

CRAFTSMAN[®] MODEL NUMBER 917.257632 OWNER'S MANUAL

- Assembly
- Operation
- Customer Responsibilities
- Service and Adjustments
- Repair Parts



CAUTION: Read and follow all safety rules and instructions before operating this equipment.



SAFETY RULES Safe Operation Practices for Ride-On Mowers

IMPORTANT: THIS CUTTING MACHINE IS CAPABLE OF AMPUTATING HANDS AND FEET AND THROWING OBJECTS. FAILURE TO OBSERVE THE FOLLOWING SAFETY INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.

I. GENERAL OPERATION

- Read, understand, and follow all instructions in the manual and on the machine before starting.
- Only allow responsible adults, who are familiar with the instructions, to operate the machine.
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade.
- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Be aware of the mower discharge direction and do not point it at anyone. Do not operate the mower without either the entire grass catcher or the guard in place.
- Slow down before turning.
- Never leave a running machine unattended. Always turn off blades, set parking brake, stop engine, and remove keys before dismounting.
- Turn off blades when not mowing.
- Stop engine before removing grass catcher or unclogging chute.
- Mow only in daylight or good artificial light.
- Do not operate the machine while under the influence of alcohol or drugs.
- · Watch for traffic when operating near or crossing roadways.
- Use extra care when loading or unloading the machine into a trailer or truck.

II. SLOPE OPERATION

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

DO:

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

DO NOT:

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

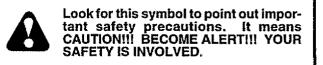
III. CHILDREN

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

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

IV. SERVICE

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





CAUTION: Always disconnect spark plug wire and place wire where it cannot contact spark plug in order to prevent accidental starting when setting up, transporting, adjusting or making repairs. **CONGRATULATIONS** on your purchase of a Sears 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/Department. We have competent, welltrained technicians and the proper tools to service or repair this unit.

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

MODEL NUMBER 917.257632

SERIAL

NUMBER __

DATE OF PURCHASE _

THE MODEL AND SERIAL NUMBERS WILL BE FOUND ON A PLATE UNDER THE SEAT.

YOU SHOULD RECORD BOTH SERIAL NUMBER AND DATE OF PURCHASE AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

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 unit.
- Follow the instructions under "Customer Responsibilities" and "Storage" sections of this owner's manual.

PRODUCT SPECIFICATIONS

HORSEPOWER:	13.0	
GASOLINE CAPACITY AND TYPE:	5 QUARTS UNLEADED REGULAR	
OIL TYPE (API-SF/SG):	SAE 30 (above 32°F) SAE 5W-30 (below 32°F)	
OIL CAPACITY:	3 PINTS	
SPARK PLUG: (GAP: _030")	CHAMPION RJ19LM STD361458	
VALVE CLEARANCE:	INTAKE: .005"007" EXHAUST: .009"011"	
GROUND SPEED (MPH):	FORWARD: 1st 1.02 2nd 1.35 3rd 2.10 4th 3.14 5th 4.00 6th 5.12 REVERSE: 1.58	
TIRE PRESSURE:	FRONT: 14 PSI REAR: 12 PSI	
CHARGING SYSTEM:	3 AMPS BATTERY 5 AMPS HEADLIGHTS	
BLADE BOLT TORQUE:	30-35 FT. LBS.	

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).

LIMITED TWO YEAR WARRANTY ON ELECTRIC START RIDING EQUIPMENT

For two (2) years from the date of purchase, if this 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 and belts.
- Tire replacement or repair caused by punctures from outside objects, such as nails, thoms, 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.

WARRANTY SERVICE IS AVAILABLE BY RETURNING THE RIDING EQUIPMENT TO THE NEAREST SEARS SERVICE CENTER/DEPARTMENT 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, ILLINOIS 60179

TABLE OF CONTENTS

SAFETY RULES	2
PRODUCT SPECIFICATIONS	
CUSTOMER RESPONSIBILITIES	3. 15-17
WARRANTY	•
TRACTOR ACCESSORIES	
ASSEMBLY	
OPERATION	10-13

INDEX

Accessories
Adjustments:
Brake States 20
Carburetor 23
Mower
Front-To-Back
Side-To-Side
Throttle Control Cable
Air Filter, Engine
Air Screen, Engine 17
Assembly

А

в

=
Battery:
Charging Charge
Cleaning 16
Installation9
Levels
Preparation
Starting with Weak Battery
Storage ,
Terminals
Belt:
Motion Drive
Removal/Replacement
Mower Belt(s)
Removal/Replacement
Blade:
Sharpening 15
Replacement 15
Brake Adjustment 20

С

Ŭ
Carburetor Adjustment
Controls, Tractor
Customer Responsibilities
Engine:
Äir Filter
Air Screen
Cooling Fins
Engine Oll 12,16
Fuel Filter
Spark Plug(s)
Tractor:
Battery
Blade 15
Lubrication Chart Land Company 14
Maintenance Schedule 14
Tire Care
Transaxle
Cutting Height, Mower

SERVICE AND ADJUSTMENTS	
STORAGE	
TROUBLESHOOTING	
REPAIR PARTS - TRACTOR	
REPAIR PARTS - ENGINE	
PARTS ORDERING/SERVICE	

MAINTENANCE SCHEDULE 14

Ε

Electrical:
Interlocks and Relays
Schematic
Wiring Diagram LINNER AND
Engine:
Air Filter , Los pour ment to a second of the second secon
Air Screen
Cooling Fins 17
Oil Change
Oil Level
Oll Type
Preparation
Repair Parts
Starting
Storage
F

Filter:
Air Filter 16
Fuel contract of the second se
Fuel:
Туре в дообладывает в в в то в то в то в то в то в то в т
Storage
Fuse

Η

L

Leveling Mower Deck	
Lubrication:	
Chart	
Engine 16	

Μ

Maintenance Schedule
Mower:
Adjustment, Front-to-Back
Adjustment, Side-to-Side
Blade Replacement
Blade Sharpening
Cutting Height
Installation
Operation
Removal
Mowing Tips
Muffler
Spark Arrester 3,38

0

Oil:
Cold Weather Conditions
Engine 16
Storage
Operation 10-13
Operating Mower
Options:
Accessories
Spark Arrester

Ρ

Parking Brake	10,11
Parts Bag	6
Parts, Replacement/Repair	28-45
Product Specifications.	3

R

S

-
Safety Rules
Seat Seat
Service and Adjustments 18-23
Carburetor
Fuse
Hood Removal/Installation
Motion Drive Belt
Removal/Replacement
Mower Belt(s) Removal/Replacement
Mower Adjustment
Front-to-Back 19
Side-to-Side
Mower Removal/Installation
Tire Care
Slope Guide Sheet
Spark Plug(s)
Specifications
Starting the Engine
Steering Wheel
Stopping the Tractor
Storage

Т

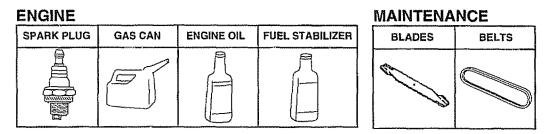
Throttle Control Cable Adjustment 23	
Tires	
Trouble Shooting Chart 25-26	
Transaxle	

W

Warranty	
Wiring Diagram	
Wiring Schematic 27	

ACCESSORIES AND ATTACHMENTS

These accessories and attachments were available through most Sears retail outlets and service centers when the tractor was purchased. Most Sears stores can order these items for you when you provide the model number of your tractor.



PERFORMANCE

Sears offers a wide variety of attachments that fit your tractor. Many of these are listed below with brief explanations of how they can help you. This list was current at the time of publication; however, it may change in future years - more attachments may be added, changes may be made in these attachments, or some may no longer be available or fit your model. Contact your nearest Sears store for the accessories and attachments that are available for your tractor.

Most of these attachments do not require additional hitches or conversion kits (those that do are indicated) and are designed for easy attaching and detaching.

AERATOR promotes deep root growth for a healthy lawn. Tapered 2.5-inch steel spikes mounted on 10-inch diameter discs puncture holes in soil at close intervals to let moisture soak in. Steel weight tray for increased penetration.

BAGGER lets you collect grass clippings and leaves for a healthier, neater looking lawn. Two Permanex containers hold 30-gallon plastic bags.

BUMPER protects front end of tractor from damage.

CARTS make hauling easy. Variety of sizes available, plus accessories such as side panel kits, tool caddy, cart cover, protective mat and dolly.

CORING AERATOR takes small plugs out of soil to allow moisture and nutrients to reach grass roots. 36-inch swath. 24 hardened steel coring tips. 150 lb. capacity weight tray.

EASY OIL DRAIN VALVE makes oil changes easier, faster.

FRONT NOSE ROLLER canters in front of mower deck to reduce chances of "scalping" on uneven terrain.

GANG HITCH lets you tow 2 or 3 pull-behind attachments at once, such as sweepers, dethatchers, aerators (not for use with rollers, carts or other heavy attachments).

GAUGE WHEELS on both sides of the mower deck reduce chances of "scalping" on uneven terrain. For mower decks not so equipped.

MULCH RAKE/DETHATCHER loosens soil and llips thatch and matted leaves to lawn surface for easy pickup. Twenty spring tine teeth. Useful to prepare bare areas for seeding. Available for front or rear mounting. HIGH PERFORMANCE REEL-ACTION SPRING TINE DETHATCHER covers 36-inch wide path and tosses thatch into large hopper. Mounts behind tractor.

MULCHING CLOSE-OUT PLATE KIT, once installed, lets you mulch, discharge or bag clippings (bagger optional) without changing blades. For models not equipped as 3-in-1 Convertible mowers. See "MOWER" in the Repair Parts section of this manual.

RAMP TOPS AND FEET let you load and unload tractor from a pickup truck. Use with 2 x 8 or 2 x 10 lumber.

ROLLER for smoother lawn surface. 36-inch wide, 18-inch diameter water-tight drum holds up to 390 lbs. of weight. Rounded edges prevent harm to turf. Adjustable scraper automatically cleans drum.

SNOW BLADE for snow removal only. 14-inch high, 42-inch wide blade clears 38-inch path when angled left or right. Raises, lowers with side lever. Adjustable skids; replaceable, reversible scraper bar. (Use with tire chains and wheel weights and/or rear drawbar weight.)

SNOWTHROWER has 40-inch swath. Drum-type auger handles powdery and wet/heavy snow. Mounts easily with simple pin arrangement. Discharge chute adjusts from tractor seat. 6-inch diameter spout discharges snow 10 to 50 feet. Lift controlled at tractor seat. (Use with chains and wheel weights and/or rear drawbar weight.)

SPRAYERS use 12-volt DC electric motor that connects to the tractor battery or other 12-volt source. Includes booms for automatic spraying and hand held wand for spot spraying. Wand has adjustable spray pattern. For applying herbicides, insecticides, fungicides and liquid fertilizers.

SPREADER/SEEDERS make seeding, fertilizing, and weed killing easy. Broadcast spreaders are also useful for granular deicers and sand.

SWEEPERS let you collect grass clippings and leaves.

TILLER has 5 hp engine and 36-inch swath to prepare seed beds, cultivate and compost garden residue. Tiller has its own built-in lift and depth control system and does NOT require a sleeve hitch. Fits any lawn, yard or garden tractor. Simply hook up to the tractor drawbar and go! **Optional accessories** convert unit for dethatching, aerating, hilling....without tools.

TIRE CHAINS are heavy duty; closely spaced extra-large cross links give smooth ride, outstanding traction.

