

SEARS

CRAFTSMAN®

MODEL NUMBER 917.250051 OWNER'S MANUAL

**Assembly
Operation
Customer
Responsibilities
Service
Adjustments
Repair Parts**



**Caution:
Read and Follow
All Safety Rules
and Instructions
Before Operating
This Equipment**

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



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.



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



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 Service Center/Department. We have competent, well-trained technicians and the proper tools to service or repair this tractor.

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

MODEL NUMBER	917.250051
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 tractor.
- Follow the instructions under "Customer Responsibilities" and "Storage" sections of this manual.

PRODUCT SPECIFICATIONS

HORSEPOWER:	20.0
GASOLINE CAPACITY:	3.5 GALLONS UNLEADED REGULAR
OIL (3.8 PINTS w/Filter) (3.5 PINTS w/o FILTER)	SAE 30 (above 32°F) 5W-30 (below 32°F)
SPARK PLUG (GAP.025 IN.):	CHAMPION RV15YC
VALVE CLEARANCE:	INTAKE .003 - .006 IN. EXHAUST .016 - .019 IN.
GROUND SPEED:	(MPH): LO HI 1st .8 1.8 2nd 1.4 3.4 3rd 2.4 5.5 Rev. .9 2.1
TRANSAXLE OIL (4 QUARTS CAPACITY)	NON-DETERGENT SAE30 (ISO 100)
TIRE PRESSURE:	FRONT: 14 PSI REAR: 10 PSI
CHARGING SYSTEM:	15 AMPS @ 3600 RPM
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 years from date of purchase, when this riding equipment is maintained, lubricated, and tuned up according to the operating and maintenance instructions in the owner's manual, Sears will repair free of charge any defect in material or workmanship.

This Warranty does not cover:

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

FULL 90 DAY WARRANTY ON BATTERY

For 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 vary from state to state.

SEARS, ROEBUCK AND CO., D/817 WA, HOFFMAN ESTATES, ILLINOIS 60179

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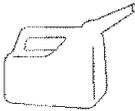
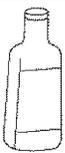
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ACCESSORIES AND ATTACHMENTS

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

ENGINE	SPARK PLUG	GAS CAN	ENGINE OIL	FUEL STABILIZER	MAINTENANCE	BLADES	BELTS
							

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.

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.

DISC HARROW has 2 gangs of 4 steel blades that angle from 10 to 20 degrees, 40 inches wide. Can hook 2 units in tandem. (Requires sleeve hitch.)

DOZER BLADE removes snow; grades dirt, sand and gravel. 48 inches wide, 17 inches high, clears 44-inch path when angled. Master lift control lever for operator ease. Spring trip for snow removal on uneven pavement; built-in float for blade to follow ground contour. Reversible, replaceable scraper bar. (Use with tire chains, wheel weights or rear drawbar weight.)

EASY OIL DRAIN VALVE makes oil changes easier, faster.

FRONT END LOADER system includes double wide rear tires, rear weight box, and hydraulically operated 5.26 cu.ft. bucket. Available for horizontal engine garden tractors only. (Catalog only.)

FRONT NOSE ROLLER canters in front of mower deck to reduce chances of "scalping" on uneven terrain. Available for 38", 42" and 44" mower decks only.

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 flips 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 REAR-ACTION SPRING TINE DETHATCHER** covers 36-inch wide path and tosses thatch into large hopper.

MULCHING KIT, once installed, lets you mulch, discharge or bag clippings (bagger optional) without changing blades. For models not equipped as 3 in One Convertible mowers.

PLOW turns soil 6 inches deep, cuts 10-inch furrow. Crank adjustment controls depth, 3-position yoke sets width. Heavy steel landslide for straight furrowing. (Requires sleeve hitch.)

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

REAR BLADE is 42 inches wide and operated from driver's seat. Reversible steel blade can be angled at 30 degrees for grading. Reverses for snow plowing. (Requires sleeve hitch.)

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.

SLEEVE CULTIVATOR is 43 inches wide. Prepares ground for seeding, helps weed control. Steel frame holds 5 adjustable sweeps. Adjusts vertically, horizontally. (Requires sleeve hitch.) **Optional accessory:** steel furrow opener for wider openings for potatoes, corn, and other deep-seeded crops.

SLEEVE HITCH for use with master lift system. Single pin couples/uncouples.

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, wheel weights, 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 when pulling, 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 de-icers and sand.

SWEEPERS let you collect grass clippings and leaves.

TILLER has 8 hp engine to prepare seed beds, cultivate, and compost garden residue. Chain-drive transmission. Six 11-inch diameter one piece heat-treated steel tines. Tills 30-inch path. (Requires sleeve hitch.)

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 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.

TRACTOR COVER protects tractor from weather. Made of Evolution 3 fabric (water-repellent, extremely breathable, light weight, soft, non-abrasive, pliable in all temperatures, durable, stain/tear/puncture resistant, will not shrink or stretch). (Catalog only.)

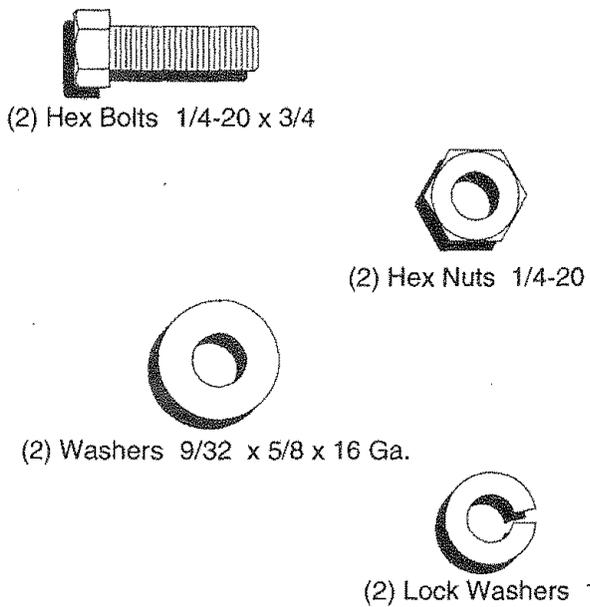
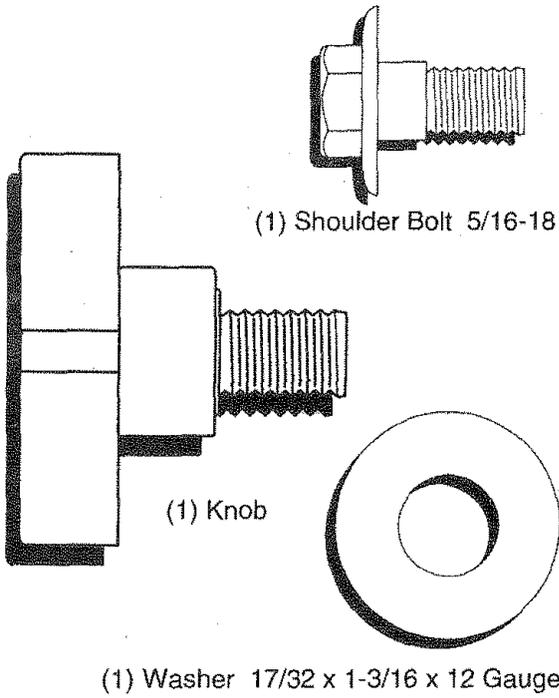
VACS for powerful collection of heavy grass clippings and leaves. Wand attachment to pick up debris in hard-to-reach places. **VAC/CHIPPER** includes a chipper-shredder.

WEIGHT BRACKET for drawbar for snow removal applications. Can be mounted on front of tractor for plowing applications. Uses (1) 55 lb. weight.

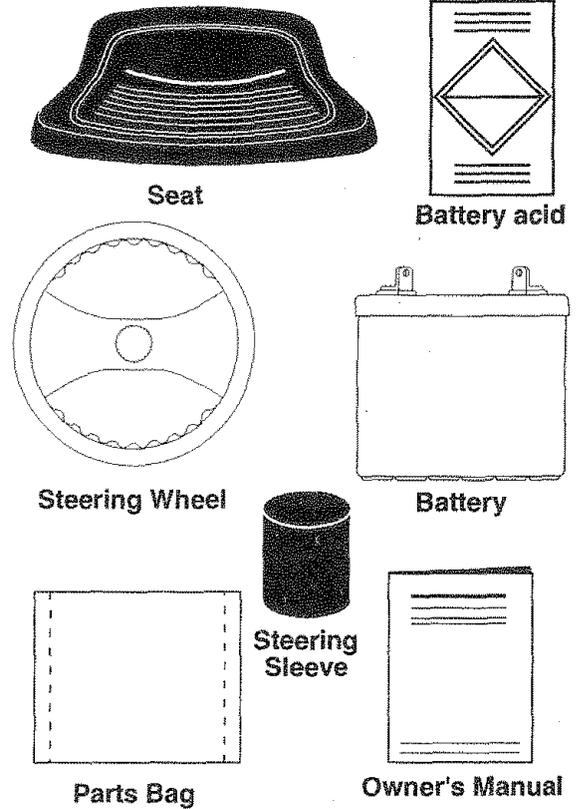
WHEEL WEIGHTS for rear wheels provide needed traction for snow removal or dozing heavy materials.

