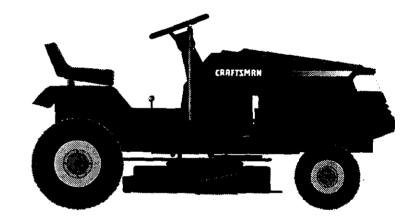
## Owner's Manual

# CRAFTSMAN

14.5 HP
ELECTRIC START
42" MOWER
6 SPEED TRANSAXUE:
LAWN TRACTOR

Model No. 917.270514



- Safety
- Assembly
- Operation
- Maintenance
- Repair Parts



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

### **CAUTION:**

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

For answers to your questions about this product, Call:

1-800-659-5917

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

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

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### WARRANTY

LIMITED TWO YEAR WARRANTY ON CRAFTSMAN RIDING EQUIPMENT 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.

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

### SAFETY RULES

**IMPORTANT:** This cutting machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

#### **GENERAL OPERATION**

- Read, understand, and follow all instructions in the manual and on the machine before starting.
- Only allow responsible adults, who are familiar with the instructions, to operate the machine.
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade.
- · Be sure the area is clear of other

- people before mowing. Stop machine if anyone enters the area.
- Never carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Be aware of the mower discharge direction and do not point it at anyone.
   Do not operate the mower without either the entire grass catcher or the guard in place.
- Slow down before turning.
- Never leave a running machine unattended. Always turn off blades, set parking brake, stop engine, and remove keys before dismounting.

2

## 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.
- Data indicates that operators, age 60 years and above, are involved in a large percentage of riding mowerrelated injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.

#### **SLOPE OPERATION**

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

#### DO:

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

#### DO NOT:

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

- Do not mow near drop-offs, ditches, or embankments. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.
- Do not mow on wet grass. Reduced traction could cause sliding.
- Do not try to stabilize the machine by putting your foot on the ground.
- Do not use grass catcher on steep slopes.

#### CHILDREN

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

- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- 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.

## SAFETY RULES

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











- Check brake operation frequently. Adjust and service as required.
- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- · Never carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and down for small children.

- Mow up and down slopes (15° Max), not across.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Use slow speed. Choose a low gear so that you will not have to stop or shift while on the slope.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.

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

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

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

#### PRODUCT SPECIFICATIONS

GASOLINE CAPACITY	1.25 GALLONS
ICAPACH Y	UNLEADED
AND TYPE:	
	SAE 30(ABOVE 32°F)
(API-SF/SG/SH):	(Below 32°F)
OIL CAPACITY:	<del>-`</del>
SPARK PLUG:	
	RJ19LM OR J19LM
VALVE	INTAKE: .005"007"
CLEARANCE:	EXHAUST:.009"011"
GROUND SPEED	FORWARD:
(MPH):	1ST 1.1
)	2ND 1.4
	3RD 2.2
	4TH 3.4
	5TH 4.3
	6TH 5.5
	REVERSE: 1.7
TIRE	FRONT: 14 PSI
PRESSURE:	REAR: 12 PSI
	3 AMPS BATTERY
SYSTEM:	5 AMPS HEADLIGHTS
BATTERY:	AMP/HR: 25
}	MIN. CCA: 190 CASE SIZE:U1R
DI ADE BOIT	
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**

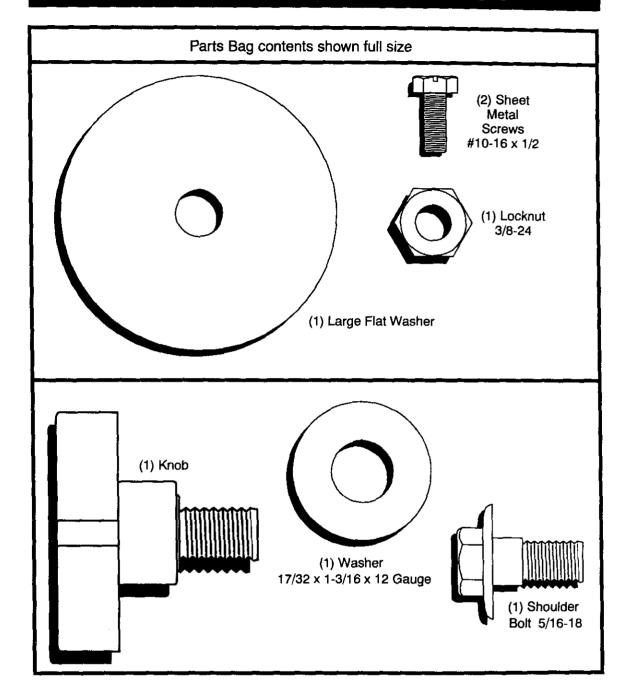
A Sears Maintenance Agreement is available on this product. Contact your nearest Sears store for details.

#### **CUSTOMER RESPONSIBILITIES**

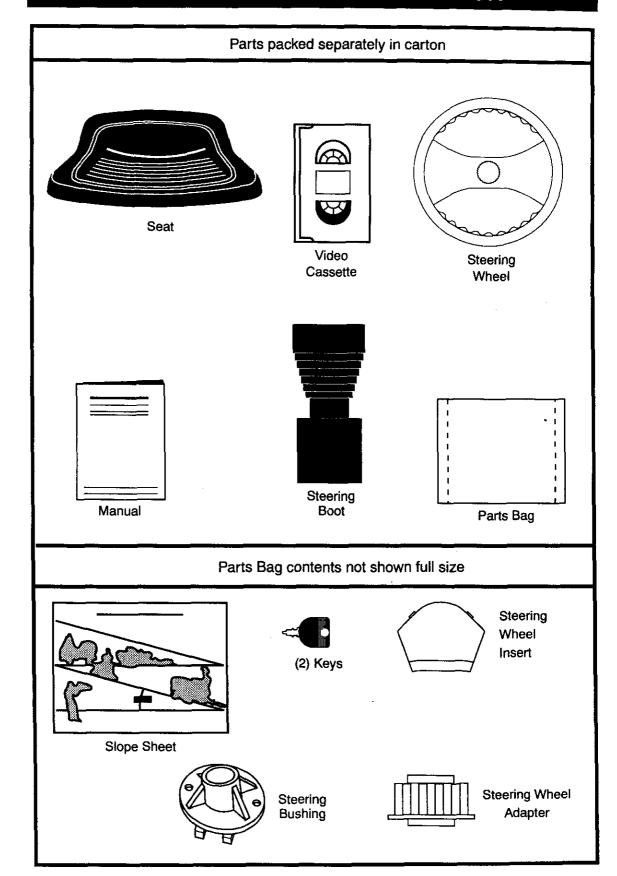
- · Read and observe the safety rules.
- Follow a regular schedule in maintaining, caring for and using your tractor.
- Follow the instructions under "Maintenance" and "Storage" sections of this owner's manual.

A WARNING: This tractor is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brushcovered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. In the state of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest Sears Authorized Service Center/Department (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
- (1) Pliers
- (1) 1/2" wrench
- (1) Utility knife
- (1) 5/16" wrench
- (1) Tire pressure
- (1) Phillips

gauge

Screwdriver

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 REMOVETRACTOR FROM CARTON

#### **UNPACK CARTON**

- Remove all accessible loose parts and parts cartons from carton.
- Cut, from top to bottom, along lines on all four corners of carton, and lay panels flat.
- Check for any additional loose parts or cartons and remove.

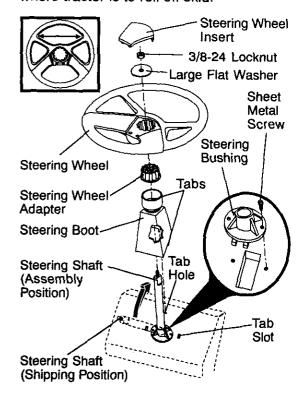
#### BEFORE ROLLINGTRACTOR OFF SKID

#### ATTACH STEERING WHEEL

- Slide the steering bushing over the steering shaft.
- Raise steering shaft forward until screw holes in dash line up with steering bushing. Install two (2) sheet metal screws and tighten securely.
- Position steering boot over steering shaft.
- Place tabs of steering boot over tab slots in dash and push down to secure.
- Slide steering wheel adapter onto upper steering shaft.
- Position front wheels of the tractor so they are pointing straight forward.
- Position steering wheel so cross bars are horizontal (left to right) and slide onto adapter.

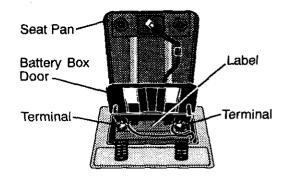
- Assemble large flat washer and 3/8-24 locknut and tighten securely.
- · Snap steering wheel insert into center of steering wheel.
- Remove protective materials from tractor hood and grill.

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



#### HOW TO SET UP YOUR TRACTOR CHECK BATTERY

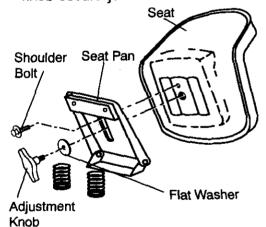
- · Lift seat pan to raised position and open battery box door.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps. (See "BATTERY" in Maintenance section of this manual for charging instructions).



#### 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.



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

- Press lift lever plunger and raise attachment lift lever to its highest position.
- Release parking brake by depressing clutch/brake pedal.
- Place gearshift lever in neutral (N) position.

- Roll tractor forward off skid.
- Remove banding holding discharge guard up against tractor.

#### TO DRIVE TRACTOR OFF SKID

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

- Be sure all the above assembly steps have been completed.
- Check engine oil level and fill fuel tank with gasoline.
- Sit on seat in operating position, depress clutch/brake pedal and set the parking brake.
- Place gear shift lever in neutral (N) position.
- Press lift lever plunger and raise attachment lift lever to its highest position.
- Start the engine. After engine has started, move throttle control to idle position.
- Depress clutch/brake pedal into full "BRAKE" position and hold. Move gearshift lever to 1st gear.
- Slowly release clutch/brake pedal and slowly drive tractor off skid.
- Apply brake to stop tractor, set parking brake and place gearshift lever in neutral position.
- Turn ignition key to "OFF" position.
   Continue with the instructions that follow.

## 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.

#### **CHECKTIRE 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.

#### **✓ CHECKLIST**

BEFORE YOU OPERATE AND ENJOY YOUR NEW TRACTOR, WE WISH TO ASSURE THAT YOU RECEIVE THE BEST PERFORMANCE AND SATISFACTION FROM THIS QUALITY PRODUCT.

## PLEASE REVIEW THE FOLLOWING CHECKLIST:

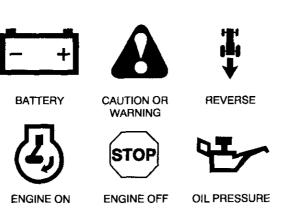
- ✓ All assembly instructions have been completed.
- ✓ No remaining loose parts in carton.
- Battery is properly prepared and charged. (Minimum 1 hour at 6 amps).
- Seat is adjusted comfortably and tightened securely.
- All tires are properly inflated. (For shipping purposes, the tires were overinflated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

# WHILE LEARNING HOW TO USE YOUR TRACTOR, PAY EXTRA ATTENTION TO THE FOLLOWING IMPORTANT ITEMS:

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

## **OPERATION**

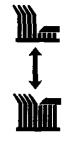
These symbols may appear on your tractor or in literature supplied with the product. Learn and understand their meaning.





