

Owner's Manual



LAWN TRACTOR

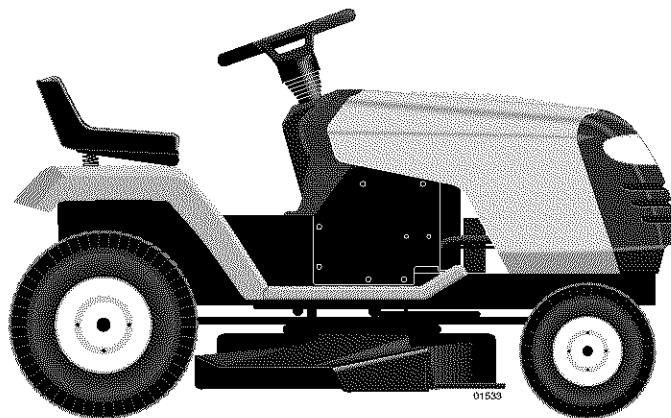
13.5 HP, 38" Mower

Electric Start

5 Speed Transaxle

Model No.

917.277131



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

IMPORTANT:

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

For answers to your questions about this product, Call:

1-800-659-5917
Sears Craftsman Help Line
5 am - 5 pm, Mon - Sat

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.

Visit our Craftsman website: www.sears.com/craftsman

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WARRANTY

LIMITED WARRANTY ON CRAFTSMAN RIDING EQUIPMENT

For one (1) year 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 full year. 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 in the manual and on the machine before starting.
- Only allow responsible adults, who are familiar with the instructions, to operate the machine.
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade.
- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.

- Be aware of the mower discharge direction and do not point it at anyone. Do not operate the mower without either the entire grass catcher or the guard in place.
- Slow down before turning.
- Never leave a running machine unattended. Always turn off blades, set parking brake, stop engine, and remove keys before dismounting.
- Turn off blades when not mowing.
- Stop engine before removing grass catcher or unclogging chute.
- Mow only in daylight or good artificial light.
- Do not operate the machine while under the influence of alcohol or drugs.
- Watch for traffic when operating near or crossing roadways.
- Use extra care when loading or unloading the machine into a trailer or truck.
- Data indicates that operators, age 60 years and above, are involved in a large percentage of riding mower-related injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.
- 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.

II. SLOPE OPERATION

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

SAFETY RULES

DO:

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

DO NOT:

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

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.

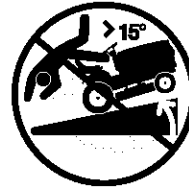
- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and *down* for small children.

- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

IV. SERVICE

- Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.
 - Use only an approved container.
 - Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling. Do not smoke.
 - Never refuel the machine indoors.
 - Never store the machine or fuel container inside where there is an open flame, such as a water heater.
- Never run a machine inside a closed area.
- Keep nuts and bolts, especially blade attachment bolts, tight and keep equipment in good condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep machine free of grass, leaves, or other debris build-up. Clean oil or fuel spillage. Allow machine to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Never make adjustments or repairs with the engine running.
- Grass catcher components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
- Check brake operation frequently. Adjust and service as required.

SAFETY RULES



- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers or children even with the blades off.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and down for small children.
- Mow up and down slopes (15° Max), not across.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Use slow speed. Choose a low gear so that you will not have to stop or shift while on the slope.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.
- 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:	1.25 Gallons Unleaded Regular
Oil Type: (API-SF-SJ):	SAE 30 (above 32°F) SAE 5W-30 (below 32°F)
Oil Capacity:	3.0 Pints
Spark Plug: (Gap: .030")	Champion RC12YC
Ground Speed (MPH):	Forward: 1st 1.1 2nd 2.2 3rd 3.4 4th 4.3 5th 5.5 Reverse: 1.7
Tire Pressure:	Front: 14 PSI Rear: 12 PSI
Charging System:	3 Amps Battery 5 Amps Headlights
Battery:	Amp/Hr: 28 Min. CCA: 230 Case Size: U1R
Blade Bolt Torque:	27-35 Ft. Lbs.

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

Should you experience any problem you cannot easily remedy, please contact a Sears or other qualified service center. We have competent, well-trained technicians and the proper tools to service or repair this tractor.

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

CUSTOMER RESPONSIBILITIES

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

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

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

REPAIR PROTECTION AGREEMENTS

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

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

Here's what's included in the Agreement:

- **Expert service** by our 12,000 professional 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.

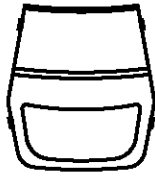
Sears has over 12,000 professional repair specialists, who have access to over 4.5 million quality parts and accessories. That's the kind of professionalism you can count on to help prolong the life of your new purchase for years to come. Purchase your Repair Protection Agreement today! **Some limitations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

SEARS INSTALLATION SERVICE

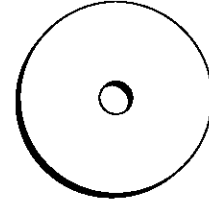
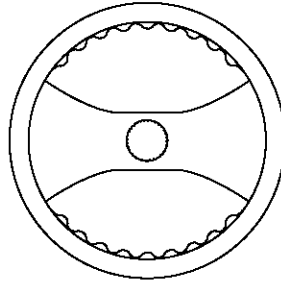
For Sears professional installation of home appliances, garage door openers, water heaters, and other major home items, in the U.S.A. call 1-800-4-MY-HOME®

UNASSEMBLED PARTS

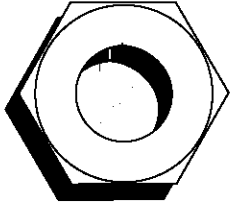
Steering Wheel



Steering Wheel Insert



(1) Large Flat Washer



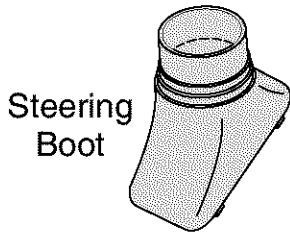
(1) Locknut
1/2-20



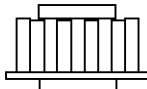
(1) Locknut
1/4-28



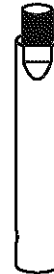
(1) Hex Bolt
1/4-28 x 1-1/4



Steering Boot

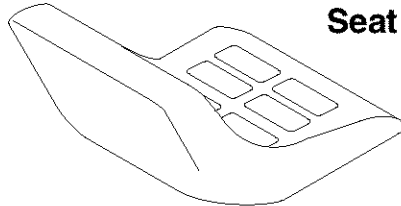


Steering Wheel Adapter



Steering Extension Shaft

Seat



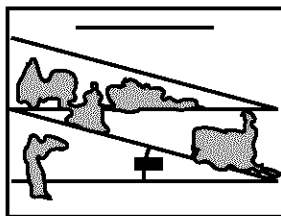
(1) Washer
17/32 x 1-3/16 x 12
Gauge



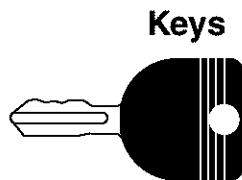
(1) Knob



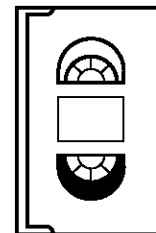
(1) Oil Drain Tube
For Future Use



Slope Sheet



Keys



Video Cassette

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. Review the video cassette before you begin.

TOOLS REQUIRED FOR ASSEMBLY

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

- (1) 3/4" wrench
- (1) 7/16" wrench
- (1) Tire pressure gauge
- (1) Pliers
- (1) Utility knife

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

TO REMOVE TRACTOR FROM CARTON

UNPACK CARTON

1. Remove all accessible loose parts and parts boxes from carton.
2. 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

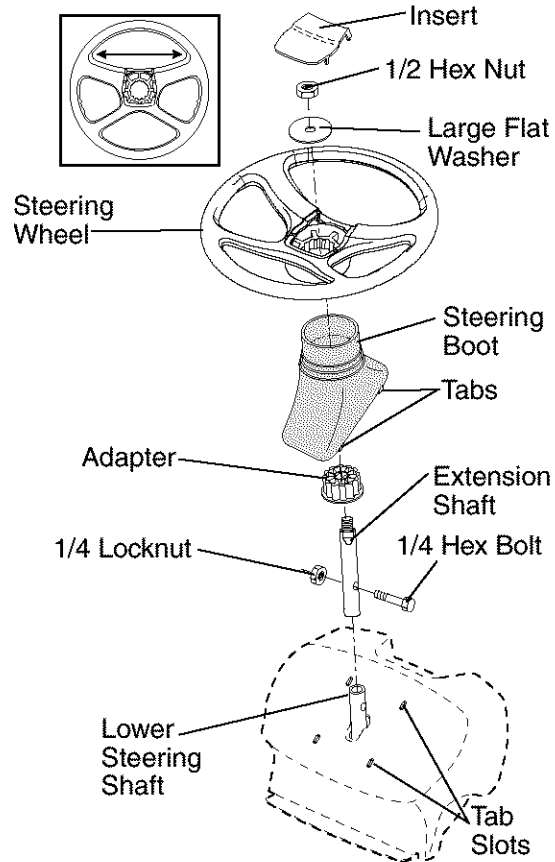
1. Slide extension shaft onto lower steering shaft. Align mounting holes in extension and lower shafts and install 1/4 hex bolt and locknut. Tighten securely.

IMPORTANT: Tighten bolt and nut securely to 10-12 ft. lbs torque.

2. 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.
4. 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, 1/2 hex nut and tighten securely.



7. Snap steering wheel insert into center of steering wheel.
8. Remove protective materials from tractor hood and grill.

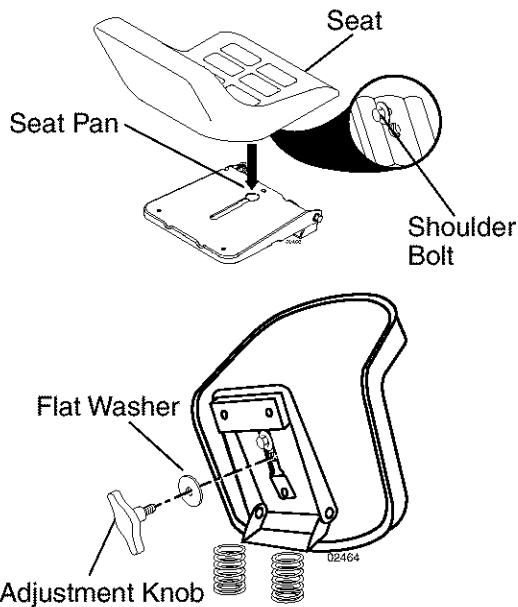
IMPORTANT: Check for and remove any staples in skid that may puncture tires where tractor is to roll off skid.

INSTALL SEAT

Adjust seat before tightening adjustment knob.

1. 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.

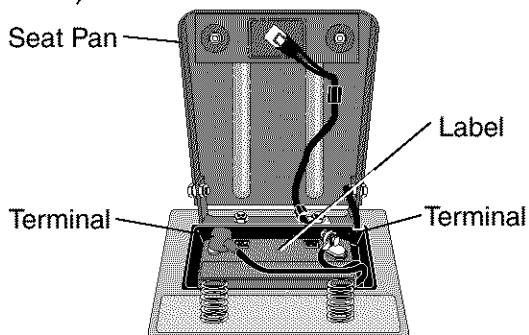
4. Push down on seat to engage shoulder bolt in slot and pull seat towards rear of tractor.
5. Pivot seat and pan forward and assemble adjustment knob and flat washer loosely. Do not tighten.
6. Lower seat into operating position and sit in seat.
7. Slide seat until a comfortable position is reached 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 seat pan 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)

1. 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.
3. 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.
6. 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.
9. 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 your new tractor, we wish to assure that you receive the best performance and satisfaction from this Quality Product.

Please review the following checklist:

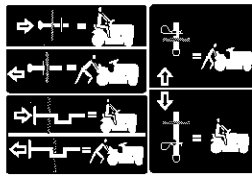
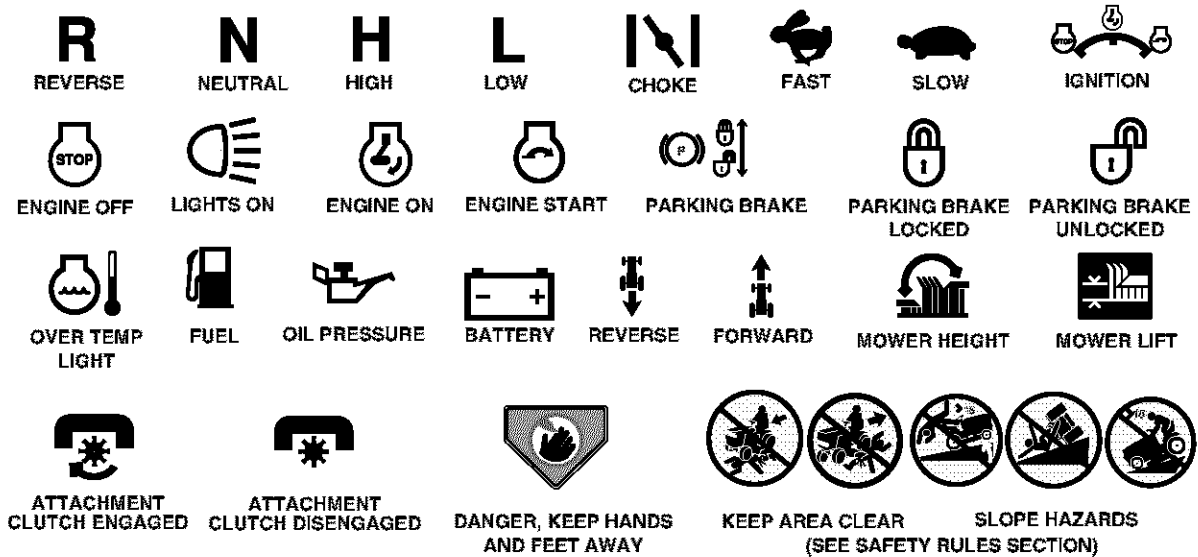
- ✓ All assembly instructions have been completed.
- ✓ No remaining loose parts in carton.
- ✓ Battery is properly prepared and charged. (Minimum 1 hour at 6 amps).
- ✓ Seat is adjusted comfortably and tightened securely.
- ✓ All tires are properly inflated. (For shipping purposes, the tires were overinflated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

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

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

OPERATION

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



FREE WHEEL
(Automatic Models only)



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.



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



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.

