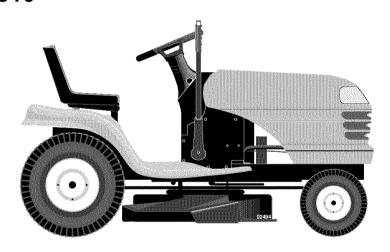
Owner's Manual

CRAFTZMAN®

LAWN TRACTOR

18.5 HP, 42" Mower Electric Start 6 Speed Transaxle

Model No. **917.274810**





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 Line5 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.

WARNING: 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.

WARNING: 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.

SAFETY RULES

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 are.
- 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: Oil Type (API-SG-SL):	2.0 Unleaded Regular SAE 30 (ab SAE 5W-30	(below 32°F)
Oil Capacity:	W/Filter: W/O Filter:	
Spark Plug: (Gap: .030")	Champion F	RC12YC
Ground Speed (MPH):	Forward: 1st 2nd 3rd 4th 5th 6th Reverse:	1.2 1.5 2.4 3.5 4.8 5.3 1.5
Tire Pressure:	Rear:	14 PSI 10 PSI
Charging System:	3 Amps Bat 5 Amps Hea	
Battery:	Amp/Hr: Min. CCA: Case Size:	230
Blade Bolt Torque	: 27-35 Ft. L	bs.

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!

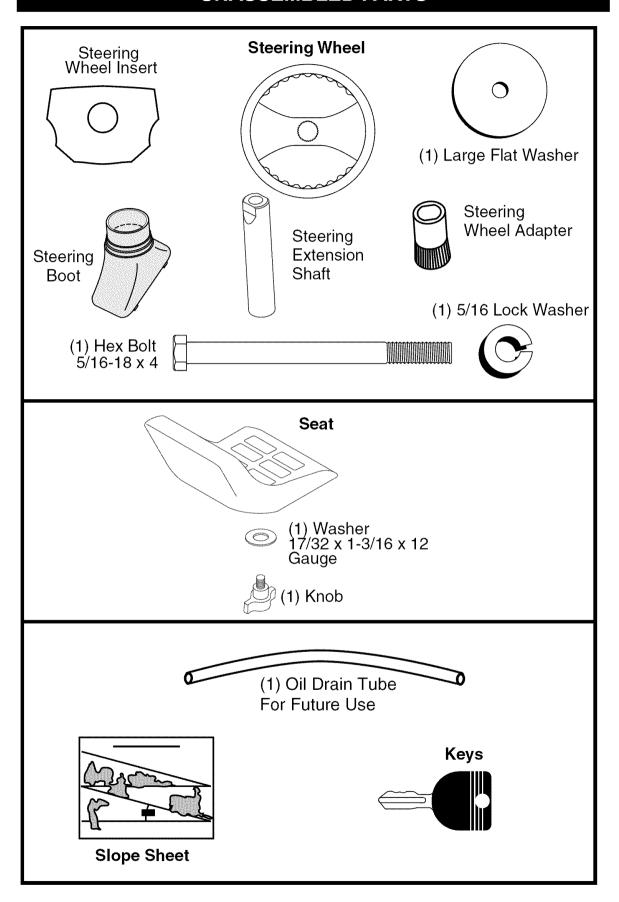
Some limitations and exclusions apply.

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**®

UNASSEMBLED PARTS



ASSEMBLY/PRE-OPERATION

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

TOOLS REQUIRED FOR ASSEMBLY

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

- (1) 3/4" wrench
- (1) Pliers
- (1) 1/2" wrench
- (1) Utility knife
- (1) Tire pressure gauge

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

TO REMOVE TRACTOR FROM CARTON

UNPACK CARTON

- Remove all accessible loose parts and parts boxes from carton.
- Cut along dotted lines on all four panels of carton. Remove end panels and lay side panels flat.
- 3. Check for any additional loose parts or cartons and remove.

BEFORE REMOVING TRACTOR FROM SKID

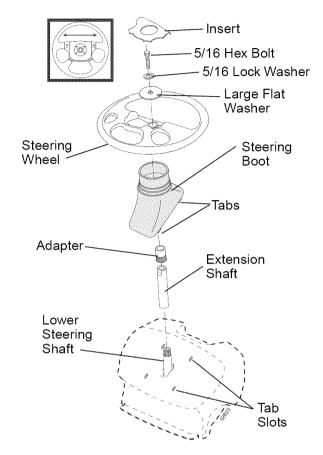
ATTACH STEERING WHEEL

ASSEMBLE EXTENSION SHAFT AND BOOT

- Slide extension shaft onto lower steering shaft.
- Place tabs of steering boot over tab slots in dash and push down to secure.

INSTALL STEERING WHEEL

- 3. Position front wheels of the tractor so they are pointing straight forward.
- Remove steering wheel adapter from steering wheel and slide adapter onto steering shaft extension.
- 5. Position steering wheel so cross bars are horizontal (left to right) and slide inside boot and onto adapter.
- 6. Assemble large flat washer, 5/16 lock washer, 5/16 hex bolt and tighten securely.
- 7. Snap steering wheel insert into center of steering wheel.
- 8. Remove protective materials from tractor hood and grill.



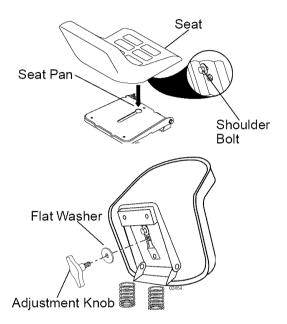
IMPORTANT: Check for and remove any staples in skid that may puncture tires where tractor is to roll off skid.

INSTALL SEAT

Adjust seat before tightening adjustment knob.

- Remove adjustment knob and flat washer securing seat to cardboard packing and set aside for assembly of seat to tractor.
- 2. Pivot seat upward and remove from the cardboard packing. Remove the cardboard packing and discard.
- 3. Place seat on seat pan so head of shoulder bolt is positioned over large slotted hole in pan.
- Push down on seat to engage shoulder bolt in slot and pull seat towards rear of tractor.
- 5. Pivot seat and pan forward and assemble adjustment knob and flat washer loosely. Do not tighten.

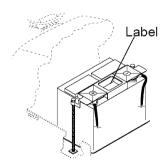
- 6. Lower seat into operating position and sit in seat.
- 7. Slide seat until a comfortable position is reached which allows you to press clutch/brake pedal all the way down.
- 8. Get off seat without moving its adjusted position.
- 9. Raise seat and tighten adjustment knob securely.



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).



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

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

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

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.
- Sit on seat in operating position, depress clutch/brake pedal and set the parking brake.
- 4. Place gear shift lever in neutral (N) position.
- 5. Press lift lever plunger and raise attachment lift lever to its highest position.
- Start the engine. After engine has started, move throttle control to idle position.
- 7. Depress clutch/brake pedal into full "BRAKE" position and hold. Move gearshift lever to 1st gear.
- 8. Slowly release clutch/brake pedal and slowly drive tractor off skid.
- Apply brake to stop tractor, set parking brake and place gearshift lever in neutral position.
- 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 and enjoy your new tractor, we wish to assure that you receive the best performance and satisfaction from this Quality Product.

Please review the following checklist:

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

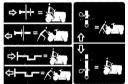
While learning how to use your tractor, pay extra attention to the following important items:

- ✓ Engine oil is at proper level.
- ✓ Fuel tank is filled with fresh, clean, regular unleaded gasoline.
- ✓ Become familiar with all controls their location and function. Operate them before you start the engine.
- ✓ Be sure brake system is in safe operating condition.
- ✓ Be sure Operator Presence System and Reverse Operation System (ROS) are working properly (See the Operation and Maintenance sections in this manual).

OPERATION

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





(Automatic Models only)

FREE WHEEL



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.



LIGHTS ON

DANGER indicates a hazard which, if not avoided. will result in death or serious injury.

IGNITION SWITCH

UNLOCKED

MOWER LIFT



WARNING indicates a hazard which, if not avoided, could result in death or serious injury.



CAUTION indicates a hazard which, if not avoided, 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.

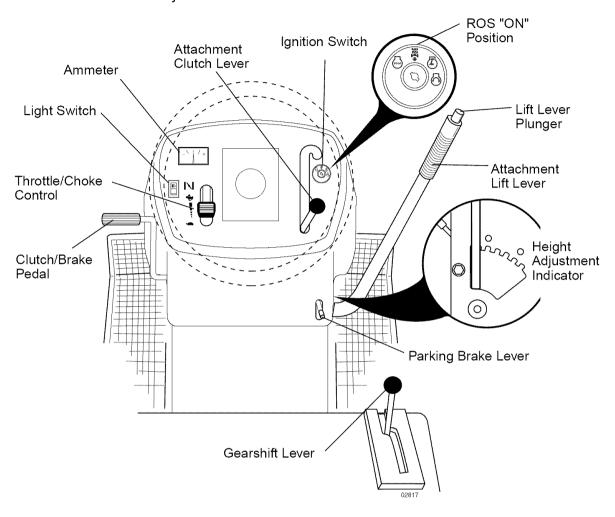


FIRE indicates a hazard which, if not avoided, could result in death, serious injury and/or property damage.

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 charging (+) or discharging (-) of battery.

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

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

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

GEARSHIFT LEVER - Selects the speed and direction of tractor.

IGNITION SWITCH - Used for starting and stopping the engine.

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

LIGHT SWITCH - Turns the headlights on and off.

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

REVERSE OPERATION SYSTEM (ROS) "ON" POSITION - Allows operation of mower deck or other powered attachment while in reverse.

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

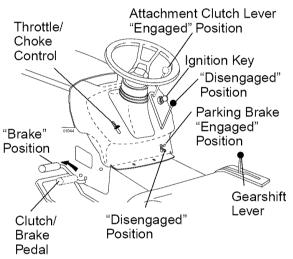


The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles or standard safety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

HOW TO USE YOUR TRACTOR TO SET PARKING BRAKE

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

- 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, move attachment clutch lever to "DISENGAGED" position.

GROUND DRIVE -

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

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.

TO USE THROTTLE CONTROL

Always operate engine at full throttle.

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

TO MOVE FORWARD AND BACKWARD

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

- Start tractor with clutch/brake pedal depressed and gearshift lever in neutral (N) position.
- 2. Move gearshift lever to desired position.
- 3. Slowly release clutch/brake pedal to start movement.

