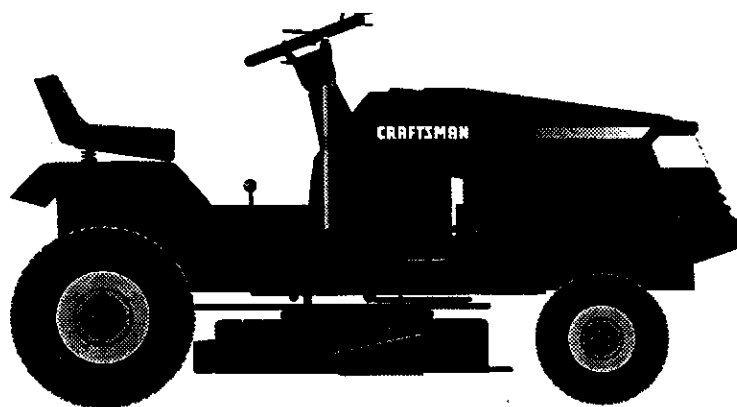


Owner's Manual

CRAFTSMAN®

**13.5 HP
ELECTRIC START
38" MOWER
5 SPEED TRANSAXLE
LAWN TRACTOR**

Model No.
917.270430



- Safety
- Assembly
- Operation
- Maintenance
- Repair Parts



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

CAUTION:

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

For answers to your questions about this product, Call:

1-800-659-5917

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

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

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WARRANTY

LIMITED TWO YEAR WARRANTY ON CRAFTSMAN RIDING EQUIPMENT

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

This Warranty does not cover:

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

LIMITED 90 DAY WARRANTY ON BATTERY

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

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

SAFETY RULES

GENERAL OPERATION

- Read, understand, and follow all instructions in the manual and on the machine before starting.
- Only allow responsible adults, who are familiar with the instructions, to operate the machine.
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade.
- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Be aware of the mower discharge direction and do not point it at anyone. Do not operate the mower without either the entire grass catcher or the guard in place.
- Slow down before turning.
- Never leave a running machine unattended. Always turn off blades, set parking brake, stop engine, and remove keys before dismounting.

SAFETY RULES

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

SLOPE OPERATION

Slopes are a major factor related to 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.

DO:

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

DO NOT:

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

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

CHILDREN

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

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

SERVICE

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

SAFETY RULES

- Never make adjustments or repairs with the engine running.
- Grass catcher components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
- Check brake operation frequently. Adjust and service as required.
- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.



- Never carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and *down* for small children.
- Mow up and down slopes (15° Max), not across.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine. *Tall grass can hide obstacles.*
- Use slow speed. Choose a low gear so that you will not have to stop or shift while on the slope.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly *straight* down the slope.
- *Do not* turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.

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

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

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

PRODUCT SPECIFICATIONS

GASOLINE CAPACITY AND TYPE:	1.25 GALLONS UNLEADED REGULAR
OIL TYPE (API-SF/SG/SH):	SAE 30(ABOVE 32°F) SAE 5W-30 (Below 32°F)
OIL CAPACITY:	3.0 PINTS
SPARK PLUG: (GAP: .030")	CHAMPION RJ19LM
VALVE CLEARANCE:	INTAKE: .005"-.007" EXHAUST:.009"-.011"
GROUND SPEED FORWARD: (MPH):	1ST 1.0 2ND 2.2 3RD 3.2 4TH 4.4 5TH 5.0 REVERSE: 1.4
TIRE PRESSURE:	FRONT: 14 PSI REAR: 12 PSI
CHARGING SYSTEM:	3 AMPS BATTERY 5 AMPS HEADLIGHTS
BATTERY:	AMP/HR: 25 MIN. CCA: 190 CASE SIZE:U1R
BLADE BOLT TORQUE:	27-35 FT. LBS

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

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

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

MAINTENANCE AGREEMENT

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

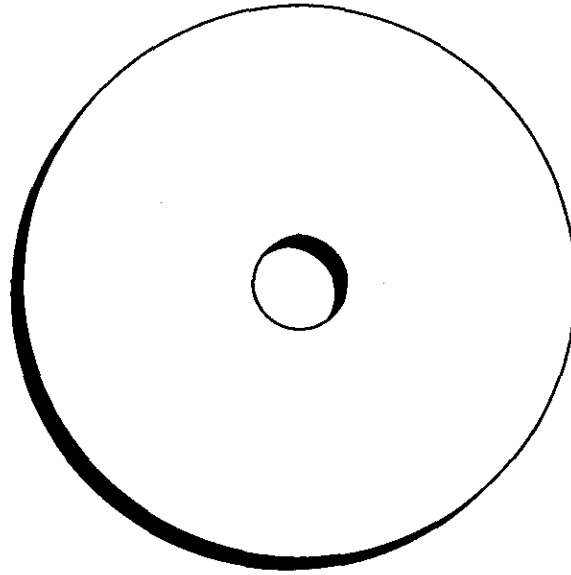
CUSTOMER RESPONSIBILITIES

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

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

CONTENTS OF HARDWARE PACK

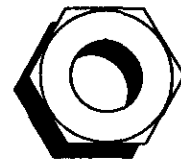
Parts Bag contents shown full size



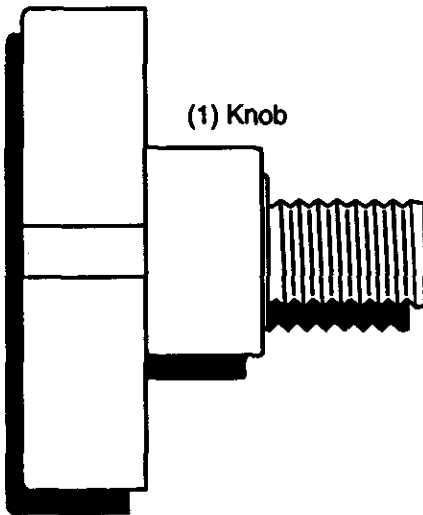
(1) Large Flat Washer



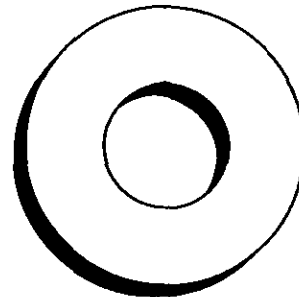
(2) Sheet Metal Screws
#10-16 x 1/2



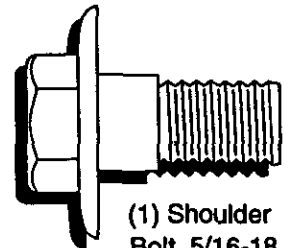
(1) Locknut
3/8-24



(1) Knob



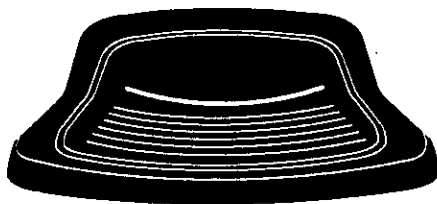
(1) Washer
17/32 x 1-3/16 x 12 Gauge



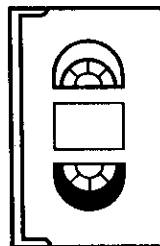
(1) Shoulder Bolt
5/16-18

CONTENTS OF HARDWARE PACK

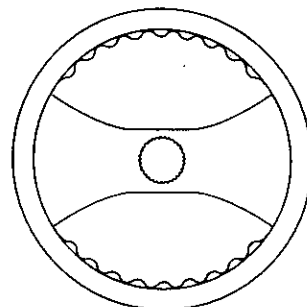
Parts packed separately in carton



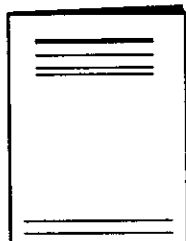
Seat



Video
Cassette



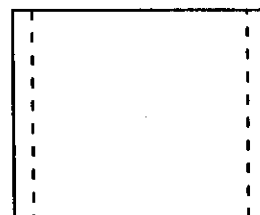
Steering
Wheel



Manual

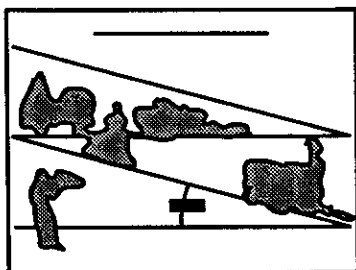


Steering
Boot



Parts Bag

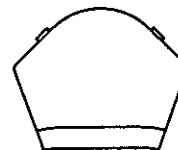
Parts Bag contents not shown full size



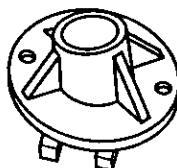
Slope Sheet



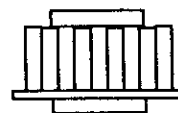
(2) Keys



Steering
Wheel
Insert



Steering
Bushing



Steering Wheel
Adapter

ASSEMBLY

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

TOOLS REQUIRED FOR ASSEMBLY

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

- (1) 5/16" wrench
- (1) Pliers
- (2) 1/2" wrench
- (1) Utility knife
- (1) Tire pressure gauge

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

TO REMOVE TRACTOR FROM CARTON

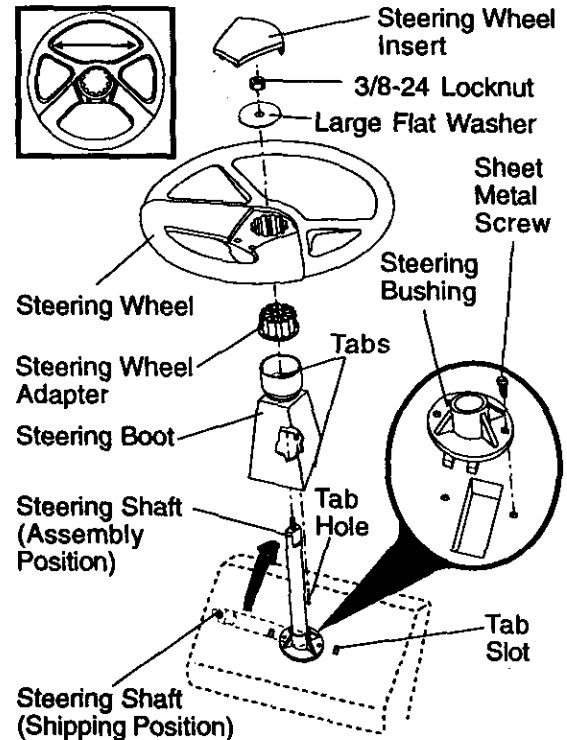
UNPACK CARTON

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

BEFORE ROLLING TRACTOR OFF SKID

ATTACH STEERING WHEEL

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



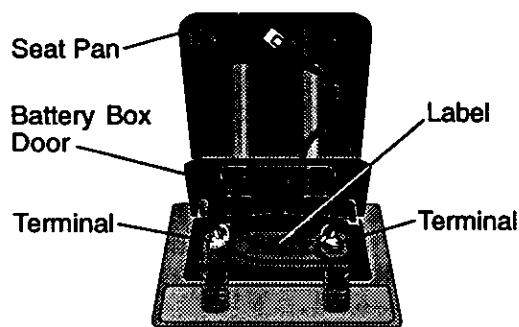
- Assemble large flat washer and 3/8-24 locknut and tighten securely.
- Snap steering wheel insert into center of steering wheel.
- Remove protective materials from tractor hood and grill.

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

HOW TO SET UP YOUR TRACTOR

CHECK BATTERY

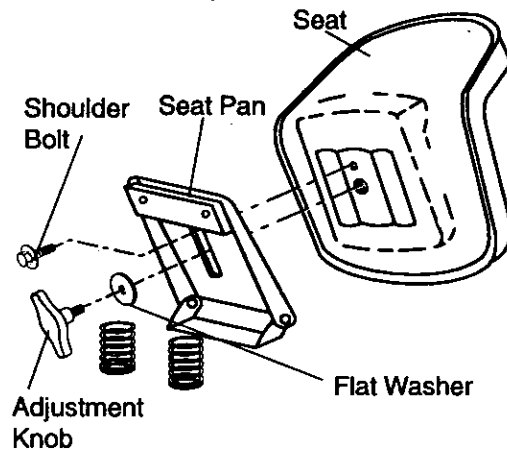
- Lift seat pan to raised position and open battery box door.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps. (See "BATTERY" in Maintenance section of this manual for charging instructions).



INSTALL SEAT

Adjust seat before tightening adjustment knob.

- Remove cardboard packing on seat pan.
- Place seat on seat pan and assemble shoulder bolt. Tighten shoulder bolt securely.
- Assemble adjustment knob and flat washer loosely. Do not tighten.
- Lower seat into operating position and sit on seat.
- Slide seat until a comfortable position is reached which allows you to press clutch/brake pedal all the way down.
- Get off seat without moving its adjusted position.
- Raise seat and tighten adjustment knob securely.



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

- Press lift lever plunger and raise attachment lift lever to its highest position.
- Release parking brake by depressing clutch/brake pedal.
- Place freewheel control in freewheeling position to disengage transmission (See "TO TRANSPORT" in the Operation section of this manual).

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

TO DRIVE TRACTOR OFF SKID

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

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

CHECK FOR PROPER POSITION OF ALL BELTS

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

CHECK BRAKE SYSTEM

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

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.

✓ CHECKLIST

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

PLEASE REVIEW THE FOLLOWING CHECKLIST:

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

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

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

OPERATION

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



BATTERY



CAUTION OR WARNING



REVERSE



FORWARD



FAST



SLOW



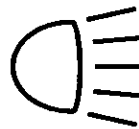
ENGINE ON



ENGINE OFF



OIL PRESSURE



LIGHTS ON



OVER TEMP LIGHT



MOWER LIFT



FUEL



CHOKE



MOWER HEIGHT



PARKING BRAKE LOCKED



UNLOCKED



ATTACHMENT CLUTCH ENGAGED

R

REVERSE

N

NEUTRAL

H

HIGH

L

LOW



PARKING BRAKE



IGNITION



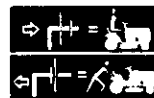
ATTACHMENT CLUTCH DISENGAGED



KEEP AREA CLEAR

SLOPE HAZARDS

(SEE SAFETY RULES SECTION)



FREE WHEEL
(Automatic Models only)

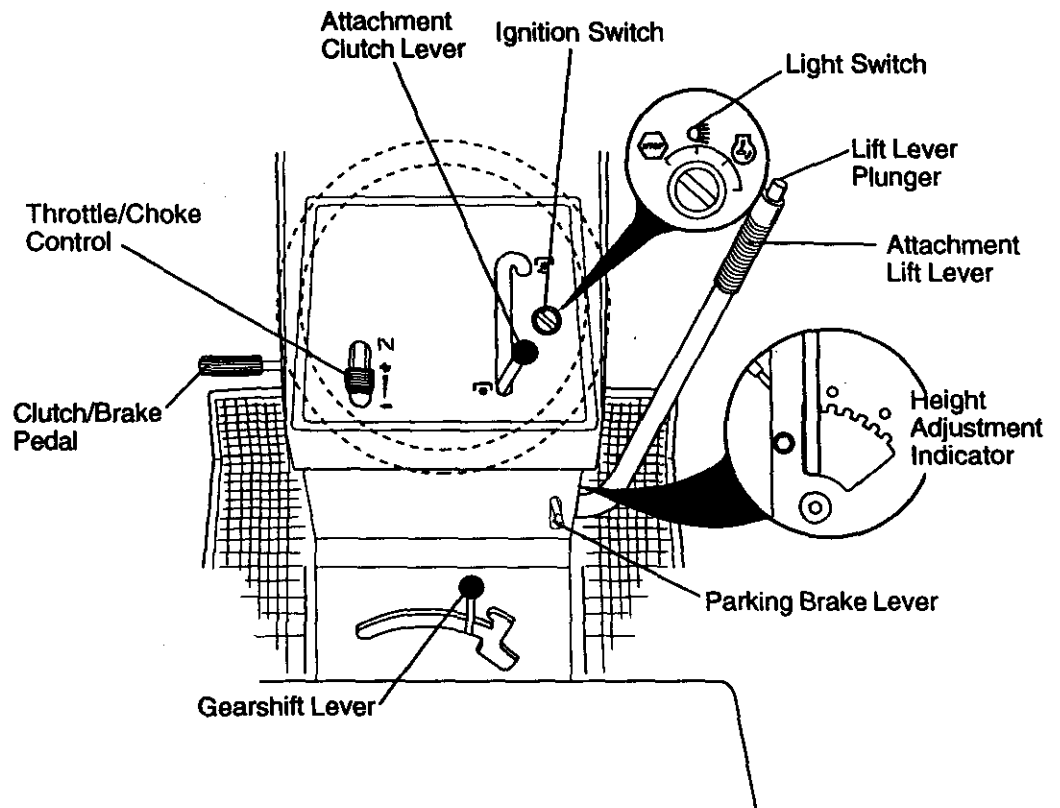


DANGER, KEEP HANDS AND FEET AWAY

KNOW YOUR TRACTOR

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

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



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

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

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

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

GEARSHIFT LEVER - Selects the speed and direction of tractor.

IGNITION SWITCH - Used for starting and stopping the engine.

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

LIGHT SWITCH - Turns the headlights on and off.