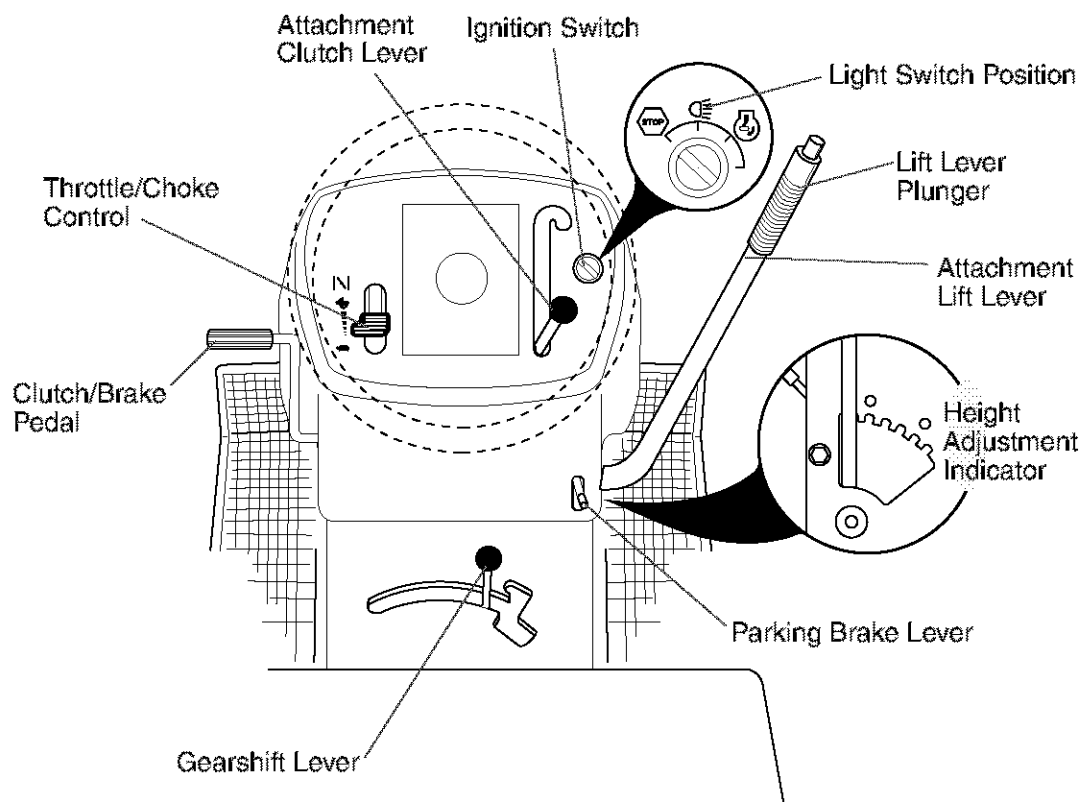


FIRE indicates a hazard which, if not avoided, could result in death, serious injury and/or property damage.

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.

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 POSITION - Turns the headlights on and off.

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

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

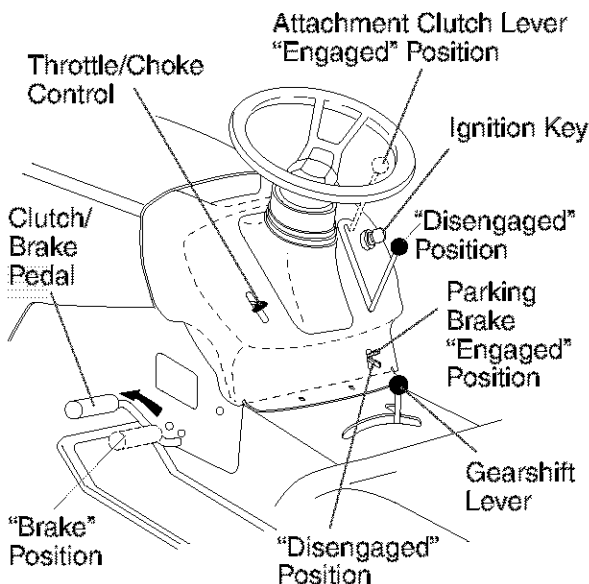


The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend standard safety glasses or a wide vision safety mask worn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

HOW TO USE YOUR TRACTOR TO SET PARKING BRAKE

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

1. Depress clutch/brake pedal all the way down and hold.
2. 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 to slow position.

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

- Turn ignition key to “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.

CAUTION: 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.

1. 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.
- For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first cut relatively high; the second to desired height.

TO OPERATE MOWER

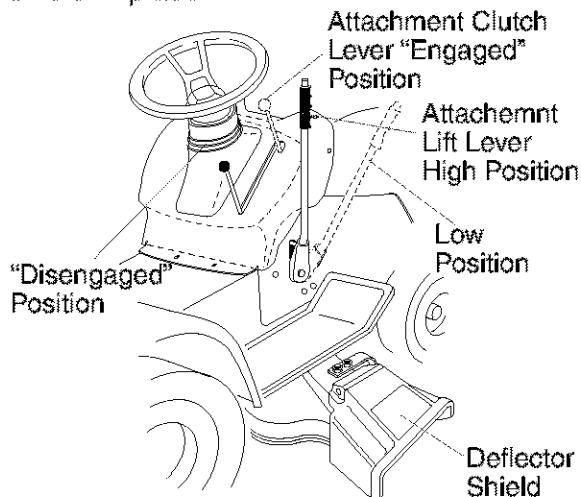
Your tractor is equipped with an operator presence sensing switch. Any attempt by the operator to leave the seat with the engine running and the attachment clutch engaged will shut off the engine. You must remain fully and centrally positioned in the seat to prevent the engine from hesitating or cutting off when operating your equipment on rough, rolling terrain or hills.

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

TO STOP MOWER BLADES -

disengage attachment clutch control.

CAUTION: Do not operate the mower without either the entire grass catcher, on mowers so equipped, or the deflector shield in place.



TO OPERATE ON HILLS

WARNING: Do not drive up or down hills with slopes greater than 15° and do not drive across any slope. Use the slope guide 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 ATTACHMENTS

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

BEFORE STARTING THE ENGINE CHECK ENGINE OIL LEVEL

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

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

ADD GASOLINE

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

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

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

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

TO START ENGINE

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

1. Sit on seat in operating position, depress clutch/brake pedal and set parking brake.
2. Place gear shift lever in neutral (N) position.
3. 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.

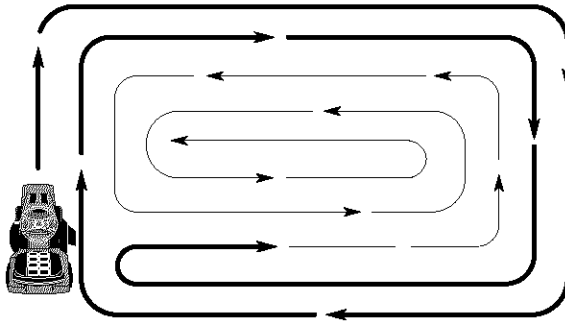
COLD WEATHER STARTING (50° F and below)

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

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

MOWING TIPS

- 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.



TRACTOR

Always observe safety rules when performing any maintenance.

BRAKE OPERATION

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

TIRES

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

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

OPERATOR PRESENCE SYSTEM

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

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

BLADE CARE

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

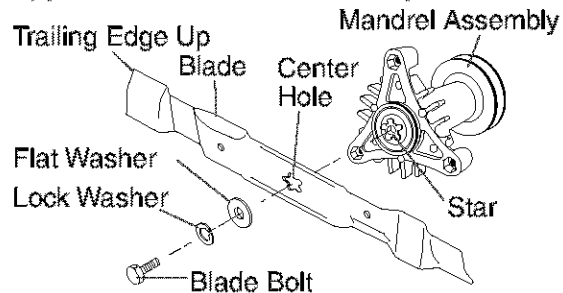
BLADE REMOVAL

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.

4. 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

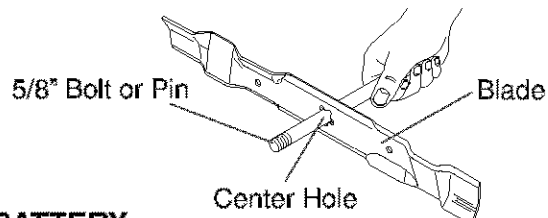
NOTE: We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

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.)

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.

1. Disconnect BLACK battery cable first then RED battery cable and remove battery from tractor.
2. 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.

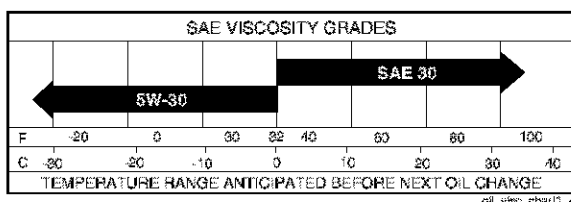
V-BELTS

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 SF-SJ. Select the oil's SAE viscosity grade according to your expected operating temperature.



NOTE: Although multi-viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, these multi-viscosity oils will result in increased oil consumption when used above 32°F.

Check your engine oil level more frequently to avoid possible engine damage from running low on oil.

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

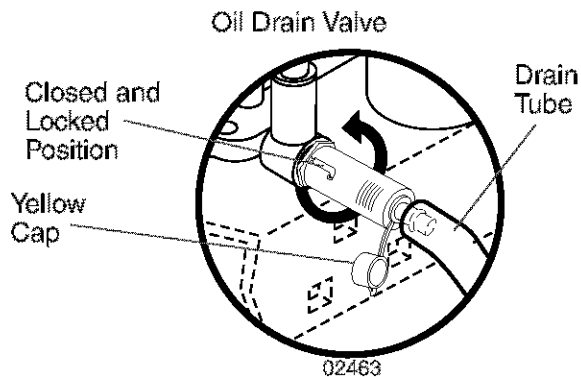
Check the crankcase oil level before starting the engine and after each eight (8)

hours of operation. Tighten oil fill cap/dipstick securely each time you check the oil level.

TO CHANGE ENGINE OIL

Determine temperature range expected before oil change. All oil must meet API service classification SF-SJ.

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



3. Unlock drain valve by pushing inward slightly and turning counterclockwise.
4. To open, pull out on the drain valve.
5. After oil has drained completely, close and lock the drain valve by pushing inward and turning clockwise until the pin is in the locked position as shown.
6. Remove the drain tube and replace the cap onto the end of the drain valve.
7. Refill engine with oil through oil fill dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PRODUCT 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.

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.

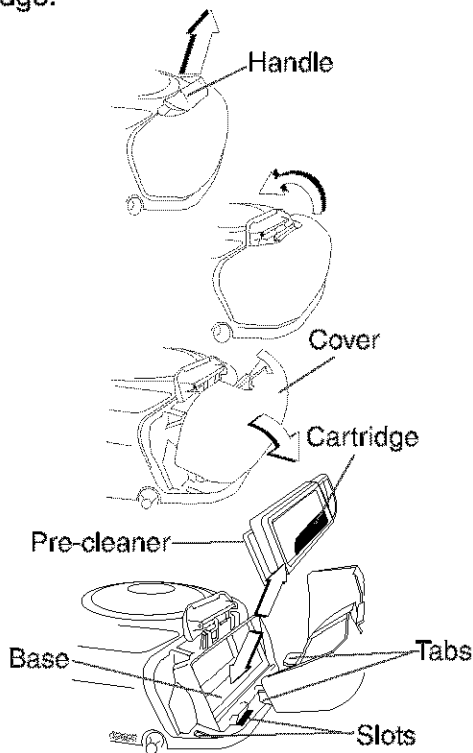
Service air cleaner more often under dusty conditions.

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.

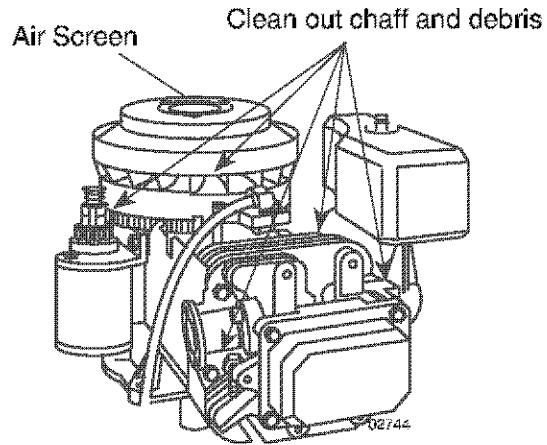


CLEAN AIR SCREEN

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

ENGINE COOLING SYSTEM

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



MUFFLER

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

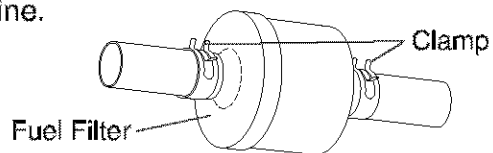
SPARK PLUG(S)

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.
2. 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

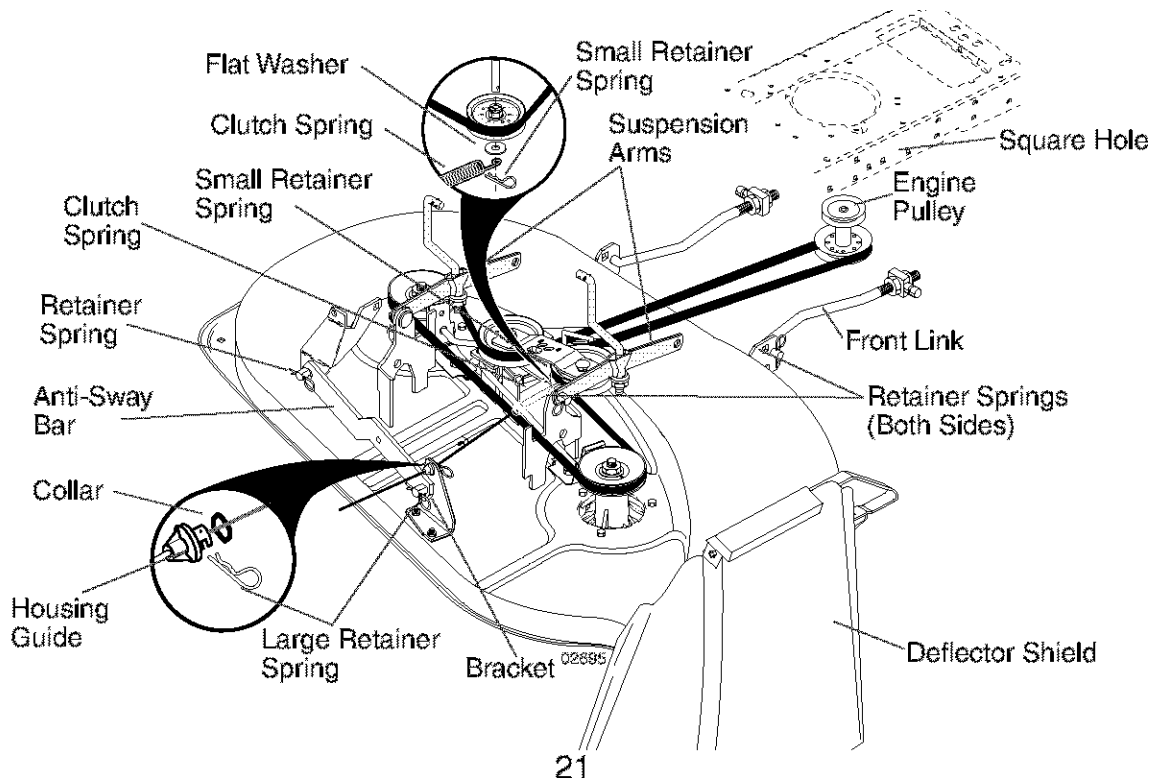
Mower will be easier to remove from the right side of tractor.

