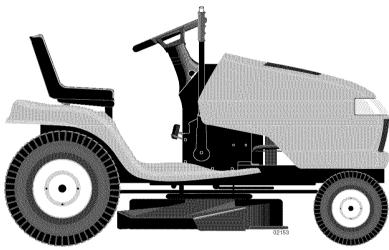
**Owner's Manual** 

# **CRAFTSMAN**®

## LAWN TRACTOR

24.0 HP, 48" Mower Electric Start Automatic Transmission

Model No. 917.273620





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.

## **IMPORTANT:**

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 U.S.A. Visit our Craftsman website: www.sears.com/craftsman

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## WARRANTY

#### LIMITED 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 that are found to be defective in material or workmanship according to the guidelines of coverage listed below. Sears will also provide free labor for these applicable warranted parts for the two full years. During the first 30 days of purchase, there will be no charges to service the product at your home for issues covered by this warranty. (See exclusions below). For your convenience, IN HOME warranty service will still be available after the first 30 days of purchase, but a trip charge will apply. This charge will be waived if the Craftsman product is dropped off at an authorized Sears location. For the nearest authorized Sears location, please call 1-800-4-MY-HOME®. This warranty applies only while this product is within the United States.

This Warranty does not cover:

- Expendable items which become worn during normal use, including but not limited to blades, spark plugs, air cleaners, belts, and oil filters.
- Standard Maintenance Servicing, oil changes, or tune-ups
- Tire replacement or repair caused by punctures from outside objects, such as nails, thorns, stumps, or glass.
- Repairs necessary because of operator abuse, including but not limited to, damage caused by towing objects beyond the capability of the riding equipment, impacting objects that bend the frame or crankshaft, or over-speeding the engine.
- Repairs necessary because of operator negligence, including but not limited to, electrical and mechanical damage caused by improper storage, failure to use the proper grade and amount of engine oil, failure to keep the deck clear of flammable debris, or failure to maintain the equipment according to the instructions contained in the owner's manual.
- Engine (fuel system) cleaning or repairs caused by fuel determined to be contaminated or oxidized (stale). In general, fuel should be used within 30 days of its purchase date.
- Normal deterioration and wear of the exterior finishes, or product label replacement.
- Riding equipment used for commercial or rental purposes.

#### LIMITED 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. During the first 30 days of purchase, there will be no charges to replace the battery at your HOME. After the first 30 days, for your convenience, IN-HOME warranty service will still be available but a trip charge will apply. This charge will be waived if the Craftsman product is dropped off at an authorized Sears location. For the nearest authorized Sears location, please call 1-800-4-MY-HOME®.

This battery warranty applies only while this product is within the United States.

This warranty gives you specific legal rights, and you may also have other rights, which vary, from state to state.

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

## SAFETY RULES

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

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

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

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

**AWARNING:** Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**AWARNING:** Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **Wash hands after handling.** 

#### **I. GENERAL OPERATION**

- Read, understand, and follow all instructions on the machine and in the manual before starting.
- Do not put hands or feet near rotating parts or under the machine. Keep clear of the discharge opening at all times.
- 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 blades.
- Be sure the area is clear of bystanders before operating. 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 direct discharged material toward anyone. Avoid discharging material against a wall or obstruction. Material may ricochet back toward the operator. Stop the blades when crossing gravel surfaces.
- Do not operate machine without the entire grass catcher, discharge guard, or other safety devices in place and working.
- Slow down before turning.
- Never leave a running machine unattended. Always turn off blades, set parking brake, stop engine, and remove keys before dismounting.
- Disengage blades when not mowing. Shut off engine and wait for all parts to come to a complete stop before cleaning the machine, removing the grass catcher, or unclogging the discharge guard.
- Operate machine 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.
- Always wear eye protection when operating machine.
- Data indicates that operators, age 60 years and above, are involved in a large percentage of riding mower-related injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.
- Follow the manufacturer's recommendation for wheel weights or counterweights.
- Keep machine free of grass, leaves or other debris build-up which can touch hot exhaust / engine parts and burn. Do not allow the mower deck to plow leaves or other debris which can cause build-up to occur. Clean any oil or fuel spillage before operating or storing the machine. Allow machine to cool before storage.
- 3

#### **II. SLOPE OPERATION**

Slopes are a major factor related to loss of control and tip-over accidents, which can result in severe injury or death. Operation on all slopes requires extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it.

- Mow up and down slopes, not across.
- Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Choose a low ground speed so that you will not have to stop or shift while on the slope.
- Do not mow on wet grass. Tires may lose traction.
   Always keep the machine in gear when going down slopes. Do not shift to neutral and coast downhill.
- Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the blades and proceed slowly straight down the slope.
- Keep all movement on the slopes slow and gradual. Do not make sudden changes in speed or direction, which could cause the machine to roll over.
- Use extra care while operating machine with grass catchers or other attachments; they can affect the stability of the machine. Do no use on steep slopes.
- Do not try to stabilize the machine by putting your foot on the ground.
- Do not mow near drop-offs, ditches, or embankments. The machine could suddenly roll over if a wheel is over the edge or if the edge caves in.

#### **III. 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 in the watchful care of a responsible adult other than the operator.
- Be alert and turn machine off if a child enters the area.
- Before and while backing, look behind and down for small children.

- Never carry children, even with the blades shut off. They may fall off and be seriously injured or interfere with safe machine operation. Children who have been given rides in the past may suddenly appear in the mowing area for another ride and be run over or backed over by the machine.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may block your view of a child.

#### **IV. TOWING**

- Tow only with a machine that has a hitch designed for towing. Do not attach towed equipment except at the hitch point.
- Follow the manufacturer's recommendation for weight limits for towed equipment and towing on slopes.
- Never allow children or others in or on towed equipment.
- On slopes, the weight of the towed equipment may cause loss of traction and loss of control.
- Travel slowly and allow extra distance to stop.

#### V. SERVICE SAFE HANDLING OF GASOLINE

To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.

- Extinguish all cigarettes, cigars, pipes, and other sources of ignition.
- Use only approved gasoline container.
- Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling.
- Never fuel the machine indoors.
- Never store the machine or fuel container where there is an open flame, spark, or pilot light such as on a water heater or other appliances.
- Never fill containers inside a vehicle or on a truck or trailer bed with plastic liner. Always place containers on the ground away from your vehicle when filling.

## SAFETY RULES

- Remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment with a portable container, rather than from a gasoline dispenser nozzle.
- Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.
- If fuel is spilled on clothing, change clothing immediately.
- Never overfill fuel tank. Replace gas cap and tighten securely.

#### **GENERAL SERVICE**

- Never operate machine in a closed area.
- Keep all nuts and bolts tight to be sure the equipment is in safe working 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 and remove any fuel-soaked debris. Allow machine to cool before storing.
- If you strike a foreign object, stop and inspect the machine. Repair, if necessary, before restarting.
- Never make any adjustments or repairs with the engine running.
- Check grass catcher components and the discharge guard frequently and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp. Wrap the blade or wear gloves, and use extra caution when servicing them.
- Check brake operation frequently. Adjust and service as required.
- Maintain or replace safety and instruction labels, as necessary.







- Be sure the area is clear of bystanders before operating. 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, even with the blades shut off. They may fall off and be seriously injured or interfere with safe machine operation. Children who have been given rides in the past may suddenly appear in the mowing area for another ride and be run over or backed over by the machine.
- Keep children out of the mowing area and in the watchful care of a responsible adult other than the operator.
- Be alert and turn machine off if a child enters the area.

- Before and while backing, look behind and down for small children.
- Mow up and down slopes (15° Max), not across.
- Choose a low ground speed so that you will not have to stop or shift while on the slope.
- Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the blades and proceed slowly straight down the slope.
- If machine stops while going uphill, disengage blades, shift into reverse and back down slowly.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.

#### PRODUCT SPECIFICATIONS

Gasoline Capacity and Type:	4 Gallons Unleaded Regular			
Oil Type (API-SG-SL):	SAE 30 (above 32°F) SAE 5W-30 (below 32°F)			
Oil Capacity:	W/Filter: 4.0 Pints W/O Filter: 3.75 Pints			
Spark Plug: (Gap: .040")	Champion QC12YC			
Ground Speed (MPH):	Forward: $0 - 5.5$ Reverse: $0 - 2.4$			
Tire Pressure:	Front: 14 PSI Rear: 10 PSI			
Charging System:	16 Amps @ 3600 RPM			
Battery:	Amp/Hr: 35 Min. CCA: 280 Case size: U1R			
Blade Bolt Torque:45-55 Ft. Lbs.				

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

Should you experience any problem you cannot easily remedy, please contact a Sears or other qualified 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".

#### 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 service center (See REPAIR PARTS section of this manual).

#### REPAIR PROTECTION AGREEMENTS

Congratulations on making a smart purchase. Your new Craftsman® product is designed and manufactured for years of dependable operation. But like all products, it may require repair from time to time. That's when having a Repair Protection Agreement can save you money and aggravation.

Purchase a Repair Protection Agreement now and protect yourself from unexpected hassle and expense.

Here's what's included in the Agreement:

- Expert service by our 12,000 profesional repair specialists.
- Unlimited service and no charge for parts and labor on all covered repairs.
- Product replacement if your covered product can't be fixed.
- Discount of 10% from regular price of service and service-related parts not covered by the agreement; also, 10% off regular price of preventive maintenance check.
- Fast help by phone phone support from a Sears technician on products requiring in-home repair, plus convenient repair scheduling.

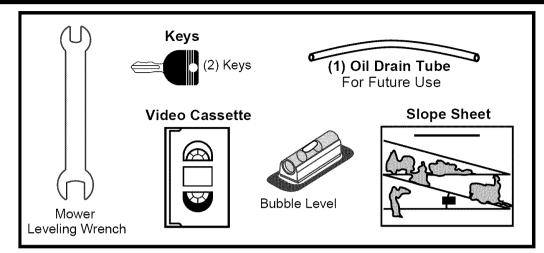
Once you purchase the Agreement, a simple phone call is all that it takes for you to schedule service. You can call anytime day or night, or schedule a service appointment online.

Sears has over 12,000 professional repair specialists, who have access to over 4.5 million quality parts and accessories. That's the kind of professionalism you can count on to help prolong the life of your new purchase for years to come. Purchase your Repair Protection Agreement today! **Some limitations and exclusions apply. For prices and additional information call 1-800-827-6655.** 

#### SEARS INSTALLATION SERVICE

*For Sears professional installation* of home appliances, garage door openers, water heaters, and other major home items, in the U.S.A. call **1-800-4-MY-HOME**®

### PARTS BAG CONTENTS



### **ASSEMBLY/PRE-OPERATION**

Your new tractor has been assembled at the factory. Review the video cassette before you begin.

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

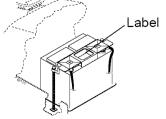
#### **UNPACK CARTON**

- 1. Cut along dotted lines on all four panels of carton. Remove end panels and lay side panels flat.
- 2. Remove packing materials.
- 3. Remove protective materials from tractor hood and grille.

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

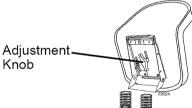
#### HOW TO SET UP YOUR TRACTOR CHECK BATTERY

1. Lift hood to raised position. **NOTE:** 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).



#### ADJUST SEAT

- 1. Raise seat and loosen adjustment knob.
- 2. Lower seat into operating position and sit in seat.
- 3. Slide seat until a comfortable position is reached which allows you to press clutch/brake pedal all the way down.
- 4. Get off seat without moving its adjusted position.
- 5. Raise seat and tighten adjustment knob securely.



**NOTE:** You may now roll or drive your tractor off the skid. Follow the appropriate instruction below to remove the tractor from the skid.

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

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

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

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

- 1. Be sure all the above assembly steps have been completed.
- 2. Check engine oil level and fill fuel tank with gasoline.
- Place freewheel control in "transmission engaged" position. (See "TO TRANSPORT" in the Operation section of this manual).
- 4. Sit on seat in operating position, depress brake pedal and set the parking brake.
- 5. Press lift lever plunger and raise attachment lift lever to its highest position.
- 6. Start the engine. After engine has started, move throttle control to idle position.
- 7. Release parking brake.
- 8. Slowly depress forward drive pedal and drive tractor off skid.
- 9. Apply brake to stop tractor and set parking brake.

10. Turn ignition key to "STOP" position. Continue with the instructions that follow.

#### CHECK TIRE PRESSURE

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

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

#### CHECK DECK LEVELNESS

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

#### CHECK FOR PROPER POSITION OF ALL BELTS

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

#### CHECK BRAKE SYSTEM

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

#### ✓CHECKLIST

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

Please review the following checklist:

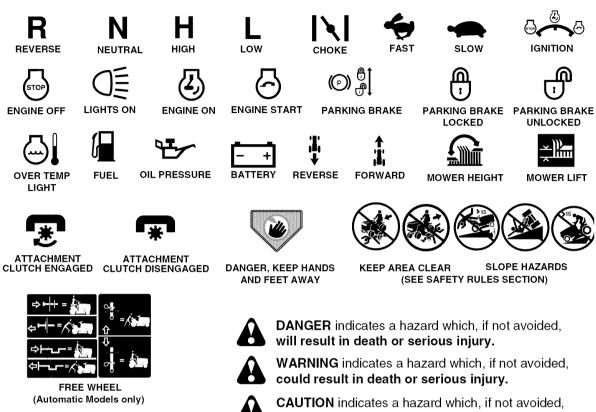
- All assembly instructions have been completed.
- ✓ No remaining loose parts in carton.
- ✓ Battery is properly prepared and charged. (Minimum 1 hour at 6 amps).
- Seat is adjusted comfortably and tightened securely.
- ✓ All tires are properly inflated. (For shipping purposes, the tires were overinflated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

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.
- ✓ It is important to purge the transmission before operating your tractor for the first time. Follow proper starting and transmission purging instructions (See "TO START ENGINE" and "PURGE TRANS-MISSION" in the Operation section of this manual).

## **OPERATION**

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





Failure to follow instructions could result in serious injury or death. The safety alert symbol is used to identify safety information about hazards which can result in death, serious injury and/or property damage. might result in minor or moderate injury.

