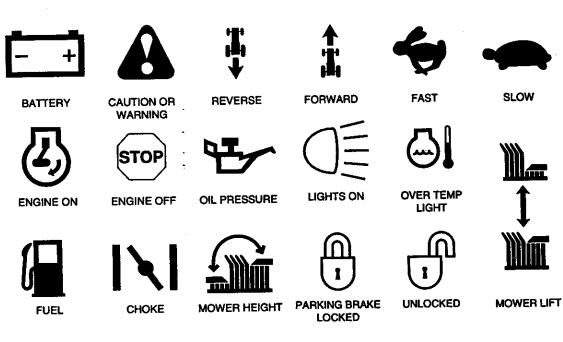
- ✓ All assembly instructions have been completed.
- ✓ No remaining loose parts in carton.
- ✓ Battery is properly prepared and charged. (Minimum 1 hour at 6 amps).
- ✓ Seat is adjusted comfortably and tightened securely.
- All tires are properly inflated. (For shipping purposes, the tires were overinflated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

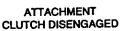
These symbols may appear on your tractor or in literature supplied with the product. Learn and understand their meaning.





















**KEEP AREA CLEAR** 

SLOPE HAZARDS (SEE SAFETY RULES SECTION)





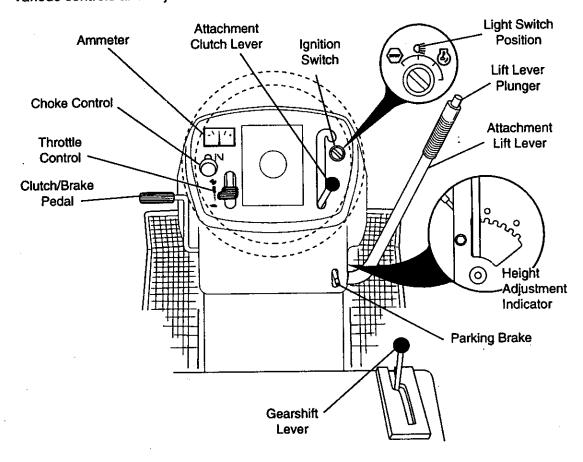


**FREE WHEEL** (Automatic Models only)

#### **KNOW YOUR TRACTOR**

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

Compare the illustrations with your tractor to familiarize yourself with the 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 (-).



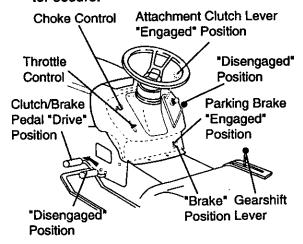
The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles, or standard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

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

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

#### TO SET PARKING BRAKE

- Depress clutch/brake pedal into full "BRAKE" position and hold.
- Place parking brake lever in "ENGAGED" 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.

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

#### THROTTLE CONTROL

Always operate engine at full throttle.

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

#### CHOKE CONTROL

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.

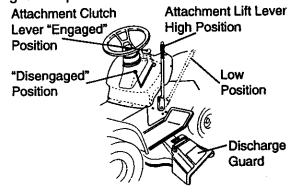
- The average lawn should be cut to approximately 2-1/2 inches during the cool season and to over 3 inches during hot months. For healthier and better looking lawns, mow often and after moderate growth.
- For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first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

#### TO 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.

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

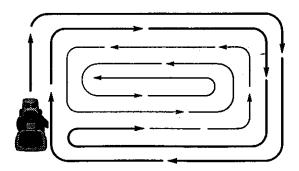
## COLD WEATHER STARTING (50° F AND BELOW)

- 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**

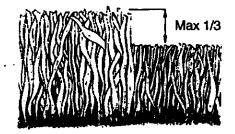
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to 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

#### **CUSTOMER RESPONSIBILITIES**

AS	MAINTENANCE SCHEDUL L IN DATES YOU COMPLETE GULAR SERVICE	.E	EFORE	ENCHUS EVERY 8	E VRS	A KOUPE VERY SO	HOUR ERY I	PHOUP SHOUP SERY SE	S ON	SERI	/ICE	DATE
	Check Brake Operation	ノ	<b>V</b>									
ļ	Check Tire Pressure	~	1									
Т	Check Operator Presence and Interlock Systems	~										
R	Check for Loose Fasteners	~				1/7		1	<u> </u>			
A	Sharper/Replace Mower Blades			1.						L		
C	Lubrication Chart		<u> </u>	<b>'</b>				<u>~</u>				
Ö	Check Battery Level		-	1/0					L	Ш		
Ř	Clean Battery and Terminals			1				1				
	Check Transaxle Cooling		<u> </u>	<b>'</b>								
	Adjust Blade Belt(s) Tension					1/5						
	Adjust Motion Drive Belt(s) Tension					<b>√</b> 5						
	Check Engine Oil Level	1	~			[		L <u>.</u>	<u> </u>			
	Change Engine Oil			1,2,3				1				_
E	Clean Air Filter			1/2								
N	Clean Air Screen			<b>√</b> 2								_
Ģ	Inspect Muffler/Spark Arrester		1		1	<u> </u>			<u> </u>			
N	Replace Oil Filter (If equipped)					1.2						
E	Clean Engine Cooling Fins					V 2		<u> </u>	1			
_	Replace Spark Plug					<u>/</u>	~	<u> </u>		<u> </u>		
	Replace Air Filter Paper Cartridge				L	1/2	<u> </u>					_
	Replace Fuel Filter					1	1					

- 1 Change more often when operating under a heavy load or in high ambient temperatures.
- Service more often when operating in dirty or dusty conditions
   If equipped with oil filter, change oil every 50 hours.
- 6 Not required if equipped with maintenance-free battery 7 Tighten front axie pivot bolt to 35 ft.-lbs. maximum.

#### **GENERAL RECOMMENDATIONS**

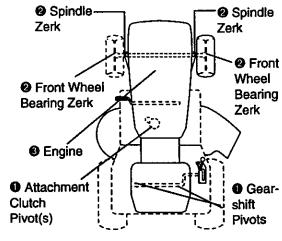
The warranty on this tractor does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain tractor as instructed in this manual. Some adjustments will need to be made periodically to properly maintain your tractor. All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

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

#### **BEFORE EACH USE**

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

#### **LUBRICATION CHART**



- SAE 30 or 10w30 Motor OILGeneral Purpose Grease
- 1 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 selflubricating bearings. If you feel they must be lubricated, use only a dry, powdered graphite type lubricant sparingly.

#### TRACTOR

Always observe safety rules when performing any maintenance.

#### **BRAKE OPERATION**

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

#### TIRES

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

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

#### **OPERATOR PRESENCE SYSTEM**

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

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

#### **BLADE CARE**

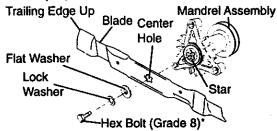
For best results mower blades must be kept sharp. Replace bent or damaged blades.

#### **BLADE REMOVAL**

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

**IMPORTANT:** To ensure proper assembly, center hole isn blade must align with star on mandrel assembly.

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



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

**IMPORTANT:** Blade bolt is Grade 8 heat treated.

#### TO SHARPEN BLADE

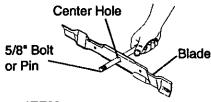
**NOTE:** We do not recommend sharpening blade, but if you do, be sure the blade is balanced.

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.

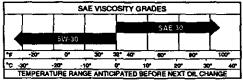
#### TRANSAXLE COOLING

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.

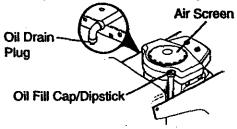
Change the oil after every 25 hours of operation or at least once a year if the tractor is not used for 25 hours in one year.

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 "PROD-UCT 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.



#### **AIR FILTER**

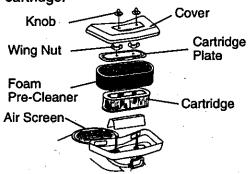
Your engine will not run properly using a dirty air filter. Clean the foam pre-cleaner after every 25 hours of operation or every season. Service paper cartridge every 100 hours of operation or every season, whichever occurs first.

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.

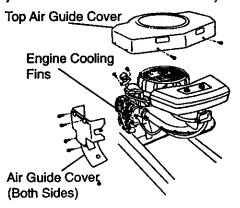


#### **CLEAN AIR SCREEN**

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).



#### **MUFFLER**

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

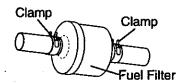
#### **SPARK PLUGS**

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.

#### TO REMOVE MOWER

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

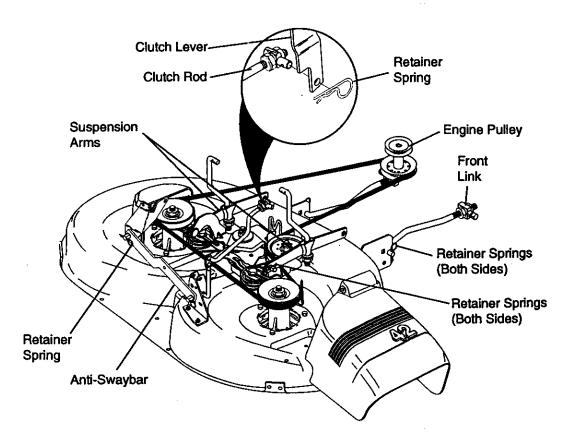
- Place attachment clutch in "DISEN-GAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- · Roll belt off engine pulley.
- Disconnect clutch rod from clutch lever by removing retainer spring.
- Disconnect anti-swaybar from chassis bracket by removing retainer spring.
- Disconnect suspension arms from rear deck brackets by removing retainer springs.

- Disconnect front links from deck by removing retainer springs.
- Raise lift lever to raise suspension arms. Slide mower out from under tractor.

**IMPORTANT:** If an attachment other than the mower deck is to be mounted on the tractor, remove the front links.

#### 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

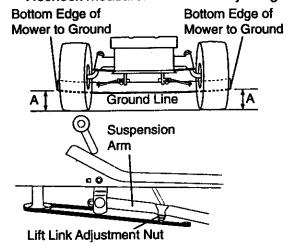
Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PROD-UCT SPECIFICATIONS" section of this manual). If tires are over or underinflated, you will not properly adjust your mower.

#### 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.



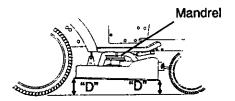
#### FRONT-TO-BACK ADJUSTMENT

**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.

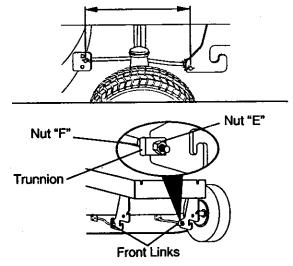
To obtain the best cutting results, the mower housing should be adjusted so that the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

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)

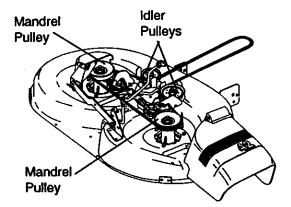
The mower blade drive belt may be replaced without tools. Park the tractor on level surface. Engage parking brake.

#### **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.



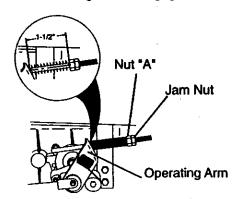
#### TO ADJUST BRAKE

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.

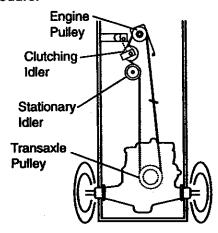
#### With Parking Brake "Engaged"



#### 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.

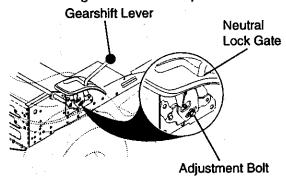
- Remove mower (See "TO REMOVE MOWER" in this section of this manual.)
- Remove belt from stationary idler and clutching idler.
- Pull belt slack toward rear of tractor.
   Remove belt upwards from transaxle pulley by deflecting belt keepers.
- Pull belt toward front of tractor and remove downwards from 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 the 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 ALIGN-MENT

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.

