Owner's Manual

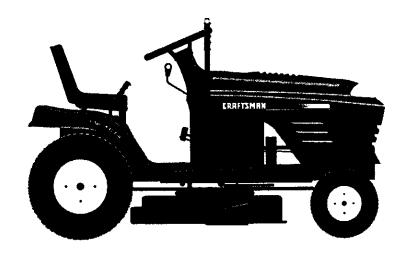
# CRAFTSMAN

16.5 HP
ELECTRIC START
42" MOWER
6 SPEED TRANSAXUE
LAWN TRACTOR

Model No. **917.271090** 



- 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, IL 60179

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#### WARRANTY

#### LIMITED TWO YEAR WARRANTY ON CRAFTSMAN RIDING EQUIPMENT

For two (2) years from the date of purchase, if this Craftsman Riding Equipment is maintained, lubricated and tuned up according to the instructions in the owner's manual, Sears will repair or replace, free of charge, any parts found to be defective in material or workmanship.

This Warranty does not cover:

- Expendable items which become worn during normal use, such as blades, spark plugs, air cleaners, belts, etc.
- Tire replacement or repair caused by punctures from outside objects, such as nails, thorns, stumps, or glass.
- Repairs necessary because of operator abuse, negligence, improper storage or accident or the failure to maintain the equipment according to the instructions contained in the owner's manual.
- · Riding equipment used for commercial or rental purposes.

#### LIMITED 90 DAY WARRANTY ON BATTERY

For ninety (90) days from date of purchase, if any battery included with this riding equipment proves defective in material or workmanship and our testing determines the battery will not hold a charge, Sears will replace the battery at no charge. In-home warranty service on your Craftsman riding equipment is available at no charge for 30 days from the date of purchase. Please contact your nearest service center. After 30 days from the date of purchase, warranty service is available by taking your Craftsman riding equipment to your nearest Sears Service Center. (In-home warranty service will still be available after 30 days from the date of purchase but a standard trip charge will apply). This warranty applies only while this product is in the United States. This Warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

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#### SAFETY RULES

#### **GENERAL OPERATION**

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

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

### **SAFETY RULES**

- · Turn off blades when not mowing.
- Stop engine before removing grass catcher or unclogging chute.
- Mow only in daylight or good artificial light.
- Do not operate the machine while under the influence of alcohol or drugs.
- Watch for traffic when operating near or crossing roadways.
- Use extra care when loading or unloading the machine into a trailer or truck.

#### SLOPE OPERATION

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

#### DO:

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

#### DO NOT:

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

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

#### CHILDREN

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

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

#### SERVICE

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

#### **SAFETY RULES**

- 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.

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

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

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

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

#### PRODUCT SPECIFICATIONS

GASOLINE CAPACITY	1.25 GALLONS
AND TYPE:	UNLEADED REGULAR
OIL TYPE	SAE 10W-30
(API-SF/SG/SH):	(above 32°F) SAE 5W-30
	(below 32°F)
OIL CAPACITY:	W/FILTER: 4.0 PINTS
OIL CAPACITY:	W/O FILTER: 3.5 PINTS
SPARK PLUG: (GAP: .030")	Champion RC12YC
GROUND SPEED	
(MPH):	1 <sup>ST</sup> 1.1
	2 <sup>ND</sup> 1.4
	3 <sup>RD</sup> 2.3
1	4 <sup>TH</sup> 3.5
	5 <sup>TH</sup> 4.5 6 <sup>TH</sup> 6.0
	0.0
[	REVERSE: 1.7
TIRE PRESSURE:	
	REAR: 10 PSI
CHARGING	3 AMPS BATTERY
SYSTEM:	5 AMPS HEADLIGHTS
BATTERY:	AMP/HR: 30
İ	MIN. CCA: 240
	CASE SIZE: U1R
BLADE BOLT TORQUE:	27–35 FT. LBS.

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

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

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

#### MAINTENANCE AGREEMENT

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

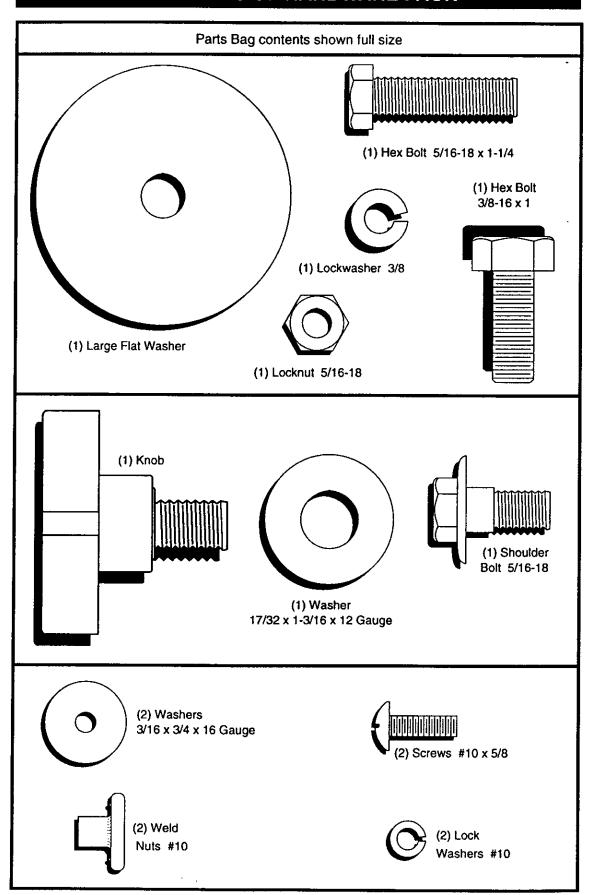
#### **CUSTOMER RESPONSIBILITIES**

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

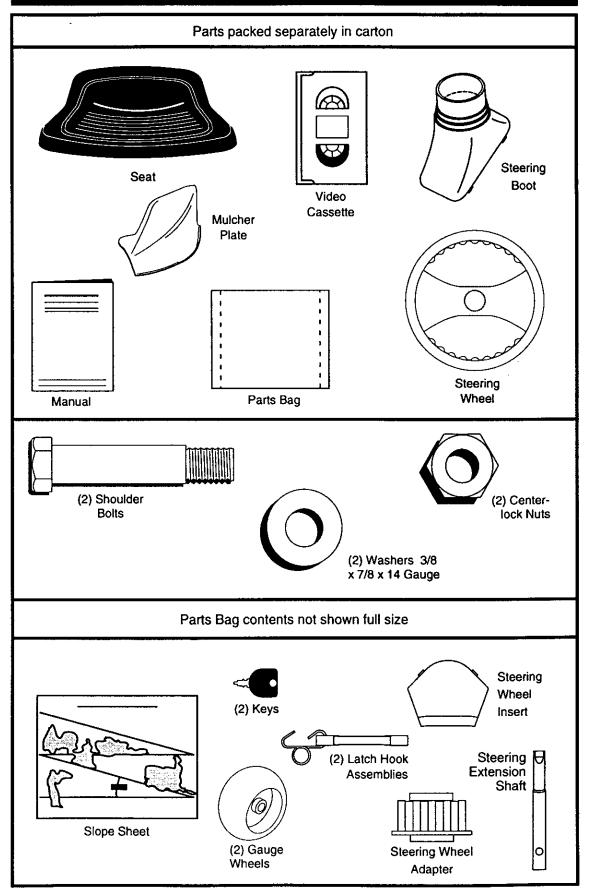
WARNING: This tractor is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester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

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

### **CONTENTS OF HARDWARE PACK**



### **CONTENTS OF HARDWARE PACK**



### **ASSEMBLY**

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

## TOOLS REQUIRED FOR ASSEMBLY

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

- (1) 9/16" wrench
- (1) 3/4" Socket w/
- (1) Utility knife
- drive rachet (1) Phillips Screw-
- (2) 1/2" wrench (1)Pliers
- driver
- (1) Tire pressure gauge

When right or left hand is mentioned in this manual, it means, from your point of view, when you are in the operating position (seated behind the steering wheel).

## TO REMOVE TRACTOR FROM CARTON

#### **UNPACK CARTON**

- Remove all accessible loose parts and parts boxes from shipping carton (See page 6).
- Cut, from top to bottom, along lines on all four corners of shipping carton, and lay panels flat.
- Check for any additional loose parts or boxes and remove.

## BEFORE ROLLING TRACTOR OFF SKID

#### ATTACH STEERING WHEEL

## ASSEMBLE EXTENSION SHAFT AND BOOT

 Slide extension shaft onto lower steering shaft. Align mounting holes in extension and lower shafts and install 5/16 hex bolt and locknut. Tighten securely.

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

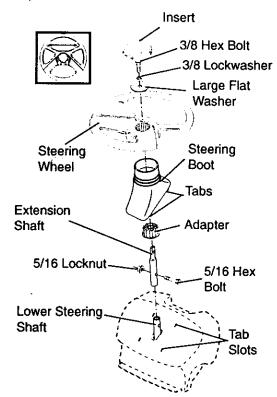
 Place tabs of steering boot over tab slots in dash and push down to secure.

#### **INSTALL STEERING WHEEL**

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

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

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

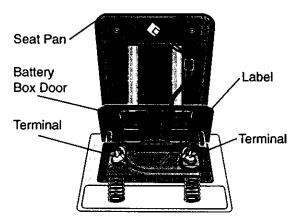


# TO ROLL TRACTOR OFF SKID (See Operation section for location and function of controls)

- Press lift lever plunger and raise attachment lift lever to its highest position.
- Release parking brake by depressing clutch/brake pedal.
- Place gearshift lever in neutral (N) position.
- Roll tractor forward off skid.
- Remove banding holding discharge guard up against tractor.

## HOW TO SET UP YOUR TRACTOR CHECK BATTERY

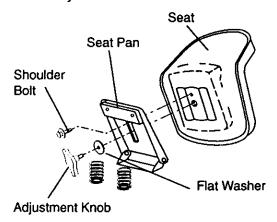
- Lift seat pan to raised position and open battery box door.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps. (See "BATTERY" in MAINTENANCE section of this manual for charging instructions).



#### **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.



#### **CHECK TIRE PRESSURE**

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

 Reduce tire pressure to PSI shown in "PRODUCT SPECIFICATIONS" on page 5 of this manual.

#### **CHECK DECK LEVELNESS**

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

## CHECK FOR PROPER POSITION OF ALL BELTS

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

#### CHECK BRAKE SYSTEM

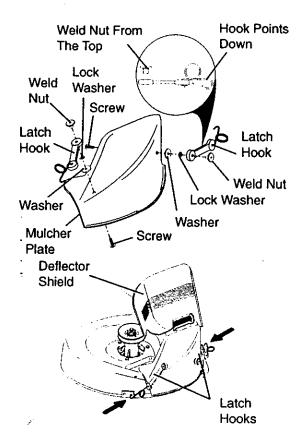
After you learn how to operate your tractor, check to see that the brake is properly adjusted. See "TO ADJUST BRAKE" in the Service and Adjustments section of this manual.

#### **INSTALL MULCHER PLATE**

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

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

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



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

## TO CONVERT TO BAGGING OR DISCHARGING

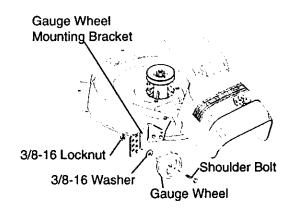
Simply remove mulcher plate and store in a safe place. Your mower is now ready for discharging or installation of optional grass catcher accessory.

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

## ASSEMBLE GAUGE WHEELS TO MOWER DECK

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

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



#### ✓ CHECKLIST

BEFORE YOU OPERATE AND ENJOY YOUR NEW TRACTOR, WE WISH TO ASSURE THAT YOU RECEIVE THE BEST PERFORMANCE AND SATISFAC-TION 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.