**CAUTION** when used without the alert symbol, indicates a situation that **could result in damage** to the tractor and/or engine.



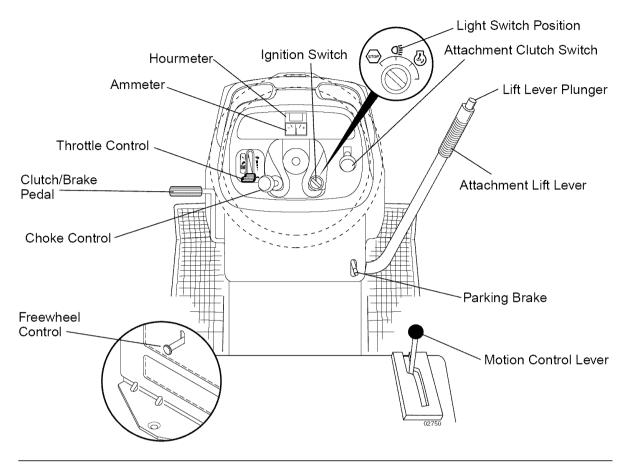
HOT SURFACES indicates a hazard which, if not avoided, could result in death, serious injury and/or property damage.



FIRE indicates a hazard which, if not avoided, could result in death, serious injury and/or property damage.

#### 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.

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

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

**ATTACHMENT LIFT LÉVER** - Used to raise, lower and adjust the mower deck or other attachments mounted to your tractor. **CHOKE CONTROL** - Used when starting a cold engine.

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

**FREEWHEEL CONTROL** - Disengages transmission for pushing or slowly towing the tractor with the engine off.

**HOURMETER** - Indicates hours of operation.

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

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

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

**MOTION CONTROL LEVER** - Selects the speed and direction of the tractor.

**PARKING BRAKE** - Locks clutch/brake into the brake position.

**THROTTLE CONTROL** - Used to control engine speed.

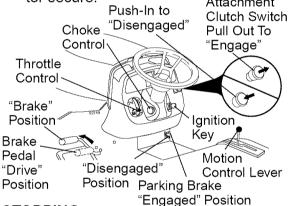


The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend standard safety glasses or a wide vision safety mask worn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

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

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

- 1. Depress clutch/brake pedal all the way down and hold.
- Pull parking brake lever up 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, push attachment clutch switch in to disengaged position.

#### **GROUND DRIVE -**

- To stop ground drive, depress clutch/ brake pedal all the way down.
- Move motion control lever to neutral (N) position.

**IMPORTANT:** The motion control lever does not return to neutral (N) position when the clutch/brake pedal is depressed.

#### ENGINE -

• Move throttle control between half and full speed (fast) position.

**NOTE:** Failure to move throttle control between half and full speed (fast) position, before stopping, may cause engine to "backfire".

• Turn ignition key to "STOP" 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 "STOP" will cause the battery to discharge and go dead.

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

**ACAUTION:** Always stop tractor completely, as described above, before leaving the operator's position.

#### THROTTLE CONTROL

Always operate engine at full throttle.

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

#### TO USE CHOKE CONTROL

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

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

## TO MOVE FORWARD AND BACKWARD

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

- 1. Start tractor with motion control lever in neutral (N) position.
- 2. Release parking brake.
- 3. Slowly move motion control lever to desired position.

#### TO ADJUST MOWER CUTTING HEIGHT

The position of the attachment lift lever determines the cutting height.

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

The cutting height range is approximately 1-1/2 to 4". The heights are measured from the ground to the blade tip with the engine not running.

These heights are approximate and may vary depending upon soil conditions, height of grass and types of grass being mowed.

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

#### TO ADJUST GAUGE WHEELS

Gauge wheels are properly adjusted when they are slightly off the ground when mower is at the desired cutting height in operating position. Gauge wheels then keep the deck in proper position to help prevent scalping in most terrain conditions. **NOTE:** Be sure tractor is on a flat level surface.

- 1. Lower mower and adjust mower to desired cutting height.
- 2. Remove retainer spring and clevis pin which secure each gauge wheel bar.
- 3. Lower gauge wheels to ground. Raise gauge wheels slightly to align holes in bracket and gauge wheel bar and insert clevis pin. Gauge wheels should be slightly off the ground.
- 4. Replace retainer spring into clevis pin.
- 5. Be sure all gauge wheels are in the same setting.

**IMPORTANT:** Be sure to readjust gauge wheels if you change the cutting height of the mower deck.

Retainer Spring

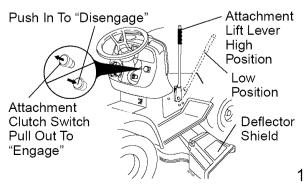


#### TO OPERATE MOWER

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. You must remain fully and centrally positioned in the seat to prevent the engine from hesitating or cutting off when operating your equipment on rough, rolling terrain or hills.

- 1. Select desired height of cut.
- 2. Start mower blades by engaging attachment clutch control.

TO STOP MOWER BLADES disengage attachment clutch control. CAUTION: Do not operate the mower without either the entire grass catcher, on mowers so equipped, or the deflector shield in place.



#### TO OPERATE ON HILLS

**WARNING**: Do not drive up or down hills with slopes greater than 15° and do not drive across any slope. Use the slope guide provided at the back of this manual.

- 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 motion control lever to neutral (N) position.

**IMPORTANT:** The motion control lever does not return to neutral (N) position when the clutch/brake pedal is depressed.

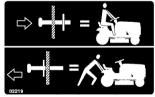
- To restart movement, slowly release parking brake and clutch/brake pedal.
- Slowly move motion control lever to slowest setting.
- Make all turns slowly.

#### **TO TRANSPORT**

When pushing or towing your tractor, be sure to disengage transmission by placing freewheel control in freewheeling position. Freewheel control is located at the rear drawbar of tractor.

- 1. Raise attachment lift to highest position with attachment lift control.
- 2. Pull freewheel control out and down into the slot and release so it is held in the disengaged position.
- Do not push or tow tractor at more than two (2) MPH.
- To re-engage transmission, reverse above procedure.

#### **Transmission Engaged**



#### **Transmission Disengaged**

**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 ATTACH-MENTS

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 12cause 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.

- 1. Check engine oil with tractor on level ground.
- Řemove oil fill cap/dipstick and wipe clean, reinsert the dipstick and screw cap tight, wait for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.
- For cold weather operation you should change oil for easier starting (See the oil viscosity chart in the Maintenance section of this manual).
- To change engine oil, see the Maintenance section in this manual.

#### ADD GASOLINE

• Fill fuel tank to bottom of tank filler neck. Do not overfill. 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.

**CAUTION:** Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.

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

**CAUTION**: 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.

#### 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.

1. Be sure freewheel control is in the transmission engaged position.

- 2. Sit on seat in operating position, depress clutch/brake pedal and set parking brake.
- 3. Place motion control lever in neutral (N) position.
- 4. Move attachment clutch to disengaged position.
- 5. Move throttle control to fast position
- 6. Pull choke control out for a cold engine start attempt. For a warm engine start attempt the choke control may not be needed.

**NOTE:** Before starting, read the warm and cold starting procedures below.

7. Insert key into ignition and turn key clockwise to start position and release key as soon as engine starts. Do not run starter continuously for more than fifteen seconds per minute. If the engine does not start after several attempts, push choke control in, wait a few minutes and try again. If engine still does not start, pull the choke control out and retry.

WARM WEATHER STARTING (50° F and above)

- When engine starts, slowly push choke control in until the engine begins to run smoothly. If the engine starts to run roughly, pull the choke control out slightly for a few seconds and then continue to push the control in slowly.
- The attachments and ground drive can now be used. If the engine does not accept the load, restart the engine and allow it to warm up for one minute using the choke as described above.

COLD WEATHER STARTING (50° F and below)

8. When engine starts, slowly push choke control in until the engine begins to run smoothly. Continue to push the choke control in small steps allowing the engine to accept small changes in speed and load, until the choke control is fully in. If the engine starts to run roughly, pull the choke control out slightly for a few seconds and then continue to push the control in slowly. This may require an engine warm-up period from several seconds to several minutes, depending on the temperature.

AUTOMATIC TRANSMISSION WARM UP Before driving the unit in cold weather, the transmission should be warmed up as follows:

- 1. Be sure the tractor is on level ground.
- 2. Place the motion control lever in neutral. Release the parking brake and let the clutch/brake slowly return to operating position.

- 3. Allow one minute for transmission to warm up. This can be done during the engine warm up period.
- The attachments can be used during the engine warm-up period after the transmission has been warmed up and may require the choke control be pulled out slightly.

**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).

#### PURGE TRANSMISSION

**CAUTION:** Never engage or disengage freewheel lever while the engine is running. To ensure proper operation and performance, it is recommended that the transmission be purged before operating tractor for the first time. This procedure will remove any trapped air inside the transmission which may have developed during shipping of your tractor.

**IMPORTANT:** Should your transmission require removal for service or replacement, it should be purged after reinstallation before operating the tractor.

- 1. Place tractor safely on level surface with engine off and parking brake set.
- Disengage transmission by placing freewheel control in disengaged position (See "TO TRANSPORT" in this section of manual).
- Sitting in the tractor seat, start engine. After the engine is running, move throttle control to slow position. With motion control lever in neutral (N) position, slowly disengage clutch/brake pedal.
- Move motion control lever to full forward position and hold for five (5) seconds. Move lever to full reverse position and hold for five (5) seconds. Repeat this procedure three (3) times.

**NOTE:** During this step there will be no movement of drive wheels. The air is being removed from hydraulic drive system.

- 5. Move motion control lever to neutral (N) position. Shutoff engine and set parking brake.
- Engage transmission by placing freewheel control in engaged position (See "TO TRANSPORT" in this section of manual).
- Sitting in the tractor seat, start engine. After the engine is running, move throttle control to half (1/2) speed. With motion control lever in neutral (N) posi-

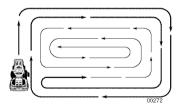
tion, slowly disengage clutch/brake pedal.

 Slowly move motion control lever forward, after the tractor moves approximately five (5) feet, slowly move motion control lever to reverse position. After the tractor moves approximately five (5) feet return the motion control lever to the neutral (N) position. Repeat this procedure with the motion control lever three (3) times.

Your transmission is now purged and now ready for normal operation.

#### **MOWING TIPS**

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



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

## MAINTENANCE

AS	MAINTENANCE SCHEDUL L IN DATES YOU COMPLETE GULAR SERVICE	E	SEFORE	EACHUS EVERY 8	HOURS	SHOUP SHOUP	SHOUP	O HOU	SEASON SEASON SEFORE S	TORAGE SERVIC	E DATES
	Check Brake Operation	V	~					1			
	Check Tire Pressure	V	1								
т	Check Operator Presence and Interlock Systems	V									
R	Check for Loose Fasteners	V				15		V			
A	Sharpen/Replace Mower Blades			<b>V</b> 3							
C T	Lubrication Chart			~				~			
ò	Check Battery Level			14							
R	Clean Battery and Terminals			V				V			
	Check Transaxle Cooling			V							
	Check V-Belts					1					
	Check Engine Oil Level	~	V								
	Change Engine Oil (with oil filter)				V 1,2			V			
Е	Change Engine Oil (without oil filter)			V 1,2				V			
Ň	Clean Air Filter			<b>V</b> 2							
G	Clean Air Screen			1/2							
	Inspect Muffler/Spark Arrester				1						
N E	Replace Oil Filter (If equipped)					1,2					
-	Clean Engine Cooling Fins					1 2					
	Replace Spark Plug					V	V				
	Replace Air Filter Paper Cartridge	1				1/2					
	Replace Fuel Filter	1					V				

in high ambient temperatures.

2 - Service more often when operating in dirty or dusty conditions.

#### 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.

At least once a season, check to see if you should make any of the adjustments described in the Service and Adjustments section of this manual.

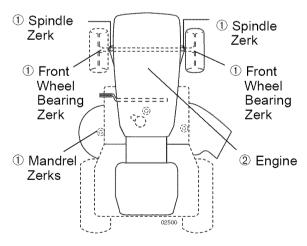
 At least once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear. A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

#### **BEFORE EACH USE**

- 1. Check engine oil level.
- Check brake operation.
- 3. Check tire pressure.
- 4. Check operator presence and interlock systems for proper operation.
- 5. Check for loose fasteners.

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

#### LUBRICATION CHART



① General Purpose Grease

2 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 five (5) feet to stop at highest speed in highest gear on a level, dry concrete or paved surface, then brake must be checked and adjusted.

#### TIRES

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

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

#### **OPERATOR PRESENCE SYSTEM**

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

- The engine should not start unless the 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.

A CAUTION: Use only a replacement blade approved by the manufacturer of your tractor. Using a blade not approved by the manufacturer of your tractor is hazardous, could damage your tractor and void your warranty

#### BLADE REMOVAL

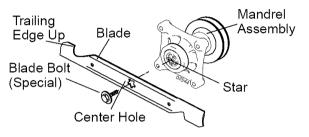
1. Raise mower to highest position to allow access to blades. **NOTE:** Protect your hands with gloves and/or wrap blade with heavy cloth.

- Remove blade bolt by turning counterclockwise.
- Install new or resharpened blade with stamped "THIS SIDE UP" facing deck and mandrel assembly.

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

4. Install and tighten blade bolt securely (45-55 Ft. Lbs. torque).

**IMPORTANT**: Special blade bolt is heat treated.



#### TO SHARPEN BLADE

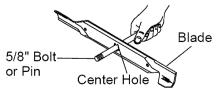
**NOTE:** We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

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

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

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

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



#### BATTERY

Your tractor has a battery charging system which is sufficient for normal use. How-

ever, periodic charging of the battery with an automotive charger will extend its life.

- Keep battery and terminals clean.
- Keep battery bolts tight.
- Keep small vent holes open.

• Recharge at 6-10 amperes for 1 hour. **NOTE:** The original equipment battery on your tractor is maintenance free. Do not attempt to open or remove caps or covers. Adding or checking level of electrolyte is not necessary.

#### TO CLEAN BATTERY AND TERMINALS

Corrosion and dirt on the battery and terminals can cause the battery to "leak" power.