**FORWARD** 





SLOW











LIGHT

**FAST** 













**ATTACHMENT CLUTCH ENGAGED** 

REVERSE

**NEUTRAL** 

HIGH

LOW

PARKING BRAKE





**ATTACHMENT CLUTCH DISENGAGED** 











KEEP AREA CLEAR

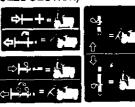
SLOPE HAZARDS

(SEE SAFETY RULES SECTION)







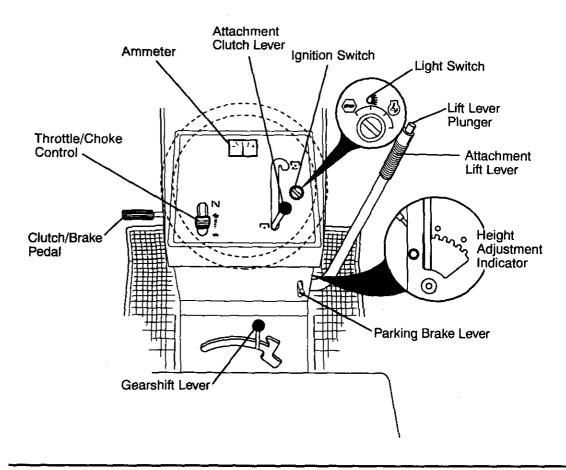


**FREE WHEEL** (Automatic Models only)

#### **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.

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

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

**GEARSHIFT LEVER** - Selects the speed and direction of tractor.

**IGNITION SWITCH** - Used for starting and stopping the engine.

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

**LIGHT SWITCH** - Turns the headlights on and off.

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

THROTTLE/CHOKE CONTROL - Used for starting and controlling engine speed.

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

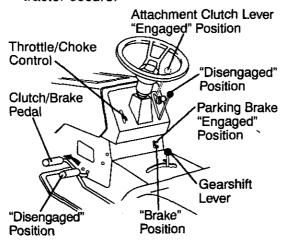


The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles or standard safety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

## HOWTO USEYOURTRACTOR TO SET PARKING BRAKE

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

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



#### **STOPPING**

#### **MOWER BLADES -**

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

#### **GROUND DRIVE -**

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

#### **ENGINE-**

 Move throttle control to slow position.
 NOTE: Failure to move throttle control to slow position and allowing engine to idle before stopping may cause engine to "backfire".

- Turn ignition key to "OFF" position and remove key. Always remove key when leaving tractor to prevent unauthorized use.
- Never use choke to stop engine.
   IMPORTANT: Leaving the ignition switch in any position other than "OFF" will cause the battery to be discharged, (dead).

**NOTE:** Under certain conditions when tractor is standing idle with the engine running, hot engine exhaust gases may cause "browning" of grass. To eliminate this possibility, always stop engine when stopping tractor on grass areas.

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

#### TO USE THROTTLE CONTROL

Always operate engine at full throttle.

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

## TO 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.

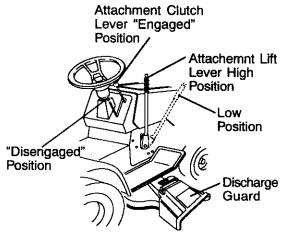
- The average lawn should be cut to approximately 2-1/2 inches during the cool season and to over 3 inches during hot months. For healthier and better looking lawns, mow often and after moderate growth.
- For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first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

ACAUTION: Do not operate the mower without either the entire grass catcher, on mowers so equipped, or the discharge guard in place.



#### TO OPERATE ON HILLS

A CAUTION: Do not drive up or down hills with slopes greater than 15° and do not drive across any slope.

- Choose the slowest speed before starting up or down hills.
- Avoid stopping or changing speed on hills.
- If slowing is necessary, move throttle control lever to slower position.
- If stopping is absolutely necessary, push clutch/brake pedal quickly to brake position and engage parking brake.
- Move 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.

#### TOTRANSPORT

- 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 ENIGNE CHECK ENGINE OIL LEVEL

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

#### **ADD GASOLINE**

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

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

**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 choke position.
   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, move throttle control to fast position, wait a few minutes and try again. If engine still does not start, move the throttle control back to the choke position and retry.

WARM WEATHER STARTING (50° F and above)

- When engine starts, move the throttle control to the fast position.
- 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)

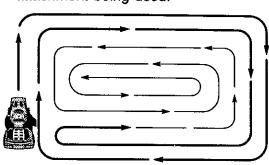
- When engine starts, allow engine to run with the throttle control in the choke position until the engine runs roughly, then move throttle control to fast position. This may require an engine warm-up period from several seconds to several minutes, depending on the temperature.
- The attachments can also be used during the engine warm-up period.

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

#### **MOWING TIPS**

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

- If grass is extremely tall, it should be mowed twice to reduce load and possible fire hazard from dried clippings. Make first cut relatively high; the second to the desired height.
- Do not mow grass when it is wet. Wet grass will plug mower and leave undesirable clumps. Allow grass to dry before mowing.
- Always operate engine at full throttle when mowing to assure better mowing performance and proper discharge of material. Regulate ground speed by selecting a low enough gear to give the mower cutting performance as well as the quality of cut desired.
- When operating attachments, select a ground speed that will suit the terrain and give best performance of the attachment being used.



### MAINTENANCE

AS	MAINTENANCE SCHEDUL L IN DATES YOU COMPLETE GULAR SERVICE	E	EFORE	ENCHUS ENCHUS	LOURS VERY 2	HOUR VERY S	HOUR	S HOUP SO HOUP SUERY SE	ASON FORE	TORA SER	VICE	DAT	ES
	Check Brake Operation	~	1									$\Box$	
	Check Tire Pressure	1	1										
Т	Check Operator Presence and Interlock Systems	~											
R	Check for Loose Fasteners	1				1/7		1					
ΙÀΙ	Sharpen/Replace Mower Blades												
Ç	Lubrication Chart			/				1					
اۃ ا	Check Battery Level			<b>√</b> 8									
R	Clean Battery and Terminals			1				/				_ "	
1	Check Transaxle Cooling			1									
<b>i</b>	Adjust Blade Belt(s) Tension					1/5							
	Adjust Motion Drive Belt(s) Tension					<b>1</b> 5							
	Check Engine Oil Level	1	1										
1	Change Engine Oil			1,2,3				1					
lε	Clean Air Filter			1/2	L								
N	Clean Air Screen			1/2		$\Box$							
G	Inspect Muffler/Spark Arrester				1			T					
	Replace Oil Filter (If equipped)					1,2							
I N	Clean Engine Cooling Fins					<b>1</b> 2				-			
-	Replace Spark Plug					1	1						
	Replace Air Filter Paper Cartridge					<b>1</b> /2							
	Replace Fuel Filter						1						

- 1 Change more often when operating under a heavy load or in high ambient temperatures.
- 2 Service more often when operating in dirty or dusty conditions.
- If equipped with oil filter, change oil every 50 hours 4 - Replace blades more often when mowing in sandy soil

5 - If equipped with adjustable system.

Do not overtighten.

6 - Not required if equipped with maintenance-free by 7 - Tighten front axle 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.

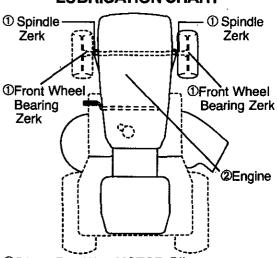
All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

 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**



**OSAE OR 10W30 MOTOR OIL @REFER TO MAINTENANCE "ENGINE" SECTION** 

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

#### TRACTOR

Always observe safety rules when performing any maintenance.

#### **BRAKE OPERATION**

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

#### **TIRES**

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

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

#### **OPERATOR PRESENCE SYSTEM**

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

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

#### **BLADE CARE**

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

#### **BLADE REMOVAL**

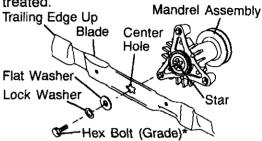
- Raise mower to highest position to allow access to blades.
- Remove hex bolt, lock washer and flat washer securing blade.

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

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

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

IMPORTANT: Blade bolt is Grade 8 heat treated.



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

#### TO SHARPEN BLADE

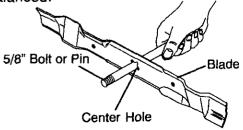
**NOTE:** We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

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

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

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

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



#### **BATTERY**

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

- · Keep battery and terminals clean.
- · Keep battery bolts tight.
- Keep small vent holes open.
- Recharge at 6-10 amperes for 1 hour.
   NOTE: The original equipment battery on your tractor is maintenance free. Do not attempt to open or remove caps or covers. Adding or checking level of electrolyte is not necessary.

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

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

#### **V-BELTS**

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

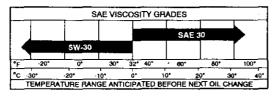
#### TRANSAXLE COOLING

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

#### **ENGINE**

#### LUBRICATION

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



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

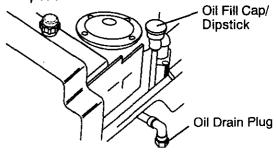
Change the oil after every 25 hours of operation or at least once a year if the tractor is not used for 25 hours in one year.

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

#### TO CHANGE ENGINE OIL

Determine temperature range expected before oil change. All oil must meet API service classification SF, SG or SH.

- · Be sure tractor is on level surface.
- · Oil will drain more freely when warm.
- · Catch oil in a suitable container.
- Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine when changing oil.
- · Remove drain plug.
- After oil has drained completely, replace oil drain plug and tighten securely.
- Refill engine with oil through oil fill dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PRODUCT SPECIFICATIONS" section of this manual.
- Use gauge on oil fill cap/dipstick for checking level. Be sure dipstick cap is tightened securely for accurate reading. Keep oil at "FULL" line on dipstick.



#### **CLEAN AIR SCREEN**

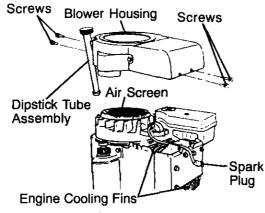
Air screen must be kept free of dirt and chaff to prevent engine damage from overheating. Clean with a wire brush or compressed air to remove dirt and stubborn dried gum fibers.

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#### **ENGINE COOLING FINS**

Remove any dust, dirt or oil from engine cooling fins to prevent engine damage from overheating.

- Remove screws from blower housing and lift housing and dipstick tube assembly off engine.
- Cover oil fill opening to prevent entry of dirt.
- Use compressed air or stiff bristle brush to thoroughly clean engine cooling fins.
- To reassemble, reverse above procedure.



#### **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

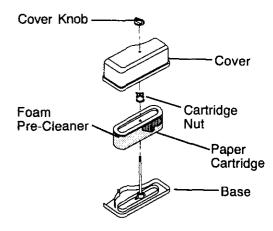
- Slide foam pre-cleaner off cartridge.
- · Wash it in liquid detergent and water.
- Squeeze it dry in a clean cloth.
- Saturate it in engine oil. Wrap it in clean, absorbent cloth and squeeze to remove excess oil.
- If very dirty or damaged, replace precleaner.
- · Reinstall pre-cleaner over cartridge.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

#### TO SERVICE CARTRIDGE

- · Remove cartridge nut.
- Carefully remove cartridge to prevent debris from entering carburetor. Clean base carefully to prevent debris from entering carburetor.