1. Place attachment clutch in "DISENGAGED" 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.
5. 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.
9. 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.
5. Connect suspension arms to rear deck brackets and secure with retainer springs.
6. 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.



TRACTOR

TO REMOVE MOWER

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

1. Place attachment clutch in "DISENGAGED" 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.
5. Remove large retainer spring, slide

TO LEVEL MOWER HOUSING

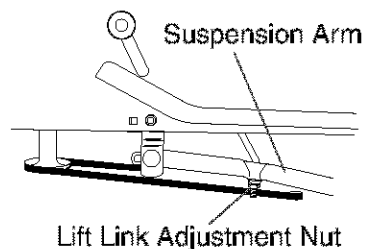
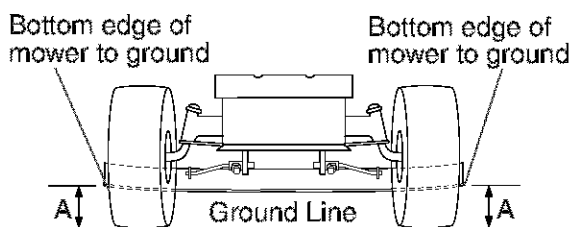
Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PRODUCT SPECIFICATIONS" section of this manual). If tires are over or underinflated, you will not properly adjust your mower.

SIDE-TO-SIDE ADJUSTMENT

- 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.



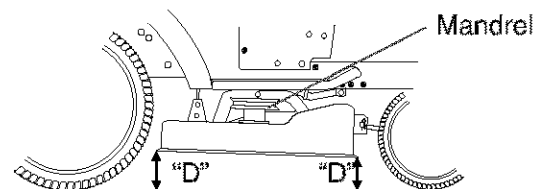
FRONT-TO-BACK ADJUSTMENT

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.

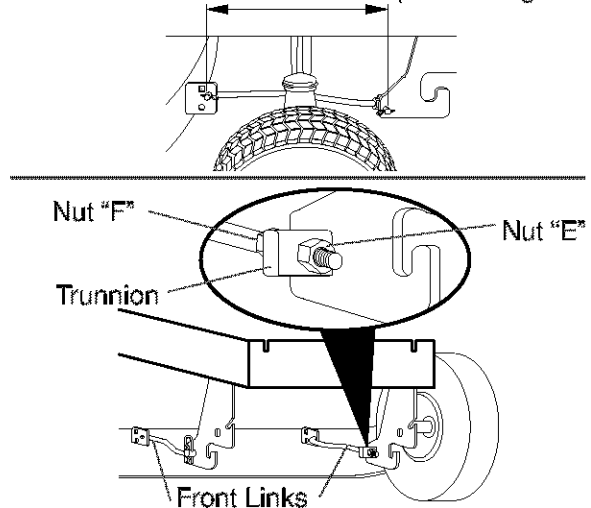
To obtain the best cutting results, the mower housing should be adjusted so that the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

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.



Both Front Links Should be Equal in Length



TO REPLACE MOWER BLADE DRIVE-BELT

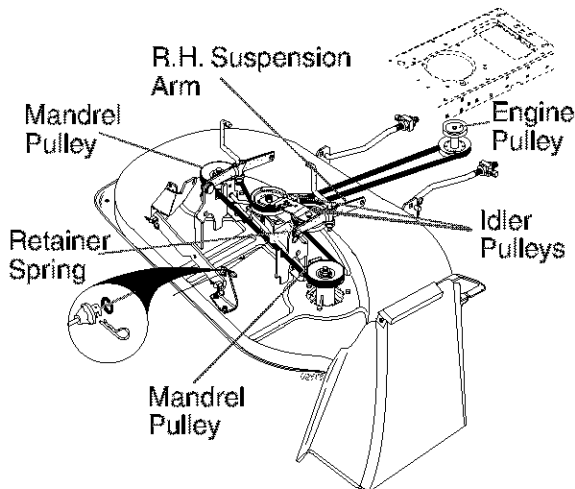
The mower blade drive belt may be replaced without tools. Park the tractor on level surface. Engage parking brake.

BELT REMOVAL -

1. Place attachment clutch in "DISENGAGED" position.
2. Move attachment lift lever forward to lower mower to its lowest position.
3. Roll belt off engine pulley.
4. Disconnect R.H. suspension arm from rear deck bracket by removing retainer spring.
5. Work belt off both mandrel pulleys and idler pulleys.
6. Pull belt away from mower.

BELT INSTALLATION -

1. Work new belt around both mandrel pulleys and idler pulleys.
2. Install new belt into engine pulley groove.
3. Reconnect R.H. suspension arm and secure with retainer spring.
4. Make sure belt is in all pulley grooves and inside all belt guides.



TO CHECK AND ADJUST BRAKE

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

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

TO CHECK BRAKE

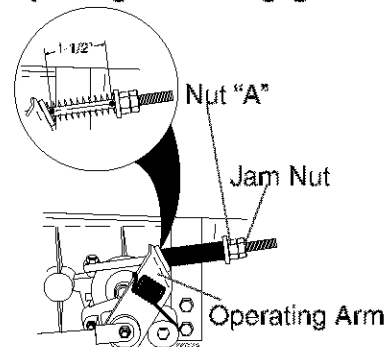
1. Park tractor on a level, dry concrete or paved surface, depress clutch/brake pedal all the way down and engage parking brake.
2. Place gear shift lever in neutral (N) position.

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

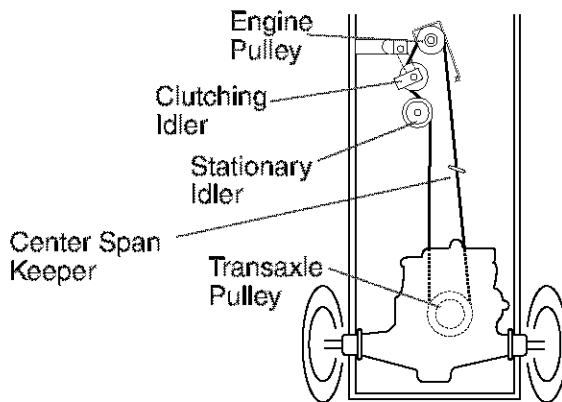
Park the tractor on level surface. Engage parking brake. For assistance, there is a belt installation guide decal on bottom side of left footrest.

BELT REMOVAL -

1. Remove mower (See "TO REMOVE MOWER" in this section of manual).
- NOTE:** Observe entire motion drive belt and position of all belt guides and keepers.
2. 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.
6. Install mower (See "TO INSTALL MOWER" in this section of manual).



TO ADJUST STEERING WHEEL ALIGNMENT

If steering wheel crossbars are not horizontal (left to right) when wheels are positioned straight forward, remove steering wheel and reassemble 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

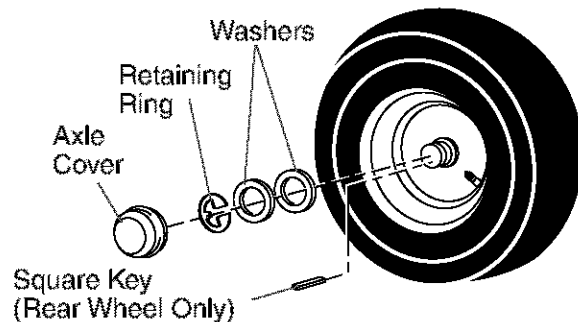
1. Block up axle securely.
2. Remove axle cover, retaining ring and washers to allow wheel removal (rear wheels have a square key - Do not lose).

3. Repair tire and reassemble.

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

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

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



TO START ENGINE WITH A WEAK BATTERY

WARNING: 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:

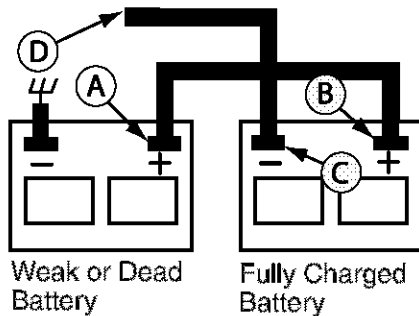
IMPORTANT: Your tractor is equipped with a 12 volt system. The other vehicle must also be a 12 volt system. Do not use your tractor battery to start other vehicles.

TO ATTACH JUMPER CABLES -

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

TO REMOVE CABLES, REVERSE ORDER -

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

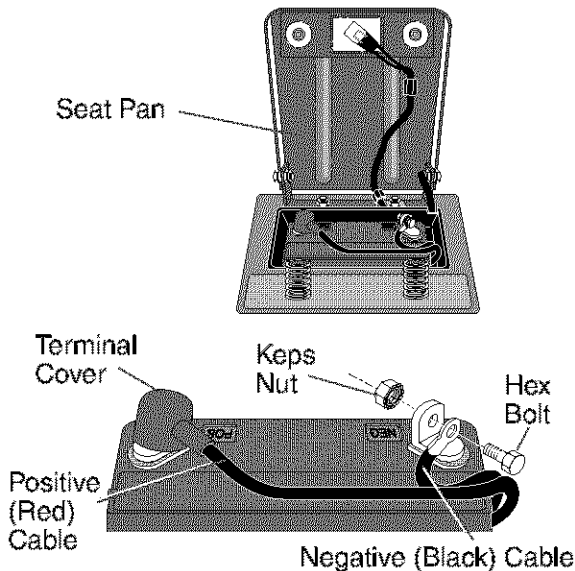


REPLACING BATTERY

⚠ 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 seat pan to raised position.
2. Disconnect BLACK battery cable first then RED battery cable and carefully remove battery from tractor.
3. Install new battery with terminals in same position as old battery.
4. First connect RED battery cable to positive (+) terminal with hex bolt and keps nut as shown. Tighten securely. Slide terminal cover over terminal
5. Connect BLACK grounding cable to negative (-) terminal with remaining hex bolt and keps nut. Tighten securely.



TO REPLACE HEADLIGHT BULB

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

INTERLOCKS AND RELAYS

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

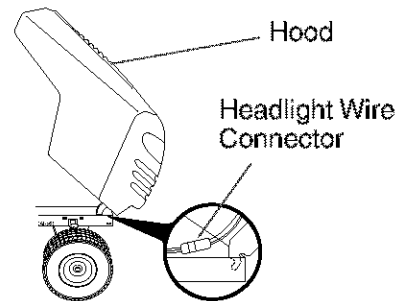
- Check wiring. See electrical wiring diagram in the Repair Parts section.

TO REPLACE FUSE

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

TO REMOVE HOOD AND GRILL ASSEMBLY

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



ENGINE

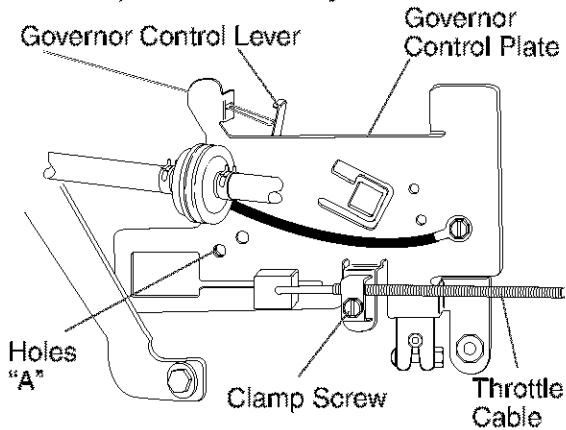
Maintenance, repair, or replacement of the emission control devices and systems, which are being done at the customers expense, may be performed by any non-road engine repair establishment or individual. Warranty repairs must be performed by an authorized engine manufacturer's service outlet.

TO ADJUST THROTTLE CONTROL CABLE

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

1. With engine not running, move throttle control lever from slow to choke position. Slowly move lever from choke to fast position.

2. 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 -

1. 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.
2. 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.

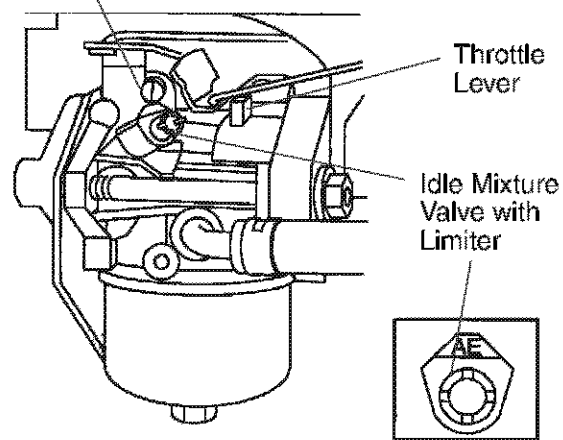
ACCELERATION TEST -

4. 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 or 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.

Idle Speed Screw



STORAGE

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

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

TRACTOR

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

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

BATTERY

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

ENGINE

FUEL SYSTEM

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

Also, alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

- Empty the fuel tank by starting the engine and letting it run until the fuel lines and carburetor are empty.
- Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.
- Use fresh fuel next season.

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

ENGINE OIL

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

CYLINDER(S)

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

OTHER

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

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

TROUBLESHOOTING CHART:

See appropriate section in manual unless directed to Sears service center

PROBLEM	CAUSE	CORRECTION
Will not start	<ol style="list-style-type: none"> 1. Out of fuel. 2. Engine not "CHOKED" properly. 3. Engine flooded. 4. Bad spark plug. 5. Dirty air filter. 6. Dirty fuel filter. 7. Water in fuel. 8. Loose or damaged wiring. 9. Carburetor out of adjustment. 10. Engine valves out of adjustment. 	<ol style="list-style-type: none"> 1. Fill fuel tank. 2. See "TO START ENGINE" in Operation section. 3. Wait several minutes before attempting to start. 4. Replace spark plug. 5. Clean/replace air filter. 6. Replace fuel filter. 7. Empty fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter. 8. Check all wiring. 9. See "To Adjust Carburetor" in Service and Adjustments section. 10. Contact a Sears or other qualified service center.
Hard to start	<ol style="list-style-type: none"> 1. Dirty air filter. 2. Bad spark plug. 3. Weak or dead battery. 4. Dirty fuel filter. 5. Stale or dirty fuel. 6. Loose or damaged wiring. 7. Carburetor out of adjustment. 8. Engine valves out of adjustment. 	<ol style="list-style-type: none"> 1. Clean/replace air filter. 2. Replace spark plug. 3. Recharge or replace battery. 4. Replace fuel filter. 5. Empty fuel tank and refill tank with fresh, clean gasoline. 6. Check all wiring. 7. See "To Adjust Carburetor" in Service and Adjustments section. 8. Contact a Sears or other qualified service center.
Engine will not turn over	<ol style="list-style-type: none"> 1. Clutch/brake pedal not depressed. 2. Attachment clutch is engaged. 3. Weak or dead battery. 4. Blown fuse. 5. Corroded battery terminals. 6. Loose or damaged wiring. 7. Faulty ignition switch. 8. Faulty solenoid or starter. 9. Faulty operator presence switch(es). 	<ol style="list-style-type: none"> 1. Depress clutch/brake pedal. 2. Disengage attachment clutch. 3. Recharge or replace battery. 4. Replace fuse. 5. Clean battery terminals. 6. Check all wiring. 7. Check/replace ignition switch. 8. Check/replace solenoid or starter. 9. Contact a Sears or other qualified service center.
Engine clicks but will not start	<ol style="list-style-type: none"> 1. Weak or dead battery. 2. Corroded battery terminals. 3. Loose or damaged wiring. 4. Faulty solenoid or starter. 	<ol style="list-style-type: none"> 1. Recharge or replace battery. 2. Clean battery terminals. 3. Check all wiring. 4. Check/replace solenoid or starter.