- 1. Remove terminal guard.
- Disconnect BLACK battery cable first then RED battery cable and remove battery from tractor.
- 3. Rinse the battery with plain water and dry.
- 4. Clean terminals and battery cable ends with wire brush until bright.
- 5. Coat terminals with grease or petroleum jelly.
- Reinstall battery (See "REPLACING BATTERY" in the SERVICE AND AD-JUSTMENTS section of this manual).

#### TRANSAXLE COOLING

The transmission fan and cooling fins should be kept clean to assure proper cooling.

Do not attempt to clean fan or transmission while engine is running or while the transmission is hot. To prevent possible damage to seals, do not use high pressure water or steam to clean transaxle.

- Inspect cooling fan to be sure fan blades are intact and clean.
- Inspect cooling fins for dirt, grass clippings and other materials. To prevent damage to seals, do not use compressed air or high pressure sprayer to clean cooling fins.

#### TRANSAXLE PUMP FLUID

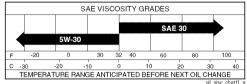
The transaxle was sealed at the factory and fluid maintenance is not required for the life of the transaxle. Should the transaxle ever leak or require servicing, contact a sears or other qualified service center.

#### 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.

#### ENGINE LUBRICATION

Only use high quality detergent oil rated with API service classification SG-SL. Select the oil's SAE viscosity grade according to your expected operating temperature. **NOTE:** Although multi-viscosity oils



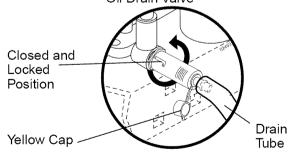
(5W30, 10W30 etc.) improve starting in cold weather, they will result in increased oil consumption when used above 32°F. Check your engine oil level more frequently to avoid possible engine damage from running low on oil.

Change the oil after every 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 SG-SL.

- Be sure tractor is on level surface.
- Oil will drain more freely when warm.
- · Catch oil in a suitable container.
- 1. Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine when changing oil.
- 2. Remove yellow cap from end of drain valve and install the drain tube onto the fitting. Oil Drain Valve



- 3. Unlock drain valve by pushing inward slightly and turning counterclockwise.
- 4. To open, pull out on the drain valve.
- 5. After oil has drained completely, close and lock the drain valve by pushing inward and turning clockwise until the pin is in the locked position as shown.
- 6. Remove the drain tube and replace the
- 17 cap onto the end of the drain valve.

- Refill engine with oil through oil fill dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PROD-UCT SPECIFICATIONS" section of this manual.
- Use gauge on oil fill cap/dipstick for checking level. For accurate reading, tighten dipstick cap securely onto the tube before removing dipstick. Keep oil at "FULL" line on dipstick. Tighten cap onto the tube securely when finished.

#### **ENGINE OIL FILTER**

Replace the engine oil filter every season or every other oil change if the tractor is used more than 100 hours in one year.

#### 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.

1. Remove knobs and cover.

TO SERVICE PRE-CLEANER

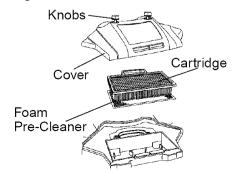
- 2. Wash it in liquid detergent and water.
- 3. Squeeze it dry in a clean cloth.
- Saturate it in engine oil. Wrap it in clean, absorbent cloth and squeeze to remove excess oil.

**NOTE:** If very dirty or damaged, replace pre-cleaner.

TO SERVICE CARTRIDGE

- 1. Clean cartridge by tapping gently on flat surface. If very dirty or damaged, replace cartridge.
- 2. Reinstall precleaner cartridge, cover and secure with knobs.

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



#### CLEAN AIR SCREEN

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

#### **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.

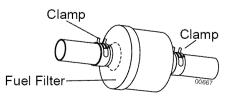
#### SPARK PLUG(S)

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

#### **IN-LINE FUEL FILTER**

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

- 1. With engine cool, remove filter and plug fuel line sections.
- Place new fuel filter in position in fuel line with arrow pointing towards carburetor.
- 3. 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 or pressure washer to clean your tractor unless the engine and transmission are covered to keep water out. Water in engine or transmission will shorten the useful life of your tractor. Use compressed air or a leaf blower to remove grass, leaves and trash from tractor and mower.

## SERVICE AND ADJUSTMENTS

#### WARNING: TO AVOID SERIOUS INJURY, BEFORE PERFORMING ANY SER-VICE OR ADJUSTMENTS:

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

#### TRACTOR

#### TO REMOVE MOWER

- 1. Place attachment clutch in "DISEN-GAGED" position.
- 2. If equipped, turn height adjustment knob to lowest setting.
- 3. Lower mower to its lowest position.
- 4. Disengage belt tension rod from lock bracket.

**ACAUTION:** Rod is spring loaded. Have a tight grip on rod and release slowly.

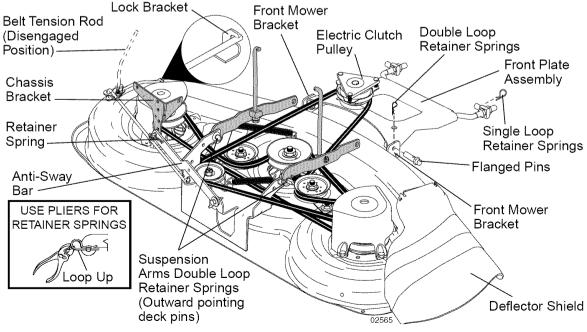
- 5. Remove retainer spring holding anti-swaybar to chassis bracket and disengage anti-sway bar from bracket.
- 6. Remove four retainer springs from front plate assembly and remove plate.

- 7. Remove retainer springs from suspension arms at deck and disengage arms from deck.
- 8. Raise attachment lift to its highest position.
- 9. Slide mower forward and remove belt from electric clutch pulley.
- 10. Slide mower out from under right side of tractor.

#### TO INSTALL MOWER

Be sure tractor is on level surface and mower suspension arms are raised with attachment lift control. Engage parking brake.

 Swing anti-sway bar to left side of mower deck.



2. Slide mower under tractor with deflector shield to right side of tractor.

**IMPORTANT:** Check belt for proper routing in all mower pulley grooves.

- If equipped, turn height adjustment knob counterclockwise until it stops.
- 4. Lower mower linkage with attachment lift control.
- 5. Be sure belt tension rod is in disengaged position.
- 6. Install belt into electric clutch pulley groove.
- Place the suspension arms on outward pointing deck pins. Retain with double loop retainer spring with loops up as shown.
- Install front plate assembly to tractor suspension brackets and retain with single loop retainer springs as shown.
- Position front plate assembly between front mower brackets. Raise deck and plate assembly to align holes and insert flanged pins. Secure pins with double loop retainer springs between the plate assembly and mower brackets.

**NOTE:** To assist in locating hole in flanged pin, the hole in pin is inline with notch on head of pin. If necessary, move mower side-to-side to give space between plate and mower brackets.

**IMPORTANT:** Check belt for proper routing in all mower pulley grooves.

10. Engage belt tension rod by pushing rod into locking bracket.

**CAUTION:** Belt tension rod is spring loaded. Have a tight grip on rod and engage slowly.

- 11. Connect anti-sway bar to chassis bracket under left footrest and retain with double loop retainer spring.
- 12. If equipped, turn height adjustment knob clockwise to remove slack from mower suspension.
- 13. Raise deck to highest position.

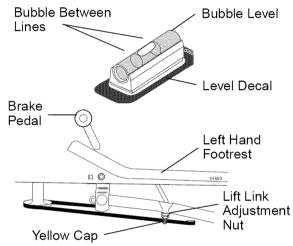
#### TO LEVEL MOWER HOUSING

Adjust the mower while tractor is parked on level ground such as a carport or garage. Make sure tires are properly inflated (See "PRODUCT SPECIFICATIONS" section of this manual). If tires are over or underinflated, you will not properly adjust your mower.

## SIDE-TO-SIDE ADJUSTMENT WITH BUBBLE LEVEL

**NOTE:** If necessary, check side-to-side surface below tractor for levelness with a long board and the bubble level.

- Using the lift lever, place mower in position where no part of the mower, including gauge wheels, is touching the ground.
- From left side of tractor, find the level decal on top of mower and place bubble level on decal as indicated.
- Mower is level side-to-side when bubble is between the two lines in the bubble level.
- If adjustment is necessary, under left hand footrest, turn lift link adjustment nut (above yellow cap) in appropriate direction to bring bubble between the lines in the bubble level.
- Remove bubble level from mower and store in a safe place.

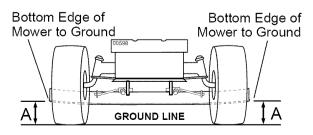


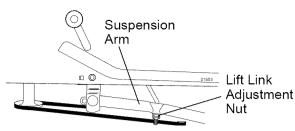
#### ALTERNATE SIDE-TO-SIDE ADJUSTMENT METHOD

- Raise mower to its highest position.
- Measure height from bottom edge of mower to ground level at front corners of mower. Distance "A" on both sides of mower should be the same.
- 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 3/16".

Recheck measurements after adjusting.





#### FRONT-TO-BACK ADJUSTMENT

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

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

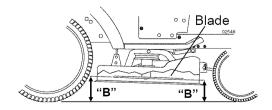
**CAUTION:** Blades are sharp. Protect your hands with gloves and/or wrap blade with heavy cloth.

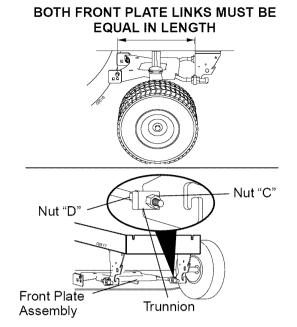
Check adjustment on right side of tractor. Position any blade so the tip is pointing straight forward. Measure distance "B" at front and rear tip of blade

- Before making any necessary adjustments, check that both front plate links are equal in length.
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of blade, loosen nut "C" on both front links an equal number of turns.

**NOTE:** Each full turn of nut "C" will change dim. "B" by approximately 3/16".

- When distance "B" is 1/8" to 1/2" lower at front than rear, tighten nut "D" against trunnion on both front links.
- To raise front of mower, loosen nut "D" from trunnion on both front links. Tighten nut "C" on both front links an equal number of turns. The two front links must remain equal in length.
- When distance "B" is 1/8" to 1/2" lower at front than rear, tighten nut "D" against trunnion on both front links.
- · Recheck side-to-side adjustment.





#### TO REPLACE MOWER DRIVE BELT

#### MOWER DRIVE BELT REMOVAL

- 1. Park tractor on a level surface. Engage parking brake.
- 2. Lower mower to its lowest position.
- 3. Disengage belt tension rod from lock bracket.

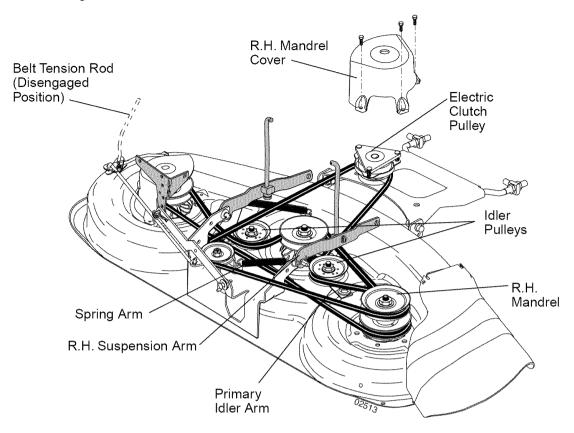
**ACAUTION:** Rod is spring loaded. Have a firm grip on rod and release slowly.

- 4. Remove screws from R.H. mandrel cover and remove cover.
- 5. Remove any dirt or grass clippings which may have accumulated around mandrels and entire upper deck surface.
- Disconnect R.H. suspension arm from rear deck bracket by removing retainer spring.
- 7. Carefully roll belt over the top of R.H. mandrel pulley.
- 8. Remove belt from electric clutch pulley.
- 9. Remove belt from idler pulleys.
- 10. Check primary idler arm and two idlers to see that they rotate freely.
- 11. Be sure spring is securely hooked to primary idler arm and spring arm.

#### MOWER DRIVE BELT INSTALLATION

- 12. Install belt in both idlers.
- 13. Install new belt onto electric clutch pulley.
- 14. Carefully roll belt into upper groove of R.H. mandrel pulley.
- 15. Carefully check belt routing making sure belt is in the grooves correctly.
- 16. Reconnect R.H. suspension arm to rear deck bracket with retainer spring.
- 17. Reassemble R.H. mandrel cover.

18. Engage belt tension rod by pushing rod into locking bracket.



#### TO REPLACE MOWER BLADE (SECONDARY) DRIVE BELT

Park the tractor on level surface. Engage parking brake.

- 1. Remove mower (See "TO REMOVE MOWER" in this section of manual).
- 2. Remove screws from R.H. and L.H. mandrel covers and remove covers.

REMOVE MOWER DRIVE BELT (Refer to "TO REMOVE MOWER DRIVE BELT" illustration in this section of manual).

- 3. Carefully roll belt over the top of R.H. mandrel pulley.
- 4. Remove belt from idler pulleys.
- 5. Check primary idler arm and two idlers to see that they rotate freely.
- 6. Be sure spring is securely hooked to primary idler arm and spring arm.

REMOVE MOWER BLADE (SECONDARY) DRIVE BELT

- 7. Carefully roll belt off L.H. mandrel pulley.
- 8. Remove belt from center mandrel pulley, idler pulley, and R.H. mandrel pulley.