- Clean cartridge by tapping gently on flat surface. If very dirty or damaged, replace cartridge.
- Reinstall cartridge, nut, precleaner, cover and secure with knob(s).

**IMPORTANT:** Petroleum solvents, such as kerosene, are not to be used to clean the cartridge. They may cause deterioration of the cartridge. Do not oil cartridge. Do not use pressurized air to clean or dry cartridge.



#### **MUFFLER**

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

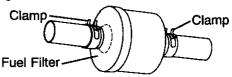
#### SPARK PLUGS

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

#### IN-LINE FUEL FILTER

The fuel filter should be replaced once each season. If fuel filter becomes clogged, obstructing fuel flow to carburetor, replacement is required.

- With engine cool, remove filter and plug fuel line sections.
- Place new fuel filter in position in fuel line with arrow pointing towards carburetor.
- Be sure there are no fuel line leaks and clamps are properly positioned.
- Immediately wipe up any spilled gasoline.



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#### CLEANING

 Clean engine, battery, seat, finish, etc. of all foreign matter.

 Keep finished surfaces and wheels free of all gasoline, oil, etc.

Protect painted surfaces with automotive type wax.

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

### SERVICE AND ADJUSTMENTS

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

Depress clutch/brake pedal fully and set parking brake.

· Place gearshift lever in neutral (N) position.

Place attachment clutch in "DISENGAGED" position.

· Turn ignition key "OFF" and remove key.

- Make sure the blades and all moving parts have completely stopped.
- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with plug.

#### **TRACTOR**

#### TO REMOVE MOWER

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

- Place attachment clutch in "DISEN-GAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.

Roll belt off engine pulley.

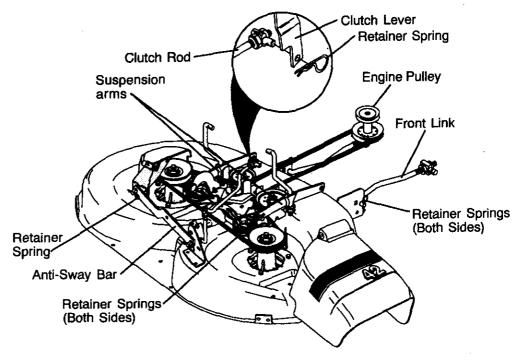
- Disconnect clutch rod from clutch lever by removing retainer spring.
- Disconnect anti-sway bar from chassis bracket by removing retainer spring.
- Disconnect suspension arms from rear deck brackets by removing retainer springs.

- 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.

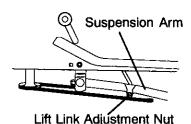
**NOTE**: Each full turn of adjustment nut will change mower height about 1/8".

Recheck measurements after adjusting.

Bottom edge of mower to ground

A Ground Line

A A Ground Line



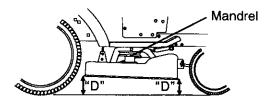
FRONT-TO-BACK ADJUSTMENT

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

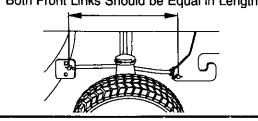
To obtain the best cutting results, the mower housing should be adjusted so that the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

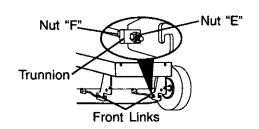
Check adjustment on right side of tractor. Measure distance "D" directly in front and behind the mandrel at bottom edge of mower housing as shown.

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



Both Front Links Should be Equal in Length





## TO REPLACE MOWER BLADE DRIVE BELT

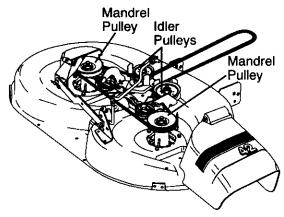
The mower blade drive belt may be replaced without tools. Park the tractor on level surface. Engage parking brake.

#### **BELT REMOVAL -**

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

#### **BELT INSTALLATION -**

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



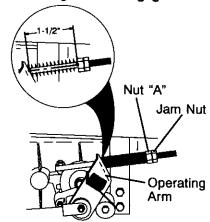
#### TO ADJUST BRAKE

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

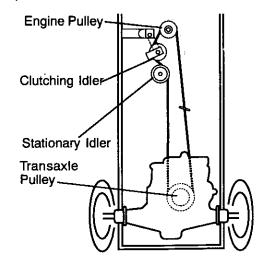
#### With Parking Brake "Engaged"



#### 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.



## TO ADJUST STEERING WHEEL ALIGNMENT

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

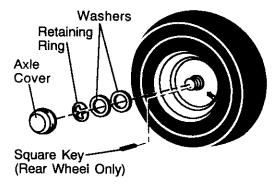
#### FRONT WHEELTOE-IN/CAMBER

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

### TO REMOVE WHEEL FOR REPAIRS

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

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



## TO START ENGINE WITH A WEAK BATTERY

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

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

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

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

#### TO ATTACH JUMPER CABLES -

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

## TO REMOVE CABLES, REVERSE ORDER -

- BLACK cable first from chassis and then from the fully charged battery.
- RED cable last from both batteries.

Chassis

Positive Terminal

Chassis

Cables

Charged

Battery

Negative

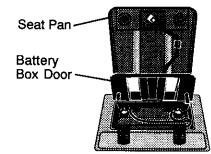
Terminal

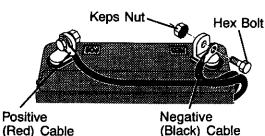
#### REPLACING BATTERY

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 seat pan to raised position and open battery box door.
- Disconnect BLACK battery cable first then RED battery cable and carefully remove battery from tractor.
- Install new battery with terminals in same position as old battery.
- First connect RED battery cable to positive (+) terminal with hex bolt and keps nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) terminal with remaining hex bolt and keps nut. Tighten securely.
- Close battery box door.





### TO REPLACE HEADLIGHT BULB

- · Raise hood.
- Pull bulb holder out of the hole in the backside of the grill.
- Replace bulb in holder and push bulb holder securely back into the hole in the backside of the grill.
- · Close hood.

#### INTERLOCKS AND RELAYS

Loose or damaged wiring may cause your tractor to run poorly, stop running, or prevent it from starting.

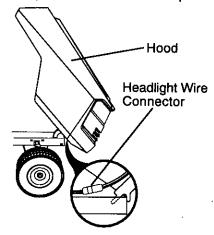
 Check wiring. See electrical wiring diagram in the Repair Parts section.

#### TO REPLACE FUSE

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

## TO REMOVE HOOD AND GRILL ASSEMBLY

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



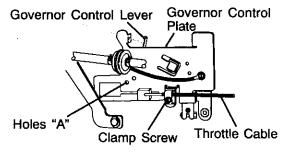
#### **ENGINE**

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

## TO ADJUST THROTTLE CONTROL CABLE

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

 With engine not running, move throttle control lever from slow to choke position. Slowly move lever from choke to fast position.  Check that holes "A" in governor control lever and hole in governor plate line-up. If holes "A" are not aligned, loosen clamp screw and move throttle cable until holes are aligned. Tighten clamp screw securely.



#### TO ADJUST CARBURETOR

**NOTE:** The carburetor on this engine is low emission. It is equipped with an idle fuel adjusting needle with a limiter cap, which allows some adjustment within the limits allowed by the cap. Do not attempt to remove the limiter cap. The limiter cap cannot be removed without breaking the adjusting needle.

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 idle mixture valve in (clockwise) decreases the supply of fuel to the engine giving a leaner fuel/air mixture. Turning the idle mixture valve out (counterclockwise) increases the supply of fuel to the engine giving a richer fuel/air mixture.

**IMPORTANT:** Damage to the needle valve and the seat in carburetor may result if screw is turned in too tight.

#### PRELIMINARY SETTING -

- Air cleaner assembly must be assembled to the carburetor when making carburetor adjustments.
- Be sure the throttle control cable is adjusted properly (see above).

#### 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.

- Move throttle control lever to slow position. With finger, rotate and hold throttle lever against idle speed screw. Turn idle speed screw to attain 1750 RPM.
- While still holding throttle lever against idle speed screw, turn idle mixture valve full travel clockwise then counterclockwise until engine runs rough. Turn valve to a point midway between those two positions. Release throttle lever.

#### **ACCELERATION TEST -**

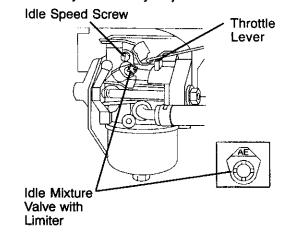
 Move throttle control lever from slow to fast position. If engine hesitates or dies, turn idle mixture valve out (counterclockwise) 1/8 turn. Repeat test and continue to adjust, if necessary, until engine accelerates smoothly.

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

rized service center/department, which has proper equipment and experience to make any necessary adjustments.

adjusting, contact your nearest Autho-



### **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

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. When mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Store in a clean, dry area.

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

#### **BATTERY**

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

#### **ENGINE**

#### **FUEL SYSTEM**

IMPORTANT: It is important to prevent gum deposits from forming in essential fuel system parts such as carburetor, fuel filter, fuel hose, or tank during storage. Also, experience indicates that alcohol blended fuels 9called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

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

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

#### **ENGINE OIL**

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

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

#### OTHER

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

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

#### TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
Will not start	<ul> <li>Out of fuel.</li> <li>Engine not "CHOKED" properly.</li> <li>Engine flooded. before attempting to start</li> <li>Bad spark plug.</li> <li>Dirty our filter.</li> </ul>	<ul> <li>Fill fuel tank.</li> <li>See "TO START ENGINE" in Operation section.</li> <li>Wait several minutes</li> <li>Replace spark plug.</li> </ul>
	<ul> <li>Dirty air filter.</li> <li>Dirty fuel filter.</li> <li>Water in fuel.</li> <li>refill tank with fresh gase</li> </ul>	<ul> <li>Clean/replace air filter.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and carburetor and</li> </ul>
replace fuel filter.	Loose or damaged	Check all wiring.
	wiring. • Carburetor out of adjustment. section.	See "To Adjust Carburetor"     in Service Adjustments
	Engine valves out of adjustment.	Contact an authorized service center/department.
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> </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</li> </ul>
	fresh gasoline.  • Loose or damaged wiring.	Check all wiring.
	Carburetor out of adjustment. section.	See "To Adjust Carburetor" in Service Adjustments
	Engine valves out of adjustment.	Contact an authorized service center/department.
Engine will not turn over	Clutch/brake pedal not depressed.	Depress clutch/brake pedal.
	<ul> <li>Attachment clutch is engaged.</li> <li>Weak or dead battery.</li> <li>Blown fuse.</li> </ul>	<ul> <li>Disengage attachment clutch.</li> <li>Recharge or replace battery.</li> <li>Replace fuse.</li> </ul>
	Corroded battery terminals.	Clean battery terminals.
	<ul><li>Loose or damaged wiring.</li><li>Faulty ignition switch.</li></ul>	<ul><li>Check all wiring.</li><li>Check/replace ignition switch.</li></ul>
	<ul> <li>Faulty solenoid or starter.</li> </ul>	Check/replace solenoid or starter.
	Faulty operator presence switch(es).	Contact an authorized service center/department.
Engine clicks but will not start	<ul> <li>Weak or dead battery.</li> <li>Corroded battery terminals.</li> </ul>	Recharge or replace battery.     Clean battery terminals.
	Loose or damaged wiring.     Faulty solenoid or starter.	Check all wiring.     Check/replace solenoid or
	starter.	starter.