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

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

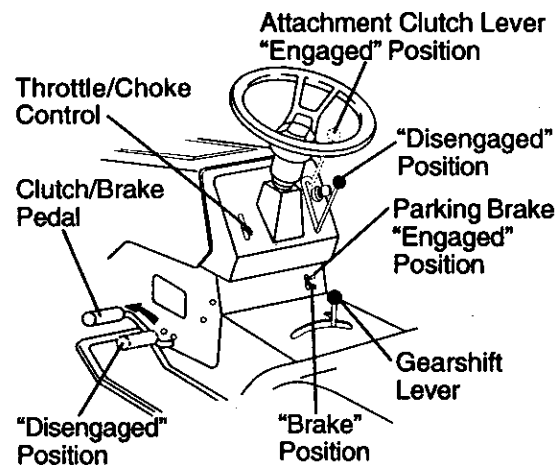


The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles or standard safety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

HOW TO USE YOUR TRACTOR TO SET PARKING BRAKE

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

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



STOPPING

MOWER BLADES -

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

GROUND DRIVE -

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

ENGINE -

- Move throttle control to slow position.

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

- Turn ignition key to "OFF" position and remove key. Always remove key when

leaving tractor to prevent unauthorized use.

- Never use choke to stop engine.
- IMPORTANT:** Leaving the ignition switch in any position other than "OFF" will cause the battery to be discharged, (dead).

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

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

TO USE THROTTLE CONTROL

Always operate engine at full throttle.

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

TO MOVE FORWARD AND BACKWARD

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

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

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

TO ADJUST MOWER CUTTING HEIGHT

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

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

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

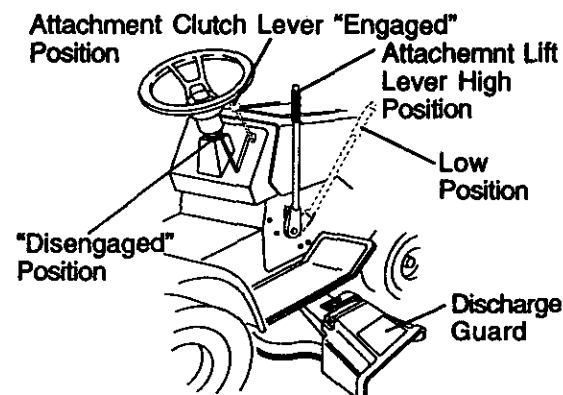
- The average lawn should be cut to approximately 2-1/2 inches during the cool season and to over 3 inches during hot months. For healthier and better looking lawns, mow often and after moderate growth.
- For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first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

TO OPERATE MOWER

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

- Select desired height of cut.
- Lower mower with attachment lift control.
- 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 discharge guard in place.



TO OPERATE ON HILLS

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

- Choose the slowest speed before starting up or down hills.
- Avoid stopping or changing speed on hills.
- If slowing is necessary, move throttle control lever to slower position.
- If stopping is absolutely necessary, push clutch/brake pedal quickly to brake position and engage parking brake.
- Move gearshift lever to 1st gear. Be sure you have allowed room for tractor to roll slightly as you restart movement.
- To restart movement, slowly release parking brake and clutch/brake pedal.
- Make all turns slowly.

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.

ADD GASOLINE

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

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

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

⚠ CAUTION: Fill to bottom of gas tank filler neck. Do not overfill. Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.

BEFORE STARTING THE ENGINE CHECK ENGINE OIL LEVEL

- The engine in your tractor has been shipped, from the factory, already filled with summer weight oil.
- Check engine oil with tractor on level ground.
- 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 Customer Responsibilities section of this manual).
- To change engine oil, see the Maintenance section in this manual.

TO START ENGINE

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

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

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

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

WARM WEATHER STARTING (50° F and above)

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

COLD WEATHER STARTING (50° F and below)

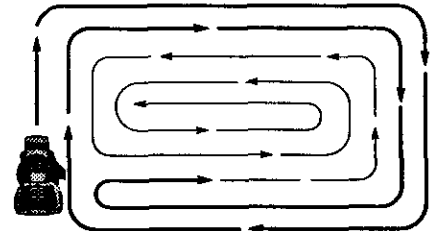
- When engine starts, slowly push choke control in until the engine begins to run smoothly. Continue to push the choke control in small steps allowing the engine to accept small changes in speed and load, until the choke control is fully in. If the engine starts to run roughly, pull the choke control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

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

MOWING TIPS

- Tire chains cannot be used when the mower housing is attached to tractor.
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the tractor. This will result in a more even distribution of clippings and more uniform cutting.

- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished.
- If grass is extremely tall, it should be mowed twice to reduce load and possible fire hazard from dried clippings. Make first cut relatively high; the second to the desired height.
- Do not mow grass when it is wet. Wet grass will plug mower and leave undesirable clumps. Allow grass to dry before mowing.
- Always operate engine at full throttle when mowing to assure better mowing performance and proper discharge of material. Regulate ground speed by selecting a low enough gear to give the mower cutting performance as well as the quality of cut desired.
- When operating attachments, select a ground speed that will suit the terrain and give best performance of the attachment being used.



MAINTENANCE

MAINTENANCE SCHEDULE		SERVICE INTERVALS							SERVICE DATES				
		BEFORE EACH USE	EVERY 8 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY SEASON	BEFORE STORAGE					
TRACTOR	Check Brake Operation	✓	✓										
	Check Tire Pressure	✓	✓										
	Check Operator Presence and Interlock Systems	✓											
	Check for Loose Fasteners	✓				✓ ₇		✓					
	Sharpen/Replace Mower Blades			✓ ₄									
	Lubrication Chart			✓				✓					
	Check Battery Level			✓ ₆									
	Clean Battery and Terminals			✓					✓				
	Check Transaxle Cooling			✓									
	Adjust Blade Belt(s) Tension						✓ ₅						
	Adjust Motion Drive Belt(s) Tension						✓ ₅						
	ENGINE	Check Engine Oil Level	✓	✓									
Change Engine Oil				✓ _{1,2,3}				✓					
Clean Air Filter				✓ ₂									
Clean Air Screen				✓ ₂									
Inspect Muffler/Spark Arrester					✓								
Replace Oil Filter (If equipped)						✓ _{1,2}							
Clean Engine Cooling Fins						✓ ₂							
Replace Spark Plug						✓	✓						
Replace Air Filter Paper Cartridge						✓ ₂							
Replace Fuel Filter							✓						

- 1 - Change more often when operating under a heavy load or in high ambient temperatures.
 2 - Service more often when operating in dirty or dusty conditions.
 3 - If equipped with oil filter, change oil every 50 hours.
 4 - Replace blades more often when mowing in sandy soil.
 5 - If equipped with adjustable system.
 6 - Not required if equipped with maintenance-free battery.
 7 - Tighten front axle pivot bolt to 35 ft.-lbs. maximum. Do not overtighten.

GENERAL RECOMMENDATIONS

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

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

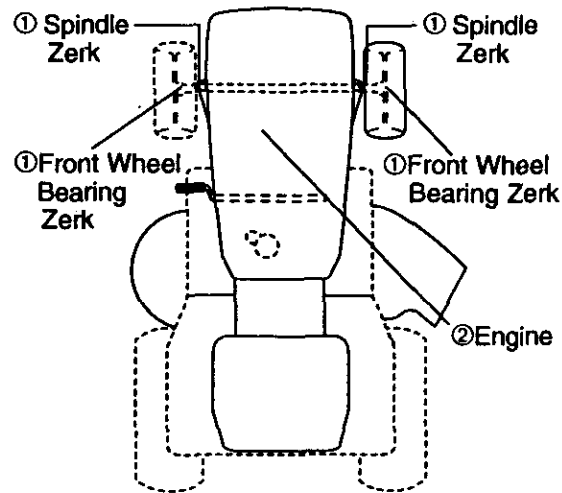
All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

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

BEFORE EACH USE

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

LUBRICATION CHART



- ① GENERAL PURPOSE GREASE
 ② REFER TO MAINTENANCE "ENGINE" SECTION

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

TRACTOR

Always observe safety rules when performing any maintenance.

BRAKE OPERATION

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

TIRES

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

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

OPERATOR PRESENCE SYSTEM

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

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

BLADE CARE

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

BLADE REMOVAL

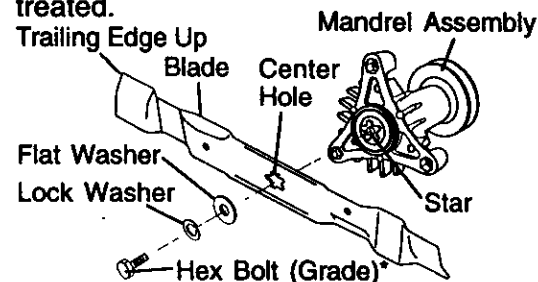
- Raise mower to highest position to allow access to blades.
- Remove hex bolt, lock washer and flat washer securing blade.

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

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

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

IMPORTANT: Blade bolt is Grade 8 heat treated.



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

TO SHARPEN BLADE

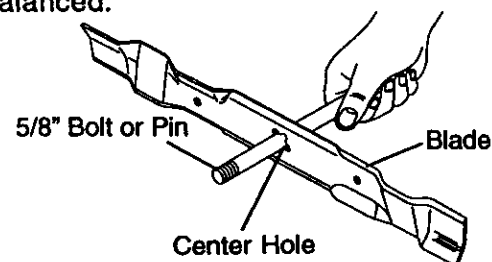
NOTE: We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

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

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

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

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



BATTERY

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

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

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

TO CLEAN BATTERY AND TERMINALS

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

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

V-BELTS

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

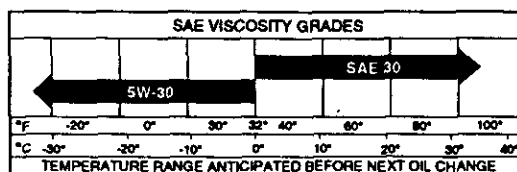
TRANSAXLE COOLING

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

ENGINE

LUBRICATION

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



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

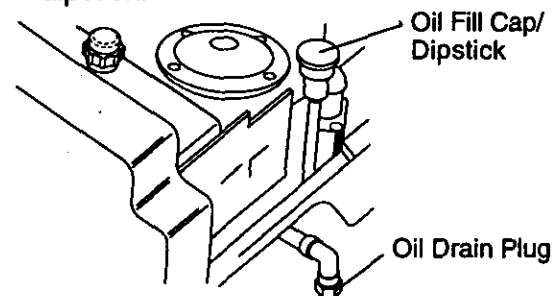
Change the oil after every 25 hours of operation or at least once a year if the tractor is not used for 25 hours in one year.

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

TO CHANGE ENGINE OIL

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

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



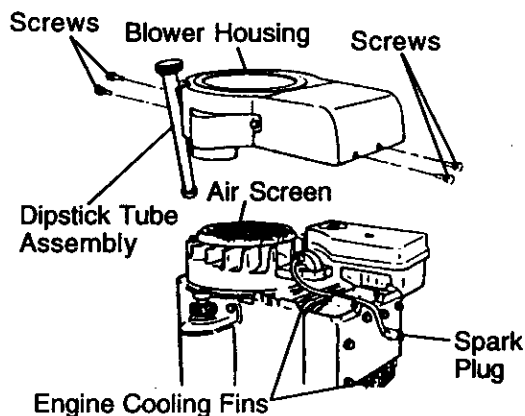
CLEAN AIR SCREEN

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

ENGINE COOLING FINS

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

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



AIR FILTER

Your engine will not run properly using a dirty air filter. Clean the foam pre-cleaner after every 25 hours of operation or every season. Service paper cartridge every 100 hours of operation or every season, whichever occurs first. Service air cleaner more often under dusty conditions.

- Remove knob(s) and cover.

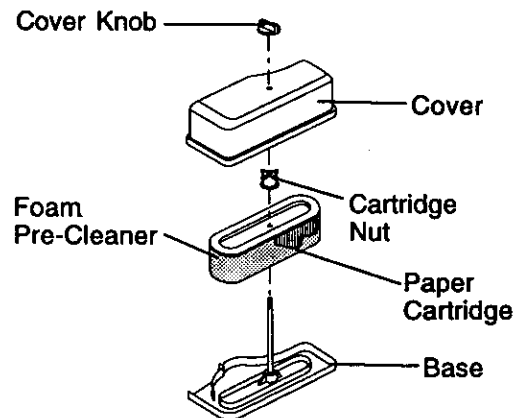
TO SERVICE PRE-CLEANER

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

TO SERVICE CARTRIDGE

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

- Clean cartridge by tapping gently on flat surface. If very dirty or damaged, replace cartridge.
 - Reinstall cartridge, nut, pre-cleaner, cover and secure with knob(s).
- IMPORTANT:** Petroleum solvents, such as kerosene, are not to be used to clean the cartridge. They may cause deterioration of the cartridge. Do not oil cartridge. Do not use pressurized air to clean or dry cartridge.



MUFFLER

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

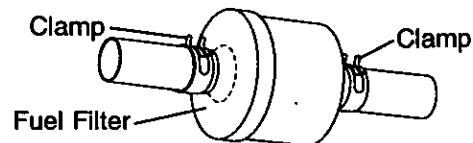
SPARK PLUGS

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

IN-LINE FUEL FILTER

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

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



CLEANING

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

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

SERVICE AND ADJUSTMENTS

⚠ CAUTION: Before performing any service or adjustments:

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

TRACTOR

TO REMOVE MOWER

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

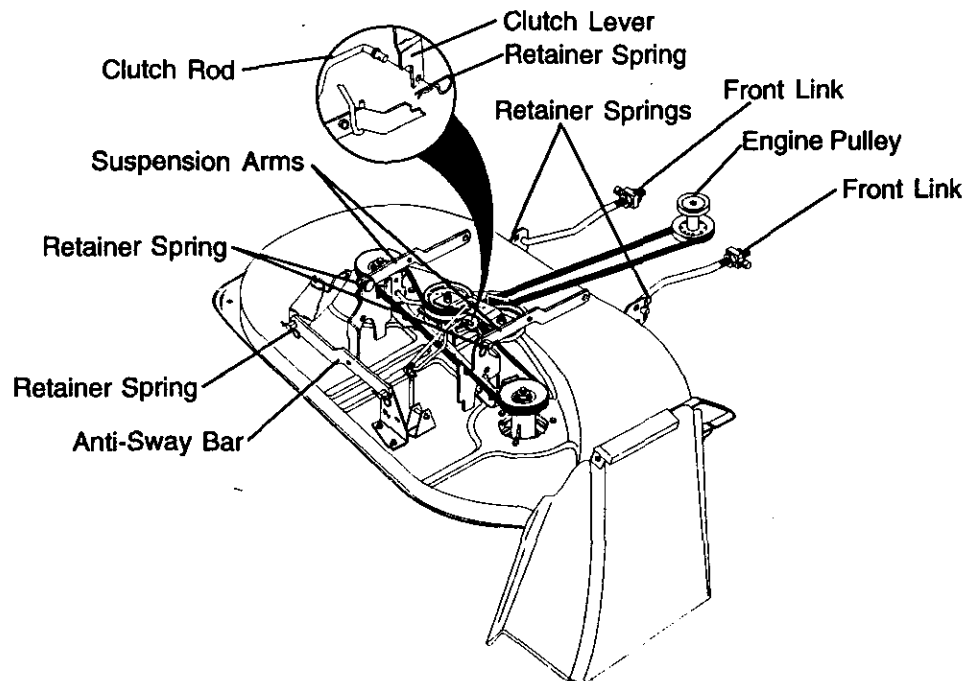
- Place attachment clutch in "DISENGAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- Roll belt off engine pulley.
- Disconnect clutch rod from clutch lever by removing retainer spring.
- Disconnect anti-sway bar from chassis bracket by removing retainer spring.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

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

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

TO INSTALL MOWER

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



TO LEVEL MOWER HOUSING

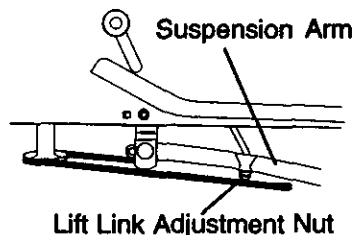
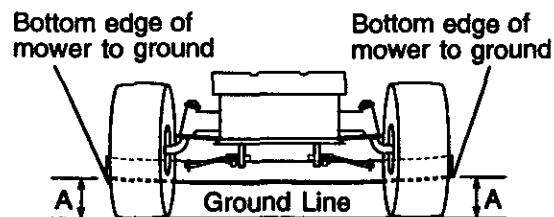
Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PRODUCT SPECIFICATIONS" on page 5 of this manual). If tires are over or underinflated, you will not properly adjust your mower.

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.



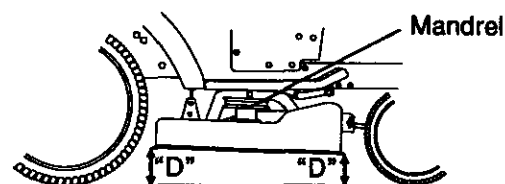
FRONT-TO-BACK ADJUSTMENT

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.