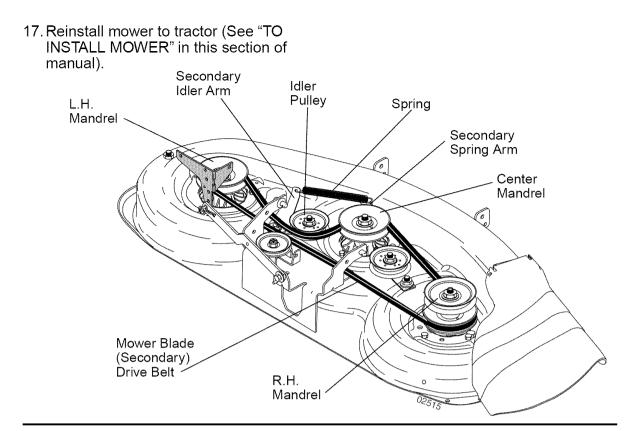
- 9. Remove any dirt or grass which may have accumulated around mandrels and entire upper deck surface.
- 10. Check secondary idler arm and idler pulley to see that they rotate freely.
- 11. Be sure spring is hooked in secondary idler arm and secondary spring arm.

INSTALL NEW MOWER BLADE (SECONDARY) DRIVE BELT

- 12. Install new belt in lower groove of R.H. mandrel pulley, idler pulley, and center mandrel pulley as shown.
- 13. Carefully roll belt over L.H. mandrel pulley. Make sure belt is in all grooves properly.

REINSTALL MOWER DRIVE BELT (Refer to "TO REMOVE MOWER DRIVE BELT" illustration in this section of manual).

- 14. Install belt into upper groove of R.H. mandrel pulley and around both idlers. Pull belt to front of mower to remove slack.
- 15. Reinstall mandrel covers and securely tighten all screws.
- 16. Carefully check belt routing making sure belt is in all grooves correctly.



#### TO CHECK AND 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 five (5) feet to stop at highest speed in highest gear on a level, dry concrete or paved surface, then brake must be checked and adjusted.

#### TO CHECK BRAKE

- 1. Park tractor on a level, dry concrete or paved surface, depress clutch/brake pedal all the way down and engage parking brake.
- Disengage transmission by placing freewheel control in "transmission disengaged" position. Pull freewheel control out and into the slot and release so it is held in the disengaged position.

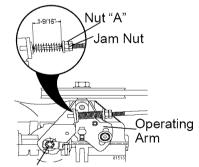
The rear wheels must lock and skid when you try to manually push the tractor forward. If the rear wheels rotate, the brake needs to be adjusted or the pads need to be replaced.

#### TO ADJUST BRAKE

- 1. Depress clutch/brake pedal all the way down and engage parking brake.
- 2. Measure distance between brake operating arm and nut "A" on brake rod.
- If distance is other than 1-9/16", loosen jam nut and turn nut "A" until distance becomes 1-9/16". Retighten jam nut against nut "A".

- 4. Engage transmission by placing freewheel control in "transmission engaged" position.
- 5. Road test tractor for proper stopping distance as stated above. Readjust if necessary. If stopping distance is still greater than five (5) feet in highest gear, further maintenance is necessary. Replace brake pads or contact a Sears or other qualified service center.

#### With parking brake "Engaged"



Do not touch this nut. If further brake adjustment is necessary contact a Sears or other qualified service center.

#### 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.

BELT REMOVAL -

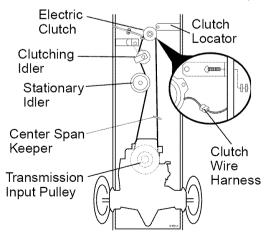
1. Remove mower (See "TO REMOVE MOWER" in this section of manual).

**NOTE:** Observe entire motion drive belt and position of all belt guides and keepers.

- 2. Disconnect clutch wire harness.
- 3. Remove clutch locator.
- 4. Remove belt from stationary idler and clutching idler.
- 5. Remove belt downward from engine pulley and around electric clutch.
- Pull belt slack toward rear of tractor. Carefully remove belt upwards from transmission input pulley and over cooling fan blades.
- 7. Remove belt from center span keeper and pull belt away from tractor.

BELT INSTALLATION -

- 1. Carefully work new belt down around transmission cooling fan and onto the input pulley.
- 2. Slide belt into the center span keeper.
- Pull belt toward front of tractor and roll belt around electric clutch and onto engine pulley.
- 4. Install belt through stationary idler and clutching idler.
- Reinstall clutch locator and tighten nut securely.
- 6. Reconnect clutch harness.
- 7. Make sure belt is in all pulley grooves and inside all belt guides and keepers.
- 8. Install mower (See "TO INSTALL MOWER" in this section of manual).



#### TRANSMISSION REMOVAL/ REPLACEMENT

Should your transmission require removal for service or replacement, it should be purged after reinstallation and before operating the tractor. See "PURGE TRANS-MISSION" in the Operation section of this manual.

#### 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 with crossbars horizontal. Tighten securely.

#### 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 Sears or other qualified service center.

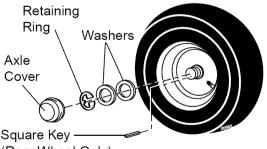
#### TO REMOVE WHEEL FOR REPAIRS

- 1. Block up axle securely.
- Remove axle cover, retaining ring and washers to allow wheel removal (rear wheels have a square key - Do not lose).
- 3. Repair tire and reassemble.

**NOTE:** On rear wheels only: align grooves in rear wheel hub and axle. Insert square key.

- 4. Replace washers and snap retaining ring securely in axle groove.
- 5. Replace axle cover.

**NOTE:** To seal tire punctures and prevent flat tires due to slow leaks, purchase and use tire sealant from Sears. Tire sealant also prevents tire dry rot and corrosion.



(Rear Wheel Only)

#### TO START ENGINE WITH A WEAK BAT-TERY

**AWARNING:** 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 "BAT-TERY" in the Maintenance section of this manual).

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

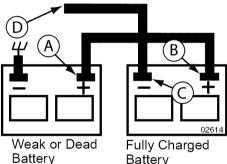
**IMPORTANT**: Your tractor is equipped with a 12 volt system. The other vehicle must also be a 12 volt system. Do not use your tractor battery to start other vehicles.

TO ATTACH JUMPER CABLES -

- 1. Connect one end of the RED cable to the POSITIVE (+) terminal of each battery(A-B), taking care not to short against tractor chassis.
- 2. Connect one end of the BLACK cable to the NEGATIVE (-) terminal (C) of fully charged battery.
- 3. Connect the other end of the BLACK cable (D) to good chassis ground. away from fuel tank and battery.

TO REMOVE CABLES, REVERSE ORDER -

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



Battery

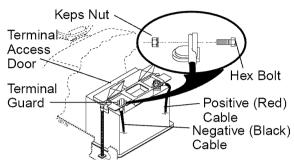
#### **REPLACING BATTERY**

**AWARNING:** 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, rinas. etc.

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

- 1. Lift hood to raised position.
- 2. Remove terminal guard.
- 3. Disconnect BLACK battery cable then RED battery cable and carefully remove battery from tractor.
- 4. Install new battery with terminals in same position as old battery.
- 5. Reinstall terminal guard.

- 6. First connect RED battery cable to positive (+) battery terminal with hex bolt and keps nut as shown. Tighten securely.
- 7. Connect BLACK grounding cable to negative (-) battery terminal with remaining hex bolt and keps nut. Tighten securely
- 8. Close terminal access doors.
- 9. Close hood.



#### TO REPLACE HEADLIGHT BULB

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

#### INTERLOCKS AND RELAYS

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

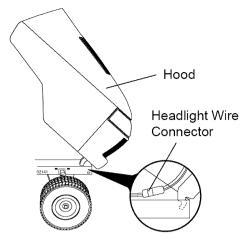
Check wiring. See electrical wiring diagram in the Repair Parts section.

#### TO REPLACE FUSE

Replace with 20 amp automotive-type plug-in fuse. The fuse holder is located behind the dash.

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

- 1. Raise hood.
- 2. Unsnap headlight wire connector.
- 3. Stand in front of tractor. Grasp hood at sides, tilt toward engine and lift off of tractor.
- 4. When replacing hood, be sure to reconnect the headlight wire connector.



#### ENGINE

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

#### TO ADJUST THROTTLE CONTROL CABLE

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

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

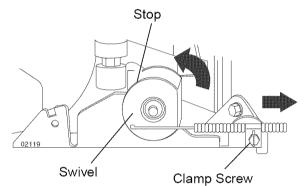
#### TO ADJUST CHOKE CONTROL

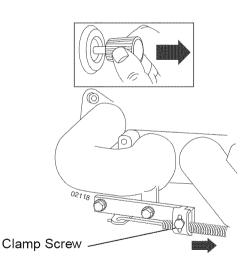
The choke control has been preset at the factory and adjustment should not be necessary. Check adjustment as described below before loosening cable. If adjustment is necessary, proceed as follows:

- 1. With engine not running, move choke control (located on dash panel) to full choke position.
- 2. Loosen knob and remove cover assembly from air cleaner.
- Choke should be closed. If it is not, loosen casing clamp screw and move choke cable until choke is completely closed. Tighten casing clamp screw securely.
- 4. Replace air cleaner cover assembly and tighten knob.

#### TO ADJUST CARBURETOR

Your carburetor is not adjustable. If your engine does not operate properly due to suspected carburetor problems, take your tractor to a Sears or other qualified service center for repair and/or adjustment. 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 a Sears or other qualified service center, 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.

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

#### TRACTOR

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

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

#### BATTERY

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

#### ENGINE

#### FUEL SYSTEM

**IMPORTANT**: It is important to prevent gum deposits from forming in essential fuel system parts such as carburetor, fuel hose, or tank during storage. Also, 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.

- Empty the fuel tank by starting the engine and letting 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 empty 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)** 

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

#### OTHER

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

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

#### TROUBLESHOOTING CHART: See appropriate section in manual unless directed to Sears service center

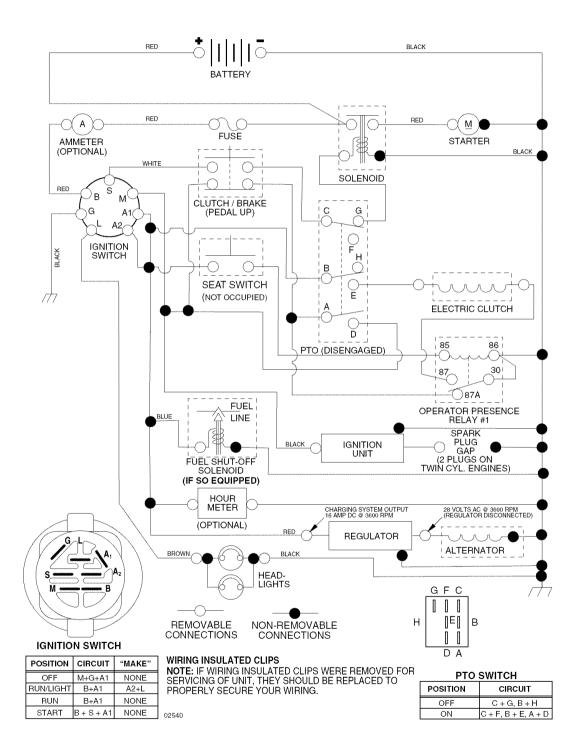
PROBLEM	CAUSE	CORRECTION				
Will not start	<ol> <li>Out of fuel.</li> <li>Engine not "CHOKED" properly.</li> <li>Engine flooded.</li> <li>Bad spark plug.</li> <li>Dirty air filter.</li> <li>Dirty fuel filter.</li> <li>Water in fuel.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</li> </ol>	<ol> <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>Empty fuel tank and carbure- tor, refill tank with fresh gas- oline and replace fuel filter.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service and Adjustments section.</li> <li>Contact a Sears or other qualified service center.</li> </ol>				
Hard to start	<ol> <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> </ol>	<ol> <li>Clean/replace air filter.</li> <li>Replace spark plug.</li> <li>Recharge or replace battery.</li> <li>Replace fuel filter.</li> <li>Empty fuel tank and refill tank with fresh, clean gasoline.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service and Adjustments section.</li> <li>Contact a Sears or other qualified service center.</li> </ol>				
Engine will not turn over	<ol> <li>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> </ol>	<ol> <li>Depress 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 a Sears or other qualified service center.</li> </ol>				
Engine clicks but will not start	<ol> <li>Weak or dead battery.</li> <li>Corroded battery terminals.</li> <li>Loose or damaged wiring.</li> <li>Faulty solenoid or starter.</li> </ol>	<ol> <li>Recharge or replace battery.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace solenoid or starter.</li> </ol>				
Loss of power	<ol> <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> </ol>	<ol> <li>Raise cutting height/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> </ol>				

#### TROUBLESHOOTING CHART: See appropriate section in manual unless directed to Sears service center

PROBLEM	CAUSE	CORRECTION
Loss of power (continued)	<ol> <li>Faulty spark plug.</li> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> <li>Water in fuel.</li> <li>Water in fuel.</li> <li>Spark plug wire loose.</li> <li>Dirty engine air screen/fins.</li> <li>Dirty/clogged muffler.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</li> </ol>	<ol> <li>Clean and regap or change spark plug.</li> <li>Replace fuel filter.</li> <li>Empty fuel tank and refill tank with fresh, clean gasoline.</li> <li>Empty fuel tank and carbure- tor, refill tank with fresh gas- oline and replace fuel filter.</li> <li>Connect and tighten spark plug wire.</li> <li>Clean/replace muffler.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service and Adjustments section.</li> <li>Contact a Sears or other qualified service center.</li> </ol>
Excessive vibration	<ol> <li>Worn, bent or loose blade.</li> <li>Bent blade mandrel.</li> <li>Loose/damaged part(s).</li> </ol>	<ol> <li>Replace blade. Tighten blade bolt.</li> <li>Contact a Sears or other qualified service center.</li> <li>Tighten loose part(s). Replace damaged parts.</li> </ol>
Engine continues to run when operator leaves seat with attachment clutch engaged	<ol> <li>Faulty operator-safety presence control system.</li> </ol>	<ol> <li>Check wiring, switches and connections. If not corrected, contact a Sears or other qualified service center.</li> </ol>
Poor cut - uneven	<ol> <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 from build-up of grass, leaves, and trash around mandrels.</li> </ol>	<ol> <li>Replace blade. Tighten blade bolt.</li> <li>Level mower deck.</li> <li>Clean underside of mower housing.</li> <li>Contact a Sears or other qualified service center.</li> <li>Clean around mandrels to open vent holes.</li> </ol>
Mower blades will not rotate	<ol> <li>Obstruction in clutch mechanism.</li> <li>Worn/damaged mower drive belt.</li> <li>Frozen idler pulley.</li> <li>Frozen blade mandrel.</li> </ol>	<ol> <li>Remove obstruction.</li> <li>Replace mower drive belt.</li> <li>Replace idler pulley.</li> <li>Contact a Sears or other qualified service center.</li> </ol>
Poor grass discharge	<ol> <li>Engine speed too slow.</li> <li>Travel speed too fast.</li> </ol>	<ol> <li>Place throttle control in "FAST" position.</li> <li>Shift to slower speed.</li> </ol>