### TROUBLESHOOTING CHART

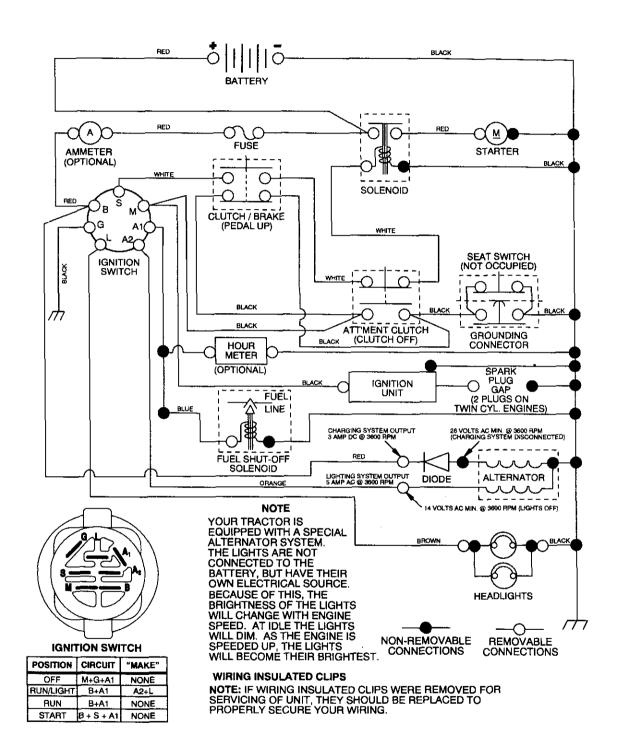
PROBLEM	CAUSE	CORRECTION
Loss of power	<ul> <li>Cutting too much grass/too fast.</li> <li>Throttle in "CHOKE" position.</li> <li>Build-up of grass, leaves and trash under mower.</li> </ul>	<ul> <li>Set in "Higher Cut" position/ reduce speed.</li> <li>Adjust throttle control.</li> <li>Clean underside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

### TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
Mower blades will not rotate (Cont'n)	<ul><li>Frozen idler pulley.</li><li>Frozen blade mandrel.</li></ul>	<ul><li>Replace idler pulley.</li><li>Replace blade mandrel.</li></ul>
Poor grass discharge	<ul> <li>Engine speed too slow. position.</li> <li>Travel speed too fast.</li> <li>Wet grass. mowing.</li> <li>Mower deck not level.</li> <li>Low/uneven tire air pressure.</li> <li>Worn, bent or loose blade. Tighten blade bolt.</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. in this manual.</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"</li> <li>Shift to slower speed.</li> <li>Allow grass to dry before</li> <li>Level mower deck.</li> <li>Check tires for proper air pressure.</li> <li>Replace/sharpen blade.</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</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 917.270514

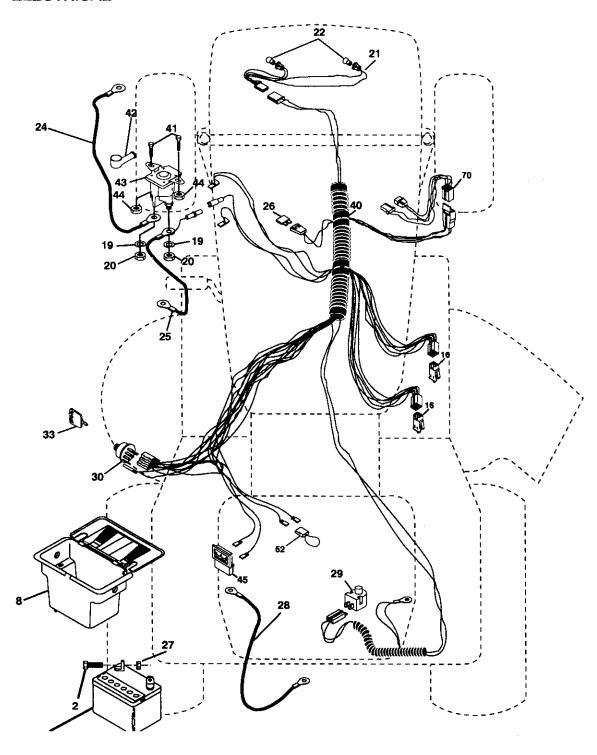
#### **SCHEMATIC**



## **REPAIR PARTS**

### TRACTOR -- MODEL NUMBER 917.270514

### **ELECTRICAL**



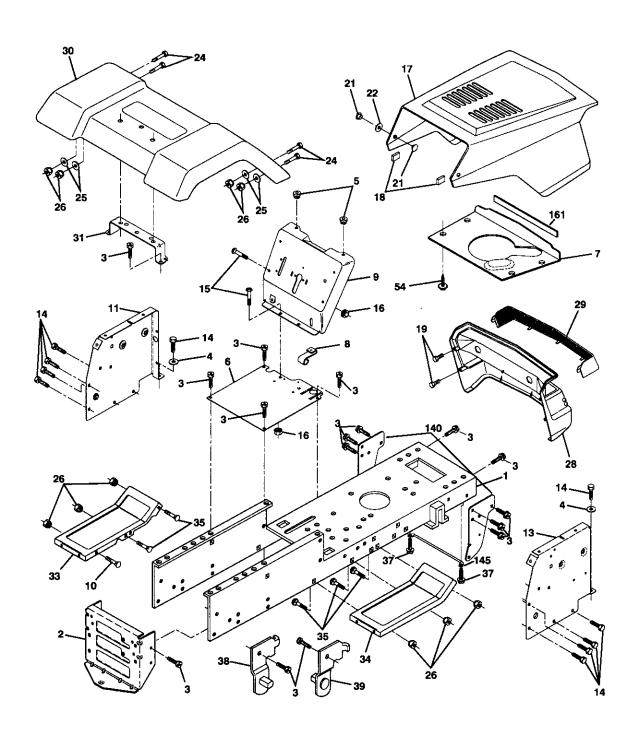
### TRACTOR -- MODEL NUMBER 917.270514

### **ELECTRICAL**

KEY PART NO. NO.	DESCRIPTION
1 144925	Battery 12 Volt 25 AMP
2 74760412	Bolt Hex Hd 1/4-20unc X 3/4
8 156417	Case Battery
16 153664	Switch Interlock Push-In
19 STD551125	Washer Lock 1/4
20 73350400	Nut Jam Hex 1/4-20 Unc
21 166181	Harness Socket Light W/4152J
22 4152J	Bulb Light #1156
24 4799J	Cable Battery 6ga 11" red
25 146147	Cable Battery 6 Ga W/16 Wir red
26 166180	Fuse 15 AMP
27. 73510400	Nut Keps Hex 1/4-20 Unc
28 4207J	Cable Ground 6ga 12" black
29 121305X	Switch Plunger No Gray
30 163968	Switch Ign Delta Push-In
33 140403	Key Ign Molded Craftsman, Delta
40 166151	Harness Ign Mech CI Am NHM 99
41 71110408	Bolt Blk Hex 1/4-20unc x 1/2
42 131563	Cover Terminal Red
43 145673	Solenoid
44 73640400	Nut Keps Blk Hex 1/4-20 Unc
45 121433X 、	Ammeter Rectangular 6 AMP
52 141940	Protection Wire Loop
70 1 <del>66</del> 659	Harness Engine, B&S

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

# TRACTOR -- MODEL NUMBER 917.270514 CHASSIS AND ENCLOSURES



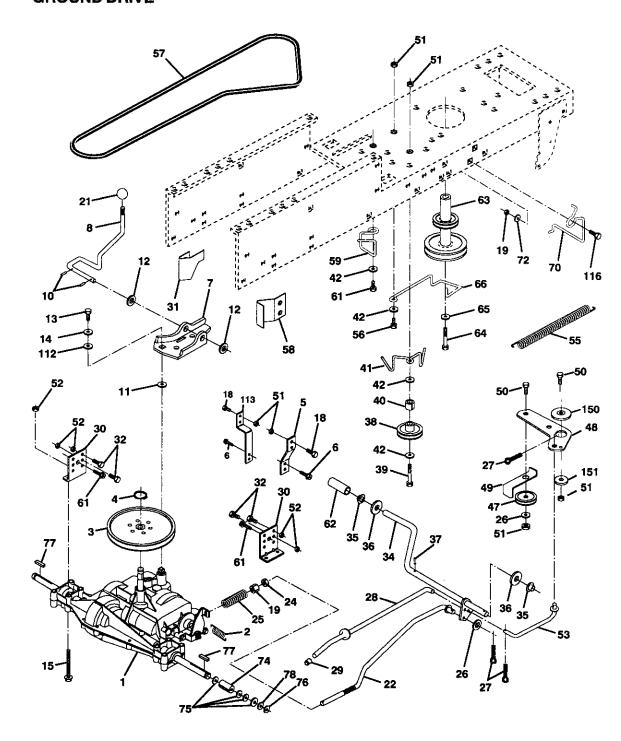
# TRACTOR -- MODEL NUMBER 917.270514 CHASSIS AND ENCLOSURES

KEY PART NO. NO.	DESCRIPTION
1 165480	Chassis
2 140356	Drawbar Stretch
3 17490612	Screw Thdrol 3/8-16 x 3/4 Tv-tt
4 STD551025	Washer 13/32 X 3/4 X 16 Ga
5 155272	Bumper Dash Hood
6 155924X015	Saddle Sikscr
7 126842X	Shield Ht. Hood Kohl/Dia Engine
8 155138	Clip Retainer Slide On
9 166322X015	Dash Sikscr 1-pc
10 STD533710	Bolt Rdhd Sqnk 3/8-16unc X 1
11 155927	Panel Dash LH
13 155934X010	Panel Sikscr Dash RH
14 17490608 15 74180512	Screw Thdrol 3/8-16 x 1/2 Ty-tt
15 74180512 16 STD541431	Screw Mach TRHD 5/16-18 unc x 3/4
17 154989X558	Nut Keps 5/16-18 Unc Hood Asm Pnt Slope Weld Ms-558
18 126938X	Bumper Hood
19 17411310	Screw Hex Wsh #13-16
21 122933X	Rivet Ratchet Nylon
22 124479X	Washer Nylon Blk 28 x 75 x 19
24 STD523710	Bolt Fin Hex 3/8-16 unc x 1 Gr. 5
25 19131312	Washer 13/32 X 13/16 x 12 Ga
26 STD541437	Nut Hex Lock W/lns. 3/8-16 Unc
28 140135X428	Grille Black
29 124029X599	Lens Headlight Bar Clear
30 166884X558	Fender Pnt LT W/o Shift
31 136619	Bracket Fender Repl 109873x
33 145244X558	Footrest Pnt Lh
34 145243X558 35 STD533707	Footrest Pnt Rh
35 STD533707 37 17490508	Bolt Rdhd Sht Sqnk 3/8-16 x 3/4
38 139886	Screw Thdrol. 5/16-18 x 1/2 Bracket Asm Pvt LH MWR Rear
39 139887	Bracket Asm Pvt RH MWR Rear
54 161464	Screw Hex Wshd 8-18 x 7/8
140 158418	Bracket Suspension Front
145 156524	Rod Pivot Chassis/Hood
161 161547	Extrusion Bumper
<b>5479J</b>	Plug Button Blk 359 Dia Choke