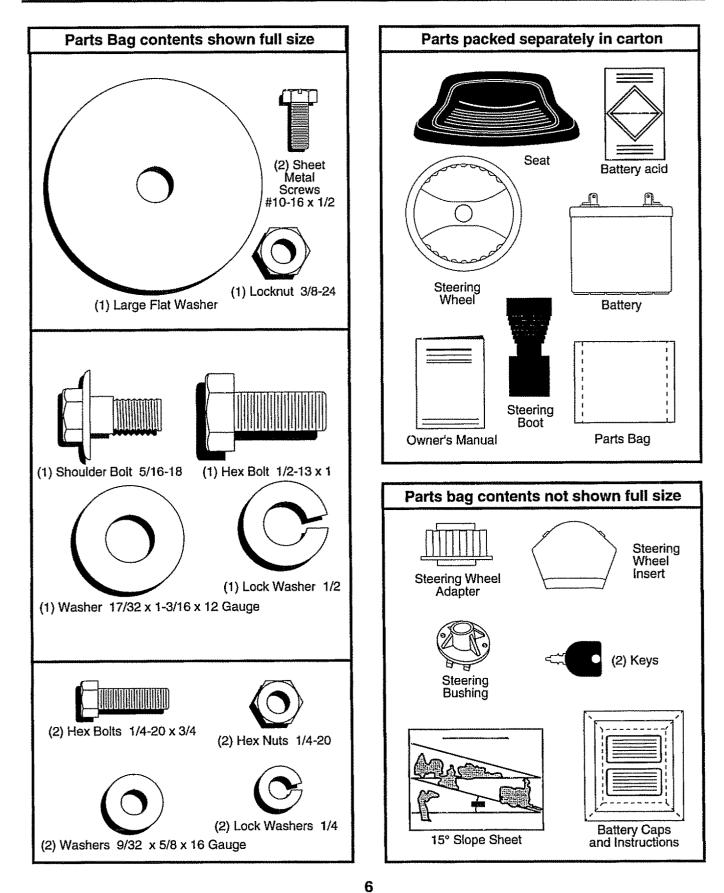
TRACTOR CAB has heavy duty vinyl fabric over tubular steel frame, ABS plastic top; clear plastic windshield offers 360 degree visibility. Hinged metal doors with catch. Keeps operator warm and dry. Remove vinyl sides and windshields for use as sun protector in summer. **Optional accessories include:** tinted/ tempered solid safety glass windshield with hand operated wiper; 12-volt amber caution light for mounting on cab top.

VACS for powerful collection of heavy grass clippings and leaves. Optional wand attachment to pick up debris in hard-to-reach places. VAC/CHIPPER includes a chipper-shredder.

WEIGHT BRACKET for drawbar for snow removal applications. Uses (1) 55 lb. weight.

WHEEL WEIGHTS for rear wheels provide needed traction for snow removal or dozing heavy materials.

CONTENTS OF HARDWARE PACK



ASSEMBLY

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

TOOLS REQUIRED FOR ASSEMBLY

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

- (1) 5/16" wrench
- (1) 3/4" wrench

Utility knife

- (2) 7/16" wrenches Tire pressure gauge
- (1) 1/2" wrench
- (1) 9/16" wrench

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

TO REMOVE TRACTOR FROM CARTON

UNPACK CARTON

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

BEFORE ROLLINGTRACTOR OFF SKID

ATTACH STEERING WHEEL (See Fig. 1)

- · 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 plastic 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.

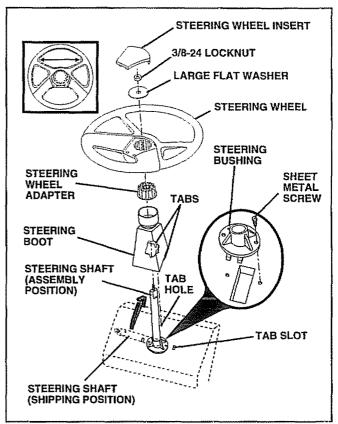


FIG. 1

TO ROLL TRACTOR OFF SKID (See Fig. 6)

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

ASSEMBLY

HOW TO SET UP YOUR TRACTOR

PREPARE BATTERY (See Fig. 2)

CAUTION: Wear eye and face shield.

Wash hands or clothing immediately if accidentally in contact with battery acid.

Do not smoke. Fumes from charged battery acid are explosive.

Read the instructions included with the battery vent caps. Always wear gloves, clothing and goggles to protect your hands, skin and eyes.

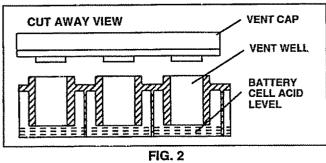
Your tractor has a battery charging system which is sufficient for normal use. However, periodic charging of the battery with an automotive charger will extend its life.

- See instructions packed with vent caps in parts bag.
- Fill battery with acid. Fill each cell until it reaches the bottom of the vent wells. Do not overfill.
- Allow battery to stand and settle for at least thirty minutes. After standing, check the battery cell acid level. If below the vent wells, add more acid until the correct level is reached.

While battery is standing (after adding acid) and later, while battery is being charged, continue with assembly of tractor.

IMPORTANT: TO MAXIMIZE THE LIFE OF YOUR BATTERY, IT IS NECESSARY THAT THE BATTERY BE CHARGED BEFORE USE. FAILURE TO CHARGE BATTERY CAN RESULT IN A SHORTENED BATTERY LIFE.

- Charge battery at a rate of 6 amperes for 1 hour. Use a 12 volt battery charger. Observe all safety precautions required for battery charging.
- Check the acid level after the battery is charged. If the acid has fallen below the correct level, add distilled or iron free water.
- Install the vent caps to cover the vent wells. Wash the top of the battery with water to remove any acid, then wipe dry.
- Check battery case for leakage to make sure that no damage has occurred in handling.
- Dispose of excess battery acid. Neutralize acid for disposal by adding it to two gallons of water in a five gallon plastic container. Stir with a wooden or plastic paddle while adding baking soda until the addition of more soda causes no more foaming.
- Follow instructions on how to install battery.



INSTALL SEAT (See Fig. 3)

Adjust seat before tightening adjustment bolt.

- Remove cardboard packing on seat pan.
- Place seat on seat pan and assemble shoulder bolt.
- Assemble adjustment bolt, lock washer and flat washer loosely. Do not tighten.
- Tighten'shoulder bolt securely.
- 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 bolt securely.

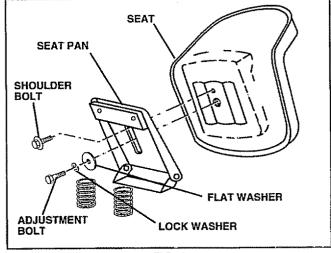


FIG. 3

CHECK TIRE PRESSURE

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

 Reduce tire pressure to PSI shown in "PRODUCT SPECIFICATIONS" on page 3 of this manual.

CHECK DECK LEVELNESS

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

CHECK FOR PROPER POSITION OF ALL BELTS

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

CHECK BRAKE SYSTEM

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

ASSEMBLY

INSTALL BATTERY (See Figs. 4 and 5)



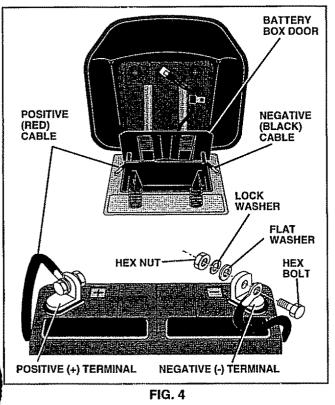
CAUTION: Do not short battery terminals. Before installing battery, remove metal bracelets, wristwatch bands, rings, etc.

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

- Lift seat to raised position
- Open battery box door.
- Be sure battery drain tube is attached to battery box.
- Lower battery into battery box with battery terminals toward front of tractor.
- First connect RED battery cable to positive (+) terminal with hex bolt, flat washer, lock washer and hex nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) terminal with remaining hex bolt, flat washer, lock washer and hex nut. Tighten securely.
- Close battery box door.

Open battery box door for:

- Inspection for secure connections (to tighten hardware).
- Inspection for corrosion.
- Testing battery.
- Jumping (if required).
- Periodic charging .



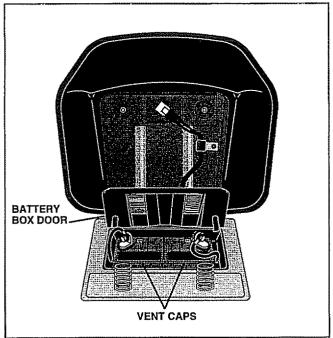


FIG. 5

√ 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.

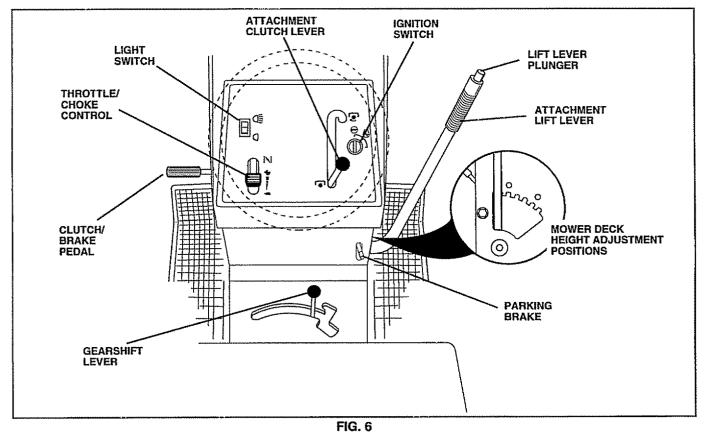
WHILE LEARNING HOW TO USE YOUR TRACTOR, PAY EXTRA ATTENTION TO THE FOLLOWING IMPORTANT ITEMS:

- 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.

KNOW YOUR TRACTOR

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

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



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

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

LIGHT SWITCH: Turns the headlights on and off.

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

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

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

GEARSHIFT LEVER: Selects the speed and direction of tractor.

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

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

IGNITION SWITCH: Used for starting and stopping the engine.



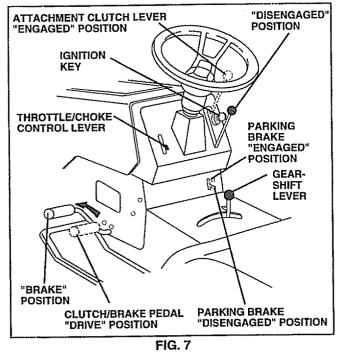
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The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a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

HOW TO USE YOUR TRACTOR

TO SET PARKING BRAKE (See Fig. 7)

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



STOPPING (See Fig. 7)

MOWER BLADES -

 Move attachment clutch lever to "DISENGAGED" position.

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.

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 (See Fig. 7)

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 (See Fig. 7)

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 (See Fig. 6)

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 (See Fig. 8)

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.
- 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.

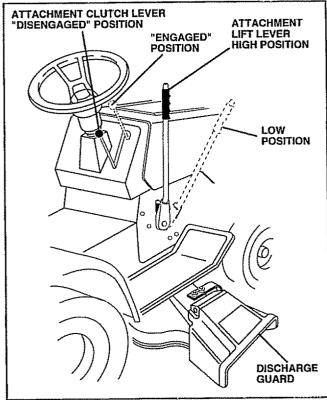


FIG. 8

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.).

BEFORE STARTING THE ENGINE

CHECK ENGINE OIL LEVEL (See Fig. 14)

- 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 Customer Responsibilities section in this manual.

ADD GASOLINE

 Fill fuel tank. Use fresh, clean, regular unleaded gasoline. (Use of leaded gasoline will increase carbon and lead oxide deposits and reduce valve life).

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.

TO START ENGINE (See Fig. 7)

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

- Depress clutch/brake pedal and set parking brake.
- Place gearshift lever in neutral (N) position.
- Move attachment clutch to "DISENGAGED" position.
- Move throttle control lever to choke (|\) position for cold engine start. For warm engine start, move throttle control to fast () position.
- 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 engine does not start after several attempts, move throttle control to fast () position, wait a few minutes and try again.
- When engine starts, move throttle control to desired position.
- Allow engine to warm up for a few minutes before engaging drive or attachments.

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 machine. 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 (See Fig. 9).
- 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.

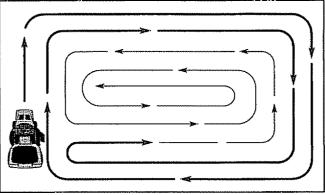
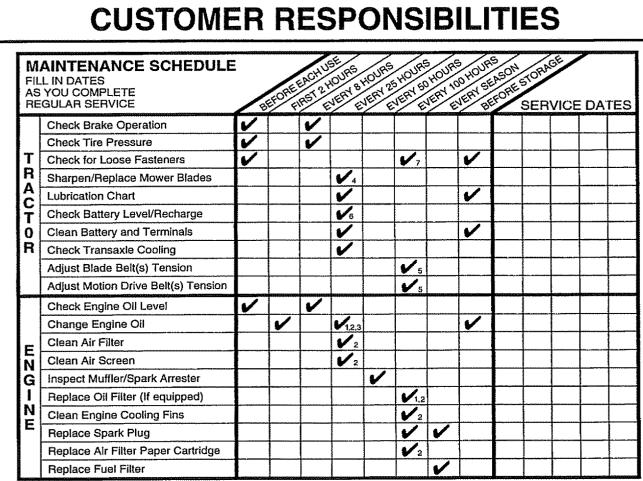


FIG. 9



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. 5 - If equipped with adjustable system.

Do not overtighten.