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

TO ADJUST MOWER CUTTING HEIGHT

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

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

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

- The average lawn should be cut to approximately 2-1/2 inches during the cool season and to over 3 inches during hot months.
- For healthier and better looking lawns, mow often and after moderate growth.

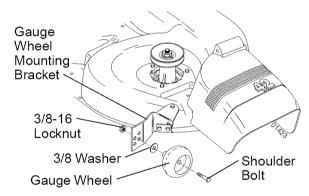
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 For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first cut relatively high; the second to desired height.

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:** Adjust gauge wheels with tractor on a flat level surface.

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



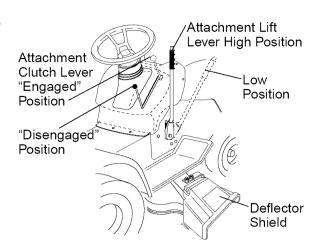
TO OPERATE MOWER

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



OPERATING IN REVERSE

Your tractor is equipped with a Reverse Operation System (ROS). Any attempt by the operator to travel in the reverse direction with the attachment clutch engaged will shut off the engine unless the ignition key is placed in the ROS "ON" position.

AWARNING: Backing up with the attachment clutch engaged while mowing is strongly discouraged. Turning the ROS "ON", to allow reverse operation with the attachment clutch engaged, should only be done when the operator decides it is necessary to reposition the machine with the attachment engaged. Do not mow in reverse unless absolutely necessary.

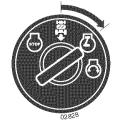
USING THE REVERSE OPERATION SYSTEM -

- 1. Depress clutch/brake pedal all the way down and hold.
- With engine running, turn ignition key counterclockwise to ROS "ON" position.
- Look down and behind before backing up.
- 4. Move gear shift lever to reverse (R) position and slowly release clutch/brake pedal to start movement.
- When use of the ROS is no longer needed, turn the ignition key clockwise to engine "ON" position.

ROS "ON" Position

Engine "ON" Position (Normal Operating)





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

TO TRANSPORT

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

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

TOWING CARTS AND OTHER 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 cause you to lose control of your tractor.

BEFORE STARTING THE ENGINE CHECK ENGINE OIL LEVEL

The engine in your tractor has been shipped, from the factory, already filled with summer weight oil.

- 1. Check engine oil with tractor on level ground.
- Remove oil fill cap/dipstick and wipe clean, reinsert the dipstick and screw cap tight, wait for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.

- For cold weather operation you should change oil for easier starting (See 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 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 below32°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. Sit on seat in operating position, depress clutch/brake pedal and set parking brake.
- 2. Place gear shift lever in neutral (N) position.
- Move attachment clutch to disengaged position.
- 4. Move throttle control to choke position. **NOTE:** Before starting, read the warm and cold starting procedures below.

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

WARM WEATHER STARTING (50° F and above)

- 6. When engine starts, move the throttle control to the fast position.
- The attachments and ground drive can now be used. If the engine does not accept the load, restart the engine and allow it to warm up for one minute using the choke as described above.

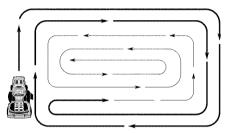
COLD WEATHER STARTING (50° F and below)

- 6. When engine starts, leave throttle control in choke position until engine warms up and begins to run roughly. Once rough running begins, immediately move the throttle control to the fast position. Engine warm-up may take from several seconds to several minutes (the colder the temperature, the longer the warm-up).
- The attachments can also be used during the engine warm-up period.

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

MOWING TIPS

- 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 /«	EFORE .	EACH U	HOURE HOURE	SHOUR'S	OHOUP VERY S	O HOU	RS ON SEASON SEFORE	SERVI	CE DAT	ES
	Check Brake Operation	1	1									
	Check Tire Pressure	~	V									
Т	Check Operator Presence and ROS Systems	V										
Ŗ	Check for Loose Fasteners	V				1 5		1				
Ă	Sharpen/Replace Mower Blades			√ 3								
C	Lubrication Chart			1				1				
ò	Check Battery Level			1/4								
R	Clean Battery and Terminals			V				1				
	Check Transaxle Cooling			1								
	Check V-Belts					1						
	Check Engine Oil Level	V	1									
	Change Engine Oil (with oil filter)				1,2			1				
E	Change Engine Oil (without oil filter)			1 ,2				1				
Ŋ	Clean Air Filter			✓ 2								
Ģ	Clean Air Screen			1/2								
Ι'n	Inspect Muffler/Spark Arrester				'							
ΙË	Replace Oil Filter (If equipped)					1,2						=
-	Clean Engine Cooling Fins					1 2						all I
	Replace Spark Plug					1	/					CIT III
	Replace Air Filter Paper Cartridge					√ 2						ilidiii Sürsiadove ilew
	Replace Fuel Filter						1					: I de

- 1 Change more often when operating under a heavy load or in high ambient temperatures.
- 2 Service more often when operating in dirty or dusty conditions.
- 3 Replace blades more often when mowing in sandy soil.
- 4 Not required if equipped with maintenance-free battery. 5 Tighten front axle pivot bolt to 35 ft.-lbs. maximum.
- Do not overtighten.

GENERAL RECOMMENDATIONS

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

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

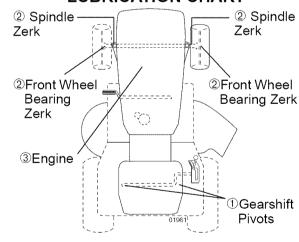
At least once a season, check to see if you should make any of the adjustments described in the Service and Adjustments section of this manual.

 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.
- 2. Check brake operation.
- 3. Check tire pressure.
- 4. Check operator presence and ROS systems for proper operation.
- 5. Check for loose fasteners.

LUBRICATION CHART



- ①SAE 30 or 10w30 Motor Oil
- **2**General Purpose Grease
- ③Refer to Maintenance "ENGINE" Section

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

TRACTOR

Always observe safety rules when performing any maintenance.

BRAKE OPERATION

If tractor requires more than 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. (See "TO ADJUST BRAKE" in the Service and Adjustments section of this manual).

TIRES

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

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

OPERATOR PRESENCE SYSTEM AND REVERSE OPERATION SYSTEM (ROS)

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

 The engine should not start unless the brake pedal is fully depressed, and the attachment clutch control is in the disengaged position.

CHECK OPERATOR PRESENCE SYSTEM

- 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.

CHECK REVERSE OPERATION (ROS) SYSTEM

When the engine is running with the ignition switch in the engine "ON" position and the attachment clutch is engaged, any attempt by the operator to shift into reverse should shut off the engine.

ROS "ON" Position

Engine "ON" Position (Normal Operating)





 When the engine is running with the ignition switch in the ROS "ON" position and the attachment clutch is engaged, any attempt by the operator to shift into reverse should NOT shut off the engine.

BLADE CARE

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

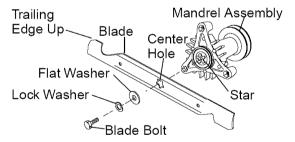
BLADE REMOVAL

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

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

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

IMPORTANT: Blade bolt is heat treated.



If bolt needs replacing, replace only with approve bolt shown in the Repair Parts.

TO SHARPEN BLADE

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

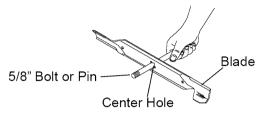
Care should be taken to keep the blade balanced. An unbalanced blade will cause excessive vibration and eventual damage to mower and engine.

- 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.)

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

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



BATTERY

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

- · Keep battery and terminals clean.
- · Keep battery bolts tight.
- Keep small vent holes open.
- Recharge at 6-10 amperes for 1 hour.

NOTE: The original equipment battery on your tractor is maintenance free. Do not attempt to open or remove caps or covers. Adding or checking level of electrolyte is not necessary.

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

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

TRANSAXLE COOLING

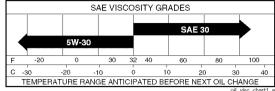
Keep transaxle free from build-up of dirt and chaff which can restrict cooling.

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.



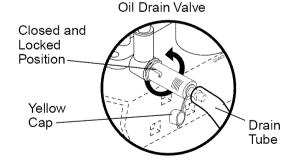
NOTE: Although multi-viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, they will result in increased oil consumption when used above 32°F. Check your engine oil level more frequently to avoid possible engine damage from running low on oil.

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.
- 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.



- 3. Unlock drain valve by pushing inward slightly and turning counterclockwise.
- 4. To open, pull out on the drain valve.
- 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 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.
- 8. 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.

CLEAN AIR SCREEN

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

AIR FILTER

Your engine will not run properly using a dirty air filter. Replace 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.

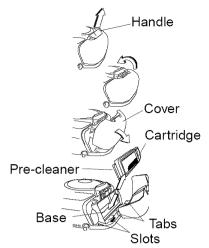
Service air cleaner more often under dusty conditions.

- 1. Pull up on air filter cover handle and rotate towards engine.
- 2. Remove cover.
- 3. Carefully remove air filter cartridge and pre-cleaner from base.
- 4. Clean base carefully to prevent debris from falling into carburetor.

NOTE: If very dirty or damaged, replace cartridge.

- 5. Place new pre-cleaner and cartridge firmly in base.
- 6. Align tabs on cover with slots in blower housing and replace cover.
- 7. Hook handle on cover and push down on handle to close.

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 cartridge.



ENGINE COOLING SYSTEM

Debris may clog the engine's air cooling system. Remove blower housing and clean area shown to prevent overheating and engine damage.



MUFFLER

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

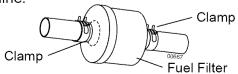
SPARK PLUG(S)

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.
- 4. 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 SERVICE OR ADJUSTMENTS:

- 1. Depress clutch/brake pedal fully and set parking brake.
- 2. Place gearshift 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

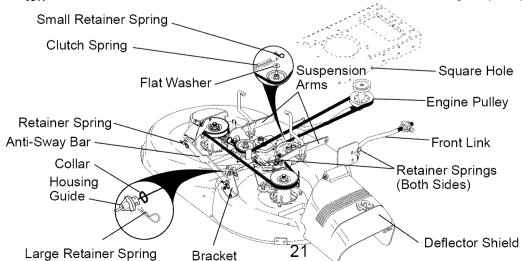
Mower will be easier to remove from the right side of tractor.