BATTERY



**CAUTION OR** WARNING



REVERSE



**FORWARD** 



FAST



SLOW



**ENGINE ON** 



**ENGINE OFF** 



OIL PRESSURE



LIGHTS ON



**OVER TEMP** 



LIGHT



**FUEL** 



CHOKE



MOWER HEIGHT PARKING BRAKE



LOCKED



UNLOCKED



MOWER LIFT



ATTACHMENT **CLUTCH ENGAGED** 



REVERSE



NEUTRAL



HIGH



LOW



PARKING BRAKE



**ATTACHMENT CLUTCH DISENGAGED** 











**KEEP AREA CLEAR** 

SLOPE HAZARDS (SEE SAFETY RULES SECTION)



DANGER, KEEP HANDS AND FEET AWAY



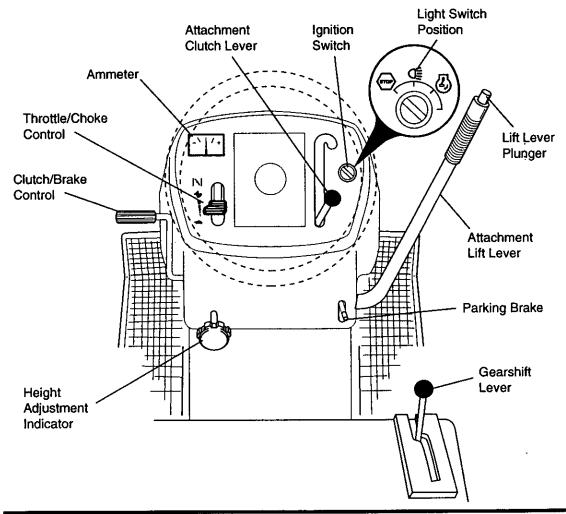


**FREE WHEEL** (Automatic Models only)

#### KNOW YOUR TRACTOR

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

Compare the illustrations with your tractor to familiarize yourself with the locations of various controls and adjustments. Save this manual for future reference.



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

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

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

THROTTLE/CHOKE CONTROL: Used to control engine speed.

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

**HEIGHT ADJUSTMENT KNOB:** Used to adjust the mower cutting height.

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

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

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

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

AMMETER: Indicates battery charging (+)

or discharging (-).

position.

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



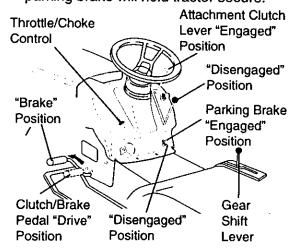
The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles, or standard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

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

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

#### TO SET PARKING BRAKE

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



#### **STOPPING**

#### **MOWER BLADES -**

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

#### **GROUND DRIVE -**

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

#### **ENGINE** -

- Move throttle control to slow position.
- **NOTE:** Failure to move throttle control to slow position and allowing engine to idle before stopping may cause engine to "backfire".
- Turn ignition key to "OFF" position and remove key. Always remove key when leaving tractor to prevent unauthorized use.

Never use choke to stop engine.
 IMPORTANT: Leaving the ignition switch in any position other than "OFF" will cause

in any position other than "OFF" will cause the battery to be discharged, (dead).

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

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

#### THROTTLE CONTROL

Always operate engine at full throttle.

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

## 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 decired page

- Move gearshift lever to desired position.
- Slowly release clutch/brake pedal to start movement.

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

## TO ADJUST MOWER CUTTING HEIGHT The cutting height is controlled by turning

the height adjustment knob in desired direction.

- Turn knob clockwise ( ) to raise cutting height.
- Turn knob counterclockwise () to lower cutting height.

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

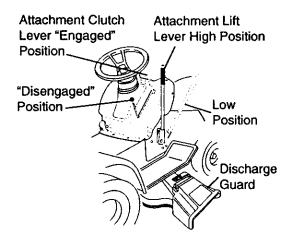
- The average lawn should be cut to approximately 2-1/2 inches during the cool season and to over 3 inches during hot months. For healthier and better looking lawns, mow often and after moderate growth.
- For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first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

#### TO OPERATE MOWER

Your tractor is equipped with an operator presence sensing switch. Any attempt by the operator to leave the seat with the engine running and the attachment clutch engaged will shut off the engine.

- · Select desired height of cut.
- Lower mower with attachment lift control.
- Start mower blades by engaging attachment clutch control.
- to Stop mower blades disengage attachment clutch control.

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



#### TO OPERATE ON HILLS

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

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

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

#### TO TRANSPORT

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

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

## TOWING CARTS AND OTHER ATTACHMENTS

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

## BEFORE STARTING THE ENGINE CHECK ENGINE OIL LEVEL

- The engine in your tractor has been shipped, from the factory, already filled with summer weight oil.
- Check engine oil with tractor on level ground.
- Unthread and remove oil fill cap/dipstick; wipe oil off. Reinsert the dipstick into the tube and rest oil fill cap on the tube. Do not thread the cap onto the tube. 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 Customer Responsibilities section of this manual).
- To change engine oil, see the Customer Responsibilities section in this manual.

#### ADD GASOLINE

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

**IMPORTANT:** When operating in temperatures below 32°F(0°C), use fresh, clean winter grade gasoline to help insure good

cold weather starting.

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

▲ CAUTION: Fill to bottom of gas tank filler neck. Do not overfill. Wipe off any spilled oil or fuel. Do not store, spill or use

gasoline near an open flame.

#### TO START ENGINE

When starting the engine for the first time or if the engine has run out of fuel, it will take extra cranking time to move fuel from the tank to the engine.

- 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.

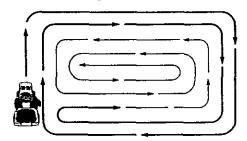
## COLD WEATHER STARTING (50° F AND BELOW)

- 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 warmup 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**

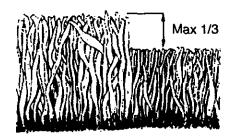
- Tire chains cannot be used when the mower housing is attached to tractor.
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings 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 the best cutting performance as well as the quality of cut desired.
- When operating attachments, select a ground speed that will suit the terrain and give best performance of the attachment being used.



#### **MULCHING MOWING TIPS**

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

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



### MAINTENANCE

#### **CUSTOMER RESPONSIBILITIES**

AS	MAINTENANCE SCHEDUL L IN DATES YOU COMPLETE GULAR SERVICE	.E	EFORE	ENCHUS ENCHUS ENCHUS	ACURE VERY ?	NERY S	HOUR HOUR	OF HOUR	ASON FORE	SERV	/ICE	DATES
	Check Brake Operation	V	~					L				
	Check Tire Pressure	1	1						L			
т	Check Operator Presence and Interlock Systems	~										
R	Check for Loose Fasteners	V				17		~				
I ∧ I	Sharpen/Replace Mower Blades			1								
<del>C</del>	Lubrication Chart			<				/				
lio	Check Battery Level			1/6								
R	Clean Battery and Terminals			1				1				
	Check Transaxle Cooling			<b>V</b>								
	Adjust Blade Belt(s) Tension					1/5						
	Adjust Motion Drive Belt(s) Tension					1/5						
	Check Engine Oil Level	1	1									
	Change Engine Oil			1,2,3				1				
E	Clean Air Filter			<b>√</b> 2								
N	Clean Air Screen			1/2						[		
G	Inspect Muffler/Spark Arrester			Τ	1						Т	
NE	Replace Oil Filter (If equipped)					1.2						
	Clean Engine Cooling Fins					1/2						
-	Replace Spark Plug					<b>'</b>	1					_
	Replace Air Filter Paper Cartridge					<b>√</b> 2						
•	Replace Fuel Filter						1			ļ — Ţ		

- 1 Change more often when operating under a heavy load or in high ambient temperatures.
- Service more often when operating in dirty or dusty conditions 3 - If equipped with oil filter, change oil every 50 hours
- Replace blades more often when mowing in sandy soil

- 5 If equipped with adjustable system.
- 7 Tighten front axle pivot bolt to 35 ft.-lbs. maximum.

#### GENERAL RECOMMENDATIONS

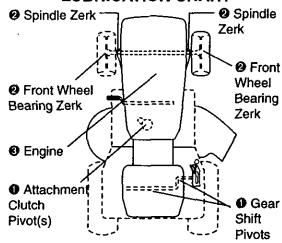
The warranty on this tractor does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain tractor as instructed in this manual. Some adjustments will need to be made periodically to properly maintain your tractor. All adjustments 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**



- SAE 30 or 10w30 Motor OIL
- @ General Purpose Grease
- O Refer to Maintenance "Engine" Section

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

#### **TRACTOR**

Always observe safety rules when performing any maintenance.

#### **BRAKE OPERATION**

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

#### TIRES

- Maintain proper air pressure in all tires (See "PRODUCT SPECIFICATIONS" on page 5 of this manual).
- Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

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

#### **OPERATOR PRESENCE SYSTEM**

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

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

#### **BLADE CARE**

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

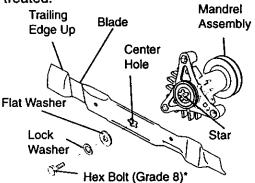
#### **BLADE REMOVAL**

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

**IMPORTANT:** To ensure proper assembly, center hole 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

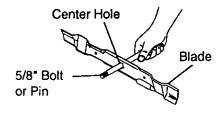
**NOTE:** We do not recommend sharpening blade but if you do, be sure the blade is balanced.

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 bal ancer.)

**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 portior 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.

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 ielly.
- 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.

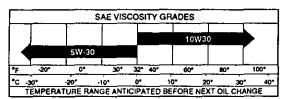
#### TRANSAXLE COOLING

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.



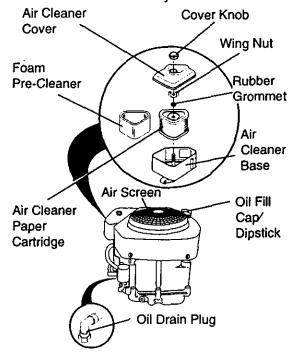
Change the oil after every 50 hours of operation or at least once a year if the tractor is not used for 50 hours in one year.

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

#### TO CHANGE ENGINE OIL

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

- · Be sure tractor is on level surface.
- · Oil will drain more freely when warm.
- Catch oil in a suitable container.
- Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine when changing oil.
- · Remove drain plug.
- After oil has drained completely, replace oil drain plug and tighten securely.
- Refill engine with oil through oil fill dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PROD-UCT SPECIFICATIONS" on page 5 of this manual.
- Use gauge on oil fill cap/dipstick for checking level. Insert dipstick into the tube and rest the oil fill cap on the tube. Do not thread the cap onto the tube when taking reading. Keep oil at "FULL" line on dipstick. Tighten cap onto the tube securely when finished.



#### **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.

#### **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 and cover.
- Remove wing nut and air cleaner from base.

#### TO SERVICE PRE-CLEANER

- Slide foam pre-cleaner off cartridge.
- · Wash it in liquid detergent and water.
- Squeeze it dry in a clean cloth. Allow it to dry.
- Saturate it in engine oil. Wrap it in clean, absorbent cloth and squeeze to remove excess oil.

#### TO SERVICE CARTRIDGE

Replace a dirty, bent, or damaged cartridge.

**NOTE:** Do not wash the paper cartridge or use pressurized air, as this will damage the cartridge.

- Reinstall the pre-cleaner (cleaned and oiled) over the paper cartridge.
- Reassemble air cleaner, wing nut, cover and tighten knob securely.

#### **CLEAN AIR INTAKE/COOLING AREAS**

To insure proper cooling, make sure the grass screen, cooling fins, and other external surfaces of the engine are kept clean at all times.

Every 100 hours of operation (more often under extremely dusty, dirty conditions), remove the blower housing and other cooling shrouds. Clean the cooling fins and external surfaces as necessary. Make sure the cooling shrouds are reinstalled.

NOTE: Operating the engine with a blocked grass screen, dirty or plugged cooling fins, and/or cooling shrouds removed will cause engine damage due to overheating.

#### MUFFLER

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

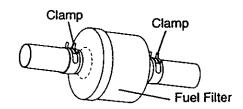
#### SPARK PLUGS

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" on page 5 of this manual.