Not required if equipped with maintenance-free battery.
 Tighten front axle pivot bolt to 35 ft.-ibs. maximum.

3 - If equipped with oil filter, change oil every 50 hours.

4 - Replace blades more often when mowing in sandy soil

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.

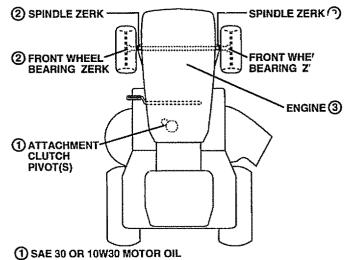
All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

 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 for loose fasteners.

LUBRICATION CHART



(2) GENERAL PURPOSE GREASE

③ REFER TO CUSTOMER RESPONSIBILITIES "ENGINE" SECTION

IMPORTANT: DO NOT OIL OR GREASE THE PIVOT POINTS WHICH HAVE SPECIAL NYLON BEARINGS. VISCOUS LUBRI-CANTS 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, POW-DERED GRAPHITE TYPE LUBRICANT SPARINGLY.

CUSTOMER RESPONSIBILITIES

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 "PROD-UCT SPECIFICATIONS" on page 3 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.

BLADE CARE

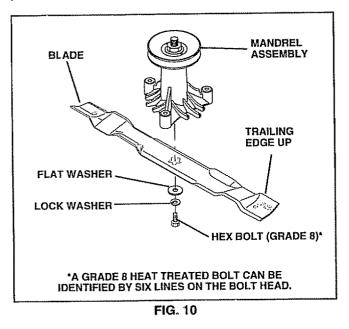
For best results mower blades must be kept sharp. Replace bent or damaged blades.

BLADE REMOVAL (See Fig. 10)

- 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.
- Reassemble hex bolt, lock washer and flat washer in exact order as shown.
- Tighten bolt securely (30-35 Ft. Lbs. torque).

IMPORTANT: BLADE BOLT IS GRADE 8 HEAT TREATED.

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



TO SHARPEN BLADE (See Fig. 11)

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).
- 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.

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

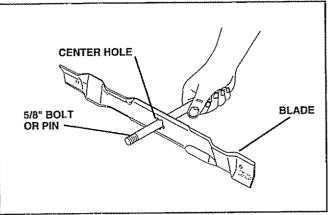
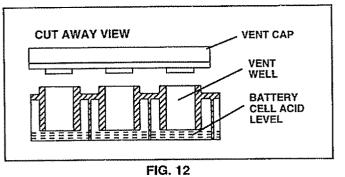


FIG. 11

BATTERY (See Fig. 12)

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.

- Acid solution level in each battery cell should be even with bottoms of vent wells. Add only distilled or iron free water if necessary. Do not overfill.
- Keep battery and terminals clean.
- Keep battery bolts tight.
- Keep vent caps tight and small vent holes in caps open.
- Recharge at 6 amperes for 1 hour.



CUSTOMER RESPONSIBILITIES

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.
- Wash battery with solution of four tablespoons of baking soda to one gallon of water. Be careful not to get the soda solution into the cells.
- 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 "INSTALL BATTERY" in the Assembly 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.

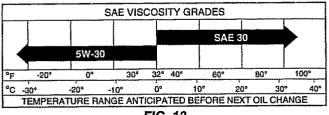
TRANSAXLE COOLING

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 or SG. 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 the first two hours of operation and every 25 hours thereafter 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 (See Figs. 13 and 14)

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

- 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" on page 3 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.

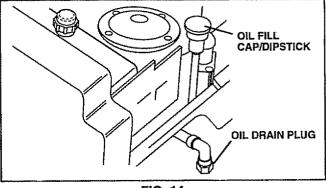


FIG. 14

AIR FILTER (See Fig. 15)

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, precleaner, 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.

CUSTOMER RESPONSIBILITIES

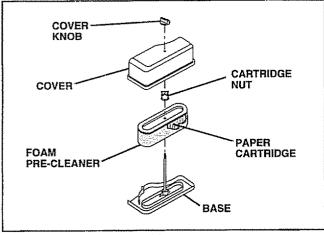


FIG. 15

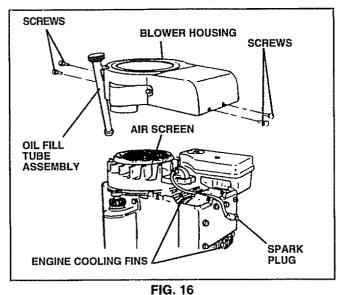
CLEAN AIR SCREEN (See Fig. 16)

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 (See Fig. 16)

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



MUFFLER

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

SPARK PLUGS

Replace spark plugs at the beginning of each mowing season or after every 100 hours of operation, whichever occurs first. Spark plug type and gap setting are shown in "PRODUCT SPECIFICATIONS" on page 3 of this manual.

IN-LINE FUEL FILTER (See Fig. 17)

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.

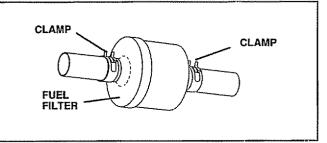


FIG. 17

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.

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.

TO REMOVE MOWER (See Fig. 18)

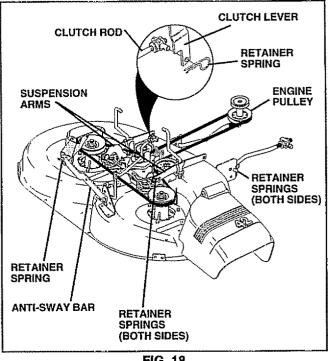
Mower will be easier to remove from the right side of tractor.

- Place attachment clutch in "DISENGAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- Roll beit 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.

IF AN ATTACHMENT OTHER THAN THE **IMPORTANT:** MOWER IS TO BE MOUNTED TO THE TRACTOR, THE R.H. AND L.H. SUSPENSION ARMS MUST BE REMOVED FROM TRACTOR.

TO INSTALL MOWER (See Fig. 18)

- 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

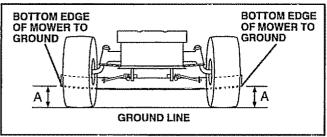
Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PRODUCT SPECIFICATIONS" on page 3 of this manual). If tires are over or underinflated, you will not properly adjust your mower.

SIDE-TO-SIDE ADJUSTMENT (See Figs. 19 and 20)

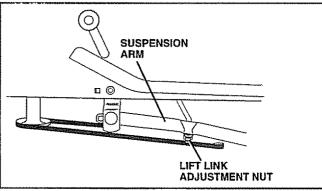
- · Raise mower to its highest position.
- At the midpoint of both sides of mower, measure height from bottom edge of mower to ground. Distance "A" on both sides of mower should be the same or within 1/4" of each other.
- If adjustment is necessary, make adjustment on one side of mower only.
- To raise 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 (See Figs. 21 and 22) 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 1/4" to 3/4" 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 1/4" to 3/4" 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 1/4" to 3/4" lower at front than rear, tighten nut "F" against trunnion on both front links.
- Recheck side-to-side adjustment.

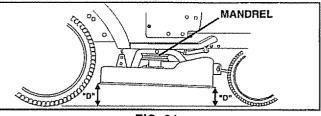
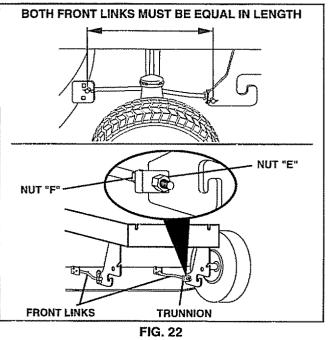


FIG. 21



TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 23)

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

BELT REMOVAL -

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

BELT INSTALLATION -

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

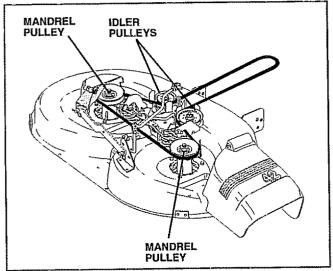


FIG. 23

TO ADJUST BRAKE (See Fig. 24)

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", disengage parking brake, loosen jam nut and turn nut "A" until distance becomes 1-1/2". Retighten jam nut against nut "A".
- Engage parking brake and recheck distance.
- 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.

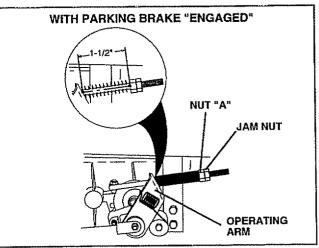


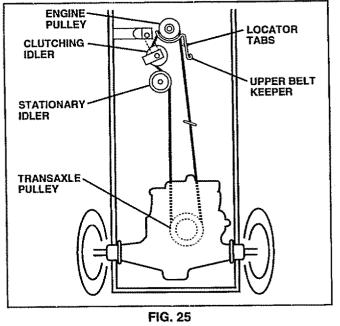
FIG. 24

TO REPLACE MOTION DRIVE BELT (See Fig. 25)

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 upper belt keeper.
- 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.

IMPORTANT: MAKE SURE UPPER BELT KEEPER IS POSITIONED PROPERLY BETWEEN LOCATOR TABS.



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 (See Fig. 26)

- 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.

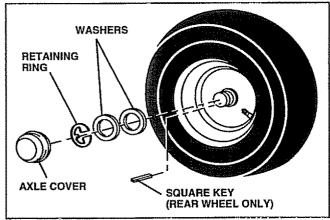


FIG. 26

TO START ENGINE WITH A WEAK BATTERY (See Fig. 27)



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

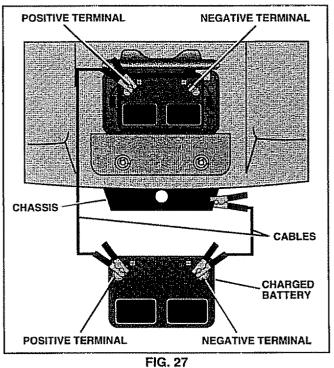
IMPORTANT: YOUR TRACTOR IS EQUIPPED WITH A 12 VOLT NEGATIVE GROUNDED SYSTEM. THE OTHER VEHICLE MUST ALSO BE A 12 VOLT NEGATIVE GROUNDED SYSTEM. DO NOT USE YOUR TRACTOR BATTERY TO START OTHER VEHICLES.

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 NEGA-TIVE (-) 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.



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 of this manual.

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 (See Fig. 28)

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

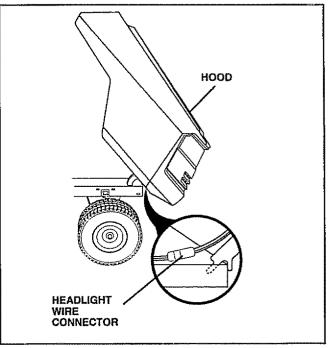


FIG. 28

ENGINE

TO ADJUST THROTTLE CONTROL CABLE (See Fig. 29)

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.

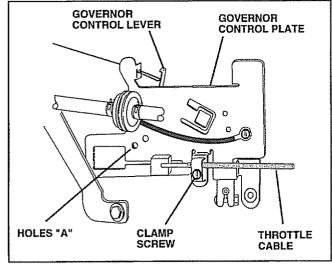


FIG. 29

TO ADJUST CARBURETOR (See Fig. 30)

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).
- With engine off turn idle mixture valve in (clockwise) closing it finger tight and then turn out (counterclockwise) 1 full turn.

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.
- While still holding throttle lever against idle speed screw, turn idle mixture valve in (clockwise) until engine begins to die and then turn out (counterclockwise) until engine runs rough. Turn valve to a point midway between those two positions. Release throttle lever.

ACCELERATION TEST -

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.

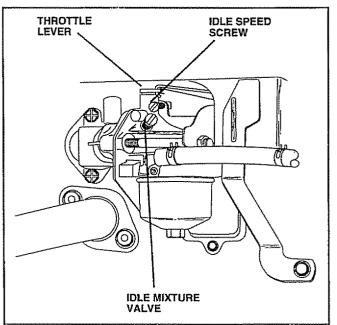


FIG. 30

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.
- Be sure battery drain tube is securely attached.
- 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).