TROUBLESHOOTING CHART:

See appropriate section in manual unless directed to Sears service center

PROBLEM	CAUSE	CORRECTION
Loss of power	<ol style="list-style-type: none"> 1. Cutting too much grass/too fast. 2. Throttle in "CHOKE" position. 3. Build-up of grass, leaves and trash under mower. 4. Dirty air filter. 5. Low oil level/dirty oil. 6. Faulty spark plug. 7. Dirty fuel filter. 8. Stale or dirty fuel. 9. Water in fuel. 10. Spark plug wire loose. 11. Dirty engine air screen/fins. 12. Dirty/clogged muffler. 13. Loose or damaged wiring. 14. Carburetor out of adjustment. 15. Engine valves out of adjustment. 	<ol style="list-style-type: none"> 1. Raise cutting height/reduce speed. 2. Adjust throttle control. 3. Clean underside of mower housing. 4. Clean/replace air filter. 5. Check oil level/change oil. 6. Clean and regap or change spark plug. 7. Replace fuel filter. 8. Empty fuel tank and refill tank with fresh, clean gasoline. 9. Empty fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter. 10. Connect and tighten spark 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 section. 15. Contact a Sears or other qualified service center.
Excessive vibration	<ol style="list-style-type: none"> 1. Worn, bent or loose blade. 2. Bent blade mandrel. 3. Loose/damaged part(s). 	<ol style="list-style-type: none"> 1. Replace blade. Tighten blade bolt. 2. Contact a Sears or other qualified service center. 3. Tighten loose part(s). Replace damaged parts.
Engine continues to run when operator leaves seat with attachment clutch engaged	<ol style="list-style-type: none"> 1. Faulty operator-safety presence control system. 	<ol style="list-style-type: none"> 1. Check wiring, switches and connections. If not corrected, contact Sears or other qualified service center.
Poor cut - uneven	<ol style="list-style-type: none"> 1. Worn, bent or loose blade. 2. Mower deck not level. 3. Buildup of grass, leaves, and trash under mower. 4. Bent blade mandrel. 5. Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels. 	<ol style="list-style-type: none"> 1. Replace blade. Tighten blade bolt. 2. Level mower deck. 3. Clean underside of mower housing. 4. Contact a Sears or other qualified service center. 5. Clean around mandrels to open vent holes.

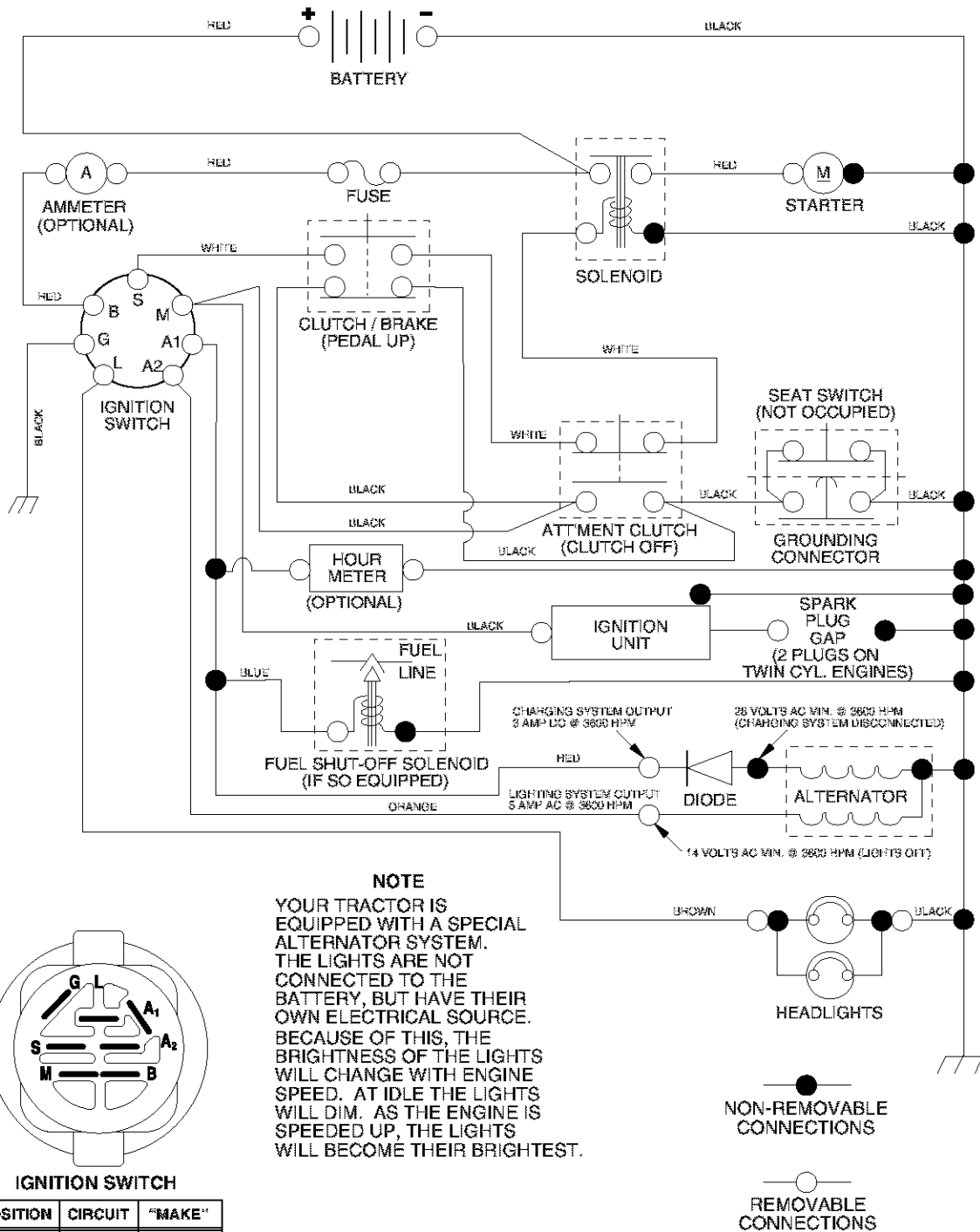
TROUBLESHOOTING CHART:

See appropriate section in manual unless directed to Sears service center

PROBLEM	CAUSE	CORRECTION
Mower blades will not rotate	<ol style="list-style-type: none">1. Obstruction in clutch mechanism.2. Worn/damaged mower drive belt.3. Frozen idler pulley.4. Frozen blade mandrel.	<ol style="list-style-type: none">1. Remove obstruction.2. Replace mower drive belt.3. Replace idler pulley.4. Contact a Sears or other qualified service center.
Poor grass discharge	<ol style="list-style-type: none">1. Engine speed too slow.2. Travel speed too fast.3. Wet grass.4. Mower deck not level.5. Low/uneven tire air pressure.6. Worn, bent or loose blade.7. Buildup of grass, leaves and trash under mower.8. Mower drive belt worn.9. Blades improperly installed.10. Improper blades used.11. Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.	<ol style="list-style-type: none">1. Place throttle control in "FAST" position.2. Shift to slower speed.3. Allow grass to dry before mowing.4. Level mower deck.5. Check tires for proper air pressure.6. Replace/sharpen blade. Tighten blade bolt.7. Clean underside of mower housing.8. Replace mower drive belt.9. Reinstall blades sharp edge down.10. Replace with blades listed in this manual.11. Clean around mandrels to open vent holes.
Headlight(s) not working (if so equipped)	<ol style="list-style-type: none">1. Switch is "OFF".2. Bulb(s) or lamp(s) burned out.3. Faulty light switch.4. Loose or damaged wiring.5. Blown fuse.	<ol style="list-style-type: none">1. Turn switch "ON".2. Replace bulb(s) or lamp(s).3. Check/replace light switch.4. Check wiring and connections.5. Replace fuse.
Battery will not charge	<ol style="list-style-type: none">1. Bad battery cell(s).2. Poor cable connections.3. Faulty regulator (if so equipped).4. Faulty alternator.	<ol style="list-style-type: none">1. Replace battery.2. Check/clean all connections.3. Replace regulator.4. Replace alternator.
Engine "backfires" when turning engine "OFF"	<ol style="list-style-type: none">1. Engine throttle control not set at "SLOW" position for 30 seconds before stopping engine.	<ol style="list-style-type: none">1. Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.

TRACTOR -- MODEL NUMBER 917.277131

SCHEMATIC



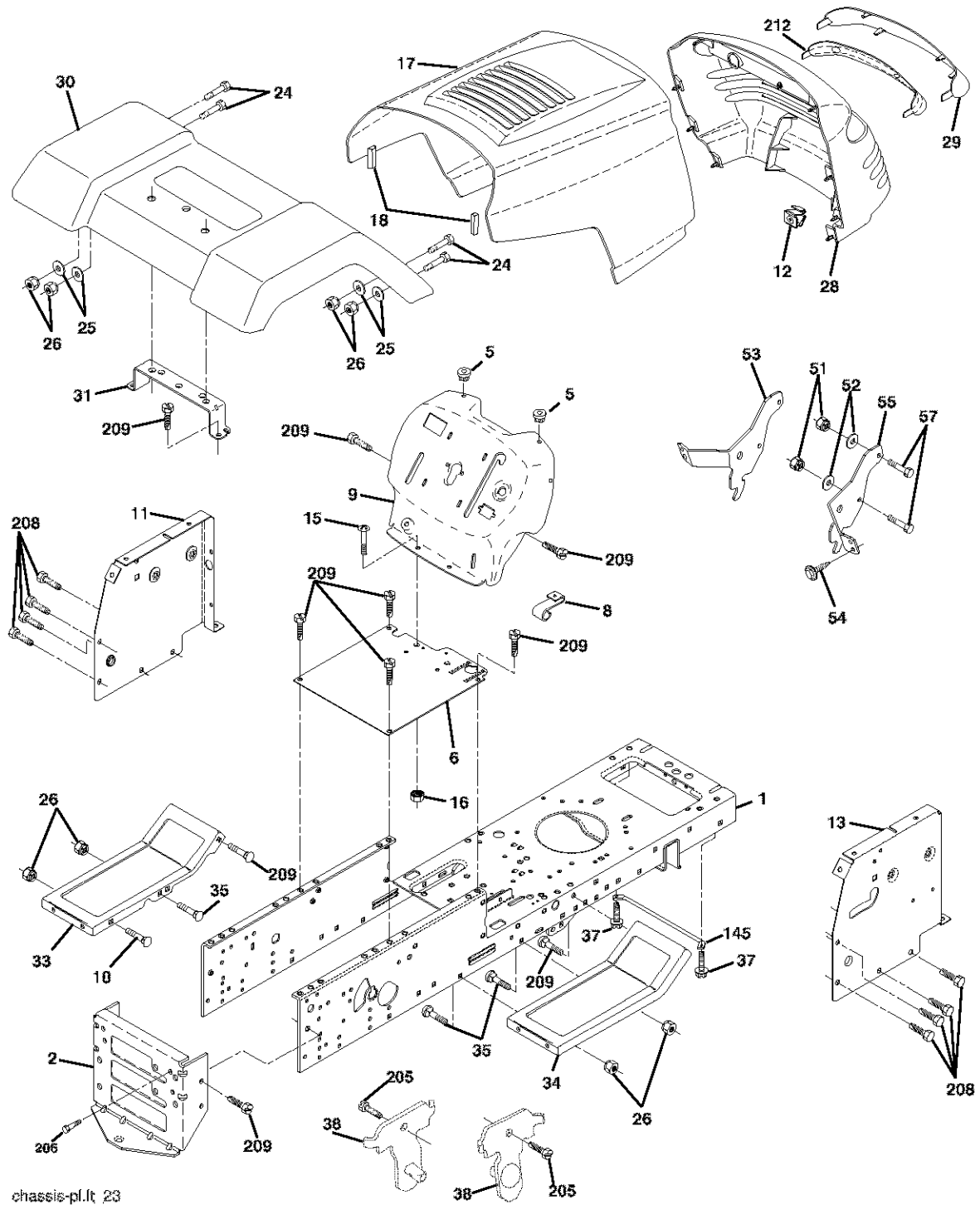
ELECTRICAL**TRACTOR -- MODEL NUMBER 917.277131**

KEY PART NO.	PART NO.	DESCRIPTION
1	163465	Battery
2	74760412	Bolt, Hex Head 1/4-20 Unc x 3/4
8	176689	Box Battery Fender
16	176138	Switch, Interlock
21	175685	Harness, Light Socket (Includes 4152J)
22	4152J	Bulb, Light
24	4799J	Cable, Battery, 6 Gauge, Red, 11"
25	146147	Cable, Battery, 6 Gauge, Red, W/16 Wire
26	175158	Fuse
27	73510400	Nut Keps Hex 1/4-20 Unc
28	4207J	Cable, Ground, 6 Gauge, Black, 12"
29	121305X	Switch, Plunger
30	175566	Switch, Ignition
33	140403	Key, Ignition
40	179720	Harness, Ignition
41	71110408	Bolt, Hex Head, Fin. 1/4-20 x 1/2
42	131563	Cover, Terminal, Red
43	178861	Solenoid
48	140844	Adaptor Ammeter Rectangular
52	141940	Protection Wire Loop
90	180449	Cover Terminal Battery