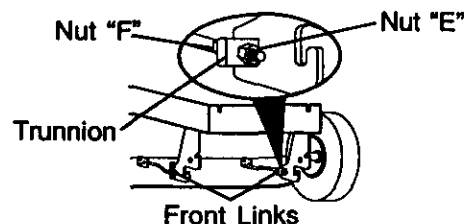
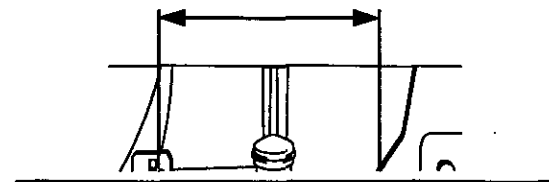
To obtain the best cutting results, the mower housing should be adjusted so that the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

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



Both Front Links Should be Equal in Length



TO REPLACE MOWER BLADE DRIVE BELT

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

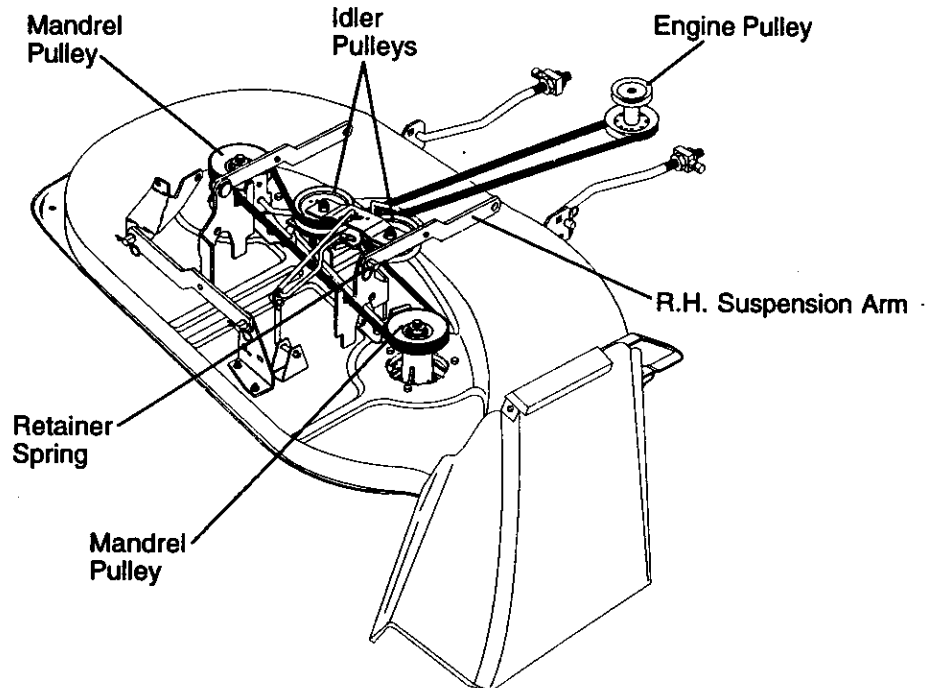
BELT REMOVAL -

- Place attachment clutch in "DISENGAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- Roll belt off engine pulley.

- Disconnect R.H. suspension arm from rear deck bracket by removing retainer spring.
- Work belt off both mandrel pulleys and idler pulleys.
- Pull belt away from mower.

BELT INSTALLATION -

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



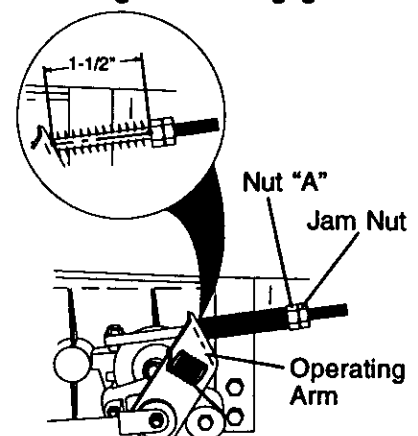
TO ADJUST BRAKE

Your tractor is equipped with an adjustable brake system which is mounted on the right side of the transaxle. If tractor requires more than six (6) feet stopping distance at high speed in highest gear, then brake must be adjusted.

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

- Road test tractor for proper stopping distance as stated above. Readjust if necessary. If stopping distance is still greater than six (6) feet in highest gear, further maintenance is necessary. Contact your nearest authorized service center/department.

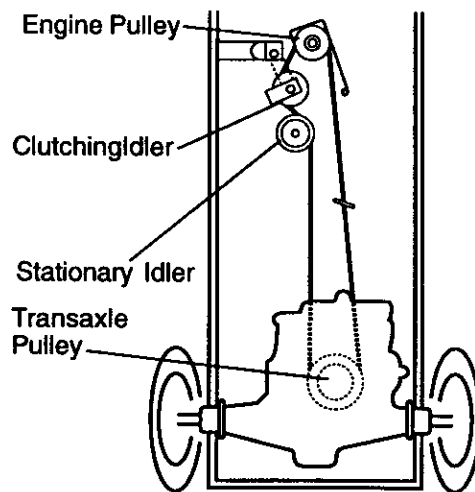
With Parking Brake "Engaged"



TO REPLACE MOTION DRIVE BELT

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

- Remove mower (See "TO REMOVE MOWER" in this section of this manual.)
- Remove belt from stationary idler and clutching idler.
- Pull belt slack toward rear of tractor. Remove belt upwards from transaxle pulley by deflecting belt keepers.
- Pull belt toward front of tractor and remove downwards from around engine pulley.
- Install new belt by reversing above procedure.



TO ADJUST STEERING WHEEL ALIGNMENT

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

FRONT WHEEL TOE-IN/CAMBER

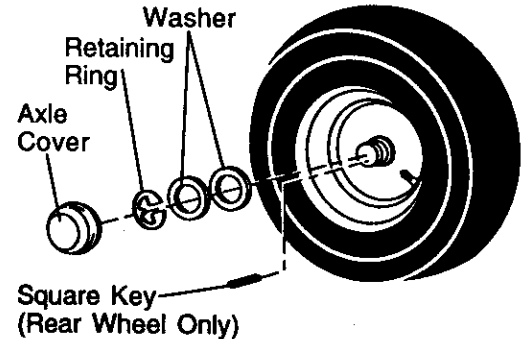
The front wheel toe-in and camber are not adjustable on your tractor. If damage has occurred to affect the front wheel toe-in or camber, contact your nearest authorized service center/department.

TO REMOVE WHEEL FOR REPAIRS

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

- On rear wheels only: align grooves in rear wheel hub and axle. Insert square key.
- Replace washers and snap retaining ring securely in axle groove.
- Replace axle cover.

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



TO START ENGINE WITH A WEAK BATTERY

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

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

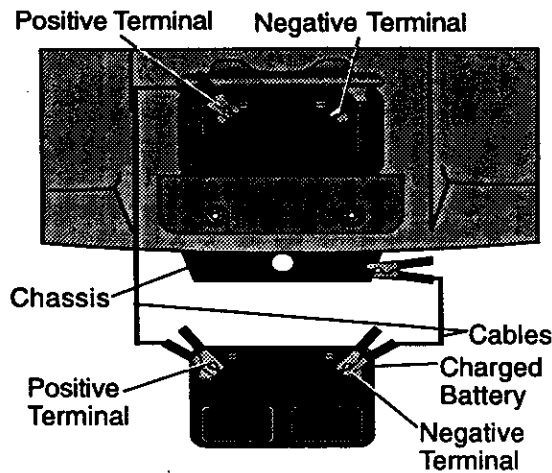
If "jumper cables" are used for emergency starting, follow this procedure: **IMPORTANT:** Your tractor is equipped with a 12 volt negative grounded system. The other vehicle must also be a 12 volt negative grounded system. Do not use your tractor battery to start other vehicles.

TO ATTACH JUMPER CABLES -

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

TO REMOVE CABLES, REVERSE ORDER -

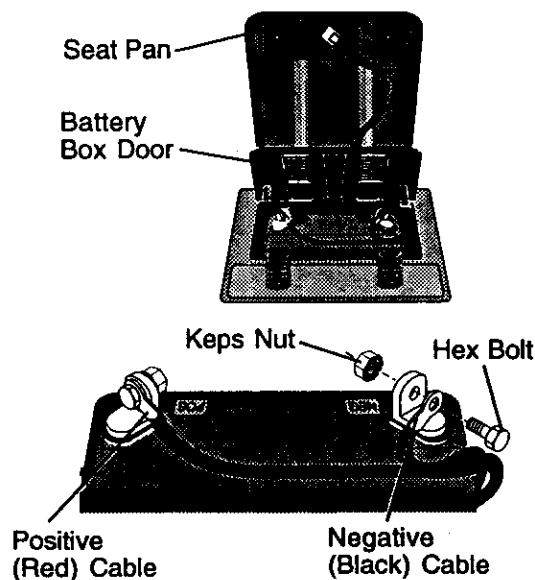
- BLACK cable first from chassis and then from the fully charged battery.
- RED cable last from both batteries.



REPLACING BATTERY

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

- Lift hood to raised position.
- Remove terminal guard.
- Disconnect BLACK battery cable then RED battery cable and carefully remove battery from tractor.
- Install new battery with terminals in same position as old battery.
- Reinstall terminal guard.
- First connect RED battery cable to positive (+) battery terminal with hex bolt and keps nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) battery terminal with remaining hex bolt and keps nut. Tighten securely
- Close terminal access doors.
- Close hood.



TO REPLACE HEADLIGHT BULB

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

INTERLOCKS AND RELAYS

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

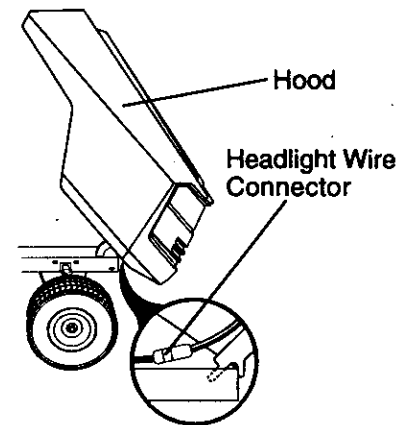
- Check wiring. See electrical wiring diagram in the Repair Parts section.

TO REPLACE FUSE

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

TO REMOVE HOOD AND GRILL ASSEMBLY

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



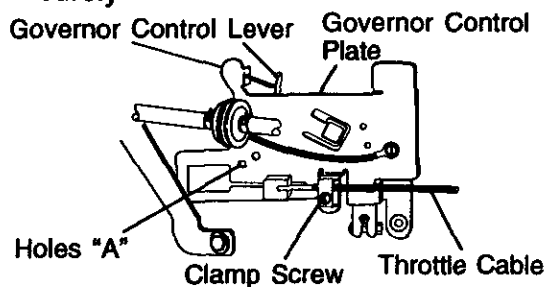
ENGINE

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

TO ADJUST THROTTLE CONTROL CABLE

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

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



TO ADJUST CARBURETOR

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

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

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

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

PRELIMINARY SETTING -

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

FINAL SETTING -

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

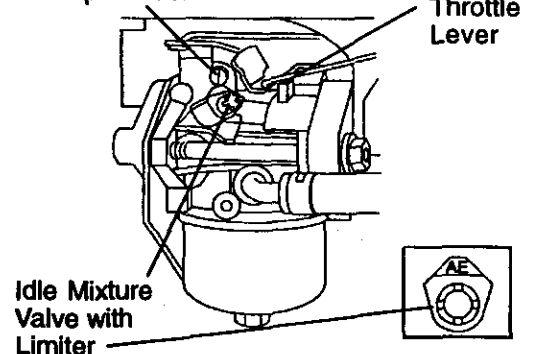
ACCELERATION TEST -

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

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

IMPORTANT: Never tamper with the engine governor, which is factory set for proper engine speed. Overspeeding the engine above the factory high speed setting can be dangerous. If you think the engine-governed high speed needs adjusting, contact your nearest AUTHORIZED service center/department, 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.

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

TRACTOR

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

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

BATTERY

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

ENGINE

FUEL SYSTEM

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

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

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

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

ENGINE OIL

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

CYLINDER(S)

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

OTHER

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

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

TROUBLESHOOTING CHART

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

TROUBLESHOOTING CHART

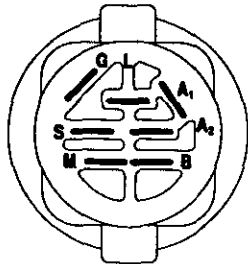
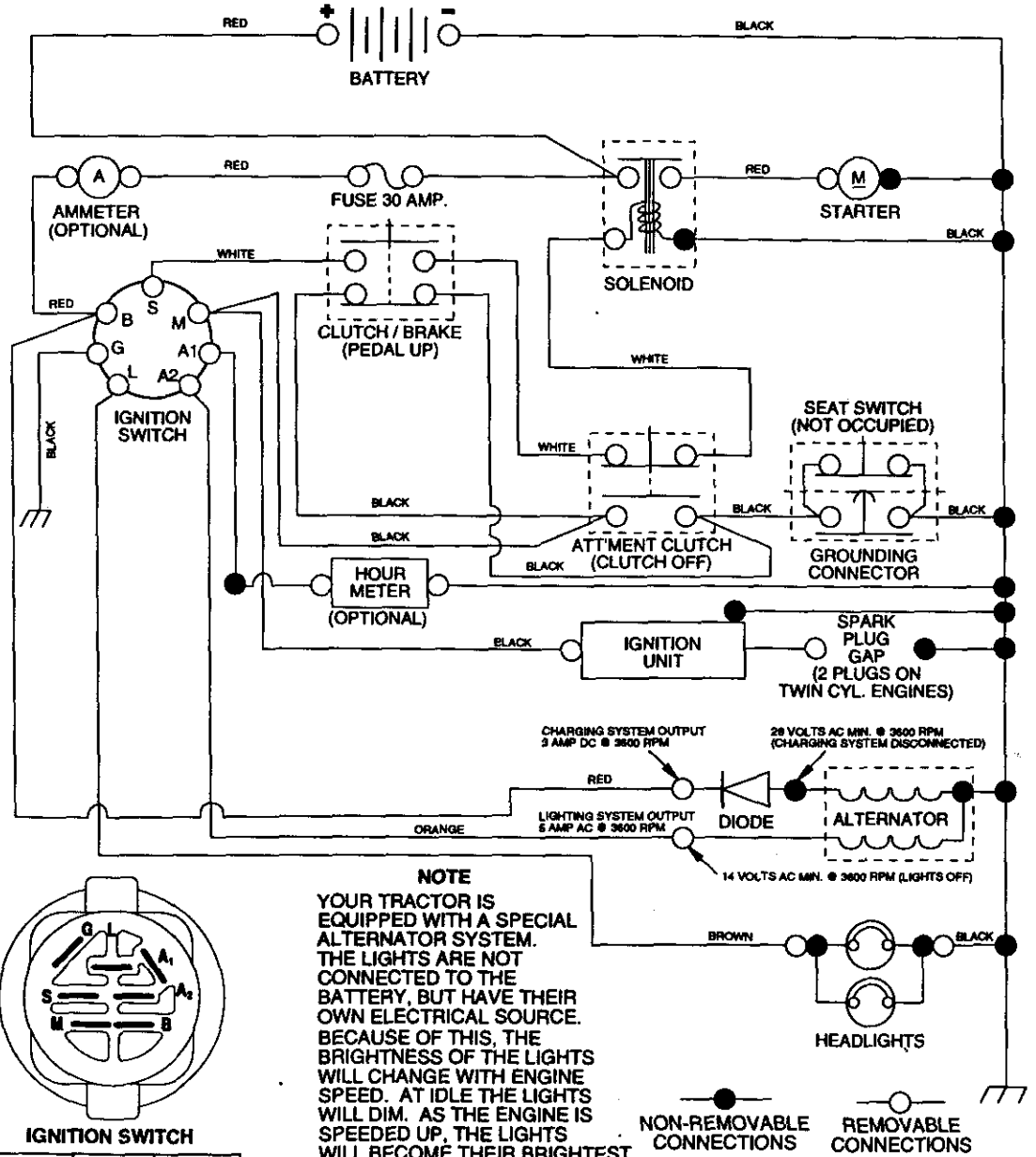
PROBLEM	CAUSE	CORRECTION
Loss of power	<ul style="list-style-type: none"> • Cutting too much grass/too fast. • Throttle in "CHOKE" position. • Build-up of grass, leaves and trash under mower. • Dirty air filter. • Low oil level/dirty oil. • Faulty spark plug. • Dirty fuel filter. • Stale or dirty fuel. • Water in fuel. • Spark plug wire loose. • Dirty engine air screen/fins. • Dirty/clogged muffler. • Loose or damaged wiring. • Carburetor out of adjustment. • Engine valves out of adjustment. 	<ul style="list-style-type: none"> • Set in "Higher Cut" position/ reduce speed. • Adjust throttle control. • Clean underside of mower housing. • Clean/replace air filter. • Check oil level/change oil. • Clean and regap or change spark plug. • Replace fuel filter. • Drain fuel tank and refill with fresh gasoline. • Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter. • Connect and tighten spark plug wire. • Clean engine air screen/fins. • Clean/replace muffler. • Check all wiring. • See "To Adjust Carburetor" in Service Adjustments section. • Contact an authorized service center/department.
Excessive vibration	<ul style="list-style-type: none"> • Worn, bent or loose blade. • Bent blade mandrel. • Loose/damaged part(s). 	<ul style="list-style-type: none"> • Replace blade. Tighten blade bolt. • Replace blade mandrel. • Tighten loose part(s). Replace damaged parts.
Engine continues to run when operator leaves seat with attachment clutch engaged	<ul style="list-style-type: none"> • Faulty operator-safety presence control system. 	<ul style="list-style-type: none"> • Check wiring, switches and connections. If not corrected, contact an authorized service center/department.
Poor cut - uneven	<ul style="list-style-type: none"> • Worn, bent or loose blade. • Mower deck not level. • Buildup of grass, leaves, and trash under mower. • Bent blade mandrel. • Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels. 	<ul style="list-style-type: none"> • Replace blade. Tighten blade bolt. • Level mower deck. • Clean underside of mower housing. • Replace blade mandrel. • Clean around mandrels to open vent holes.
Mower blades will not rotate	<ul style="list-style-type: none"> • Obstruction in clutch mechanism. • Worn/damaged mower drive belt. • Frozen idler pulley. • Frozen blade mandrel. 	<ul style="list-style-type: none"> • Remove obstruction. • Replace mower drive belt. • Replace idler pulley. • Replace blade mandrel.

TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
Poor grass discharge	<ul style="list-style-type: none"> • Engine speed too slow. • Travel speed too fast. • Wet grass. • Mower deck not level. • Low/uneven tire air pressure. • Worn, bent or loose blade. • Buildup of grass, leaves and trash under mower. • Mower drive belt worn. • Blades improperly installed. • Improper blades used. • Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels. 	<ul style="list-style-type: none"> • Place throttle control in "FAST" position. • Shift to slower speed. • Allow grass to dry before mowing. • Level mower deck. • Check tires for proper air pressure. • Replace/sharpen blade. Tighten blade bolt. • Clean underside of mower housing. • Replace mower drive belt. • Reinstall blades sharp edge down. • Replace with blades listed in this manual. • Clean around mandrels to open vent holes.
Headlight(s) not working (if so equipped)	<ul style="list-style-type: none"> • Switch is "OFF". • Bulb(s) burned out. • Faulty light switch. • Loose or damaged wiring. • Blown fuse. 	<ul style="list-style-type: none"> • Turn switch "ON". • Replace bulb(s). • Check/replace light switch. • Check wiring and connections. • Replace fuse.
Battery will not charge	<ul style="list-style-type: none"> • Bad battery cell(s). • Poor cable connections. • Faulty regulator (if so equipped). • Faulty alternator. 	<ul style="list-style-type: none"> • Replace battery. • Check/clean all connections. • Replace regulator. • Replace alternator.
Loss of Drive	<ul style="list-style-type: none"> • Freewheel control in "disengaged" position. • Motion drive belt worn, damaged or broken. • Air trapped in transmission during shipment or servicing. 	<ul style="list-style-type: none"> • Place freewheel control in "engaged" position. • Replace motion drive belt.
Engine "backfires" when turning engine "OFF"	<ul style="list-style-type: none"> • Engine throttle control not set at "SLOW" position for 30 seconds before stopping engine. 	<ul style="list-style-type: none"> • Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.

TRACTOR--MODEL NUMBER 917.270430

SCHEMATIC



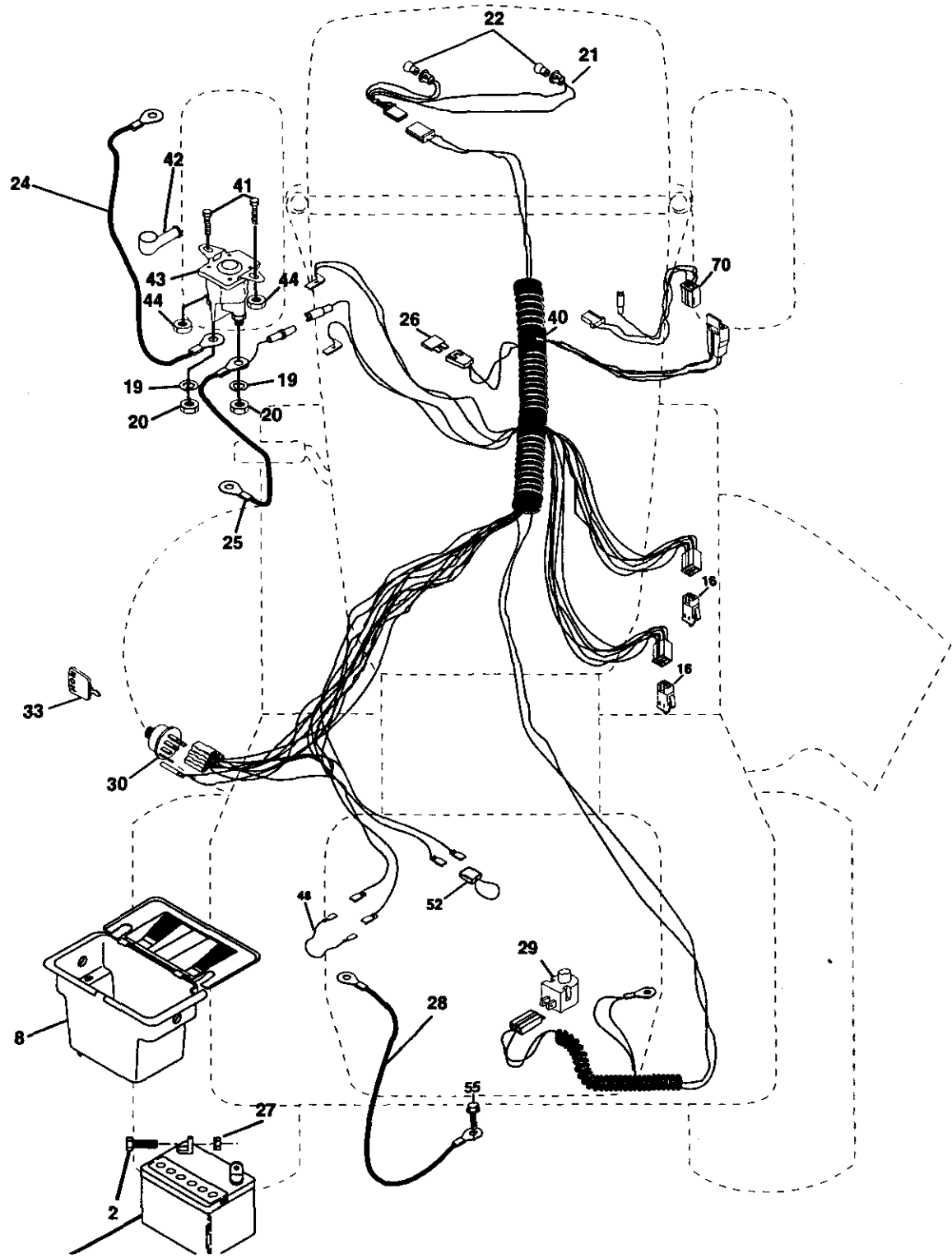
IGNITION SWITCH

POSITION	CIRCUIT	"MAKE"
OFF	M+G+A1	NONE
RUN/LIGHT	B+A1	A2+L
RUN	B+A1	NONE
START	B + S + A1	NONE

REPAIR PARTS

TRACTOR—MODEL NUMBER 917.270430

ELECTRICAL



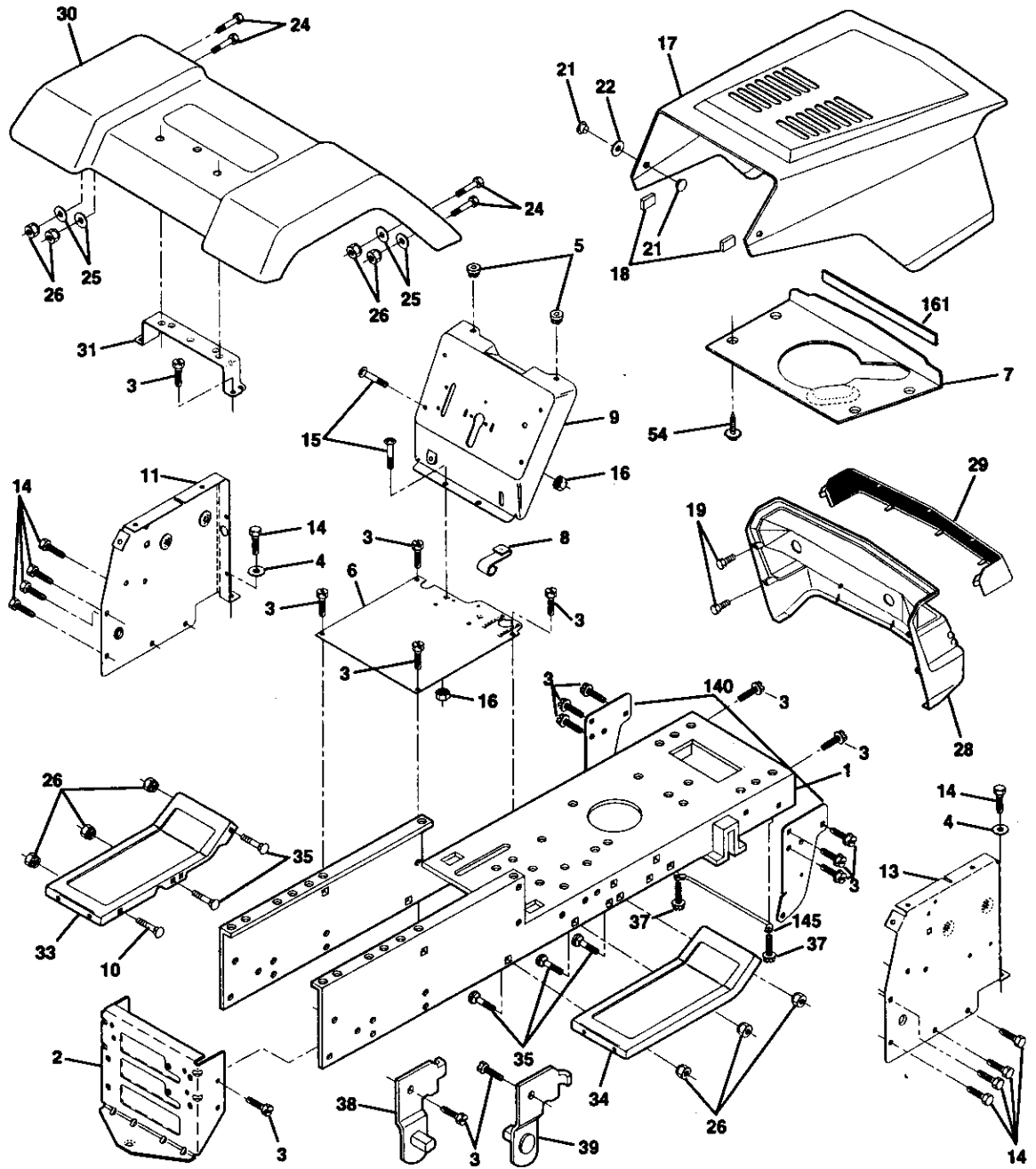
TRACTOR--MODEL NUMBER 917.270430

ELECTRICAL

KEY PART NO.	PART NO.	DESCRIPTION
1	144925	Battery 12 Volt 25 Amp
2	74760412	Bolt, Hex Head 1/4-20 unc x 3/4
8	156417	Case, Battery Mech Hinge
16	153664	Switch, Interlock Push-In
19	STD551125	Washer, Lock
20	73350400	Nut, Hex, Jam 1/4-20 UNC
21	166181	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	166180	Fuse
27	73510400	Nut Keps Hex 1/4-20 UNC
28	4207J	Cable, Ground, 6 Gauge, Black, 12"
29	121305X	Switch, Plunger
30	163968	Switch, Ignition
33	140403	Key, Ignition
40	166151	Harness, Ignition
41	71110408	Bolt, Hex Head, Fin. 1/4-20 x 1/2
42	131563	Cover, Terminal, Red
43	145673	Solenoid
44	73640400	Nut Keps Blk Hex 1/4-20 UNC
48	140844	Adaptor Ammeter Rectangular
52	141940	Protection Wire Loop
70	166658	Harness Engine B&S

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

TRACTOR - MODEL NUMBER 917.270430
CHASSIS AND ENCLOSURES



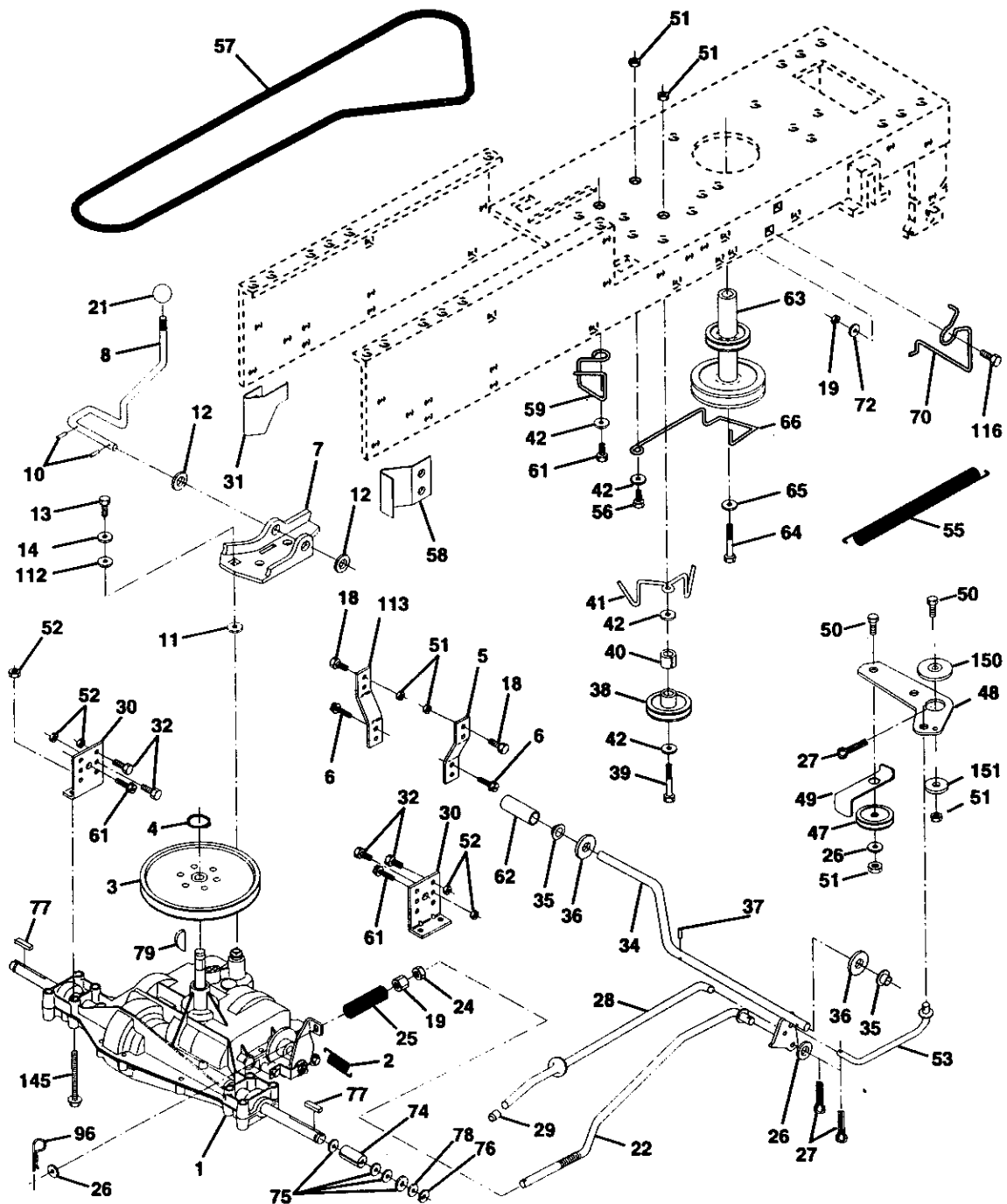
TRACTOR--MODEL NUMBER 917.270430
CHASSIS AND ENCLOSURES

KEY PART NO. NO.	DESCRIPTION
1 165480	Chassis Asm. LT STMP
2 140356	Drawbar Stretch
3 17490612	Screw Thdrol 3/8-16 x 3/4 Ty-tt
4 STD551025	Washer 13/32 X 3/4 X 16 Ga
5 155272	Bumper Hood/Dash
6 155924X011	Saddle Slkscr Fit LT 6SP Peerless
7 126842X	Shield Ht. Hood Lt
8 155138	Clip Retainer Slide-On
9 166318X012	Dash Slkscr 1-pc
10 STD533710	Bolt Rdhd Sqnk 3/8-16unc X 1
11 155927	Panel Dash LH
13 155934X010	Panel Slkscr Dash RH
14 17490608	Screw Thdrol 3/8-16 x 1/2 Ty-tt
15 74180512	Screw Mach TRHD 5/16-18 unc x 3/4
16 STD541431	Nut Keps 5/16-18 Unc
17 154988X558	Hood Asm
18 126938X	Bumper Hood
19 164863	Screw Hwrd Hi-Lo #13-16 x 3/4
21 122933X	Rivet Ratchet Nylon
22 124479X	Washer Nylon Blk 28 x 75 x 19
24 STD523710	Bolt Fin Hex 3/8-16 unc x 1 Gr. 5
25 19131312	Washer 13/32 X 13/16 x 12 Ga
26 STD541437	Nut Hex Lock W/Ins. 3/8-16 Unc
28 140135X428	Grille Black
29 124029X599	Lens Headlight Bar Clear
30 157584X558	Fender Pnt LT W/o Shift
31 136619	Bracket Fender Repl 109873x
33 105476X558	Footrest Pnt Lh
34 105475X558	Footrest Pnt Rh
35 STD533707	Bolt Rdhd Sht Sqnk 3/8-16 x 3/4
37 17490508	Screw Thdrol 5/16-18 x 1/2
38 139886	Bracket Asm Pvt LH MWR Rear
39 139887	Bracket Asm Pvt RH MWR Rear
54 161464	Screw
140 158418	Bracket Suspension Front
145 156524	Rod Pivot Chassis/Hood
161 161547	Extrusion Hood
-- 5479J	Plug Button Blk 359 Dia Choke