CYLINDERS

- 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 POINTS

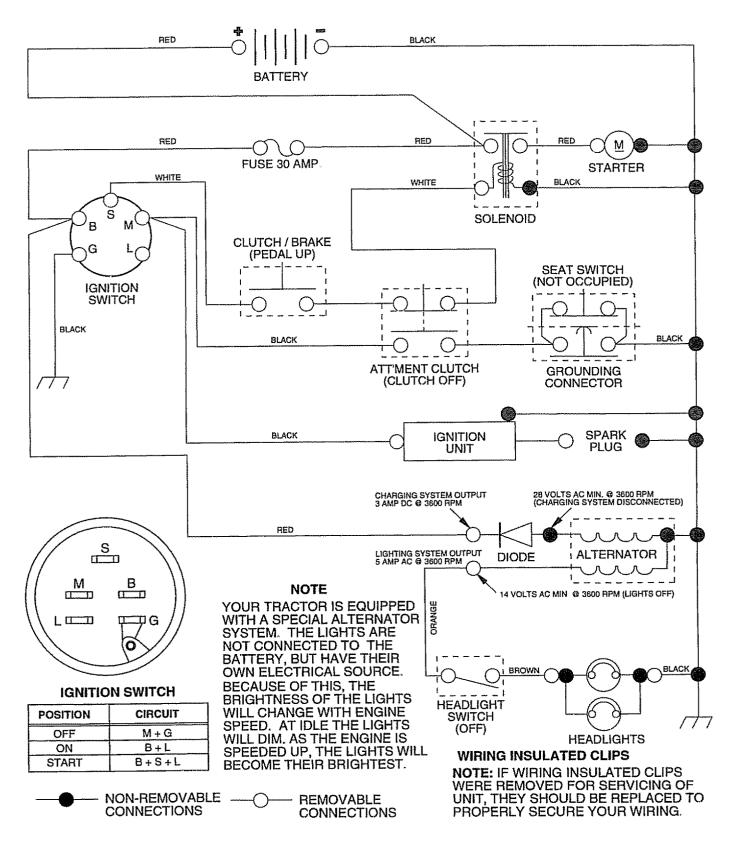
PROBLEM	CAUSE	CORRECTION	
Will not start	 Out of fuel. Engine not "CHOKED" properly. Engine flooded. Bad spark plug. Dirty air filter. Dirty fuel filter. Water in fuel. Loose or damaged wiring. Carburetor out of adjustment. Engine valves out of adjustment. 	 Fill fuel tank. See "TO START ENGINE" in Operation 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. Contact an authorized service center/department. 	
Hard to start	 Dirty air filter. Bad spark plug. Weak or dead battery. Dirty fuel filter. Stale or dirty fuel. Loose or damaged wiring. Carburetor out of adjustment. Engine valves out of adjustment. 	 Clean/replace air filter. Replace spark plug. Recharge or replace battery. Replace fuel filter. Drain fuel tank and refill with fresh gasoline. Check all wiring. Contact an authorized service center/department. Contact an authorized service center/department. 	
Engine will not turn over	 Ciutch/brake pedal not depressed. Attachment clutch is engaged. Weak or dead battery. Blown fuse. Corroded battery terminals. Loose or damaged wiring. Faulty Ignition switch. Faulty solenoid or starter. Faulty operator presence switch(es). 	 Depress clutch/brake pedal. Disengage attachment clutch. Recharge or replace battery. Replace fuse. Clean battery terminals. Check all wiring. Check/replace ignition switch. Check/replace solenoid or starter. Contact an authorized service center/department. 	
Engine clicks but will not start	 Weak or dead battery. Corroded battery terminals. Loose or damaged wiring. Faulty solenoid or starter. 	 Recharge or replace battery. Clean battery terminals. Check all wiring. Check/replace solenoid or starter. 	
Loss of power	 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. State 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. 	 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 regine air screen/fins. Clean/replace muffler. Check all wiring. Contact an authorized service center/department. Contact an authorized service center/department. 	
Excessive vibration	 Worn, bent or loose blade. Bent blade mandrel. Loose/damaged part(s). 	 Replace blade Tighten blade bolt. Replace blade mandrel. Tighten loose part(s). Replace damaged parts. 	

TROUBLESHOOTING POINTS

PROBLEM	CAUSE	CORRECTION	
Engine continues to run when operator leaves seat with attachment clutch engaged	1. Faulty operator-safety presence control system.	 Check wiring, switches and connections. If not corrected, contact an authorized service center/ department. 	
Poor cut - uneven	 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. 	 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	 Obstruction in clutch mechanism. Wom/damaged mower drive belt. Frozen idler pulley. Frozen blade mandrel. 	 Remove obstruction. Replace mower drive belt. Replace idler pulley. Replace blade mandrel. 	
Poor grass discharge	 Engine speed too slow. Travel speed too fast. Wet grass. Mower deck not level. Low/uneven tire air pressure. Worn, bent or loose blade. Buildup of grass, leaves and trash under mower. Mower drive belt wom. Blades improperly installed. Improper blades used. Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels. 	 Place throttle control in "FAST" position. Shift to slower speed. Allow grass to dry before mowing. Level mower deck. Check tires for proper air pressure. Replace/sharpen blade. Tighten blade bolt. Clean underside of mower housing. Replace mower drive belt. Reinstall blades sharp edge down. Replace with blades listed in this manual. Clean around mandrels to open vent holes. 	
Headlight(s) not working (if so equipped)	 Switch is "OFF". Bulb(s) burned out. Faulty light switch. Loose or damaged wiring. Blown fuse. 	 Turn switch "ON". Replace bulb(s). Check/replace light switch. Check wiring and connections. Replace fuse. 	
Battery will not charge	 Bad battery cell(s). Poor cable connections. Faulty regulator (if so equipped). Faulty alternator. 	 Replace battery. Check/clean all connections. Replace regulator. Replace alternator. 	
Engine "backfires" when turning engine "OFF"	 Engine throttle control not set at "SLOW" position for 30 seconds before stopping engine. 	 Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine. 	

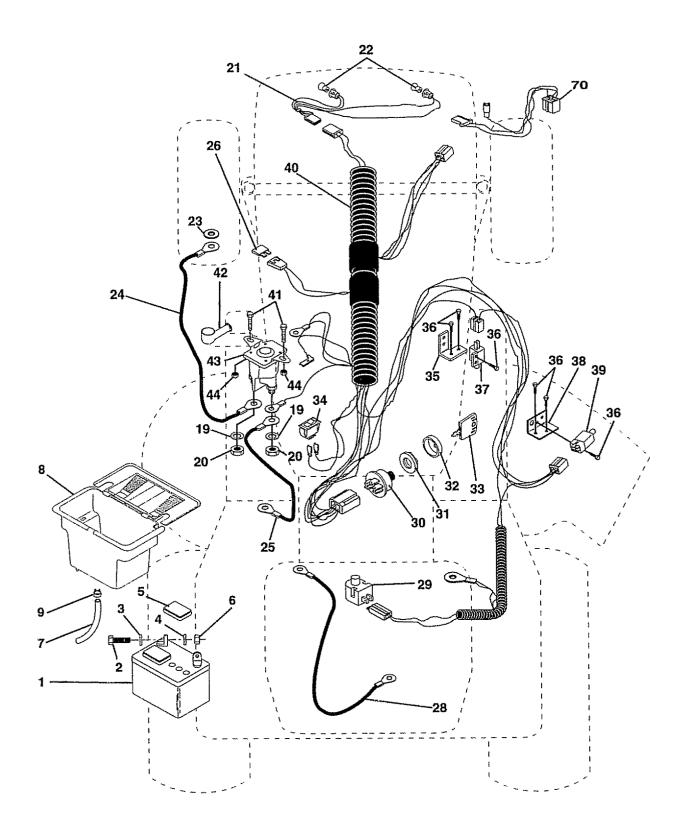
13 HP 42" TRACTOR - - MODEL NUMBER 917.257632

SCHEMATIC



13 HP 42" TRACTOR - - MODEL NUMBER 917.257632

ELECTRICAL



13 HP 42" TRACTOR - - MODEL NUMBER 917.257632

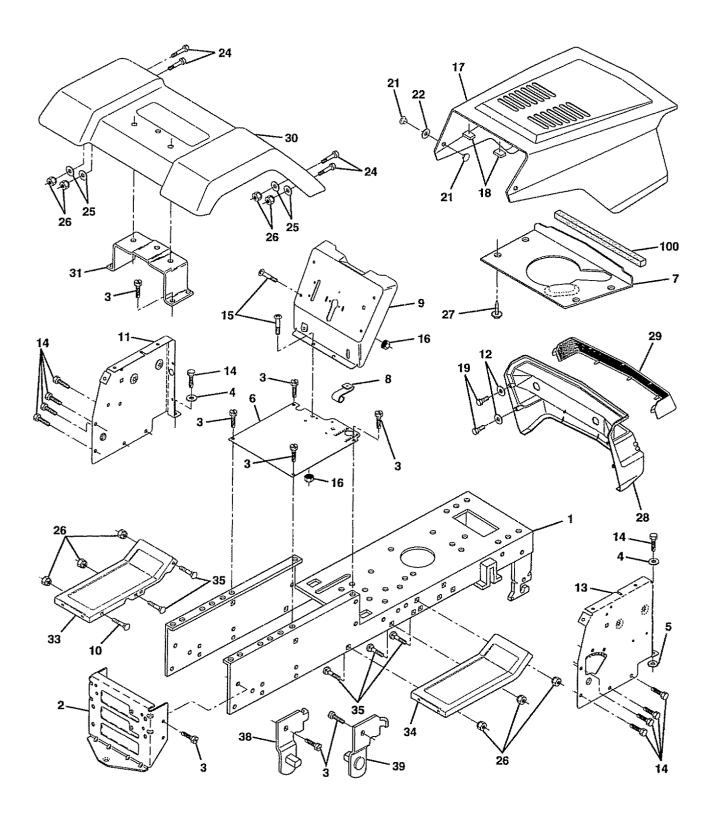
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ELECTRICAL

KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 9 0 1 2 3 4 5 6 8 9 9 0 1 2 3 4 5 6 7 8 9 9 0 1 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3	11150400 4799J 132202 108824X 4207J 121305X 144921 140400 141226 140403 110712X 108236X	Battery 12 Volt 25 AMP Bolt Hex Hd 1/4-20unc X 3/4 Washer 9/32 X 5/8 X 16 Ga Washer Lock Hvy Helical 1/4 Caps Battery 20/25/30 AMP Nut Fin Hex 1/4-20 Unc Tube Plastic 12" Case Battery Hng Mech W/lid Clamp Hose Olive Washer Lock 1/4 Nut Jam Hex 1/4-20 Unc Harness Socket Light Bulb Light #1156 Washer Lock Internal Tooth 1/4 Cable Battery 6 Ga 43" red Fuse 30 AMP Auto Green Cable Battery 6 Ga 43" red Fuse 30 AMP Auto Green Cable Ground 6ga 12" black Switch Plunger Nc Gray Switch Ign 3 pos Nut Ignition Cover Sw Ignition Key Ign Molded Craftsman, Delta Switch Light Blk Blk Red Bracket Switch Clutch Screw Tap Hex #10-24unc X 1/2 Switch Intlk Cl Grd Gry 2 Term Bracket Switch Interlock Switch Intlk Cl MWR Gry 4 Term Harness Ign LT Mech Bolt Blk Fin Hex 1/4-20 Unc Harness Engine, B&S/Tec, Dual

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

13 HP 42" TRACTOR - - MODEL NUMBER 917.257632 CHASSIS AND ENCLOSURES



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13 HP 42" TRACTOR - - MODEL NUMBER 917.257632