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

TRACTOR -- MODEL NUMBER 917.277131

CHASSIS AND ENCLOSURES



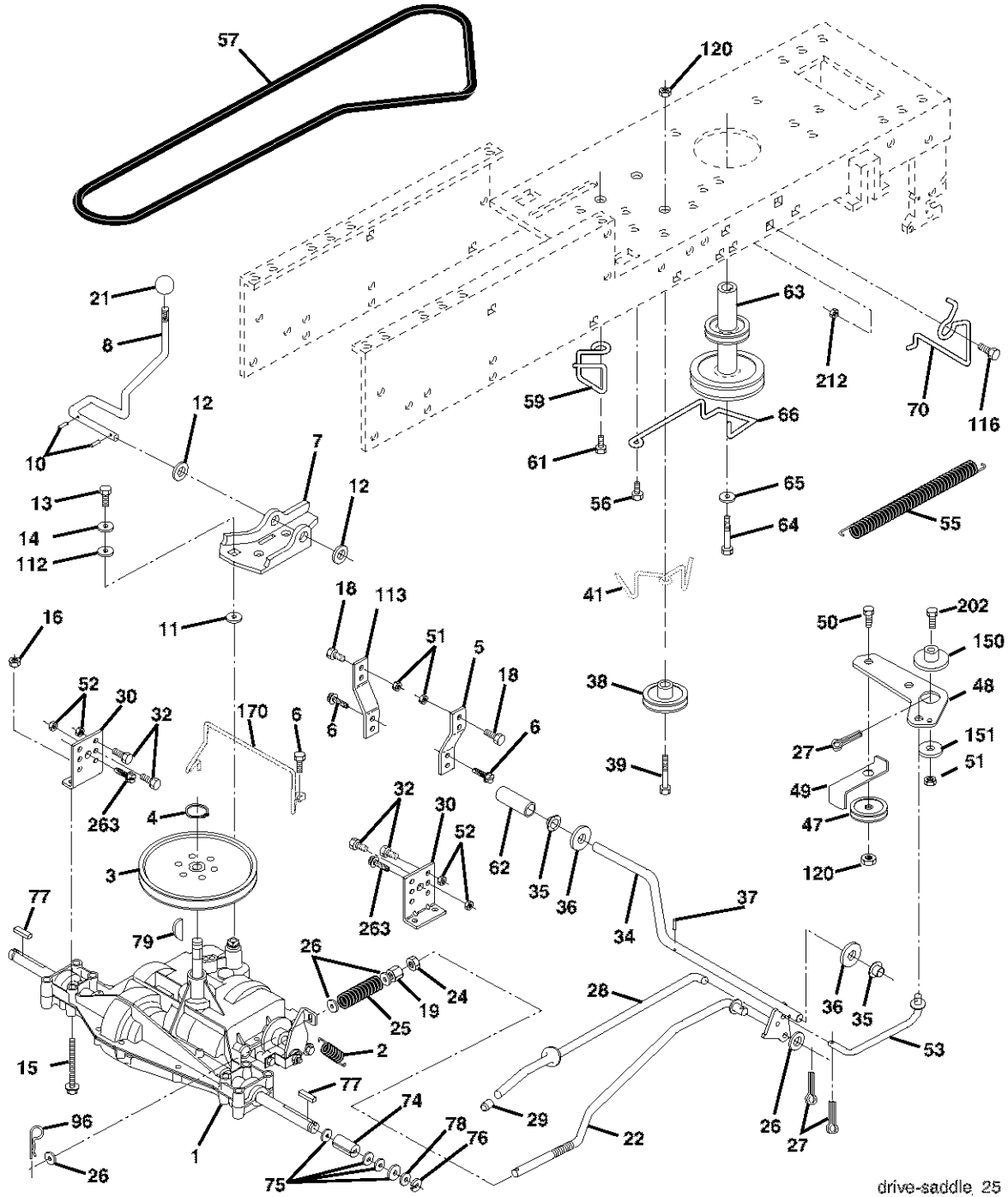
**TRACTOR -- MODEL NUMBER 917.277131
CHASSIS AND ENCLOSURES**

KEY NO.	PART NO.	DESCRIPTION
1	174620	Chassis
2	176554	Drawbar
3	17060612	Screw 3/8-16 x 3/4
5	155272	Bumper Hood/Dash
6	174643X014	Saddle Slkscr Flt LT
8	155138	Clip Retainer Slide-On
9	168347X014	Dash
10	72140608	Bolt Rdhd Sqnk 3/8-16 Unc x 1
11	174996	Panel Dash LH
12	145660	Clip Tinnerman Grille P/L
13	172105X010	Panel Slkscr Dash RH
15	74180512	Screw Mach TRHD 5/16-18 Unc x 3/4
16	73510500	Nut Keps 5/16-18 Unc
17	159639X558	Hood Asm
18	184921	Bumper Hood
24	74780616	Bolt Fin Hex 3/8-16 Unc x 1 Gr. 5
25	19131312	Washer 13/32 X 13/16 x 12 Ga
26	73800600	Nut Hex Lock W/Ins. 3/8-16 Unc
28	179777	Grille/Lens Asm
29	150209X599	Lens Headlight Bar Clear
30	169465X558	Fender
31	136619	Bracket Fender Repl 109873x
33	179716X558	Footrest Pnt Lh
34	179717X558	Footrest Pnt Rh
35	72110606	Bolt Rdhd Sht Sqnk 3/8-16 x 3/4
37	17490508	Screw Thdrol 5/16-18 x 1/2
38	175710	Bracket Asm Pivot Mower Rear
51	73800400	Nut Lock Hex w/Ins 1/4-20
52	19091416	Washer 9/32 x 7/8 x 16 Ga.
53	144697	Bracket, Grille LH
54	161464	Screw
55	144696	Bracket, Grille RH
57	74780412	Bolt Hex 1/4-20 x 3/4
145	156524	Rod Pivot Chassis/Hood
205	17490608	Screw Thdrol 3/8-16 x 1/2
206	170165	Bolt Shoulder 5/16-18
208	17670608	Screw thdrol 3/8-16 x 1/2
209	17000612	Screw Hex Wsh Thdrol 3/8-16
212	156494	Insert Lens Reflective
--	5479J	Plug Button Blk 359 Dia Choke

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

TRACTOR -- MODEL NUMBER 917.277131

GROUND DRIVE



drive-saddle, 25

TRACTOR -- MODEL NUMBER 917.277131

GROUND DRIVE

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	-----	Transaxle Dana D4360-139 (Order parts from transaxle Manufacturer)	47	127783	Pulley Idler V Groove Plastic
2	146682	Spring Return Brake T/a Zinc	48	154407	Bellcrank Asm. Clutch
3	123666X	Pulley Transaxle 18/20" tires	49	123205X	Retainer Belt Style Spring
4	12000028	Ring Retainer # 5100-62	50	72110612	Bolt 3/8-16 x 1-1/2 Gr. 5
5	121520X	Strap Torque 30 Degrees	51	73680600	Nut Crownlock 3/8-16 Unc
6	17000512	Screw 5/16-18 x 3/4	52	73680500	Nut Crown Lock 5/16-18
7	162240	Bracket Saddle Shift T/a	53	105710X	Link Clutch 7 66
8	131679	Rod Shf Sdl LY/YT Str Bik	55	105709X	Spring Return Clutch 6 75
10	76020416	Pin Cotter 1/8 x 1 Cad	56	17060620	Screw 3/8-16 x 1-1/4
11	105701X	Washer Plate 388 Sq Hole	57	160855	V-Belt Gd Drive 9530
12	19151216	Washer 15/32 x 3/4 x 16ga	59	169691	Keeper Belt Centerspan
13	74550412	Bolt 1/4-28unf Gr8 W/Patch	61	17120614	Screw 3/8-16 x .875
14	10040400	Washer Lock Hvy Helical 1/4	62	8883R	Cover Pedal Bik Round
15	74490544	Bolt Hex Flghd 5/16-18 x Gr. 5	63	175410	Pulley Eng Cl Cable
16	73800500	Nut 5/16-18	64	173937	Bolt Hex 7/16-20 x 4 Gr 5-1.5
18	74780616	Bolt Fin Hex 3/8-16 Unc x 1 Gr. 5	65	10040700	Washer Lock Hchl Spr 7/16
19	73800600	Nut Lock Hex W/Ins. 3/8-16 Unc	66	154778	Keeper Belt Engine FP
21	106933X	Knob Rd 1/2-13 Plstc Thds	70	134683	Guide Belt Mower Drive RH
22	130804	Rod Brake Bik Zinc 26 840	74	109502X	Spacer Axle
24	73350600	Nut Hex Jam 3/8-16 Unc	75	121749X	Washer 25/32 x 1-1/4 x16 Ga
25	106888X	Spring Rod Brake 2 00 Zinc	76	12000001	E-ring #5133-75
26	19131316	Washer 13/32 x 13/16 x 16 Ga.	77	123583X	Key Square 2 0 x 1845/ 1865
27	76020412	Pin Cotter 1/8 x 3/4 Cad	78	121748X	Washer 25/32 x1-5/8 x 16 Ga
28	175765	Rod Brake Parking Lt/Yt	79	2228M	Key Woodruff #9 3/16 x 3/4
29	71673	Cap Brake Parking	96	4497H	Retainer Spring 1
30	174973	Bracket Mtg Transaxle	112	19091210	Washer 9/32 x 3/4 x 10 Ga
32	74760512	Bolt Hex Hd 5/16-18 Unc x 3/4	113	127285X	Strap Torque LH LT
34	175578	Shaft Asm Pedal Foot Nibbed	116	72140608	Bolt 3/8-16 x 1
35	120183X	Bearing Nylon Bik 629 Id	120	73900600	Nut Lock Flg 3/8-16
36	19211616	Washer 21/32 x 1 x 16 Ga	150	175456	Spacer Retainer
37	1572H	Pin Roll 3/16 x 1"	151	19133210	Washer 13/32 x 2 x 10 Ga.
38	179114	Pulley Composite Flat	170	178394	Keeper Belt Transaxle Gear
39	72110622	Bolt Fin Hex 3/8-16 Unc x 2-3/4 Gr. 5	202	72110614	Bolt Carr. Sh 3/8-16 x 1-3/4 Gr. 5
41	175556	Keeper Belt Idler	212	145212	Nut Hex Flange Lock
			263	17000612	Screw 3/8-16 x 3/4

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

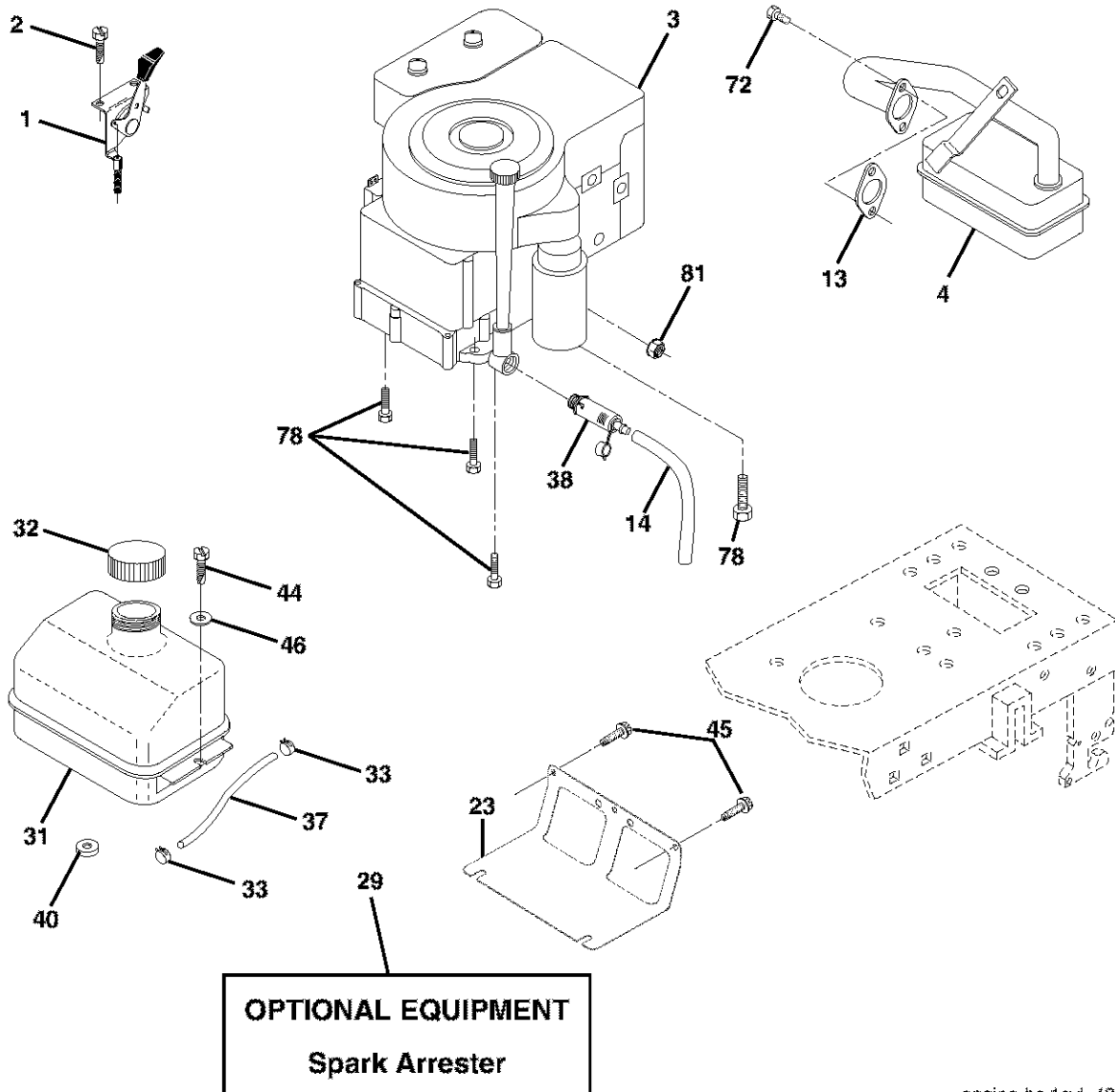
STEERING**TRACTOR -- MODEL NUMBER 917.277131**

KEY NO.	PART NO.	DESCRIPTION
1	140044X428	Steering Wheel
2	175131	Axle Assembly
3	169840	Spindle Assembly, L.H.
4	169839	Spindle Assembly, R.H.
5	6266H	Bearing, Race, Thrust, Hardened
6	121748X	Washer 25/32 x 1-5/8 x 16 Gauge
7	19272016	Washer 27/32 x 1-1/4 x 16 Gauge
8	12000029	Ring, Klip
9	3366R	Bearing, Steering Column
10	175121	Draglink
11	10040600	Washer, Lock
12	73940800	Nut Hex Jam Toplock 1/2-20
13	136518	Spacer Bearing Axle Front
15	145212	Hexflange Lock
17	180641	Shaft Assembly, Steering
26	126847X	Bushing, Link, Drag
28	19131416	Washer 13/32 x 7/8 x 16 Gauge
29	17060612	Screw, 3/8-16 x 3/4
30	76020412	Pin
32	130465	Rod, Tie
36	155099	Bushing, Steering
37	152927	Screw
38	140045X428	Cap, Steering Wheel
39	19183812	Washer 9/16 x 2-3/8
40	73540600	Nut Crownlock 3/8-24
41	186737	Adaptor, Steering Wheel
42	145054X428	Boot, Steering
43	121749X	Washer 25/32 x 1-1/4 x 16 Gauge
44	180640	Shaft Extension Steering
46	121232X	Cap, Spindle
47	183226	Fitting, Grease
51	73540400	Nut 1/4-28
54	71130420	Bolt Hex 1/4-28 x 1-1/4
65	160367	Spacer Brace Axle
67	72140618	Bolt, Rdhd Sq 3/8-16 Unc x 2-1/4
68	169827	Axle, Brace
71	175146	Steering Asm
82	169835	Bracket Susp Chassis Front
85	133835	Fastener Christmas Tree
88	175118	Shoulder Bolt
91	175553	Clip Steering
95	188967	Washer Hardened