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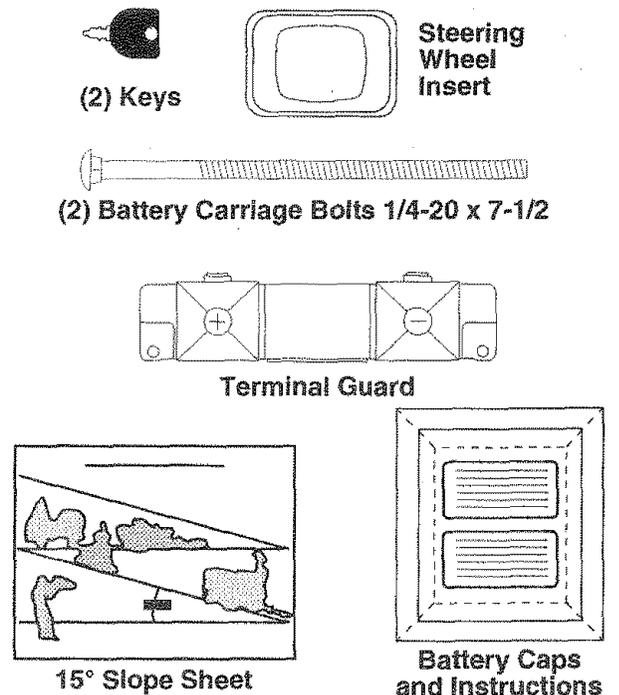
Parts Bag contents shown full size



Parts packed separately in carton



Parts bag contents not shown full size



ASSEMBLY

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

TOOLS REQUIRED FOR ASSEMBLY

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

- (2) 7/16" wrenches (1) Tire pressure gauge
- (1) 9/19" wrench (1) Adjustable wrench
- (1) 1/2" wrench (1) Utility knife

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

BEFORE ROLLING TRACTOR OFF SKID

ATTACH STEERING WHEEL (See Fig. 1)

- Remove hex bolt, lock washer and large flat washer from steering shaft.
- Position front wheels of the tractor so they are pointing straight forward.
- Slide the steering sleeve over the steering shaft.
- Position steering wheel so cross bars are horizontal (left to right) and slide onto adapter.
- Secure steering wheel to steering shaft with hex bolt, lock washer and large flat washer previously removed. Tighten securely.
- Snap 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.

TO ROLL TRACTOR OFF SKID (See Fig. 2)

- Release parking brake by depressing clutch/brake pedal.
- Place gearshift lever in "NEUTRAL" position.
- Roll tractor backwards off skid.

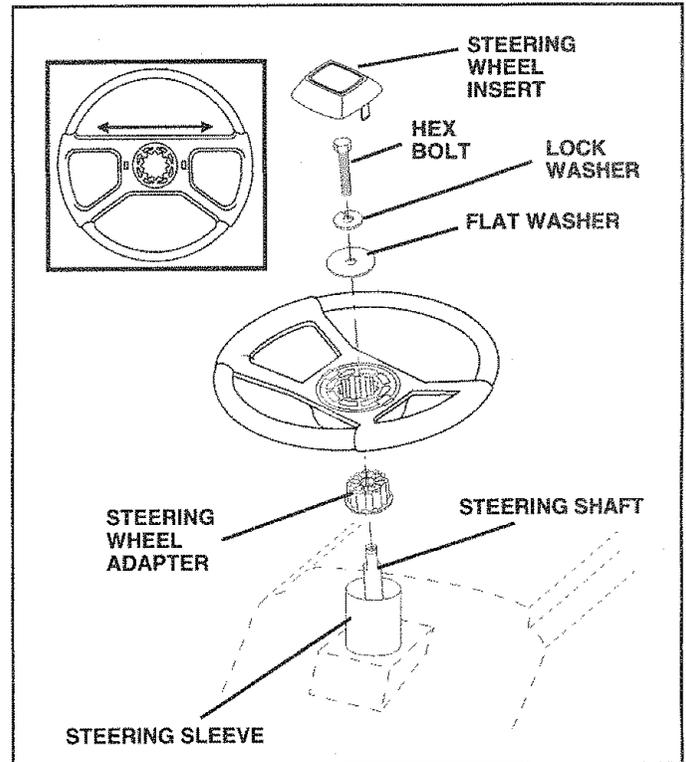


FIG. 1

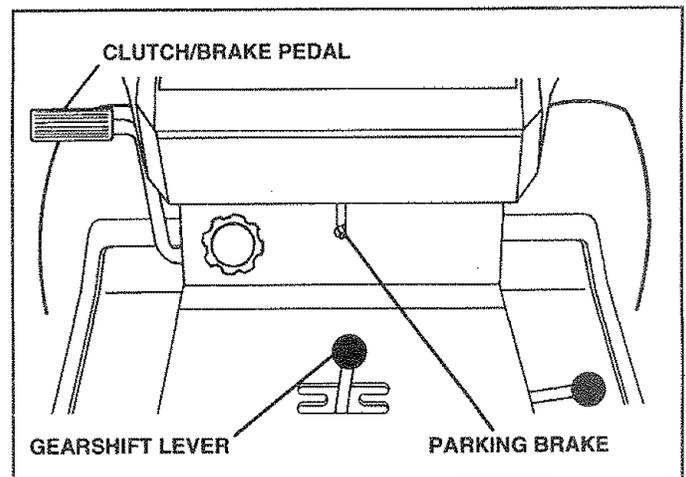


FIG. 2

ASSEMBLY

HOW TO SET UP YOUR TRACTOR PREPARE BATTERY (See Fig. 3)



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 level of acid. 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 four inches 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.

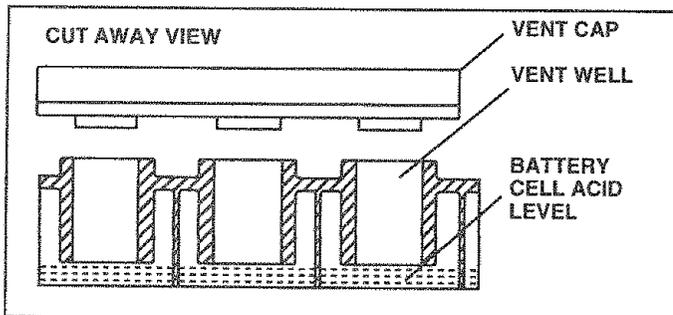


FIG. 3

INSTALL SEAT (See Fig. 4)

Adjust seat before tightening adjustment knob.

- Remove cardboard packing on seat pan.
- Place seat on pan and assemble shoulder bolt.
- Assemble adjustment knob 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 knob securely.

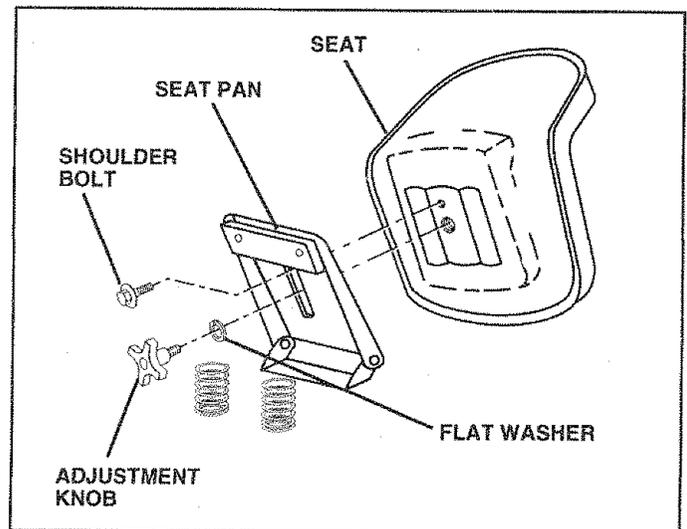


FIG. 4

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 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. 5 & 6)



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.

- Raise hood.
- Make sure drain tube is fastened to drain hole in battery tray and battery tray is positioned in hole of battery support.
- Place battery in plastic tray, battery terminals to front of tractor.
- First connect RED battery cable to positive (+) battery terminal with hex bolt, flat washer, lock washer and hex nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) battery terminal with remaining hex bolt, flat washer, lock washer and hex nut. Tighten securely.
- Slide the two battery bolts through the terminal guard and start the wing nuts onto the threads.
- Position terminal guard over the battery as shown, lower bolts into key holes and slide square shafts of bolts into slots of key holes.
- Tighten wing nuts by hand making sure battery bolts remain in slots of the key holes in the battery support.
- Be sure terminal access doors are closed.