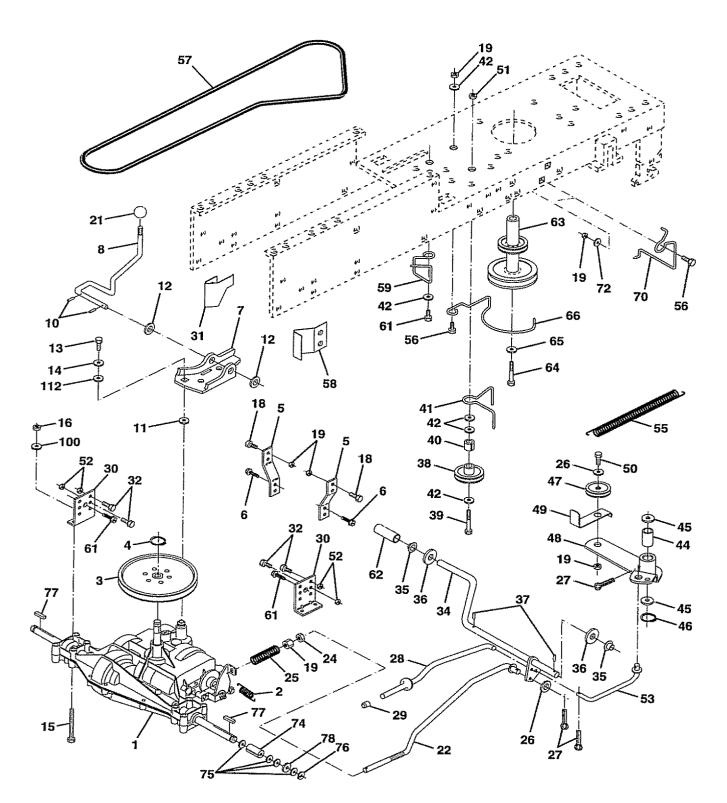
CHASSIS AND ENCLOSURES

KEY NO.	PART NO.	DESCRIPTION
12345678901123456789011234567890333358900 3333333900	131445X417 126938X 17521312 122933X 124479X 74780616 19131312 73800600 17030808 140135 124029X 109872X417 136619 105465X417 105464X417 72110606 139886 139887	Chassis Widmt 11ga Drawbar Stretch Screw Thdrol 3/8-16 x 3/4 Ty-tt Washer 13/32 X 3/4 X 16 Ga Washer Lock Ext Tooth 3/8 Saddle Str Flat LT Shield Ht. Hood Kohl/Dia Engine Clip Insulator 406 Mtg Hole Dash Sikscr 1-pc M W/i N/c Eng Bolt Rdhd Sqnk 3/8-16unc X 1 Panel Dash LH Washer Lock 1/4 Int/Ext Tooth Panel Sikscr Dash RH Wid Notch Screw Thdrol 3/8-16 x 1/2 Ty-tt Screw Mach TRHD 5/16-18 unc x 3/4 Nut Keps 5/16-18 Unc Hood Asm Pnt Slope Weld Ms-417 Bumper Hood Screw Sitd Hex Hd W/PI Washer Rivet Ratchet Nylon Washer Nylon Bik 28 x 75 x 19 Bolt Fin Hex 3/8-16 unc x 1 Gr. 5 Washer 13/32 X 13/16 x 12 Ga Nut Hex Lock W/Ins. 3/8-16 Unc Screw Spiderloc Hex Hd #8 x 1/2 Grille Grey Lens Headlight Bar Clear Fender Pnt LT W/o Shift Bracket Fender Repl 109873x Footrest Pnt Rh (Silver) Bolt Rdhd Sht Sqnk 3/8-16 x 3/4 Bracket Asm Pvt LH MWR Rear Bracket Asm Pvt RH MWR Rear Strip Foam 18"

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

13 HP 42" TRACTOR - - MODEL NUMBER 917.257632

DRIVE

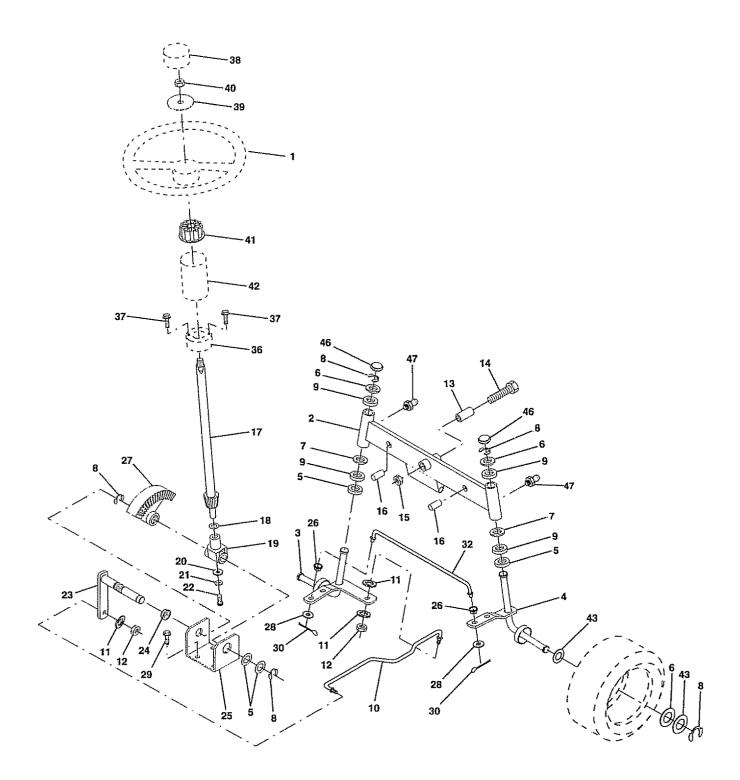


DRIVE

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 0 1 1 2 3 4 5 6 7 8 0 1 1 2 3 4 5 6 7 8 0 1 1 2 3 4 5 6 8 9 1 2 2 2 5 6 7 8 9 3 3 2 4 5 6 7 8 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	142603 110422X 123666X 12000028 121520X 17490512 130802 131679 76020416 105701X 19151216 71040412 10040400 74780544 73680500 74780616 73800600 106933X 130804 73350600 106888X 19131316 76020412 140448 124236X 130807 127275X 74760512 122424X 120183X 19211616 1572H	Transaxle 6sp Std D4360-79 Spring Return Brake T/a Zinc Pulley Transaxle 18/20" tires Ring Retainer # 5100-62 Strap Torque 30 Degrees Screw Thdrol 5/16-18 X 3/4 TYT Bracket Saddle Shift T/a Rod Shf Sdl LY/YT Str Blk Zinc Pin Cotter 1/8 X 1 Cad Washer Plate Shf 388 Sq Hole Washer 15/32 X 3/4 X 16ga Bolt Fin Hex 1/4-28unfx3/4 Gr8 Washer Lock Hvy Helical 1/4 Bolt Fin Hex 5/16-18unc X 2 75 Nut Crown Lock 5/16-18 Bolt Fin Hex 3/8-16unc X 1 Gr. 5 Nut Lock Hex W/Ins. 3/8-16 Unc Knob Rd 1/2-13 Plstc Thds Blk Rod Brake Blk Zinc 26 840 Nut Hex Jam 3/8-16 Unc Spring Rod Brake 2 00 Zinc Washer 13/32 X 13/16 X 16 Ga Pin Cotter 1/8 X 3/4 Cad Rod Brake Parking Lt Flat 94 Cap Brake Parking Red Bracket Mtg Transaxle Keeper Belt LH LT 14 Ga Bolt Hex Hd 5/16-18unc X 3/4 Shaft Asm Pedal Foot 1 930 Bearing Nylon Blk 629 Id Washer 21/32 X 1 X 16 Ga Pin Roll 3/16 X 1"	56 57 58 59 61 62 63 64 65 66 70 72 74 75 76 77 78	74760644 4470J 109070X 19131312 105706X 110812X 12000039 127783 123789X 123205X 74760624 105710X 105709X 74760620 130801 127274X 140312 17490612 8883R 140186 71170764 10040700 129921 134683 19132012 109502X 121749X 12000001 123583X 121748X 19091210	Bolt Fin Hex 3/8-16unc X 2-3/4 Spacer Split 395 X 59 Bzp Keeper Belt Retainer Washer 13/32 X 13/16 X 12 Ga Bearing Nyl 503 X 628 X 1 25 Washer Hardened Ring Klip #t5304-50 Pulley Idler V Groove Plastic Bellcrank Asm Clutch Retainer Belt Style Spring Bolt Hex Hd 3/8-16unc X 1-1/2 Link Clutch 7 66 Spring Return Clutch 6 75 Bolt Fin Hex 3/8-16 unc x 1-1/4 V-Belt Gd Drive 95 25 Keeper Belt RH LT Pnt/zinc 16g Keeper Belt Centerspan Screw Thdrol 3/8-16x3/4 Ty-tt Cover Pedal Blk Round Pulley Eng CI Mech 38deg LT/YT Bolt Hex 7/16-20x4 Gr 5 Washer Lock Hvy HIcl Spr 7/16 Keeper Belt Engine LH LT Guide Belt Mower Drive RH Washer 13/32 X 1-1/4 X 12 Ga Spacer Split 80x1 94 Cad/zinc Washer 25/32 X 1 1/4 X 16 Ga E-ring #5133-75 Key Square 2 0 X 1845/ 1865 Washer 11/32 X 3/4 X 16ga Washer 11/32 X 3/4 X 10 Ga
38	123674X	Pulley Idler Flat	NOT	TE: All compo	nent dimensions given in U.S. inches.

1 inch = 25.4 mm

13 HP 42" TRACTOR - - MODEL NUMBER 917.257632 STEERING ASSEMBLY



13 HP 42" TRACTOR - - MODEL NUMBER 917.257632

STEERING ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 32 36 37 38 39 40 41	110438X 74011056 73901000 132624 132614 57079 124035X	Wheel Steering Opp Sears Blk Axle Asm Front Lt Spindle Asm Lh Spindle Asm Rh Washer Thrust .75 x 1.230 Washer 25/32 x 1-5/8 x 16 Ga. Washer 27/32 x 1-1/4 x 16 Ga. RingKlip #T5304-75 Bearing Col Strg Blk Link Drag Sol Ball Jt 20.064 Washer Lock Hvy Hlcl Spr 3/8 Nut Fin Hex 3/8-24 Unf Spacer Bearing Axle Front Bolt, Hex 5/8-11 UNC x 3-1/2 Locknut Flange 5/8-11 UNC Pin Axle 5/8 x 1.55/1.54 Lg Shaft Asm Strg 5/8 x 15.19 Lt Washer Thrust .515 x .750 x .033 Support Shaft Washer Shim 1/4 x 5/8 x .062 Washer Lock Hvy Helical 1/4 Screw Hex Socket 1/4-20 x 5/8 Shaft Asm Pitman Nyliner Snap In Bracket Steering Bushing LInk Drag Blk LR Gear Sector 22 Teeth Washer 13/32 x 7/8 x 16 Ga. Screw Thdrol 3/8-16 x 3/4 TY-TT Pin Cotter 1/8 x 3/4 Cad Rod Tie Wire Form 19.75 Mech Bushing Strg. 5/8 ID Dash Screw Slftp #10-16 x 1/2 Ty-B Cap Wheel Steer Opp Sears Blk Washer 13/32 x 2-3/8 x 8 Ga. Locknut Center 3/8-24 Unf Adaptor Wheel Strg640/.635 Id Boot Shaft Steering Craftsman Washer 25/32 x 1-1/4 x 16 Ga. Cap Spindle Fr Top Blk Fitting Grease

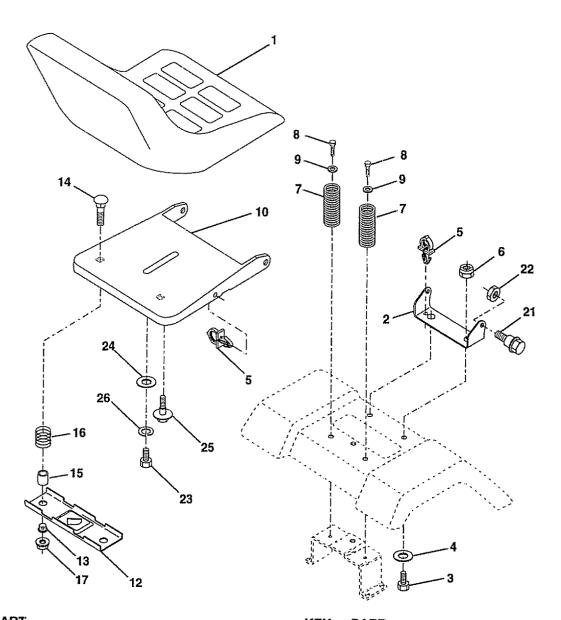
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NOTE: All component dimensions given in U.S. inches. 1 inch = 25.4 mm