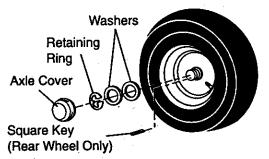
#### FRONT WHEEL TOE-IN/CAMBER

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:

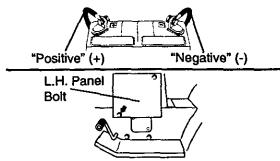
IMPORTANT: Your tractor is equipped with a 12 volt negative grounded system. The other vehicle must also be a 12 volt negative grounded system. Do not use your tractor battery to start other vehicles.

#### 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.



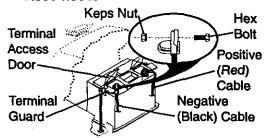
#### REPLACING BATTERY

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

Positive terminal must be connected first to prevent sparking from accidental

grounding.

- Lift hood to raised position.
- Remove terminal 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.

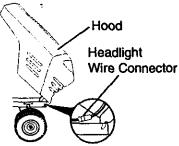
 Check wiring. See electrical wiring diagram in the Repair Parts section.

#### TO REPLACE FUSE

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

#### TO REMOVE HOOD AND GRILL **ASSEMBLY**

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



#### **ENGINE**

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

#### TO ADJUST THROTTLE CONTROL CABLE

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

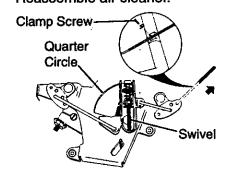
- With engine not running, move throttle control lever to fast position.
- Check that swivel is against side of quarter circle. If it is not, loosen cable clamp screw and pull cable back until swivel is against quarter circle. Tighten cable clamp screw securely.

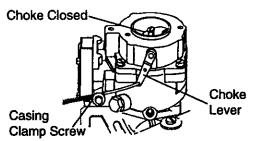
#### TO ADJUST CHOKE CONTROL

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

With engine not running, move choke control (located on dash panel) to full choke position.

- Remove air cleaner cover, filter and cartridge plate to expose carburetor choke (see "AIR FILTER" in the Customer Responsibilities section of this manual).
- Choke should be closed. If it is not, loosen casing clamp screw and move choke cable until choke is completely closed. Tighten casing clamp screw securely.
- Reassemble air cleaner.





#### TO ADJUST CARBURETOR

The carburetor has been preset at the factory and adjustment should not be necessary. However, minor adjustment may be required to compensate for differences in fuel, temperature, altitude or load. If the carburetor does need adjustment, proceed as follows:

In general, turning the mixture screw in (clockwise) decreases the supply of fuel to the engine giving a leaner fuel/air mixture. Turning the mixture screw out (counterclockwise) increases the supply of fuel to the engine giving a richer fuel/air mixture. IMPORTANT: Damage to the needles and the seats in carburetor may result if screw is turned in too tight.

#### **PRELIMINARY SETTING -**

- Be sure you have a clean air filter, and the throttle control cable and choke are adjusted properly (see above).
- With engine off turn idle mixture screw in (clockwise) closing it finger tight and then turn out (counterclockwise) 1-1/4 to 1-1/2 turns.

#### FINAL SETTING -

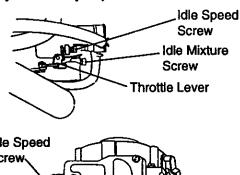
- Start engine and allow to warm for five minutes. Make final adjustments with engine running and shift/ motion control lever in neutral (N) position.
- With throttle control lever in slow position, hold throttle lever against idle speed screw and adjust idle speed screw to obtain 1200 to 1400 RPM.
-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

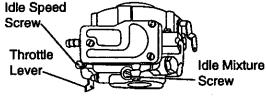
#### **ACCELERATION TEST-**

 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	• Week or dead bettern	Recharge or replace battery.     Clean battery terminals.

### TROUBLESHOOTING CHART

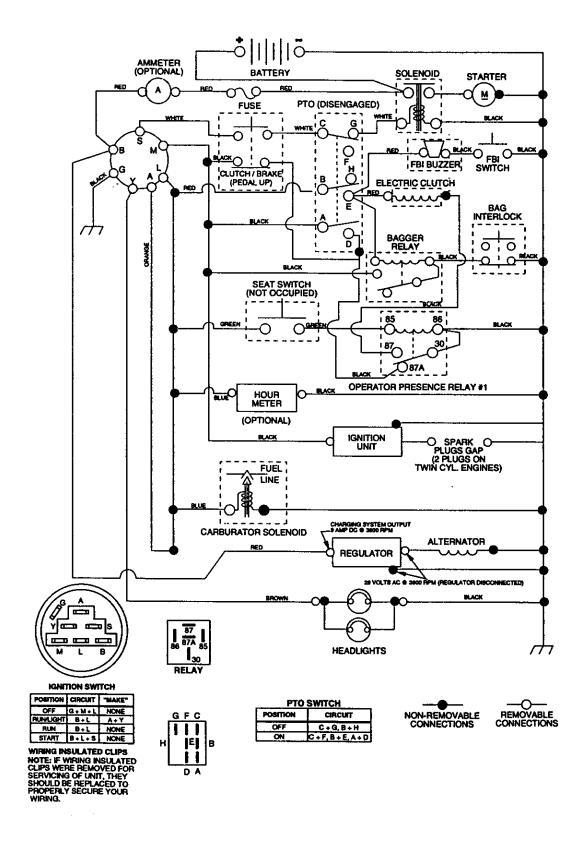
PROBLEM	CAUSE	CORRECTION				
Engine clicks but will not start (cont'd)	<ul><li>Loose or damaged wiring.</li><li>Faulty solenoid or starter.</li></ul>	<ul><li>Check all wiring.</li><li>Check/replace solenoid or starter.</li></ul>				
Loss of power	<ul> <li>Cutting too much grass/too fast.</li> <li>Throttle 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).</li> <li>Replace damaged parts.</li> </ul>				
Engine continues to run when operator leaves seat with at- tachment clutch engaged	presence control system.	Check wiring, switches and connections. If not corrected, contact an authorized service center/ department.				
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> </ul>	<ul> <li>Replace blade. Tighten blade bolt.</li> <li>Level mower deck.</li> <li>Clean underside of mower housing.</li> </ul>				

### TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
Poor cut - uneven (cont'd)	<ul> <li>Bent blade mandrei.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ul>	<ul> <li>Replace blade mandrel.</li> <li>Clean around mandrels to open vent holes.</li> </ul>
Mower blades will not rotate	<ul> <li>Obstruction in clutch mechanism.</li> <li>Worn/damaged mower drive belt.</li> <li>Frozen idler pulley.</li> <li>Frozen blade mandrel.</li> </ul>	<ul> <li>Remove obstruction.</li> <li>Replace mower drive belt.</li> <li>Replace idler pulley.</li> <li>Replace blade mandrel.</li> </ul>
Poor grass dis- charge	<ul> <li>Engine speed too slow.</li> <li>Travel speed too fast.</li> <li>Wet grass.</li> <li>Mower deck not level.</li> <li>Low/uneven tire air pressure.</li> <li>Worn, bent or loose blade.</li> <li>Buildup of grass, leaves and trash under mower.</li> <li>Mower drive belt worn.</li> <li>Blades improperly installed.</li> <li>Improper blades used.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ul>	<ul> <li>Place throttle control in "FAST" position.</li> <li>Shift to slower speed.</li> <li>Allow grass to dry before mowing.</li> <li>Level mower deck.</li> <li>Check tires for proper air pressure.</li> <li>Replace/sharpen blade. Tighten blade bolt.</li> <li>Clean underside of mower housing.</li> <li>Replace mower drive belt.</li> <li>Reinstall blades sharp edge down.</li> <li>Replace with blades listed in this manual.</li> <li>Clean around mandrels to open vent holes.</li> </ul>
Headlight(s) not working (if so equipped)	<ul> <li>Switch is "OFF".</li> <li>Bulb(s) burned out.</li> <li>Faulty light switch.</li> <li>Loose or damaged wiring.</li> <li>Blown fuse.</li> </ul>	<ul> <li>Turn switch "ON".</li> <li>Replace bulb(s).</li> <li>Check/replace light switch.</li> <li>Check wiring and connections.</li> <li>Replace fuse.</li> </ul>
Battery will not charge	<ul> <li>Bad battery cell(s).</li> <li>Poor cable connections.</li> <li>Faulty regulator (if so equipped).</li> <li>Faulty alternator.</li> </ul>	<ul> <li>Replace battery.</li> <li>Check/clean all connections.</li> <li>Replace regulator.</li> <li>Replace alternator.</li> </ul>
Engine "backfires" when turning engine "OFF"	Engine throttle control not set at "SLOW" position for 30 seconds before stopping engine.	Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.

#### **TRACTOR - - MODEL NUMBER 917.270771**

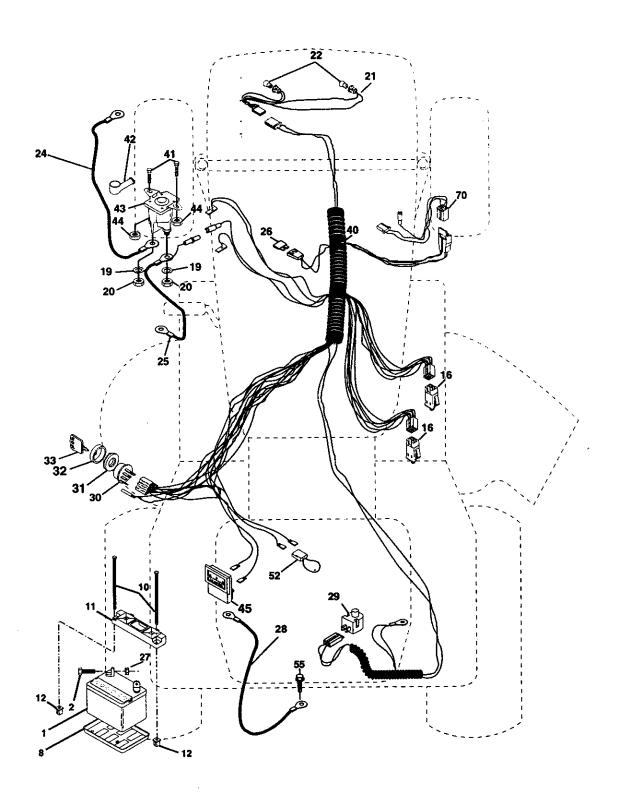
#### **SCHEMATIC**



## **REPAIR PARTS**

### TRACTOR - - MODEL NUMBER 917.270771

### **ELECTRICAL**



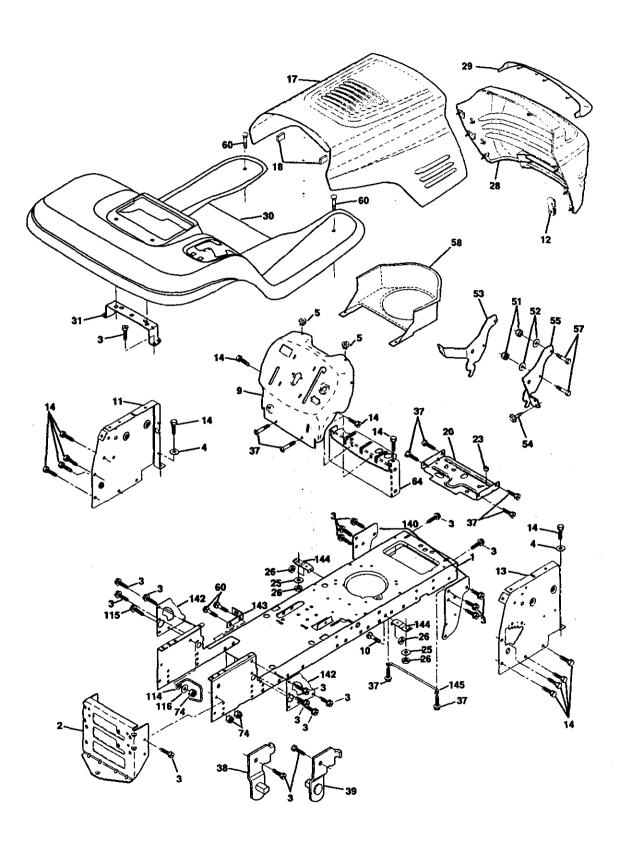
### **TRACTOR - - MODEL NUMBER 917.270771**