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

TRACTOR - MODEL NUMBER 917.270430

GROUND DRIVE



TRACTOR -- MODEL NUMBER 917.270430

GROUND DRIVE

KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1 - - - - -	Transaxle Peerless 205-544C (See Breakdown)	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 STD523715	Bolt Hex Hd 3/8-16unc x 1-1/2
5 121520X	Strap Torque 30 Degrees	51 STD541437	Nut Crownlock 3/8-16 UNC
6 17490512	Screw Thdrol 5/16-18 x 3/4 TYT	52 STD541431	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 Blk Zinc	55 105709X	Spring Return Clutch 6 75
10 STD561210	Pin Cotter 1/8 x 1 Cad	56 STD523712	Bolt Fin Hex 3/8-16 unc x 1-1/4
11 105701X	Washer Plate Shf 388 Sq Hole	57 130801	V-Belt Gd Drive 95 00
12 19151216	Washer 15/32 x 3/4 x 16ga	59 140312	Keeper Belt Centerspan
13 74550412	Bolt 1/4-28unf Gr8 W/Patch	61 17490612	Screw Thdrol 3/8-16 x 3/4 Ty-tt
14 STD551125	Washer Lock Hvy Helical 1/4	62 8883R	Cover Pedal Blk Round
18 STD523710	Bolt Fin Hex 3/8-16 UNC x 1 Gr. 5	63 140186	Pulley Eng Cl Mech 38deg LT/YT
19 STD541437	Nut Lock Hex W/Ins. 3/8-16 Unc	64 71170764	Bolt Hex 7/16-20 x 4 Gr 5
21 106933X	Knob Rd 1/2-13 Plstc Thds Blk	65 STD551143	Washer Lock Hvy Hlcl Spr 7/16
22 130804	Rod Brake Blk Zinc 26 840	66 154778	Keeper Belt Engine Fool Proof
24 STD541237	Nut Hex Jam 3/8-16 Unc	70 134683	Guide Belt Mower Drive RH
25 106888X	Spring Rod Brake 2 00 Zinc	72 19132012	Washer 13/32 x 1-1/4 x 12 Ga
26 STD551037	Washer 13/32 x 13/16 x 16 Ga	74 137057	Spacer Axle
27 STD561210	Pin Cotter 1/8 x 3/4 Cad	75 121749X	Washer 25/32 x 1 1/4 x 16 Ga
28 145204	Rod Brake Parking Lt/Yt	76 STD581075	E-ring #5133-75
29 124236X	Cap Brake Parking Red	77 123583X	Key Square 2 0 x 1845/ 1865
30 130807	Bracket Mtg Transaxle	78 121748X	Washer 25/32 x 1-5/8 x 16 Ga
32 STD523107	Bolt Hex Hd 5/16-18unc x 3/4	79 2228M	Key Woodruff #9 3/16 x 3/4
34 155071	Shaft Asm Pedal Foot LT/STLT	96 4497H	Retainer Spring 1"
35 120183X	Bearing Nylon Blk 629 Id	112 19091210	Washer 9/32 x 3/4 x 10 Ga
36 STD551062	Washer 21/32 x 1 x 16 Ga	113 127285X	Strap Torque LH/LT
37 1572H	Pin Roll 3/16 x 1"	116 72110610	Bolt Rdhd Sq Neck 3/8-16 x 1.25
38 131494	Pulley Idler Flat	145 74490540	Bolt Hex Flghd 5/16-18 x Gr. 5
39 STD523727	Bolt Fin Hex 3/8-16unc x 2-3/4	150 165850	Bushing Bellcrank GRD Drive
40 4470J	Spacer Split 395 x 59 Bzp	151 19133210	Washer 13/32 x 2 x 10 Ga.
41 165838	Keeper Belt Idler	170 165849	Keeper Belt Transaxle Gear
42 19131312	Washer 13/32 x 13/16 x 12 Ga		

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

TRACTOR – MODEL NUMBER 917.270430

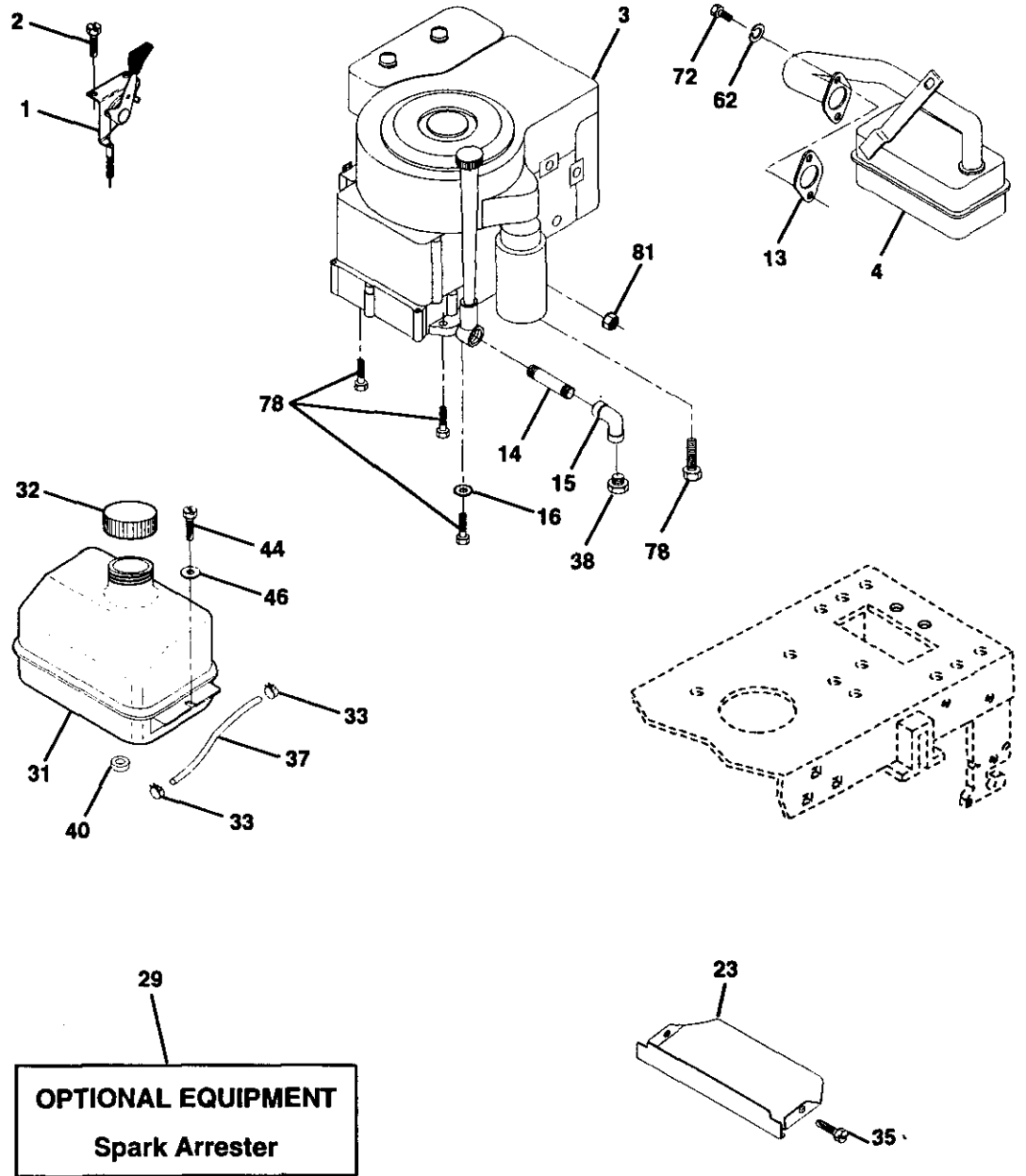
STEERING

KEY PART NO.	PART NO.	DESCRIPTION
1	139768	Steering Wheel
2	154427	Axle Assembly STMP Dropped STL
3	156483	Spindle Assembly, L.H.
4	157473	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	156438	Draglink Extended Stamped
11	STD551137	Washer, Lock
13	154779	Bearing Axle STLT/GT
15	73901000	Nut, Lock, Flange 5/8-11 UNC
17	156545	Shaft Assembly, Steering
18	57079	Washer, Thrust .515 x .750 x .033
19	160395	Support, Shaft
22	165857	Screw, Hex Wshhd
23	165851	Pittman Shaft Assembly
25	154406	Bracket, Steering
26	126847X	Bushing, Link, Drag
27	136874	Gear, Sector
28	19131416	Washer 13/32 x 7/8 x 16 Gauge
29	17490612	Screw, Thd., Roll. 3/8-16 x 3/4
30	STD561210	Pin
32	130465	Rod, Tie
36	155099	Bushing, Steering
37	152927	Screw
38	139769	Insert, Steering Wheel
39	19133808	Washer 13/32 x 2-3/8 x 8 Gauge
40	STD541537	Gripco Nut
41	104820X	Adaptor, Steering Wheel
42	124417X	Boot, Steering Shaft
43	121749X	Washer 25/32 x 1-1/4 x 16 Gauge
46	121232X	Cap, Spindle
47	6855M	Fitting, Grease
62	167903	Kit Steering Asm Service
65	154780	Spacer Axle
66	154404	Bearing Arm Pittman
67	74781044	Bolt, Fin Hex 5/8-11 UNC x 2-3/4
68	154429	Axle, Brace
79	19132012	Washer 13/32 x 1-1/4 x 12 Ga.
80	74950612	Bolt Hex Nylon 3/8-16 x 3/4

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

TRACTOR--MODEL NUMBER 917.270430

ENGINE



OPTIONAL EQUIPMENT
Spark Arrester

TRACTOR--MODEL NUMBER 917.270430

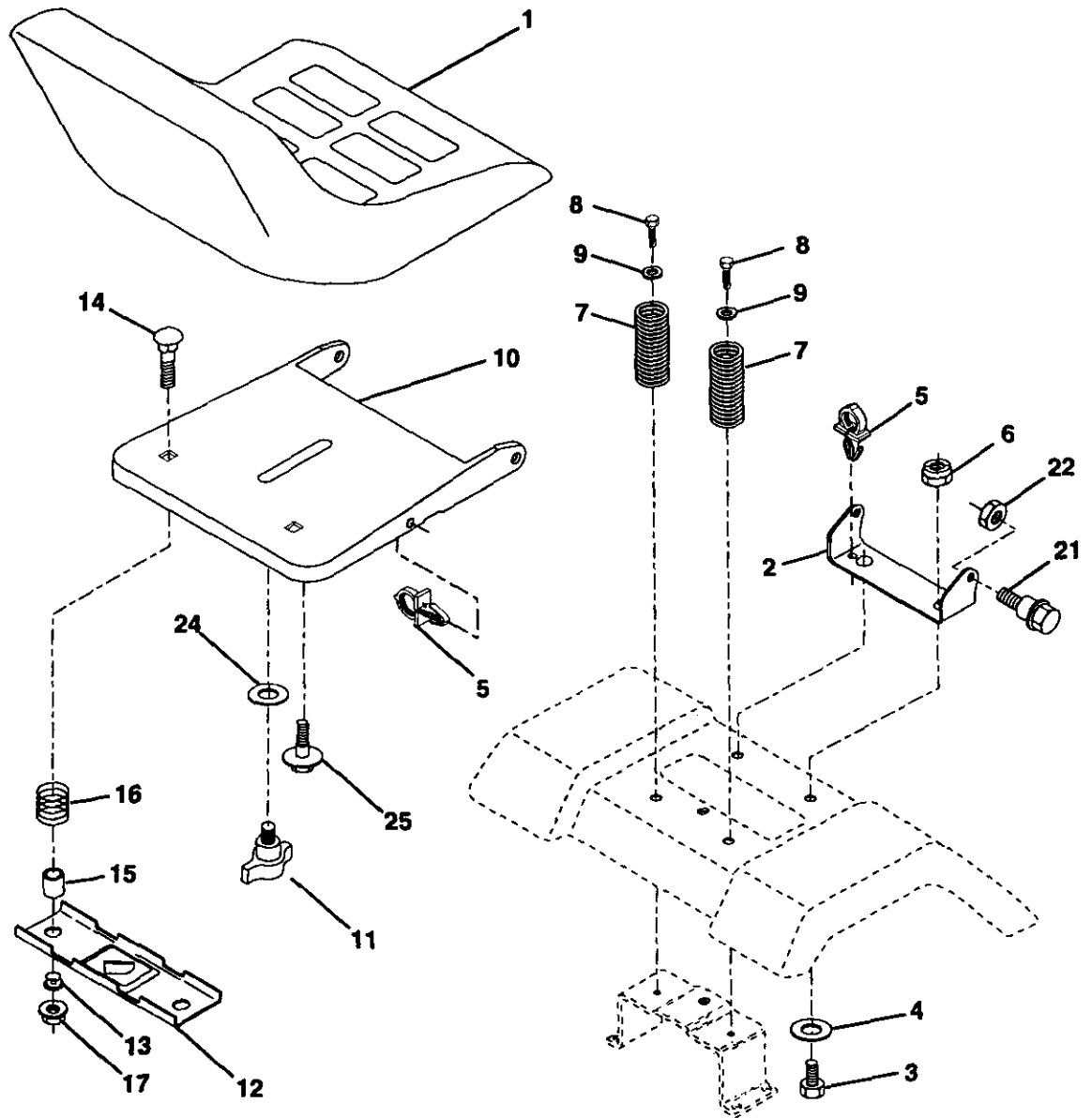
ENGINE

KEY PART NO.	PART NO.	DESCRIPTION
1	162144	Control Th/ch RH Blk Pdl 15 10
2	17720410	Screw Hex Thd Cut 1/4-20x5/8 T
3	-----	Engine (See Breakdown)
		Briggs Model 28R707-1140-E1
4	137348	Muffler
13	165291	Gasket Eng 1 313 Id Tin Plated
14	13280324	Nipple Pipe 3/8 Npt x 3"
15	13200300	Elbow Std 90 Degree 3/8-18 Npt
16	STD551237	Washer Lock Ext Tooth 3/8
23	159880	Shield Browning
29	137180	Kit Spark Arrestor (Flat Scm)
31	109202X	Tank Fuel Front 1 25
32	158990	Cap Asm Fuel W/sym Vented
33	123487X	Clamp Hose Blk
35	17490512	Screw Thdrol 5/16-18 x 3/4 TYT
37	137040	Line Fuel 20"
38	-----	Plug Oil Drain (See Engine Breakdown)
40	124028X	Bushing Snap Nyl Blk Fuel Line
44	17490412	Screw Hexwsh Thdrol 1/4-20 x 3/4
46	19091416	Washer 9/32 x 7/8 x 16 ga
62	STD551131	Washer Lock Hvy Hlci Spr 5/16
72	71070512	Screw Hex Hd Cap 5/16-18 X 3/4
78	17490620	Screw Thdrol 3/8-16x1-1/4 TYTT
81	128861	Nut Flange 1/4-20 Starter Nut