13 HP 42" TRACTOR - - MODEL NUMBER 917.257632

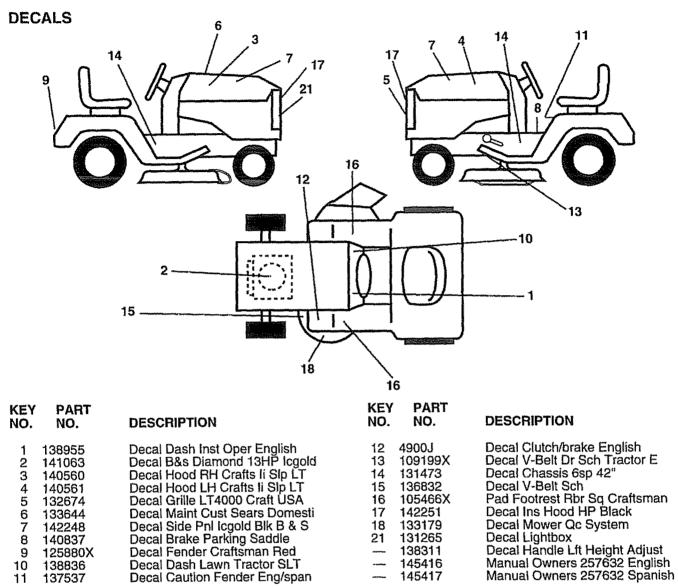
SEAT ASSEMBLY

VEN

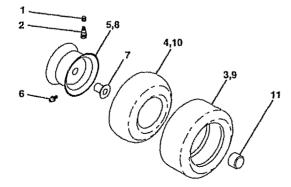


KEY NO.	NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1 2 3 4 5 6 7 8	127437 140551 74760616 19131610 145006 73800600 124181X 17490616	Seat Bracket Pvt St Bolt Fin Hex 3/8-16unc X 1 Washer Flat 13/32 X 1 X 10 Ga Clip Push-In Hinged Locknut Hex W/Wsh 3/8-16 Spring Seat Cprsn 2 250 Blk Zi Serow Thdrol 2/8 16 X 1 Tv H	14 72050411 15 134300 16 121250X 17 123976X 21 139888 22 73800500 23 74780814	Bolt Rdhd Sht Nk 1/4-20x1-3/8 Spacer Split 28x 96 Yel Zinc Spring Cprsn 1 27 Blk Pnt Nut Lock 1/4 Lge Flg Gr 5 Zinc Bolt Shld 5/16-18 Type Tt T R Nut Lock Hex "W/Ins 5/16-18 Bolt Fin Hex 1/2-13 X 7/8 Gr 5
9 10 12 13	19131614 140552 121246X 121248X	Screw Thdrol 3/8-16 X 1 Ty-tt Washer 13/32 X 1 X 14 Ga Pan Seat Bracket Mounting Switch Bushing Snap Blk Nyl 50 Id	24 19171912 25 127018X 26 10040800 NOTE: All compo 1 inch = 2	Washer 17/32 X 1-3/16 X 12 Ga Bolt Shoulder 5/16-18 X 62 Washer Lock Hvy Hicl Spr 1/2 ment dimensions given in U.S. inches. 5.4 mm

13 HP 42" TRACTOR - - MODEL NUMBER 917.257632



WHEELS & TIRES

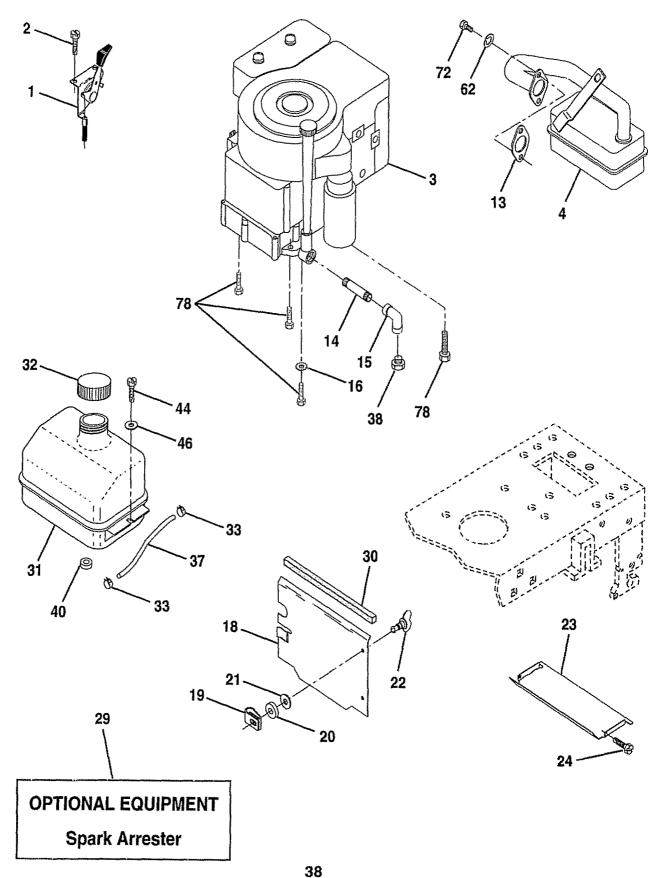


KEY NO.	PART NO.	DESCRIPTION
1	59192	Cap Valve Tire
2 3	65139	Stem Valve
3	106222X	Tire F Ts 15 X 6 0 - 6 Service
4	59904	Tube Front (Service Item Only)
5	106732X417	Rim Asm 6" f ront Silver Service
6	278H	Fitting Grease (Front Wheel Only)
7	9040H	Bearing Flange (Front Wheel Only)
8	106108X417	Rim Asm 8" rear Silver Service
9	124635X	Tire R Ts 18x8 5-8 C Service
1Õ	7152J	Tube Rear (Service Item Only)
11	104757X	Cap Hub Axle Blk 1 50 X 1 00
11	1041 JIA	Dap Hau Anie Din T DU A T W

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

13 HP 42" TRACTOR - - MODEL NUMBER 917.257632

ENGINE



ENGINE

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KEY NO.	PART NO.	DESCRIPTION
1	132759	Control Th/ch RH Blk Pdl 15 10 Screw Hex Thd Cut 1/4-20x5/8 T
2 3	17720410 140591	Engine Asm B&s Dmd 13Eec lcgld
4 13 14 15 16 18 20 21 22 23 24 29 30 31 32	140591 137348 125593X 13280324 13200300 11050600 136718 105839X 105838X 19091016 123650X 128953 17021008 137180 127057X 109202X 123549X 123549X 123487X	Engine Asm B&s Dmd 13Eec lcgld Model No. 28M707, Type No. 0137-01 Muffler LT B&S 12/12 5/13 HP Gasket Eng 1 313 ld Tin Plated Nipple Pipe 3/8 Npt x 3" Elbow Std 90 Degree 3/8-18 Npt Washer Lock Ext Tooth 3/8 Shield Heat LT Receptacle 1/4 Turn Dacrotized Retainer 1/4 Turn 365 od x 222id Washer 9/32 x 5/8 x 16 Ga Stud 1/4 Turn (Replaces 105751) Shield Heat Browning LT/YT Screw Tap Hex #10-24 unc X 1/2 Kit Spark Arrestor (Flat Scrn) Pinch Weld Hood Black 2 00 Tank Fuel Front 1 25 Cap Asm Fuel W/sym Vented Clamp Hose Blk Line Fuel 20"
38	******	Plug Oil Drain (Order From Engine
40 44 62 72 78		Mañufacturer) Bushing Snap Nyl Blk Fuel Line Screw Hexwsh Thdrol 1/4-20 x 3/4 Washer 9/32 x 7/8 x 16 ga Washer Lock Hvy Hlcl Spr 5/16 Screw Hex Hd Cap 5/16-18 X 3/4 Screw Thdrol 3/8-16x1-1/4 TYTT

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

13 HP 42" TRACTOR - - MODEL NUMBER 917.257632 LIFT

13 HP 42" TRACTOR - - MODEL NUMBER 917.257632

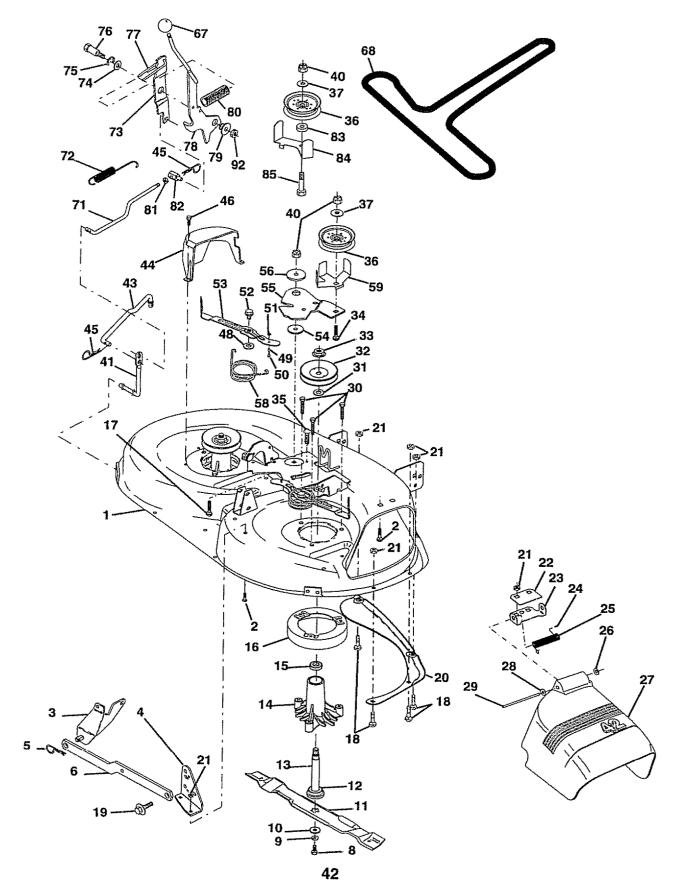
LIFT

KEY NO.		DESCRIPTION
1	136973	Wire Asm Inner W/plunger 17 32
2	122507X	Shaft Asm Lift 9 680
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
2 3 4 5 6 7 8	125631X	Grip Handle Fluted Blk
8	122365X	Button Plunger Red
	122512X	Spring Cprsn 3 750 Oiled
	139865	Link Lift LH
	139866	Link Lift RH
13	4939M	Retainer Spring
	127218	Link Front
	73350800	Nut Jam Hex 1/2-13 Unc
	130171	Trunnion Blk Zinc
	73800800	Nut Lock W/wsh 1/2-13unc
	139868	Arm Suspension Rear
	3146R	Retainer Spring Zinc
	140302	Bearing Pvt Lift Spherical
32	and the second	Nut Lock 3/8-24 W/Nylon Insert

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

13 HP 42" TRACTOR - - MODEL NUMBER 917.257632

42" MOWER



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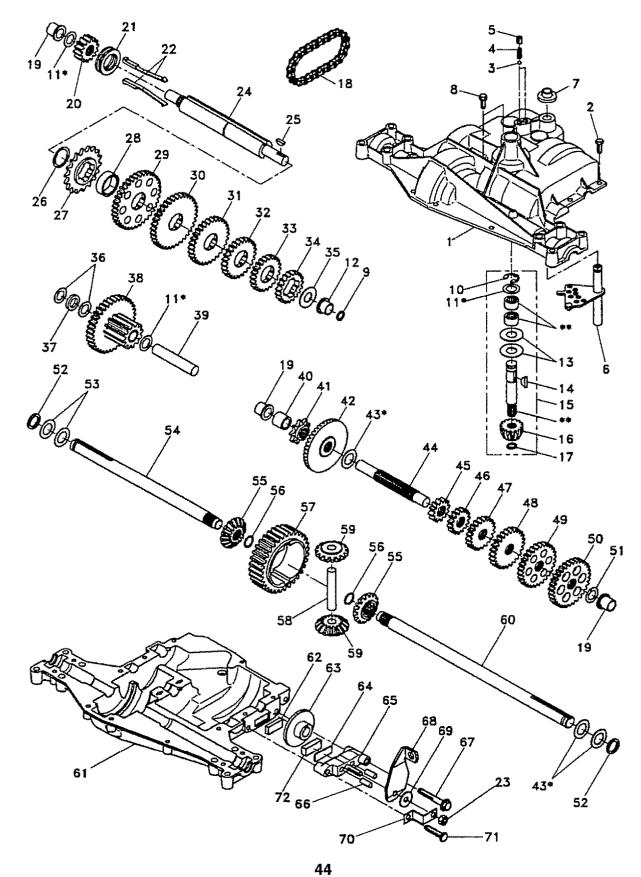
13 HP 42" TRACTOR - - MODEL NUMBER 917.257632