- 1. Place attachment clutch in "DISEN-GAGED" position.
- 2. Move attachment lift lever forward to lower mower to its lowest position.
- 3. Roll belt off engine pulley.
- 4. Remove small retainer spring, and remove clutch spring off pulley bolt.
- Remove large retainer spring, slide collar off and push housing guide out of bracket.
- 6. Disconnect anti-sway bar from chassis bracket by removing retainer spring.
- 7. Disconnect suspension arms from rear deck brackets by removing retainer springs.
- 8. Disconnect front links from deck by removing retainer springs.
- Raise lift lever to raise suspension arms. Slide mower out from under tractor.

IMPORTANT: If an attachment other than the mower deck is to be mounted on the tractor, remove the front links and hook the clutch spring Into square hole in frame.

TO INSTALL MOWER

- 1. Raise attachment lift lever to its highest position.
- 2. Slide mower under tractor with deflector shield to right side of tractor.
- 3. Lower lift lever to its lowest position.
- 4. Connect front links to mower deck and secure with retainer springs.
- Connect suspension arms to rear deck brackets and secure with retainer springs.
- Connect anti-sway bar to chassis bracket and secure with retainer spring.
- 7. Push clutch cable housing guide into bracket, slide collar onto guide and secure with large retainer spring.
- 8. Place flat washer and clutch spring on idler pulley bolt and secure with small retainer spring.
- 9. Install belt onto engine pulley.



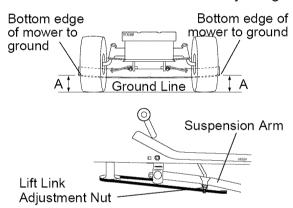
TO LEVEL MOWER HOUSING

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

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

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

Recheck measurements after adjusting.



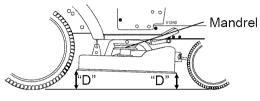
FRONT-TO-BACK ADJUSTMENT IMPORTANT: Deck must be level side-to side. If the following front-to-back adjustment is necessary, be sure to adjust both front links equally so mower will stay level side-to-side.

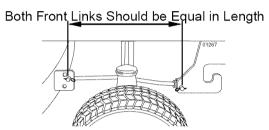
To obtain the best cutting results, the mower housing should be adjusted so that the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

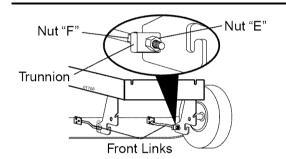
Check adjustment on right side of tractor. Measure distance "D" directly in front and behind the mandrel at bottom edge of mower housing as shown.

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

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







TO REPLACE MOWER BLADE DRIVE BELT

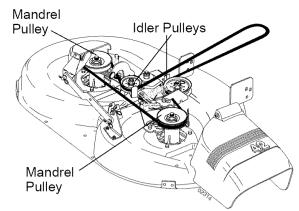
The mower blade drive belt may be replaced without tools. Park the tractor on level surface. Engage parking brake.

BELT REMOVAL -

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

BELT INSTALLATION -

- Work belt around both mandrel pulleys and idler pulleys
- 2. Make sure belt is in all pulley grooves and inside all belt guides.
- 3. Install mower (See "To Install Mower" in this section of this manual).



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

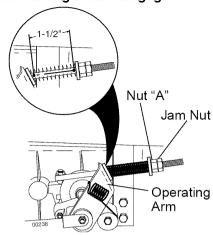
- Park tractor on a level, dry concrete or paved surface, depress clutch/brake pedal all the way down and engage parking brake.
- 2. Place gear shift lever in neutral (N) position.

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.
- 3. If distance is other than 1-1/2", loosen jam nut and turn nut "A" until distance becomes 1-1/2". Retighten jam nut against nut "A".
- 4. 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"



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 -

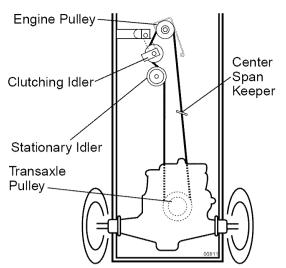
 Remove mower (See "TO REMOVE MOWER" in this section of manual).

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

- 2. Remove belt from stationary idler and clutching idler.
- 3. Remove belt downward from around engine pulley.
- 4. Pull belt slack toward rear of tractor. Remove belt upwards from transaxle pulley by deflecting belt keepers.
- 5. Remove belt from center span keeper and pull belt away from tractor.

BELT INSTALLATION -

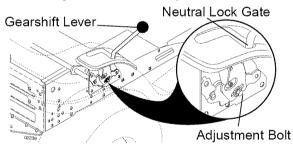
- 1. Carefully work new belt down between transaxle belt keepers and onto the input pulley.
- 2. Slide belt into the center span keeper.
- 3. Pull belt toward front of tractor and roll around the top groove of engine pulley.
- 4. Install belt through stationary idler and clutching idler.
- 5. Make sure belt is in all pulley grooves and inside all belt guides and keepers.
- Install mower (See "TO INSTALL MOWER" in this section of manual).



TRANSAXLE GEAR SHIFT LEVER NEUTRAL ADJUSTMENT

The transaxle should be in neutral when the gear shift lever is in neutral (N) (lock gate) position. The adjustment is preset at the factory; however, if adjustment is needed, proceed as follows:

- 1. Make sure transaxle is in neutral (N). **NOTE:** When the tractor rear wheels move freely, the transaxle is in neutral.
- 2. Loosen adjustment bolt in front of the right rear wheel.
- 3. Position the gear shift lever in the neutral (N) position.
- 4. Tighten adjustment bolt securely. **NOTE:** If additional clearance is needed to get to adjustment bolt, move mower deck height to the lowest position.



TO ADJUST STEERING WHEEL ALIGN-MENT

If steering wheel crossbars are not horizontal (left to right) when wheels are positioned straight forward, remove steering wheel and reassemble 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 a Sears or other qualified service center.

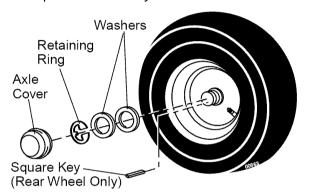
TO REMOVE WHEEL FOR REPAIRS

- 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.
- 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.



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 "BATTERY" in the MAINTENANCE section of this manual).

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

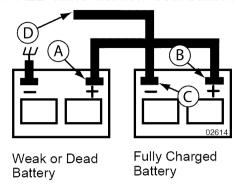
IMPORTANT: Your tractor is equipped with a 12 volt system. The other vehicle must also be a 12 volt system. Do not use your tractor battery to start other vehicles.

TO ATTACH JUMPER CABLES -

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

TO REMOVE CABLES, REVERSE ORDER -

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

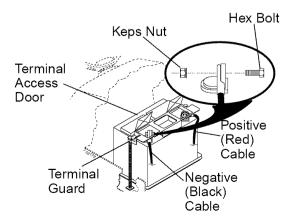


REPLACING BATTERY

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

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

- 1. Lift hood to raised position.
- 2. Remove terminal guard.
- 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.
- First connect RED battery cable to positive (+) battery terminal with hex bolt and keps nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) battery terminal with remaining hex bolt and keps nut. Tighten securely
- 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.
- 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.

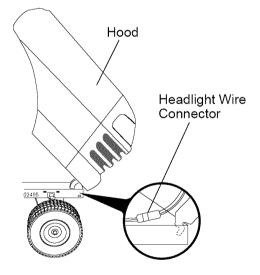
 Check wiring. See electrical wiring diagram in the Repair Parts section.

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



ENGINE

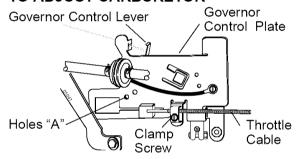
Maintenance, repair, or replacement of the emission control devices and systems, which are being done at the customers expense, may be performed by any non-road engine repair establishment or individual. Warranty repairs must be performed by an authorized engine manufacturer's service outlet.

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:

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

TO ADJUST CARBURETOR



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

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

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

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

PRELIMINARY SETTING -

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

FINAL SETTING -

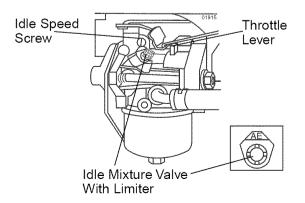
- 1. Start engine and allow to warm for five minutes. Make final adjustments with engine running and shift/motion control lever in neutral (**N**) position.
- Move throttle control lever to slow position. With finger, rotate and hold throttle lever against idle speed screw. Turn idle speed screw to attain 1750 RPM.
- 3. While still holding throttle lever against idle speed screw, turn idle mixture valve full travel clockwise then counterclockwise until engine runs rough. Turn valve to a point midway between those two positions. Release throttle lever.

ACCELERATION TEST -

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

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

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

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

TRACTOR

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

- 1. Clean entire tractor (See "CLEANING" in the Maintenance section of this manual).
- Inspect and replace belts, if necessary (See belt replacement instructions in the Service and Adjustments section of this manual).
- 3. Lubricate as shown in the Maintenance section of this manual.
- Be sure that all nuts, bolts and screws are securely fastened. Inspect moving parts for damage, breakage and wear. Replace if necessary.
- 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	 Out of fuel. Engine not "CHOKED" properly. Engine flooded. Bad spark plug. Dirty air filter. Dirty fuel filter. Water in fuel. Loose or damaged wiring. 	 Fill fuel tank. See "TO START ENGINE" in Operation section. Wait several minutes before attempting to start. Replace spark plug. Clean/replace air filter. Replace fuel filter. Empty fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter. Check all wiring. 			
	9. Carburetor out of adjustment.10. Engine valves out of adjustment.	9. See "To Adjust Carburetor" in Service and Adjustments section.10. Contact a Sears or other qualified service center.			
Hard to start	 Dirty air filter. Bad spark plug. Weak or dead battery. Dirty fuel filter. Stale or dirty fuel. Loose or damaged wiring. Carburetor out of adjustment. Engine valves out of adjustment. 	 Clean/replace air filter. Replace spark plug. Recharge or replace battery. Replace fuel filter. Empty fuel tank and refill tank with fresh, clean gasoline. Check all wiring. See "To Adjust Carburetor" in Service and Adjustments section. Contact a Sears or other qualified service center. 			
Engine will not turn over	 Clutch/brake pedal not depressed. Attachment clutch is engaged. Weak or dead battery. Blown fuse. Corroded battery terminals. Loose or damaged wiring. Faulty ignition switch. Faulty solenoid or starter. Faulty operator presence switch(es). 	 Depress clutch/brake pedal. Disengage attachment clutch. Recharge or replace battery. Replace fuse. Clean battery terminals. Check all wiring. Check/replace ignition switch. Check/replace solenoid or starter. Contact a Sears or other qualified service center. 			
Engine clicks but will not start	 Weak or dead battery. Corroded battery terminals. Loose or damaged wiring. Faulty solenoid or starter. 	 Recharge or replace battery. Clean battery terminals. Check all wiring. Check/replace solenoid or starter. 			