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

TRACTOR – MODEL NUMBER 917.270430

SEAT ASSEMBLY



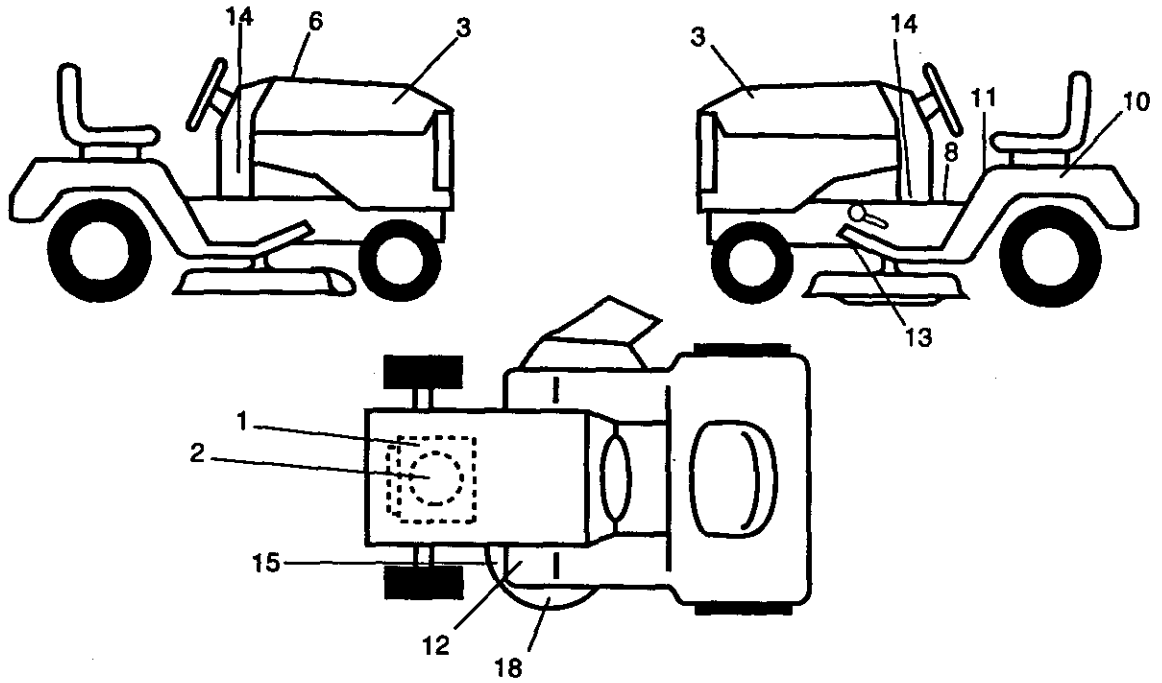
KEY PART NO. NO.	DESCRIPTION
1 127426X	Seat
2 140551	Bracket Pvt St
3 STD523710	Bolt Fin Hex 3/8-16unc X 1
4 19131610	Washer Flat 13/32 X 1 X 10 Ga
5 145006	Clip Push-In Hinged
6 STD541437	Locknut Hex W/Wsh 3/8-16
7 124181X	Spring Seat Cprsn 2 250 Blk Zi
8 17490616	Screw Thdrol 3/8-16 X 1 Ty-tt
9 19131614	Washer 13/32 X 1 X 14 Ga
10 155925	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 Rdhd Sht Nk 1/4-20x1-1/2
15 134300	Spacer Split 28x 96 Yel Zinc
16 121250X	Spring Cprsn 1 27 Blk Pnt
17 123976X	Nut Lock 1/4 Lge Fig Gr 5 Zinc
21 153236	Bolt Shld 5/16-18 Unc
22 STD541431	Nut Lock Hex *W/ins 5/16-18
24 19171912	Washer 17/32 X 1-3/16 X 12 Ga
25 127018X	Bolt Shoulder 5/16-18 X 62

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

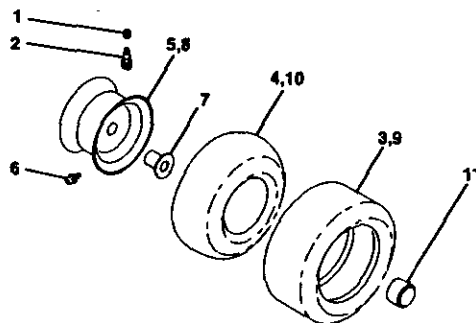
TRACTOR--MODEL NUMBER 917.270430

DECALS



KEY PART NO.	NO.	DESCRIPTION	KEY PART NO.	NO.	DESCRIPTION
1	165837	Decal, Engine	12	4900J	Decal, Clutch/Brake Eng
2	167177	Decal Engine	13	146046	Decal V-Belt Dr Sch tractor
3	163204	Decal Fender Craftsman White	14	163248	Decal Panel Dash
6	133644	Decal Maint Cust Sears Domestic	15	136832	Decal V-Belt sch
8	156867	Decal, Oper sdl P/L Gear	18	133179	Decal Mower QC System
10	149516	Decal Battery Dngr/Psn Eng Acme	--	138311	Decal Handle Lft Height Adjust (Lift Handle)
11	156439	Decal Fender Eng/Span Dnger	--	167766	Owner's Manual, English
			--	167767	Owner's Manual, Spanish

WHEELS AND TIRES

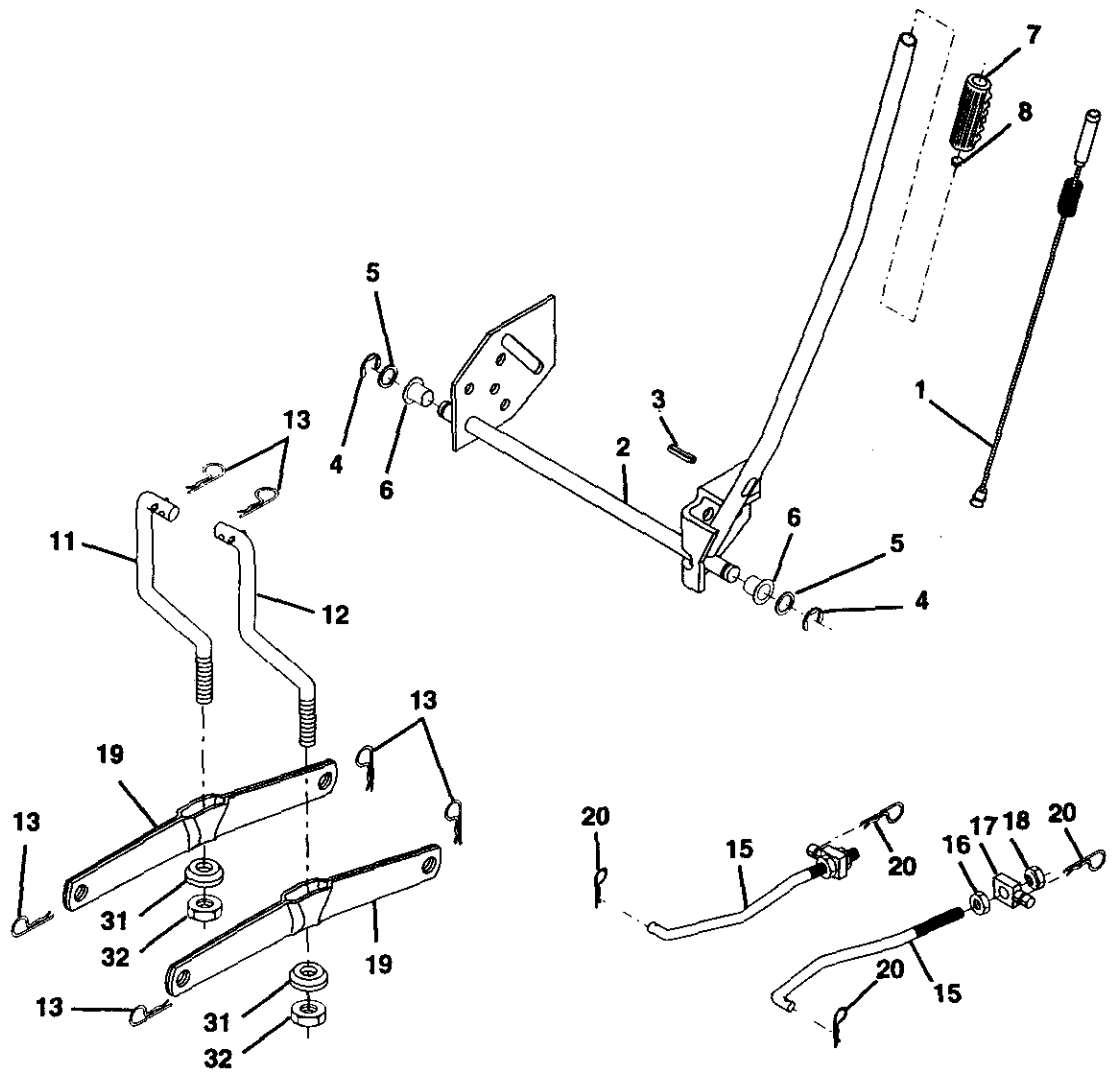


KEY PART NO.	NO.	DESCRIPTION
1	59192	Cap Valve Tire
2	65139	Stem Valve
3	106222X	Tire F Ts 15 X 6 0 - 6 Service
4	59904	Tube Front (Service Item Only)
5	106732X427	Rim Asm 6"front White Service
6	278H	Fitting Grease (Front Wheel Only)
7	9040H	Bearing Flange (front Wheel Only)
8	106108X427	Rim Asm 8"rear White Service
9	122082X	Tire Rear
10	7152J	Tube Rear (Service Item Only)
11	104757X	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 917.270430

LIST ASSEMBLY



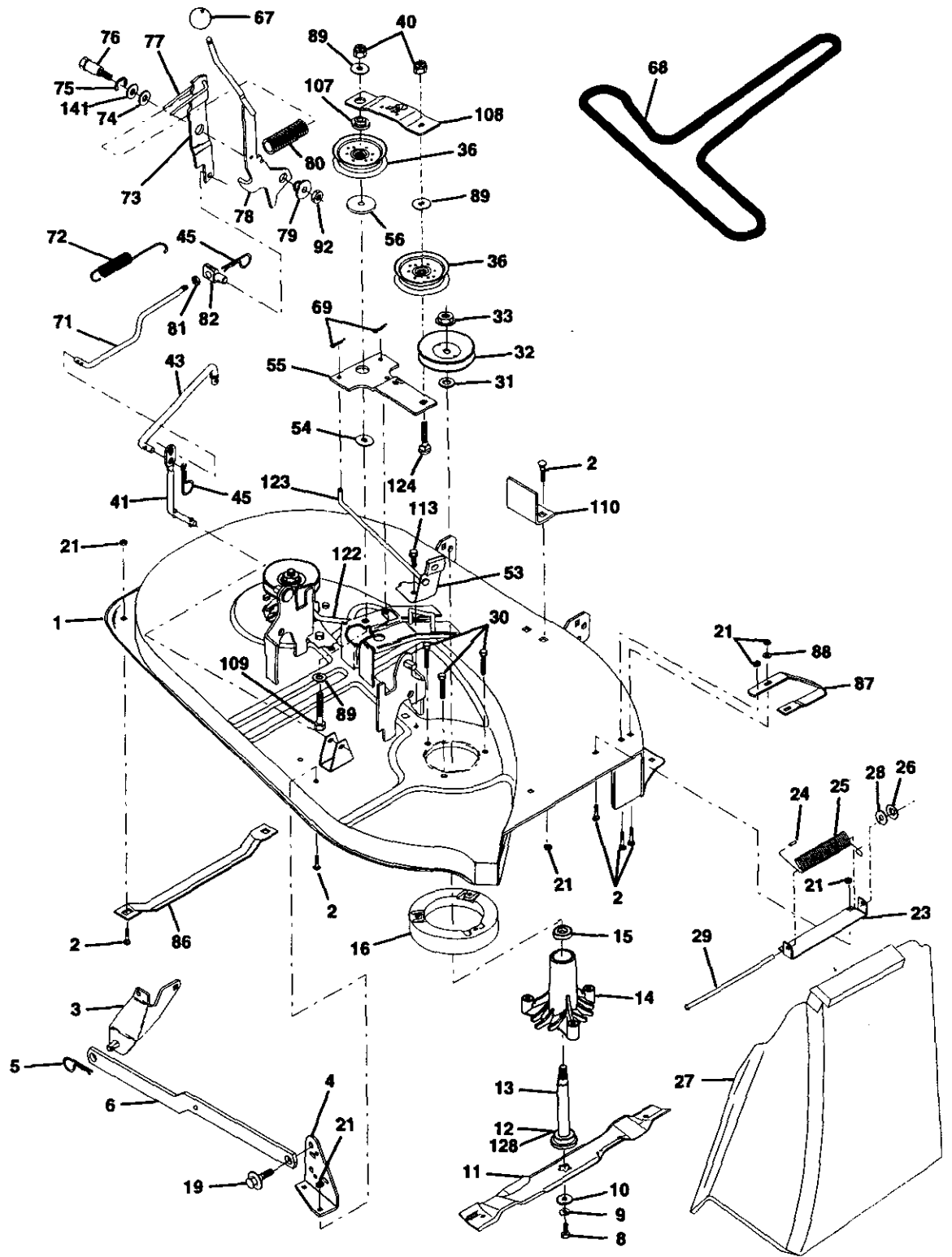
TRACTOR -- MODEL NUMBER 917.270430
LIST ASSEMBLY

KEY PART NO.	PART NO.	DESCRIPTION
1	159460	Wire Asm Inner W/plunger
2	159474	Shaft Asm Lift
3	105767X	Pin Groove 1 500 Zinc
4	12000002	E Ring #5133-62
5	19211621	Washer Pltd 21/32 X 1 X 21ga
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	STD624008	Retainer Spring
15	127218	Link Front
16	73350800	Nut Jam Hex 1/2-13 Unc
17	130171	Trunnion Blk Zinc
18	73680800	Nut Crownlock 1/2-13
19	139868	Arm Suspension Rear
20	163552	Retainer Spring Zinc
31	140302	Bearing Pvt Lift Spherical
32	73540600	Nut Crownlock 3/8-24

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

TRACTOR - MODEL NUMBER 917.270430

MOWER DECK



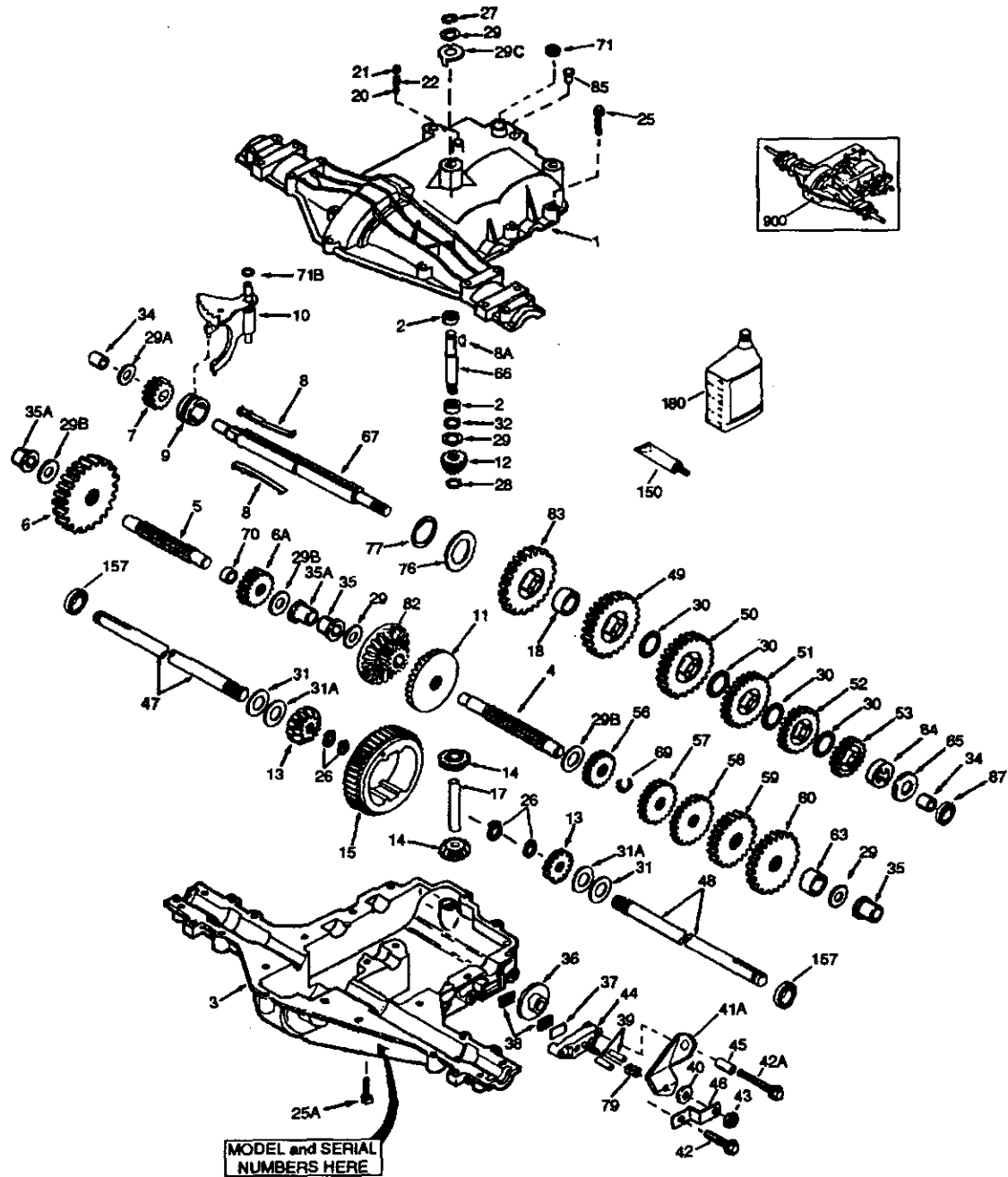
TRACTOR – MODEL NUMBER 917.270430

MOWER DECK

KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1 142829	Mower Housing Assembly	55 133840	Idler Arm Assembly
2 STD533107	Bolt, Carriage 5/16-18 x 3/4	56 122052X	Spacer, Retainer 1-3/4
3 138017	Bracket Asm. Fram Sway Bar 38/42	67 162113	Knob
4 138440	Bracket, Asm. Deck Sway Bar 38"	68 144200	Belt
5 STD624008	Retainer, Spring	69 STD560907	Pin, Cotter 3/32 x 3/4
6 130832	Asm. Suspension Rear	71 142427	Rod, Clutch, Primary
8 850857	Bolt, Hex 3/8-24 x 1-1/4 Grade 8	72 131870	Spring, Return
9 STD551137	Washer, Lock, Hvy Hlcl Spring 3/8	73 127847	Arm, Clutch, Secondary
10 140296	Washer, Hard Blade Mower Vented	74 121748X	Washer 25/32 x 1-5/8 x 16 Gauge
11 134148	Blade, Mower, Mulching 38"	75 12000029	Ring, Klip
12 129895	Ball Bearing	76 128903	Bolt, Shoulder
13 137645	Shaft and Bearing Assembly (Includes Key Number 15)	77 127845	Keeper, Spring
14 128774	Mandrel Housing, Vented	78 160571	Arm, Clutch, Primary
15 110485X	Ball Bearing, Mandrel	79 127498	Bushing
16 140329	Stripper, Mower, Vented	80 153701	Spring
19 132827	Bolt, Shoulder	81 STD541237	Nut Hex Jam 3/8-16 UNC
21 STD541431	Nut, Crownlock 5/16-18	82 142028	Trunnion Adj 94
23 137607	Bracket, Mower Deflector	86 7631J	Runner, LH
24 105304X	Cap, Sleeve	87 128772	Runner, RH
25 123713X	Spring, Deflector	88 19111216	Washer 11/32 x 3/4 x 16 Gauge
26 110452X	Nut, Push	89 19131612	Washer 13/32 x 1 x 12 Gauge
27 106736X	Shield, Deflector	92 STD541437	Nut Lock Hex w/Ins 3/8-16 UNC
28 19111016	Washer 11/32 x 3/4 x 16 Gauge	107 133502	Spacer, Retainer
29 106735X	Rod, Hinge	108 133503	Stiffener, Idler Arm
30 157722	Screw, Thdrol Washer Hd	109 74760640	Bolt, Hex Head 3/8-16 x 2-1/2
31 129963	Washer, Spacer	110 142587	Upstop Deck Front 38"
32 153532	Pulley, Mandrel	113 17490512	Screw, Hex Head, Thd., Roll. 5/16-18 x 3/4
33 137266	Nut, Flangelock 9/16	122 131289	Rod, Brake, LH
36 131494	Pulley, Idler, Flat	123 131288	Rod, Brake, RH
40 STD541437	Nut, Crownlock 3/8-16	124 STD533717	Bolt, Carriage 3/8-16 x 1-3/4
41 133551	Rod, Pivot	128 153390	Washer Felt
43 133504	Rod, Clutch, Secondary	141 6266H	Washer Thrust .75 x 1.230
45 STD624003	Retainer, Spring	-- 130794	Mandrel Assembly (Includes Key Numbers 12-15, 17-19, 31 and 33)
53 130840	Brake Assembly	-- 142820	Mower Deck, Complete
54 133943	Washer Hardened		