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

## TRACTOR--MODELNUMBER 917.270514

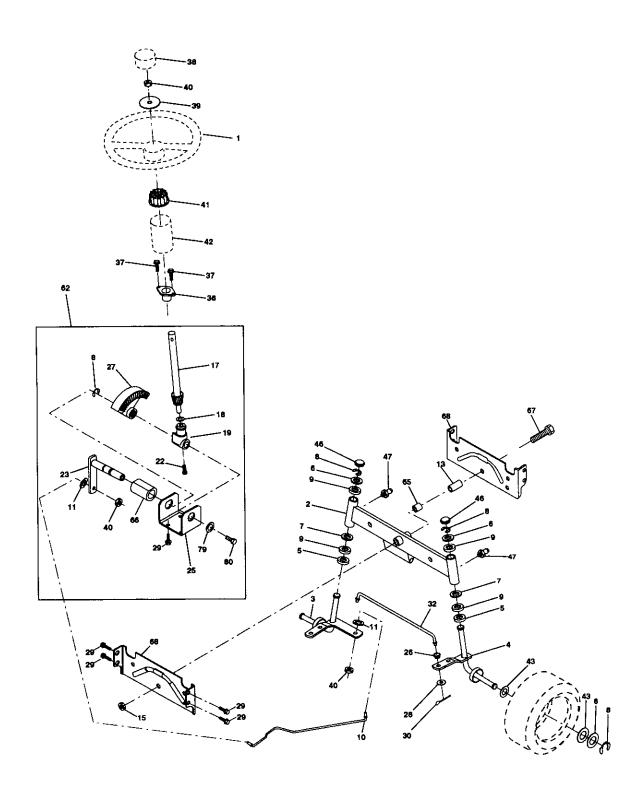
## **GROUND DRIVE**



#### **GROUND DRIVE**

	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1		Transaxle (See Breakdown)	41	165838	Keeper Belt Idler
		Dana Model D4360-128	42	19131312	Washer 13/32 x 13/16 x 12 Ga
2	146682	Spring Return Brake T/a Zinc	47	127783	Pulley Idler V Groove Plastic
3	123666X	Pulley Transaxle 18/20" tires	48	154407	Bellcrank Clutch Grn Dry Stl
4	12000028	Ring Retainer # 5100-62	49	123205X	Retainer Belt Style Spring
5	121520X	Strap Torque 30 Degrees	50	STD523715	Bolt Hex Hd 3/8-16unc x 1-1/2
6	17490512	Screw Thdrol 5/16-18 x 3/4 TYT	51	STD541437	Nut Crownlock 3/8-16 UNC
7	162240	Bracket Saddle Shift T/a	52	STD541431	Nut Crown Lock 5/16-18
8	131679	Rod Shf Sdl LY/YT Str Blk Zinc	53	105710X	Link Clutch 7 66
10	STD561210	Pin Cotter 1/8 x 1 Cad	55	105709X	Spring Return Clutch 6 75
11	105701X	Washer Plate Shf 388 Sq Hole	56	STD523712	Bolt Fin Hex 3/8-16 unc x 1-1/4
12	19151216	Washer 15/32 x 3/4 x 16ga	57	160855	V-Belt Gd Drive
13	74550412	Bolt 1/4-28unf Gr8 W/Patch	58	127274X	Keeper Belt RH LT Pnt/zinc 16g
14	STD551125	Washer Lock Hvy Helical 1/4	59	140312	Keeper Belt Centerspan
15	74490544	Bolt Hex FLGHD 5/16-18Gr.5	61	17490612	Screw Thdrol 3/8-16 x 3/4 Ty-tt
18	STD523710	Bolt Fin Hex 3/8-16 x 1	62	8883R	Cover Pedal Blk Round
19	STD541437	Nut Lock Hex W/Ins. 3/8-16 Unc	63	140186	Pulley Eng Cl Mech 38deg LT/YT
21	106933X	Knob Rd 1/2-13 Plstc Thds Blk		71170764	Bolt Hex 7/16-20 x 4 Gr 5
22	130804	Rod Brake Blk Zinc 26 840		STD551143	Washer Lock Hvy Hlcl Spr 7/16
24	STD541237	Nut Hex Jam 3/8-16 Unc		154778	Keeper Belt Engine
25	106888X	Spring Rod Brake 2 00 Zinc		134683	Guide Belt Mower Drive RH
26	STD551037	Washer 13/32 x 13/16 x 16 Ga		19132012	Washer 13/32 x 1-1/4 x 12 Ga
27	STD561210	Pin Cotter 1/8 x 3/4 Cad		109502X	Spacer Axle
28	145204	Rod Brake Parking Lt/Yt		121749X	Washer 25/32 x 1 1/4 x 16 Ga
29	124236X	Cap Brake Parking Red		STD581075	E-ring#5133-75
30	130807	Bracket Mtg Transaxie		123583X	Key Square 2 0 x 1845/ 1865
31	127275X	Keeper Belt LH LT 14 Ga		121748X	Washer 25/32 x 1-5/8 x 16ga
32	STD523107	Bolt Hex Hd 5/16-18unc x 3/4		19091210	Washer 9/32 x 3/4 x 10 Ga
34	155071	Shaft Asm Pedal Foot		127285X	Strap Torque
35	120183X	Bearing Nylon Blk 629 Id	116	72110610	Bolt Rdhd Sq Neck 3/8-16 x 1.25
36	STD551062	Washer 21/32 x 1 x 16 Ga	150	165850	Bushing Belicrank Grd. Drive
37	STD571810	Pin Roll 3/16 x 1"	151	19133210	Washer 13/32 x 2 x 10 Ga
38	131494	Pulley Idler Flat	NO.	TE: All compor	ant dimensions sixen in LLO
39	STD523727	Bolt Fin Hex 3/8-16unc x 2-3/4	NO	inches 1 iss	nent dimensions given in U.S.
40	4470J	Spacer Split 395 x 59 Bzp		mones i inc	h = 25/4 mm

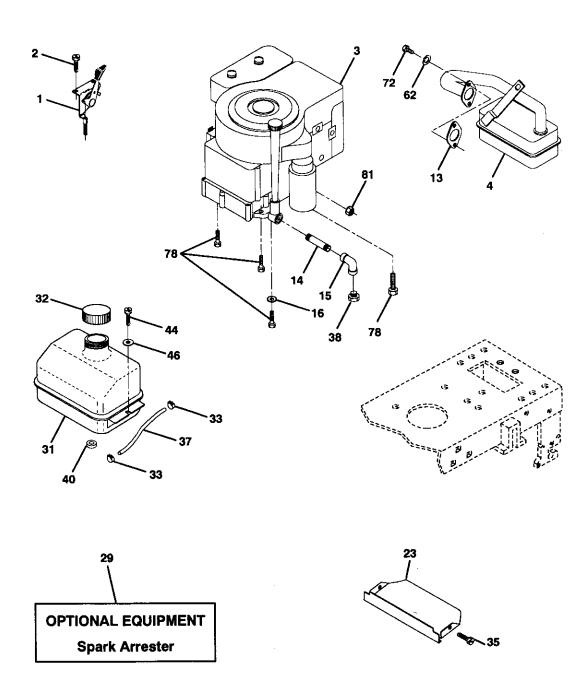
#### **STEERING**



#### **STEERING**

KEY PART	
NO. NO.	DESCRIPTION
1 139768	Wheel Steering Opp Sears Blk
2 154427	Axle Asm Front Lt
3 156483	Spindle Asm Lh
4 157473	Spindle Asm Rh
5 6266H	Washer Thrust .75 x 1.230
6 121748X	Washer 25/32 x 1-5/8 x 16 Ga.
7 19272016	Washer 27/32 x 1-1/4 x 16 Ga.
8 12000029	RingKlip #T5304-75
9 3366R	Bearing Col Strg Blk
10 156438 11 10040600	Draglink Extended Stamped
11 10040600 13 154779	Washer Lock Hvy Hlcl Spr 3/8 Bearing Axle
15 73901000	Locknut Flange 5/8-11 UNC
17 156545	Shaft Asm Strg 5/8 x 15.19 Lt
18 57079	Washer Th ist .515 x .750 x .033
19 160395	Support Sheft
22 165857	Screw Hex Wsh Hd Torx
23 165851	Shaft Asm Pitman
25 154406	Bracket Steering
26 126847X	Bushing Link Drag Bik LR
27 136874	Gear Sector 22 Teeth
28 19131416	Washer 13/32 x 7/8 x 16 Ga.
29 17490612	Screw Thdrol 3/8-16 x 3/4 TY-TT
30 STD561210 32 130465	Pin Cotter 1/8 x 3/4 Cad Rod Tie Wire Form 19.75 Mech
36 155099	Bushing Strg. 5/8 ID Dash
37 152927	Screw
38 139769	Cap Wheel Steer Opp Sears USA
39 19133808	Washer 13/32 x 2-3/8 x 8 Ga.
40 7810H	Nut Lock Center 3/8-24
41 104820X	Adaptor Wheel Strg640/.635 ld
42 124417X	Boot Shaft Steering Craftsman
43 121749X	Washer 25/32 x 1-1/4 x 16 Ga.
46 121232X	Cap Spindle Fr Top Blk
47 6855M	Fitting Grease
62 167903	Steering Assembly
65 154780 66 154404	Spacer Axle
67 74781044	Bearing Arm Pittman Bolt Fin Hex 5/8-11 UNC x 2-3/4
68 154429	Brace Axle
79 19132012	Washer 13/32 x 1-1/4 x 12 Ga
80 74950612	Bolt Hex Nylon 3/8-16 x 3/4
· ·	