#### **ELECTRICAL**

KEY	PART	
NO.	NO.	DESCRIPTION
1	163465	Battery 12 VOLT 25 AMP
2	74760412	Bolt Hex Hd 1/4-20unc x 3/4
8	7603J	Case Battery
10	145211	Bolt, Btr Front 1/4-20 x 7-1/2
11	150109	Holddown Battery Front Mount
12	145769	Nut, Push Nylon Battery Front 1/4
16	153664	Switch, Interlock Push-In
19	Std551125	Washer Lock 1/4
20	73350400	Nut Jam Hex 1/4-20 Unc
21	166182	Hamess Light Socket (W/4152j)
22	4152J	Bulb Light #1156
24	4799J	Cable Battery
25	146148	Cable Battery
26	166180	Fuse
27	73510400	Nut Keps Hex 1/4-20 Unc
28	145491	Cable Ground
29	121305X	Switch Seat
30	140301	Switch Ign 4 Position
31	124211X	Nut Ignition
32	141226	Cover Ignition Switch
33	109310X	Key Molded Craftsman
40	166145	Harness Ign
41	71110408	Bolt Blk. Fin Hex 1/4-20 Unc x 1/2
42	131563	Cover Terminal
43	145673	Solenoid
44	73640400	Nut Keps Blk Hex 1/4-20 Unc
45	121433X	Ammeter Rectangular 6 Amp
52	141940	Protection Wire Loop
55	17490508	Screw Thdrol 5/16-18 x 1/2
70	166658	Hamess Engine B&S
NOTE:	All compoi	nent dimensions give in U.S. inches

1 inch = 25.4 mm

# TRACTOR - - MODEL NUMBER 917.270771 CHASSIS AND ENCLOSURES



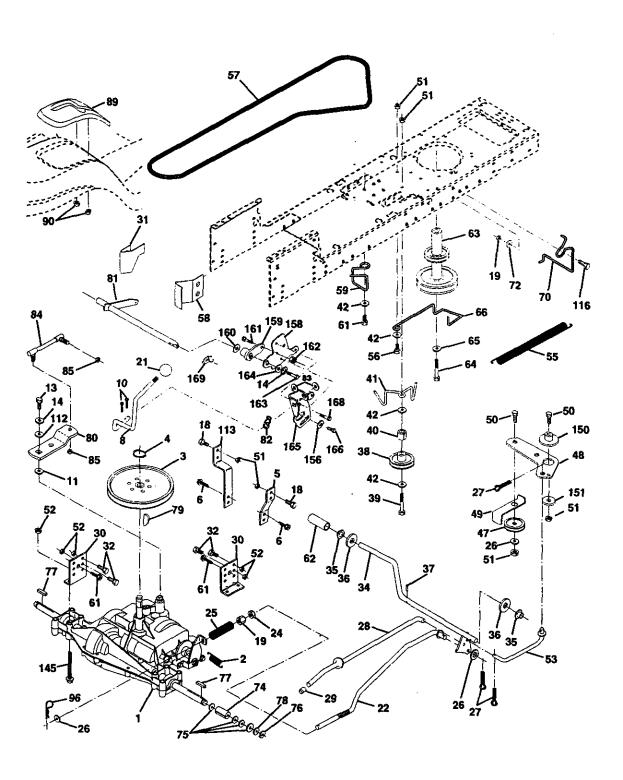
# TRACTOR - - MODEL NUMBER 917.270771 CHASSIS AND ENCLOSURES

KEY	PART	
NO.	NO.	DESCRIPTION
1	165583	Chassis Assembly
2	140356	Drawbar
3	17490612	Screw, Thd. Roll. 3/8-16 x 3/4
4	STD551025	Washer 13/32 x 3/4 x 16 Gauge
5	155272	Bumper Hood/Dash
9	161917X013	Dash
10	STD533710	Bolt, Carriage 3/8-16 x 3/4
11	155927	Panel, Dash, L.H.
12	145660	Clip Tinnerman Grille P/L
13	155934X010	Panel, Dash, R.H.
14	17490608	Screw Thdrol 3/8-16 x 1/2
17	144983X558	Hood Assembly
18	126938X	Bumper Hood
20	156437	Plate Mtg Battery Fuel Tank
23 25	124028X 19131312	Bushing, Snap, Nylon, Fuel Line Washer 13/32 x 13/16 x 12 Gauge
25 26	STD541437	Locknut, Hex, with Insert 3/8-16 Unc
26 28	145198X558	Grille w/Clips MS-558
29	155217X599	Lens, Grille
30	151287X558	Fend/Ftrest
31	139976	Bracket, Fender Support
37	17490508	Screw Thdrol 5/16-18 x 1/2
38	139886	Pivot Bracket Assembly, L.H.
39	139887	Pivot Bracket Assembly, R.H.
51	73800400	Nut Lock w/insert 1/4-20 UNC
52	19091416	Washer 9/32 x 7/8 x 16 Ga.
53	145201	Bracket Grille Pickoff LH
54	161464	Screw Hex Wshd 8-18 x 7/8
55	145202	Bracket Grille Pickoff RH
57	STD522507	Bolt, Fin Hex 1/4-20 UNC x .75
58	140547	Air Duct P/L 18HP B&S Opp. Twin
60	STD533707	Bolt Rdhd Sqnk 3/8-16 UNC x 3/4
64	154798	Dash Lower STLT
74	STD541437	Nut Crownlock 3/8-16 UNC
114	158112	Keeper Belt Rear Lh
115	17490620	Screw Thdrol 3/8-16 x 1-1/4
116	19131614	Washer 13/32 x 1 x 14 Ga
140	158418	Bracket Suspension Front
142	165867	Plate Reinforcement STLT
143	154966	Bracket Swaybar Chassis
144	154207	Bracket Pnt Footrest STLT
145	156524	Rod Pivot Chassis/Hood
• •	5479J	Plug Btn

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

### **TRACTOR - - MODEL NUMBER 917.270771**

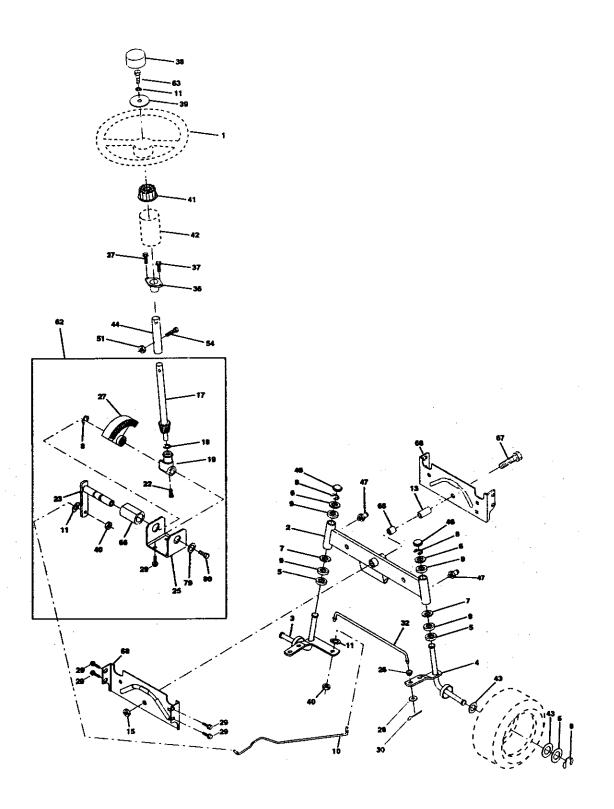
### **GROUND DRIVE**



### **GROUND DRIVE**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1		Transaxle (See Breakdown)	59	140312	Keeper, Belt, Center Span
		Peerless 206-545C	61	17490612	Screw, Thd., Roll. 3/8-16 x 3/4
2	146682	Spring, Return, Brake	62	8883R	Cover, Pedal
3	123666X	Pulley, Transaxle	63	140186	Pulley, Engine
4	12000028	Ring, Retainer	64	71170764	Bolt, Hex Fin 7/16-20 x 4 Gr. 5
5	121520X	Strap, Torque	65	STD551143	Washer
6	17490512	Screw, Thd., Roll. 5/16-18 x 3/4	66	154778	Keeper, Belt, Engine, Fool-Proof
8	165866	Rod Shifter Fender Adjust	70	134683	Guide, Mower Drive Belt, R.H.
10	STD561210	Pin, Cotter	72	19132012	Washer 13/32 x 1-1/4 x 12 Ga.
11	105701X	Washer, Shift Plate	74	137057	Spacer, Axie
13	74550412	Bolt 1/4-28 UNF W/Patch Gr. 8	75	121749X	Washer 25/32 x 1-1/4 x 16 Ga.
14	STD551125	Washer	76	STD581075	E-Ring
18	STD523710	Boit Fin Hex 3/8-16 unc x 1.Gr 5	77	123583X	Key, Square 2.0 x .1845/.1865
19	STD541437	Nut	78	121748X	Washer 25/32 x 1-5/8 x 16 Ga
21	106933X	Knob	79	SDT580025	Woodruff Key
22	130804	Rod, Brake	80	145090	Arm, Shift
24	STD541237	Nut	81	165592	Shaft Assembly
25	106888X	Spring, Brake Rod	82	165711	Spring, Torsion
26	STD551037	Washer	83	19171216	Washer 17/32 x 3/4 x 16 Ga.
27	STD561210	Pin	84	166231	Link Transaxle
28	145204	Rod, Parking Brake	85	150360	Nut, Nylock,
29	124236X	Cap, Parking Brake, Red	89	158391X428	Console, Shift, STLT
30	130807	Bracket, Transaxle	90	124346X	Nut, Self-Thding, Wsh Hd 1/4
31	127275X	Keeper, Belt, L.H.	96	STD624003	Retainer Spring 1"
32	STD523107	Bolt	112	19091210	Washer 9/32 x 3/4 x 10 Gauge
34	155071	Shaft Assembly, Foot Pedal	113	127285X	Strap Torque 90 Degrees
35	120183X	Bearing, Nylon	116	72110610	Bolt Rdhd Sqneck 3/8-16 x 1.25
36	STD551062	Washer	145	74490540	Bolt Hex Fighd 5/16-18 x Gr.5
37	STD571810	Roll Pin	150	165850	Bushing Bellcrank Grd Drive
38	131494	Pulley, Idler, Flat	151	19133210	Washer 13/32 x 2 x 10 Ga.
39	STD523727	Bolt	156	166002	Washer Streed 5/16ID x 1 .125
40	4470J	Spacer, Split .395 x .59	158	165589	Bracket Shift Mount
41	165838	Keeper, Belt, Idler Fool-Proof	159	165494	Hub Tapered Flange Shift LT
42 47	19131312 127783	Washer 13/32 x 13/16 x 12 Ga.	160	19292016	Washer 29/32 x 1-1/4 x 16 Ga.
47 48		Pulley, Idler, V-Groove, Plastic	161	72140406	Bolt Rdhd Sqnk 1/4-20 x 3/4 Gr 5
46 49	154407 123205X	Bellcrank Clutch Grnd Drv Sti	162	73680400	Nut Crownlock 1/4-20 Unc
49 50	STD523715	Retainer, Belt	163	74780416	Bolt Hex Fin 1/4-20 Unc x 1 Gr 5
		Boit	164	19091010	Washer 5/8 x .281 x 10 Ga.
51 52	STD541437	Nut Crown Lock 3/8-16 UNC	165	165623	Bracket Pivot Lever
52 53	STD541431	Nut Crown Lock 5/16-18 UNC	166	166880	Screw 5/16-18 x 5/8
55 55	105710X	Link, Clutch	168	165492	Bolt Shoulder 5/16-18 x .561
55 56	105709X	Spring, Clutch Return	169	165580	Plate Fastening Cross Shf STLT/CRD
56 57	STD523712	Bolt Fin Hex 3/8-16 x 1-1/4			
57 58	130801 127274X	V-Belt, Ground Drive Keeper, Belt, R.H.	NOTE:		ent dimensions give in U.S. nch = 25.4 mm