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

TRACTOR--MODEL NUMBER 917.270430
PEERLESS TRANSAXLE--MODEL NUMBER 205-544C



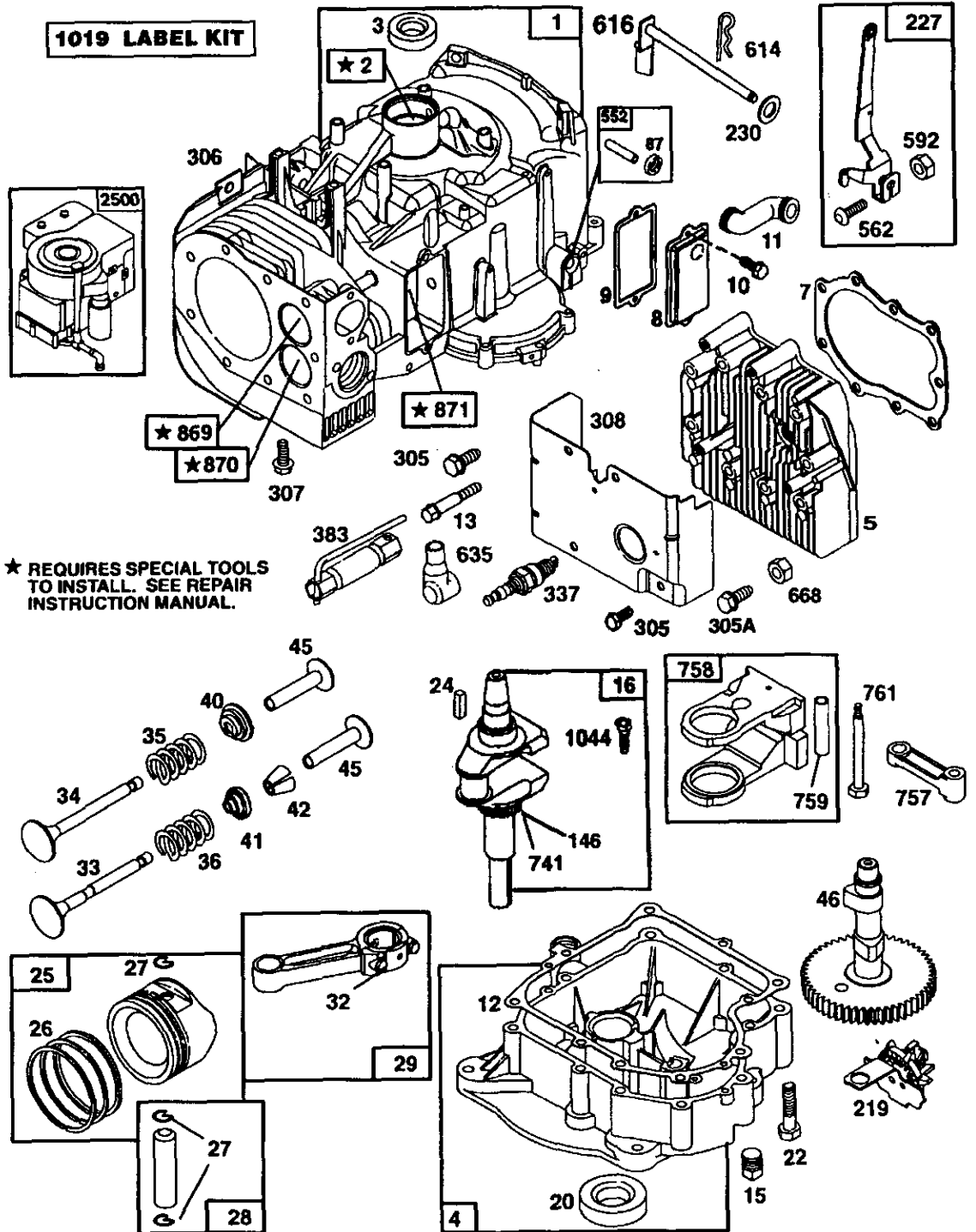
TRACTOR – MODEL NUMBER 917.270430
PEERLESS TRANSAXLE – MODEL NUMBER 205-544C

REF PART NO. NO.	DESCRIPTION	REF PART NO. NO.	DESCRIPTION
1	772147 Transaxle Cover	39	786026 Dowel Pin
2	780086A Needle Bearing 5 / 8"	40	792076A Flat Washer .312 ID x .059W
3	770128 Transaxle Case	41A	790079 Brake Lever
4	776395 Countershaft	42	792073A Screw 1 / 4 - 20 x 1 - 1 / 4"
5	776409 Output Shaft	42A	792085A Screw 1 / 4 - 20 x 2 - 1 / 4"
6	778364 Spur Gear (38 teeth)	43	792075 Locknut 5 / 16 - 24
6A	778369 Spur Gear (15 teeth)	44	790025 Brake Pad Holder
7	778330 Spur Gear (11 teeth)	45	786066 Spacer .2625 x 1.0
8	792180 Shift Key	46	786086 Brake Lever Bracket
8A	792047 Woodruff Key #9	47	774690 Axle (11 - 15 / 16 " long)
9	784352 Shift Collar	48	774691 Axle (16 - 1 / 2" long)
10	784378 Shift Rod & Fork	49	778356 Spur Gear (29 teeth)
11	778334 Bevel Gear (30 teeth)	50	778354 Spur Gear (23 teeth)
12	778309 Input Bevel Pinion (13 teeth)	51	778352 Spur Gear (19 teeth)
13	778368 Bevel Gear (13 teeth) (Include. 14)	52	778350 Spur Gear (16 teeth)
14	778368 Bevel Pinion (13 teeth) (Include 13)	53	778346 Spur Gear (15 teeth)
15	778370 Ring Gear (43 teeth)	53	778346 Spur Gear (15 teeth - steel)
17	786188 Drive Pin	56	778355 Spur Gear (11 teeth)
18	786102 Spacer 1.130 x .695	57	778353 Spur Gear (17 teeth)
20	792077A Ball 5 / 6" dia	58	778351 Spur Gear (21 teeth)
21	792078 Set Screw 3 / 8-16 x 3 / 8"	59	778349 Spur Gear (24 teeth)
22	792079 Spring .310 OD x .625 L	60	778345 Spur Gear (25 teeth)
25	792073A Screw 1 / 4 - 20 x 1-1 / 4"	63	786071 Countershaft Spacer 1 - 1 / 8" x 3 / 8"
25A	792177 Screw 1 / 4 - 20 x 1 - 3 / 8"	64	786072 Brake Shaft Spacer 1 - 3 / 8" x 3 / 8"
26	792125 Retaining Ring (pkg of 2)	65	780189 Flat Washer .563 ID x .062W
27	792035 Retaining Ring	66	776422 Input shaft
28	788040 Retaining Ring	67	776396 Shifter & Brake shaft
29	780072 Thrust Washer .627 ID x .031W	69	792170 Retaining Ring
29A	780160 Thrust Washer .563 ID x .031W	70	786187 Spacer .890
29B	780051 Thrust Washer .762 ID x .031W	71	788069 Square Cut Ring
29C	780199 Anti -Rotation Washer .632	71B	788092 "O" Ring
30	780108 Cup Washer 1.127 ID x .032W	76	780090 Flat Washer 1.128 ID x .058W
31	780001 Flat Washer .750 ID x .056 (Use as Needed)	77	788078A Inverted Retaining Ring
31A	780195 Flat Washer .750 ID x .062W	79	792144 Spring .430 OD x .5000 L
32	788083 Oil Seal 5 / 8"	82	778333 Bevel & Spur Gear (30 & 13 teeth)
34	780194 Bushing .563	83	778338 Spur Gear (27 teeth)
35	780193 Flanged Bushing 5 / 8" ID	85	792154 Oil Fill Plug
35A	780197 Flanged Bushing .751	87	788089A Oil Seal 9 / 16"
36	790075 Brake Disk	150	788093A Liquid Gasket RTV Silicone
37	790007 Brake Pad Plate	157	788088A Oil Seal 3 / 4"
38	799021 Brake Pad (pkg of 2)	180	730229A Gear Oil 80W90
		900	794711 Replacement MST-205-544C Transaxle

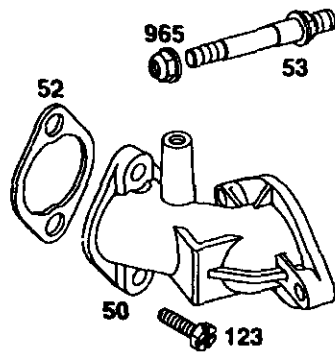
NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

TRACTOR - MODEL NUMBER 917.270430

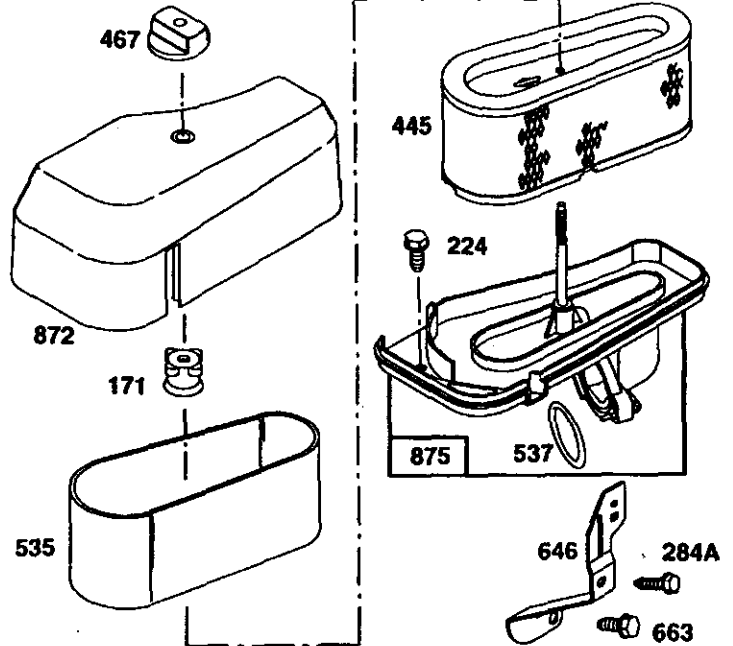
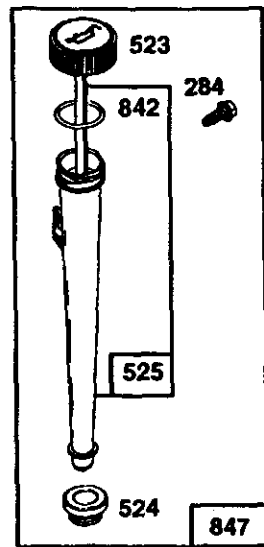
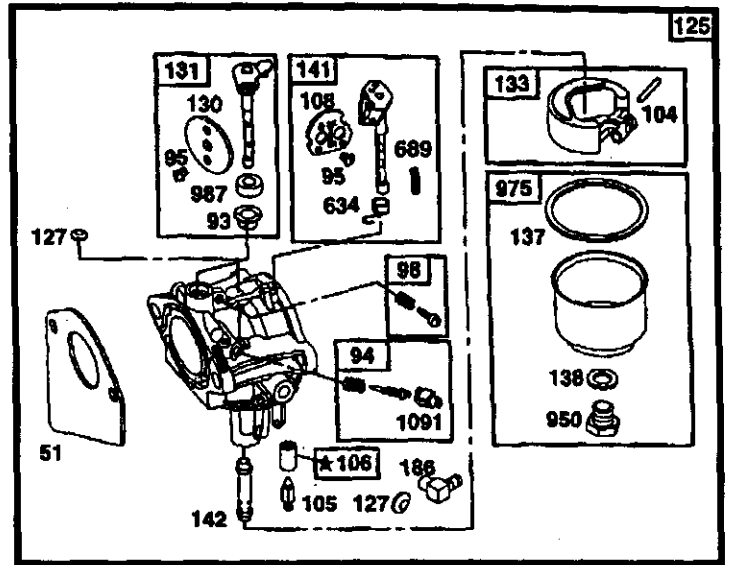
BRIGGS & STRATTON ENGINE-MODEL NUMBER 28R707, TYPE NUMBER 1140-E1



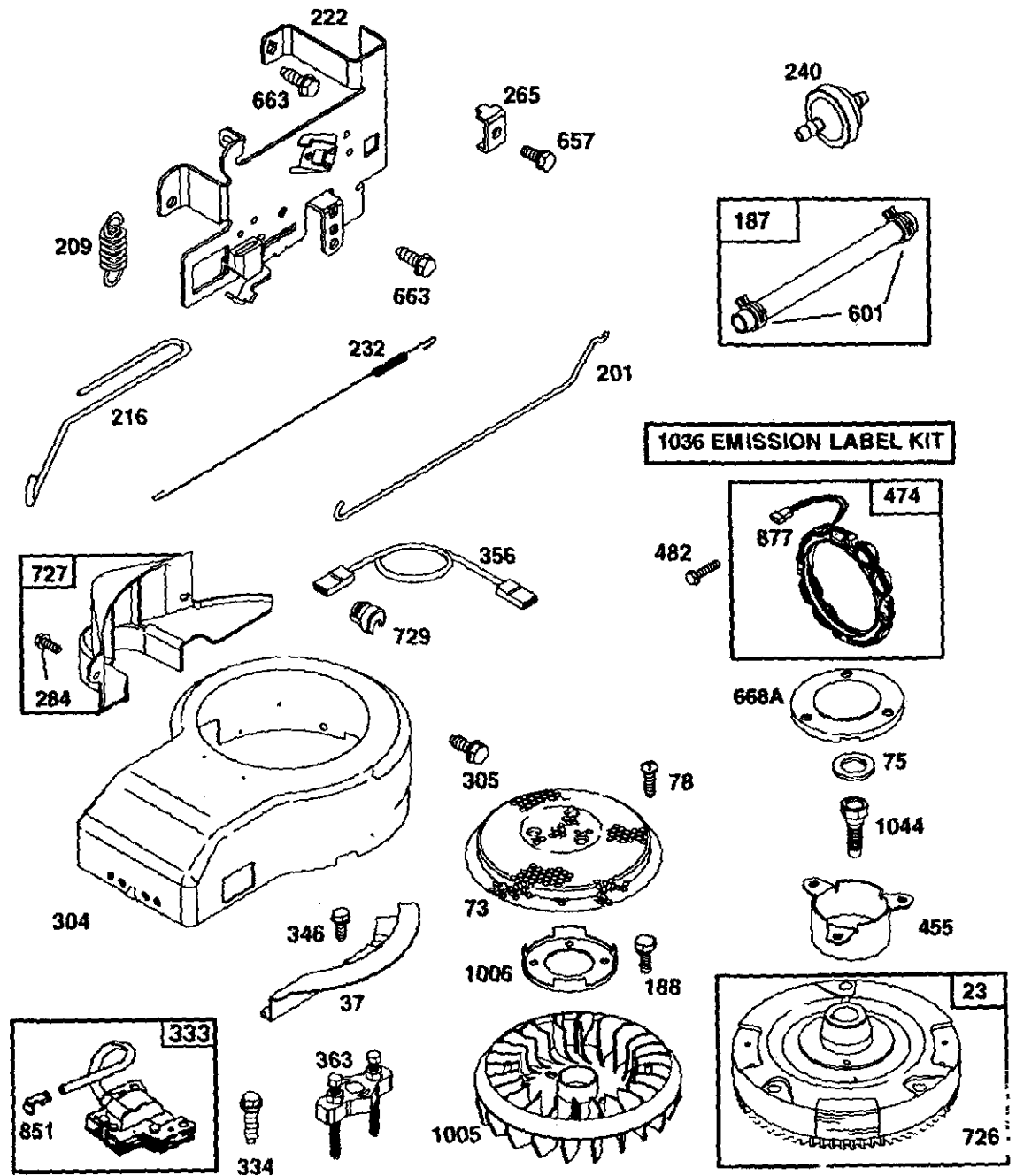
TRACTOR—MODEL NUMBER 917.270430
BRIGGS & STRATTON ENGINE—MODEL NUMBER 28R707, TYPE NUMBER 1140-E1