42" MOWER

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	144393	Mower Housing	41	133551	Rod, Pivot, with Nibs
2	STD533107	Bolt	43	140083	Rod, Clutch, Secondary, with Nibs
3	138017	Bracket Assembly, Sway Bar, Front	44	140088	Guard, Mandrel, L.H.
4	138440	Bracket Assembly, Sway Bar	45	STD624003	Retainer
5 6	STD624008	Retainer Spring		137729	Screw, Thd. Roll 1/4-20 x 5/8
6	130832	Arm, Suspension, Rear		133944	Washer, Hardened
8	850857	Bolt, Hex 3/8-24 x 1.25 Grade 8		133940	Roller Assembly, Cam Follower
9	STD551137	Washer, Lock		131340	Bolt, Shoulder #10-24 Grade 5
10	140296	Washer, Hardened	51	STD541410	
11	134149	Blade, Mulching		139888	Bolt, Shoulder 5/16-18 UNC
12	129895	Bearing, Ball		131845	Arm Assembly, Pad, Brake
13	137645	Shaft Assembly, Mandrel, Vented		133943	Washer, Hardened
		(Includes Key Number 6)		140084	Arm, Idler
14	128774	Housing, Mandrel, Vented		122052X	Spacer, Retainer
15	110485X	Bearing, Ball, Mandrel		140086	Spring, Torsion Brakes 42"
16	140329	Stripper, Vented Mower Deck		141043 106932X	Guard, Tuv Idler (94)
17	72110610	Bolt, Carriage 3/8-16 x 2-1/4		144200	Knob, Round 3/8-16 UNC V-Belt
18	72140505	Bolt, Carriage 5/16-18 x 5/8		142427	
19	132827	Bolt, Shoulder		131870	Rod, Clutch, Primary, with Nibs Spring, Return
20	136888	Baffle, Vortex Nut, Crownlock 5/16-18 UNC	72	127847	Arm, Clutch, Secondary
21	73680500 134753	Stiffener Bracket		121748X	Washer 25/32 x 1-5/8 x 16 Gauge
22		Bracket, Deflector		12000029	Ring, Klip
23 24	131267 105304X	Cap, Sleeve		128903	Bolt, Shoulder 3/8-16 UNC x 1.44
25	123713X	Spring, Torsion, Deflector		127845	Keeper, Spring
26	110452X	Nut, Push		140334	Arm, Clutch, Primary
27	130968	Shield, Deflector		127498	Bushing, Large, Brass
28	19111016	Washer 11/32 x 5/8 x 16 Gauge		128759	Spring, Mower Clutch
29	131491	Rod, Hinge		73350600	Nut, Hex Jam 3/8-16 UNC
30	138776	Screw Thdrol Hex Head Zinc Mwr	82	142028	Trunnion Adj. 94
31	129963	Washer, Spacer	83	120958X	Washer Sintered
32	129861	Pulley, Mandrel		144394	Keeper Belt Idler Fixed
33	137266	Nut, Toplock, Flanged		STD533720	Bolt Carriage 3/8-16 x 2-1/2 G5
34	STD533717	Bolt	92	73800600	Locknut, Hex W/Wsh 3/8-16 UNC
35	133835	Fastner, Christmas Tree	* *	130794	Mandrel Assembly (Includes Key
36	131494	Pulley, Idler, Flat			Numbers 8-10, 12-15, 31 and 32)
37	19131316	Washer 13/32 x 13/16 x 16 Ga.	• •	145411	Mower Deck, Complete
40	73680600	Nut, Crownlock 3/8-16 UNC			· •
•		·	NOT	E: All compor	ent dimensions given in U.S. inches.

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

13 HP 42" TRACTOR - - MODEL NUMBER 917.257632 DANA TRANSAXLE - MODEL NUMBER 4360-79



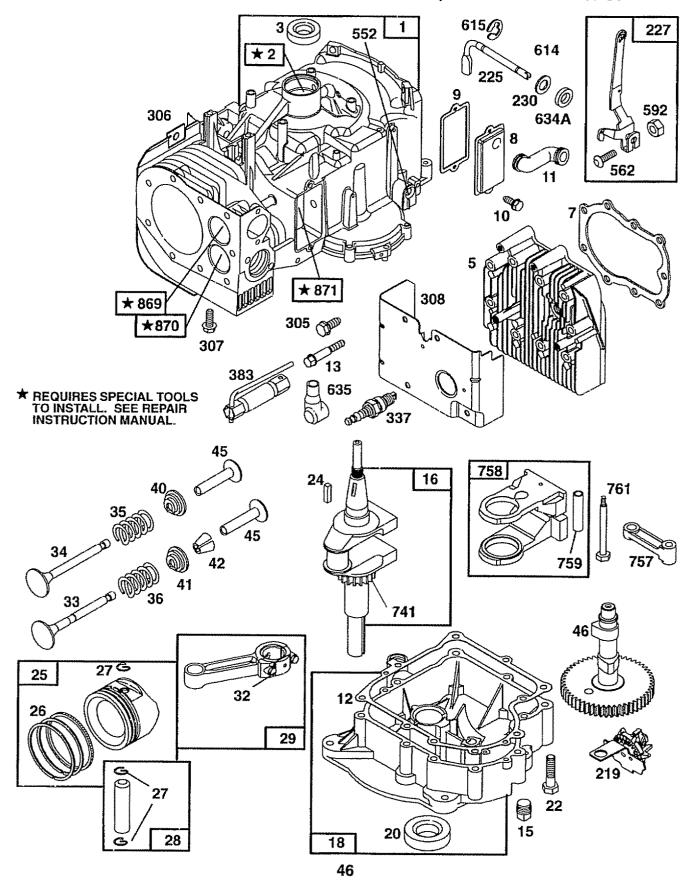
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13 HP 42" TRACTOR - - MODEL NUMBER 917.257632

DANA TRANSAXLE - MODEL NUMBER 4360-79

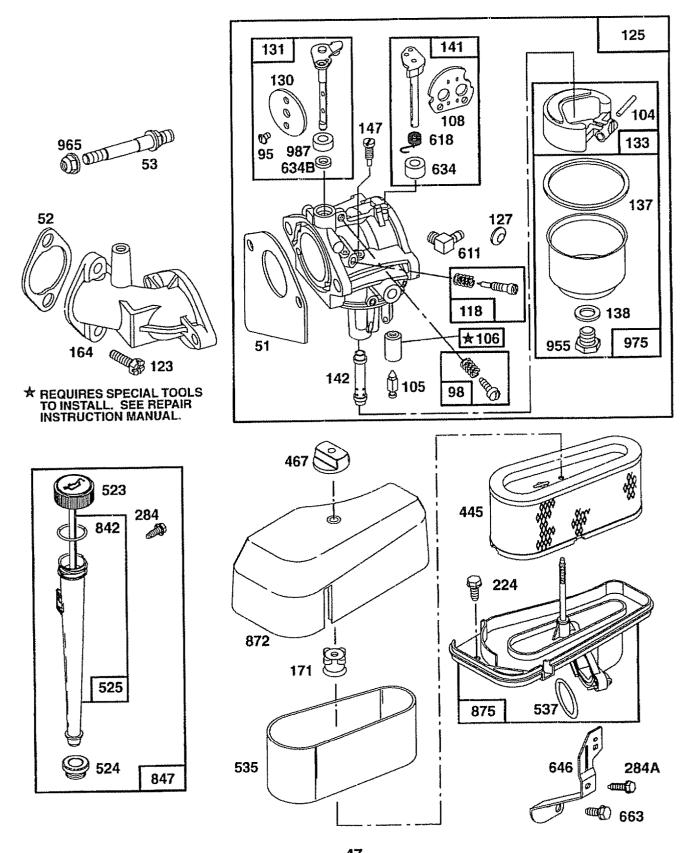
KEY NO.	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1	142671	Housing, Upper	41	105928X	Sprocket, 9 Teeth
ż	2274J	Screw, Self-Tapping, Large		110084X	Gear, Bevel, 42 Teeth
_		1/4-20 x .734		134394 ' 120473X	* Assembly, Kit, Shim 750 Shaft
3	134400	Ball, Detent		142678	Shaft, Drive Gear, Spur, 12 Teeth
4	105904X	Spring, Detent Screw, Set	45 46	142679	Gear, Spur, 15 Teeth
5 6	105905X 138235	Kit, Shifter Assembly		120407X	Gear, Spur, 20 Teeth
7	134399	Boot, Shifter		106589X	Gear, Spur, 25 Teeth
8	134791	Screw, Tapping w/Sealer		120408X	Gear, Spur, 28 Teeth
9	138241	Square Ring	50	105937X	Gear, Spur, 31 Teeth
10	142672	Ring, Retaining	51	2226J	Washer, Plain .632 x 1.00 x .060
11		* Assembly, Kit, Shim .625 Shaft		134401	Washer, Neoprene
12	142673	Bearing, Flange		2264J 120474X	Washer, Plain758 x 1.25 x .031 Axle, L.H.
13	120415X	Washer, Plain .632 x 1.38 x .046		120474X 110081X	Gear, Miter, 15 Teeth
14	142674	Key, Woodruff, #9 Assembly, Kit, Input Shaft		105941X	Ring, Retaining
15 16	138234 110078X	Pinion, Bevel, 14 Teeth		110071X	Gear, Spur, 32 Teeth
17	105909X	Ring, Retaining		120952X	Shaft, Cross
18	105910X	Chain, 24 Pitches		110082X	Gear, Miter, 15 Teeth
19	105911X	Bearing, Flange	60	120475X	Axle, R.H.
20	142675	Gear, Spur, 14 Teeth		142680	Housing, Lower
21	138246	Collar, Clutch		120961X	Puck, Friction
22	138236	Assembly, Kit, Clutch Keys		7294J 108989X	Disc, Brake Spacer
23	73810500	Locknut 5/16-24	65	120953X	Jaw, Brake
24 25	142676 2244J	Shaft, Intermediate Key, Woodruff, #61		120954X	Pin, Dowel
25	105916X	Ring, Retaining	67	134799	Screw, Self-Tapping, Large
27	120470X	Sprocket, 18 Teeth			5/16-18 x 2.25
28	110070X	Spacer	68	138244	Lever, Actuating
29	142677	Gear, Spur, 37 Teeth	69	108996X	Washer, Plain 321 x 1.00 x .055
30	142681	Gear, Spur, 35 Teeth		120956X	Bracket, Anti-Rotation
31	120405X	Gear, Spur, 30 Teeth	71	106596X	Screw, Self-Tapping, Large 5/16-18 x 1.44
32	108980X	Gear, Spur, 25 Teeth	72	120951X	Puck, Friction
33 34	120406X 134796	Gear, Spur, 22 Teeth Gear, Spur, 19 Teeth	73	120416X	Grease
35	105925X	Washer, Plain .640 x 1.37 x .061			
36	2232J	Washer, Plain .632 x 1.00 x .026	*	Use in combir	nations to maintain proper clearances
37	108978X	Spacer .630 x 1.00 x .169			
38	110079X	Assembly, Gear, Combination of	**	Order Key No), 15
		12 Teeth and 35 Teeth	1007		ont dimonsions given in LLS inches
39	124639X	Shaft, Idler	NU	1 inch = 25	ent dimensions given in U.S. inches
40	120472X	Spacer .635 x .875 x .755		1 111011 - 20	PA-I

13 HP 42" TRACTOR - - MODEL NUMBER 917.257632 BRIGGS & STRATTON ENGINE - MODEL NUMBER 28M707, TYPE NUMBER 0137-01



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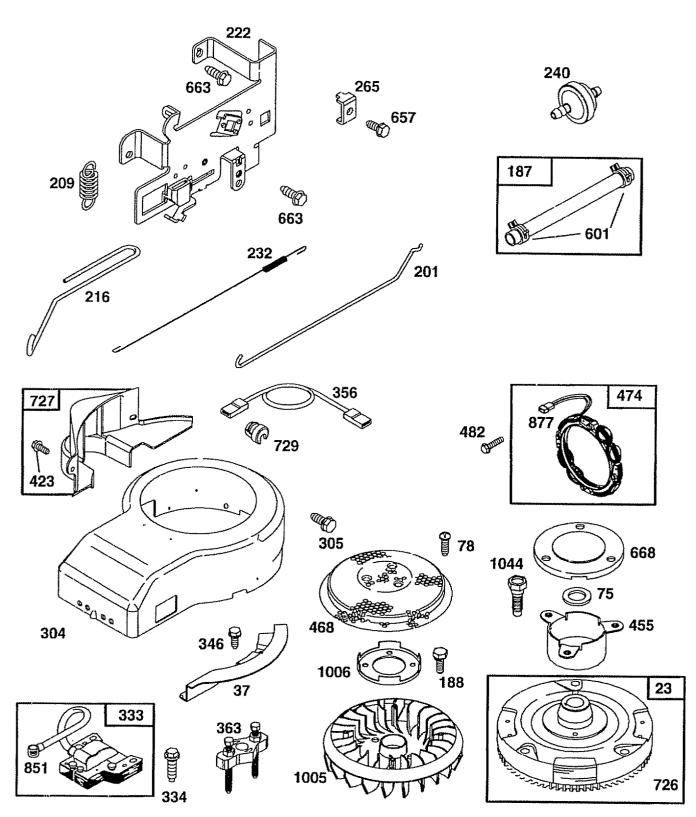
13 HP 42" TRACTOR - - MODEL NUMBER 917.257632 BRIGGS & STRATTON ENGINE - MODEL NUMBER 28M707, TYPE NUMBER 0137-01