#### IN-LINE FUEL FILTER

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

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



#### **CLEANING**

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

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

#### **SERVICE AND ADJUSTMENTS**

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

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

#### TO REMOVE MOWER

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

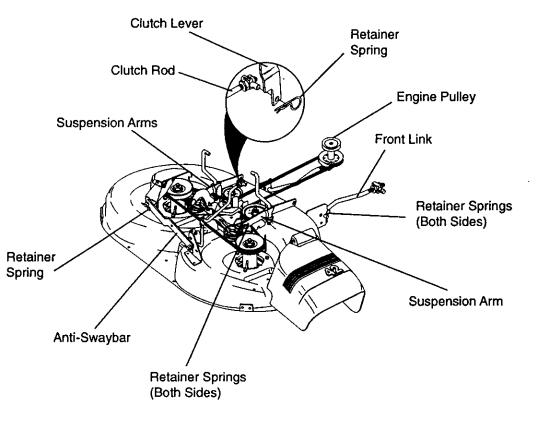
- Place attachment clutch in "DISEN-GAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- · Roll belt off engine pulley.
- Disconnect clutch rod from clutch lever by removing retainer spring.
- Disconnect anti-swaybar from chassis bracket by removing retainer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

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

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

#### TO INSTALL MOWER

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



#### TO LEVEL MOWER HOUSING

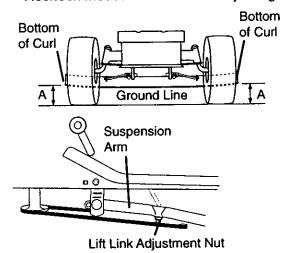
Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PROD-UCT SPECIFICATIONS"). If tires are over or underinflated, you will not properly adjust your mower.

#### SIDE-TO-SIDE ADJUSTMENT

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

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

· Recheck measurements after adjusting.



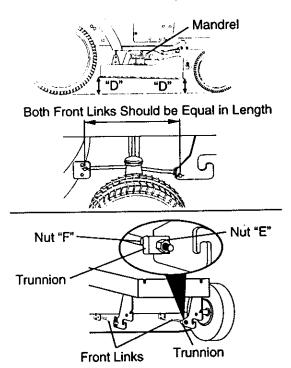
#### FRONT-TO-BACK ADJUSTMENT

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

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

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

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



## 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.

Idler Pulley

Mandrel Pulley

Mandrel Pulley

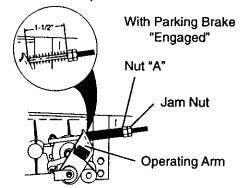
Mandrel Pulley

#### **TO ADJUST BRAKE**

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

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

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



#### TO REPLACE MOTION DRIVE BELT

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

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

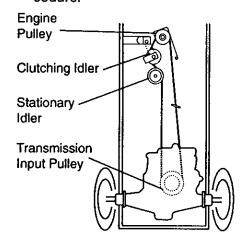
Pull belt toward front of tractor and

Install mower in reverse order of

removal instructions.

Install new belt by reversing above procedure.

remove downwards from around engine



#### TO ADJUST STEERING WHEEL ALIGN-MENT

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

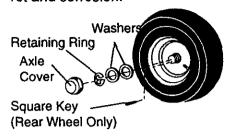
#### FRONT WHEEL TOE-IN/CAMBER

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

#### 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.
- 24 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

▲ 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.

Chassis
Charged
Battery
Positive
Terminal
Negative Terminal
Negative Terminal

## TO REMOVE CABLES, REVERSE ORDER -

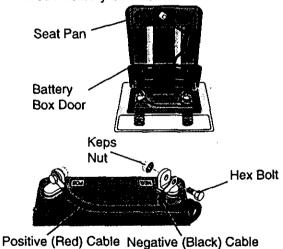
- BLACK cable first from chassis and then from the fully charged battery.
- RED cable last from both batteries.

#### REPLACING BATTERY

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

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

- Lift 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.



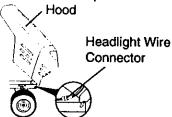
#### TO REPLACE HEADLIGHT BULB

- · 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.

#### TO REMOVE HOOD AND GRILL AS-SEMBLY

- Raise hood.
- · Unsnap headlight wire connector.

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



#### 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 of this manual.

#### TO REPLACE FUSE

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

#### **ENGINE**

## 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 to see if hole in throttle lever and hole in speed control bracket are aligned.
- If holes are not aligned, loosen cable clamp screw and align the holes by inserting a pencil or a 1/4" drill bit through both holes.
- Pull throttle cable up to remove slack and tighten cable clamp screw. Remove alignment pencil or drill bit.

#### TO ADJUST CARBURETOR

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

n general, turning the adjusting needles in clockwise) decreases the supply of fuel to ne engine giving a leaner fuel/air mixture. urning the adjusting needles out counterclockwise) increases the supply of sel to the engine giving a richer fuel/air nixture.

IMPORTANT: Damage to the needles and the seats in carburetor may result if needle is turned in too tight.

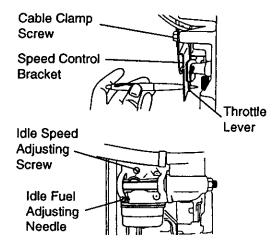
NOTE: The carburetor on this engine is low emission. It is equipped with an idle fuel adjusting needle with a limiter cap, which allows some adjustment within the limits allowed by the cap. Do not attempt to remove the limiter cap. The limiter cap cannot be removed without breaking the adjusting needle.

- Be sure you have a clean air filter and the throttle control cable is adjusted properly (see above).
- Start engine and allow to warm for five minutes. Make adjustments with engine running and shift/motion control lever in neutral (N) position.
- Idle speed setting With throttle control lever in slow position, engine should idle at 1750 RPM. If engine idles too slow or fast, turn idle speed adjusting screw in or out until correct idle is attained.
- Idle fuel needle setting With throttle control lever in slow position, turn idle fuel adjustment needle in (clockwise) until engine begins to die and then turn out (counterclockwise) until engine runs rough. Turn needle to a point midway between those two positions.
- Recheck idle speed. Readjust if necessary.

#### **ACCELERATION TEST -**

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

High speed stop is factory adjusted. Do not adjust - damage may result.



IMPORTANT: Never tamper with the engine governor, which is factory set for proper engine speed. Overspeeding the engine above the factory high speed setting can be dangerous. If you think the

engine-governed high speed needs adjusting, contact your nearest AUTHO-RIZED service center/department, which has proper equipment and experience to make any necessary adjustments.

#### **STORAGE**

Immediately prepare your tractor for storage at the end of the season or if the tractor will not be used for 30 days or more.

**ACAUTION:** Never store the tractor with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

#### TRACTOR

Remove mower from tractor for winter storage. This will allow you to clean it thoroughly. Remove all dirt, grease, leaves, etc. Store in a clean, dry area.

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

#### **BATTERY**

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

#### **ENGINE**

#### **FUEL SYSTEM**

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

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

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

#### **ENGINE OIL**

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

#### CYLINDER(S)

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

#### OTHER

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

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

### TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
Will not start	<ul> <li>Out of fuel.</li> <li>Engine not "CHOKED" properly.</li> <li>Engine flooded.</li> <li>Bad spark plug.</li> <li>Dirty air filter.</li> <li>Dirty fuel filter.</li> <li>Water in fuel.</li> </ul>	<ul> <li>Fill fuel tank.</li> <li>See "TO START ENGINE" in Operation section.</li> <li>Wait several minutes before attempting to start.</li> <li>Replace spark plug.</li> <li>Clean/replace air filter.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> </ul>
	<ul> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</li> </ul>	<ul> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service and Adjustments section.</li> <li>Contact an authorized service center.</li> </ul>
Hard to start	<ul> <li>Dirty air filter.</li> <li>Bad spark plug.</li> <li>Weak or dead battery.</li> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</li> </ul>	<ul> <li>Clean/replace air filter.</li> <li>Replace spark plug.</li> <li>Recharge or replace battery.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with fresh gasoline.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service and Adjustments section.</li> <li>Contact an authorized service center.</li> </ul>
Engine will not turn over	<ul> <li>Clutch/brake pedal not depressed.</li> <li>Attachment clutch is engaged.</li> <li>Weak or dead battery.</li> <li>Blown fuse.</li> <li>Corroded battery terminals.</li> <li>Loose or damaged wiring.</li> <li>Faulty ignition switch.</li> <li>Faulty solenoid or starter.</li> <li>Faulty operator presence switch(es).</li> </ul>	<ul> <li>Depress clutch/brake pedal.</li> <li>Disengage attachment clutch.</li> <li>Recharge or replace battery.</li> <li>Replace fuse.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace ignition switch.</li> <li>Check/replace solenoid or starter.</li> <li>Contact an authorized service center.</li> </ul>
Engine clicks but will not start	Weak or dead battery.     Corroded battery terminals. 28	<ul> <li>Recharge or replace battery.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> </ul>

### TROUBLESHOOTING CHART

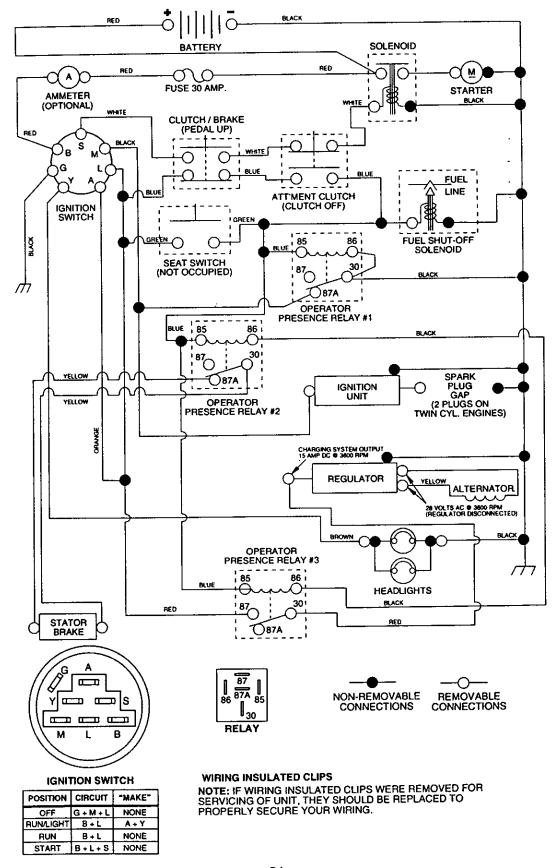
PROBLEM	CAUSE	CORRECTION
Engine clicks but will not start (cont'd)	<ul><li>Loose or damaged wiring.</li><li>Faulty solenoid or starter.</li></ul>	Check/replace solenoid or starter.
Loss of power	<ul> <li>Cutting too much grass/too fast.</li> <li>Throttle in "CHOKE" position.</li> <li>Build-up of grass,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

### TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
Poor cut - uneven (cont'd)	grass, leaves, and trash around mandrels.	
Mower blades will not rotate	<ul> <li>Obstruction in clutch mechanism.</li> <li>Worn/damaged mower drive belt.</li> <li>Frozen idler pulley.</li> <li>Frozen blade mandrel.</li> </ul>	<ul> <li>Remove obstruction.</li> <li>Replace mower drive belt.</li> <li>Replace idler pulley.</li> <li>Replace blade mandrel.</li> </ul>
Poor grass dis- charge	<ul> <li>Engine speed too slow.</li> <li>Travel speed too fast.</li> <li>Wet grass.</li> <li>Mower deck not level.</li> <li>Low/uneven tire air pressure.</li> <li>Worn, bent or loose blade.</li> <li>Buildup of grass, leaves and trash under mower.</li> <li>Mower drive belt worn.</li> <li>Blades improperly installed.</li> <li>Improper blades used.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ul>	<ul> <li>Place throttle control in "FAST" position.</li> <li>Shift to slower speed.</li> <li>Allow grass to dry before mowing.</li> <li>Level mower deck.</li> <li>Check tires for proper air pressure.</li> <li>Replace/sharpen blade. Tighten blade bolt.</li> <li>Clean underside of mower housing.</li> <li>Replace mower drive belt.</li> <li>Reinstall blades sharp edge down.</li> <li>Replace with blades listed in this manual.</li> <li>Clean around mandrels to open vent holes.</li> </ul>
Headlight(s) not working (if so equipped)	<ul> <li>Switch is "OFF".</li> <li>Bulb(s) burned out.</li> <li>Faulty light switch.</li> <li>Loose or damaged wiring.</li> <li>Blown fuse.</li> </ul>	<ul> <li>Turn switch "ON".</li> <li>Replace bulb(s).</li> <li>Check/replace light switch.</li> <li>Check wiring and connections.</li> <li>Replace fuse.</li> </ul>
Battery will not charge	<ul> <li>Bad battery cell(s).</li> <li>Poor cable connections.</li> <li>Faulty regulator (if so equipped).</li> <li>Faulty alternator.</li> </ul>	<ul><li>Replace battery.</li><li>Check/clean all connections.</li><li>Replace regulator.</li><li>Replace alternator.</li></ul>
Engine "backfires" when turning 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 917.271090