Use terminal access doors for:

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

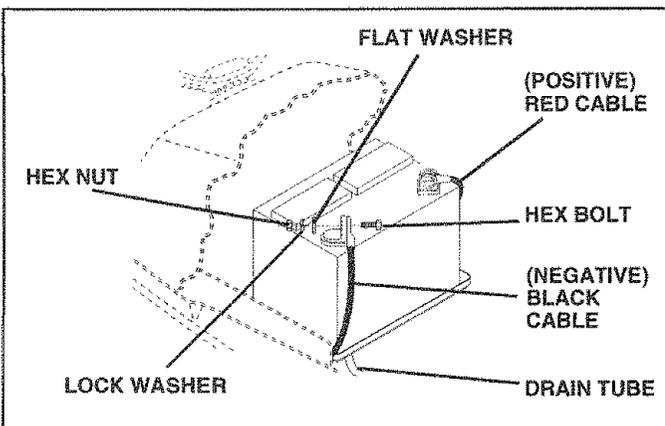


FIG. 5

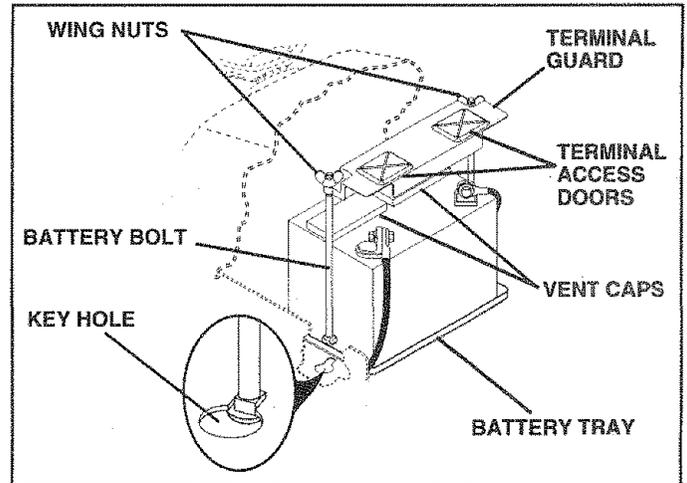


FIG. 6

✓ CHECKLIST

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

PLEASE REVIEW THE FOLLOWING CHECKLIST:

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

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

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

OPERATION

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 location of various controls and adjustments. Save this manual for future reference.

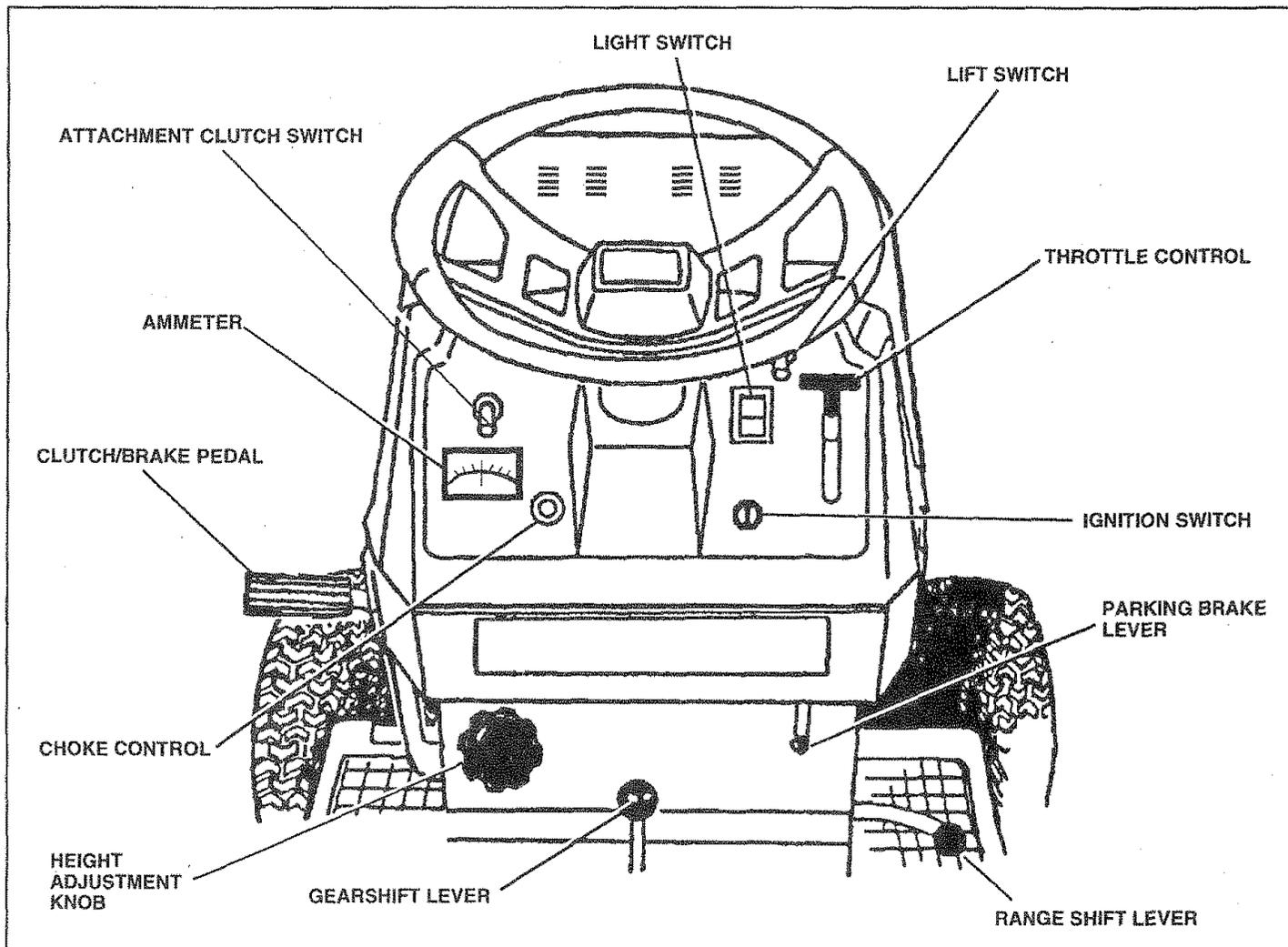


FIG. 7

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

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

LIFT SWITCH - Used to raise and lower mower deck or other attachments mounted to your tractor. Ignition switch must be on to operate this switch.

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

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

HEIGHT ADJUSTMENT KNOB - Used to adjust the mower height.

GEARSHIFT LEVER: Selects the speed and direction of tractor.

THROTTLE CONTROL - Used to control engine speed.

RANGE SHIFT LEVER - Allows "HI" or "LO" speed for all forward and reverse gears.

IGNITION SWITCH - Used to start and stop the engine.

LIGHT SWITCH - Turns the headlights on and off.

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

CHOKE CONTROL - Used when starting a cold engine.

OPERATION



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 before starting your tractor and while moving. We recommend wide vision safety mask for over the spectacles or standard safety glasses.

HOW TO USE YOUR TRACTOR TO SET PARKING BRAKE (See Fig. 8)

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

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

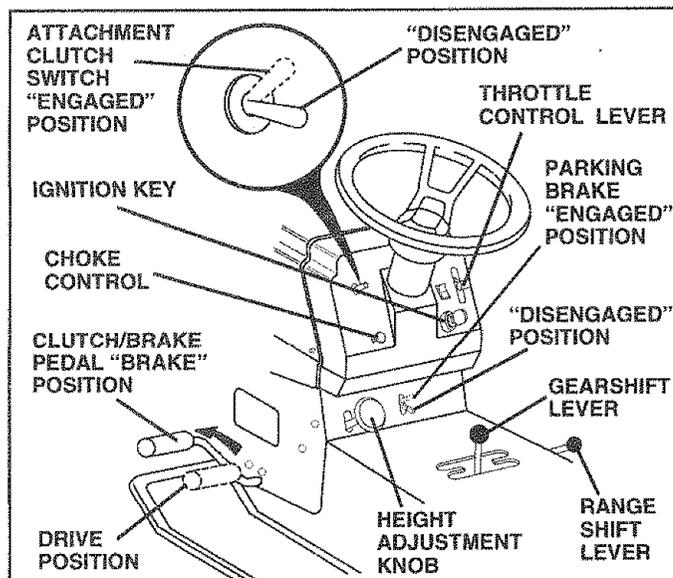


FIG. 8

STOPPING (See Fig. 8)

MOWER BLADES -

- Move attachment clutch switch to "DISENGAGED" position.

GROUND DRIVE -

- Depress clutch/brake pedal into full "BRAKE" position.
- Move gearshift lever to "NEUTRAL" position.

ENGINE -

- Move throttle control to "SLOW" position.

NOTE: Failure to move throttle control to "SLOW" position or 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 engine running, hot engine exhaust gasses may cause "browning" of grass. To eliminate this possibility, always stop engine when stopping tractor on grass covered areas.



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

TO USE CHOKE CONTROL (See Fig. 8)

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

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

TO USE THROTTLE CONTROL (See Fig. 8)

Always operate engine at full throttle.

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

TO MOVE FORWARD AND BACKWARD (See Fig. 8)

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

- Start tractor with clutch/brake pedal depressed and gearshift lever in "NEUTRAL" position.
- Move gearshift and range shift levers 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 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 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 and range shift lever to "LO" position. 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.