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

PROBLEM	CAUSE	CORRECTION			
Loss of power	 Cutting too much grass/too fast. Throttle in "CHOKE" position. 	 Raise cutting height/reduce speed. Adjust throttle control. 			
	 Build-up of grass, leaves and trash under mower. Dirty air filter. Low oil level/dirty oil. 	 Clean underside of mower housing. Clean/replace air filter. Check oil level/change oil. 			
	 Faulty spark plug. Dirty fuel filter. 	Clean and regap or change spark plug. Replace fuel filter.			
	 Stale or dirty fuel. Water in fuel. 	8. Empty fuel tank and refill tank with fresh, clean gasoline.9. Empty fuel tank and carbure-			
	10. Spark plug wire loose.	tor, refill tank with fresh gas- oline and replace fuel filter. 10. Connect and tighten spark			
	11. Dirty engine air screen/fins. 12. Dirty/clogged muffler. 13. Loose or damaged wiring. 14. Carburetor out of adjustment.	plug wire. 11. Clean engine air screen/fins. 12. Clean/replace muffler. 13. Check all wiring. 14. See "To Adjust Carburetor" in Service and Adjustments			
	15. Engine valves out of adjustment.	section. 15. Contact a Sears or other qualified service center.			
Excessive vibration	 Worn, bent or loose blade. Bent blade mandrel. 	Replace blade. Tighten blade bolt. Contact a Sears or other			
	3. Loose/damaged part(s).	qualified service center. 3. Tighten loose part(s). Replace damaged parts.			
Engine dies when tractor is shifted into reverse	Reverse operation system (ROS) is not "ON" while mower or other attachment is engaged.	Turn ignition key to ROS "ON" position. See Operation section.			
Engine continues to run when operator leaves seat with attach- ment clutch engaged	Faulty operator-safety presence control system.	Check wiring, switches and connections. If not corrected, contact Sears or other qualified service center.			
Poor cut - uneven	1. Worn, bent or loose blade.	Replace blade. Tighten blade bolt.			
	 Mower deck not level. Buildup of grass, leaves, and trash under mower. Bent blade mandrel. 	 Level mower deck. Clean underside of mower housing. Contact a Sears or other 			
	 Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels. 	qualified service center. 5. Clean around mandrels to open vent holes.			

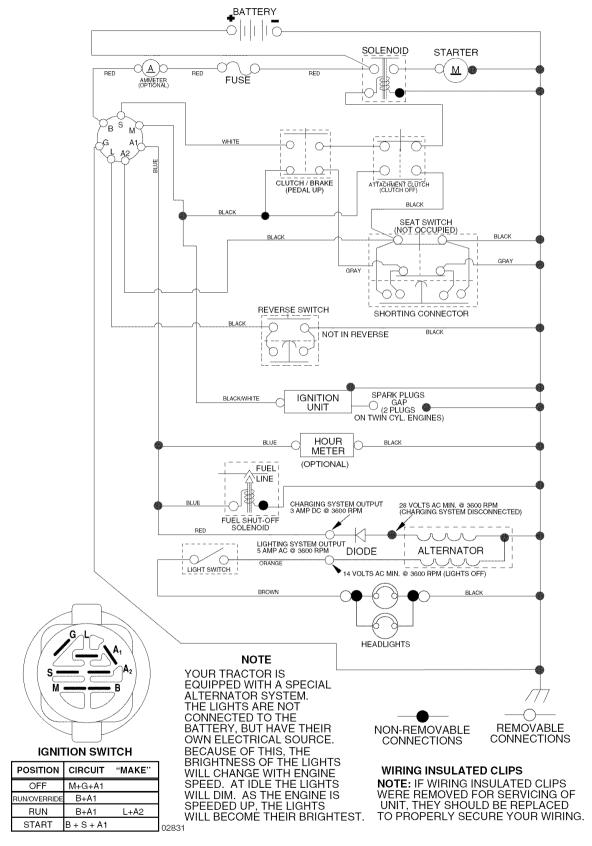
TROUBLESHOOTING CHART: See appropriate section in manual unless directed to Sears service center

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

TRACTOR - - MODEL NUMBER 917.274810

SCHEMATIC

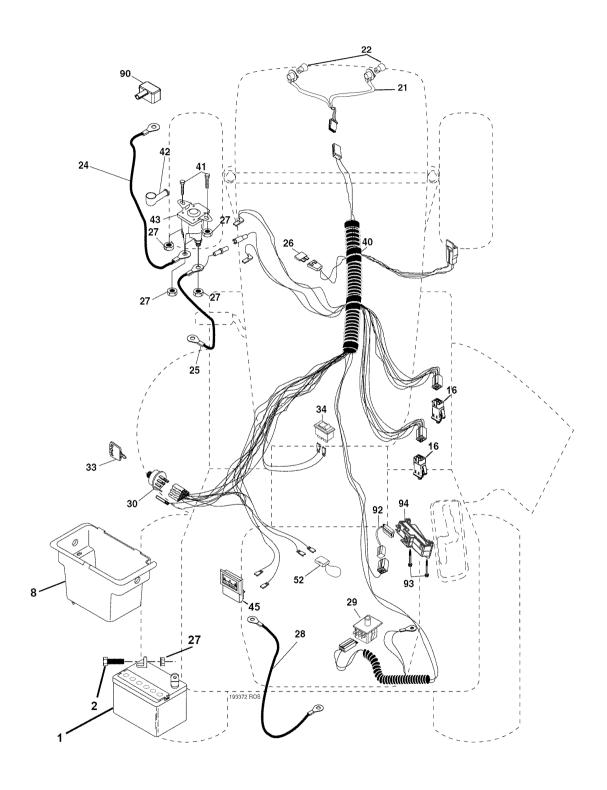
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REPAIR PARTS

TRACTOR - - MODEL NUMBER 917.274810

ELECTRICAL



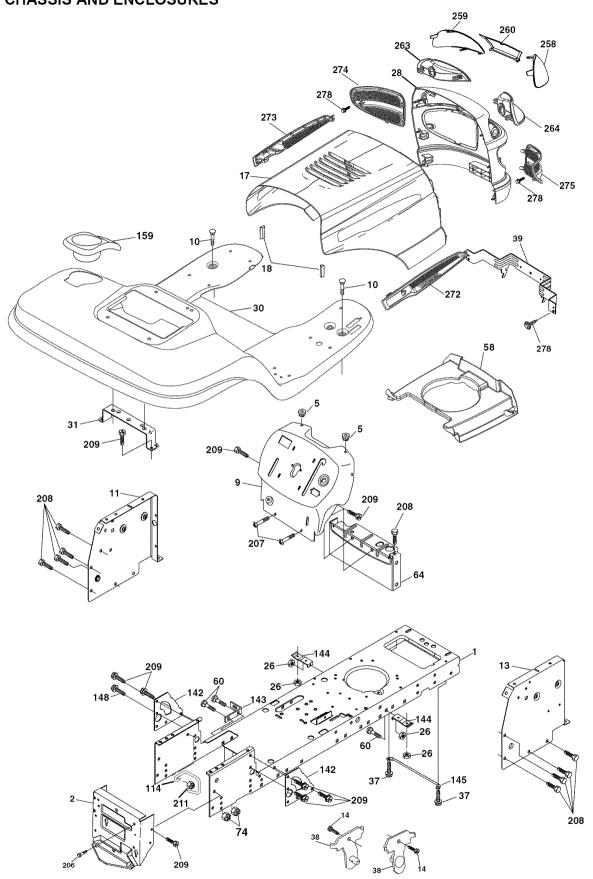
TRACTOR - - MODEL NUMBER 917.274810

ELECTRICAL

	PART NO.	DESCRIPTION
1	163465	Battery
2 8	74760412 176689	Bolt Hex Hd 1/4-20 unc x 3/4
16	176138	Box Battery Switch, Interlock Push-In
21		Harness Light Socket (W/4152j)
22		Bulb Light #1156
	4799J	Cable Battery
	193149	Cable Battery
26		Fuse
27	73510400	Nut Keps Hex 1/4-20 unc
28	4207J	Cable Ground
29	192749	Switch Seat DP w/Ramps
30	193350	Switch Ign
33	140403	Key Molded Craftsman
34	110712X	Switch Light
	193372	Harness Ign
	71110408	Bolt Blk. Fin Hex 1/4-20 unc x 1/2
42		Cover Terminal
43		Solenoid
45		Ammeter Rectangular 6 Amp
52		Protection Wire Loop
	180449	Cover Terminal Battery
	193465	Harness Pigtail Reverse Switch
93	192540	Screw
94	191834	Module Reverse Ros