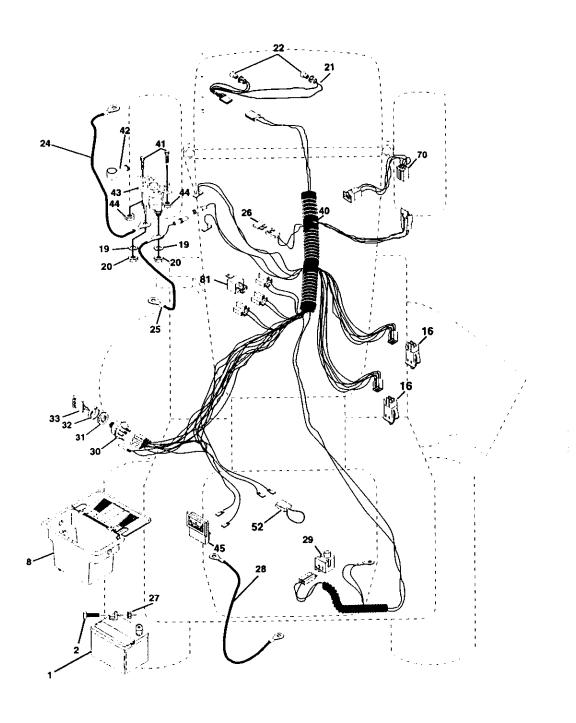
#### **SCHEMATIC**



### REPAIR PARTS

### TRACTOR - - MODEL NUMBER 917.271090

### **ELECTRICAL**



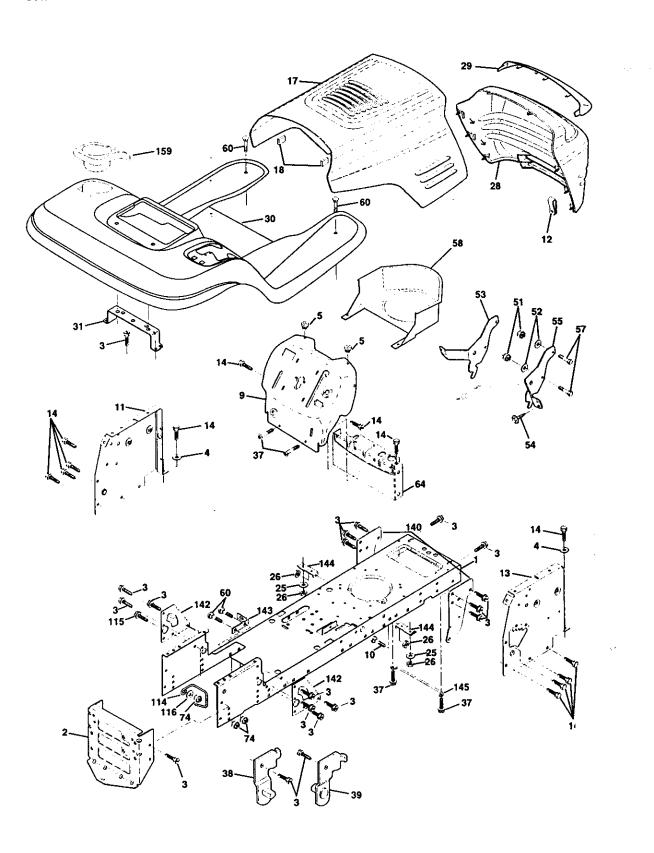
### TRACTOR - - MODEL NUMBER 917.271090

### ELECTRICAL

KEY NO.	PART NO.	DESCRIPTION
1	163465	Battery,12 Volt 28 Amp
2	74760412	Bolt, Hex 1/4-20 x 3/4
8	156417	Case, Battery Mech Hinge
16	161343	Switch, Interlock N. OPN./N.OPN
19	STD551125	Washer, Lock 1/4
20	73350400	Nut, Hex, Jam 1/4-20 UNC
21	_	Harness, Light Socket (w/4152J)
22	4152J	Light Bulb
24	4799J	Cable, Battery, 6 Gauge, Red, 11"
25	146147	Cable, Battery, 6 Gauge, Red, W16 Wire
26	166180	Fuse, 30 Amp
27	73510400	Nut, Keps Hex 1/4-20 Unc
28	4207J	Cable, Ground, 6 Gauge, Black, 12"
29	160784	Switch, Plunger Normal OP Olive
30	140301	Switch, Ignition 4 Position
31	124211X	Nut, Ignition
32	141226	Cover, Ignition Switch
33	109310X	Key, Molded, Craftsman
40	166148	Harness, Ignition
41	71110408	Bolt Blk Fin Hex 1/4-20 UNC x 1/2
42	131563	Cover, Terminal
	145673	Solenoid
44	73640400	Nut, Keps Blk Hex 1/4-20 UNC
-	122822X	Ammeter, Rectangular 15 Amp
	141940	Protection Wire Loop (Hour Meter)
70	166661	Harness, Engine
81	109748X	Relay Asm.

 $\label{eq:NOTE: All component dimensions given in U.S. inches \\ 1 \ inch = 25.4 \ mm$ 

# TRACTOR - - MODEL NUMBER 917.271090 CHASSIS AND ENCLOSURES



### TRACTOR - - MODEL NUMBER 917.271090

### **CHASSIS AND ENCLOSURES**

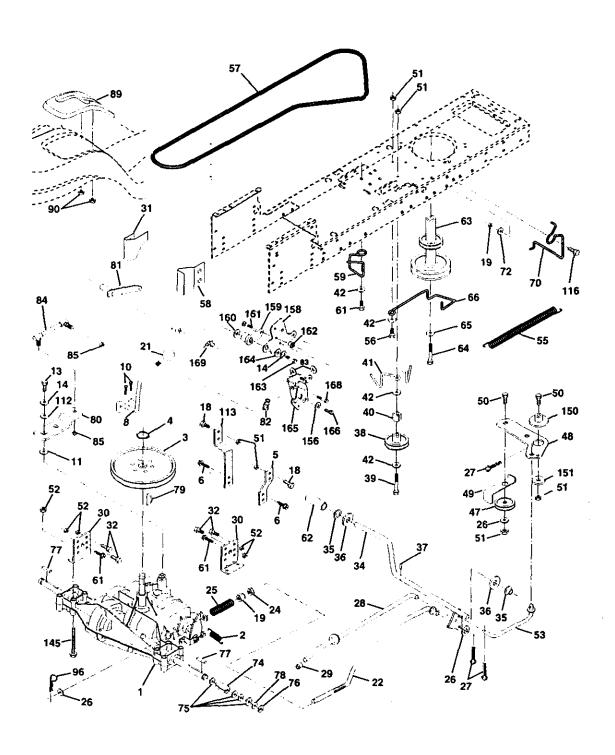
KEY NO.	PART NO.	DESCRIPTION
1	165583	Chassis Assembly
2	140356	Drawbar
3	17490612	Screw, Thd., Roll. 3/8-16 x 3/4
4	19131216	Washer 13/32 x 3/4 x 16 Gauge
5	155272	Bumper Hood/Dash
9	161917X013	Dash
10	STD533710	Bolt, Carriage 3/8-16 x 3/4
11	155927	Panel, Dash, LH
12	145660	Clip Tinnerman Grille P/L
13	155936	Panel, Dash, RH
14	17490608	Screw, Thd., Roll. 3/8-16 x 1/2
17	144983X558	Hood Assembly
18	126938X	Bumber Hood
25	19131312	Washer 13/32 x 13/16 x 12 Gauge
26	STD541437	Locknut
28	145198X558	Grille w/Clips MS-558
29	155217X599	Lens, Grille
30	154791X558	Fender/Footrest Pnt STLT N Hold 558
31	139976	Bracket, Fender/Support
37	17490508	Screw Thdrol 5/16-18 x 1/2
38	139886	Pivot Bracket Assembly, LH,
39	139887	Pivot Bracket Assembly, RH,
51	73800400	Nut Lock w/Insert 1/4 - 20 UNC
52	19091416	Washer, 9/32 x 7/8 x 16 Gauge
53	145201	Bracket, Grille Pickoff LH
54	161464	Screw, Hex Wshd #8-18 x 7/8
55	145202	Bracket, Grille Pickoff RH
57	STD552507	Bolt, FinHex 1/4 -20 UNC x .75
58	150127	Duct, Air Engine PL/LT
60	STD533707	Bolt, Rdhd Sqnk 3/8-16 UNC x 3/4
64	154798	Dash, Lower STLT
74	STD541437	Nut, Crownlock 3/8-16 UNC
114	158112	Keeper Belt
115	17490620	Screw Thdrol 3/8-16 x 1-1/4
116	19131614	Washer 13/32 x 1 x 14
140	158418	Bracket, Suspension Front
142	165867	Plate, Reinforcement STLT
143	154966	Backrest, Swaybar Chassis
144	154207	Bracket, Footrest STLT
145	156524	Rod Pivot Chassis/Hood
159	155123X428	Cupholder
•••	5479J	Plug, Button