OPERATION

TO TRANSPORT

- Raise attachment lift to highest position with lift control.
- When pushing or towing your unit, be sure gearshift lever is in "NEUTRAL" position.
- Do not push or tow unit 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. 9)

- The engine in your unit has been shipped, from the factory, already filled with summer weight oil.
- Check engine oil with unit on level ground.
- Remove dipstick and wipe clean, reinsert the dipstick and push it all the way down into the tube, 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.

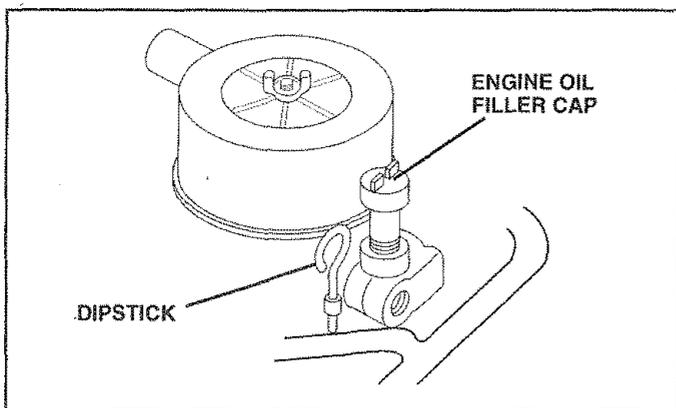


FIG. 9

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. 8)

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" position.
- Move attachment clutch to "DISENGAGED" position.
- Pull choke control out to "CHOKE" position for cold engine start. For warm engine start do not use choke control.
- Move throttle control to midway between "FAST" and "SLOW" positions.
- 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, slowly push choke control in.
- Move throttle control to "FAST" 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.

CUSTOMER RESPONSIBILITIES

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

1 - Change more often when operating under a heavy load or in high ambient temperatures.
2 - Service more often when operating in dirty or dusty conditions.

3 - If equipped with oil filter, change oil every 50 hours.
4 - Replace blades more often when mowing in sandy soil.
5 - If equipped with adjustable system.

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.

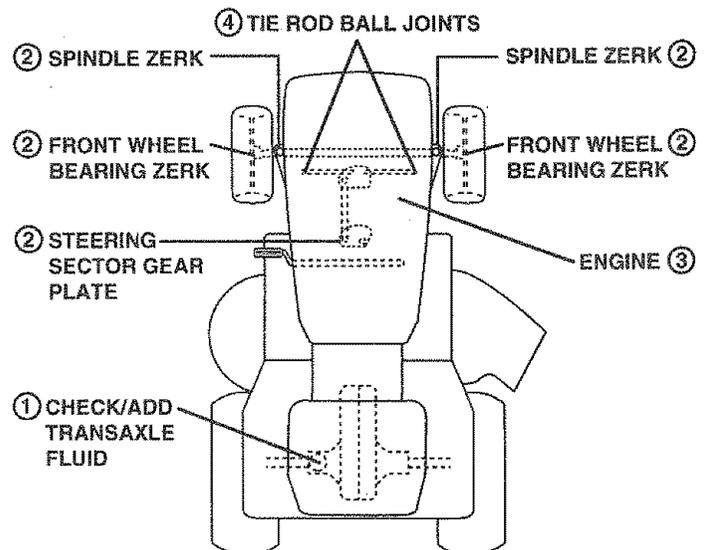
- Once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear. A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

BEFORE EACH USE

- Check engine oil level.
- Check brake operation.
- Check tire pressure.
- Check for loose fasteners.

IMPORTANT: DO NOT OIL OR GREASE THE PIVOT POINTS WHICH HAVE SPECIAL NYLON BEARINGS. VISCOUS LUBRICANTS WILL ATTRACT DUST AND DIRT THAT WILL SHORTEN THE LIFE OF THE SELF-LUBRICATING BEARINGS. IF YOU FEEL THEY MUST BE LUBRICATED, USE ONLY A DRY, POWDERED GRAPHITE TYPE LUBRICANT SPARINGLY.

LUBRICATION CHART



- ① SAE 30 NON-DETERGENT OIL (ISO 100)
- ② GENERAL PURPOSE GREASE
- ③ REFER TO CUSTOMER RESPONSIBILITIES "ENGINE" SECTION
- ④ SPRAY SILICONE LUBRICANT (MOVE BOOTS TO LUBRICATE)

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 "PRODUCT 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.

TRANSAXLE COOLING

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

CHECK TRANSAXLE OIL LEVEL

(See Fig. 10)

- Block up rear axle securely or use a tractor jack.
- Remove left rear wheel by removing hub bolts.
- Remove filler plug from transaxle. Oil level must be even with plug threads. If necessary, fill with SAE 30 non-detergent oil (ISO 100). Replace filler plug.
- Reassemble wheel to hub.
- For approximate capacity, see "Product Specifications" on page 3 of this manual.

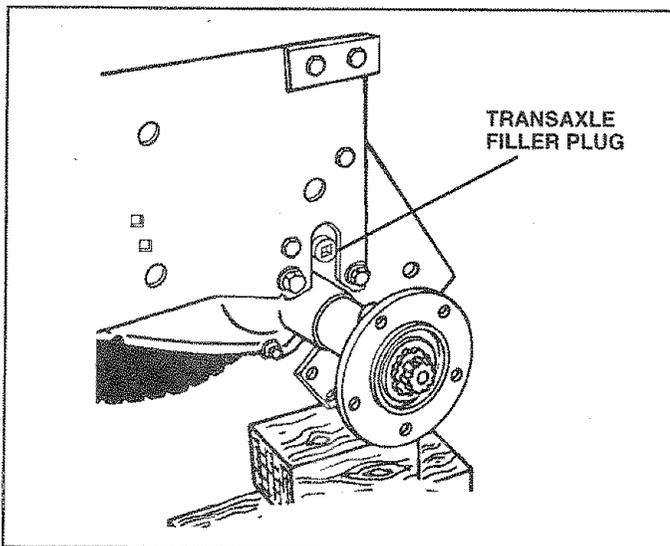


FIG. 10

BATTERY (See Fig. 11)

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.

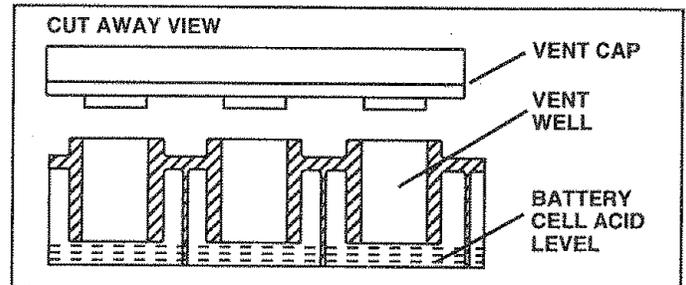


FIG. 11

TO CLEAN BATTERY AND TERMINALS -

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

- Remove terminal guard.
- 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

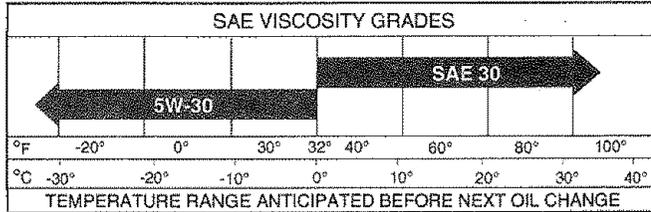
Check V-Belts for deterioration and wear after 100 hours of operation. Replace if necessary. The belts are not adjustable. Replace belts if they begin to slip from wear.

CUSTOMER RESPONSIBILITIES

ENGINE

LUBRICATION

Only use high quality detergent oil rated with API service classification 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 50 hours thereafter or at least once a year if the tractor is not used for 50 hours in one year.

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

TO CHANGE ENGINE OIL (See Figs. 12 and 13)

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

- Be sure tractor is on level surface.
- Oil will drain more freely when warm.
- Catch oil in a suitable container.
- Remove oil filler cap. 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 filler tube. Pour slowly. Do not overfill. For approximate capacity see "Product Specifications" on page 3 of this manual.
- Use gauge on dipstick for checking level. Be sure dipstick is in all the way for accurate reading. Keep oil at "FULL" line on dipstick.