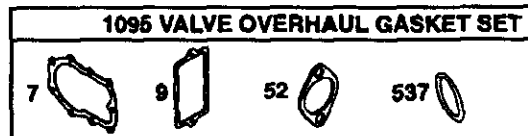
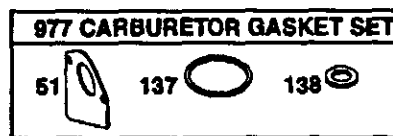
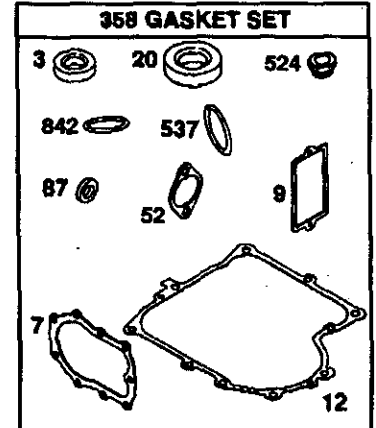
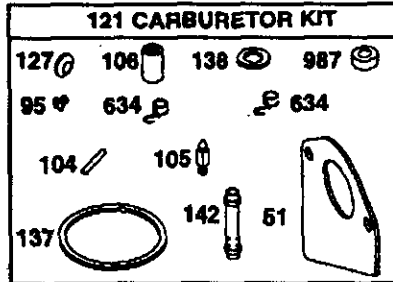
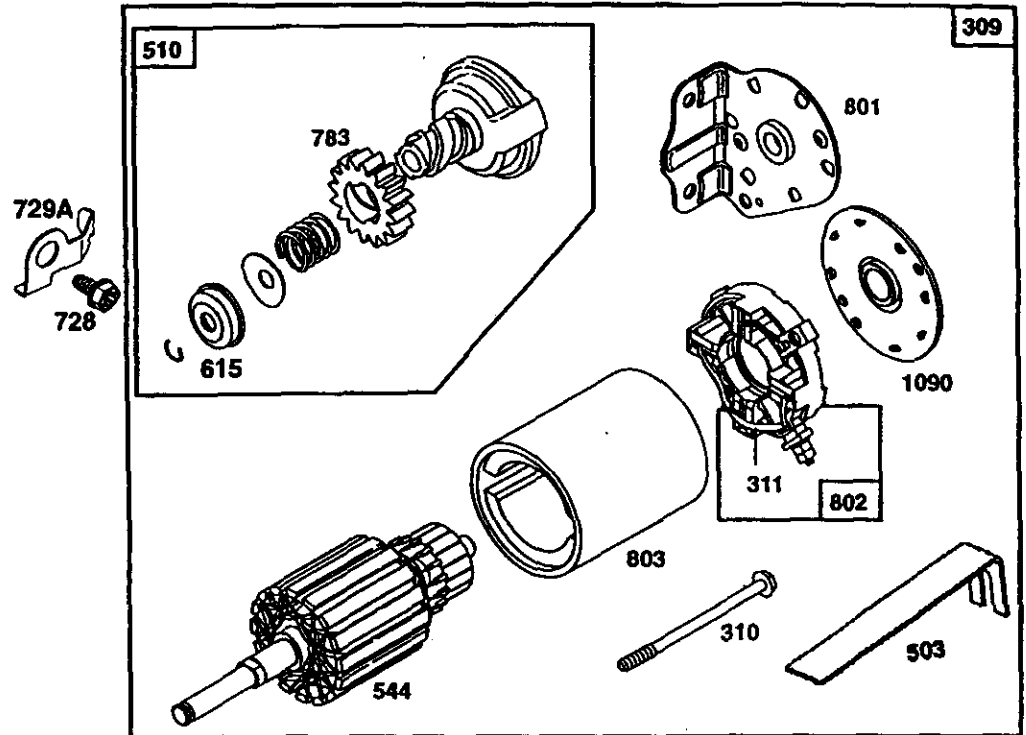
★ REQUIRES SPECIAL TOOLS TO INSTALL. SEE REPAIR INSTRUCTION MANUAL.



TRACTOR--MODEL NUMBER 917.270430
BRIGGS & STRATTON ENGINE-MODEL NUMBER 28R707, TYPE NUMBER 1140-E1



TRACTOR--MODEL NUMBER 917.270430
BRIGGS & STRATTON ENGINE-MODEL NUMBER 28R707, TYPE NUMBER 1140-E1



TRACTOR – MODEL NUMBER 917.270430

BRIGGS & STRATTON ENGINE-MODEL NUMBER 28R707, TYPE NUMBER 1140-E1

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	496413	Cylinder Assembly	51	272465	*** Gasket, Carburetor
2	399265	Bearing, Cylinder	52	272554	+* Gasket, Carburetor
3	391086	* Seal, Oil	53	94637	Stud, Carburetor Mounting
4	494238	Base, Engine	73	224948	Screen, Rotating
5	494240	Head, Cylinder	75	225136	Washer, Spring
7	271866	+* Gasket, Cylinder Head	78	94626	Screw, Phillips
8	495735	Breather Assembly (Includes Mounting Gasket)	87	491323	* Seal, Governor
			93	281346	Bushing, Throttle Shaft
			94	498030	Valve, Needle
9	27803	+* Gasket, Valve Cover	95	94098	** Screw, Throttle
10	94621	Screw, Sems	98	495800	Screw, Idle Adjust
11	280100	Tube, Breather	104	231789	** Pin, Float Hinge
12	271916	* Gasket, Crankcase Cover, 1/64"	105	231855	** Valve, Inlet Needle
	271997	* Gasket, Crankcase Cover, .005"	106	231854	** Seat, Inlet
	271996	* Gasket, Crankcase Cover, .009"	108	224540	Valve, Choke
13	94622	Screw, Cylinder Head	121	499220	Carburetor Kit
15	94239	Plug, Oil Drain	123	94913	Screw, Elbow Mounting
16	498971	Crankshaft	125	498027	Carburetor
20	291675	* Seal, Oil	127	---	** Plug, Welch (Sold in Kit Only)
22	94624	Screw, Sems, Base Mounting	130	224539	Valve, Throttle
23	492326	Flywheel	131	494379	Shaft, Throttle
24	222698	Key, Flywheel	133	494381	Float, Carburetor
25	394661	Piston Assembly, Standard Size	137	281165	*** Gasket, Float Bowl
	394662	Piston Assembly, .010" Oversize	138	281164	*** Washer, Float Bowl
	394663	Piston Assembly, .020" Oversize	141	495097	Shaft, Choke
	394664	Piston Assembly, .030" Oversize	142	497736	** Nozzle, Carburetor
26	391780	Ring Set, Standard Size		497737	Nozzle, Carburetor (High Altitude)
	392331	Ring Set, Standard Size, Chrome	146	94196	Key, Timing
	391781	Ring Set, .010" Oversize	171	281051	Nut, Air Cleaner
	391782	Ring Set, .020" Oversize	186	493496	Elbow, Fuel Pipe
	391783	Ring Set, .030" Oversize	187	298049	Line, Fuel (Cut to Suit)
27	260924	Lock, Piston Pin	188	94627	Screw, Sems
28	299691	Pin, Piston, Standard Size	201	262767	Link, Governor
	391286	Pin, Piston, .005" Oversize	209	260871	Spring, Governor
29	490348	Rod, Connecting	216	262766	Link, Choke
	490469	Rod, Connecting, .020" Undersize	219	490815	Gear, Governor
32	94671	Screw, Connecting Rod	222	495611	Plate, Governor Control
33	262246	Valve, Exhaust	224	94729	Screw, Hex Head
34	262247	Valve, Intake	227	493935	Lever Assembly, Governor
35	65906	Intake Exhaust Valve	230	94927	Washer, Governor Crank
36	26828	Spring, Valve	232	262785	Spring, Governor Link
37	224502	Guard, Flywheel	240	394358	Filter, Fuel
40	221596	Retainer, Intake Valve	265	221535	Clamp, Casing
41	292260	Rotocoil, Exhaust Valve			* Included in Gasket Set (494241)
42	494553	Retainer, Rotocoil			** Included in Carburetor Kit (499220)
45	262248	Tappet, Valve			*** Included in both Carburetor Kit (499220), and Carburetor Gasket Set (494385)
46	212897	Gear, Cam			+ Included in Valve Overhaul Gasket Set
50	213819	Carburetor, Elbow			

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

TRACTOR—MODEL NUMBER 917.270430

BRIGGS & STRATTON ENGINE—MODEL NUMBER 28R707, TYPE NUMBER 1140-E1

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
284	94903	Screw, Shoulder	741	262932	Gear, Timing
284A	94704	Screw, Hex Head	757	213998	Link, Counterweight
304	496280	Housing, Blower	758	399891	Counterweight Assembly
305	94786	Screw, Hex Head	759	298909	Pin, Counterweight
305A	94881	Screw, Hex	761	94593	Screw, Counterweight
306	224545	Shield, Cylinder	783	280104	Gear
307	94930	Screw, Sems	801	394856	Cap, Drive
308	491490	Cover, Cylinder Head	802	497605	Cap, End
309	497595	Motor, Starter	803	497604	Housing, Starter
310	94003	Thru Bolt	842	270920	Seal, Cap
311	497608	Brush Assembly	847	496415	Tube Assembly, Oil
333	492341	Armature, Magneto	851	493880	Terminal, Ignition Cable
334	094731	Screw, Sems	869	261463	Seat, Intake Valve
337	802592	Plug, Spark	870	262924	Seat, Exhaust Valve
346	94896	Screw, Hex Head	871	261961	Guide, Exhaust Valve
356	494328	Wire Assembly		231218	Guide, Intake Valve, Brass
358	494241	Gasket Set	872	281361	Cover, Air Cleaner
363	19203	Puller, Flywheel	875	494237	Body, Air Cleaner
383	89838	Wrench, Spark Plug	877	393456	Diode Assembly
445	496894	Cartridge, Air Cleaner	950	94642	Screw, Fuel Bowl
455	221561	Cap, Flywheel	965	94010	Nut, Hex
467	493903	Knob, Air Cleaner	975	495933	Bowl, Float
474	393474	Stator, Alternator	977	494385	Carburetor Gasket Set
482	93621	Screw, Sems	987	281166	** Seal, Throttle Shaft
503	806000	Strap, Starter	1005	281400	Fan, Flywheel
510	497606	Starter Drive Group	1006	224413	Retainer, Fan
523	495230	Dipstick, Oil	1019	491252	Label Kit
524	281370	* Seal, Oil	1036	499362	Label, Kit, Emission
525	496113	Tube, Oil Filler	1044	94673	Screw, Hex Head
535	272403	Element, Filter	1090	497607	Retainer, Brush
537	281106	+* O-Ring, Air Cleaner	1091	281364	Cap, Limiter
544	497603	Armature, Starter	1095	498539	Gasket Set, Valve
552	491986	Bushing, Governor Crank			Overhaul
562	94907	Bolt, Governor Lever	2500	28R707-1140	Replacement Engine
592	231978	Nut, Hex	N N	496050	Replacement Shortblock
601	93053	Clamp, Fuel Pipe			
614	93306	Pin, Cotter			
615	263080	Retainer			
616	495157	Crank, Governor			
634	494453	* Seal, Spring Assembly			
635	66538	Elbow, Spark Plug			
646	224546	Brace, Air Cleaner			
657	94906	Screw, Sems			
663	94929	Screw, Hex Head			
668	231109	Spacer			
668A	280848	Spacer			
689	262820	Spring, Friction			
726	392134	Gear, Ring			
727	490324	Cover, Starter			
728	94951	Screw, Torx			
729	281159	Clip, Lead Wire			
729A	225170	Retainer, Wire			

RPM Settings: Low Speed: 1900-2100
High Speed: 3000-3200

* Included in Gasket Set (494241)

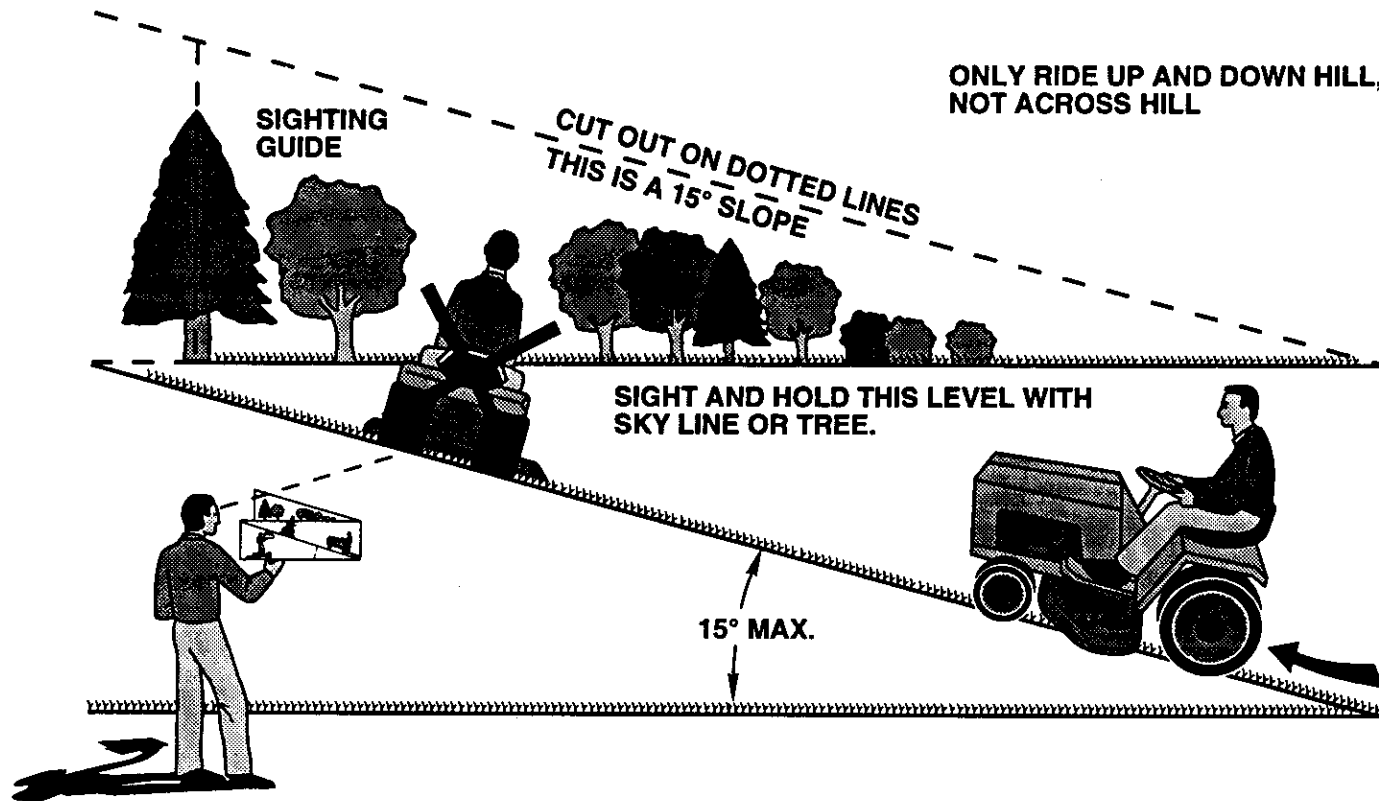
** Included in Carburetor Kit (499220)

*** Included in both Carburetor Kit (499220), and Carburetor Gasket Set (494385)

+ Included in Valve Overhaul Gasket Set

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

SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



Operate your Tractor up and down the face of slopes (not greater than 15°), never across the face. Make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.

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

**1-800-4-MY-HOMESM (1-800-469-4663)
Para pedir servicio de reparación a domicilio
1-800-676-5811**

**In Canada for all your service and parts needs call
Au Canada pour tout le service ou les pièces
1-800-665-4455**

**For the repair or replacement parts you need:
Call 6 am - 11 pm CST, 7 days a week
PartsDirectSM
1-800-366-PART (1-800-366-7278)**

**Para ordenar piezas con entrega a domicilio
1-800-659-7084**

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

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