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

TRACTOR - - MODEL NUMBER 917.274810 CHASSIS AND ENCLOSURES



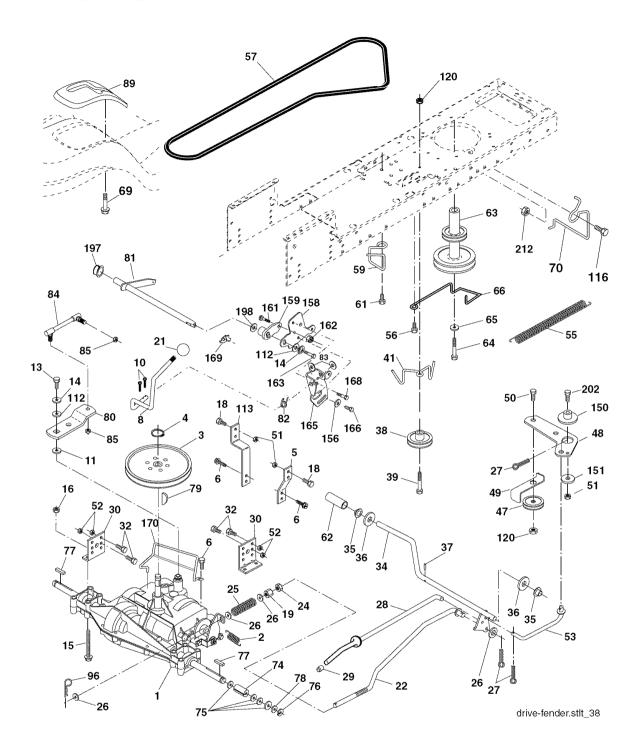
chassis-Laser -lt.stlt_45

TRACTOR - - MODEL NUMBER 917.274810 CHASSIS AND ENCLOSURES

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

TRACTOR - - MODEL NUMBER 917.274810

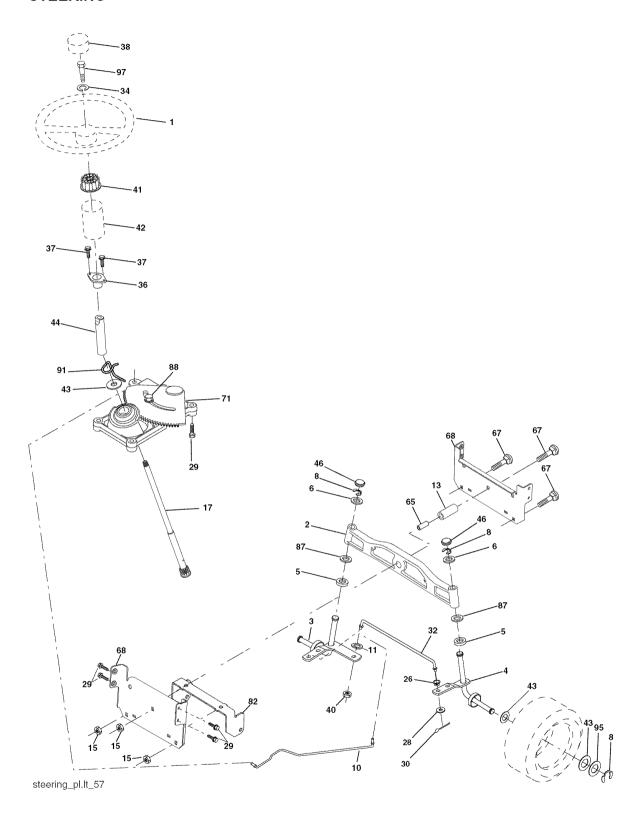
GROUND DRIVE



GROUND DRIVE

KEY PART NO. NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 146682 3 123666X 4 12000028 5 121520X 6 17060512 8 192502 10 STD561210 11 105701X 13 74550412 14 10040400 15 74490544 16 73800500 18 STD523710 19 STD541437 21 106933X 22 130804 24 STD541237 25 106888X 26 STD551037 27 STD561210 28 175765 29 71673 30 169592 32 STD523107 34 175578 35 120183X 36 STD551062 37 STD571810 38 179114 39 72110622 41 175556 47 127783 48 154407 49 123205X 50 72110612 51 STD541437 52 STD541431 53 105710X 55 105709X 56 17060620 57 130801 59 169691 61 17120614	Washer, Shift Plate Bolt 1/4-28 unf W/Patch Gr. 8 Washer Lock Hvy Helical Bolt Hex Flghd 5/16-18 Gr. 5 Nut Lock Hx W/Ins 5/16-18 Bolt Fin Hex 3/8-16 unc x 1 Gr. 5 Nut Knob Rod, Brake Nut Spring, Brake Rod Washer Pin Rod, Parking Brake Cap, Parking Brake Bracket, Transaxle Bolt Shaft Assembly, Foot Pedal Bearing, Nylon Washer Roll Pin Pulley, Composite, Flat Bolt Rdhd 3/8-16 unc x 2-3/4 Gr. 5 Keeper, Belt, Idler Pulley, Idler, V-Groove, Plastic Bellcrank Clutch Grnd Drv Stl Retainer, Belt Bolt Carr. Sh. 3/8-16 x 1-1/2 Gr. 5 Nut Crown Lock 3/8-16 unc	62 63 64 65 66 69 70 74 75 76 77 78 79 80 81 82 83 84 85 89 61 120 150 151 156 163 165 166 168 169 170 198 202 212	STD624003 19091210 127285X 72140608 73900600 175456 19133210 166002 165589 183900 72140406 73680400 74780416 165623 17490510 165492 165580 187414 169593 72110614 145212	Cover, Pedal Pulley, Engine Bolt, Hex 7/16-20 x 4 Gr. 5 Washer Keeper, Belt, Engine, Fool-Proof Screw Hex Wsh Hi-Lo 1/4-1/2 unc Guide, Mower Drive Belt, R.H. Spacer, Axle Washer 25/32 x 1-1/4 x 16 Ga. E-Ring Key, Square 2.0 x .1845/.1865 Washer 25/32 x 1-5/8 x 16 Ga. Key Woodruff Arm, Shift Shaft Asm Cross Tapered Spring, Torsion Washer 17/32 x 3/4 x 16 Ga. Link Transaxle Nut, Nylock Console, Shift, STLT Retainer Spring Washer 9/32 x 3/4 x 10 Ga. Strap Torque 90 Degrees Bolt Rdhd Sqneck 3/8-16 x 1 Nut Lock Flg. 3/8-16 Spacer Retainer Washer 13/32 x 2 x 10 Ga. Washer Srrted 5/16 ID x 1.125 Bracket Shift Mount Hub Shift Bolt Rdhd Sqnk 1/4-20 x 3/4 Gr.5 Nut Crownlock 1/4-20 unc Bolt Hex Fin 1/4-20 unc x 1 Gr. 5 Bracket Pivot Lever Screw 5/16-18 x 5/8 Bolt Shoulder 5/16-18 x .561 Plate Fastening Lt Keeper Belt Transaxle Gear Washer Nylon Bolt Carr. SH 3/8-16 x 1-3/4 Gr. 5 Nut Hex Fig. Lock

STEERING

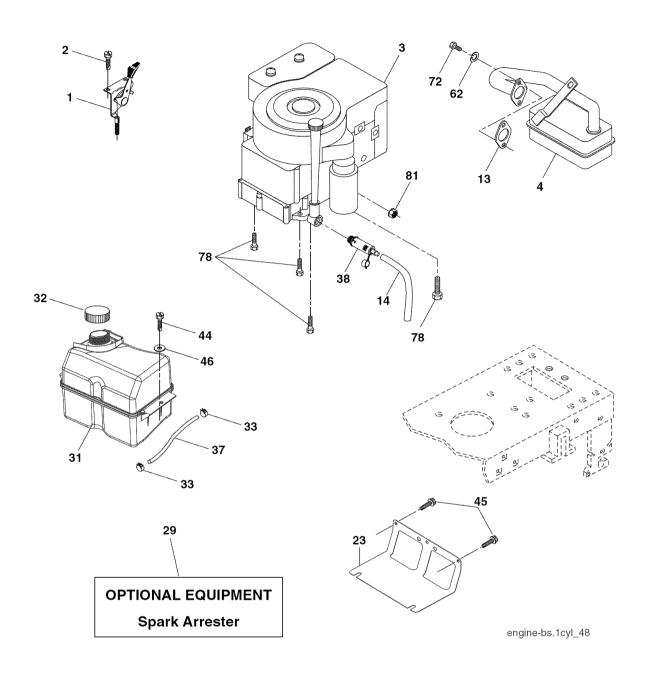


STEERING

KEY NO.	PART NO.	DESCRIPTION
NO. 1 2 3 4 5 6 8 10 11 13 15 17 26 8 29 30 2 34 6 37 38 40 41 42 43 44 65 67 68 71 2 87 88 91	186093X428 184706 169840 169839 6266H 121748X 12000029 175121 STD551137 136518 145212 190753 126847X 19131416 17000612 76020412 130465 10040500 155099 152927 186095X428 73540600 186737 145054X428 121749X 190752	Steering Wheel Axle Assembly Spindle Assembly, L.H. Spindle Assembly, R.H. Bearing, Race, Thrust, Hardened Washer 25/32 x 1-5/8 x 16 Ga. Ring, Klip Draglink Washer, Lock Spacer, Bearing, Axle Nut, Hexflange Lock Shaft Assembly, Steering Bushing Washer 13/32 x 7/8 x 16 Ga. Screw 3/8-16 x 3/4 Pin Cotter 1/8 x 3/4 Rod, Tie Washer Lock Hvy HLCL Spr. 5/16 Bushing, Steering Screw Insert, Steering Wheel Nut Crownlock 3/8-24 Adaptor, Steering Wheel Nut Crownlock 3/8-24 Adaptor, Steering Wheel Boot, Steering Shaft Washer 25/32 x 1-1/4 x 16 Ga. Extension Shaft Steering Cap, Spindle Spacer Brace Axle Bolt RDHD SQNK 3/8-16 x 2-1/4 Axle, Brace Steering Asm Bracket Susp Chassis Front Washer Flat .781 x 1-1/2 x .14 Bolt shoulder 7/16-20 Clip Steering
95 97	188967 74780564	Washer Hardened Bolt 5/16-18 x 4 Gr. 5

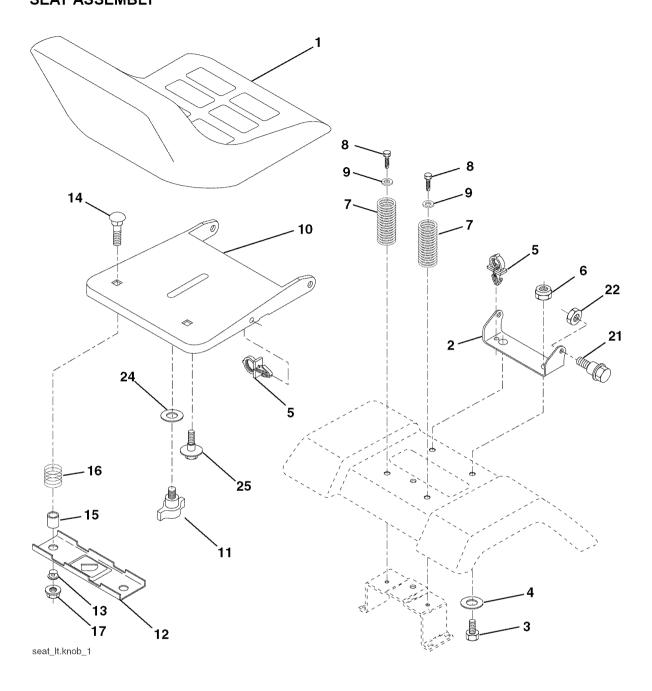
NOTE: All component dimensions given in U. S. inches 1 inch = 25.4 mm