#### TROUBLESHOOTING CHART: See appropriate section in manual unless directed to Sears service center

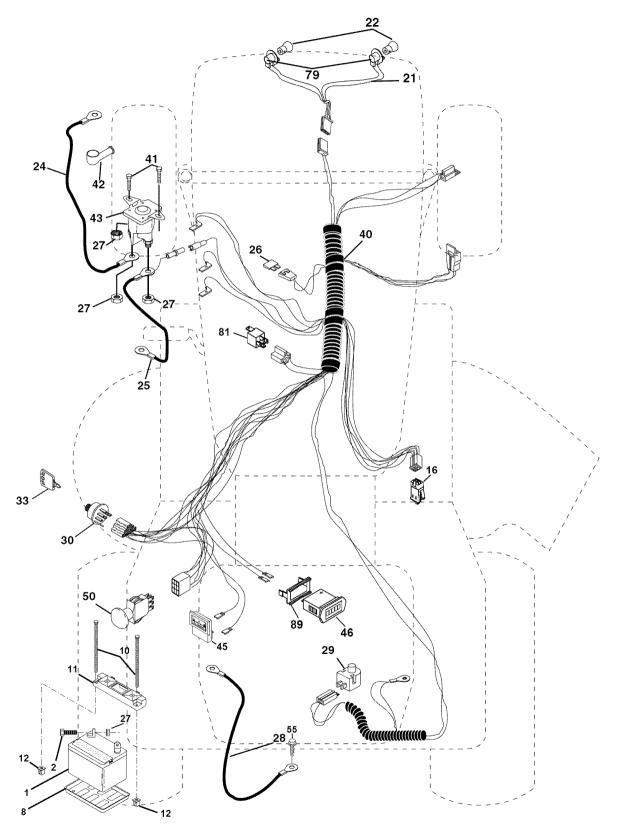
PROBLEM	CAUSE	CORRECTION
Poor grass discharge (continued)	<ol> <li>Wet grass.</li> <li>Mower deck not level.</li> <li>Low/uneven tire air pressure.</li> <li>Worn, bent or loose blade.</li> <li>Buildup of grass, leaves and trash under mower.</li> <li>Mower drive belt worn.</li> <li>Blades improperly installed.</li> <li>Improper blades used.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ol>	<ol> <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> </ol>
Headlight(s) not working (if so equipped)	<ol> <li>Switch is "OFF".</li> <li>Bulb(s) or lamp(s) burned out.</li> <li>Faulty light switch.</li> <li>Loose or damaged wiring.</li> <li>Blown fuse.</li> </ol>	<ol> <li>Turn switch "ON".</li> <li>Replace bulb(s) or lamp(s).</li> <li>Check/replace light switch.</li> <li>Check wiring and connections.</li> <li>Replace fuse.</li> </ol>
Battery will not charge	<ol> <li>Bad battery cell(s).</li> <li>Poor cable connections.</li> <li>Faulty regulator (if so equipped).</li> <li>Faulty alternator.</li> </ol>	<ol> <li>Replace battery.</li> <li>Check/clean all connections.</li> <li>Replace regulator.</li> <li>Replace alternator.</li> </ol>
Loss of drive	<ol> <li>Freewheel control in "disengaged" position.</li> <li>Motion drive belt worn, damaged, or broken.</li> <li>Air trapped in transmission during shipment or servicing.</li> </ol>	<ol> <li>Place freewheel control in "engaged" position.</li> <li>Replace motion drive belt.</li> <li>Purge transmission.</li> </ol>
Engine "backfires when turning engine "OFF"	<ol> <li>Engine throttle control not set between half and full speed (fast) position before stopping engine.</li> </ol>	between half and full speed



## **REPAIR PARTS**

#### TRACTOR - - MODEL NUMBER 917.273620

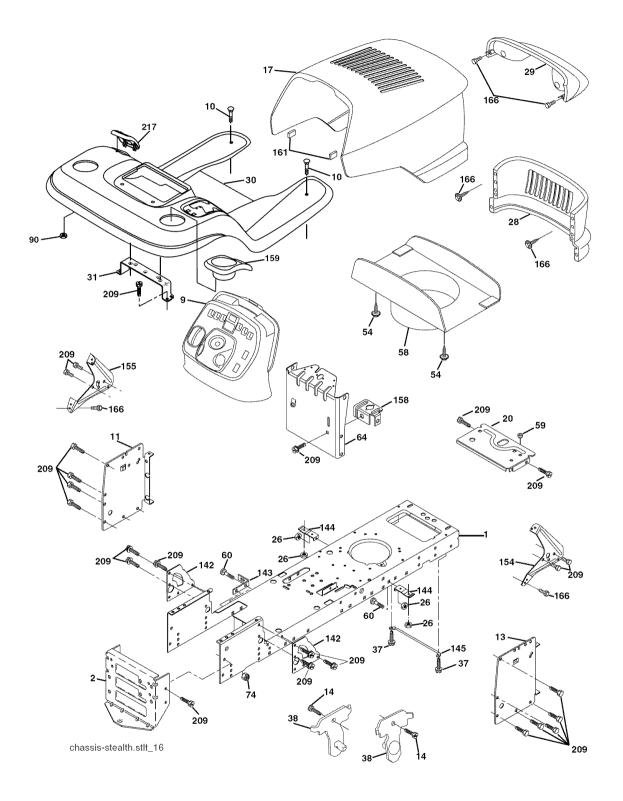
ELECTRICAL



KEY NO.	PART NO.	DESCRIPTION
22 24 25 26 27 28 29 30 33 40 41 42 43 45 46 55 79 81 89	144927 74760412 7603J 145211 150109 145769 176138 175688 4152J 8860R 146148 175158 73510400 145491 160784 175566 140403 188031 17720408 131563 178861 122822X 169635 174652 17490508 175242 109748X 169639	Battery Bolt, Hex 1/4-20 x 3/4 Tray, Battery Bolt, Battery, Front 1/4-20 x 7-1/2 Holddown, Battery, Front 1/4 Switch, Interlock Harness, Light Bulb Light #1156 Cable Starter Cable Fuse Nut, Hex, Keps 1/4-20 unc Cable, Ground Switch, Seat Switch, Ignition Key Harness, Ignition Screw Thd Cut 1/4-20 x 1/2 Cover Terminal Solinoid w/brass plunger Ammeter Hourmeter Switch, PTO Screw, Thd. Roll. 5/16-18 x 1/2 Socket Asm Bulb Twistlock Relay Assembly Bracket Snap-in

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

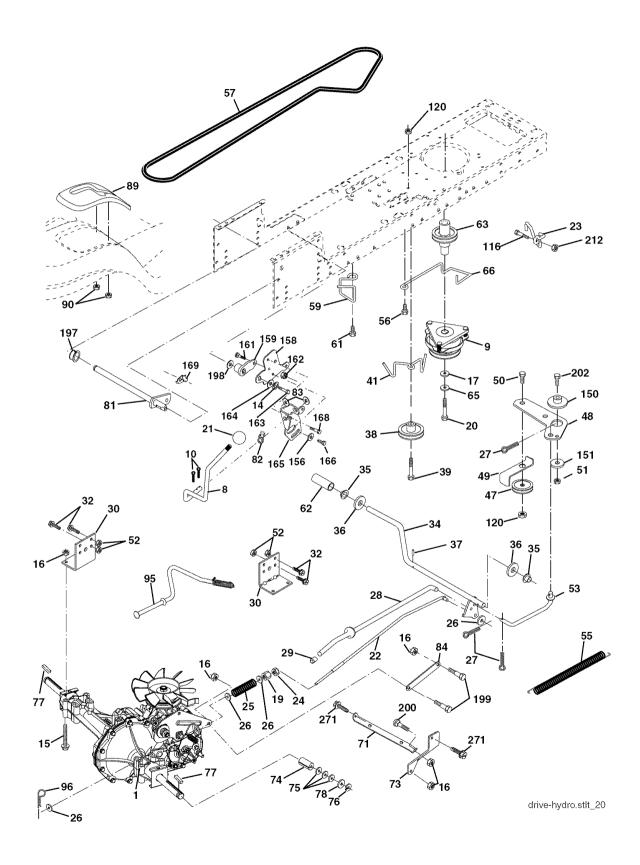
#### TRACTOR - - MODEL NUMBER 917.273620 CHASSIS AND ENCLOSURES



#### TRACTOR - - MODEL NUMBER 917.273620 CHASSIS AND ENCLOSURES

KEY NO.	PART NO.	DESCRIPTION
$\begin{array}{c} 1\\ 2\\ 9\\ 10\\ 11\\ 13\\ 14\\ 17\\ 20\\ 26\\ 28\\ 29\\ 30\\ 31\\ 37\\ 38\\ 54\\ 59\\ 60\\ 64\\ 74\\ 90\\ 142\\ 143\\ 144\\ 145\\ 155\\ 158\\ 159\\ 161\\ 166\\ 209\\ 217\\ \end{array}$	174619 176554 163967X428 72140608 167203 188702X010 17490608 175260X615 162026 STD541437 174515X615 161840 179131X615 139976 17490508 175710 161464 175351 187495 STD533707 174997 STD541437 124346X 175702 186689 175582 156524 161897 161900 162037 179950X428 164655 171875 17000612	Chassis Drawbar Dash Bolt RDHD SQNK 3/8-16 x 1 Panel, Dash, LH Panel, Dash, RH Screw Thdrol 3/8-16 x 1/2 Hood Assembly Plate Battery Locknut, Hex, with Insert 3/8-16 unc Grille Lens, Bar Fender/Footrest Bracket, Fender/Support Screw, Thdrol. 5/16-18 x 1/2 TYT Bracket Asm Pivot Mower Rear Screw Hex Wshd 8-18 x 7/8 Duct Hood Bushing 1.375 OD Bolt Rdhd Sqnk 3/8-16 unc x 3/4 Dash Lower Nut Crownlock 3/8-16 unc x 3/4 Dash Lower Nut Crownlock 3/8-16 unc Nut Self Thrd Wshd 1/4 Zinc Plate Reinforcement Bracket Swaybar Chassis Bracket Footrest Rod Pivot Chassis/Hood Bracket Dash Rh Bracket Dash Lh Parking Brake Bkrt

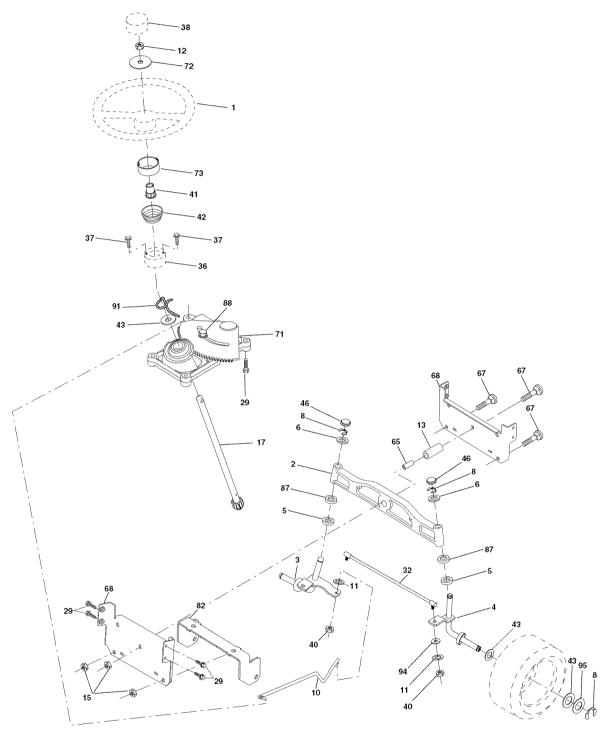
**NOTE:** All component dimensions given in U.S. inches 1 inch = 25.4 mm