--- 5479J Plug, Button

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

### TRACTOR - - MODEL NUMBER 917.271090

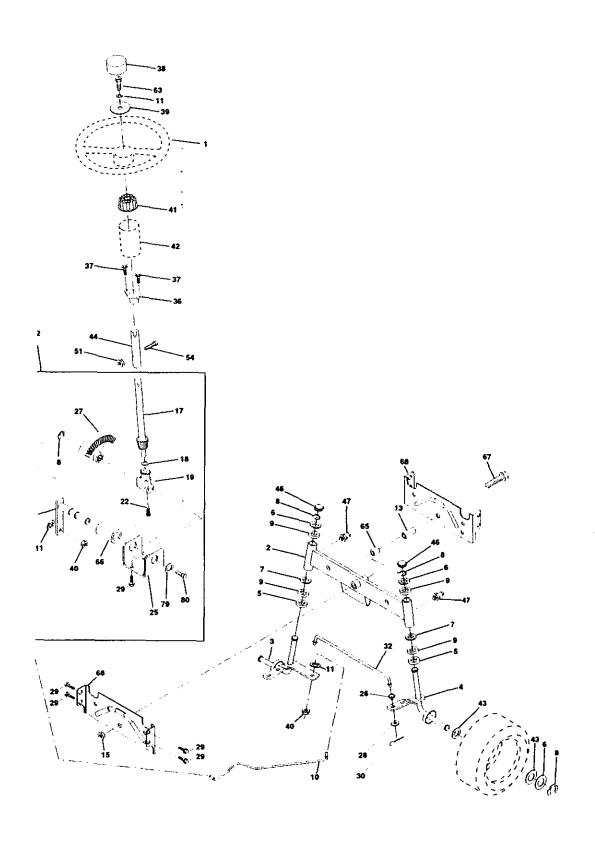
### **GROUND DRIVE**



### **GROUND DRIVE**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1		Transaxle(See Breakdown) Peerless, Model Number 206- 545C	63 64	140186 71170764	Pulley, Engine Bolt, Hex Head, Fin. 7/16-20 x 4 Grade 5
2	146682	Spring, Return, Brake	65	STD551143	Washer
3	123666X	Pulley, Transaxle	66	154778	Keeper, Belt, Engine, Fool-
4	12000028	Ring, Retainer			Proof
5	121520X	Strap, Torque	70	134683	Guide, Mower Drive Belt, R.H.
6	17490512	Screw, Thd., Roll. 5/16-18 x 3/4	72	19132012	Washer 13/32 x 1-1/4 x 12
8	165866	Rod Shifter Fender STLT		407057	Gauge
10	STD561210	Pin, Cotter	74	137057	Spacer, Split
11	105701X	Washer, Shift Plate	75	121749X	Washer 25/32 x 1-1/4 x 16 Gauge
13	74550412	Bolt 1/4-28 UNF W/Patch	76	STD581075	E-Ring
	10010100	Grade 8	76 77	123583X	Key, Square 2.0 x .1845/.1865
14	10040400	Washer Lock Hvy Helical	77 78	121748X	Washer 25/32 x 1-5/8 x 16
40	STD523710	Bolt Fin Hex 3/8-16 UNC x 1.	70	1217407	Gauge
18	310323710	Gr 5	79	2228M	Key Woodruff
19	STD541437	Nut	80	145090	Arm, Shift
21	106933X	Knob	81	165592	Shaft Asm Cross Tapered
22	130804	Rod, Brake	82	165711	Spring, Torsion
24	STD541237	Nut	83	19171216	Washer 17/32 x 3/4 x 16
25	106888X	Spring, Brake Rod			Gauge
26	STD551037	Washer	84	166231	Link Transaxle
27	STD561210	Pin years	85	150360	Nut, Nylock
28	145204	Rod, Parking Brake	89	158391X428	Console, Shift, STLT
29	124236X	Cap, Parking Brake, Red	90	124346X	Nut, Self-Threading, Washer Hd
30	130807	Bracket, Transaxle	oc	44071	
31	127275X	Keeper, Belt, L.H.	96	4497H	Retainer Spring Washer 9/32 x 3/4 x 10 Gauge
32	STD523107	Bolt	112 113	19091210 127285X	Strap Torque Lh
34	155071	Shaft Assembly, Foot Pedal	116	72110610	Bolt Rdhd Sqneck 3/8-16 x 1.25
35	120183X	Bearing, Nylon	145	74490540	Bolt, Hex Fighd 5/16-18 Grade
36	STD551062	Washer	170	74430340	5
37	STD571810	Roll Pin	150	165850	Bushing Bellcrank Grd. Drive
38	131494	Pulley, Idler, Flat	151	19133210	Washer 13/32 x 2 x 10 Ga.
39	STD523727	Bolt Spacer, Split .395 x .59	156	166002	Washer Srrted 5/16ID x 1.125
40 41	4470J 165838	Keeper, Belt, Idler	158	165589	Bracket Shift Mount
42	19131312	Washer 13/32 x 13/16 x 12	159	165494	Hub Tapered Flange Shift LT
42	19131312	Gauge	160	19292016	Washer 29/32 x 1-1/4 x 16 Ga
47	127783	Pulley, Idler, V-Groove, Plastic	161	72140406	Bolt Rdhd Sqnk 1/4-20 x 3/4 Gr
48	154407	Bellcrank Clutch Gmd Drv Stl			5
49	123205X	Retainer, Belt	162	73680400	Nut Crownlock 1/4-20 Unc
50	STD523715	Bolt	163	74780416	Bolt Hex Fin 1/4-20 Unc x 1 Gr
51	STD541437	Nut Crown Lock 3/8-16 UNC	104	10001010	5 Washer 5/78 x .281 x 10 Ga
52	STD541431	Nut Crown Lock 5/16-18 UNC	164	19091010	Brackot Pivot Lever
53	105710X	Link, Clutch	165 166	165623 166880	Screw 5/16-18 x 5/8
55	105709X	Spring, Clutch Return	168	165492	Bolt Shoulder 5/16-18 x .561
56	STD523712	Bolt Fin Hex 3/8-16 x 1-1/4	169	165580	Plate Fastening Lt
57	130801	V-Belt, Ground Drive	103	100000	Total Constituting at
58	127274X	Keeper, Belt, R.H.			
59	140312	Keeper, Belt, Center Span			
61	17490612	Screw, Thd., Roll. 3/8-16 x 3/4			dimensions given in U.S. inches
62	8883R	Cover, Pedal	11	inch = 25.4 mm	

## TRACTOR - - MODEL NUMBER 917.271090 STEERING ASSEMBLY

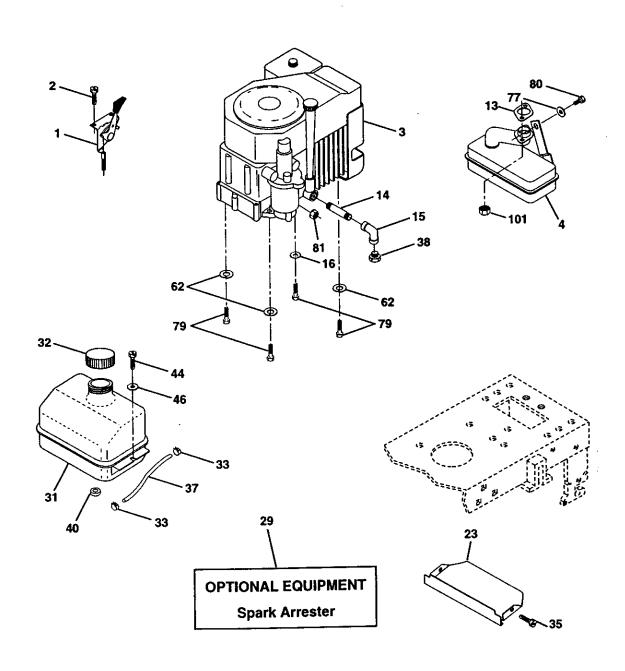


## STEERING ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
1	139768	Wheel, Steering
2	154427	Axle, Asm Front
3	156483	Spindle, Asm Lh
4	157473	Spindie, Asm Rh
5	6266H	Bearing, Race Thrust Harden
6	121748X	Washer, 25/32 x 1 5/8 x 16ga
7	19272016	Washer, 27/32 x 1 1/4 x 16 Ga
8	12000029	Ring, Klip #t5304-75
9	3366R	Bearing, Col Strg Blk
10	156438	Draglink, Extended Stamped
11	STD551137	Washer, Lock Hvy Hlcl Spr 3/8
13	154779	Bearing, Axle STLT/GT
15	73901000	Locknut, Flange 5/8-11 UNC
17	156546	Shaft, Asm Strg Private Label
18	57079	Washer, Thrust 515 x 750 x 033
19	160395	Support, Shaft
22	165857	Screw Hex Wshhd Torx
23	165851	Shaft, Asm Pittman
25	154406	Bracket, Steering
26	126847X	Bushing, Rod Tie Blk Lt
27	136874	Gear, Sector
28	19131416	Washer, 13/32 x 7/8 x 16ga
29	17490612	Screw, Thdrol 3/8-16x3/4 Ty-tt
30	STD561210	Pin, Cotter 1/8 x 3/4 Cad
32	130465	Rod, Tie Wire Form 19 75 Mech
36	155099	Bushing, Strg 5/8 ld Dash
37	152927	Screw, TT #10-32 x 5 x 3/8 Flange
38	139769	Insert, Steering Wheel
39	19133808	Washer, 13/32 x 2-3/8 x 8 Gauge
40	STD541537	Gripco Nut
41	100711L	Adaptor, Wheel Strg
42	145054	Boot Shaft Steering
43	121749X	Washer, 25/32 x 1-1/4 x 16 Gauge
44	153720	Extension, Steering Non-Adjust
46	121232X	Cap, Spindle Fr Top Blk
47	6855M	Fitting, Grease
51	STD541431	Nut Lock Hex w/lns 5/16 -18 UNC
54	74780520	Bolt Fin Hex 5/16 - 18 UNC x 1 -1/4
62	167902	Kit, Steering Assembly
63	STD523710	Bolt, Fin Hex 3/8-16 UNC x 1 Gr. 5
65	154780	Spacer, Axle
66	154404	Bearing, Arm Pittman
67	74781044	Bolt, Fin Hex 5/8-11 UNC x 2-3/4
68	154429	Axle, Brace
79	19132012	Washer 13/32 x 1-1/4 x 12 Ga
80	74950612	Bolt Hex Nyion 3/8-16 x 3/4
NOTE:	All component e	dimensions given in U.S. inches

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

#### **ENGINE**

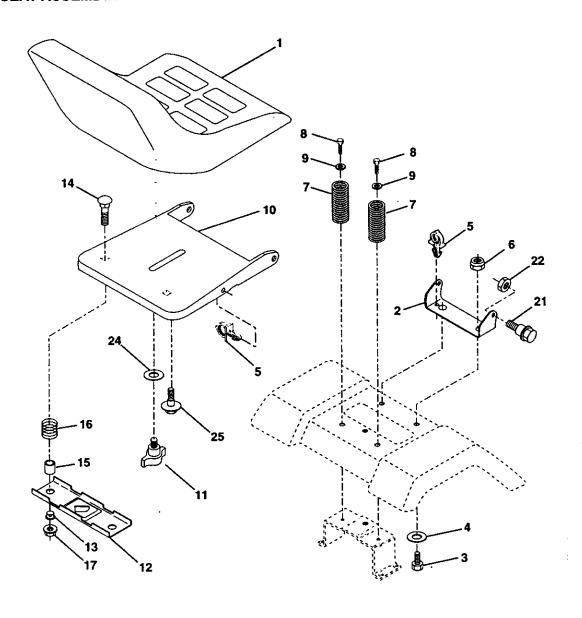


#### **ENGINE**

KEY NO.	PART NO.	DESCRIPTION
1	162156	Control, Throt 1 Ch
2	17720410	Screw, Hex Thd Cut 1/4-20x5/8 T
3		Engine (See Breakdown) Kohler Model No. CV16s-43520
4	159420	Muffler
13	12-041-03	Gasket
14	13280328	Nipple, Pipe 3/8 NPT x 3-1/2
15	13200300	Elbow, Std 90 Degree 3/8-18 Npt
16	STD551231	Washer
23	159880	Shield, BRN/DBR Guard
29	137180	Arrestor, Spark
31	109202X	Tank, Fuel
32	158990	Cap Assembly, Fuel Tank, Vented
33	123487X	Clamp, Hose Blk
35		Screw, Thdrol 5/16-18 x 3/4 TYT
37	137040	Line Fuel
38		Plug Oil Drain (Order From Engine Manufacturer)
40	124028X	Bushing, Snap, Fuel Line
44	17490412	Screw, Hex Washer Head, Thd. Roll. 1/4-20 x 3/4
46	19091416	Washer, 9/32 x 7/8 x 16 Gauge
62	STD551131	Washer, Lock
77	19101216	Washer 5/16 x 3/4 x 16 Gauge
79	M740108025	Bolt, Hex
80	74760508	Bolt, Hex Hd 5/16-18 UNC x 1/2
81	128861	Nut, Flange 1/4-20 Starter Nut
101	M73030800	Nut Flange M8-1.25

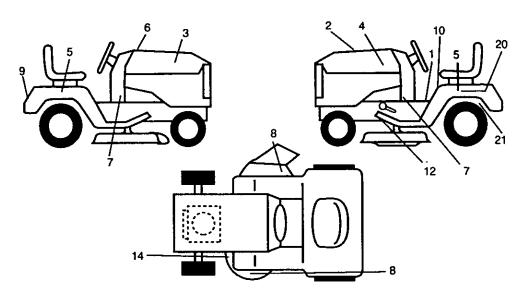
NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