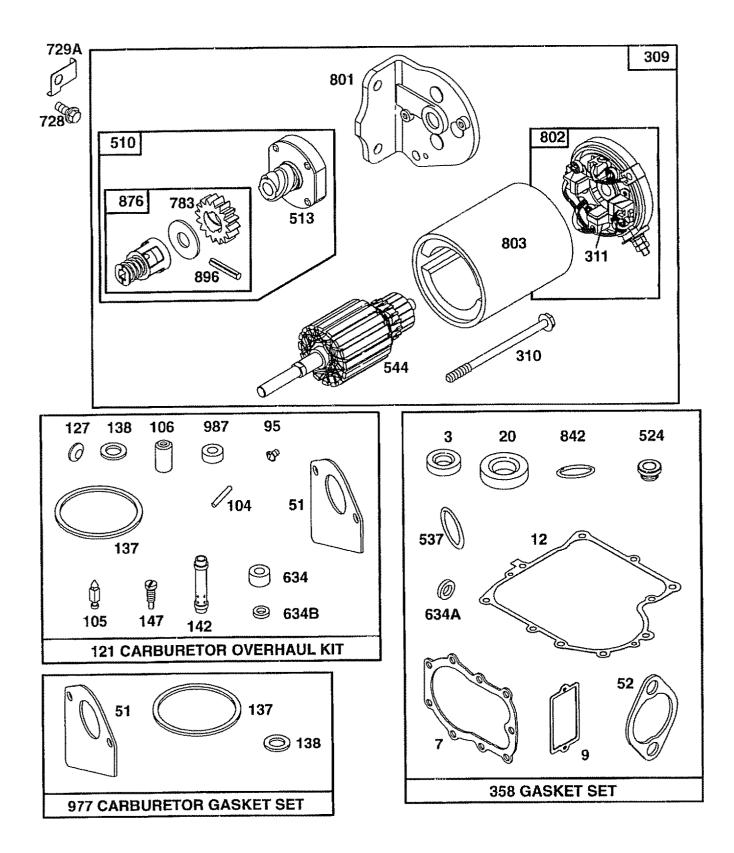
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13 HP 42" TRACTOR - - MODEL NUMBER 917.257632 BRIGGS & STRATTON ENGINE - MODEL NUMBER 28M707, TYPE NUMBER 0137-01



13 HP 42" TRACTOR - - MODEL NUMBER 917.257632 BRIGGS & STRATTON ENGINE - MODEL NUMBER 28M707, TYPE NUMBER 0137-01

KEY NO.	PART NO.	DESCRIPTION
1	496413	Cylinder Assembly
2	399265	Bearing, Cylinder
з	391086	* Seal, Oil
5	494240	Head, Cylinder
6	22963	Washer, Flat
7	271866	* Gasket, Cylinder Head
8	495735	Breather Assembly
~	07000	(Includes Mounting Gasket)
-9	27803	* Gasket, Valve Cover
10 11	94621	Screw, Sems Tube, Breather
12	280100 271916	* Gasket, Crankcase Cover, 1/64"
14	271910	* Gasket, Crankcase Cover, .005"
	271996	* Gasket, Crankcase Cover, .009"
13	94622	Screw, Cylinder Head
15	94239	Plug, Oil Drain
16	495162	Crankshaft
	94196	Key, Timing Gear
18	494238	Base, Engine
20	291675	* Seal, Oil
22	94624	Screw, Sems, Base Mounting
23	492326	Flywheel
24	222698	Key, Flywheel
25	394661	Piston Assembly, Standard Size
	394662	Piston Assembly, .010" Oversize
	394663	Piston Assembly, .020" Oversize
~~	394664	Piston Assembly, .030" Oversize
26	391780	Ring Set, Standard Size
	392331 391781	Ring Set, Standard Size, Chrome Ring Set, .010" Oversize
	391782	Ring Set, .020" Oversize
	391783	Ring Set, .030" Oversize
27	260924	Lock, Piston Pin
28	299691	Pin, Piston, Standard Size
	391286	Pin, Piston, .005" Oversize
29	490348	Rod. Connectina
	490469	Rod, Connecting, .020" Undersize
32	94671	Screw, Connecting Rod
33	262246	Valve, Exhaust
34	262247	Valve, Intake
35	65906	Spring, Valve
36	26828	Spring, Valve Spring, Valve Guard, Flywheel
37	224502	Guard, Hywneel Datainat, Intoka Valua
40	221596	Retainer, Intake Valve
41 42	292260	Rotocoil, Exhaust Valve
	93630 262248	Retainer, Rotocoil Tappet, Valve
40	212897	Gear, Cam
51	272465	*** Gasket, Carburetor
<u>.</u> .		mander shared preserves and the press

	PART NO.	DESCRIPTION
75 78 98 105 106 1123 125 133 1337 1341 1427 15 106 1123 1257 131 1337 1341 1427 15 109 2192 222 222 222 222 222 222 222 222 2	94637 224061 94626 94098 495800 231789 231855 231855 231854 224540 494383 94616 495706 224539 494379 494381 281165 281164 495931 494537 231794 213819 281051 393815 94627 262767 260871 262766 490815 495611 94729 231058 493935 94742 262785 394358 221535 94073	 * Gasket, Carburetor Stud, Carburetor Mounting Washer, Spring Screw, Sems ** Screw, Throttle Screw, Idle Adjust ** Pin, Float Hinge ** Valve, Inlet Needle ** Seat, Inlet Valve, Choke Valve, Needle Screw, Elbow Mounting Carburetor ** Plug, Welch (Sold in Kit Only) Valve, Throttle Shaft, Throttle Float, Carburetor *** Gasket, Float Bowl *** Washer, Float Bowl Shaft, Choke ** Nozzle, Carburetor ** Pilot, Jet Carburetor, Elbow Nut, Air Cleaner Line, Fuel (11" Long, Cut to Suit) Screw, Sems Link, Governor Spring, Governor Link, Choke Gear, Governor Carank, Governor Lever Assembly, Governor Washer, Governor Crank Spring, Governor Link Filter, Fuel Clamp, Casing Screw, Hex Head Screw, Hex Head Screw, Hex Head Screw, Hex Head<!--</td-->

**

Included in Gasket Set (494241) Included in Carburetor Kit (495799) Included in both Carburetor Kit (495799), and Carburetor Gasket Set (494385) ***

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

13 HP 42" TRACTOR - - MODEL NUMBER 917.257632 BRIGGS & STRATTON ENGINE - MODEL NUMBER 28M707, TYPE NUMBER 0137-01

KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
NO. NO. 305 94729 306 224545 307 94623 308 491490 309 394805 310 94003 311 395538 332A 94314 333 492341 334 93381 337 802592 346 93705 356 494328 358 494241 363 19203 383 89838 423 94073 445 493909 455 222561 467 493903 468 224948 474 393474 482 93621 510 495878 513 398003 523 495230 524 68838 525 496113 535 272403 537 281106 544 390837 552 231597 562 92613 592 231082 601 93053 611 494451 614 93306 615 93307 618 262803 634 281168 634A 491323 634B 398970	Screw, Hex Head Shield, Cylinder Screw, Sems Cover, Cylinder Head Motor, Starter Thru Bolt Assembly Brush Assembly Nut, Hex Armature, Magneto Screw, Sems Plug, Spark Screw, Hex Head Wire Assembly Gasket Set Puller, Flywheel Wrench, Spark Plug Screw, Sems Cartridge, Air Cleaner Cup, Screen Mounting Knob, Air Cleaner Screen, Rotating Stator, Alternator Screw, Sems Starter Drive Group Clutch Assembly Dipstick, Oil * Seal, Oil Tube, Oil Filler Element, Filter * O-Ring, Air Cleaner Armature, Starter Bushing, Governor Crank Bolt, Governor Lever Nut, Hex Clamp, Fuel Pipe Elbow, Fuel Pipe Pin, Cotter Retainer, E-Ring Spring, Choke Return ** Seal, Choke Shaft * Seal, Governor	NO. NO. 668 280848 726 392134 727 490324 728 94627 729 281159 729A 24723 741 262962 757 213998 758 399891 759 298909 761 94593 783 280104 801 394856 802 395537 803 398159 842 270920 847 496415 851 221798 869 261463 870 213316 871 261961 231218 872 281361 875 494237 876 495877 877 393456 896 94288 955 94642 965 94010 975 494378 977 494385 987 281166 1003 490316 1005 281355 1006 224413 1044 94673 * Included in C	DESCRIPTION Spacer Gear, Ring Cover, Starter Screw, Hex Head Clip, Lead Wire Retainer, Wire Gear, Timing Link, Counterweight Counterweight Assembly Pin, Counterweight Screw, Counterweight Gear Cap, Drive Cap, End Housing, Starter * Seal, Cap Tube Assembly, Oil Terminal, Ignition Cable Seat, Intake Valve Seat, Exhaust Valve Guide, Exhaust Valve Guide, Exhaust Valve Guide, Intake Valve, Brass Cover, Air Cleaner Body, Air Cleaner Body, Air Cleaner Body, Air Cleaner Kit, Spring Diode Assembly Roll Pin Screw, Fuel Bowl Nut, Hex Bowl, Float Carburetor Gasket Set ** Seal, Throttle Shaft Spring Set Fan, Flywheel Retainer, Fan Screw, Hex Head Gasket Set (494241) Carburetor Kit (495799) poth Carburetor Kit (495799), etor Gasket Set (494385) Low: 1900-2100, High: 3000-3200
635 66538 646 224546 657 93496 663 94620	Elbow, Spark Plug Brace, Air Cleaner Screw, Sems Screw, Hex Head	-	onent dimensions given in U.S. inches

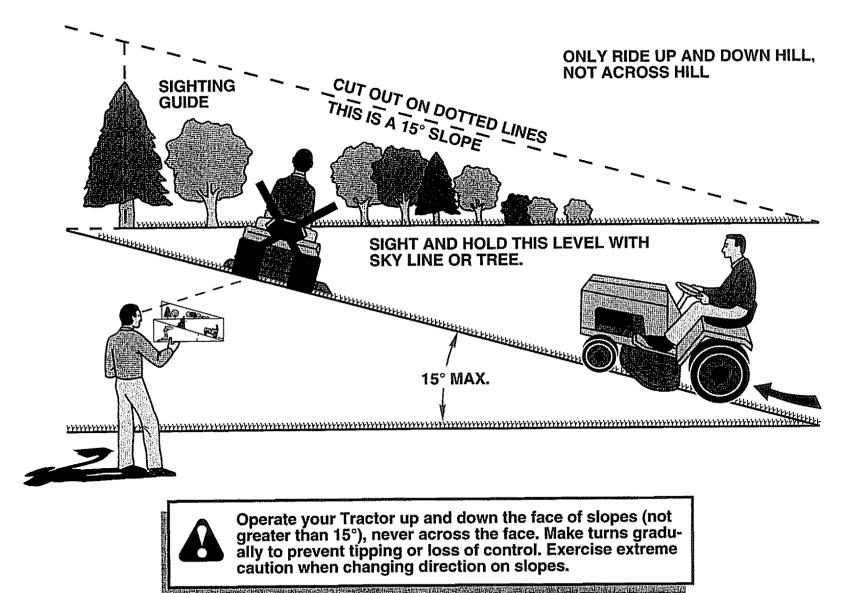
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SERVICE NOTES



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OWNER'S MANUAL

MODEL NO. 917.257632

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CRAFTSMAN®

13.0 HP IC ELECTRIC START 42" MOWER 6 SPEED TRANSAXLE LAWN TRACTOR

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The model number for your engine will be found on the blower housing of the engine.

All parts listed herein may be ordered from any Sears, Roebuck and Co. Service Center/Department and most Retail Stores.

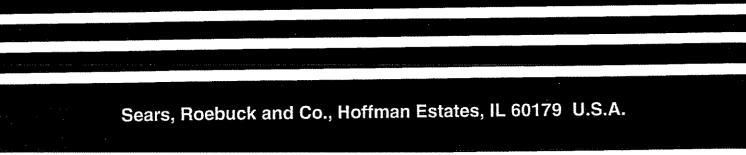
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- MODEL NUMBER 917.257632
- ENGINE MODEL NO. 28M707, TYPE NO. 0137-01
- PART NUMBER
- PART DESCRIPTION

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