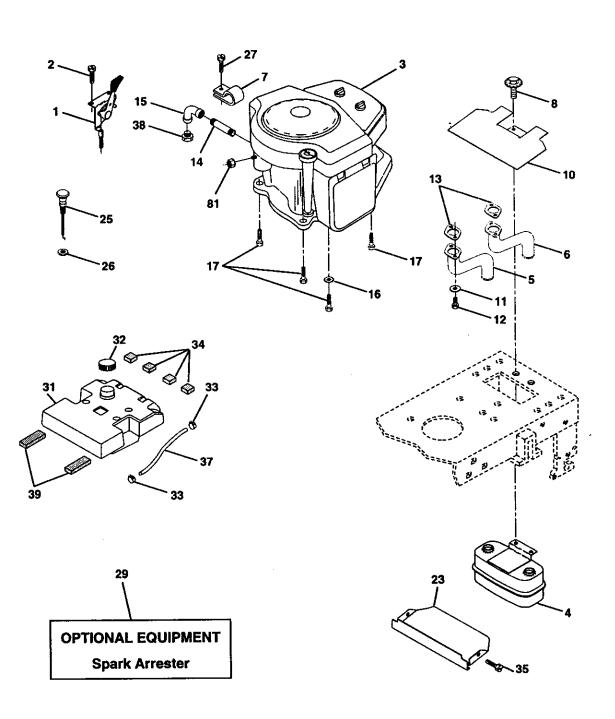
# TRACTOR - - MODEL NUMBER 917.270771 STEERING ASSEMBLY



## STEERING ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
1	139768	Steering Wheel
2	154427	Axle Assembly STMP Dropped STL
3	156483	Spindle Assembly, L.H.
4	157473	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	156438	Draglink Extended Stamped
11	STD551137	Washer, Lock
13	154779	Bearing Axle STLT/GT
15	73901000	Nut, Lock, Flange 5/8-11 UNC
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	165851	Pittman Shaft Assembly
25	154406	Bracket, Steering
26	126847X	Bushing, Link, Drag
27	136874	Gear, Sector
28	19131416	Washer 13/32 x 7/8 x 16 Gauge
29	17490612	Screw, Thd., Roll. 3/8-16 x 3/4
30	STD561210	Pin
32	130465	Rod, Tie
36	155099	Bushing, Steering
37	152927	Screw
38	139769	Insert, Steering Wheel
39	19133808	Washer 13/32 x 2-3/8 x 8 Gauge
40	STD541537	Nut Lock Center 3/8-24 UNF
41 42	100711L	Adaptor, Steering Wheel
42	145054 121749X	Boot, Steering Shaft Washer 25/32 x 1-1/4 x 16 Gauge
43	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	154780	Spacer Axle
66	154404	Bearing Arm Pittman
67	74781044	Bolt, Fin Hex 5/8-11 UNC x 2-3/4
68	154429	Axle. Brace
79	19132012	Washer 13/32 x 1-1/4 x 12 Ga
80	74950612	Bolt Hex Nylon 3/8-16 x 3/4
		t dimensions given in U.S. inches
	1 inch = 25.4	_

## **ENGINE**

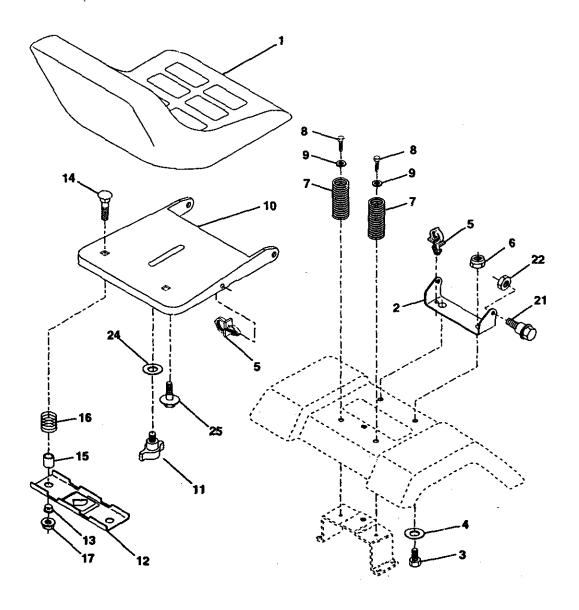


### **ENGINE**

KEY NO.	PART NO.	DESCRIPTION
1	162152	Control, Throt Paddle 32 22
2	17720410	Screw, Hex Thd Cut 1/4-20 x 5/8
3		Engine (See Breakdown)
		Model 42E707-2631-E1
4	149723	Muffler Exhaust
5	144069	Exhaust Asm. Left
6	144068	Exhaust Asm. Right
7	138129	Clamp Tube Double Engine
8	150176	Boit 5/16-18unc x 3/4 W/Sems
10	145552	Heat Shield Lt
11	STD551125	Washer Lock Hvy. Helical 1/4
12	STD522507	Bolt Fin Hex 1/4
13	165287	Gasket, Muffler
14	13280336	Nipple, Pipe 4-1/2
15	13200300	Elbow, Standard 90°, 3/8-18 NPT
16	STD551237	Washer Lock Ext Tooth 3/8
17	17490624	Screw Thdrol 3/8-16x1-1/2 Tytt
23	159880	Shield, Brn/Dbr Guard
25	145996	Control Choke
26	73920600	Nut Keps 3/8-24 Unf
27	152927	Screw TT #10-32 x 5 x 3/8 Flange
29	137180	Arrestor, Spark
31	157103	Tank, Fuel
32	161696	Cap Fuel Guage
33	123487X	Clamp, Hose
34	106082X	Spacer Pad
35	17490512	Screw Thdrol 5/16-18 x 3-4 Tyt
37	8543R	Line, Fuel
38		Plug, Oil Drain (Order From Engine Manufacturer)
39	109227X	Pad Idler
81	128861	Nut Flange 1/4-20 Starter Nut

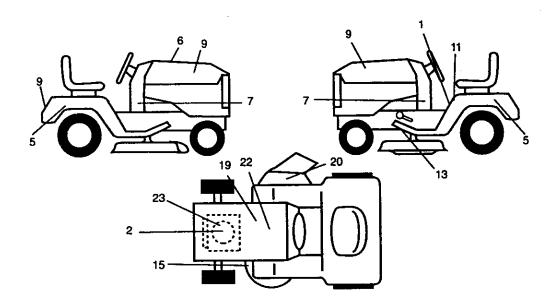
NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

## SEAT ASSEMBLY



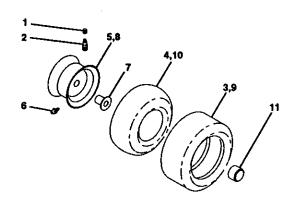
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	140122	Seat	13	121248X	Bushing Snap Blk Nyl 50 ld
2	140551	Bracket Pnt Pivot Seat (blk )	14	72050412	Bolt Rdhd Sht Nk 1/4-20x1-1/2
3	STD523710	Bolt Fin Hex 3/8-16unc X 1	15	134300	Spacer Split 28 X 96 Zinc
4	19131610	Washer 13/32 X 3/4 X 10 Ga	16	121250X	Spring Cprsn 1 27 Blk Pnt
5	145006	Clip Push In Hinged	17	123976X	Nut Lock 1/4 Lge Flg Gr 5 Zinc
6	STD541437	Nut Hex Lock w/ins 3/8-16 Unc	21	153236	Bolt Shoulder 5/16-18 Unc-2A
7	124181X	Spring Seat Cprsn 2 250 Blk Zi	22	STD541431	Nut Hex Lock w/lns 5/16-18
8	17490616	Screw Thdrol 3/8-16 X 1 Ty-tt	24	19171912	Washer 17/32 X 1-3/16 X 12 Ga.
9	19131614	Washer 13/32 X 1 X 14 Ga	25	127018X	Bolt Shoulder 5/16-18 X 62
10	155925	Pan Pnt Seat (blk )			
11	166369	Knob Seat			dimensions given in U.S. inch-
12	121246X	Bracket Pnt Mounting Switch	es1 inc	h = 25.4 mm	

### **DECALS**



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	156439	Decal, Fender Danger Sears	19	138047	Decal, Battery Diehard Sears
2	165389	Decal, Engine	20	166187	Decal, Deck EZ3
5	163207	Decal, Fender	22	149516	Decal, Battery
6	133644	Decal, Maintenance	23	167180	Decal, Replacement
7	166799	Decal, Panel Dash		138311	Decal, Lift Handle
9	163204	Decal, Hood/Fender	••	154515	Pad Footrest LH STLT
11	156368	Decal, Fender STLT Oper Inst		154516	Pad Footrest RH STLT
		E/S		168193	Owner's Manual, English
13	146046	Decal, V-Belt Dr Sch Tractor		168194	Owner's Manual, Spanish
15	160396	Decal, Mower Drive Schematic			• •

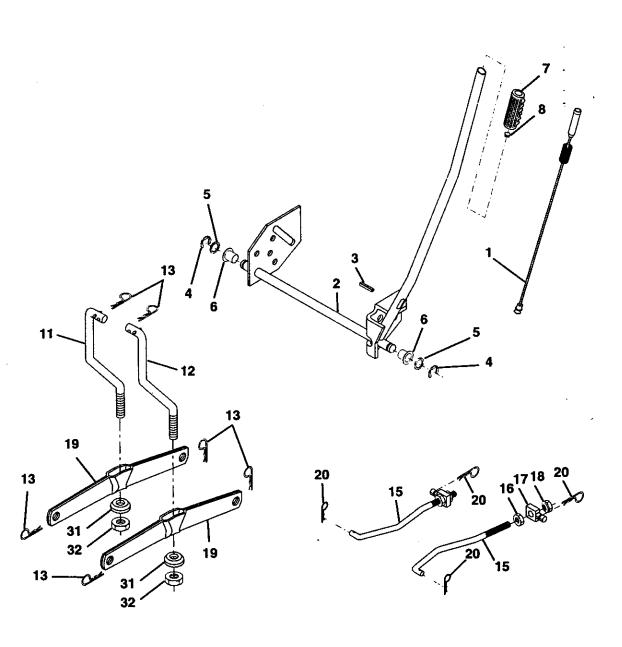
### **WHEELS & TIRES**



KEY NO.	PART 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	138468	Tire, Rear
10	7152J	Tube, Rear Tire
		(Not Provided, Service Item Only)
11	104757X	Cap, Axle
	144334	Sealant, Tire 10 oz.