#### SEAT ASSEMBLY



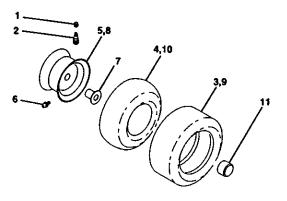
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8	140123 140551 STD523710 19131610 145006 STD541437 124181X 17490616 19131614	Seat Bracket Pnt Pivot Seat (blk ) Bolt Fin Hex 3/8-16unc X 1 Washer 13/32 X 3/4 X 10 Ga Clip Push In Hinged Nut Hex Lock w/Ins 3/8-16 Unc Spring Seat Cprsn 2 250 Blk Zi Screw Thdrol 3/8-16 X 1 Ty-tt Washer 13/32 X 1 X 14 Ga	12 13 14 15 16 17 21 22	121246X 121248X 72050412 134300 121250X 123976X 153236 STD541431 19171912	Bracket Pnt Mounting Switch Bushing Snap Bik Nyl 50 Id Bolt Rdhd Sht Nk 1/4-20x1-1/2 Spacer Split 28 X 96 Zinc Spring Cprsn 1 27 Blk Pnt Nut Lock 1/4 Lge Fig Gr 5 Zinc Bolt Shoulder 5/16-18 Unc-2A Nut Hex Lock w/Ins 5/16-18 Washer 17/32 X 1-3/16 X 12 Ga.
10 11	155925 166369	Pan Pnt Seat (blk ) Knob Seat		127018X : All component ch = 25.4 mm	Bolt Shoulder 5/16-18 X 62 dimensions given in U.S. inch-

### **DECALS**



(EY	PART		KEY	PART	
10.	NO.	DESCRIPTION	NO.	NO.	DESCRIPTION
1	156368	Decal, Oper. Instr	10	156439	Decal, Fender Danger
2	167182	Decal, Replc.	12	146046	Decal, V-Belt Drive Schematic
3	163200	Decal, Hood, R.H.	14	160396	Decal, V-Belt Schematic
4	163202	Decal, Hood, L.H.	20	149516	Decal Battery Dngr/Psn Eng
5	163207	Decal, Fender Sd White	21	138047	Decal, Battery Diehard Sears
		Rad/6sp 42"		138311	Decal, Lift Handle
6	133644	Decal, Customer Maintenance		154515	Pad Footrest LH STLT
7	163263	Decal, Dash Pnl Kohler 16.5	• •	154516	Pad Footrest RH STLT
		Ohv		168378	Owner's Manual, English
8	166887	Decal, Deck EZ3		168379	Owner's Manual, Spanish
9	163204	Decal, Fender, Craftsman			

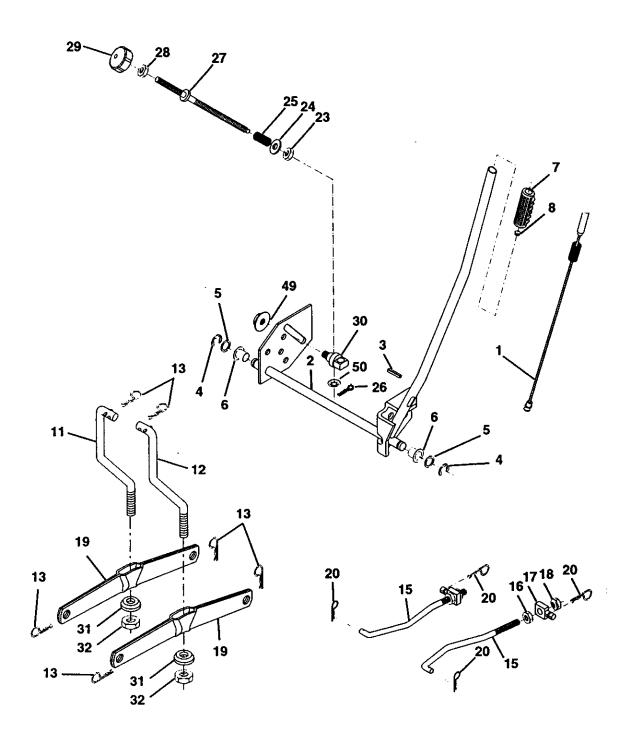
#### **WHEELS & TIRES**



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

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

#### LIFT ASSEMBLY

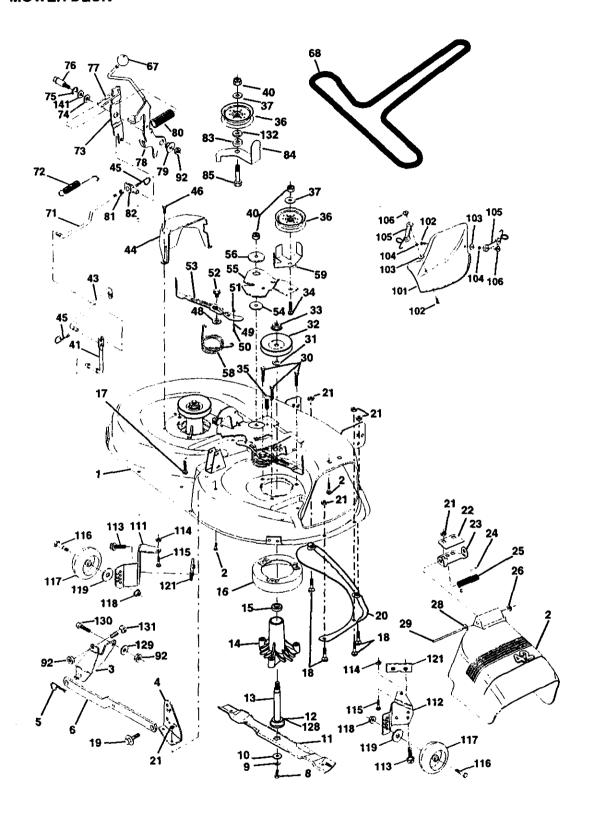


### LIFT ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
1	159460	Wire Asm Inner/Sprg w/Plunger LT
2	159471	Shaft Asm. Lift
3	105767X	Pin Groove
4	12000002	E Ring #5133-62
5	19211621	Washer 21/32 x 1 x 21 Ga.
6	120183X	Bearing Nylon
7	125631X	Grip Handle Fluted
8	122365X	Button Plunger Red
11	139865	Link Lift Lh Fixed Length
12	139866	Link Lift Rh Fixed Length
13	STD624008	Retainer Spring
15	127218	Link Front
16	73350800	Nut Jam Hex 1/2-13 Unc
17	130171	Trunnion Blk Zinc
18	73800800	LockNut, Hex, with Washer Insert 1/2-13 UNC
19	139868	Arm, Suspension Rear
20	STD624008	Retainer Spring
23	110807X	Nut Special .
24	19131016	Washer 13/32 x 5/8 x 16 Ga.
25	2876H	Spring 2-1/8"
26	76020308	Pin Cotter 3/32 x 1/2
27	126971X	Rod Adjust Lift Zinc 7.49 Wrk
28	73350600	Nut Hex Jam 3/8-16unc
29	138057	Knob Inf 3/8-16unc Blk W/Syn
30	150233	Trunnion Infin Height
31	140302	Bearing, Pivot, Lift Spherical
32	73540600	Nut, Crownlock 3/8-24
49	145212	Nut Hex Flange Lock
50	110452X	Nut Push Phos & Oil

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

### **MOWER DECK**

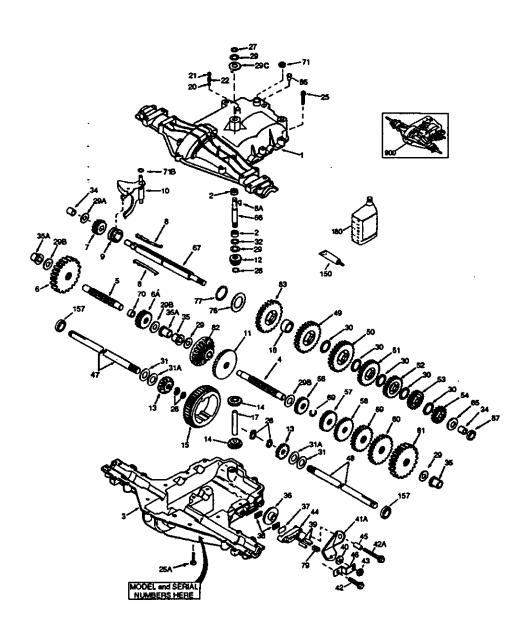


#### **MOWER DECK**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	164961	Mower Housing	56	122052X	Spacer, Retainer
2	STD533107	Bolt	58	140086	Spring, Torsion Brakes
3	138017	Bracket Assembly, Sway Bar,	59	141043	Guard, TUV Idler
		Front	67	162113	Knob Custom Oval
4	138440	Bracket Assembly, Sway Bar	68	144200	V-Belt
5	STD624008	Retainer Spring	71	142427	Rod, Clutch, Primary, with Nib
6	130832	Arm, Suspension, Rear	72	131870	Spring, Return
8	850857	Bolt, Hex 3/8-24 x 1.25	73	127847	Arm, Clutch, Secondary
		Grade 8	74	121748X	Wäsher 25/32 x 1-5/8 x 16
9	STD551137	Washer, Lock	, ,		Gauge
10	140296	Washer, Hardened	75	12000029	Ring, Klip
11	134149	Blade, Mulching	76	128903	Bolt, Shoulder 3/8-16 UNC x
12	129895	Bearing, Ball			1.44
13	137645	Shaft Assembly, Mandrel,	77	127845	Keeper, Spring
		Vented (Includes Key Number	78	160570	Lever Asm. Clutch Pri Plm
		6)			STLT
14	128774	Housing, Mandrel, Vented	79	127498	Bushing, Large, Brass
15	110485X	Bearing, Ball, Mandrel	80	153701	Spring, Mower Clutch
16	140329	Stripper, Vented Mower Deck	81	STD541237	Nut, Hex Jam 3/8-16 Unc
17	72110610	Bolt, Carriage 3/8-16 x 1-1/4	82	142028	Trunnion, Adj.
18	STD533106	Bolt, Carriage 5/16-18 x 5/8	83	120958X	Washer Sintered
19	132827	Bolt, Shoulder	84	156084	Keeper Belt Idler
20	159770	Baffle, Vortex	85	72140620	Bolt Rdhd Sqnic 3/8-16 x 2-1/2
21	STD541431	Nut Crownlock 5/16-18 UNC	92	STD541437	Nut
22	134753	Stiffener Bracket	101	136420	Mulcher Cover
23	131267	Bracket, Deflector	102	71161010	Screw
24	105304X	Cap, Sleeve	103	19061216	Washer #10
25	123713X	Spring, Torsion, Deflector	104	STD551110	Washer, Lock
26	110452X	Nut, Push	105	160793	Latch Assembly, Bagger
27	130968	Shield, Deflector	106	2029J	Nut, Weld
28	19111016	Washer 11/32 x 5/8 x 16	111	155197	Bracket, Gauge, Wheel L.H.
		Gauge	112	155198	Bracket, Gauge, Wheel R.H.
29	131491	Rod, Hinge	113	17490512	Screw Thdrol 5/16-18 x 3/4
30	157722	Screw Thdrol Washer Head	114	STD541431	Nut, Hex, Keps 5/16-18 UNC
31	129963	Washer, Spacer	115	72110504	Bolt, Carriage 5/16 UNC x 1/2
32	153535	Pulley, Mandrel	116	4898H	Bolt, Shoulder
33	137266	Nut, Toplock, Flanged	117	165746	Wheel, Gauge
34	STD533717	Bolt	118	73930600	Nut, Centerlock 3/8-16
35	133835	Fastner, Christmas Tree	119	STD551037	Washer 3/8 x 7/8 x 14 Gauge
36	131494	Pulley, Idler, Flat	121	143723	Bracket
37	STD551037	Washer 13/32 x 13/16 x 16	128	153390	
		Gauge	129	19131312	Washer Felt Washer 13/32 x 13/16 x 12 Ga.
40	STD541437	Nut Crownlock 3/8-16 UNC	130	STD523710	
41	133551	Rod, Pivot, with Nibs	130	310323710	Bolt, Fin Hex 3/8-16 UNC x 1 Gr. 5
43	140083	Rod, Clutch, Secondary, with Nibs	131	STD533710	Bolt, RDHD SQNK 3/8-16 UNC
44	140088	Guard, Mandrel, L.H.	132	19132203	Spacer, Washer 13/32 I.D. x 1-
45	STD624003	Retainer			3/8 O.D. x 1/4
46	137729	Screw, Thd. Roll 1/4-20 x 5/8	141	6266H	Washer Thrust .75 x 1.230
48	133944	Washer, Hardened		130794	Mandrel Assembly (Includes
49	155066	Roller Assembly, Carn Follower			Key Numbers 8-10, 12-15, 31
50	131340	Bolt, Shoulder #10-24 Grade 5			and 32)
51	STD541410	Locknut		164963	Mower Deck, Complete
52	139888	Bolt, Shoulder 5/16-18 UNC			(Standard Deck, Order
53	131845	Arm Assembly, Pad, Brake			Separately Mulcher Plate and
54	133943	Washer, Hardened			Gauge Wheel Components,
55	155046	Arm, Idler			Key Nos. 101-106 and 111-121)