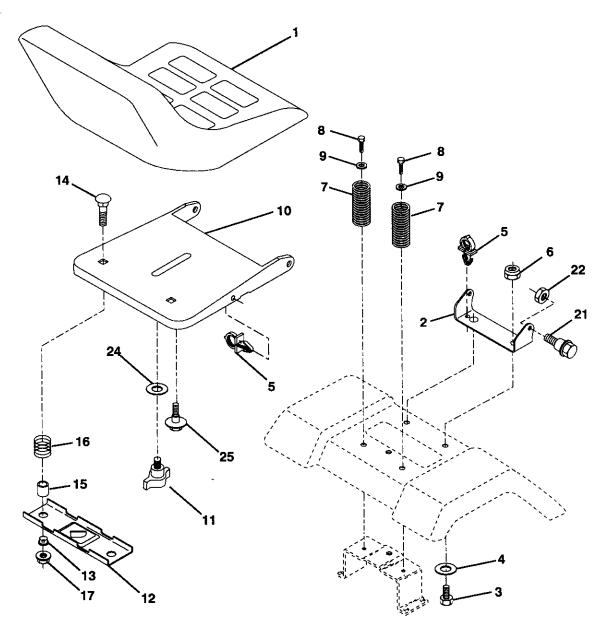
#### **ENGINE**



#### **ENGINE**

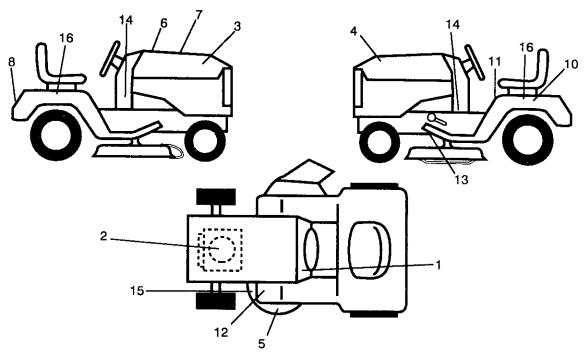
KEY PART NO. NO.	DESCRIPTION
1 162144	Control Th/ch RH Blk Pdl 15 10
2 17720410	Screw Hex Thd Cut 1/4-20x5/8 T
3	Engine (See Breakdown)
4 137352	Briggs, Model No 287707-1255-E1 Muffler Exh LT B&S 14HP IC OHV
13 165291	Gasket Eng 1 313 ld Tin Plated
14 13280324	Nipple Pipe 3/8 Npt x 3"
15 13200300	Elbow Std 90 Degree 3/8-18 Npt
16 STD551237	Washer Lock Ext Tooth 3/8
23 159880	Shield Browning/Debris Guard
29 137180	Kit Spark Arrestor (Flat Scrn)
31 109202X	Tank Fuel Front 1 25
32 158990	Cap Asm Fuel Sears Vented
33 123487X	Clamp Hose Blk
35 17490512	Screw Thdrol 5/16-18 x 3/4 TYT
37 137040	Line Fuel 20"
38	Plug Oil Drain
	(See Engine Breakdown)
40 124028X	Bushing Snap Nyl Blk Fuel Line
44 17490412	Screw Hexwsh Thdrol 1/4-20 x 3/4
46 19091416	Washer 9/32 x 7/8 x 16 ga
62 STD551131	Washer Lock Hvy Hlcl Spr 5/16
72 71070512	Screw Hex Hd Cap 5/16-18 X 3/4
78 17490620 81 128861	Screw Thdrol 3/8-16x1-1/4 TYTT
81 128861	Nut Flange 1/4-20 Starter Nut

#### **SEAT ASSEMBLY**



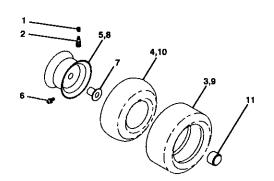
KE NO	PART NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12	140122 140551 STD523710 19131610 145006 STD541437 124181X 17490616 19131614 155925 166369 121246X	Seat Bracket Pvt St Bolt Fin Hex 3/8-16unc X 1 Washer Flat 13/32 X 1 X 10 Ga Clip Push-In Hinged Locknut Hex W/Wsh 3/8-16 Spring Seat Cprsn 2 250 Blk Zi Screw Thdrol 3/8-16 X 1 Ty-tt Washer 13/32 X 1 X 14 Ga Pan Seat Knob Seat Adj. Wingnut Bracket Mounting Switch		Bushing Snap Blk Nyl 50 Id Bolt Rdhd Sht Nk 1/4-20x1-1/2 Spacer Split 28x 96 Yel Zinc Spring Cprsn 1 27 Blk Pnt Nut Lock 1/4 Lge Flg Gr 5 Zinc Bolt Shld 5/16-18 Unc Nut Lock Hex "W/Ins 5/16-18 Washer 17/32 X 1-3/16 X 12 Ga Bolt Shoulder 5/16-18 X 62 Intent dimensions given in U. S. inch = 25/4 mm

#### **DECALS**



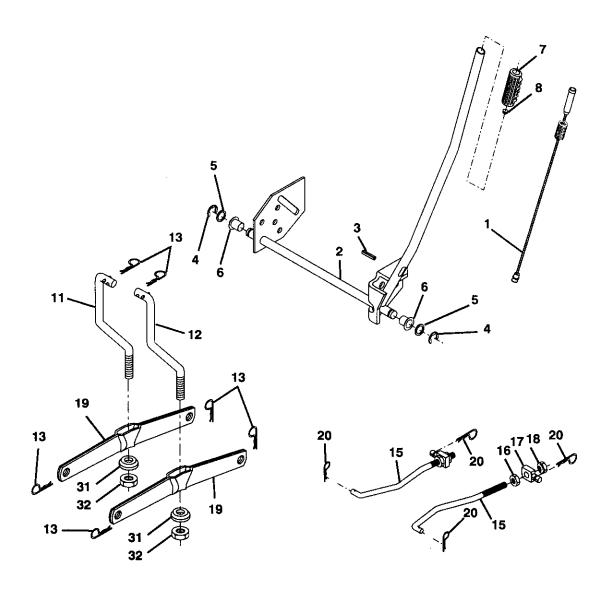
NO.	PART NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1	156867	Decal Dash Inst Oper English	11 156439	Decal Danger Fender Eng/span
2	165393	Decal HP Engine	12 4900J	Decal Clutch/brake English
3	163990	Decal Hood RH	13 146046	Decal V-Belt Dr Sch Tractor
4	163991	Decal Hood LH	14 163249	Decal Panel Dash 6sp 42"
5	133179	Decal Mower QC System	15 160396	Decal V-Belt Sch
6	133644	Decal Maint Cust Sears Domesti	16 163209	Decal Fender Sd 6/42
7	169008	Decal Replomnt Sears	157199	Pad Footrest
9	163204	Decal Fender Craftsman White	138311	Decal Handle Lft Height Adjust
10	149516	Decal Battery Dngr/Psn Eng	169002	Manual Owners English
		Acme	169003	Manual Owners Spanish

## WHEELS AND TIRES



KEY NO.		DESCRIPTION
1	59192	Cap Value Tire
2	65139	Stem Value
3	106222X	Tire F Ts 15 X 6 0 - 6 Service
4	59904	Tube Inner Front #35060
5	106732X427	Rim Asm 6"front White Service
6	278H	Fitting Grease
7	9040H	Bearing Flange
8	106108X427	Rim Asm 8"rear White Service
9	106268X	Tire R Ts 18x9 5-8 Service
10	7152J	Tube Rear 9 5 X 8 Service
11	104757X	Cap Axle Blk 1 50 X 1 00
	144334	Sealant, Tire (10 oz. tube)

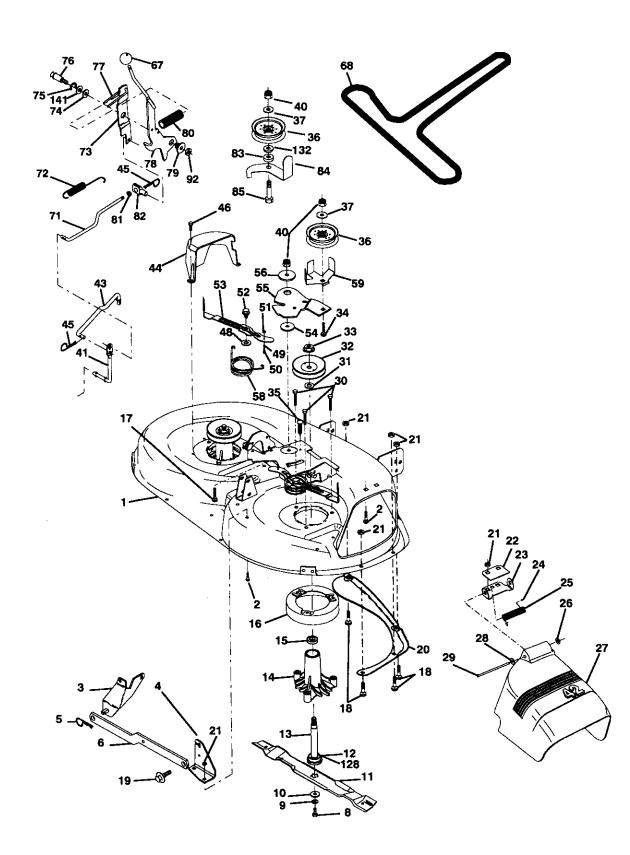
#### LIFT ASSEMBLY



#### LIFT ASSEMBLY

	Y PART	
NO	. NO.	DESCRIPTION
1	159460	Wire Asm Inner/Sprg W/plunger LT
2	159474	Shaft Asm Lift
3	105767X	Pin Groove 1 500 Zinc
4	12000002	E Ring #5133-62
5	19211621	Washer Pltd 21/32 X 1 X 21ga
	120183X	Bearing Nylon Blk 629 ld
7	125631X	Grip Handle Fluted Blk
8	122365X	Button Plunger Red
11	139865	Link Lift LH
12	139866	Link Lift RH
13	STD624008	Retainer Spring
15	127218	Link Front
16	73350800	Nut Jam Hex 1/2-13 Unc
	130171	Trunnion Blk Zinc
18	73680800	Nut Crownlock 1/2-13unc
	139868	Arm Suspension Rear
	1 <b>63</b> 552	Retainer Spring Zinc
	140302	Bearing Pvt Lift Spherical
32	73540600	Nut Crownlock 3/8-24