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

### LIFT ASSEMBLY

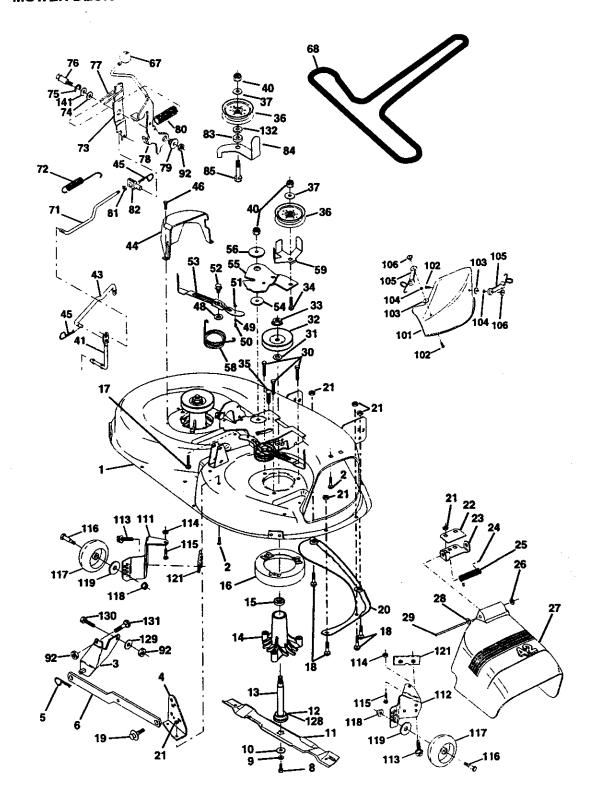


### LIFT ASSEMBLY

KEY NO.	PART 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	127218	Link, Front
16	73350800	Nut, Hex, Jam 1/2-13 UNC
17	130171	Trunnion
18	73680800	Nut Lock 1/2-13 UNC
19	139868	Arm, Suspension, Rear
20	163552	Retainer Spring
31	140302	Bearing, Pvt, Lift Special
32	73540600	Nut, Crownlock 3/8-24