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

TRACTOR -- MODEL NUMBER 917.277131

ENGINE



engine-bs.1cyl 49

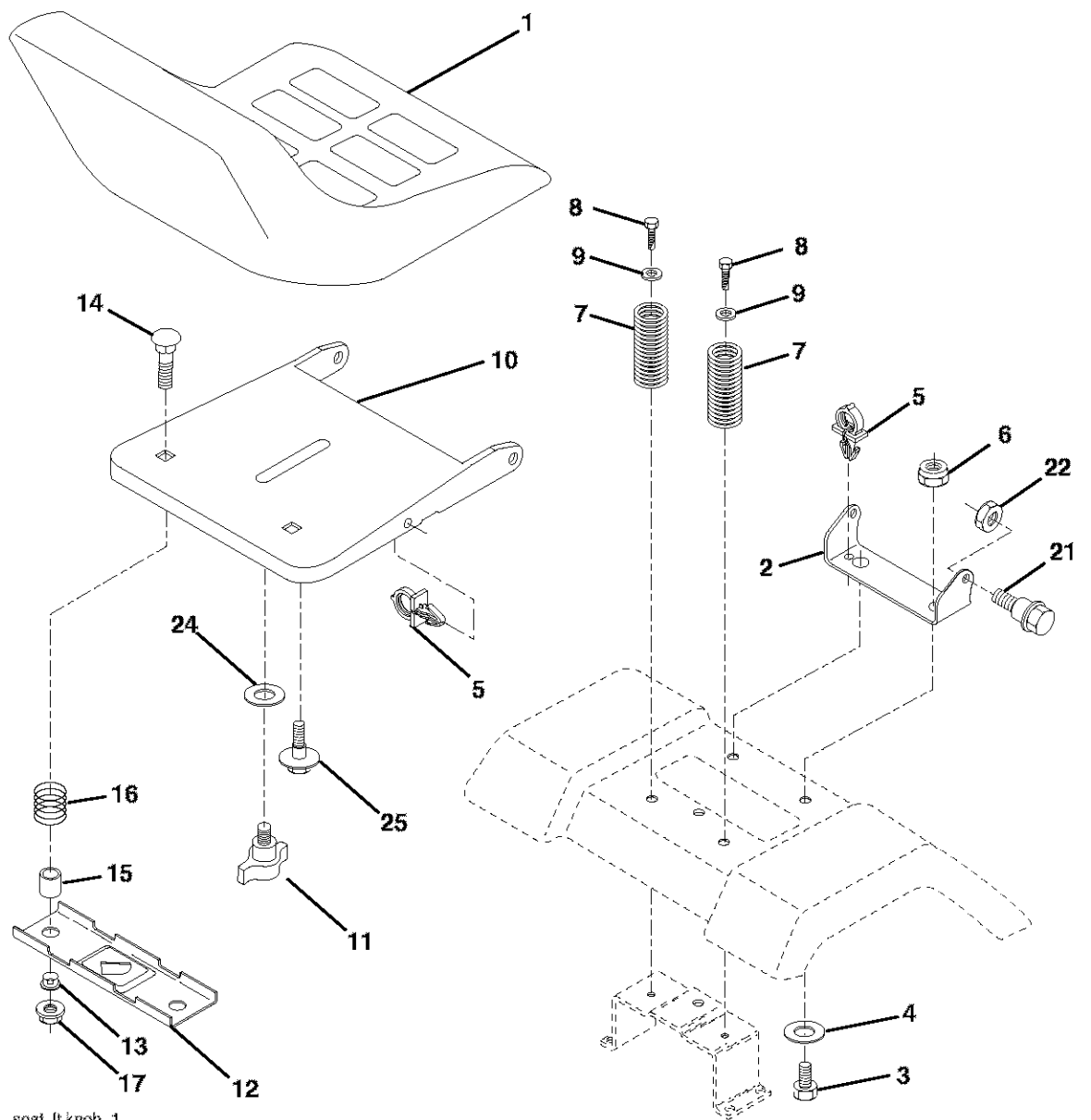
KEY PART NO.	NO.	DESCRIPTION
1	170551	Control Th/ch
2	17720408	Screw Hex Thd Cut 1/4-20 x 1/2
3	-----	Engine Briggs Model 21B807-0290-E1 (See Breakdown)
4	179758	Muffler
13	165291	Gasket Eng 1 3/13 Id Tin Plated
14	148456	Tube Drain Oil Easy
23	169837	Shield Browning
29	137180	Kit Spark Arrester (Flat Scrn)
31	184900	Tank Fuel Front 1 25
32	140527	Cap Asm Fuel
33	123487X	Clamp Hose Blk
37	137040	Line Fuel 20"

KEY PART NO.	NO.	DESCRIPTION
38	181654	Plug Drain Oil Easy
40	124028X	Bushing Snap Nyl Blk Fuel Line
44	17670412	Screw Hexwsh Thdrol 1/4-20 x 3/4
45	17000612	Screw Hex Wsh Thdrol 3/8-16
46	19091416	Washer 9/32 x 7/8 x 16 ga
72	183906	Screw Hex Hd 5/16-18 x 1
78	17060620	Screw 3/8-16 x 1-1/4
81	73510400	Nut Keps Hex 1/4-20 Unc

KEY PART NO.	NO.	DESCRIPTION
38	181654	Plug Drain Oil Easy
40	124028X	Bushing Snap Nyl Blk Fuel Line
44	17670412	Screw Hexwsh Thdrol 1/4-20 x 3/4
45	17000612	Screw Hex Wsh Thdrol 3/8-16
46	19091416	Washer 9/32 x 7/8 x 16 ga
72	183906	Screw Hex Hd 5/16-18 x 1
78	17060620	Screw 3/8-16 x 1-1/4
81	73510400	Nut Keps Hex 1/4-20 Unc

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

TRACTOR -- MODEL NUMBER 917.277131
SEAT ASSEMBLY



seat_ft.knob_1

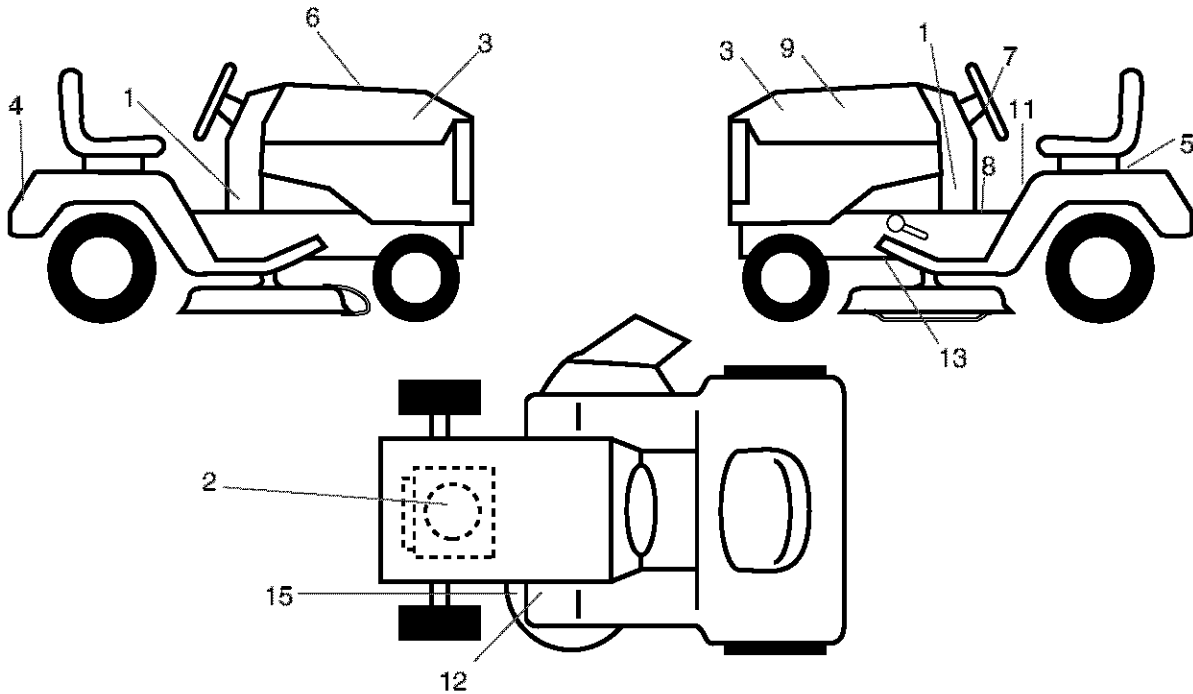
KEY PART NO.	NO.	DESCRIPTION
1	127427	Seat
2	140551	Bracket Pvt St
3	71110616	Bolt Fin Hex 3/8-16 Unc x 1
4	19131610	Washer Flat 13/32 x1 x 10 Ga
5	145006	Clip Push-In Hinged
6	73800600	Locknut Hex W/Wsh 3/8-16
7	124181X	Spring Seat Cprsn 2 250 Blk
8	17000616	Screw 3/8-16 x 1
9	19131614	Washer 13/32 x 1 x 14 Ga
10	182493	Pan Seat
11	166369	Knob Seat Adj. Wingnut
12	121246X	Bracket Mounting Switch

KEY PART NO.	NO.	DESCRIPTION
13	121248X	Bushing Snap Blk Nyl 50 Id
14	72050412	Bolt Rchd Sht 1/4-20 x 1-1/2
15	134300	Spacer Split 28 x 96 Yel Zinc
16	121250X	Spring Cprsn 1 27 Blk Pnt
17	123976X	Nut Lock 1/4 Lge Fig Gr 5
21	171852	Bolt Shld 5/16-18 Unc
22	73800500	Nut Lock Hex W/Ins 5/16-18
24	19171912	Washer 17/32 x1-3/16 x 12 Ga
25	127018X	Bolt Shoulder 5/16-18 x 62

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

TRACTOR -- MODEL NUMBER 917.277131

DECALS



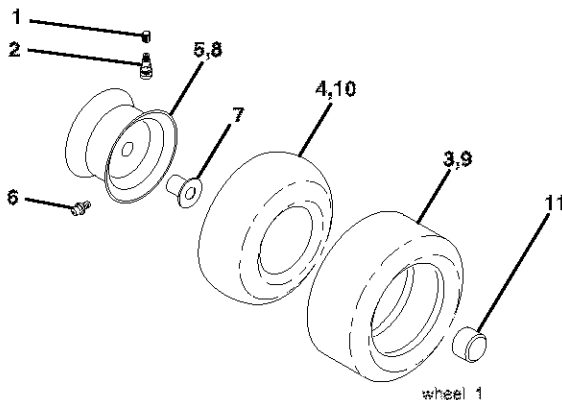
KEY PART NO. NO.

KEY PART NO.	PART NO.	DESCRIPTION
1	177109	Decal Lower Dash
2	189455	Decal Engine
3	171704	Decal Hood
4	163204	Decal Fender
5	149516	Decal Battery Danger
6	189461	Decal Replacement
7	172275	Decal Steering
8	156867	Decal, Oper sdl P/L Gear

KEY PART NO. NO.

KEY PART NO.	PART NO.	DESCRIPTION
9	133644	Decal customer Responsibility
11	156439	Decal Fender Dnger
12	181249	Decal, Clutch/Brake Eng
13	146046	Decal V-Belt Dr Sch tractor
15	136832	Decal V-Belt sch
--	138311	Decal Handle Lft Height Adjust (Lift Handle)
--	189387	Owner's Manual, English
--	189388	Owner's Manual, Spanish

WHEELS AND TIRES



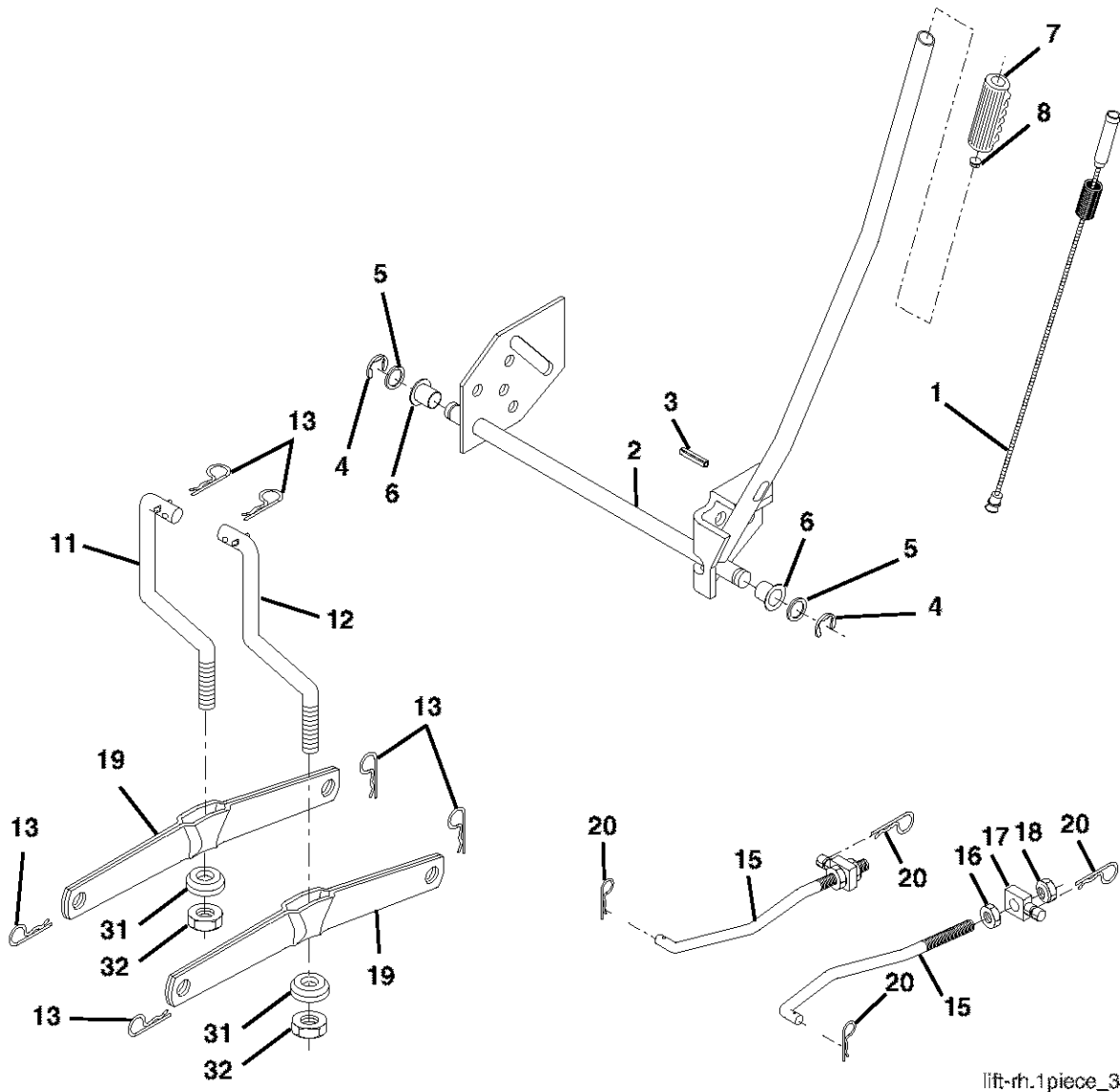
KEY PART NO. NO.