#### **MOWER DECK**



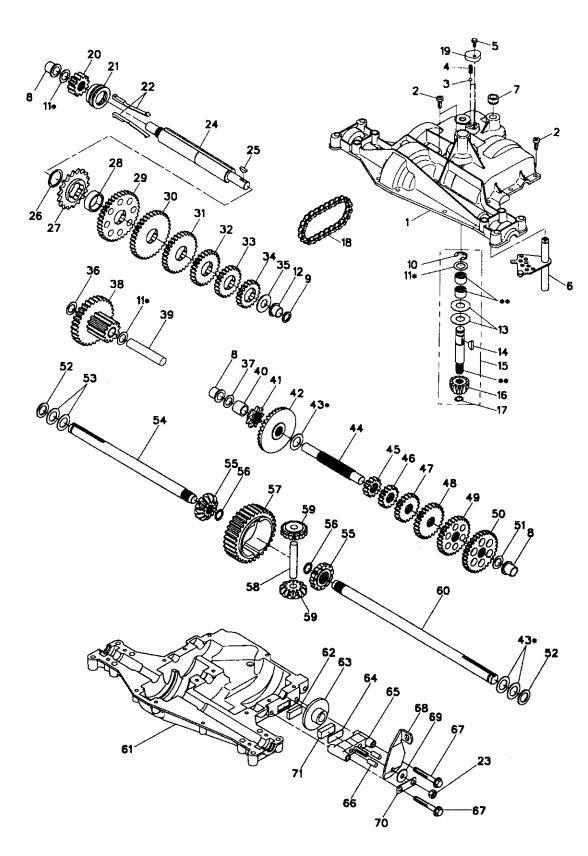
#### **MOWER DECK**

Screw, Thd. Roll 1/4-20 x 5/8

46 137729

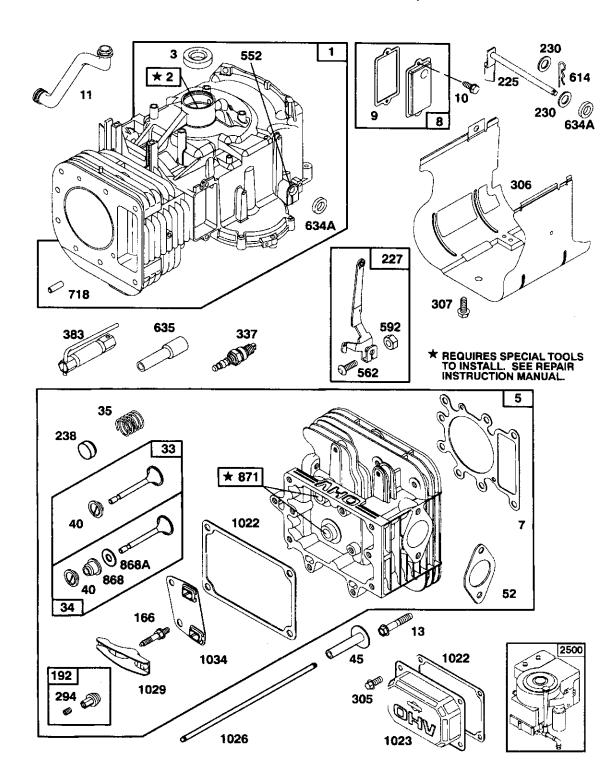
_	EY PART O. NO.	DESCRIPTION		PART	
		- · ·		NO.	DESCRIPTION
1	164961	Mower Housing	48	133944	Washer, Hardened
2		Bolt	49	155066	Roller Assembly, Cam Follower
3	138017	Bracket Assembly, Sway Bar,		131340	Bolt, Shoulder #10-24 Grade 5
	100110	Front	51	STD541410	Locknut
4 5	+	Bracket Assembly, Sway Bar		139888	Bolt, Shoulder 5/16-18 UNC
5 6		Retainer Spring		131845	Arm Assembly, Pad, Brake
8		Arm, Suspension, Rear		133943	Washer, Hardened
. 9		Bolt, Hex 3/8-24 x 1.25 Gr. 8		155046	Arm, Idler
10		Washer, Lock		122052X	Spacer, Retainer
11		Washer, Hardened	58	140086	Spring, Torsion Brakes
12		Blade, Mulching		141043	Guard, TUV Idler
13		Bearing, Ball		162113	Knob Custom Oval
10	137043	Shaft Assembly, Mandrel, Vented		144200	V-Belt
14	128774	(Includes Key No. 6)		142427	Rod, Clutch, Primary, with Nibs
15		Housing, Mandrel, Vented		131870	Spring, Return
16		Bearing, Ball, Mandrel Stripper, Vented Mower Deck		127847	Arm, Clutch, Secondary
17		Bolt, Carriage 3/8-16 x 1-1/4		121748X	Washer 25/32 x 1-5/8 x 16 Ga.
18		Bolt, Carriage 5/16-18 x 5/8		12000029	Ring, Klip
19		Bolt, Shoulder	76	128903	Bolt, Shoulder 3/8-16 UNC x
20		Baffle, Vortex	77	107045	1,44
21	STD541431	Nut Crownlock 5/16-18 UNC		127845 160571	Keeper, Spring
22		Stiffener Bracket		127498	Lever Asm. Clutch Pri Plm STLT
23		Bracket, Deflector		153701	Bushing, Large, Brass
24		Cap, Sleeve		73350600	Spring, Mower Clutch
25		Spring, Torsion, Deflector		142028	Nut, Hex Jam 3/8-16 Unc Trunnion, Adj.
26		Nut, Push		120958X	Washer Sintered
27		Shield, Deflector		156084	Keeper Belt Idler
28	19111016	Washer 11/32 x 5/8 x 16 Ga.		72140620	Bolt Carriage 3/8-16 x 2-1/2
29	131491	Rod, Hinge		STD541437	Nut
30	157722	Screw Thdrol Washer Head		153390	Washer Felt
31	129963	Washer, Spacer		19132203	Spacer, Washer 13/32 I.D. x 1-
32	153535	Pulley, Mandrel		TO TOLLEGE	3/8 O.D. x 1/4
33	137266	Nut, Toplock, Flanged	141	6266H	Washer Thrust .75 x 1.230
34		Bolt		130794	Mandrel Assembly (Includes Key
35		Fastner, Christmas Tree			Numbers 8-10, 12-15, 31 and 32)
36	131494	Pulley, Idler, Flat		164963	Mower Deck, Complete (Standard
37		Washer 13/32 x 13/16 x 16 Ga.			Deck, Order Separately Mulcher
40	,	Nut Crownlock 3/8-16 UNC			Plate and Gauge Wheel
41	133551	Rod, Pivot, with Nibs			Components, Key Nos. 101-106
43	140083	Rod, Clutch, Secondary, w/Nibs			and 111-121)
44	140088	Guard, Mandrel, L.H.			
45 46	STD624003	Retainer	NOT	E: All compor	nent dimensions given in U.S.
An:	137720	Second The Dell 4/4 00 to 5/0		IDADAG 1 ii	noh – OEM mm

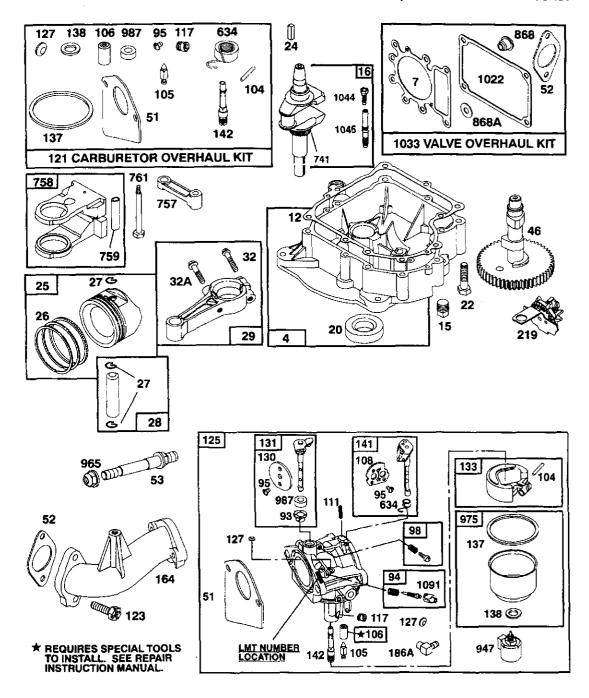
# TRACTOR -- MODEL NUMBER 917.270514 DANATRANSAXLE-MODEL NUMBER D4360-128

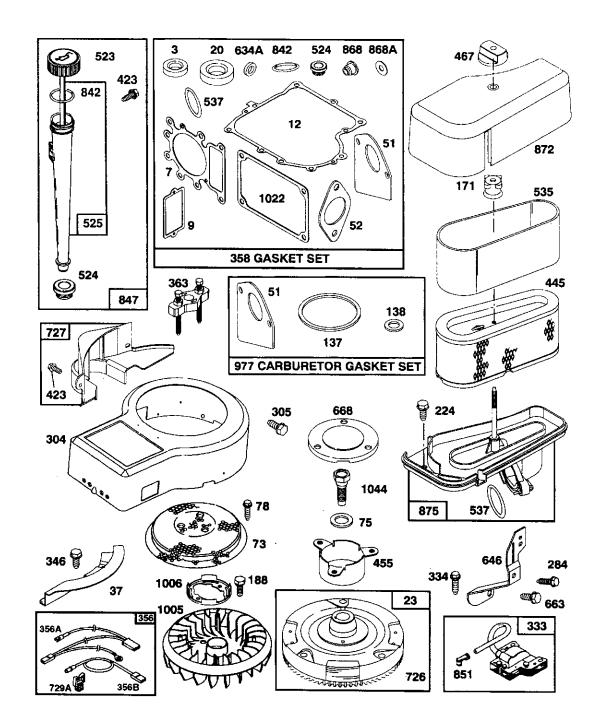


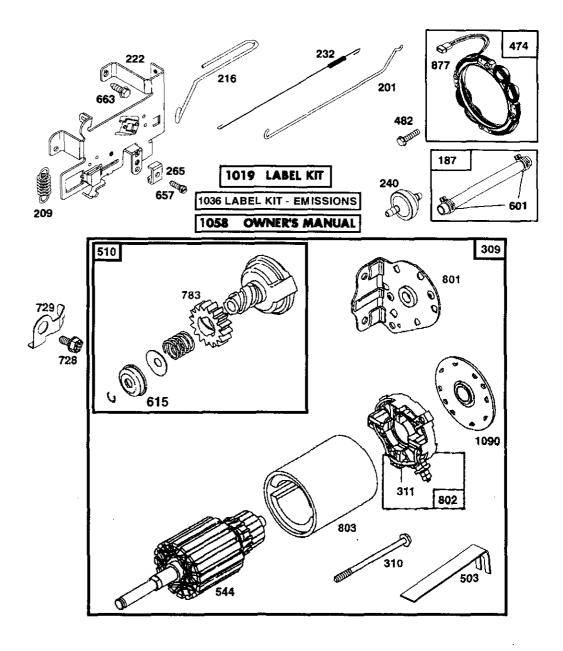
# TRACTOR -- MODEL NUMBER 917.270514 DANA TRANSAXLE--MODEL NUMBER D4360-128

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	160955	Housing, Upper	38	160944	Assy, Gear, Comb.,
2	2274J	Screw, Tapping,			12T & 30T
_	104400	1/4-20 X .734	39	124639X	Shaft, Idler
3	134400	Ball, Detent	40	120472X	Spacer, .633 X .87 X .755
4	105904X	Spring, Detent	41	105928X	Sprocket, 9T
5	160940	Screw, Tapping,	42	161565	Gear, Bevel, 36T
6	138235	No. 10-24 X .482	43	134394	Assy, Kit, Shim, .750 Shaft
7	136235 108727X	Assy, Kit, Shifter	44	120473X	Shaft, Drive
8	148266	V-Ring	45	142678	Gear, Spur, 12T
9	148269	Bearing, Flange Seal, Oil	46	143697	Gear, Spur, 15T
10	2225J	Ring, Retaining	47	124641X	Gear, Spur, 20T
11	134793	Assy, Kit, Shim, .625 Shaft	48 49	106589X	Gear, Spur, 25T
12	148268	Bearing, Flange	50	120408X 105937X	Gear, Spur, 28T
13	120415X	Washer, Plain,	51	2226J	Gear, Spur, 31T
	,	.632 X 1.38 X .046	J1	22200	Washer, Plain, .632 X 1.00 X .060
14	142674	Key, Woodruff, No. 9	52	134401	Washer, Neoprene
15	161563	Assy, Kit, Input Shaft	53	2264J	Washer, Plain,
16	161564	Pinion, Bevel, 12T			.758 X 1.25 X .031
17	105909X	Ring, Retaining	54	160946	Axle, LH
18	105910X	Chain, 24 Pitches	55	160947	Gear, Miter, 12T, Splined
19	160942	Cover, Detent	56	160948	Ring, Retaining
20	160943	Gear, Spur, 12T	57	110071X	Gear, Spur, 32T
21	148267	Collar, Clutch	58	120952X	Shaft, Cross
22	138236	Assy, Kit, Clutch Keys	59	160949	Gear, Miter, 12T, Idler
23 24	73810500	Nut, Lock, 5/16-24	60	160950	Axle, RH
25	142676 2244J	Shaft, Intermediate	61	160951	Housing, Lower
26 26	105916X	Key, Woodruff, No. 61	62	120961X	Puck, Friction
27	120470X	Ring, Retaining	63	7294J	Disc, Brake
28	110070X	Sprocket, 18T Spacer, 1.131 X 1.45 X .494	64	108989X	Spacer, Brake Puck
29	142677	Gear, Spur, 37T	65 66	160952	Jaw, Brake
30	142681	Gear, Spur, 35T	66 67	120954X	Pin, Dowel
31	124644X	Gear, Spur, 30T	67	160953	Screw, Tapping,
32	108980X	Gear, Spur, 25T	68	138244	5/16-18 X 2.35
33	120406X	Gear, Spur, 22T	69	108996X	Lever, Actuating
34	134796	Gear, Spur, 19T	03	1009907	Washer, Plain, .321 X 1.00 X .055
35	105925X	Washer, Plain,	70	160954	Bracket, Anti-Rotation
		.640 X 1.37 X .061	71	120951X	Puck, Friction
36	2228J	Washer, Plain,	72	120416X	Grease
		.632 X 1.00 X .046	-	0 +10/(	C10000
37	2231J	Washer, Plain,	NOT	E: All comp	onent dimensions given in
		.632 X 1.00 X .031		U.S. inc	hes 1 inch = 25.4 mm