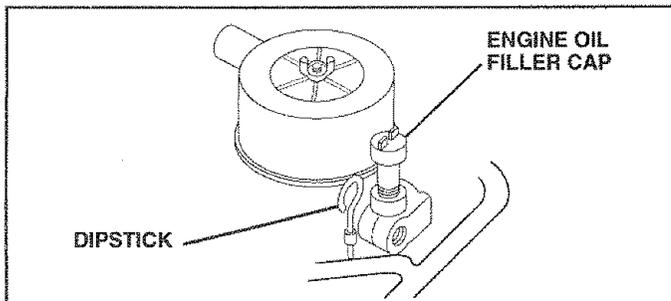


FIG. 12

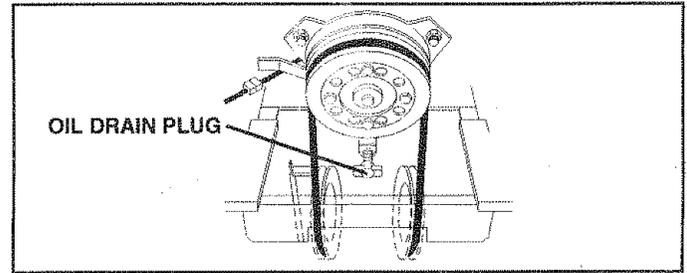


FIG. 13

CLEAN AIR SCREEN (See Fig. 14)

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

CLEAN ENGINE COOLING FINS (See Fig. 14)

Remove any dust, dirt or oil from engine cooling fins to prevent engine damage from overheating. Engine blower housing must be removed. Remove side panels and hood (See "TO REMOVE HOOD AND GRILL ASSEMBLY" in the Service and Adjustments section of this manual.)

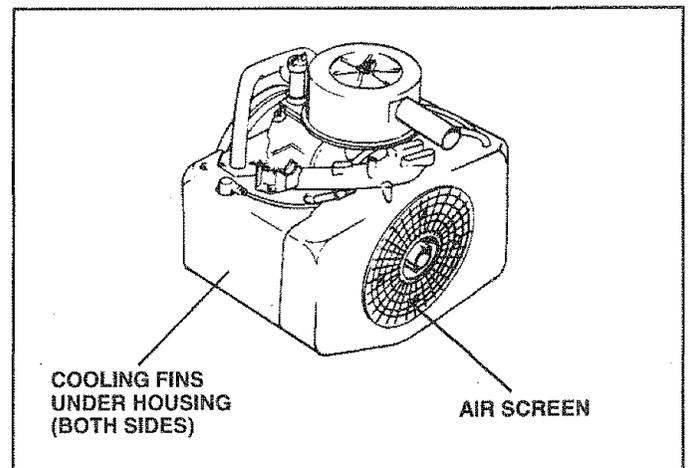


FIG. 14

CUSTOMER RESPONSIBILITIES

AIR FILTER (See Fig. 15)

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

Service air cleaner more often under dusty conditions.

- Remove wing nut and cover.
- Remove seal and cartridge plate.

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.

TO SERVICE CARTRIDGE

- Gently tap the flat side of the paper cartridge to dislodge dirt. Do not wash the paper cartridge or use pressurized air, as this will damage the cartridge. Replace a dirty, bent, or damaged cartridge.
- Reinstall the pre-cleaner (cleaned and oiled) over the paper cartridge.
- Reassemble air cleaner, cartridge plate, and seal.
- Install the air cleaner cover and wing nut. Tighten wing nut 1/2 turn to 1 full turn after nut contacts cover. Do not overtighten.

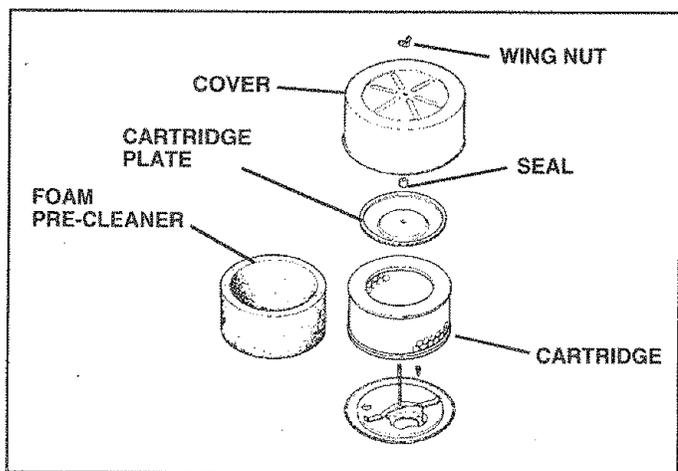


FIG. 15

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 comes first. Spark plug type and gap setting are shown in "PRODUCT SPECIFICATIONS" on page 3 of this manual.

ENGINE OIL FILTER

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

IN-LINE FUEL FILTER (See Fig. 16)

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.

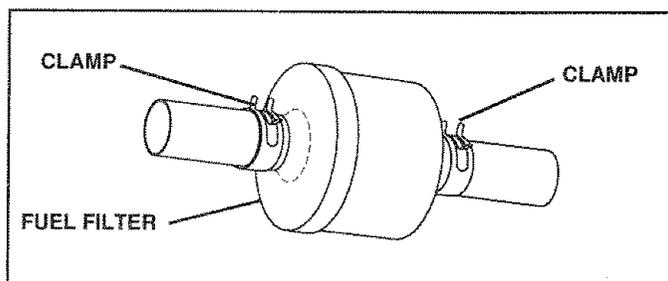


FIG. 16

CLEANING

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

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

SERVICE AND ADJUSTMENTS

CAUTION: BEFORE PERFORMING ANY SERVICE OR ADJUSTMENTS:



- Depress clutch/brake pedal fully and set parking brake.
- Place gearshift lever in "NEUTRAL" 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.

POWER TAKE OFF (CLUTCH PULLEY -See Fig. 17)

The power take-off clutch should provide years of service. The clutch incorporates a built-in brake that stops the pulley almost immediately. Eventually, the internal brake will wear so the mower blades will not stop as recommended. Adjustments should be made by your nearest authorized service center.

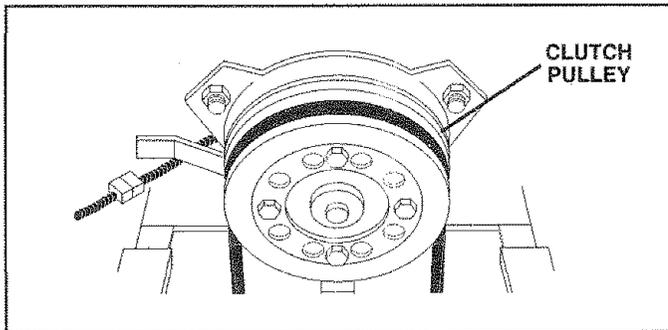


FIG. 17

TO ADJUST BRAKE (See Fig. 18)

Your tractor is equipped with an adjustable brake system which is mounted on the left 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.

IMPORTANT: DO NOT OVER TIGHTEN BRAKE. WHEN DEPRESSING CLUTCH BRAKE PEDAL, THE MOTION DRIVE BELT MUST STOP MOVING (DECLUTCH FROM ENGINE PULLEY) BEFORE BRAKE ENGAGES. IMPROPER ADJUSTMENT WILL CAUSE HARD SHIFTING AND EXCESSIVE WEAR TO BRAKE LINING.

- Park and turn off the tractor on a level surface. Place gear shift lever in "N" (neutral) position. Disengage parking brake and be sure tractor does not roll in either direction.
- Lower mower deck (if installed on tractor).
- Snap out access hole cover on left side of tractor above footrest.
- Loosen jam nut at clevis which will allow brake rod to be rotated.
- With pliers, from underside of frame, unscrew brake rod from clevis four (4) to six (6) full turns.
- Start tractor with gear shift lever in "N" (neutral) position.
- Slowly depress clutch/brake pedal to the point where the motion drive belt stops moving. Hold clutch/brake pedal in this position and engage parking brake. If belt begins to move after engaging parking brake, reset parking brake by depressing clutch/brake pedal slightly to next notch on parking brake.

- Stop engine. Screw brake rod back into clevis until clevis pin is against rear edge of slot in brake arm. Do not over tighten (see "IMPORTANT" above).
- Tighten jam nut against clevis.
- Replace access hole cover.
- Road test tractor for proper stopping distance and declutching as stated above. Readjust if necessary. If proper adjustment cannot be attained, further maintenance is necessary. Contact your nearest authorized service center.

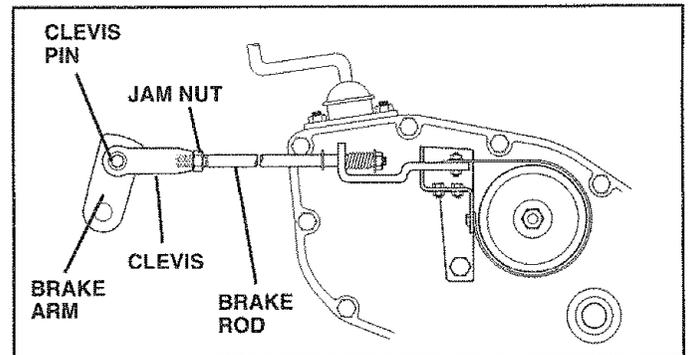


FIG. 18

SERVICE AND ADJUSTMENTS

TO REPLACE MOTION DRIVE BELT (See Figs. 19 and 20)

Park the tractor on level surface. Engage parking brake. For ease of service there is a belt installation guide decal on bottom side of left footrest. It is not necessary to remove mower.