KEY PART NO.	PART NO.	DESCRIPTION
1	59192	Cap Valve Tire
2	65139	Stem Valve
3	106222X	Tire F Ts 15 x 6 0 - 6 Service
4	59904	Tube Front (Service Item Only)
5	106732X624	Rim Asm 6"front Service
6	278H	Fitting Grease (Front Wheel Only)
7	9040H	Bearing Flange (front Wheel Only)
8	106108X624	Rim Asm 8"rear Service
9	124635X	Tire Rear
10	7152J	Tube Rear (Service Item Only)
11	104757X428	Cap Axle Blk 1 50 x 1 00
--	144334	Sealant, Tire (10 oz. Tube)

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

TRACTOR -- MODEL NUMBER 917.277131

LIFT ASSEMBLY



KEY PART NO.	NO.	DESCRIPTION
1	159460	Wire Asm Inner W/plunger
2	159471	Shaft Asm Lift
3	105767X	Pin Groove 1.500 Zinc
4	12000002	E Ring #5133-62
5	19211621	Washer Pltd 21/32 x 1 x 21ga
6	120183X	Bearing Nylon Blk 629 Id
7	125631X	Grip Handle Fluted Blk
8	122365X	Button Plunger Red
11	139865	Link Lift LH
12	139866	Link Lift RH
13	4939M	Retainer Spring

KEY PART NO.	NO.	DESCRIPTION
15	173288	Link Front
16	73350800	Nut Jam Hex 1/2-13 Unc
17	175689	Trunnion Blk Zinc
18	73800800	Nut Lock w/Wsh 1/2-13 Unc
19	139868	Arm Suspension Rear
20	163552	Retainer Spring Zinc
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

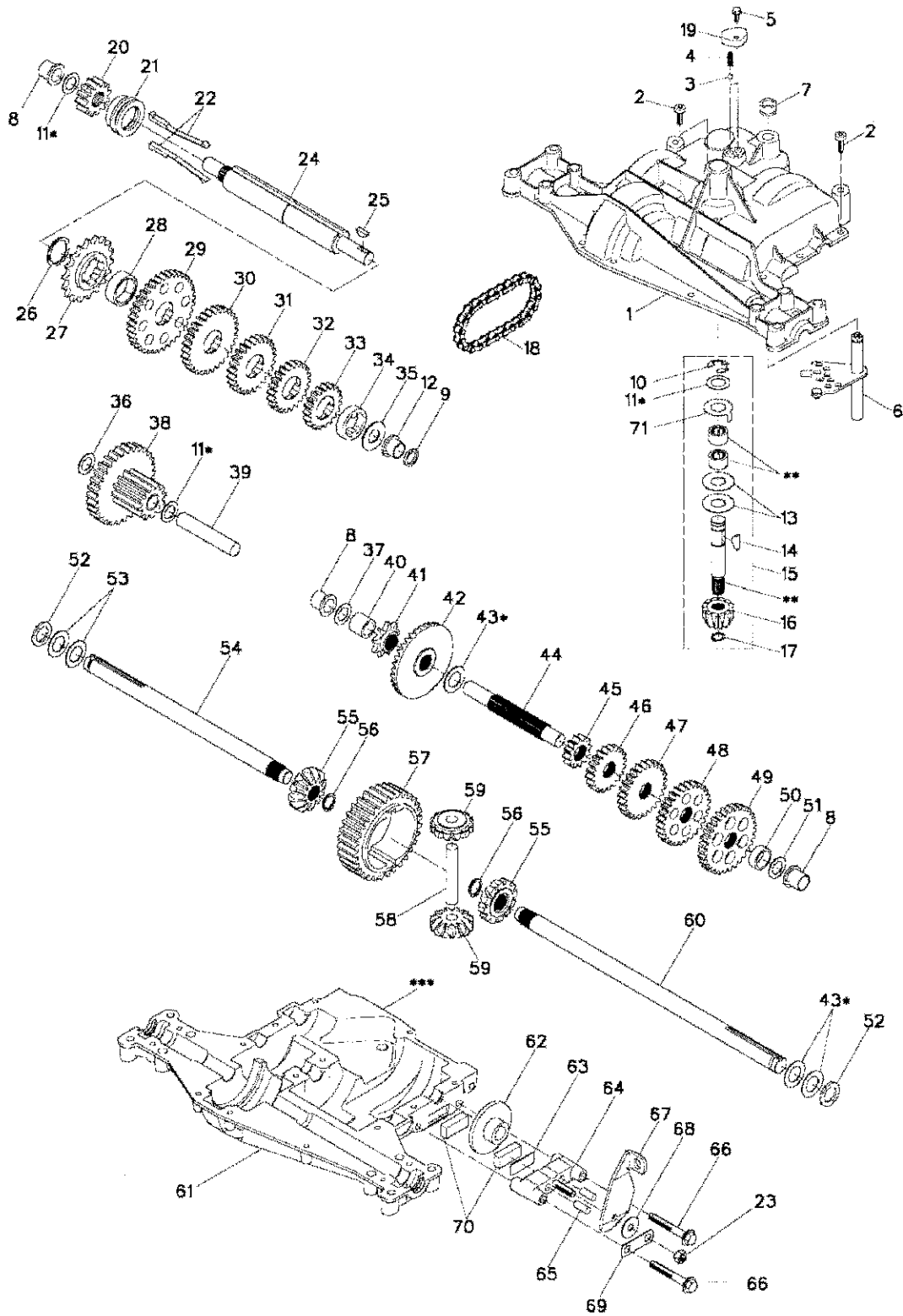
TRACTOR -- MODEL NUMBER 917.277131

MOWER DECK

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	170280	Mower Housing Assembly	40	73680600	Nut Crownlock 3/8-16
2	72140506	Bolt, Carriage 5/16-18 x 3/4	45	4497H	Retainer, Spring
3	138017	Bracket Asm. Fram Sway Bar	53	130840	Brake Assembly
4	169970	Bracket, Asm. Deck Sway Bar	54	178515	Washer Hardened
			55	133840	Idler Arm Assembly
5	4939M	Retainer, Spring	56	165723	Spacer, Retainer
6	178024	Bar Sway Deck	67	149846	Knob
8	850857	Bolt, Hex 3/8-24 x 1-1/4 Gr 8	68	144200	Belt
9	10030600	Washer, Lock, Hlcl Sprg 3/8	86	7631J	Runner, LH
10	140296	Washer, Hard Blade Mower Vented (The following blades are available)	87	128772	Runner, RH
11	134148	Blade, 38" Mulching Std (For mulching mowers only)	88	19111216	Washer 11/32 x 3/4 x 16 Ga
--	139774	Blade, 38" Mulching Premium (For better wear when mulching)	89	19131311	Washer 13/32 x 13/16 x 11 Ga.
--	138497	Blade, 38" Hi-Lift (For Bagging and discharging)	96	74930620	Bolt 3/8-16 x 1-1/4
13	137645	Shaft and Bearing Assembly (Includes Key Number 15)	97	73930600	Nut Centerlock 3/8-16
14	128774	Mandrel Housing, Vented	107	133502	Spacer, Retainer
15	110485X	Ball Bearing, Mandrel	108	133503	Stiffener, Idler Arm
16	174493	Stripper, Mower, Vented	109	74760640	Bolt, Hex Head 3/8-16 x2-1/2
19	132827	Bolt, Shoulder	110	142587	Upstop Deck Front 38"
21	73680500	Nut, Crownlock 5/16-18	113	17060512	Screw 5/16-18 x 3/4
23	137607	Bracket, Mower Deflector	122	131289	Rod, Brake, LH
24	105304X	Cap, Sleeve	123	169971	Rod, Brake, RH
25	123713X	Spring, Deflector	146	165891	Bolt Carriage Idler
26	110452X	Nut, Push	148	169022	Spring Return Idler
27	106736X428	Shield, Deflector	149	165898	Retainer Spring Yellow Zinc
28	19111016	Washer 11/32 x 3/4 x 16 Ga	150	19091210	Washer 9/32 x 3/4 x 10 Ga.
29	106735X	Rod, Hinge	152	172758	Cable Clutch 38 In
30	173984	Screw, Thdro	158	17720408	Screw Hex Thd Cut 1/4-20 x 1/2
31	187690	Washer, Spacer	185	188234	Head Asm Cable Clutch
32	153532	Pulley, Mandrel	--	130794	Mandrel Assembly (Includes Housing, Shaft and Shaft Hardware Only-Pulley Not Included)
33	178342	Nut, Flangelock 9/16	--	171665	Replacement Mower, Complete
36	131494	Pulley, Idler, Flat			

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

TRACTOR -- MODEL NUMBER 917.277131
DANA TRANSAXLE-MODEL D4360-139



TRACTOR -- MODEL NUMBER 917.277131

DANA TRANSAXLE-MODEL D4360-139

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	170981	Housing, Upper	41	105928X	Sprocket, 9T
2	2274J	Screw, Tapping, 1/4-20 X .734	42	170988	Gear, Bevel, 36T
3	134400	Ball, Detent	43	134394	* Assy, Kit, Shim, .750 Shaft
4	105904X	Spring, Detent	44	120473X	Shaft, Drive
5	160940	Screw, Tapping, No. 10-24 X .482	45	142678	Gear, Spur, 12T
6	138235	Assy, Kit, Shifter	46	124641 X	Gear, Spur, 20T
7	108727X	V-Ring	47	106589X	Gear, Spur, 25T
8	148266	Bearing, Flange	48	120408X	Gear, Spur, 28T
9	148269	Seal, Oil	49	105937X	Gear, Spur, 31T
10	2225J	Ring, Retaining	50	105936X	Spacer, .781 X 1.00 X .375
11	134793	* Assy, Kit, Shim, .625 Shaft	51	2226J	Washer, Plain, .632 X 1.00 X .060
12	148268	Bearing, Flange	52	134401	Washer, Neoprene
13	120415X	Washer, Plain, .632 X 1.38 X .046	53	2264J	Washer, Plain, .758 X 1.25 X .031
14	142674	Key, Woodruff, No. 9	54	160946	Axle, LH
15	170983	Assy, Kit, Input Shaft	55	170990	Gear, Miter, T, Splined
16	170986	Pinion, Bevel, 12T	56	160948	Ring, Retaining
17	105909X	Ring, Retaining	57	110071X	Gear, Spur, 32T
18	105910X	Chain, 24 Pitches	58	120952X	Shaft, Cross
19	160942	Cover, Detent	59	170991	Gear, Miter, 1 2T, Idler
20	160943	Gear, Spur, 1 2T	60	160950	Axle, RH
21	148267	Collar, Clutch	61	170992	Housing, Lower
22	138236	Assy, Kit, Clutch Keys	62	7294J	Disc, Brake
23	73810500	Nut, Lock, 5/16-24	63	108989X	Spacer, Brake Puck
24	142676	Shaft, Intermediate	64	160952	Jaw, Brake
25	2244J	Key, Woodruff, No. 61	65	120954X	Pin, Dowel
26	105916X	Ring, Retaining	66	160953	Screw, Tapping, 5/16-18 X 2.35
27	120470X	Sprocket, 1 8T	67	138244	Lever, Actuating
28	110070X	Spacer, 1.131 X 1.45 X .494	68	108996X	Washer, Plain, .321 X 1.00 X .055
29	142677	Gear, Spur, 37T	69	160954	Bracket, Anti-Rotation
30	124644X	Gear, Spur, 30T	70	120951X	Puck, Friction
31	108980X	Gear, Spur, 25T	71	174256	Washer, Anti Rotation
32	120406X	Gear, Spur, 22T	72	120416X	Grease
33	134796	Gear, Spur, 1 9T			
34	134797	Spacer, 1.133 X 1.50 X .375			
35	105925X	Washer, Plain, .640 X 1.37 X .061			
36	2228J	Washer, Plain, .632 X 1.00 X .046			
37	170987	Washer, Plain, .632 X 1.00 X .031			
38	174255	Assy, Gear, Comb., 12T & 30T			
39	124639X	Shaft, Idler			
40	120472X	Spacer, .633 X .87 X .755			

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

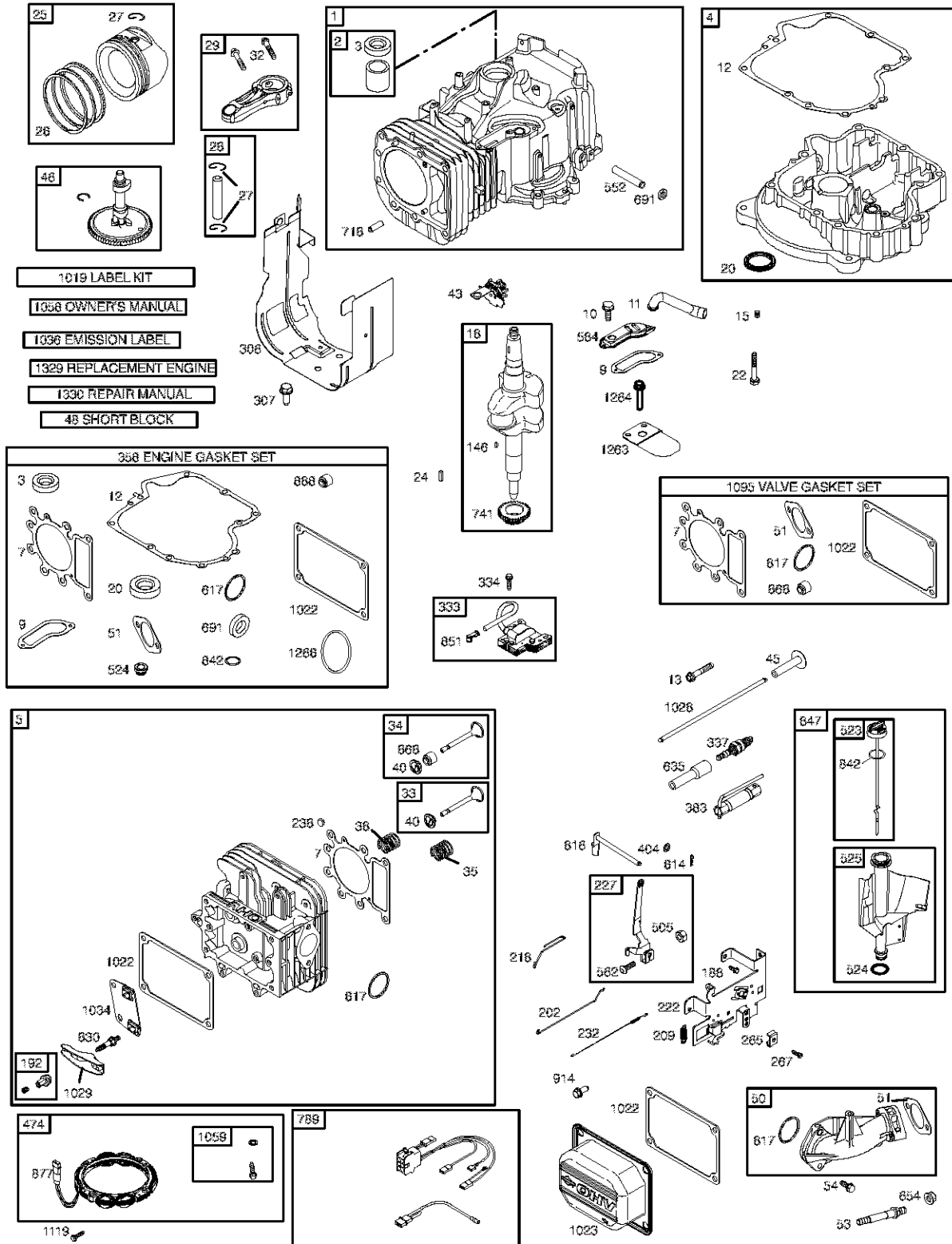
* Use in various combinations to maintain proper clearances.