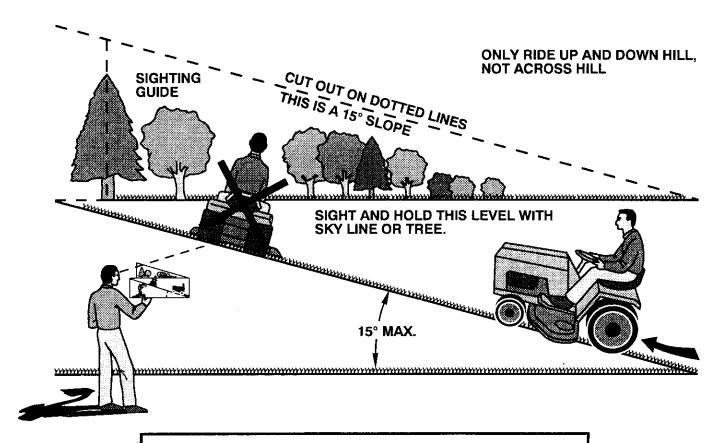
## BRIGGS & STRATTON ENGINE-MODEL NUMBER 287707, TYPE NUMBER 1255-E1

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	496412	Cylinder Assembly	53	94637	Stud, Carburetor Mounting
2	399265	Bearing, Cylinder	73	224948	Screen, Flush Rotating
3 4		Seal, Ŏil	75	225136	Washer, Spring
5	494238 495858	Base, Engine Head, Cylinder	78	94626	Screw, Sems
7	272614 ***	Gasket, Cylinder Head	93 94	281346	Bushing, Throttle Shaft
8	495735	Breather Assembly	94 95	498030 94098 **	Valve, Needle Screw, Throttle
. 9	27803	Gasket, Valve Cover	98	495800	Screw, Idle Speed
10	94621	Screw, Sems	104	231789 **	Pin, Float Hinge
11 12	281246 271916 '	Tube, Breather Gasket, Crankcase Cover,	105		Valve Float
12	271310	1/64"	106 108	231854 ** 224540	oout, inict valve
	271997	Gasket, Crankcase Cover,	111	262719	Valve, Choke Spring, Choke
		.005"	117	232118	Jet, Main (Std.)
	271996	Gasket, Crankcase Cover,		232119	Jet, Main (Hi-Alt.)
13	94728	.009" Screw, Cylinder Head	121	499233	Carburetor Overhaul Kit
15	94239	Plug, Oil Drain	123 125	94913 499153	Screw, Elbow Mounting
16	495162	Crankshaft	127	**	Carburetor Assembly Plug, Welch (Sold in Kit
	94196	Timing Gear Key	. – .		Only)
20 22		Seal, Oil	130	224539	Valve, Throttle
22	94624	Screw, Sems, Base Mounting	131	494379	Shaft and Lever, Throttle
23	492326	Flywheel and Ring Gear	133 137	494381 281165****	Float, Carburetor Gasket, Float Bowl
		Assembly, Magneto	138	281164****	Washer, Bowl
24	222698	Key, Flywheel	141	495931	Shaft and Lever, Choke
25	495860	Piston Assembly, Standard	142	232117	Nozzle, Carburetor
	495977	Size Piston Assembly, .010"	164 166	214047	Elbow, Carburetor
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Oversize	171	94555 281051	Stud, Rocker Arm Nut, Air Cleaner Mounting
	495978	Piston Assembly, .020"	186A		Elbow, Fuel Pipe
	405070	Oversize	187	492790	Line, Fuel (11" Long, Cut
	495979	Piston Assembly, .030" Oversize	188	04607	to Suit)
26	495854	Ring Set, Piston, Standard	192	94627 492160	Screw, Hex Head, 3/4 Screw Assembly, Rocker
	405050	Size			Arm
	495852	Ring Set, Piston, .010" Oversize	201	262767	Link, Governor
	495851	Ring Set, Piston, .020"	209 216	260695 262766	Spring, Governor
	100001	Oversize	219	490815	Link, Choke Gear, Governor
	495855	Ring Set, Piston, .030"	222	495611	Plate, Governor Control
0.7	000100	Oversize	224	94729	Screw, Sems, Air Cleaner
27 28	263129 498319	Lock, Piston Pin Pin Assy., Piston, Standard	225	495157	Crank, Governor
20	430013	Size	227 230	493935 94927	Lever Assembly, Governor Washer, Governor Crank
29	494504	Rod Assembly, Connecting	232	262785	Spring, Governor Link
	495490	Rod Assembly, Connect-	238	262836	Cap, Valve
		ing, .020" Undersize Crankpin	240	394358	Filter, Fuel (In Fuel Line)
		Bore	265	221535	Clamp, Casing
32	94695	Screw, Hex Washer Head, 1-57/64	NOTE	: All compon	ent dimensions given in U.S.
32A	94648	Screw, Hex Washer Head, 1-5/8		1 inch = 25	inches 5.4 mm
33	495856	Valve, Exhaust	*	Included In	Gasket Set (495993)
34	495857	Valve, Intake	**	Included in	Carburetor Kit (499233)
35 37	262811 224502	Spring, Valve Guard, Flywheel	***	Included in	Both Gasket Set (495993)
40	224641	Retainer, Valve Spring		Valve Overh	and aul Kit (495992)
45	262411	Tappet, Valve	****		Gasket Set (495993),
46	496884	Gear, Cam			Carburetor Kit
51	272465 ***			(499233) ar	nd Carburetor Gasket Set
52	272569 **	(Carburetor to Elbow)  * Gasket, Carburetor			(494385)
	2. 2300	(Elbow to Cylinder)			

## BRIGGS & STRATTON ENGINE-MODEL NUMBER 287707, TYPE NUMBER 1255-E1

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
284	94704	Screw, Hex Head	757	213998	Link, Counterweight
294	810068	Screw, Set	758	399891	Counterweight Assembly
304	496318	Housing, Blower	759	298909	Pin, Counterweight
305	94786	Screw, Hex, Head,	761	94593	Screw, Counterweight
000	005000	Blower Housing Mounting	783	280104	Gear, Starter
306	225020	Shield, Cylinder	801	394856	Cap, Drive
307 309	94930 497595	Screw, Cylinder Shield Motor, Starter	802	497605	Cap, End
310	497602	Bolt, Thru	803 842	497604 270920 *	Housing, Starter Seal, Oil Filler Cap
311	497608	Brush Set	847	496415	Fill Group, Oil
333	495859	Armature, Magneto	851	493880	Terminal, Ignition Cable
334	94731	Screw, Sems, Armature	868	494435 ***	Seal Assembly, Valve
		Mounting	868A		Gasket, Valve
337	491055	Plug, Spark	871	262835	Bushing, Guide (Intake &
346	93705	Screw, Hex Head			Exhaust)
356	497708	Wire Assembly	872	281104	Cover, Air Cleaner
356A 356B	497671 494705	Wire Stop	875	495862	Body, Air Cleaner
358	495993	Wire Stop Gasket Set	877	393456	Diode and Connector
363	19203	Puller, Flywheel	947	497672	Assembly Solenoid
383	89838	Wrench, Spark Plug	965	94108	Nut, Hex
423	94903	Screw, Sems	975	495933	Bowl Assembly, Carburetor
445	496894	Cartridge, Air Cleaner	977	494385	Carburetor Gasket Set
455	222561	Cup, Screen Mounting	987	281166 **	Seal, Throttle Shaft
467	493903	Knob, Air Cleaner	1005	280687	Fan, Flywheel
474 482	393474	Stator, Alternator	1006		Retainer, Fan
503	93621 806000	Screw, Sems	1019		Label Kit
510	497606	Grounding Strap Drive, Starter	1022 1023	272475 ***	Gasket, Cover
523	495230	Cap and Dipstick, Oil Filler	1023	224552 494432	Cover, Rocker Arm Rod, Push, Intake
524	281370	* Seal, Filler Tube	1020	495136	Rod, Push, Exhaust
525	496113	Tube, Oil Filler	1029		Arm, Rocker
535	272403	Element, Filter	1033		Valve Overhaul Kit
537	281106	* O-Ring, Air Cleaner	1034		Guide Assembly, Push Rod
544	497603	Armature, Starter	1036		Label Kit, Emissions
552	231597	Bushing, Governor Crank	1044		Screw, Hex Head
562 592	94907 231978	Bolt, Governor Lever	1045		Extension, Crankshaft
601	93053	Nut, Hex Clamp, Fuel Pipe	1058 1090		Manual, OwnerOs
614	93306	Pin, Cotter	1090		Retainer, Brush Cap, Limiter
615	263080	Retainer	2500		26 Replacement Engine
634	494455	** Seal, Choke Shaft		496050	Replacement Shortblock
634A	491323	* Seal, Governor			
635	280872	Elbow, Spark Plug	RPM	Settings:	Low: 1650-1850, High:
646	224546	Brace, Air Cleaner			3200-3400
657	94906	Screw, Sems	Nore		
663 668	94929 280848	Screw, Self-Tapping Spacer	NOIE		ent dimensions given in U.S.
718	230192	Pin, Dowel		inches i in	ch = 25.4 mm
726	392134	Gear, Ring	*	Included In	Gasket Set (495993)
		(Includes Mounting	**		Carburetor Kit (499233)
		Hardware)	***		Both Gasket Set (495993)
727	490324	Cover, Starter		and Valve (	Overhaul Kit (495992)
728	94951	Screw, Hex Head	***	included in	Gasket Set (495993),
729	225170	Retainer, Wire		Carburetor	Kit (499233) and Carburetor
729A 741		Clip, Wire		Gasket Set	(494385)
/ <del>**</del> 1	262932	Gear, Timing			

#### 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

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

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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



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