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

### **MOWER DECK**

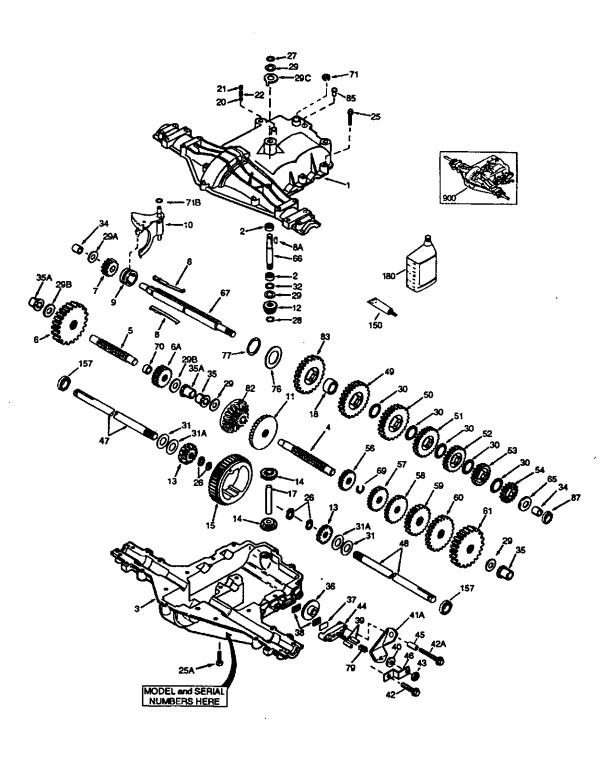


### **MOWER DECK**

1   164961   Mower Deck Assembly, 42"   56   122052X   Spacer, Retainer   Spring   Torsion Brakes   138017   Bracket Assembly, Sway Bar, Fort   Fort   138440   Bracket Assembly, Sway Bar   59   141043   Guard, TUV Idler   Fort   138440   Bracket Assembly, Sway Bar   71   142427   Knob Custom Oval   V-Belt   V-Belt   Knob Custom Oval   V-Belt   V-Belt   Knob Custom Oval   V-Belt	KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
138017   Bracket Assembly, Sway Bar, Front Fro	1	164961	Mower Deck Assembly, 42"	56	122052X	Spacer, Retainer
Front	2	STD533107	Bolt	58	140086	
139440   Bracket Assembly, Sway Bar   5   144207   Policy   Poli	3	138017		59	141043	Guard, TUV idler
5         STD624008         Retainer Spring         71         142227         Rod. Clutch, Primary, with Nibs           8         850857         Bolt, Hex 3/8-24 x 1.25         73         127847         Arm, Clutch, Primary, with Nibs           9         STD551137         Washer, Lock         Lock         Lock         1.44         128764         Washer, Lock         Washer, Lock         1.44         1.42         1.44         1.44         1.42         1.44 <t< td=""><td></td><td></td><td></td><td>67</td><td>162113</td><td></td></t<>				67	162113	
B					144200	
Sossistration			• •			
Grade 8 9 STD551137 Washer, Lock Washer, Hardened 10 140296 : Washer, Hardened 11 134149 Blade, Mulching 12 129895 Barfing, Ball 13 137645 Shaft Assembly, Mandrel, Vented (Includes Key Number 12) 14 128774 Housing, Mandrel, Vented 15 110485X Bearing, Ball, Mandrel 16 140329 Stirpper, Vented Mover Deck 17 72110610 Dt, Carriage 376-16 x 1-1/4 18 STD533106 Bolt, Carriage 5716-18 x 5/8 19 132827 Bolt, Shoulder 20 159770 Baffle, Vortex 21 STD541431 Nut Crownlock 5/16-18 UNC 22 134753 Stiffener Bracket 23 131267 Bracket, Deflector 24 103304X Cap, Sleeve 25 110452X Nut, Push 26 110452X Nut, Push 27 130968 Shield, Deflector 28 19111016 Washer 11/32 x 5/8 x 16 29 131491 Gauge 29 131491 Food, Hingle 30 157722 Screw Thdrol Washer Head 31 129963 Washer, Spacer 31 131267 Bolt, Cristmas Tree 31 131267 Bolt, Filat 11/4 Stirps 131340 31 13246 Bolt, Shoulder 11/4 Stirps 131340 31 13406 Bolt, Shoulder 11/4-20 x 5/8 31 131945 Food, Hingle 31 13494 Washer, Hardened 31 139843 Washer, Hardened 31 139843 Washer, Hardened 31 139843 Washer, Hardened 31 13984 Washer, Hardened 31 139843 Washer, Hardened 31 13984 Washer, Hardened 32 13984 Washer, Hardened 33 13984 Washer, Hardened 34 Washer, Hardened 35 150546 Min Min Marder 36 150000			•			
STD551137	8	850857				
10   140296   Washer, Hardened   75   12000029   Bing, Kilp   Blade, Mulching   76   128903   Bolt, Shoulder 3/8-16 UNC x   1.44   1.28774   Housing, Mandrel, Vented (Includes Key Number 12)   127498   Bushing, Large, Brass   1.0485X   Bearing, Ball   Mandrel   80   153701   STILT   STILT   STILT   STILT   STILT   14085X   Bearing, Ball, Mandrel   80   153701   STILT		CTD554407		74	121748X	
134149   Blade, Mulching   76   128903   Bolt, Shoulder 3/8-16 UNC x   1.44   Keeper, Spring   Lever Asm. Clutch Pri Pim STLT   127874   Housing, Mandrel, Vented (Includes Key Number 12)   14   128774   Housing, Mandrel, Vented (Includes Key Number 12)   110485X   Bearing, Ball, Mandrel   80   153701   Spring, Mower Clutch Pri Pim STLT   110485X   Bearing, Ball, Mandrel   80   153701   Spring, Mower Clutch Pri Pim STLT   110485X   Bearing, Ball, Mandrel   80   153701   Spring, Mower Clutch Pri Pim STLT   110485X   Bearing, Ball, Mandrel   80   153701   Spring, Mower Clutch Pri Pim STLT   110485X   Bearing, Ball, Mandrel   80   153701   Spring, Mower Clutch Pri Pim STLT   110485X   Bearing, Ball, Mandrel   80   153701   Spring, Mower Clutch Pri Pim STLT   110485X   Bearing, Ball, Mandrel   80   153701   Spring, Mower Clutch Pri Pim STLT   110485X   Spring, Mower Clutch Pri Pim STLT   110485X   Spring, Mower Clutch Pri Pim STLT   110485X   Spring, Spring, Pri Spri				75	12000020	
129895			•			<u> </u>
137645   Shaft Assembly, Mandrel, Verlted (Includes Key Number 12)   Verlted Mousing, Mandrel, Verlted   STLT STLT STLT				70	120903	
Vented (Include's Key Number 12)				77	127845	
Number 12    128774		101043				
15 110485X Bearing, Ball, Mandrel 80 153701 Spring, Mower Clutch Nather 140329 Stripper, Vented Mower Deck 81 73305000 Nath, Hex Jam 3/9-16 Unc 170610 Bolt, Carriage 3/9-16 x 1-1/4 82 142028 Trunnion, Adj. Washer Sintered 19 132827 Bolt, Carriage 5/16-18 x 5/8 83 120958X Washer Sintered Keeper Belt Idler Keeper Belt						
16	14	128774	Housing, Mandrel, Vented	79	127498	Bushing, Large, Brass
17	15	110485X	Bearing, Ball, Mandrel	80	153701	Spring, Mower Clutch
18         STDS33106         Bolt, Carriage 5/16-18 x 5/8         83         120958X         Washer Sintered           19         132827         Bolt, Shoulder         84         156084         Keeper Belt Idler           20         159770         Baffle, Vortex         85         STD533725         Bolt Carriage 3/8-16 x 2-1/2           21         STD541431         Nut Crownlock 5/16-18 UNC         92         STD541437         Nut           22         134753         Stiffener Bracket         101         136420         Mulcher Cover           24         105304X         Cap, Sleeve         103         19061216         Washer #10           25         123713X         Spring, Torsion, Deflector         104         STD551110         Washer #10           26         110452X         Nut, Push         105         160793         Latch Assembly, Bagger           27         130968         Shleid, Deflector         106         2023J         Nut, Weld           28         19111016         Washer 11/32 x 5/8 x 16         111         155198         Bracket, Gauge, Wheel R.H.           29         131491         Rod, Hinge         113         17490512         Screw Thdrol 5/16-18 x 3/4           31         129963         Wa	16	140329				
19						
20						
STD541431						
22		•				•
131267   Bracket, Deflector   102   71161010   Screw						
24         105304X         Cap, Sleeve         103         19061216         Washer, Lock           25         123713X         Spring, Torsion, Deflector         104         STD551110         Washer, Lock           26         110452X         Nut, Push         105         160793         Latch Assembly, Bagger           27         130968         Shleid, Deflector         106         2029J         Nut, Weld           28         19111016         Washer 11/32 x 5/8 x 16         111         155198         Bracket, Gauge, Wheel L.H.           29         131491         Rod, Hinge         113         17490512         Screw Thdrol Vasher Head         114         STD541431         Nut, Hex, Keps 5/16-18 UNC           31         129963         Washer, Spacer         115         72110504         Bolt, Carriage 5/16-18 UNC x 1/2           32         153535         Pulley, Mandrel         116         4898H         Bolt, Shoulder           33         137266         Nut, Toplock, Flanged         117         165746         Bolt, Shoulder           34         STD533717         Bolt         18         73930600         Nut, Centerlock 3/8-16           35         133835         Fastner, Christmas Tree         119         STD551037         Washe						
25			•			==:=::
26 110452X Nut, Push 105 160793 Latch Assembly, Bagger Nut, Weld 2029J Nut, Nut, Hex, Keps 5/16-18 UNC 2029J Nut, Weld 2029J Nut, Nut, Hex, Keps 5/16-18 UNC 2029J Nut						
27   130968   Shleld, Deflector   106   2029.J   Nut, Weld						•
19111016						
Gauge 112 155198 Bracket, Gauge, Wheel R.H.  29 131491 Rod, Hinge 113 17490512 Screw Thdrol 5/16-18 x 3/4  30 157722 Screw Thdrol Washer Head 114 STD541431 Nut, Hex, Keps 5/16-18 UNC  31 129963 Washer, Spacer 115 72110504 Bolt, Carriage 5/16 UNC x 1/2  32 153535 Pulley, Mandrel 116 4899H Bolt, Shoulder  33 137266 Nut, Toplock, Flanged 117 165746 Wheel, Gauge  34 STD533717 Bolt 118 73930600 Nut, Centerlock 3/8-16  35 133835 Fastner, Christmas Tree 119 STD551037 Washer 3/8 x 7/8 x 14 Gauge  36 131494 Pulley, Idler, Flat 121 143723 Bracket  37 STD551037 Washer 13/32 x 13/16 x 16 128 153390 Washer Felt  Gauge 129 19131312 Washer 13/32 x 13/16 x 12 Ga.  40 STD541437 Nut Crownlock 3/8-16 UNC 130 STD523710 Bolt, Fin Hex 3/8-16 UNC x 1  41 133551 Rod, Clutch, Secondary, with Nibs  43 140083 Rod, Clutch, Secondary, with Nibs  44 14088 Guard, Mandrel, L.H. 132 19132203 Spacer Washer 13/32 I.D. x 1-  45 STD624003 Retainer 3/8 O.D. x 1/4  46 137729 Screw, Thd. Roll 1/4-20 x 5/8 141 6266H Washer Thrust .75 x 1.230  48 133944 Washer, Hardened - 130794 Mandrel Assembly (Includes Key Numbers 8-10, 12-15, 31 and 32)  51 STD541410 Locknut 5/16-18 UNC S1 139888 Bolt, Shoulder #10-24 Grade 5 155046 Arm Assembly, Pad, Brake Washer, Hardened Says Washer, Hardened Say			•			•
29						
30	29	131491				
31         129963         Washer, Spacer         115         72110504         Bolt, Carriage 5/16 UNC x 1/2           32         153535         Pulley, Mandrel         116         4898H         Bolt, Shoulder           33         137266         Nut, Toplock, Flanged         117         165746         Wheel, Gauge           34         STD533717         Bolt         118         73930600         Nut, Centerlock 3/8-16           35         133835         Fastner, Christmas Tree         119         STD551037         Washer 3/8 x 7/8 x 14 Gauge           36         131494         Pulley, Idler, Flat         121         143723         Bracket           37         STD551037         Washer 13/32 x 13/16 x 16         128         153390         Washer Felt           Gauge         129         19131312         Washer Flot Nuc         130         STD523710         Bolt, Fin Hex 3/8-16 UNC x 1           41         133551         Rod, Clutch, Secondary, with Nibs         131         STD533710         Bolt, RDHD SQNK 3/8-16 UNC x 1           44         140088         Guard, Mandrel, L.H.         132         19132203         Spacer Washer 13/32 I.D. x 1-3/8 O.D. x 1/4           45         STD541410         Screw, Thd. Roll 1/4-20 x 5/8         141         6266H	30	157722	Screw Thdrol Washer Head		STD541431	
33         137266         Nut, Toplock, Flanged         117         165746         Wheel, Gauge           34         STD533717         Bolt         118         73930600         Nut, Centerlock 3/8-16           35         133835         Fastner, Christmas Tree         119         STD551037         Washer 3/8 x 7/8 x 14 Gauge           36         131494         Pulley, Idler, Flat         121         143723         Bracket           37         STD551037         Washer 13/32 x 13/16 x 16         128         153390         Washer Felt           Gauge         129         19131312         Washer 13/32 x 13/16 x 12 Ga.           40         STD541437         Nut Crownlock 3/8-16 UNC         130         STD523710         Bolt, Fin Hex 3/8-16 UNC x 1           41         133551         Rod, Pivot, with Nibs         131         STD533710         Bolt, RDHD SQNK 3/8-16 UNC x 1           43         140083         Rod, Clutch, Secondary, with Nibs         131         STD533710         Bolt, RDHD SQNK 3/8-16 UNC x 1           44         140088         Guard, Mandrel, L.H.         132         19132203         Spacer Washer 13/32 I.D. x 1-3/8 O.D. x 1/4           45         STD624003         Retainer         130794         Mandrel Assembly (Includes Key Numbers 8-10, 12-15, 31 and 32)	31	129963		115	72110504	
34         STD533717         Bolt         118         73930600         Nut, Centerlock 3/8-16           35         133835         Fastner, Christmas Tree         119         STD551037         Washer 3/8 x 7/8 x 14 Gauge           36         131494         Pulley, Idler, Flat         121         143723         Bracket           37         STD551037         Washer 13/32 x 13/16 x 16         128         153390         Washer Felt           Gauge         129         19131312         Washer 13/32 x 13/16 x 12 Ga.           40         STD541437         Nut Crownlock 3/8-16 UNC         130         STD523710         Bolt, Fin Hex 3/8-16 UNC x 1           41         133551         Rod, Pivot, with Nibs         3         TSTD533710         Bolt, RDHD SQNK 3/8-16 UNC x 1           43         140083         Rod, Clutch, Secondary, with Nibs         131         STD533710         Bolt, RDHD SQNK 3/8-16 UNC x 1           44         140088         Guard, Mandrel, L.H.         132         19132203         Spacer Washer 13/32 I.D. x 1-3/8 O.D. x 1/4           45         STD624003         Retainer         3/8 O.D. x 1/4         Washer, Hardened          130794         Mandrel Assembly (Includes Key Numbers 8-10, 12-15, 31 and 32)           49         155066         Rolier Assembly, C				116	4898H	Bolt, Shoulder
35       133835       Fastner, Christmas Tree       119       STD551037       Washer 3/8 x 7/8 x 14 Gauge         36       131494       Pulley, Idler, Flat       121       143723       Bracket         37       STD551037       Washer 13/32 x 13/16 x 16       128       153390       Washer Felt         Gauge       129       19131312       Washer 13/32 x 13/16 x 12 Ga.         40       STD541437       Nut Crownlock 3/8-16 UNC       130       STD523710       Bolt, Fin Hex 3/8-16 UNC x 1         41       133551       Rod, Pivot, with Nibs       Gr. 5       Bolt, Fin Hex 3/8-16 UNC x 1         43       140083       Rod, Clutch, Secondary, with Nibs       131       STD533710       Bolt, RDHD SQNK 3/8-16 UNC x 1         44       140088       Guard, Mandrel, L.H.       132       19132203       Spacer Washer 13/32 I.D. x 1-3/8 O.D. x 1/4         45       STD624003       Retainer       3/8 O.D. x 1/4       Washer, Hardened        130794       Mandrel Assembly (Includes Key Numbers 8-10, 12-15, 31 and 32)         48       133944       Washer, Hardened        164963       Mower Deck, Complete (Standard Deck, Order Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)         50       131845       Arm, Idler       Arm, Idler				117	165746	
36         131494         Pulley, Idler, Flat         121         143723         Bracket           37         STD551037         Washer 13/32 x 13/16 x 16         128         153390         Washer Felt           40         STD541437         Nut Crownlock 3/8-16 UNC         130         STD523710         Bolt, Fin Hex 3/8-16 UNC x 1           41         133551         Rod, Pivot, with Nibs         3         140083         Rod, Clutch, Secondary, with Nibs         3         STD533710         Bolt, RDHD SQNK 3/8-16 UNC x 1           44         140088         Guard, Mandrel, L.H.         132         19132203         Spacer Washer 13/32 I.D. x 1-3/8 O.D. x 1/4           45         STD624003         Retainer         3/8 O.D. x 1/4         Washer, Thrust .75 x 1.230           48         1337729         Screw, Thd. Roll 1/4-20 x 5/8         141         6266H         Washer Thrust .75 x 1.230           48         133944         Washer, Hardened          130794         Mandrel Assembly (Includes Key Numbers 8-10, 12-15, 31 and 32)           50         131340         Bolt, Shoulder #10-24 Grade 5          164963         Mower Deck, Complete (Standard Deck, Order Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)           54         133943         Washer, Hardened					73930600	Nut, Centerlock 3/8-16
37 STD551037 Washer 13/32 x 13/16 x 16 Gauge 40 STD541437 Nut Crownlock 3/8-16 UNC 41 133551 Rod, Pivot, with Nibs 43 140083 Rod, Clutch, Secondary, with Nibs 44 140088 Guard, Mandrel, L.H. 45 STD624003 Retainer 46 137729 Screw, Thd. Roll 1/4-20 x 5/8 47 133944 Washer, Hardened 48 133944 Washer, Hardened 49 155066 Roller Assembly, Cam Follower 50 131340 Bolt, Shoulder #10-24 Grade 5 51 STD541410 Locknut 52 139888 Bolt, Shoulder 5/16-18 UNC 53 131845 Arm Assembly, Pad, Brake 54 133943 Washer, Hardened 55 155046 Arm, Idler						Washer 3/8 x 7/8 x 14 Gauge
Gauge  40 STD541437 Nut Crownlock 3/8-16 UNC  41 133551 Rod, Pivot, with Nibs  43 140083 Rod, Clutch, Secondary, with Nibs  44 140088 Guard, Mandrel, L.H.  45 STD624003 Retainer  46 137729 Screw, Thd. Roll 1/4-20 x 5/8  47 133944 Washer, Hardened  48 133944 Washer, Hardened  49 155066 Roller Assembly, Cam Follower  50 131340 Bolt, Shoulder #10-24 Grade 5  51 STD541410 Locknut  52 139888 Bolt, Shoulder 5/16-18 UNC  53 131845 Arm Assembly, Pad, Brake  54 133943 Washer, Hardened  55 155046 Arm, Idler  129 19131312 Washer 13/32 x 13/16 x 12 Ga.  130 STD523710 Bolt, Fin Hex 3/8-16 UNC x 1  131 STD533710 Bolt, RDHD SQNK 3/8-16 UNC x 1  132 19132203 Spacer Washer 13/32 l.D. x 1-  3/8 O.D. x 1/4  Washer Thrust .75 x 1.230  Mandrel Assembly (Includes Key Numbers 8-10, 12-15, 31 and 32)  51 STD541410 Locknut  52 139888 Bolt, Shoulder \$/16-18 UNC Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)						
40 STD541437 Nut Crownlock 3/8-16 UNC 41 133551 Rod, Pivot, with Nibs 43 140083 Rod, Clutch, Secondary, with Nibs 44 140088 Guard, Mandrel, L.H. 45 STD624003 Retainer 46 137729 Screw, Thd. Roll 1/4-20 x 5/8 47 155066 Roller Assembly, Cam Follower 48 133944 Washer, Hardened 49 155066 Roller Assembly, Cam Follower 50 131340 Bolt, Shoulder #10-24 Grade 5 51 STD541410 Locknut 52 139888 Bolt, Shoulder 5/16-18 UNC 53 131845 Arm Assembly, Pad, Brake 54 133943 Washer, Hardened 55 155046 Arm, Idler	37	\$10551037	Washer 13/32 x 13/16 x 16			
41 133551 Rod, Pivot, with Nibs 43 140083 Rod, Clutch, Secondary, with Nibs 44 140088 Guard, Mandrel, L.H. 45 STD624003 Retainer 46 137729 Screw, Thd. Roll 1/4-20 x 5/8 47 155066 Roller Assembly, Cam Follower 48 133944 Washer, Hardened 49 155066 Roller Assembly, Cam Follower 50 131340 Bolt, Shoulder #10-24 Grade 5 51 STD541410 Locknut 52 139888 Bolt, Shoulder 5/16-18 UNC 53 131845 Arm Assembly, Pad, Brake 54 133943 Washer, Hardened 55 155046 Arm, Idler	40	STDE41427				
43       140083       Rod, Clutch, Secondary, with Nibs       131       STD533710       Bolt, RDHD SQNK 3/8-16 UNC x 1         44       140088       Guard, Mandrel, L.H.       132       19132203       Spacer Washer 13/32 l.D. x 1-3/8 O.D. x 1/4         45       STD624003       Retainer       3/8 O.D. x 1/4         46       137729       Screw, Thd. Roll 1/4-20 x 5/8       141       6266H       Washer Thrust .75 x 1.230         48       133944       Washer, Hardened        130794       Mandrel Assembly (Includes Key Numbers 8-10, 12-15, 31 and 32)         50       131340       Bolt, Shoulder #10-24 Grade 5        164963       Mower Deck, Complete (Standard Deck, Order Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)         51       STD541410       Arm, Idler       Arm, Idler       Key Nos. 101-106 and 111-121)				130	STD523710	
44       140088       Guard, Mandrel, L.H.       132       19132203       Spacer Washer 13/32 I.D. x 1-3/8 O.D. x 1/4         45       STD624003       Retainer       3/8 O.D. x 1/4         46       137729       Screw, Thd. Roll 1/4-20 x 5/8       141       6266H       Washer Thrust .75 x 1.230         48       133944       Washer, Hardened        130794       Mandrel Assembly (Includes Key Numbers 8-10, 12-15, 31 and 32)         50       131340       Bolt, Shoulder #10-24 Grade 5        164963       Mower Deck, Complete (Standard Deck, Order Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)         52       139888       Bolt, Shoulder 5/16-18 UNC       Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)			Rod, Clutch, Secondary, with	131	STD533710	Bolt, RDHD SQNK 3/8-16 UNC
45 STD624003 Retainer 46 137729 Screw, Thd. Roll 1/4-20 x 5/8 141 6266H Washer Thrust .75 x 1.230 48 133944 Washer, Hardened 130794 Mandrel Assembly (Includes Key Numbers 8-10, 12-15, 31 and 32) 51 STD541410 Locknut 164963 Mower Deck, Complete (Standard Deck, Order Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)	4.4	4.40000				****
46       137729       Screw, Thd. Roll 1/4-20 x 5/8       141       6266H       Washer Thrust .75 x 1.230         48       133944       Washer, Hardened        130794       Mandrel Assembly (Includes         49       155066       Roller Assembly, Cam Follower       Key Numbers 8-10, 12-15, 31         50       131340       Bolt, Shoulder #10-24 Grade 5        164963       Mower Deck, Complete (Standard Deck, Order         52       139888       Bolt, Shoulder 5/16-18 UNC       (Standard Deck, Order       Separately Mulcher Plate and         53       131845       Arm Assembly, Pad, Brake       Separately Mulcher Plate and       Gauge Wheel Components,         54       133943       Washer, Hardened       Key Nos. 101-106 and 111-121)				132	19132203	
48       133944       Washer, Hardened       130794       Mandrel Assembly (Includes Key Numbers 8-10, 12-15, 31 and 32)         50       131340       Bolt, Shoulder #10-24 Grade 5       164963       Mower Deck, Complete (Standard Deck, Order Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)         52       139888       Bolt, Shoulder 5/16-18 UNC       Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)				141	esceu	
49       155066       Roller Assembly, Cam Follower       Key Numbers 8-10, 12-15, 31         50       131340       Bolt, Shoulder #10-24 Grade 5       and 32)         51       STD541410       Locknut       164963       Mower Deck, Complete (Standard Deck, Order Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)         52       139888       Bolt, Shoulder 5/16-18 UNC       Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)						
50 131340 Bolt, Shoulder #10-24 Grade 5 51 STD541410 Locknut 164963 Mower Deck, Complete 52 139888 Bolt, Shoulder 5/16-18 UNC 53 131845 Arm Assembly, Pad, Brake 54 133943 Washer, Hardened 55 155046 Arm, Idler  50 131340 Bolt, Shoulder #10-24 Grade 5 5- 164963 Mower Deck, Complete (Standard Deck, Order Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)					130754	
51 STD541410 Locknut 164963 Mower Deck, Complete 52 139888 Bolt, Shoulder 5/16-18 UNC 53 131845 Arm Assembly, Pad, Brake 54 133943 Washer, Hardened 55 155046 Arm, Idler  Mower Deck, Complete (Standard Deck, Order Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)						
52 139888 Bolt, Shoulder 5/16-18 UNC (Standard Deck, Order Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)		_			164963	
53 131845 Arm Assembly, Pad, Brake Separately Mulcher Plate and Gauge Wheel Components, Key Nos. 101-106 and 111-121)  55 155046 Arm, Idler						(Standard Deck, Order
54 133943 Washer, Hardened Gauge Wheel Components, 55 155046 Arm, Idler Key Nos. 101-106 and 111-121)	•		*			
55 155046 Arm, Idler						
MOTE: All component dimensions given in LLC inches					A 44	•