## TRACTOR - - MODEL NUMBER 917.273620

#### **GROUND DRIVE**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 8 9	 165866 179334	Transaxle, HydroGear, Model Number 314-0510 (See Break down) Rod Shift Fend. Clutch Electric	63 65 66 71 73	174607 10040700 154778 169183 169182	Pulley, Engine Washer Keeper Belt Engine Strap Torque LH Strap Torque RH
10	76020416	Pin Cotter 1/8 x 1	74	137057	Spacer, Axle
14	10040400	Washer Lock Hvy 1/4	75	121749X	Washer 25/32 x 1-1/4 x 16 Ga.
15	74490544	Bolt Hex Flghd 5/16-18 Gr. 5	76	12000001	E-Ring
16	73800500	Nut Lock Hex W/Ins. 5/16-18 unc	77	123583X	Key, Square
17	126197X	Washer 1-1/2 OD x 15/32 ID x.250	78	121748X	Washer 25/32 x 1-5/8 x 16 Ga.
19	73800600	Nut Lock Hex W/Wsh 3/8-16 unc	81	165596	Shaft Assy. Cross Taper
20	173937	Bolt Hex 7/16-20 x 4 x Gr. 5-1.5	82	165711	Spring Torsion
21	140845	Knob	83	19171216	Washer 17/32 x 3/4 x 16 Ga.
22	169498	Rod, Brake	84	169594	Link Transaxle
23	178289	Bracket Anti-Rotation	89	164890X428	Console, Shift
24	73350600	Nut, Hex Jam 3/8-16 unc	90	124346X	Nut Self-Thd Wsh-hd 1/4 Zinc
25	106888X	Spring, Brake Rod	95	170201	Rod Bypass
26	19131316	Washer	96	4497H	Retainer Spring 1" Zinc/Cad
27	76020412	Pin Cotter 1/8 x 3/4 CAD.	116	72140608	Bolt RDHD SQNK 3/8-16 unc x 1
28	175765	Rod, Parking Brake	120	73900600	Nut Lock Flg 3/8-16 unc
29	124236X	Knob Brake Parking	150	175456	Spacer Retainer
30	169592	Bracket, Transaxle	151	19133210	Washer 13/32 x 2 x 10 Ga.
32	74760512	Bolt Hex Hd 5/16-18 unc x 3/4	156	166002	Washer 5/16 ID x 1.0 x .125
34	175578	Shaft, Foot Pedal	158	165589	Bracket Shift Mount
35	120183X	Bearing, Nylon	159	183900	Hub Shift
36	19211616	Washer	161	72140406	Bolt Rdhd Sqnk 1/4-20 x 3/4 Gr. 5
37	1572H	Pin, Roll	162	73680400	Nut Crownlock 1/4-20 unc
38	179114	Pulley, Composite	163	74780416	Bolt Hex Fin 1/4-20 unc x 1 Gr. 5
39	72110622	Bolt Rdhd 3/8-16 unc x 2-3/4 Gr. 5	164	19091210	Washer 9/32 x 3/4 x 10 Ga.
41	175556	Keeper, Belt Idler Flat	165	165623	Bracket Pivot Lever
47	127783	Pulley, Idler, V-Groove	166	17490510	Screw 5/16-18 x 5/8
48	154407	Bellcrank Clutch Grnd Drw Stl	168	165492	Bolt Shoulder 5/16-18 x .561
49	123205X	Retainer, Belt	169	165580	Plate Fastener Cross Shf.
50	72110612	Bolt	197	169613	Nyliner Snap-in 5/8 ID
51	73680600	Nut Crownlock 3/8-16 unc	198	169593	Washer Nyl 7/8 ID x .105"
52 53 55 56 57 59	73680500 105710X 105709X 17060620 140294 169691	Nut, Crownlock 5/16-18 unc Link, Clutch Spring, Return, Clutch Screw 3/8-16 x 1-1/4 V-Belt, Ground Drive Keeper, Center Span	199 200 202 212 271	169612 72140508 72110614 145212 17000612	Bolt Shoulder 5/16-18 unc Bolt Rdhd Sqnk 5/16-18 unc x 1 Bolt Carr Sh 3/8-16 x 1-3/4 Gr. 5 Nut HexFlange Lock Screw 3/8-16 x .75
61 62	17120614 123533X	Screw 3/8-16 x .875 Cover, Pedal		: All compone 1 = 25.4 mm	nt dimensions given in U.S. inches

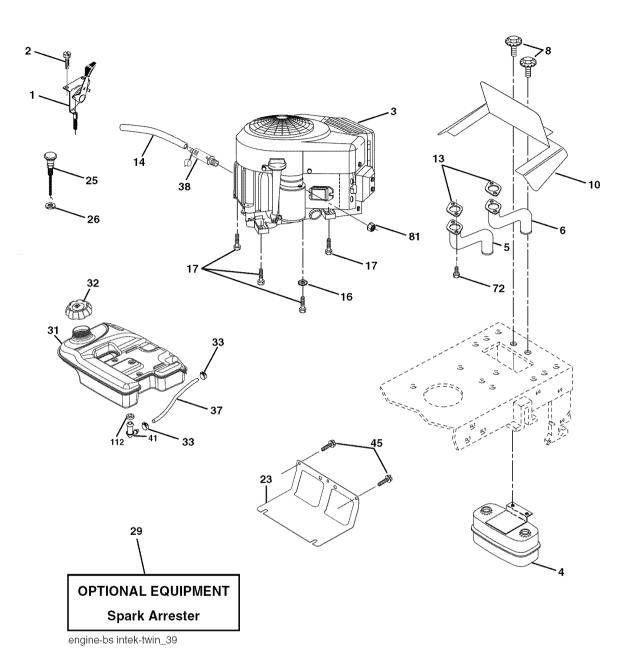


steering\_stealth\_prem\_10

TRACTOR - - MODEL NUMBER 917.273620 STEERING ASSEMBLY

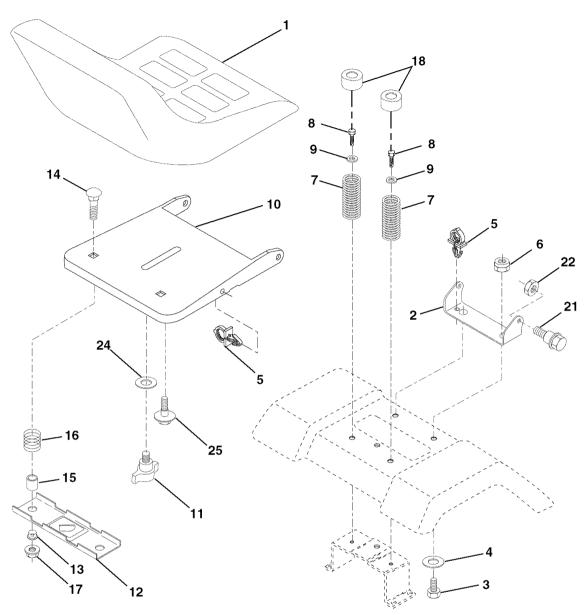
KEY NO.	PART NO.	DESCRIPTION			
1	159944X428	Wheel Steering			
2 3 4 5	184706	Axle Asm			
3	169840	Spindle Asm LH			
4	169839	Spindle Asm RH			
	6266H	Bearing Race Thrust Harden			
6	121748X	Washer 25/32 x 1-5/8 x 16 Ga.			
8	12000029	Ring Klip #t5304-75			
10	175121	Link Drag			
11	10040600	Washer Lock HIcl Spr 3/8			
12	73940800	Nut Hex Jam Toplock 1/2-20 unf			
13	136518	Spacer Bearing Axle Front			
15	145212	Nut Hex Flange Lock			
17	177883	Shaft Asm. Steering			
29	17000612	Screw 3/8-16 x 3/4			
32 36	180580 155105	Rod Tie			
36 37	152927	Bushing Strg Screw			
38		Insert Cap Strg Wh			
39	19182411	Washer 9/16 ID x 1-1/2 OD 11Ga.			
40	73540600	Nut Crownlock 3/8-24			
41	159945	Adaptor Wheel Strg			
42		Boot Steering			
43	121749X	Washer 25/32 1 1/4 x 16 Ga.			
46	184946X505				
65	160367	Spacer Brace Axle			
67	72110618	Bolt, Rdhd Sq 3/8-16 unc x 2-1/4			
68	169827	Axle, Brace			
71	175146	Steering Asm.			
73	160135X428	Extension Steering Stealth			
82	169835	Bracket Susp. Chassis Front			
87	173966	Washer Flat .781 x 1-1/2 x .15			
88	175118	Bolt Shoulder 7/16-20 unc			
91	175553	Clip Steering			
94	19121414	Washer 3/8 x 7/8 x 14 Ga.			
NOTE	<b>NOTE:</b> All component dimensions given in U.S. inches				

1 inch = 25.4 mm



KEY NO.	PART NO.	DESCRIPTION
1		Control Throttle
2 3	171875	Screw Hwhd Hi-Lo #13-16 x 3/4 Engine, Briggs Model 445777-0168-E1
0		(See Breakdown)
4	149723	Muffler Asm Twin Lo-Tone
5	159955	Pipe Exhaust LH Intek
6	160589	Pipe Exhaust RH Intek
8	171877	Bolt 5/16-18 Unc x 3/4 w/Sems
10	162797	Shield Browning Intek II
13 14	165391 148456	Muffler Gasket Tube Drain oil
16		Washer Lock Ext Tooth 3/8
17		
23	169837	Shield Heat
25		Choke Control
26		Nut, Keps 3/8-24 unf
29	137180	Kit Spark Arrestor (Flat Scrn)
31	179022	Tank Fuel 4.0 Rear
32		Cap Asm Fuel
33		Clamp Hose Black
37		Line Fuel
38	181654	Plug Drain Oil Easy
41	139277	Stem Tank Fuel
45 72		Screw Hexwsh Thdr 3/8-16 x 3/4
	183906 73510400	Screw 5/16-18 x 1 Nut Keps Hex 1/4-20 unc
112		Bushing
112	00-00	Dusining

### TRACTOR - - MODEL NUMBER 917.273620 SEAT ASSEMBLY



seat\_lt.knob\_2

KEY NO.	PART NO.	DESCRIPTION
1	180598	Seat
2	180166	Bracket Pivot Seat
3	STD523710	Bolt Fin Hex 3/8-16 unc x 1
4	19131610	Washer 13/32 x 1 x 10 Ga
5	145006	Clip Push-In
6	STD541437	Nut Hex w/Ins. 3/8-16 unc
7	124181X	Spring Seat Cprsn
8	17000616	Screw 3/8-16 x 1-1/2
9	19131614	Washer 13/32 x 1 x 14 Ga.
10	180186	Pan Seat
11	166369	Knob Seat Adj. Wingnut
12	121246X	Bracket Mounting Switch

KEY NO.	PART NO.	DESCRIPTION
13	121248X	Bushing Snap Blk Nyl 50 ld
14	72050412	Bolt Rdhd Sqnk 1/4-20 x 1-1/2
15	121249X	Spacer Split 28x .88 Zinc
16	123740X	Spring Cprsn Plate 1.310 Ga
17	123976X	Nut Lock 1/4 Lge Flg Gr. 5 Zinc
18	124238X	Cap Spring Seat
21	171852	Bolt Shoulder 5/16-18 unc
22	STD541431	Nut Hex Lock W/Ins 5/16-18
24	19171912	Washer 17/32 x 1-3/16 x 12 Ga.
25	127018X	Bolt Shoulder 5/16-18 x 62

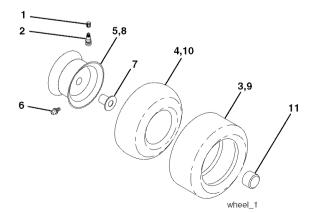
	5 C				
KEY NO.	part No.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7	187407 138047 186242 186243 186572 146046 180978	Reflector, LH Decal, Battery, Diehard, Sears Decal, Hood RH Decal, Hood LH Decal, Seat Craftsman Decal, V-Belt, Drive Schematic Decal, Hood	15 16 17 18 20 21 22	187408 164065 177955 156811 149516 186331 177889	Decal, Reflector, RH Decal, Steering Wheel Decal, Fender, Cruise Decal, Fender Opr. Decal, Battery Decal, Hood, Side Panel Decal, Grille

1	187407	Reflector, LH
2	138047	Decal, Battery, Dieha
3	186242	Decal, Hood RH
4	186243	Decal, Hood LH
5	186572	Decal, Seat Craftsma
6	146046	Decal, V-Belt, Drive S
7	180978	Decal, Hood
8	178455	Decal, Deck, Caution
0	400447	Desel Deviserenti

9 10	186447 156439	Decal, Replacement Hood Decal, Fender, Danger
11	189637	Decal, Panel, Dash
12	178482	Decal, Mower, Heavy-Duty
13	133644	Decal, Replacement Parts
14	175291	Decal, V-Belt, Schematic

18	156811	Decal, Fender Opr.
20	149516	Decal, Battery
21	186331	Decal, Hood, Side Panel
22	177889	Decal, Grille
23	189684	Decal, Engine
26	181470	Decal, Deck level
	184310X428	Pad, Footrest, ST/LT, LH
	184311X428	Pad, Footrest, ST/LT, RH
	166960	Decal By-Pass
	189011	Manual, Owner's, English

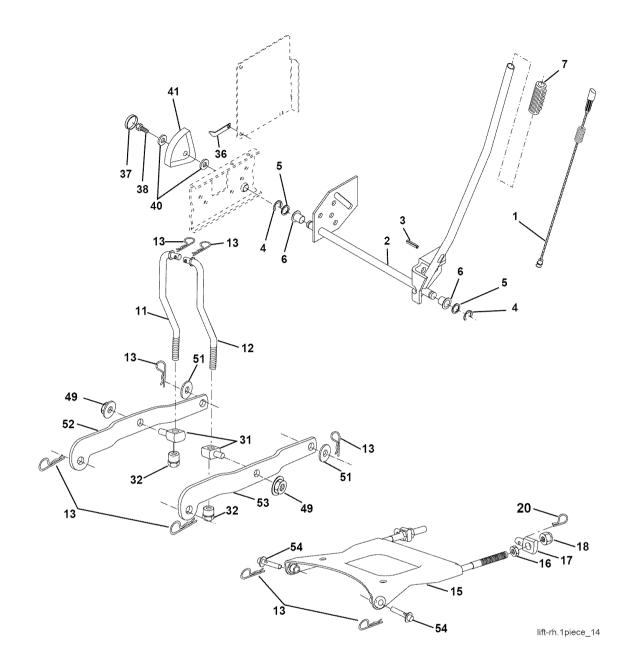
WHEELS & TIRES



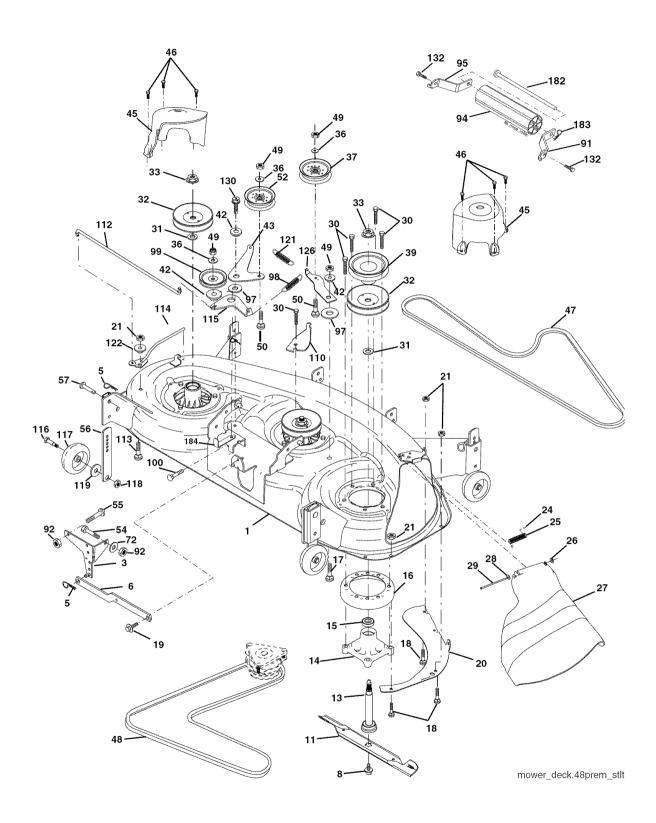
KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7	59192 65139 106222X 59904 106732X624 278H 9040H	Cap Valve Tire Stem Valve Tire F Ts 15 x 6 0 - 6 Service Tube Front (Service Item Only) Rim Asm 6"front Service Fitting Grease (Front Wheel Only) Bearing Flange (Front Wheel Only)
8 9 10 11 	122082X 7152J	Rim Asm 8"rear Service Tire R Ts 20 x 10-8 C Service Tube Rear (Service Item Only) Cap Axle Blk 1 50 x 1 00 Sealant, Tire ( 10 oz. Tube)