BELT REMOVAL -

- Raise hood and disconnect negative ground battery cable.
- Set parking brake (to get belt slack).
- Loosen (do not remove) two (2) engine pulley belt guide bolts and swivel R.H. side of belt guide up. Tighten L.H. bolt to hold belt guide in position.
- Roll belt off engine pulley.
- Roll belt off "V" idler, flat idler and clutching idler pulleys.
- Roll belt off clutch pulley-between pulley and chassis. Pull belt off transaxle pulley.

BELT INSTALLATION -

- Push belt down from engine pulley area. Place back (flat) side of belt on flat idler (flat idler is next to chassis).
- Place belt on clutching idler and over clutch pulley. "V" (narrow) part of belt should engage clutch pulley.
- Place belt around transaxle pulley. "V" part of belt should engage transaxle pulley.
- Make sure "V" part of belt engages "V" idler.
- Roll belt over engine pulley.
- Loosen L.H. engine pulley belt guide bolt and swivel belt guide on to R.H. bolt. Tighten L.H. and R.H. bolts securely.
- Release parking brake.

IMPORTANT: CHECK BRAKE ADJUSTMENT.

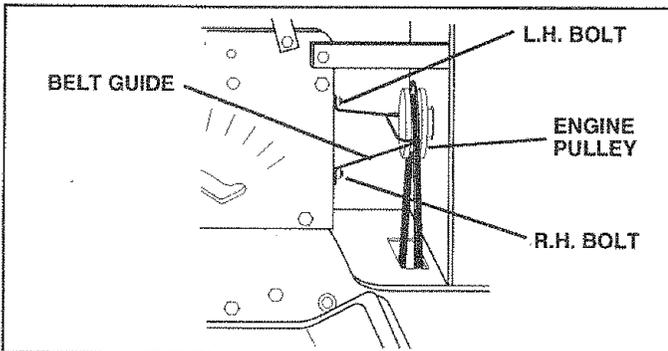


FIG. 19

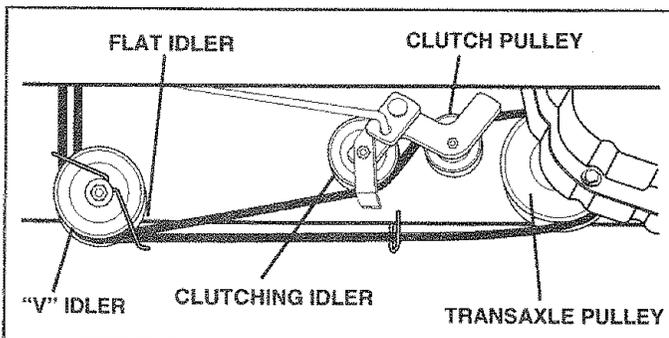


FIG. 20

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 ADJUSTMENT

Front wheel toe-in is required for proper steering operation. Toe-in was set at the factory and adjustment should not be necessary. If parts in the front axle or steering mechanism have been replaced or damaged, check toe-in and adjust if necessary.

TO CHECK TOE-IN (See Fig. 21) -

- Position front wheels straight ahead.
- Measure distance between wheels at front and rear of tires (dimensions "A" and "B").
- Front dimension "A" should be 1/8" to 1/4" less than rear dimension "B".

TO ADJUST TOE-IN (See Figs. 21 and 22) -

It is important that both tie rods be equal in length before adjusting toe-in. Both tie rods should measure approximately 10-1/4" in length (see inset). Adjust if necessary.

- Loosen jam nuts at adjustment sleeves on tie rods.
- Adjust both tie rods equally until dimension "A" is 1/8" to 1/4" less than dimension "B".
- Tighten jam nuts securely.

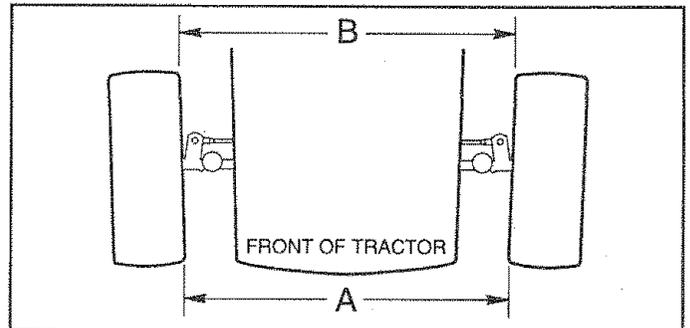


FIG. 21

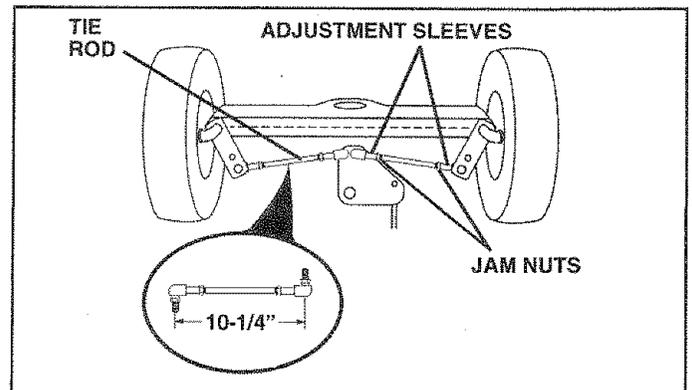


FIG. 22

FRONT WHEEL CAMBER

The front wheel camber is not adjustable on your tractor. If damage has occurred to affect the front wheel camber, contact your nearest authorized service center.

SERVICE AND ADJUSTMENTS

TO REMOVE WHEEL FOR REPAIRS

FRONT WHEEL (See Fig. 23) -

- Block up axle securely.
- Remove axle cover, retaining ring and washers to allow wheel removal.
- Repair tire and reassemble.
- Replace washers and snap retaining ring securely in axle groove.
- Replace axle cover.

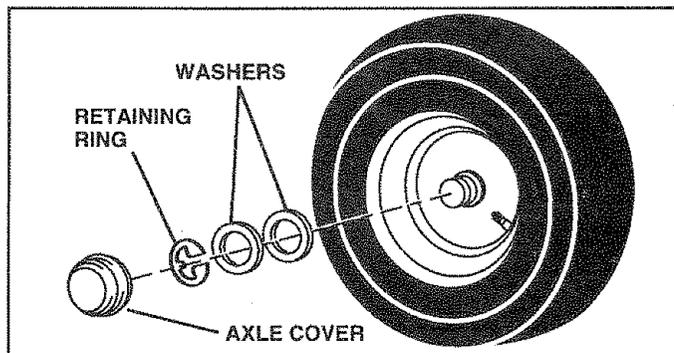


FIG. 23

REAR WHEEL-

- Block rear axle securely.
- Remove five (5) hub bolts to allow wheel removal.
- Repair tire and reassemble. Replace and tighten hub bolts and axle cover securely.

TO START ENGINE WITH A WEAK BATTERY (See Figs. 24 and 25)



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 NEGATIVE (-) terminal of fully charged battery.
- Connect the other end of the BLACK cable to a bolt on the L.H. side of chassis, away from fuel tank and battery.

TO REMOVE CABLES, REVERSE ORDER -

- BLACK cable first from left side of chassis and fully charged battery.
- RED cable last from both batteries.

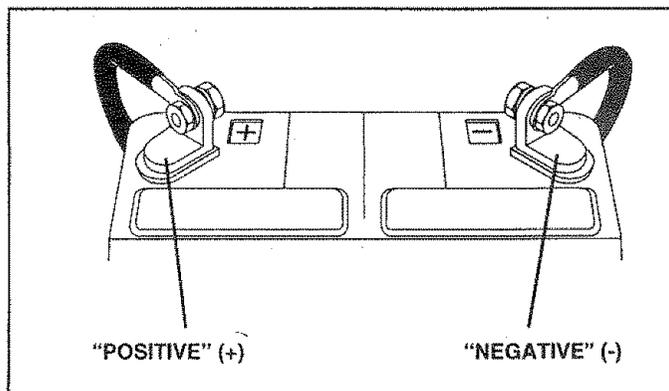


FIG. 24

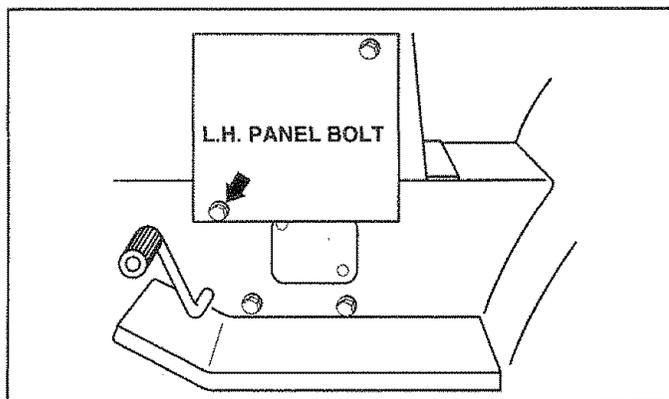


FIG. 25

TO REPLACE FUSE

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

TO REPLACE HEADLIGHT BULB

- Raise hood.
- Pull bulb holder out of 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 the electrical wiring diagram in the Repair Parts section of this manual.