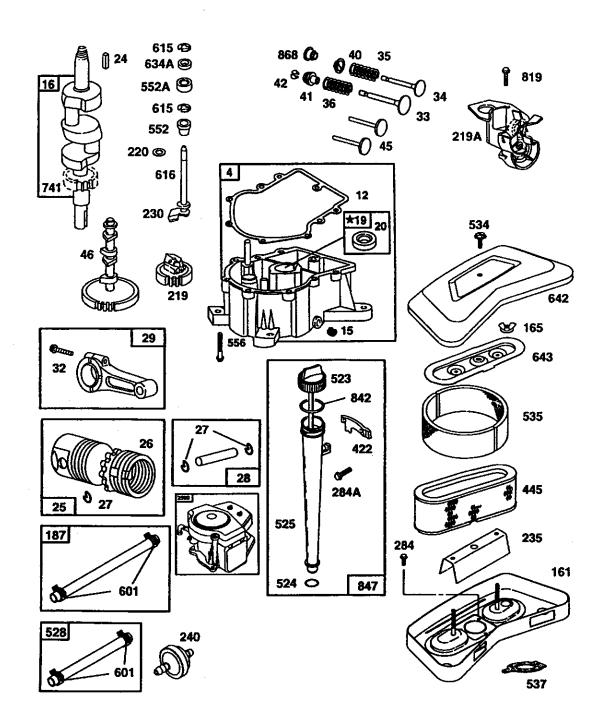
NOTE: All component dimensions given in U.S.inches 1 inch = 25.4 mm

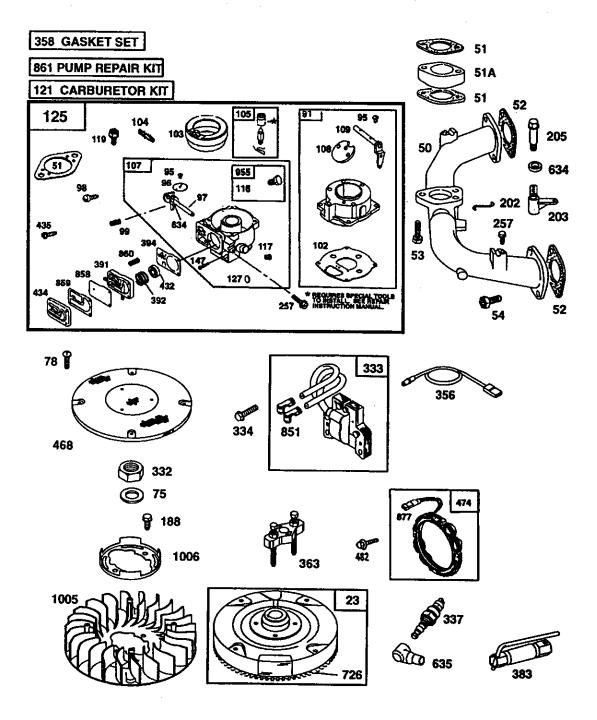
# TRACTOR - - MODEL NUMBER 917.270771 PEERLESS TRANSAXLE - - MODEL NUMBER 206-508B

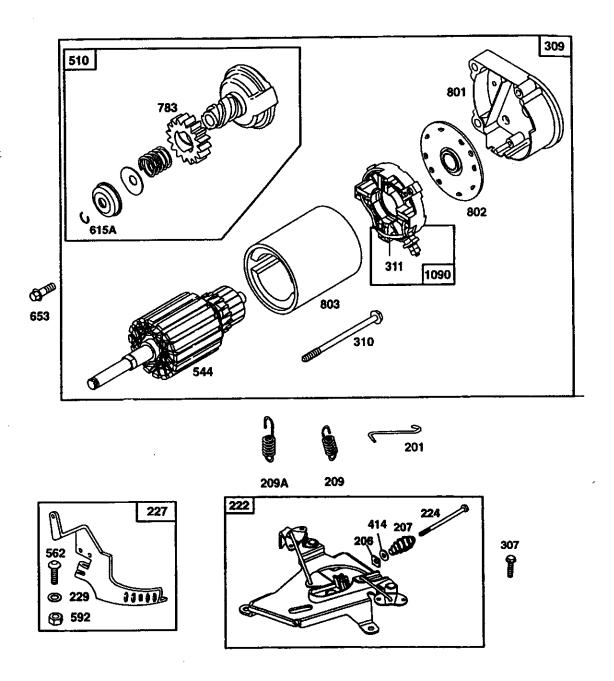


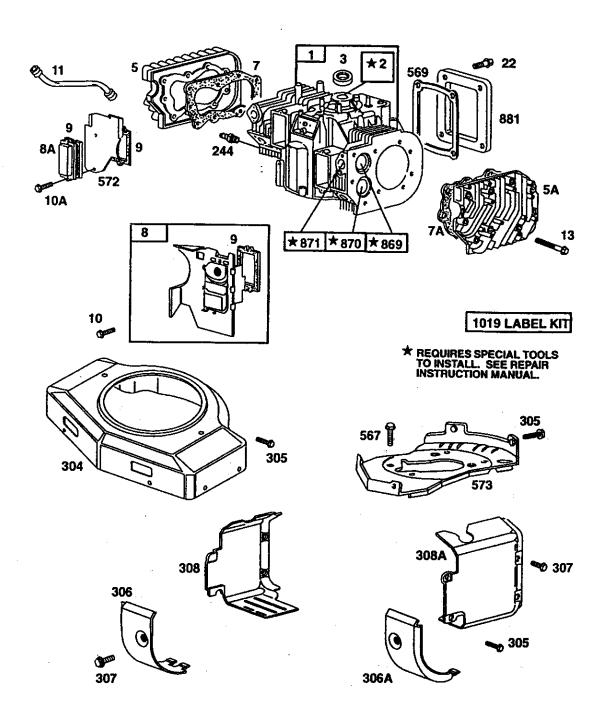
## TRACTOR - - MODEL NUMBER 917.270771 PEERLESS TRANSAXLE - - MODEL NUMBER 206-508B

REF NO.	PART NO.	DESCRIPTION	REF NO.	PART NO.	DESCRIPTION
1	772147	Transaxle Cover	41A	790079	Brake Lever
2	780086A	Needle Bearing 5/8"	42	792073A	Screw 1/4-20 x 1-1/4"
3	770128	Transaxle Case	42A	792085A	Screw 1/4-20 x 2-1/4"
4	776395	Countershaft	43	792075	Locknut 5/16-24
5	776409	Output Shaft	44	790025	Brake Pad Holder
6	778364	Spur Gear (38 teeth)	45	786066	Spacer
6A	778369	Spur Gear (15 teeth)	46	786086	Brake Lever Bracket
7	778330	Spur Gear (11 teeth)	47	774690	Axle (11-15/16" long)
8	792180	Shift Key	48	774691	Axle (16-1/2" long)
8A	792047	Woodruff Key #9	49	778356	Spur Gear (29 teeth)
9	784352	Shift Collar	50	778338	Spur Gear (27 teeth)
10	784378	Shift Rod & Fork	51	778354	Spur Gear (23 teeth)
11	778334	Bevel Gear (30 teeth)	52	778352	Spur Gear (19 teeth)
12	778309	Input Bevel Pinion (13	53	778350	Spur Gear (16 teeth)
		teeth)	54	778346	Spur Gear (15 teeth)
13	778368	Bevel Gear (13 teeth)	56	778355	Spur Gear (11 teeth)
		(Incl. 14)	57	778337	Spur Gear (13 teeth)
14	778367	Bevel Pinion (13 teeth)	58	778353	Spur Gear (17 teeth)
15	770270	(Incl. 13)	59	778351	Spur Gear (21 teeth)
-	778370	Ring Gear (43 teeth)	60	778349	Spur Gear (24 teeth)
17 18	786188	Drive Pin	61	778345	Spur Gear (25 teeth)
20	786102	Spacer	65	780189	Washer
21	792077	Ball 5/16" dia	66	776422	Input Shaft
22	792078 792079	Set Screw 3/8-16 x 3/8" Spring	67	776396	Shifter & Brake Shaft
25	792073A	Screw 1/4-20 x 1-1/4"	69	792170	Retaining Ring
25A	792177	Screw 1/4-20 X 1-1/4 Screw 1/4-20 X 1-3/8"	70	786187	Spacer .890
26	792125	Retaining Ring (pkg of 2)	71	788069	Square Cut Ring
27	792035	Retaining Ring	71B	788092	"O" Ring
28	788040	Retaining Ring	76	780090	Washer
29	780072	Washer	77	788078A	Inverted Retaining Ring
29A	780160	Washer	79	792144	Spring
29B	780051	Thrust Washer (.762 ID)	82	778333	Bevel & Spur Gear (30 & 13 teeth)
29C	780199	Anti-Rotation Washer	83	778338	Spur Gear (27 teeth)
30	780108	Washer	85	792154	Oil Fill Plug
31	780001	Washer (.056 wide)	87	788089	Oil Seal 9/16"
31A	780195	(USE AS NEEDED) Flat Washer (.062 wide)	150	788093A	Liquid Gasket RTV Silicone
32	788083	Oil Seal 5/8"	157	788088	Oil Seal 3/4"
34	780194	Bushing	180	730229A	Gear Oil 80W90
35	780193	Flanged Bushing	900	794691	Replacement Transaxle
35A	780197	Flanged Bushing 3/4*	000	704001	riepiacement riansaxio
36	790075	Brake Disk	NOTE	F. All compo	nent dimensions given in
37	790007	Brake Pad Plate		US inch	es 1 inch = 25.4 mm
38	799021	Brake Pad (pkg of 2)		U.U. 111011	00 1 HOH — 40.7 HH
39	786026	Dowel Pin			
40	792076A	Flat Washer			