** Order Key No. 15.

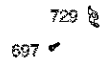
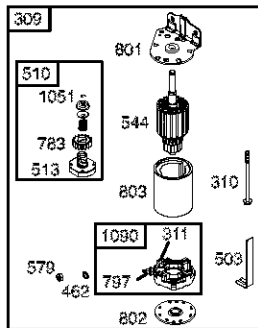
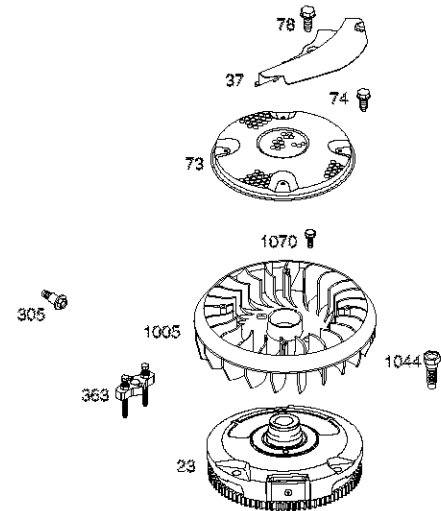
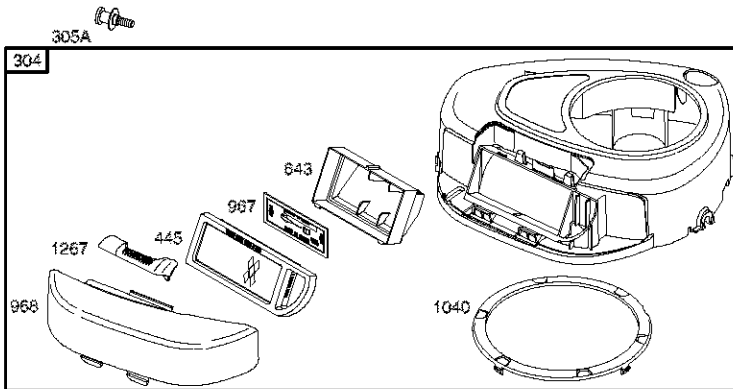
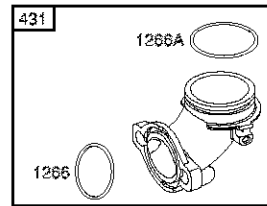
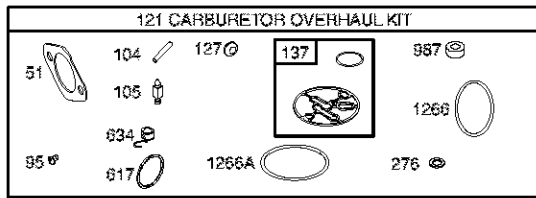
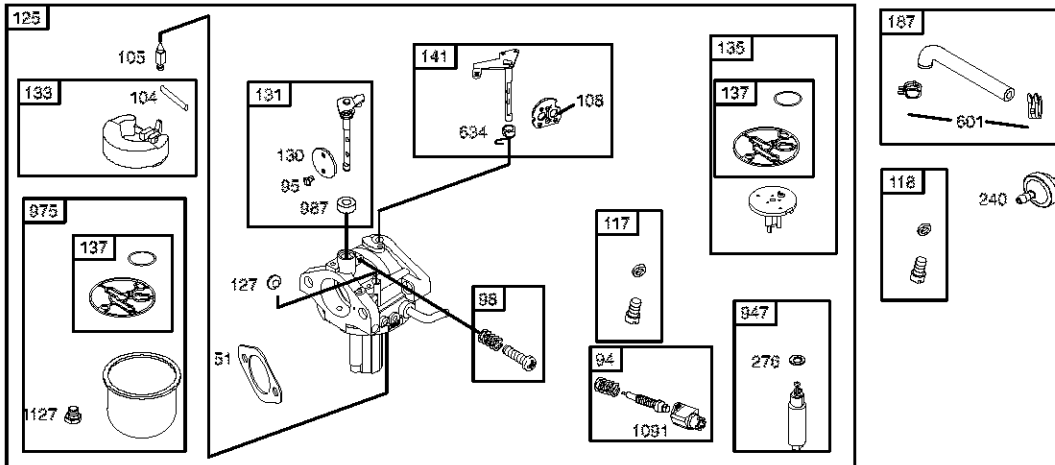
*** Silicone Sealant to be applied between Upper and Lower Housings (use Loctite Ultra Gray Silicone 5699 or equivalent).

TRACTOR -- MODEL NUMBER 917.277131

BRIGGS & STRATTON ENGINE-MODEL NUMBER 21B807, TYPE NUMBER 0290-E1



**TRACTOR -- MODEL NUMBER 917.277131
BRIGGS & STRATTON ENGINE-MODEL NUMBER 21B807, TYPE NUMBER 0290-E1**



TRACTOR -- MODEL NUMBER 917.277131
BRIGGS & STRATTON ENGINE-MODEL NUMBER 21B807, TYPE NUMBER 0290-E1

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	697377	Cylinder Assembly	98	695408	Kit-Idle Speed
2	399265	Kit-Bushing/Seal (Magneto Side)	104	694918	Ø Pin-Float Hinge
3	391086	• Seal-Oil (Magneto Side)	105	696136	Ø Valve-Float Needle
4	697106	Sump-Engine	108	698773	Valve-Choke
5	697396	Head-Cylinder	117	699897	Jet-Main (Standard)
7	273280	*+ Gasket-Cylinder Head	118	698898	Jet-Main (High Altitude)
9	697109	• Gasket-Breather	121	698787	Kit-Carburetor Overhaul
10	697157	Screw (Breather Assembly)	125	699916	Carburetor
11	697113	Tube-Breather	127	690727	Ø Plug-Welch
12	697110	• Gasket-Crankcase	130	698774	Valve-Throttle
13	690360	Screw (Cylinder Head)	131	698776	Kit-Throttle Shaft
15	690946	Plug-Oil Drain	133	694914	Float-Carburetor
16	698382	Crankshaft	135	698780	Tube-Fuel Transfer
20	690947	• Seal-Oil (PTO Side)	137	698781	Ø Gasket-Float Bowl
22	692125	Screw (Crankcase Cover/ Sump)	141	698778	Kit-Choke Shaft
23	698281	Flywheel	146	691639	Key-Timing
24	222698	Key-Flywheel	187	697098	Line-Fuel
25	698767	Piston Assembly (Standard)	188	691693	Screw (Control Bracket)
--	698769	Piston Assembly (.020" Over-size)	192	691986	Adjuster-Rocker Arm
26	698375	Ring Set (Standard)	202	691841	Link-Mechanical Governor
--	698377	Ring Set (.020" Oversize)	209	692208	Spring-Governor
27	698469	Lock-Piston Pin	216	691840	Link-Choke
28	697099	Pin-Piston	222	694042	Bracket-Control
29	697364	Rod-Connecting (Standard)	227	691374	Lever-Governor Control
32	692852	Screw (Connecting Rod)	232	691842	Spring-Governor Link
33	495856	Valve-Exhaust	238	691843	Cap-Valve
34	495857	Valve-Intake	240	394358	Filter-Fuel
35	691279	Spring-Valve (Intake)	265	691024	Clamp-Casing
36	691279	Spring-Valve (Exhaust)	267	695134	Screw (Casing Clamp)
37	697352	Guard-Flywheel	276	695410	Ø Washer-Sealing
40	690964	Retainer-Valve	304	697870	Housing-Blower
43	691968	Slinger-Governor/Oil	305	697102	Screw (Blower Housing)
45	690564	Tappet-Valve	305A	697103	Screw (Blower Housing)
46	698577	Camshaft	306	697356	Shield-Cylinder
48	697740	Short Block	307	691003	Screw (Cylinder Shield)
50	697361	Manifold-Intake	309	693551	Motor-Starter
51	692137	*Ø+ 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			
74	697987	Screw (Rotating Screen)			
78	691003	Screw (Flywheel Guard)			
94	695425	Kit-Idle Mixture			
95	690718	Ø Screw (Throttle Valve)			

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

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

TRACTOR -- MODEL NUMBER 917.277131
BRIGGS & STRATTON ENGINE-MODEL NUMBER 21B807, TYPE NUMBER 0290-E1

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
337	491055	Plug-Spark	847	697611	Dipstick/Tube Assembly
358	697151	Gasket Set-Engine	851	692424	Terminal-Spark Plug
363	19203	Flywheel Puller	868	690968	*+ Seal-Valve
383	89838	Wrench-Spark Plug	877	393456	Wire-Connector/Alternator
404	691691	Washer (Governor Crank)	914	690960	Screw (Rocker Cover)
431	697122	Elbow-Intake	967	697292	Filter-Pre Cleaner
445	698413	Filter-Air Cleaner Cartridge	968	697420	Cover-Air Cleaner
462	691261	Washer (Starter Cable)	975	699502	Bowl-Float
474	696459	Alternator	987	698777	Ø Seal-Throttle Shaft
503	691532	Strap-Starter	1005	699044	Fan-Flywheel
505	691251	Nut (Governor Control Lever)	1019	697143	Kit-Label
510	693699	Drive-Starter	1022	272475	*+ Gasket-Rocker Cover
513	692024	Clutch-Drive	1023	692492	Cover-Rocker Arm
523	697086	Dipstick	1026	697394	Rod-Push
524	691032	• Seal-Dipstick Tube	---	697395	Rod-Push
525	697184	Tube-Dipstick	1029	691751	Arm-Rocker
544	692034	Starter-Armature	1034	690822	Guide-Push Rod
552	697144	Bushing-Governor Crank	1036	697221	Label-Emission
562	691119	Bolt (Governor Control Lever)	1040	698368	Plate-Trim
579	691029	Nut (Starter Cable)	1044	698139	Screw (Flywheel)
584	697112	Cover-Breather Passage	1051	691265	Ring-Retaining
601	95162	Clamp-Hose	1058	275038	Owner's Manual
614	691620	Pin-Cotter	1059	698516	Kit-Screw/Washer
616	692012	Crank-Governor	1070	690372	Screw (Flywheel Fan)
617	692138	Ø • Seal-O Ring (Intake Manifold)	1090	691293	Retainer-Brush
634	698779	Ø Spring/Seal Assembly	1091	691333	Cap-Limiter
635	691909	Boot-Spark Plug	1095	691581	Gasket Set-Valve
643	697155	Retainer-Air Filter	1119	691183	Screw (Alternator)
654	690958	Nut (Carburetor)	1127	695407	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	1266A	697123	Ø Seal-O Ring(Intake Elbow)
741	697128	Gear-Timing	1267	697419	Latch-Blower Housing
783	693713	Gear-Pinion	1329	31C707-0230	Replacement Engine
789	698329	Harness-Wiring	1330	272147	Repair Manual
797	693167	Nut (Brush Retainer)			
801	691283	Cap-Drive	•		Included in Engine Gasket Set, Key. No. 358
802	691286	Cap-End	Ø		Included in Carburetor Overhaul Kit, Key. No. 121
803	693757	Housing-Starter	+		Included in Valve Gasket Set, Key. No. 1095
830	691095	Stud (Rocker Arm)			
842	691031	• Seal-O Ring (Dipstick Tube)			

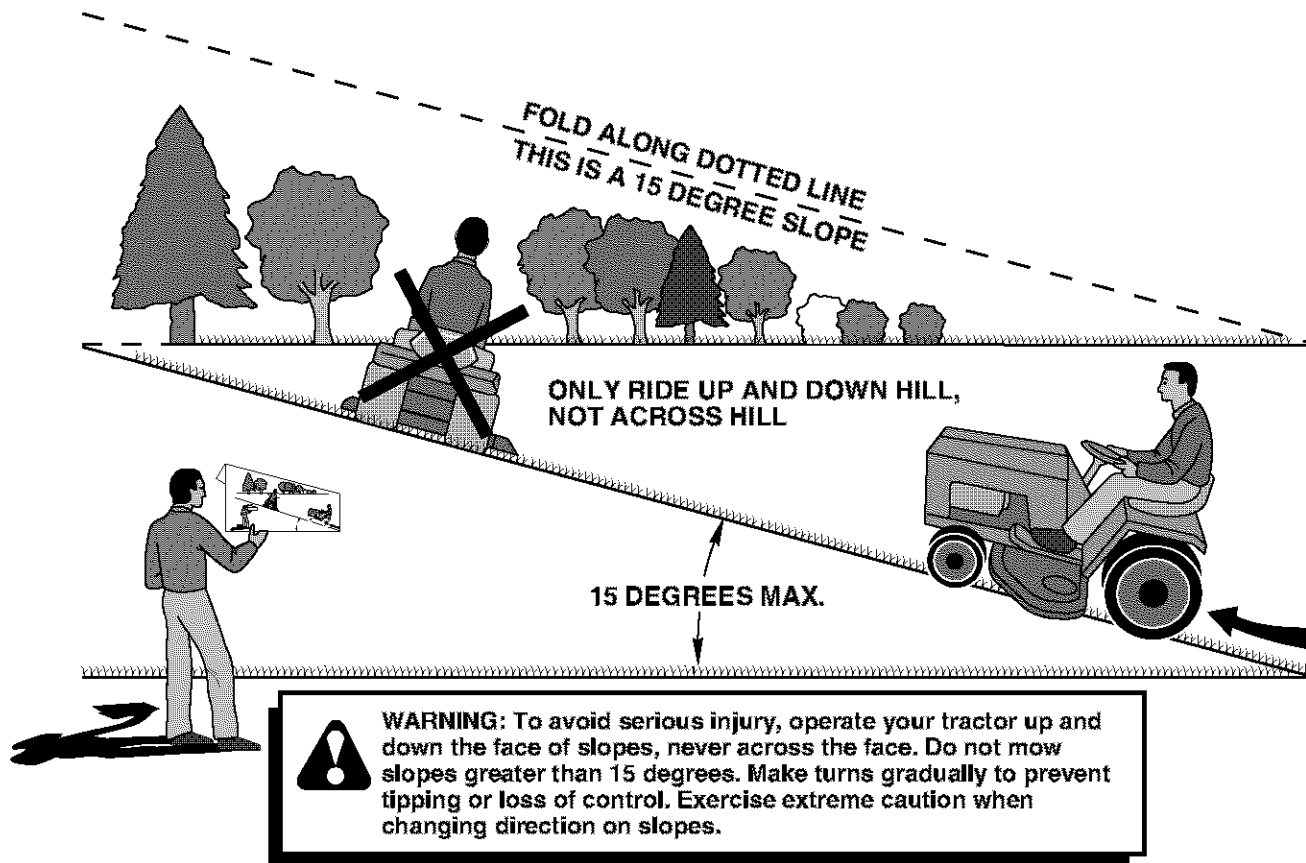
NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

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.

Get it fixed, at your home or ours!

Your Home

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