ENGINE



PART		KEY	PART	
NO.	DESCRIPTION	NO.	NO.	DESCRIPTION
170545	Control, Throttle/Choke	37	137040	Line, Fuel
17720408	Screw, Hex Thd Cut 1/4-20 x 1/2	38	181654	Plug, Oil Drain Easy
	Engine, B&S, No. 31P777-0299-E1	44	17670412	Screw Hexwsh Thdrol 1/4-20 x 3/4
		45	17000612	Screw Hex Wsh 3/8-16 x 3/4
137352	,	46	19091416	WEasher 9/32 x 7/8 x 16 Ga.
		62	10010500	Washer Split
	,	72	71070512	Screw Hex Head Cap 5/16-18 x 3/4
		78	17060620	Screw 3/8-16 x 1-1/4
	*	81	73510400	Nut Keps Hex 1/4-20 Starter Nut
				•
	,			
123487X	Clamp, Hose	NOT		nent dimensions given in U.S. nch = 25.4 mm
	NO. 170545 17720408 137352 165291 148456 169837 137180 185534 140527	NO. DESCRIPTION 170545 Control, Throttle/Choke 17720408 Screw, Hex Thd Cut 1/4-20 x 1/2 Engine, B&S, No. 31P777-0299-E1 (See Breakdown) 137352 Muffler Exhaust 165291 Gasket, Muffler 148456 Tube Drain Oil Easy 169837 Shield, Brn/Dbr Guard 137180 Arrestor, Spark 185534 Tank, Fuel 140527 Cap Fuel	NO. DESCRIPTION NO. 170545 Control, Throttle/Choke 37 17720408 Screw, Hex Thd Cut 1/4-20 x 1/2 38 Engine, B&S, No. 31P777-0299-E1 44 (See Breakdown) 45 137352 Muffler Exhaust 46 165291 Gasket, Muffler 62 148456 Tube Drain Oil Easy 72 169837 Shield, Brn/Dbr Guard 78 137180 Arrestor, Spark 81 185534 Tank, Fuel 140527 Cap Fuel	NO. DESCRIPTION NO. NO. 170545 Control, Throttle/Choke 37 137040 17720408 Screw, Hex Thd Cut 1/4-20 x 1/2 38 181654 Engine, B&S, No. 31P777-0299-E1 44 17670412 (See Breakdown) 45 17000612 137352 Muffler Exhaust 46 19091416 165291 Gasket, Muffler 62 10010500 148456 Tube Drain Oil Easy 72 71070512 169837 Shield, Brn/Dbr Guard 78 17060620 137180 Arrestor, Spark 81 73510400 185534 Tank, Fuel Tank, Fuel 140527 Cap Fuel NOTE: All compo

TRACTOR - - MODEL NUMBER 917.274810 **SEAT ASSEMBLY**



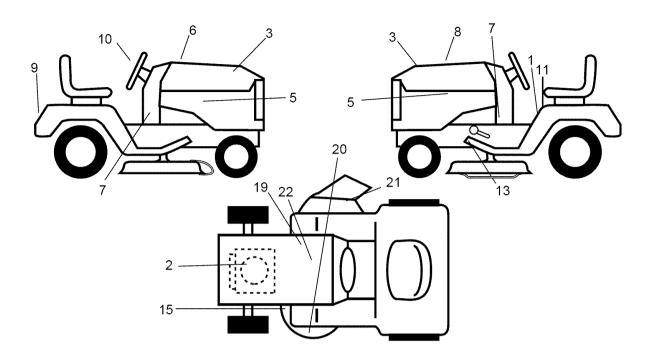
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	188719	Seat	13	121248X	Bushing, Snap
2	140551	Bracket, Pivot, Seat	14	72050412	Bolt, Carriage 1/4-20 x 1-1/2
3	71110616	Bolt	15	134300	Spacer, Split .28 x .88
4	19131610	Washer 13/32 x 1 x 10 Ga.	16	121250X	Spring
5	145006	Clip, Push-In Hinged	17	123976X	Locknut, Flange 1/4 Gr. 5
6	STD541437	Nut	21	171852	Bolt, Shoulder 5/16-18 unc
7	124181X	Spring, Seat	22	STD541431	Nut
8	17000616	Screw 3/8-16 x 1-1/2	24	19171912	Washer 17/32 x 1-3/16 x 12 Ga.
9	19131614	Washer 13/32 x 1 x 14 Ga.	25	127018X	Bolt Shoulder 5/16-18 x .62
10	182493	Pan, Seat			
11	166369	Knob Seat	NOTE		ent dimensions given in U.S.
12	174648	Bracket Switch Mounting		inches 1 inc	h = 25.4 mm

12

174648

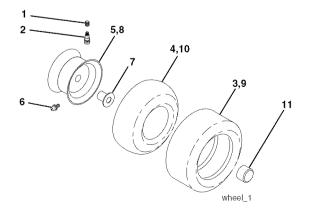
Bracket, Switch Mounting

DECALS



	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	156439	Decal, Fender Danger Sears	15	160396	Decal, Mower Drive Schematic
2	189020	Decal, Engine	19	138047	Decal, Battery Diehard Sears
3	186366	Decal, Hood, R.H. /L.H.	20	172331	Decal, Deck Sears
5	186367	Decal, Hood Side Panel	21	179128	Decal, Deck
6	133644	Decal, Maintenance	22	149516	Decal, Battery
7	189088	Decal, Lower Dash		138311	Decal, Lift Handle
8	193564	Decal, Rplcmnt		184310X428	Pad Footrest LH STLT
9	186572	Decal, Fender, Craftsman White		184311X428	Pad Footrest RH STLT
10	164065	Decal, Strng Whl Domed		193302	Owner's Manual, English
11	193308	Decal, Fender STLT Oper Inst E/S		193303	Owner's Manual, Spanish
13	146046	Decal, V-Belt Dr Sch Tractor			• •

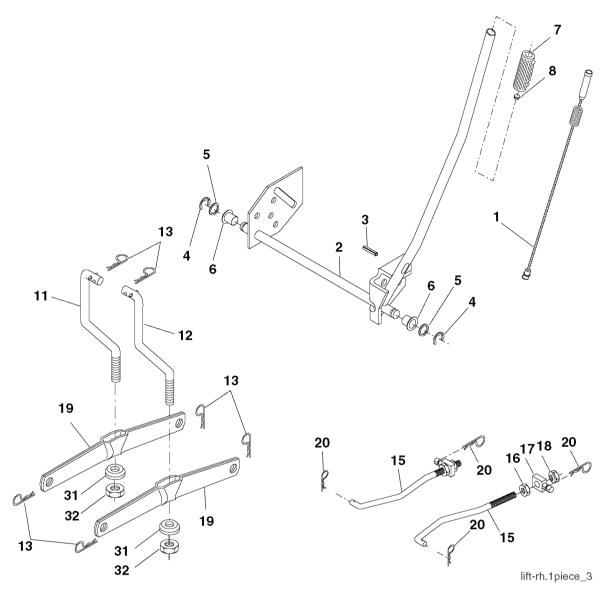
WHEELS AND TIRES



KEY No.	PART NO.	DESCRIPTION
1	59192	Valve Cap, Tire
2	65139	Stem, Valve
3	106222X	Tire, Front
4	59904	Tube, Front Tire (Not Provided,
		Service Item Only)
5	106732X624	Rim, Front
6	278H	Fitting, Grease (Front Wheel Only)
7	9040H	Bearing, Flange (Front Wheel
		Only)
8	106108X624	Rim, Rear
9	138468	Tire, Rear
10	7152J	Tube, Rear Tire
		(Not Provided, Service Item Only)
11	104757X428	
	144334	Sealant, Tire 10 oz.

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

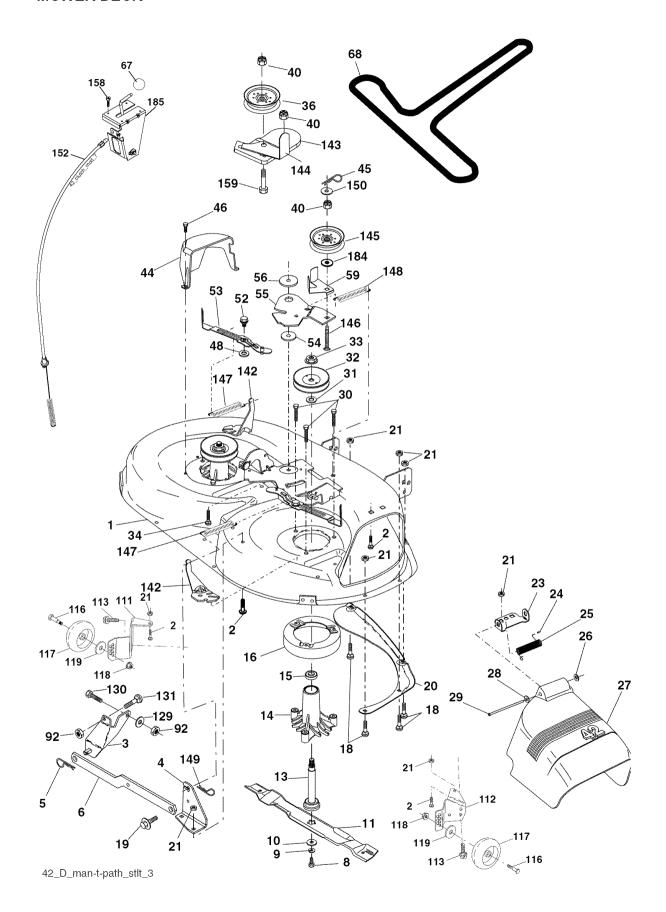
LIFT ASSEMBLY



KEY NO.	PART NO.	DESCRIPTION
1	159460	Wire Asm Inner/Sprg W/plunger LT
2	159471	Shaft Asm Lift RH w/Inf
3	105767X	Pin Groove 1 500 Zinc
4	12000002	E Ring #5133-62
5	19211621	Washer 21/32 x 1 x 21 Ga.
6	120183X	Bearing Nylon Blk 629 ld
7	125631X	Grip Handle
8	122365X	Button Plunger Yellow
11	139865	Link Lift LH Fixed Length
12	139866	Link Lift RH Fixed Length
13	4939M	Retainer Spring
15	173288	Link Front
16		Nut Jam Hex 1/2-13 unc
17	175689	Trunnion Blk Zinc
18		Nut Lock w/Wsh 1/2-13 unc
19	139868	Arm Suspension Rear
20	163552	Retainer Spring
31	169865	Bearing Pvt Lift
32	73540600	Nut Crownlock 3/8 - 24