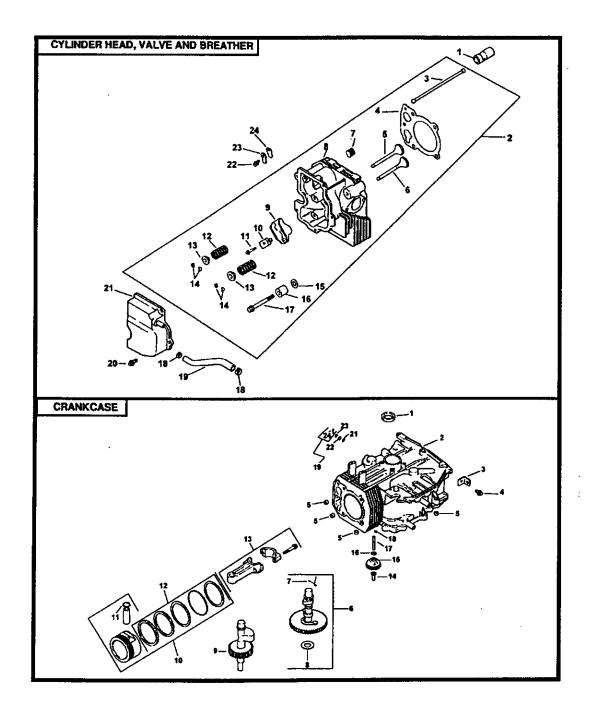
NOTE: All component dimensions given in U.S.inches 1 inch = 25.4 mm

## TRACTOR - - MODEL NUMBER 917.271090 PEERLESS TRANSAXLE - - MODEL NUMBER 206-545C

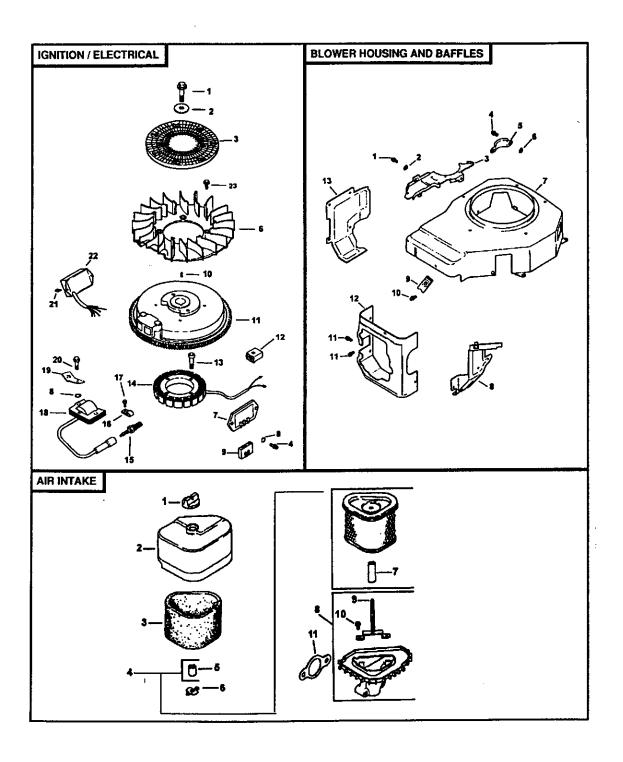


# TRACTOR - - MODEL NUMBER 917.271090 PEERLESS TRANSAXLE - - MODEL NUMBER 206-545C

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	772147	Transaxle Cover	41A	790079	Brake Lever
2	780086A	Needle Bearing 5/8"	42	792073A	Screw 1/4 - 20 x 1-1 /4"
3	770128	Transaxle Case	42A	792085A	Screw 1/4 - 20 x 2 1/4"
4	776395	Countershaft	43	792075	Locknut 5 / 16 - 24
5	776409	Output Shaft	44	790025	Brake Pad Holder
6	778364	Spur Gear (38 teeth)	45	786066 -	Spacer .2625 x 1.0
6A	778369	Spur Gear (15 teeth)	46	786086	Brake Lever Bracket
7	778330	Spur Gear (11 teeth)	47	774690	Axle (11-15 / 16" Long)
8	792180	Shift Key	48	774691	Axle (16 - 1 / 2" long)
8A	792047	Woodruff Key #9	49	778356	Spur Gear (29 teeth)
9	784352	Shift Collar	50	778338	Spur Gear (27 teeth)
10	784378	Shift Rod & Fork	51	778354	Spur Gear (23 teeth)
11	778334	Bevel Gear (30 teeth)	52	778352	Spur Gear (19 teeth)
12	778309	Input Bevel Pinion (13 teeth)	53	778350	Spur Gear (16 teeth)
13	778368	Bevel Gear (13 teeth) (Include.	54	778346	Spur Gear (15 teeth)
		14)	56	778355	Spur Gear (11 teeth)
14	778368	Bevel Pinion (13 teeth) (Include.	57	778337	Spur Gear (13 teeth)
		13)	58	778353	Spur Gear (17 teeth)
15	778370	Ring Gear (43 teeth)	59	778351	Spur Gear (21 teeth)
17	786188	Drive Pin	60	778349	Spur Gear (24 teeth)
18	786102	Spacer 1.130 X .695	61 🕑	778345	Spur Gear (25 teeth)
20	792077A	Ball 5/16" dia	65	780189	Flat Washer .563 ID x .062W
21	792078	Set Screw 3/8 - 16 x 3/8"	66	776422	Input Shaft
22	792079	Spring .310 OD x .625 L	67	776396	Shifter & Brake Shaft
25	792073A	Screw 1/4 - 20 x 1-1/4"	69	792170	Retaining Ring
25A	792177	Screw 1/4-20 x 1-3/8"	70	786187	Spacer .890
26	792125	Retaining Ring (pkg of 2)	71_	788069	Square Cut Ring
27 28	792035	Retaining Ring	71B	788092	"O" Ring
28 29	788040 780072	Retaining Ring Thrust Washer .627 ID x .031W	76	780090	Flat Washer 1.128 ID x .058W
	780072 780160	Thrust Washer .762 ID x .031W	77	788078A	Inverted Retaining Ring
29A 29B	780051	Thrust Washer .762 ID x .031W	79	792144	Spring .430 OD x .5000 L
29C	780199	Anti-Rotation Washer .632	82	778333	Bevel & Spur Gear (30 & 13
30	780199 780108	Cup Washer 1.127 ID x .032W	00	770000	teeth)
31	780001	Flat Washer .750 ID x .056W	83	778338	Spur Gear (27 teeth)
31	700001	(Use As Needed)	85 97	792154 788089A	Oil Fill Plug Oil Seal 9 / 16"
31A	780195	Flat Washer .750 ID x .062W	87 150		
32	788083	Oil Seal 5/8"	150	788093A 788088A	Liquid Gasket RTV Silicone Oil Seal 3 /4"
34	780194	Bushing .563	157 180	730229A	Gear Oil 80W90
35	780193	Flanged Bushing 5 / 8* ID		794712	
35A	780197	Flanged Bushing 376 18	900	194112	Replacement MST - 206-545C Transaxle
36	790075	Brake Disk			Hansano
37	790007	Brake Pad Plate			
38	799021	Brake Pad (pkg of 2)			
39	786026	Dowel Pin	NOTE	All commoner	nt dimensions given in U.S. inches
40	792076A	Flat Washer .312 ID x .059W	14012.	1 inch = 25.4	<del>-</del>



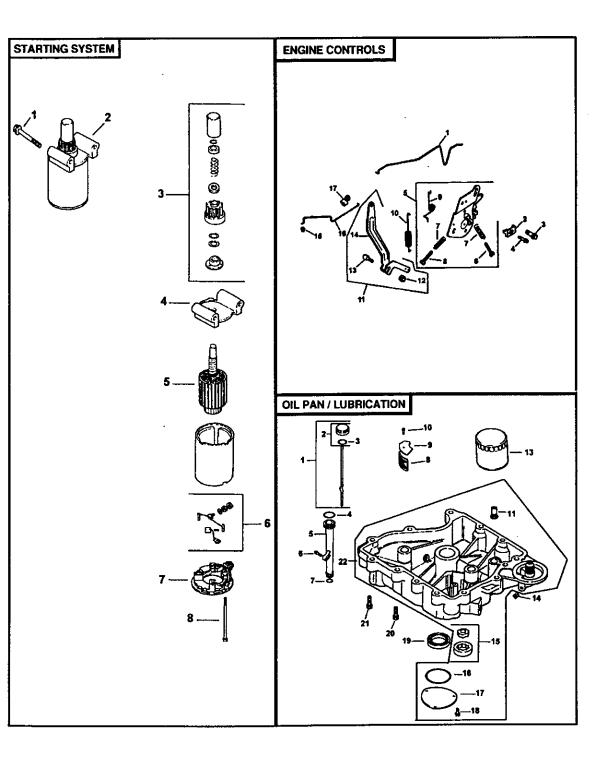
CYLINDER HEAD/VALVE/BREATHER		CRAN	KCASE		
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	25-351-01	Lifter, valve (2)	1	12-032-03	Seal, crankshaft
2	12-755-81	Kit, cylinder head (Includes 3-17)	2	Block, cylinder	(Use Short Block 12 522 18)
3	12-411-01	Rod, push (2)	3	12-445-02	Strap, lifting
4	12-041-10	Gasket, cylinder head	4	M-0839025	Screw, hex. flange M8x1.25x25
5	12-017-01	Valve, intake (Std.)	5	12-380-17	Dowel, locating (4)
	12-017-02	Valve, intake (.25)	6	12-755-49	Kit, camshaft (Includes 7,8)
6	12-016-01	Valve, exhaust (Std.)	7	12-089-31	Spring, actuating
	12-016-02	Valve, exhaust (.25)	8	12-422-08	Shim, camshaft (A.R.) blue
7	X-75-23	Plug, allen hd. pipe 1/8		12-422-09	Shim, camshaft (A.R.) red
8	12-318-19	Cylinder Head		12-422-10	Shim, camshaft (A.R.) yellow
9	25-186-01	Arm, rocker (2)		12-422-11	Shim, camshaft (A.R.) green
10	12-599-03	Pivot, rocker arm (2)		12-422-12	Shim, camshaft (A.R.) gray
11	M-0640034	Screw, hex. flange M6xl.0x34 (2)		12-422-13	Shim, camshaft (A.R.) black
12	12-089-01	Spring, valve (2)		12-422-07	Shim, camshaft (A.R.) white
13	12-173-01	Cap, valve spring (2)	9	12-144-27	Shaft, balance
14	12-755-03	Kit, retainer (2)	10	12-874-07	Piston w/Ring Set (Std.)
15	12-468-05	Washer, plain 13/32			(Includes 11-12)
16	12-112-13	Spacer, head bolt exhaust port		24-874-11	Piston w/Ring Set (.08)
17	12-086-15	Screw, hex. flange M10x1.5x81 (5)		12-874-08	Piston w/Ring Set (.25)
18	X-426-9	Clamp, hose (2)		12-874-09	Piston w/Ring Set (.50)
19	12-326-03	Hose, breather	11	12-018-02	Retainer, piston pin (2)
20	M-0645020	Screw, hex. flange M6x1.0x20 (5)	12	12-108-07	Ring Set (Std.)
21	12-096-07	Cover, valve w/nipple		12-108-08	Ring Set (.25)
22	M-0545010	Screw, hex. flange M5x0.8x10		12-108-09	Ring Set (.50)
23	12-018-01	Retainer, breather reed	13	12-067-05	Connecting Rod (Std.)
24	12-402-02	Reed, breather		12-067-06	Connecting Rod (.25)
			14	12-380-01	Pin, governor regulating
			15	12-043-05	Gear, governor assembly
			16	M-0631005	Washer, plain 6mm
			17	12-144-02	Shaft, governor gear
			18	52-139-09	Plug, cup
			19	12-755-64	Kit, gov. cross shaft w/clip (Includes 24)
i			21	X-25-102	washer, plain 1/4
			22	12-032-01	Seal, governor cross shaft
			23	SM-0631015	Washer, plain 6mm
			24	12-154-05	Clip, hitch pin