TRACTOR - - MODEL NUMBER 917.273620

LIFT ASSEMBLY

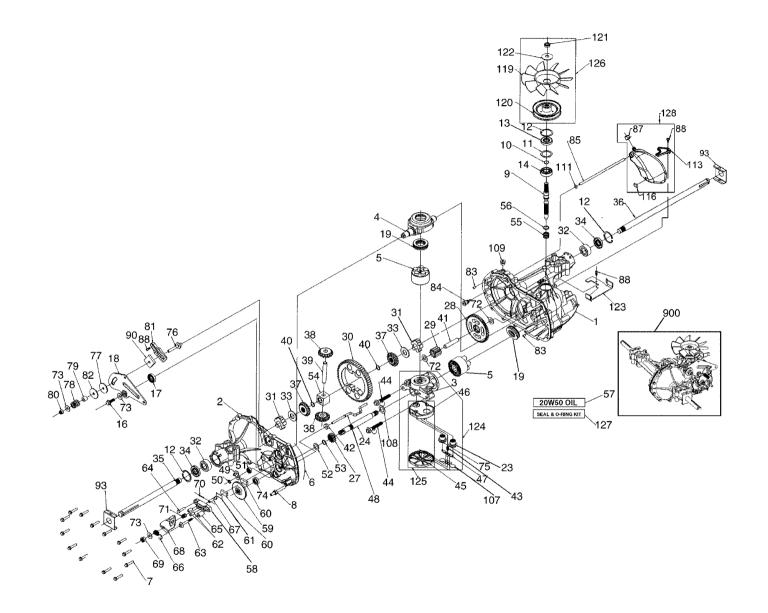


1       179504       Plunger Assembly         2       159476       Shaft Assembly, Lift         3       138284       Pin, Groove         4       12000002       E-Ring         5       19211621       Washer 21/32 x 1 x 21 Ga.         6       120183X       Bearing, Nylon         7       175830       Grip, Handle, Fluted         11       175370       Link, Lift, L.H.         12       175371       Link, Lift, R.H.         13       4939M       Retainer Spring         15       175562       Plate Asm Suspension Front         16       73350800       Nut Hex Jam 1/2-13 unc         17       175689       Trunnion Front Susp.         18       73800800       Nut Lock w/Wsh 1/2-13 unc         20       163552       Retainer Spring         31       176205       Trunion Sups. Arm.         32       175994       Nut Lift Link 7/16-20         36       155097       Pointer Height Indicator         37       123935X       Plug Hole         38       17060516       Screw 5/16-18 x 1         40       19112410       Washer 11/32 x 1-1/2 x 10 Ga.         41       155098       Indicator		PART	
2       159476       Shaft Assembly, Lift         3       138284       Pin, Groove         4       12000002       E-Ring         5       19211621       Washer 21/32 x 1 x 21 Ga.         6       120183X       Bearing, Nylon         7       175830       Grip, Handle, Fluted         11       175370       Link, Lift, L.H.         12       175371       Link, Lift, R.H.         13       4939M       Retainer Spring         15       175562       Plate Asm Suspension Front         16       73350800       Nut Hex Jam 1/2-13 unc         17       175689       Trunnion Front Susp.         18       73800800       Nut Lock w/Wsh 1/2-13 unc         20       163552       Retainer Spring         31       176205       Trunion Sups. Arm.         32       175994       Nut Lift Link 7/16-20         36       155097       Pointer Height Indicator         37       123935X       Plug Hole         38       17060516       Screw 5/16-18 x 1         40       19112410       Washer 11/32 x 1-1/2 x 10 Ga.         41       155098       Indicator Height Stlt         49       145212       Nut	NO.	NO.	DESCRIPTION
	1 2 3 4 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 8 0 1 2 3 6 7 8 0 1 2 3 8 0 1 9 1 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 11 2 3 5 6 7 1 1 2 3 5 6 7 1 1 2 3 5 7 8 0 1 2 3 5 1 2 3 5 5 7 8 0 1 2 3 5 5 7 8 9 1 2 3 5 7 8 9 1 2 3 5 1 2 3 3 3 8 0 3 3 8 0 3 3 8 0 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	179504 159476 138284 12000002 19211621 120183X 175830 175370 175371 4939M 175562 73350800 175689 73800800 163552 176205 175994 155097 123935X 17060516 19112410 155098 145212 19171416 175378 175802	Shaft Assembly, Lift Pin, Groove E-Ring Washer 21/32 x 1 x 21 Ga. Bearing, Nylon Grip, Handle, Fluted Link, Lift, L.H. Link, Lift, R.H. Retainer Spring Plate Asm Suspension Front Nut Hex Jam 1/2-13 unc Trunnion Front Susp. Nut Lock w/Wsh 1/2-13 unc Retainer Spring Trunion Sups. Arm. Nut Lift Link 7/16-20 Pointer Height Indicator Plug Hole Screw 5/16-18 x 1 Washer 11/32 x 1-1/2 x 10 Ga. Indicator Height Stlt Nut Hex/Large Lock Washer 17/32 x 7/8 x 16 Ga. Arm Suspension Rear LH



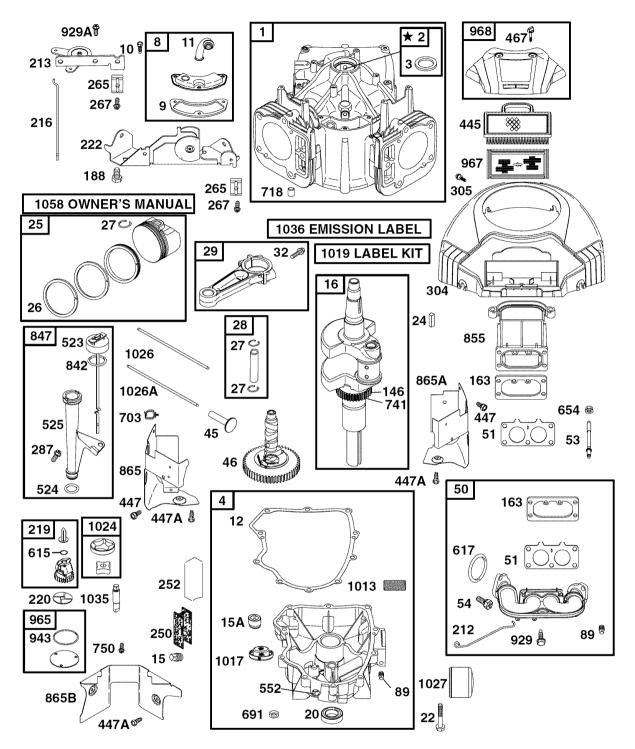
MOWER DECK

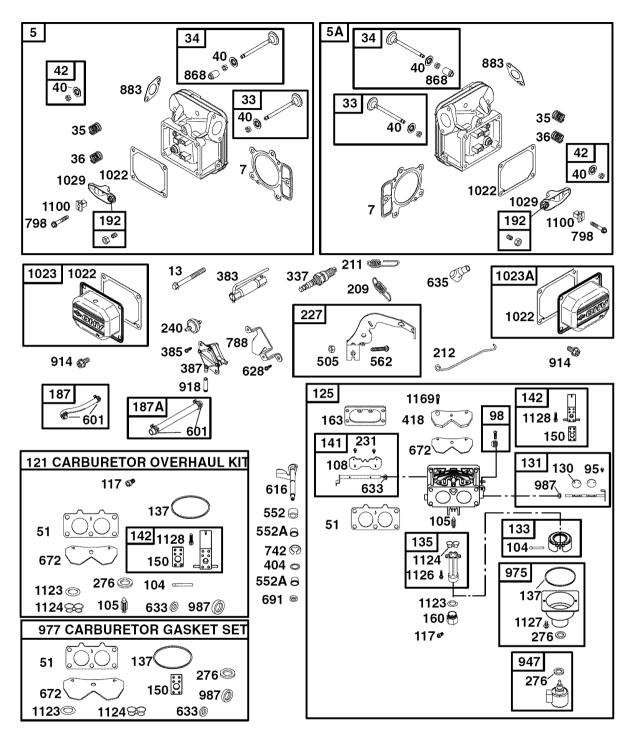
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	180358	Deck Weldment Mower 48	52	175820	Pulley Idler Flat
3	138017	Bracket Asm., Sway Bar	54	74780616	Bolt Éin Hex 3/8-16 unc x 1 Gr. 5
5	4939M	Retainer Spring	55	72140608	Bolt Rdhd Sqnk 3/8-16 unc x 1
6	178024	Bar Sway Deck	56	155986	Bar Pnt Adj.
8	174365	Bolt 7/16 Asm. Blade	57	156941	Pin Head Rivet
		(The following blades are	72	19131312	Washer 13/32 x 13/16 x 12 Ga.
	17000	available)	91	180535	Bracket Asm Noseroller RH
11	173921	Blade, 48" Mulching	92	73800600	Nut Lock Hex w/Ins 3/8-16 unc
	400054	(For mulching mowers only)	94	176066	Noseroller
	180054	Blade, 48" Hi-Lift	95	180534	Bracket Asm Noseroller LH
13	174260	(For bagging and discharging)	97 98	178515 179479	Washer Hardened
13	174360 174358	Shaft Mandrel Asm. Greaseable Housing Mandrel	90 99	184058	Spring Primary Drive Pulley Idler"V"
14	110485X	Bearing, Ball, Mandrel	100	72110616	Bolt RDHD Sqnk 3/8-16 unc x 2
16	174493	Stripper Mandrel Deck	110	175016	Arm Spring Secondary
17	72110610	Bolt RDHD Sq Neck 3/8-16 x 1.25	112	174387	Link Tension Relief Lever
18	72140505	Bolt, Carriage 5/16-18 x 5/8	113	72110506	Bolt Carr. 5/16-18 x 3/4
19	132827	Bolt, Hex Hd, Shoulder 5/16-18	114	174384	Tension Asm Relief Lever
20	174378	Baffle, Vortex Mower	115	174609	Arm Spring Tension Relief
21	73680500	Nut, Crownlock 5/16-18 unc	116	184219	Bolt, Shoulder
24	105304X	Cap, Sleeve	117	174873	Gauge Wheel
25	178102	Spring, Torsion	118	73930600	Nut, Centerlock 3/8-16 unc
26	110452X	Nut, Push	119	19121414	Washer 3/8 x 7/8 x 14 Ga.
27		Deflector Shield	121	174371	Spring Secondary Drive
28	19111016	Washer 11/32 x 5/8 x 16 Ga.	122	174606	Bushing Pivot Tension Relief
29	131491	Rod, Hinge	126	174372	Arm, Idler, Primary Deck
30	173984	Screw, Thdroll	130	17000616	Screw 3/8-16 x 1
31	187690	Washer, Spacer Mower Vented	132	17000612	Screw 3/8-16 x .75
32	177865	Pulley, Mandrel	182	179127	Rod Roller Nose
33 36	178342 19131316	Nut, Flg. Top Lock Cntr. 9/16 Washer 13/32 x 13/16 x 16 Ga.	183 184	163552 173979	Retainer Spring Keeper Belt Idler
37	177968	Pulley, Idler		174356	Mandrel Asm. Service (Includes
39	174375	Pulley, Idler, Driven		174550	Key Nos. 13-15)
42	165723	Spacer, Retainer		181579	Replacement Mower, Complete
43	174373	Arm, Idler Secondary		101010	(Std. Deck - Order separately
45	180806	Cover, Mandrel Deck			nose roller components key nos.
46	137729	Screw, Thdroll. 1/4-20 x 5/8			91, 94, 95, 132, 182, and 183)
47	180808	V-Belt, Mower, Secondary			, ,
48	174368	V-Belt, Mower, Primary	NOTE		ont dimonsions given in U.S. inches
49	73680600	Nut, Crownlock 3/8-16 unc	NUTE	1 inch = 25.	ent dimensions given in U.S. inches
50	72110612	Bolt, Carr. 3/8-16 x 1-1/2 Gr. 5		- men = 20.	