SERVICE AND ADJUSTMENTS

TO REMOVE HOOD AND GRILL ASSEMBLY (See Figs. 26 & 27)

- Lift hood. Disconnect headlight wire connection.
- Unscrew one screw at rear of each side panel.
- Pivot hood and side panel forward and lift off tractor.
- To replace, reverse above procedure.

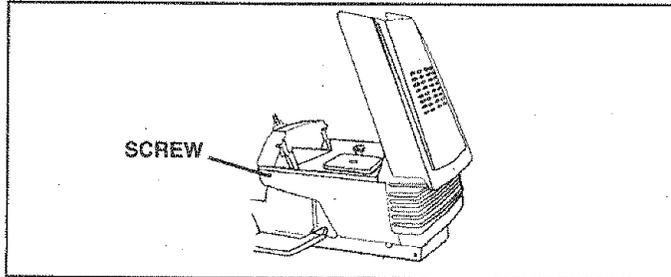


FIG. 26

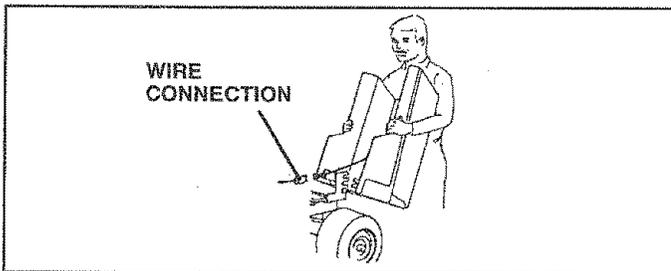


FIG. 27

ENGINE

TO ADJUST THROTTLE CONTROL CABLE (See Fig. 28)

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 to "FAST" position.
- Check that throttle lever is against high speed stop. If it is not, loosen clamp screw and pull throttle cable until lever is against stop. Tighten clamp screw securely.

TO ADJUST CARBURETOR (See Fig. 29)

The carburetor has been present 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 not need adjustment, proceed as follows:

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

IMPORTANT: DAMAGE TO THE NEEDLES AND THE SEATS IN CARBURETOR MAY RESULT IF SCREW IS TURNED IN TOO TIGHT.

PRELIMINARY SETTING -

- Be sure you have a clean air filter, and the throttle control cable and choke are adjusted properly (see above).

- With engine off turn idle fuel adjusting needle **in** (clockwise) closing it finger tight and then turn **out** (counterclockwise) 1-1/4 turns.
- Turn main fuel adjusting needle **in** (clockwise) closing finger tight and then turn **out** (counterclockwise) 1 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" position.
- With throttle control lever in "FAST" position, turn main fuel adjusting needle **in** (clockwise) until engine begins to die then turn **out** (counterclockwise) until engine runs rough. Turn needle to a point midway between those two positions.
- Idle speed setting - With throttle control lever in "SLOW" position, engine should idle at 1400 RPM. If engine idles too slow or fast, turn idle speed adjusting screw in or out until correct idle is attained.
- Idle fuel needle setting - With throttle control lever in "SLOW" position, turn idle fuel adjusting needle **in** (clockwise) until engine begins to die and then turn **out** (counterclockwise) until engine runs rough. Turn needle to a point midway between those two positions.
- Recheck idle speed. Readjust if necessary.

ACCELERATION TEST -

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

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

IMPORTANT: NEVER TAMPER WITH THE ENGINE GOVERNOR, WHICH IS FACTORY SET FOR PROPER ENGINE SPEED. OVERSPEEDING THE ENGINE ABOVE THE FACTORY HIGH SPEED SETTING CAN BE DANGEROUS. IF YOU THINK THE ENGINE-GOVERNED HIGH SPEED NEEDS ADJUSTING, CONTACT YOUR NEAREST AUTHORIZED SERVICE CENTER, WHICH HAS PROPER EQUIPMENT AND EXPERIENCE TO MAKE ANY NECESSARY ADJUSTMENTS.

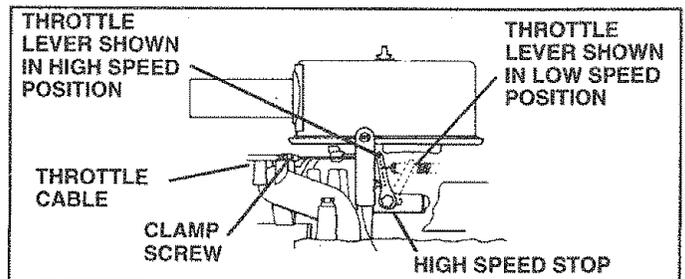


FIG. 28

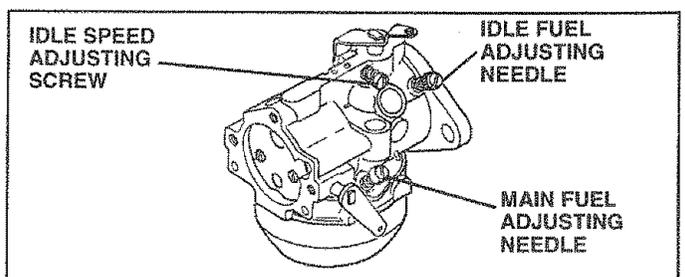


FIG. 29

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 ARE STILL WARM.