#### IGNITION/ELECTRICAL

#### **BLOWER HOUSING & BAFFLES**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2	12-086-14 12-468-03	Screw, hex. flange MIOx1.5x46 Washer, plain 3/8	1	M-0545010	Screw, hex. flange M5x0.8x10 (8)
3	24-162-03	Screen, grass	2	24-468-10	Washer, plain 1/4
4	M-0639016	Screw, hex. flange M6x1.0x16	3	12-146-07	Plate, blower housing
•	00001.0	(6)	4	24-086-18	Screw, phillip hd M4x0.7 X8 (2)
6	12-157-03	Fan	5	24-096-05	Cover, pinion
7	41-403-09	Regulator, rectifier	6	220534 -	Washer, plain 5/16 (2)
8	X-22-11	Washer, lock (2)	7	12-027-54	Housing, blower
9	236602	Connector	8	12-063-10	Baffle, intake side
10	X-42-15	Key	9	25-154-02	Clip, mounting (3)
11	12-025-35	Flywheel	10	12-086-37	Screw,captive washerM5 X0.8
12	41-155-02	Connector (4 contact)			X20 (3)
13	M-0548025	Screw, hex. cap M5x0.8x25 (2)	11	M-0645016	Screw, hex. flange M6x1.0x16
14	12-085-01	Stator assembly - 15 amp	40	10.062.00	(2)
15	12-132-02	Spark Plug	12 13	12-063-08	Baffle, cylinder head
16	X-728-1	Clip, cable		12-063-09 LUSTRATED	Baffle, cylinder
17	M-0545010	Screw, hex. flange M5x0.8x10 (2)	NOTIL	X-25-92	WASHER, PLAIN 3/16" (2)
18	12-584-08	Module, ignition			
19	12-452-02	Terminal			
20	12-086-35	Screw, hex. socket M5x0.8x20 (2)	AIR IN	TAKE/FILTRAT	ION
21	M-0461013	Screw, pan head M4.2x13 (2)	KEY	PART	
22	12-584-12	Module, speed advance	NO.	NO.	DESCRIPTION
23	25-086-47	Shoulder M6X1.0X16 (4)			
NOT IL	LUSTRATED		1	25-341-03	Knob, air cleaner cover
	25-518-29	Lead	2	12-096-24	Cover, air cleaner
	25-518-05	Lead	3	12-083-12	Precleaner, element
	12-176-36	Hamess	4	12-1083-10	Kit air cleaner element
	X-25-5	Washer, plain 5/16"	-	1000040	(Includes 5,7)
	12-155-02	Connector	5	1230046	Seal 3/4*
	23-517-03	Clip Cable	6	12-100-01	Wing Nut
			7 8	12-032-11	Seal 1-7/16"
				12-094-07	Base, air cleaner(Includes 10,11)
			9	12-072-04	Stud, mounting plate M6X1.0X75
			10	12-086-01	Screw, #10 Hi-Lo thread forming (2)
			11	12-041-02	Gasket, air cleaner
			NOT IL	LUSTRATED	
				12-113-53	Decal, air cleaner



#### **KEYPART** NO.NO. DESCRIPTION 1 M-0839070 Screw, hex. flange M8x1.25x70 25-098-05 Starter assembly (Includes 3-8) 3 12-755-54 Kit, drive end 12-227-06 Cap, drive end 5 12-170-05 Amature 6 12-221-01 Kit, brush & spring 7 12-227-13 Cap, commutator end 8 12-211-01 Bolt, hex. flange 1/4-20x4-5/8 OIL PAN/LUBRICATION **KEYPART** NO.NO. DESCRIPTION 1 12-038-01 Dipstick assembly (Includes 2-2 25-755-13 Kit, oil fill cap (Includes 3) 12-153-03 O-Ring, oil fill cap 3 12-153-02 O-Ring, upper oil fill tube 5 12-123-04 Tube, oil fill 6 SM-0545020 Screw, hex. flange M5x0.8x20 12-153-01 O-Ring, lower oil fill tube 7 25-162-07 Screen, oil pickup 9 12-096-03 Cover, oil pickup screen 10 Screw, hex. flange M5x0.8x16 M-0545016 Valve, oil pressure relief 11 25-462-09 13 52-050-02 Filter, oil 14 X-75-10 Plug, sq. hd. solid 3/8 15 12-393-01 Pump, oil assembly 12-153-06 O-Ring, oil pump cover 12-096-34 17 Cover, oil pump 18 M-0545016 Screw, hex. flange M5x0.8x16

(3)

Seal, oil (P.T.O. end)

Screw, hex. flange M8x1.25x45

Assembly, Pan, oil (Incl. 11,15-

Screw, hex. flange M8x1.25x45 (11)

12-032-03

24-086-16

24-086-17

22 12-199-53

19

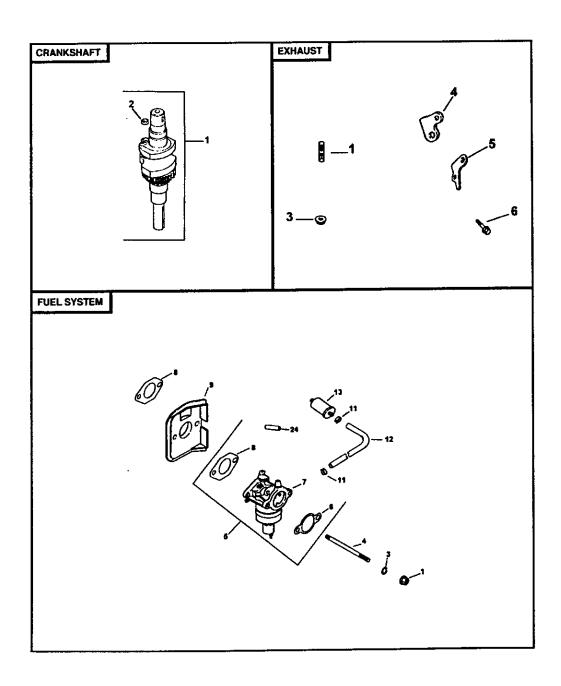
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21

STARTING SYSTEM

#### **ENGINE CONTROLS**

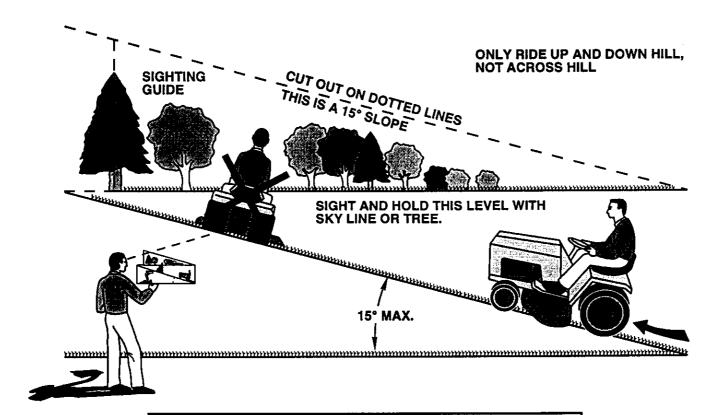
KEYP. NO.NO		DESCRIPTION
1	12-079-07	Linkage, choke
2	12-237-01	Clamp, cable
3	M-0664020	Screw, lobed socket M6xl.0x20 (2)
4	24-086-43	Screw, hex. flange
5	12-536-10	Control, speed assembly
		(Includes 6,8,9)
6	M-0443025	Screw, pan head M4x0.7x25
7	M-0443020	Screw, pan head M4x0.7x20
8	12-089-11	Spring, choke (2)
9	12-089-23	Spring, choke return
10	12-089-24	Spring, governor
11	12-755-83	Kit, governor lever (Includes 12-14)
12	12-100-07	Nut, hex flange 1/4 - 20"
13	52-211-04	Bolt, 1/4 - 20 X 1"
14	12-090-28	Lever, governor
15	25-158-08	Bushing, throttle linkage
16	12-079-01	Linkage, throttle
17	25-158-11	Bushing, throttle linkage



FUEL SYSTEM			CRANKSHAFT		
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	M-0641060	Nut, hex. flange M6x1.0 (2)	1	12-014-37	Crankshaft (Includes 2)
3	X-22-11	Washer, star 1/4	2	12-139-01	Plug, cup
4	M-0629116	Stud M6x1.0x116 (2)			
5	12-853-95	Kit, carburetor w/gasket	EXHAUST		
		(Includes 6,7,8 qty 1			
_		12-454-01, 25452-20)	KEY	PART	
6	12-041-02	Gasket, air cleaner	NO.	NO.	DESCRIPTION
7	12-053-95	Carburetor assembly			
		(For information only not	1	25-072-04	Stud (2)
_	10.044.04	available separately)	4	12-126-11	Bracket, muffler
8	12-041-01	Gasket, carburetor (2)	5	12-445-06	Strap, lifting
: 9	12-265-04	Deflector, heat	6	M-0645025	Screw, hex. flange M6xl.0x25
10 11	47-154-01 X-426-09	Clip cable		12-522-18	(2) Short Block
12	25-353-10	Clamp, hose (2) Line, fuel 9"		12-755-82	Gasket Set
13	25-050-02	Filter, fuel		12-755-62	Gasket Set
13	25-050-02	ritter, ruer			
NOT IL	LUSTRATED				
	12-757-02	Kit, float			
	12-757-03	Kit, carburetor repair			
	12-041-01	Gasket, carburetor			
	12-041-02	Gasket, air cleaner			
	12-041-05	Gasket, bowl			
	12-041-06	Gasket, bowl screw			
	12-032-06	Seal, solenoid			
	12-757-33	Kit, solenoid repair			
	12-041-06	Gasket, bowl screw			
	12-454-01	Tie, wire			
	25-452-20	Terminal			
	12-454-03	Tie cable			
	M-0561010	Screw, thread forming M5X0.8X10			
	M-0645020	Screw, hex. flange M6X1.0X20 (2)			

## SERVICE NOTES

#### 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 the repair or replacement parts you need delivered directly to your home Call 7 am - 7 pm, 7 days a week

1-800-366-PART

(1-800-366-7278) Para ordenar piezas con entrega a domicilio - 1-800-659-7084

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

1-800-4-REPAIR

(1-800-473-7274)

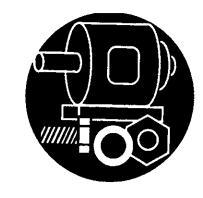
Para pedir servicio de reparación a domicilio - 1-800-676-5811

For the location of a Sears Parts and Repair Center in your area Call 24 hours a day, 7 days a week 1-800-488-1222

For information on purchasing a Sears Maintenance Agreement or to inquire about an existing Agreement Call 9 am - 5 pm, Monday-Saturday 1-800-827-6655

When requesting service or ordering parts, always provide the following information:

- Product TypePart Number
- Model Number
   Part Description











America's Repair Specialists