NOTE: All component dimensions given in U. S. inches 1 inch = 25.4 mm 43

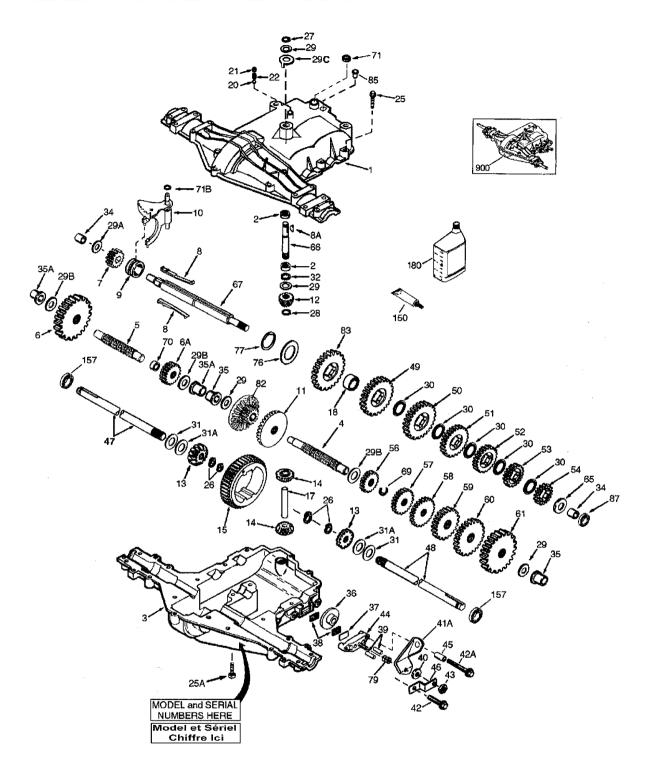
MOWER DECK



MOWER DECK

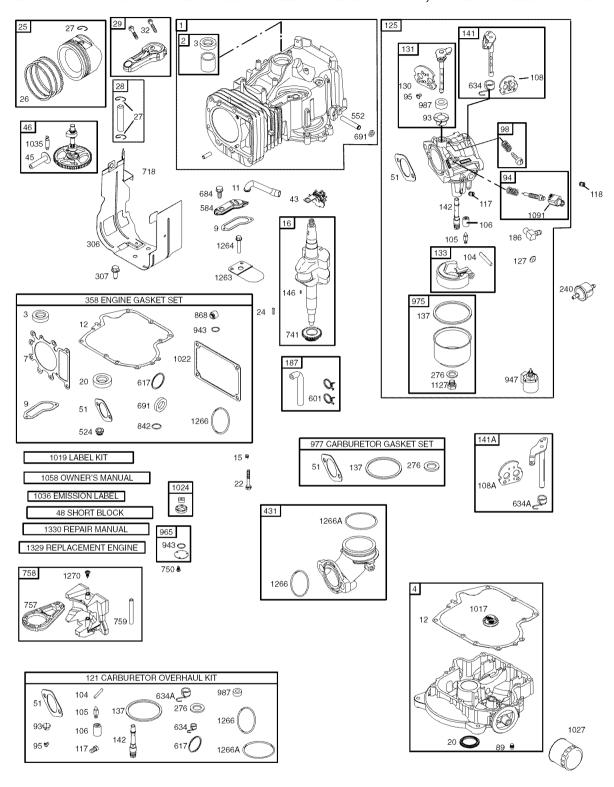
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
	NO. 165892 STD533107 138017 165460 STD624008 178024 850857 STD551137 140296 138971 134149 139775 137645 128774 110485X 174493 72140505 132827 159770 STD541431 177563 105304X 123713X 110452X	Mower Deck Assembly, 42" Bolt Bracket Assy., Sway Bar, Front Bracket Sway Bar 38/42" Deck Retainer Spring Bar Sway Deck Bolt, Hex 3/8-24 x 1.25 Gr. 8			Bolt, Shoulder 5/16-18 unc Arm Assembly, Pad, Brake Washer, Hardened Arm, Idler Spacer, Retainer Guard, TUV Idler Knob Custom Oval V-Belt Nut Bracket Wheel Guage LH Bracket Wheel Guage RH Screw 5/16-18 x 3/4 Bolt, Shoulder Wheel, Gauge Nut, Centerlock 3/8-16 Washer 3/8 x 7/8 x 14 Ga. Washer 13/32 x 13/16 x 12 Ga.
44 45 46 48	140088 STD624003 137729 133944	Guard, Mandrel, L.H. Retainer Screw, Thd. Roll 1/4-20 x 5/8 Washer, Hardened	NOTE		(Std. Deck-Order separately guage wheel components key nos. 116 - 119). ent dimensions given in U. S. ch = 25.4 mm

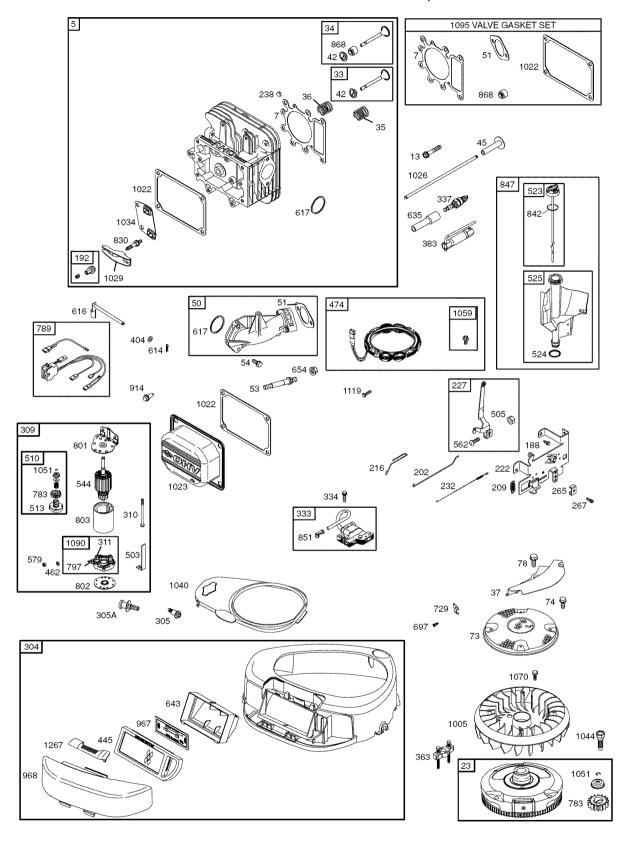
TRACTOR - - MODEL NUMBER 917.274810 PEERLESS TRANSAXLE--MODEL NUMBER 206-545C



TRACTOR - - MODEL NUMBER 917.274810 PEERLESS TRANSAXLE--MODEL NUMBER 206-545C

REF NO.	PART NO.	DESCRIPTION	REF NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 6A 7 8 8A 9 10 11 12 13 14 15 17 18 20 21 22 25 A 26 27 28 29 29A 29B 29C 30 31 31A 32 34 35 35A	772147 780086A 770128 776395 776409 778364 778369 778330 792180 792047 784352 784378 778309 778368 778368 778370 786188 786102 792077A 792078 792077A 792078 792073A 792177 792125 792035 788040 780072 780160 780195 780199 780108 780195 788083 780194 780193 780197	Transaxle Cover Needle Bearing 5/8" Transaxle Case Countershaft Output Shaft Spur Gear (38 teeth) Spur Gear (15 teeth) Spur Gear (11 teeth) Shift Key Woodruff Key #9 Shift Collar Shift Rod & Fork Bevel Gear (30 teeth) Input Bevel Pinion (13 teeth) Bevel Gear (13 teeth) (Include. 14) Bevel Pinion (13 teeth) (Include. 13) Ring Gear (43 teeth) Drive Pin Spacer 1.130 X .695 Ball 5/16" dia Set Screw 3/8 - 16 x 3/8" Spring .310 OD x .625 L Screw 1/4 - 20 x 1-1/4" Screw 1/4-20 x 1-3/8" Retaining Ring (pkg of 2) Retaining Ring Retaining Ring Thrust Washer .762 ID x .031W Thrust Washer .750 ID x .056W (Use As Needed) Flat Washer .750 ID x .056W Oil Seal 5/8" Bushing .563 Flanged Bushing 5 / 8" ID Flanged Bushing .751	41A 42A 43 44 45 46 47 48 49 50 51 52 53 46 57 58 59 60 61 66 67 67 77 78 82 83 85 87 157 180 90 157 157 157 157 157 157 157 157 157 157		Brake Lever Screw 1/4 - 20 x 1-1 /4" Screw 1/4 - 20 x 2 1/4" Locknut 5 / 16 - 24 Brake Pad Holder Spacer .2625 x 1.0 Brake Lever Bracket Axle (11-15 / 16" Long) Axle (16 - 1 / 2" long) Spur Gear (29 teeth) Spur Gear (27 teeth) Spur Gear (19 teeth) Spur Gear (16 teeth) Spur Gear (11 teeth) Spur Gear (11 teeth) Spur Gear (17 teeth) Spur Gear (21 teeth) Spur Gear (21 teeth) Spur Gear (25 teeth) Spur Gear (25 teeth) Flat Washer .563 ID x .062W Input Shaft Shifter & Brake Shaft Retaining Ring Spacer .890 Square Cut Ring "O" Ring Flat Washer 1.128 ID x .058W Inverted Retaining Ring Spring .430 OD x .5000 L Bevel & Spur Gear (30 & 13 teeth) Spur Gear (27 teeth) Oil Fill Plug Oil Seal 9 / 16" Liquid Gasket RTV Silicone Oil Seal 3 /4" Gear Oil 80W90 Replacement MST - 206-545C Transaxle
36 37 38 39 40	790075 790007 799021 786026 792076A	Brake Disk Brake Pad Plate Brake Pad (pkg of 2) Dowel Pin Flat Washer .312 ID x .059W			inch = 25.4 mm





KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	697174	Cylinder Assembly	106	690577 Ø	Seat-Inlet
2	399265	Kit-Bushing/Seal (Magneto	108	690464	Valve-Choke (Manual Choke)
		Side)	108A	692344	Valve-Choke (Choke A Matic)
3	391086 •	Seal-Oil (Magneto Side)	117	694352 Ø	Jet-Main (Standard)
4	697188	Sump-Engine	118	697228	Jet-Main (High Altitude)
5	698147	Head-Cylinder	121	697241	Kit-Carburetor Overhaul
7	699168 •+	Gasket-Cylinder Head	125	697190	Carburetor
9	697109 •	Gasket-Breather	127	695005	Plug-Welch
11	697113	Tube-Breather	130	691750	Valve-Throttle
12	697110 •	Gasket-Crankcase	131	494379	Kit-Throttle Shaft
13	690360	Screw (Cylinder Head)	133	494381	Float-Carburetor
15	690946	Plug-Oil Drain	137	281165 ؇	Gasket-Float Bowl
16	697127	Crankshaft	141	495097	Kit-Choke Shaft
20	690947 •	Seal-Oil (PTO Side)			(Manual Choke)
22	692125	Screw (Crankcase Cover/Sump)	141A	495931	Kit-Choke Shaft
23	693557	Flywheel			(Choke A Matic)
24	222698	Key-Flywheel	142	697140 Ø	Nozzle-Carburetor
25	699052	Piston Assembly (Standard)	146	691639	Key-Timing
	699054	Piston Assembly	186	698174	Connector-Hose
		(.020" Oversize)	187	699331	Line-Fuel
26	699051	Ring Set (Standard)	188	691693	Screw (Control Bracket)
	697559	Ring Set (.020" Oversize)	192	691986	Adjuster-Rocker Arm
27	698469	Lock-Piston Pin	202	691841	Link-Mechanical Governor
28	697099	Pin-Piston	209	692208	Spring-Governor
29	697126	Rod-Connecting (Standard)	216	691840	Link-Choke
	697263	Rod-Connecting	222	694042	Bracket-Control
00	000050	(.020" Undersize)	227	691374	Lever-Governor Control
32	692852	Screw (Connecting Rod)	232 238	691842	Spring-Governor
33	695760	Valve-Exhaust	240	691843	Cap-Valve Filter-Fuel
34	695761	Valve-Intake	240 265	394358 691024	
35 36	691279	Spring-Valve (Intake)	267	695134	Clamp-Casing Screw (Casing Clamp)
36 37	691279 697108	Spring-Valve (Exhaust)	276	692255 ؇	Washer-Sealing
42	690964	Guard-Flywheel Retainer-Valve	304	699829	Housing-Blower
43	691968	Slinger-Governor/Oil	305	697102	Screw (Blower Housing)
45 45	690564	Tappet-Valve	305A	697103	Screw (Blower Housing)
46 46	790400	Camshaft	306	697107	Shield-Cylinder
48	697762	Short Block	307	691003	Screw (Cylinder Shield)
50	690193	Manifold-Intake	309	693551	Motor-Starter
51		· Gasket-Intake	310	690323	Bolt (Starter Motor)
53	690227	Stud (Carburetor)	311	497608	Brush Set
54	691148	Screw (Intake Manifold)	333	492341	Armature-Magneto
73	697133	Screen-Rotating	334	691061	Screw (Magneto Armature)
74	697897	Screw (Rotating Screen)			· · · · · · · · · · · · · · · · ·
78	691003	Screw (Flywheel Guard)	•	Included in E	ngine Gasket Set, Key. No. 358
89	690283	Plug-Oil	Ø		Carburetor Overhaul Kit, Key. No.
93	690602 Ø	Bushing-Throttle Shaft		121	, ,
94	498030	Kit-Idle Mixture	‡	Included in C	arburetor Gasket Set, Key. No.
95	691636	Screw (Throttle Valve)	,	977	, ,
98	495800	Kit-Idle Speed	+		alve Gasket Set, Key. No. 1095
104	690525 Ø	Pin-Float Hinge			, .
105	231855 Ø	Valve-Float Needle	NOTE:	All componer	nt dimensions given in U.S. inches
				1 inch = 25.4	

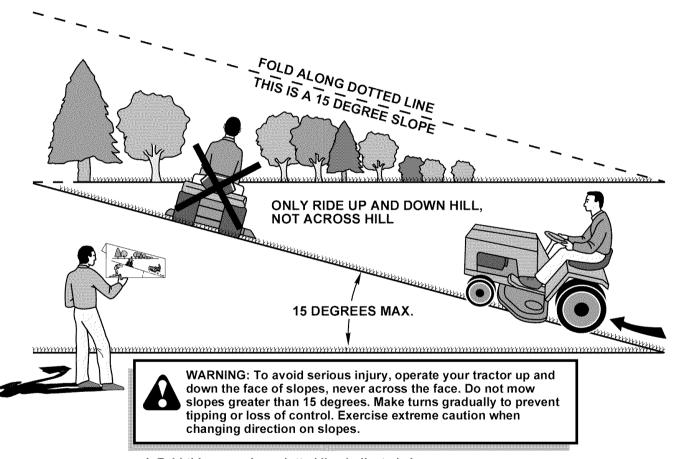
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
337	691043	Plug-Spark	868	690968 •+	Seal-Valve
358	697191	Gasket Set-Engine	914	691108	Screw (Rocker Cover)
363	19203	Flywheel Puller	943	690589 •	Seal-O Ring (Oil Pump Cover)
383	89838	Wrench-Spark Plug	947	694393	Solenoid-Fuel
404	691691	Washer (Governor Crank)	965	499613	Cover-Oil Pump
431	697122	Elbow-Intake	967	697015	Filter-Pre Cleaner
445	697153	Filter-Air Cleaner Cartridge	968	699848	Cover-Air Cleaner
462	691261	Washer (Starter Cable)	975	495933	Bowl-Float
474	696459	Alternator	977	690192	Gasket Set-Carburetor
503	691532	Strap-Starter	987	691326 Ø	Seal-Throttle Shaft
505	691251	Nut (Governor Control Lever)	1005	699043	Fan-Flywheel
510	693699	Drive-Starter	1017	690770	Screen-Oil Pump
513	692024	Clutch-Drive	1019	697143	Kit-Label
523	699908	Dipstick	1022	272475 •+	Gasket-Rocker Cover
524	691032 •	Seal-Dipstick Tube	1023	692492	Cover-Rocker Arm
525	697085	Tube-Dipstick	1024	499054	Pump-Oil
544	692034	Starter-Armature	1026	692003	Rod-Push (Intake)
552	697144	Bushing-Governor Crank		692011	Rod-Push (Exhaust)
562	691119	Bolt (Governor Control Lever)	1027	696854	Filter-Oil
579	691029	Nut (Starter Cable)	1029	691751	Arm-Rocker
584	697112	Cover-Breather Passage	1034	690822	Guide-Push Rod
601	95162	Clamp-Hose	1035	693784	Shaft-Pump
614	691620	Pin-Cotter	1036	790464	Label-Emission
616	692012	Crank-Governor	1040	699852	Plate-Trim
617	692138 Ø •	Seal-O Ring (Intake Manifold)	1044	698139	Screw (Flywheel)
634	690801 Ø	Spring/Seal Assembly	1051	691265	Ring-Retaining
		(Manual Choke)	1058	275935	Owner's Manual
634A	690802 Ø	Spring/Seal Assembly	1059	698516	Kit-Screw/Washer
		(Choke A Matic)	1070	691058	Screw (Flywheel Fan)
635	691909	Boot-Spark Plug	1090	691293	Retainer-Brush
643	698401	Retainer-Air Filter	1091	691333	Cap-Limiter
654	690958	Nut (Carburetor)	1095	690190	Gasket Set-Valve
684	697157	Screw	1119	691183	Screw (Alternator)
		(Breather Passage Cover)	1127	691657	Screw (Float Bowl)
691	692407 •	Seal-Governor Shaft	1263	697124	Reed-Breather
697	690372	Screw (Drive Cap)	1264	697104	Screw (Breather Reed)
718	690959	Pin-Locating	1266	691917 •Ø	Seal-O Ring (Intake Elbow)
729	691224	Clip-Wire		697123 Ø	Seal-O Ring (Intake Elbow)
741	697128	Gear-Timing	1267	697424	Latch-Blower Housing
750	691033	Screw (Oil Pump Cover)	1270	697156	Plug-AVS Counterweight
757	697607	Link-Counterweight	1329		6 Replacement Engine
758	697134	Counterweight	1330	272147	Repair Manual
759	697392	Pin-Counterweight			
783	693713	Gear-Pinion	•		ngine Gasket Set, Key. No. 358
789	698329	Harness-Wiring	Ø		arburetor Overhaul Kit, Key. No.
797	693167	Nut (Brush Retainer)		121	
801	691283	Cap-Drive	‡		arburetor Gasket Set, Key. No.
802	691286	Cap-End		977	
803	693757	Housing-Starter	+	Included in V	alve Gasket Set, Key. No. 1095
830	691095	Stud (Rocker Arm)			
842	691031 •	Seal-O Ring (Dipstick Tube)	NOTE:		nt dimensions given in U.S. inches
847	790442	Dipstick/Tube Assembly		1 inch = 25.4	mm
851	692424	Terminal-Spark Plug			
		· •			

SERVICE NOTES

SERVICE NOTES

SERVICE NOTES

SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



- 1. Fold this page along dotted line indicated above.
- 2. Hold page before you so that its left edge is vertically parallel to a tree trunk or other upright structure.
- 3. Sight across the fold in the direction of hill slope you want to measure.
- 4. Compare the angle of the fold with the slope of the hill.

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