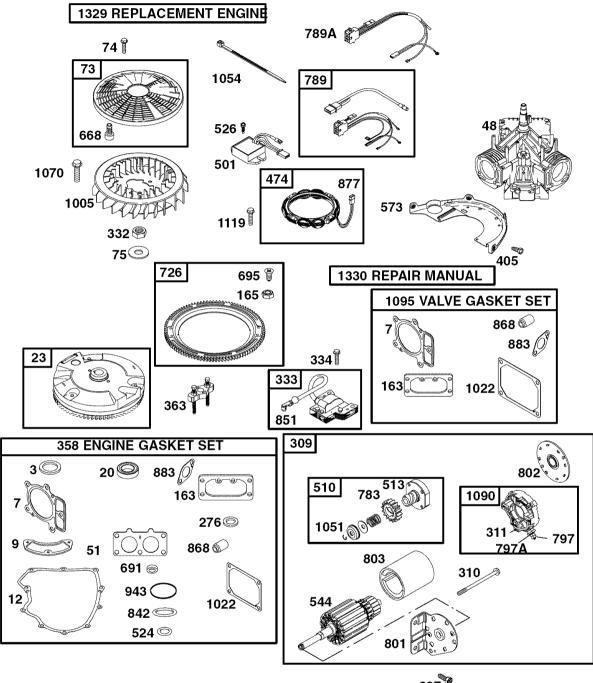


#### TRACTOR - - MODEL NUMBER 917.273620 HYDRO GEAR TRANSAXLE - - MODEL NUMBER 314-0510

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6	170351 170352 170353 170354 169898 170355	Main Housing, Assembly Side Housing, Assembly Center Section, Assembly Swashplate, Trunion Machined Block - Assembly Sealant 10.5 Oz	59 60 61 62 63	170408 142883 142882 142887 170410	Rotor, Brake Brake Puck Puck Plate Brake Actuating Pin Hfhcs 1/4-20x2 W/ Patch,SpecialFlange
7 8 9 10 11 12 13 14	170356 170357 170358 170359 170360 169870 170361 169869	Hex Flange Screw 1/4-20 X 1.25 Stud, 5/16-24 Hex Double End Shaft, Input Ring - Retaining Spacer Ring - Retaining Seal, Lip .67 X 1.58 X .276 Boll Reg 17mm Id X 40mm Od	64 65 67 68 69 70 71	142892 170411 189386 170413 170414 170415 170416 170417	Bolt, 1/4-20 X 1 W/Patch Spacer Spring, Brake Arm Bias Sq. Hd. Bolt 5/16-24-Ribbed Arm, Brake Slotted Hex Nut 5/16-24 Cotter Pin 3/32 X 3/4 Compression Spring Brake
14	170362	Ball Brg 17mm Id X 40mm Od X 12mm Hex Flange Head Screw 5/16-	72	170418	Anti-Drag Washer, Ht .5 I.D. X 1 O.D. X .032
17	170363	24X0.75 Lip Seal 18 X 32 X 7	73	142884	Flat - Washer 11/32 I.D. X 7/8 O.D
18 19 23	170364 150771 170365	Arm, Control Bearing, 30x52x13 Thrust Check Plug Assembly, Washer	74 75	170419 170420	Oil Seal .625 X 1.0 X .25 Check Plug Assembly, .027, Washer
24 27 28 29 30	170366 170367 170368 170369 170370	Shaft, Motor Gear - Pinion, 13t 10t/48t Gear Gear, 10t Jackshaft 60t Bull Gear	76 77 78 79 80	170421 170422 142969 142980 150778	Stud, 5/16-24 Friction Pack Puck, .330 X 1.50 X .0975 Spring, Helical Comp Spacer Hex Lock Nut 5/16-
31 32	170371 170389	Sleeve Bearing .75 X 1.575 X .625 SleeveBearing(Outboard) .75x1.750x.625	81 82	170423 170424	24Unjf(Nylon Insert) Wedge, Friction Pack Clip, Washer .316x1.50x.1046 (Plated)
33	142991	Washer, 3/4 Id X 1-1/2 Od X .13 Thk	83 84	161168 170425	Pin, Standard Headless Fitting, 5/16 Sae 5/32 Tube
34 35	170390 170391	Lip Seal Axle Seal Shaft, Axle .75 X 11.39 (Key,	85 87	170426 142917	Hose, Expansion Tank Cap - Poppet Valve
36	170392	R.H.) Shaft, Axle .75 X 16.99 (Key, L.H.)	88 90 93	170429 170430 170431	Bolt, Self Tapping 10-32 X 1/2 Puck, Inner Wedge Spring Clip - Housing Thrust
37 38 39	150792 150793 150809	Miter Gear (Splined) Miter Gear 15t (0.5 ld) Shaft	107 108	170432 170433	Deflector Washer,Motor Shaft .71idx1.15odx.030thk
40 41 42 43	170393 170394 170395 170396	Ring, Spiral Retaining Pin, Jackshaft Magnet, Ring Spring, Bypass	109 111 113	170434 170435 170437	Plug, Sae #6 O-Ring .07 X .301 I.D. Bracket, Support Expansion Tank
44 45	150797	Hydro Mtg Screw 3/8-24 X 2.5 Long	116 119	170438 170439	Silicon Sponge Fan, 7 In.
46 47	170397 170398 170399	Filter Base, Filter Actuator, Bypass	120 121	188312 170441	Pulley Hex Lock Nut 1/2-20 (Nylon Insert)
48 49 50 51	170400 170401 170402 170403	Rod, Bypass Actuator Arm, Bypass Retaining Ring .250 External Seal, Lip .741 X .250 X .250	122 123 124	170442 170443 170444	Washer, Belleville Belt Keeper Center Section-Filter-Bypass Assembly
52	170404	Tc Flat Washer, 5/8 ld X 1.0 Od X .05 Thk	125 126 127	170445 170446 170447	Filter Assembly Fan - Pulley Service Assembly Seal - O-Bing Kit
53 54	170405 170406 142077	Retaining Ring Bearing, Center Block	128 900	173165 166768	Seal - O-Ring Kit Kit, Expansion Tank Transaxle Complete
55 56 57 58	142977 142978 170407	Spring - Helical Compression Washer 20w-50 Oil Brake Yoke		: All compoi s 1 inch = 25	nent dimensions given in U.S. .4 mm







697

KEY NO.	PART NO.	DESCRIPTION
1 2	699753 499585	Cylinder Assembly Kit-Bushing/Seal (Magneto Side)
3 4 5 7 8 9 10 11 12 15 A 20 22 3 4 5 -	391086 699747 693998 693999 693997 499601 690937 690960 690942 697227 690360 690946 691680 691046 691046 691046 691053 222698 694003 694007	<ul> <li>Seal-Oil (Magneto Side) Sump-Engine Head-Cylinder (Cylinder 1) Head-Cylinder (Cylinder 2)</li> <li>Gasket-Cylinder Head Breather Assembly</li> <li>Gasket-Breather Screw (Breather Assembly) Tube-Breather</li> <li>Gasket-Crankcase Screw (Cylinder Head) Plug-Oil Drain Plug-Oil Drain Crankshaft</li> <li>Seal-Oil (PTO Side) Screw (Crankcase Cover) Flywheel Key-Flywheel Piston Assembly (Standard) Piston Assembly (.020" Over-</li> </ul>
$\begin{array}{c} 26\\\\ 27\\ 28\\ 232\\ 33\\ 35\\ 40\\ 425\\ 46\\ 48\\ 551\\ 34\\ 75\\ 99\\ 804\\ 105\\ 117\\ 121\\ 130\end{array}$	690985 Ø 690986	size) Ring Set (Standard) Ring Set (.020" Oversize) Lock-Piston Pin Pin-Piston (Standard) Rod-Connecting (Standard) Screw (Connecting Rod) Valve-Exhaust Valve-Exhaust Valve-Intake Spring-Valve (Intake) Spring-Valve (Intake) Spring-Valve (Exhaust) Retainer-Valve Keeper-Valve Tappet-Valve Camshaft Short Block Manifold-Intake t Gasket-Intake Stud (Carburetor) Screw (Intake Manifold) Screen-Rotating Screw (Rotating Screen) Washer (Flywheel) Plug-Oil Screw (Throttle Valve) Kit-Idle Speed Pin-Float Hinge Valve-Float Needle Valve-Choke J Jet-Main (Standard) Kit-Carburetor Overhaul Carburetor Valve-Throttle

KEY NO.	PART NO.	DESCRIPTION
131 133 135 137 141 142 146 150 160 163 165 187 187A	499807 499808 690979 690995 690996 691001 •+ 693148 691049	Kit-Throttle Shaft Float-Carburetor Tube-Fuel Transfer Gasket-Float Bowl Kit-Choke Shaft Nozzle-Carburetor Key-Timing Gasket-Nozzle Retainer-Solenoid Gasket-Air Cleaner Nut (Ring Gear) Line-Fuel Line-Fuel (Cut to Required Length)
188 192 209 211 212 213 216 219 220 222 231 240 250 252 265 267 276 287	690960 690083 697674 691019 695238 691021 691022 698231 690412 698761 691048 690718 6909718 690957 690956 691024 695134 690997 •∅‡	Screw (Control Bracket) Adjuster-Rocker Arm Spring-Governor Spring-Governor Bracket-Choke Control Link-Choke Gear-Governor Washer (Governor Gear) Bracket-Control Lever-Governor Control Screw (Choke Valve) Filter-Fuel Retainer-Breather Collector-Oil Clamp-Casing Screw (Casing Clamp) Washer-Sealing Screw (Dipstick/Tube Assem-
304 305 309 310 311 332 333 334 337 358 363 383 385 385 387 404 405 418	695277 691005 691262 691263 497608 691059 691060 691061 691043 694012 691062 690966 690966 690960 808656 690442 697820 690999	bly) Housing-Blower Screw (Blower Housing) Motor-Starter Screw (Starter Motor) Brush Set Nut (Flywheel) Armature-Magneto Screw (Magneto Armature) Spark Plug Gasket Set-Engine Puller-Flywheel Wrench-Spark Plug Screw (Fuel Pump) Pump-Fuel Washer (Governor Crank) Screw (Back Plate) Plate-Carburetor
•	Included in E	ngine Gasket Set, Key. No. 358

- Included in Engine Gasket Set, Key. No. 358
   Ø Included in Carburetor Overhaul Kit, Key. No. 121
- Included in Carburetor Gasket Set, Key. No. 977
- + Included in Valve Overhaul Kit, Key. No. 1095

KEY PART NO. NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
445 $499486$ $447$ $691003$ $447A$ $690960$ $467$ $691008$ $474$ $696458$ $501$ $691185$ $505$ $691029$ $510$ $497606$ $513$ $692024$ $523$ $691032$ $525$ $691037$ $526$ $690960$ $544$ $552$ $690552$ $552A$ $690553$ $562$ $690311$ $573$ $691009$ $601$ $95162$ $615$ $698290$ $616$ $691045$ $617$ $691917$ $628$ $690960$ $633$ $690998$ $616$ $691245$ $672$ $690234$ $672$ $690234$ $691$ $690657$ $695$ $693149$ $697$ $690372$ $703$ $691010$ $718$ $69080$ $742$ $690328$ $750$ $696999$ $783$ $693058$ $788$ $691029$ $797A$ $693167$ $798$ $697890$ $801$ $691283$ $802$ $691286$ $803$	Filter-Air Cleaner Cartridge Screw (Air Guide Cover) Screw (Air Guide Cover) Knob-Air Cleaner Alternator Regulator Nut (Governor Control Lever) Drive-Starter Clutch-Drive Dipstick Seal-O Ring (Dipstick Tube) Tube-Dipstick Screw (Regulator) Armature-Starter (Serviced by 691262 Starter Motor Only) Bushing-Governor Crank Bushing-Governor Crank Bolt (Governor Control Lever) Plate-Back Clamp-Hose Retainer-Governor Shaft Crank-Governor Seal-O Ring (Intake Manifold) Screw (Fuel Pump Bracket) Seal-Choke/Throttle Shaft Boot-Sparkplug Nut (Carburetor) Spacer Gasket-Carburetor Plate Seal-Governor Shaft Screw (Ring Gear) Screw (Drive Cap) Clip Pin-Locating Gear-Timing Retainer-E Ring Screw (Oil Pump Cover) Gear-Pinion Bracket-Fuel Pump Harness-Wiring Nut (Brush Retainer) Nut (Brush Retainer) Nut (Brush Retainer) Nut (Brush Retainer) Nut (Brush Retainer) Nut (Brush Retainer) Nut (Brush Retainer) Screw (Rocker Arm) Cap-Drive Cap-End Housing-Starter (Serviced by 691262 Starter Motor Only) Seal-O Ring (Dipstick) Assembly-Dipstick/Tube Terminal-Sparkplug Adapter-Air Cleaner Cover-Air Guide (Cylinder 1) Cover-Air Guide (Cylinder 1)	865B 868 877 883 914 918 929 943 947 965 967 968 975 977 968 975 977 1005 1013 1023 1023 1024 1026 1026 1027 1029 1035 1036 1051 1054 1055 1036 1051 1054 1055 1000 1199 1123 1124 1126 1127 1128 1129 1329	691015 690968 ++ 399916 690970 ++ 691127 694000 695239 691003 690589 • 499809 499613 273638 499788 499810 499812 691000 ؇ 499603 690954 690971 ++ 499599 499600 499054 690971 ++ 499599 499600 499054 690981 690982 492932 690972 691042 690972 691042 690972 691265 280275 275475 690372 691265 280275 275475 690372 691293 694013 690988 ؇ 690988 ؇ 690991 690992 690990 Ø 693140 445777-002 273521 Included in E Included in G No. 121 Included in G 977	Cover-Air Guide Seal-Valve Wire/Connector-Alternator Gasket-Exhaust Screw (Rocker Arm Cover) Hose-Vacuum Screw (Choke Control Bracket) Screw (Choke Control Bracket) Screw (Choke Control Bracket) Seal-O Ring (Oil Pump Cover) Solenoid-Fuel Cover-Oil Pump Filter-Pre Cleaner Cover-Air Cleaner Bowl-Float Gasket Set-Carburetor Seal-Throttle Shaft Fan-Flywheel Nipple-Oil Filter Screen-Oil Pump Kit-Label Gasket-Rocker Cover Cover-Rocker Arm (Cylinder 1) Cover-Rocker Arm (Cylinder 2) Pump-Oil Rod-Push (Steel) Rod-Push (Steel) Rod-Push (Aluminum) Filter-Oil Arm-Rocker Shaft-Pump Label-Emission Ring-Retaining Cable-Tie Owner's Manual Screw (Flywheel Fan) Retainer-Brush Set-Valve Gasket Pivot-Rocker Arm Screw (Alternator) Seal-O Ring (Solenoid Re- tainer) Seal-O Ring (Fuel Transfer Tube) Screw (Fuel Transfer Tube) Screw (Carburetor Nozzle) Screw (Carburetor Nozzle) Screw (Carburetor Cover Plate) 7 Replacement Engine Repair Manual Engine Gasket Set, Key. No. 358 Carburetor Overhaul Kit, Key. No.
			1095	

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