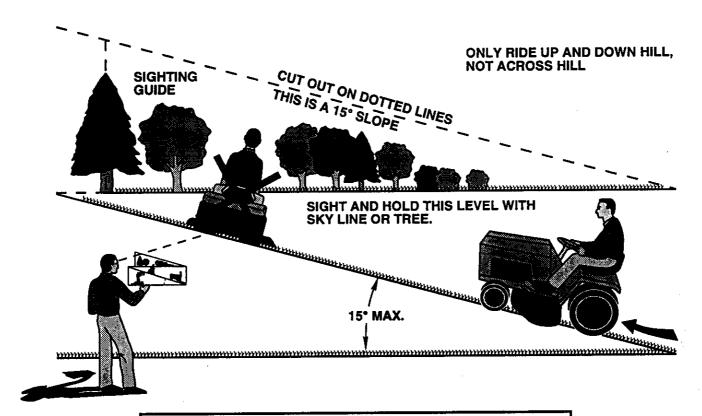


KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	497074	Cylinder Assembly	52	270884	<ul> <li>Gasket, Intake Manifold Mounting</li> </ul>
2 3	399265 391086	Bushing * Seal, Oil	53	93970	Screw, Hex Head,
4	493304	Sump, Engine			Carburetor to Manifold
5	493457	Head, Cylinder #1	54	93208	Screw, Phillips
5A	493458	Head, Cylinder #2	75	222511	Washer, Spring
7	271867	* Gasket, Cylinder Head #1	78	95039	Screw, Hex
7A	271868	* Gasket, Cylinder Head #2	91	499281	Body Assembly, Upper
8	495754	Breather Assembly #1	95	93499	Screw, Sems
8A	222892	Cover, Breather Cylinder #2	96	221939	Valve, Throttle
		(Used Only on Key #572,	97	499172	Shaft, Throttle
		Air Baffle with Holes for	98	91920	Screw, Fillister Head
		Mounting)	99	26157	Spring, Throttle Adjust
9	27803	<ul> <li>Gasket, Breather</li> </ul>	102	271607	Gasket, Carburetor Body
10	94382	Screw, Sems	103	298514	Float, Carburetor
10A	94830	Screw, Sems	104	231435	** Pin, Float Hinge
11	280225	Tube, Breather	105	394682	** Valve, Needle
12	273208	* Gasket, Crankcase, .015" Thick	107	499655	Body Assembly, Lower
	271188	* Gasket, Crankcase, .005" Thick	108	225373	Valve, Choke
	271189	<ul> <li>Gasket, Crankcase, .009" Thick</li> </ul>	109	392673	Shaft, Choke
13	94565	Screw, Cylinder Head	116	280474	* O-Ring
15	94239	Plug, Oil Drain	117	232018	Jet, Needle Valve, Fixed
16	394028	Crankshaft		232022	Jet, Needle Valve, Fixed,
	94196	Timing Gear Key			High Altitude
19	399264	Bushing	119	94152	Screw, Hex Head
20	291675	* Seal, Oil	121	491539	Carburetor Kit
22	94724	Screw, Sems	125	19306	Carburetor
23	491180	Flywheel	127	223472	** Plug, Welch
24	222698	Key, Flywheel	147	497684	Jet, Pilot
25	498584	Piston Assembly, Standard Size	161	496599	Base, Air Cleaner
	498585	Piston Assembly, .010"	165	94289	Nut, Wing
	498586	Oversize Piston Assembly, .020"	187	299146	Line, Fuel, 28" Long (Cut to Suit)
-		Oversize	188	94627	Screw
•	498587	Piston Assembly, .030*	201	262683	<b>Link</b>
		Oversize	202	262684	Link
26	394959	Ring Set, Standard Size	203	280997	· Crank, Beli
	394960	Ring Set, .010" Oversize	205	93971	Screw, Hex Head
	394961	Ring Set, .020" Oversize	206	94298	Nut
	394962	Ring Set, .030" Oversize	207	262337	Spring, Control, Rod
27	263129	Lock, Piston Pin	209	262352	Spring, Governor
28	498319	Pin, Piston, Standard Size	209A	261563	Spring, Governor Idle
	391286	Pin, Piston, .005* Oversize	219	394348	Gear, Governor
29	394306	Rod, Connecting, Standard	219A	393415	Oil Slinger
		Size	220	222773	Washer, Thrust
	397158	Rod, Connecting, .020"	222	491282	Bracket, Control
	04074	Undersize	224	94297	Screw, Torx
32	94671	Screw, Connecting Rod			
33	390420	Valve, Exhaust	•	Included	in Gasket Set (495868)
34	261528	Valve, Intake			
35	65906	Spring, Valve, Intake	**	Included	in Carburetor Kit (491539)
36	26828	Spring, Valve, Exhaust			
40	221596	Retainer, Valve, Intake	***	Included	in Carburetor Kit (491539),
41	292260	Retainer, Valve, Exhaust		and Pum	np Repair Kit (393397)
42	494553	Keeper, Valve			
45	261368	Tappet, Valve	****	Included	l in Gasket Set (495868),
46	214484	Gear, Cam		and Carb	buretor Kit (491539)
50	213290	Manifold, Intake			
51	271412	**** Gasket, Carburetor Mounting	NOTE	: All comp	conent dimensions given in U.S. inches
51A	281412	Spacer, Carburetor	54	1 inch = 2	25.4 mm

## BRIGGS & STRATTON ENGINE-MODEL NUMBER 42E707, TYPE NUMBER 2631-E1

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.		DESCRIPTION
227	491297	Lever Assembly, Governor	572	224816		Baffle, Air, Cylinder #2
229	62199	Washer	573	491304		Plate, Back
230	223882	Washer, Governor Crank, Inside	592	92278		Nut, Hex.
235	224995	Shield, Fuel Spray	601	93053		Clamp, Hose
240	394358	Filter, Fuel	615	94296		Retainer, E-Ring
244	230318	Connector, Fuel Line	615A	263080		Retainer
257	93897	Screw, Serns	616	491530		Crank, Governor
284	94674	Screw, Hex Head	634	271013	**	Washer, Throttle Shaft
284A	94882	Screw, Hex Head	634A	491287	•	Seal, Governor Shaft
304	495469	Housing, Blower, Red	635	66538		Boot, Spark Plug
305	94786	Screw, Sems	642	225008		Cover, Air Cleaner
306	222846	Shield, Cylinder	643	496700		Plate, Air Cleaner
306A	223734	Shield, Cylinder	653	93585		Screw, Hex Head
307	94930	Screw, Self-Tapping	726	391362		Gear, Ring
308	224774	Cover, Air Guide				(Includes Mounting Parts)
308A	224775	Cover, Air Guide	741	262989		Gear, Timing
309	497596	Motor, Starter	783	280104		Gear, Starter
310	94003	Bolt, Thru	801	394860		Cap, Drive
311	497608	Brush Set	802	497607		Cap, End
332	230674	Nut, Hex	803	497604		Housing, Starter
333	394891	Armature, Magneto	819	94675		Screw, Hex Head
334	94731	Screw, Sems	842	270920	•	Seal, Cap
337	802592	Plug, Spark	847	495715		Tube Assembly, Oil
356	494705	Wire, Stop	851	493880		Terminal, Cable
358	495868	Gasket Set	858	270989		Diaphragm, Carburetor
363	19203	Flywheel Puller	859	271025	***	Gasket, Pump
383 391	89838	Wrench, Spark Plug	860	201000		Spring, Diaphragm
392	280197 261395	Body, Pump *** Spring, Diaphragm	861	393397		Repair Kit, Pump
394	272638	*** Diaphragm, Carburetor	868 869	497212 261463		Seal, Valve
414	220680	Washer	870	213316		Seat, Valve, Intake
422	222875	Bracket, Oil Fill	871	261961		Seat, Valve, Exhaust
432	221377	*** Cap, Spring	071	231218		Bushing, Guide (Exhaust Only) Bushing, Guide (Intake, Brass)
434	223688	Cover, Diaphragm	877	393456		Wire, Alternator
435	93829	Screw, Diaphragm Cover	881	495901		Plate, Cover
445	394019	Filter, Air	955	397882		Plug and Seal, Solenoid
468	497908	Screen, Rotating	1005	281053		Fan, Flywheel
474	393474	Alternator	1006	224901		Retainer, Fan
482	93621	Screw,	1019	496726		Label Kit
510	497606	Drive, Starter	1090	97605		Retainer, Brush
	494947	Cap, Oil Fill	2500	42E707-263	31	Replacement Engine
524	271157	* Seal, Fill Tube		498543	-	Replacement Shortblock
525	495348	Tube, Oil Fill (Includes Seals				
528	393815	Hose, Vacuum		Included in 6	Gar	sket Set (495868)
534	94823	Screw, Air Cleaner		III COUGO HT	oa.	sket Oct (493000)
535	272490	Filter, Air	**	Included in (	Cai	buretor Kit (491539)
537	271411	**** Gasket, Air Cleaner		II CIGGOG HT	oa.	Daretor Att (431309)
544	497603	Armature, Starter	***	Included in f	(Car	buretor Kit (491539).
552	262332	Lower Bushing, Governor				air Kit (393397)
552A	262331	Upper Bushing, Governor			.به	
556	93585	Screw, Hex Head	****	Included in 6	Gas	sket Set (495868),
562	93853	Bolt, Governor Lever				r Kit (491539)
567	94811	Screw, Hex Head,				
		Back Plate to Cylinder	NOTE:	All compone	ent	dimensions given in U.S. inches
56 <del>9</del>	272645	* Gasket, Base		1 inch = $25.4$	4 m	im

## 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.

## For in-home major brand repair service: Call 24 hours a day, 7 days a week

1-800-4-MY-HOME<sup>SM</sup> (1-800-469-4663)

Para pedir servicio de reparación a domicilio
1-800-676-5811

In Canada for all your service and parts needs call Au Canada pour tout le service ou les pièces 1-800-665-4455

For the repair or replacement parts you need:
Call 6 am-11pm CST, 7 days a week
PartsDirect

1-800-366-PART (1-800-366-7278)

Para ordenar piezas con entrega a domicilio 1-800-659-7084

For the location of a Sears Parts and Repair Center in your area:

Call 24 Hours a day, 7 days a week 1-800-488-1222

For information on purchasing a Sears Maintenance Agreement or to inquire about an existing Agreement:

Call 9 am-5 pm, Monday - Saturday 1-800-827-6655