TROUBLESHOOTING

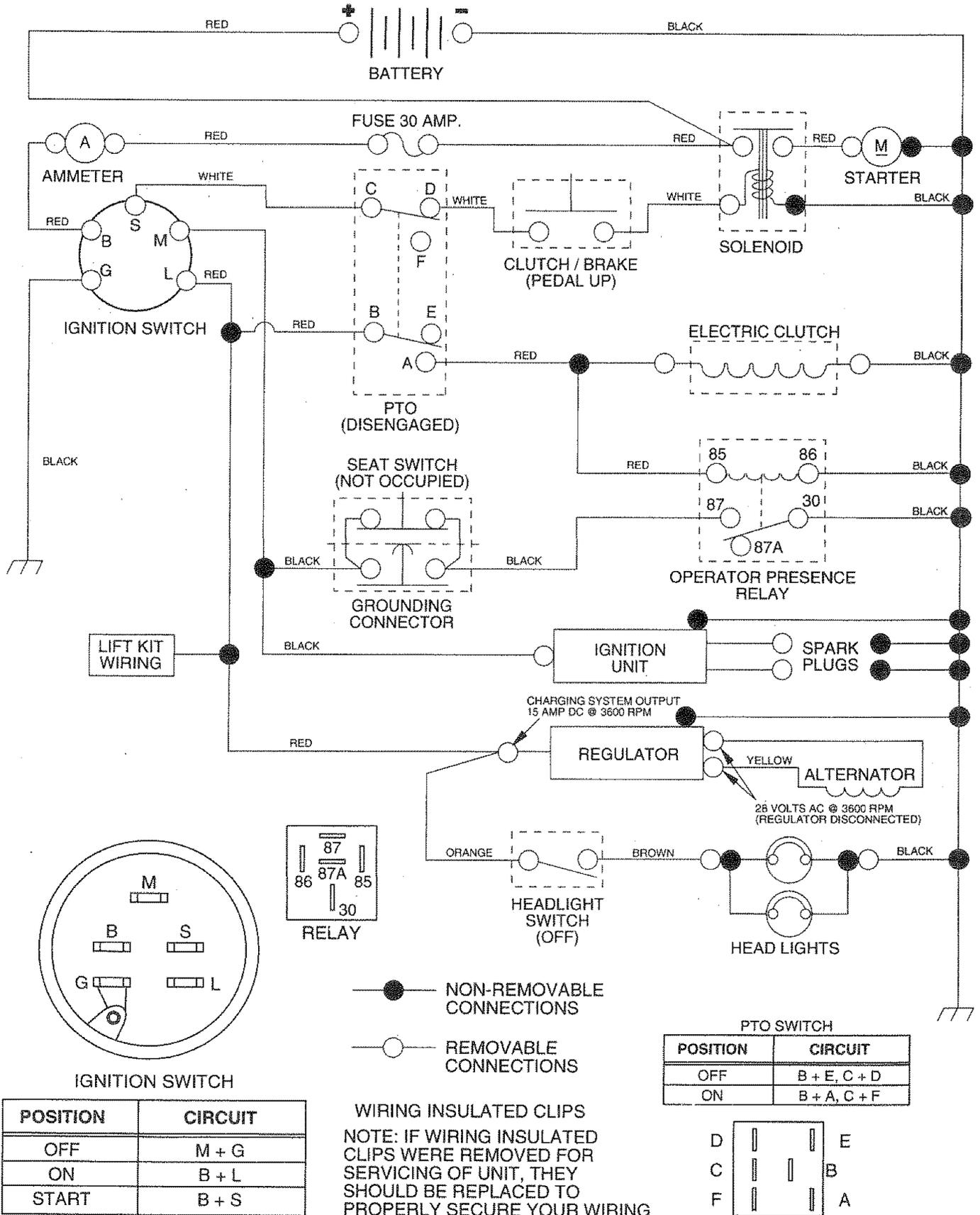
PROBLEM	CAUSE	CORRECTION
Will not start	<ol style="list-style-type: none"> 1. Out of fuel. 2. Engine not "CHOKED" properly. 3. Engine flooded. 4. Bad spark plug. 5. Dirty air filter. 6. Dirty fuel filter. 7. Water in fuel. 8. Loose or damaged wiring. 9. Carburetor out of adjustment. 10. Engine valves out of adjustment. 	<ol style="list-style-type: none"> 1. Fill fuel tank. 2. See "TO START ENGINE" in Operation section. 3. Wait several minutes before attempting to start. 4. Replace spark plug. 5. Clean/replace air filter. 6. Replace fuel filter. 7. Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter. 8. Check all wiring. 9. Contact an authorized service center/department. 10. Contact an authorized service center/department.
Hard to start	<ol style="list-style-type: none"> 1. Dirty air filter. 2. Bad spark plug. 3. Weak or dead battery. 4. Dirty fuel filter. 5. Stale or dirty fuel. 6. Loose or damaged wiring. 7. Carburetor out of adjustment. 8. Engine valves out of adjustment. 	<ol style="list-style-type: none"> 1. Clean/replace air filter. 2. Replace spark plug. 3. Recharge or replace battery. 4. Replace fuel filter. 5. Drain fuel tank and refill with fresh gasoline. 6. Check all wiring. 7. Contact an authorized service center/department. 8. Contact an authorized service center/department.
Engine will not turn over	<ol style="list-style-type: none"> 1. Clutch/brake pedal not depressed. 2. Attachment clutch is engaged. 3. Weak or dead battery. 4. Blown fuse. 5. Corroded battery terminals. 6. Loose or damaged wiring. 7. Faulty ignition switch. 8. Faulty solenoid or starter. 9. Faulty operator presence switch(es). 	<ol style="list-style-type: none"> 1. Depress clutch/brake pedal. 2. Disengage attachment clutch. 3. Recharge or replace battery. 4. Replace fuse. 5. Clean battery terminals. 6. Check all wiring. 7. Check/replace ignition switch. 8. Check/replace solenoid or starter. 9. Contact an authorized service center/department.
Engine clicks but will not start	<ol style="list-style-type: none"> 1. Weak or dead battery. 2. Corroded battery terminals. 3. Loose or damaged wiring. 4. Faulty solenoid or starter. 	<ol style="list-style-type: none"> 1. Recharge or replace battery. 2. Clean battery terminals. 3. Check all wiring. 4. Check/replace solenoid or starter.
Loss of power	<ol style="list-style-type: none"> 1. Cutting too much grass/too fast. 2. Throttle in "CHOKE" position. 3. Build-up of grass, leaves and trash under mower. 4. Dirty air filter. 5. Low oil level/dirty oil. 6. Faulty spark plug. 7. Dirty fuel filter. 8. Stale or dirty fuel. 9. Water in fuel. 10. Spark plug wire loose. 11. Dirty engine air screen/fins. 12. Dirty/clogged muffler. 13. Loose or damaged wiring. 14. Carburetor out of adjustment. 15. Engine valves out of adjustment. 	<ol style="list-style-type: none"> 1. Set in "Higher Cut" position/reduce speed. 2. Adjust throttle control. 3. Clean underside of mower housing. 4. Clean/replace air filter. 5. Check oil level/change oil. 6. Clean and regap or change spark plug. 7. Replace fuel filter. 8. Drain fuel tank and refill with fresh gasoline. 9. Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter. 10. Connect and tighten spark plug wire. 11. Clean engine air screen/fins. 12. Clean/replace muffler. 13. Check all wiring. 14. Contact an authorized service center/department. 15. Contact an authorized service center/department.
Excessive vibration	<ol style="list-style-type: none"> 1. Worn, bent or loose blade. 2. Bent blade mandrel. 3. Loose/damaged part(s). 	<ol style="list-style-type: none"> 1. Replace blade. Tighten blade bolt. 2. Replace blade mandrel. 3. Tighten loose part(s). Replace damaged parts.

TROUBLESHOOTING

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

20 HP TRACTOR - - MODEL NUMBER 917.250051

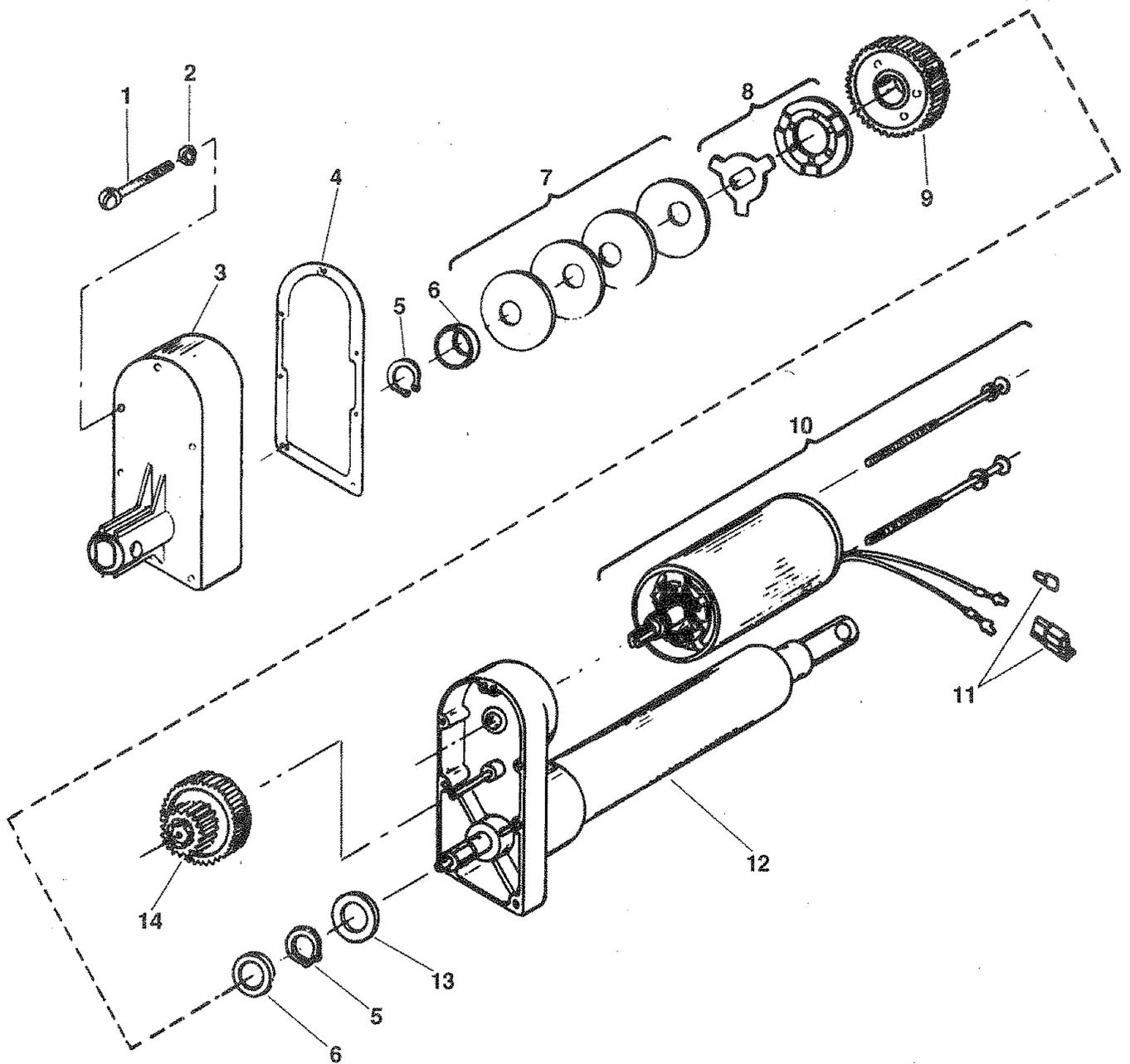
SCHEMATIC



REPAIR PARTS

20 HP TRACTOR -- MODEL NUMBER 917.250051

ELECTRIC LIFT ACTUATOR



KEY NO.	PART NO.	DESCRIPTION
1	1862J	Screw - Sl. Fil. Hd. Mach. No. 10-32 x 1-5/8
2	1863J	Lockwasher - No. 10
3	8331J	Housing Cover
4	1857J	Cover Gasket
5	1865J	Snap Ring
6	1864J	Retaining Ring
7	677A149	Spring Washer (Use 3 or 4 as req'd.)

KEY NO.	PART NO.	DESCRIPTION
8	674A281	Pawl & Ramp Washer
9	1859J	Out put Gear
10	1861J	Motor - 12V
11	673A218	Connector Body Kit
12	---	Not Serviced Separately Order complete actuator Part# 124371X
13	1860J	Thrust Washer
14	1858J	Intermediate Gear

REPAIR PARTS

20 HP TRACTOR - - MODEL NUMBER 917.250051

ELECTRICAL

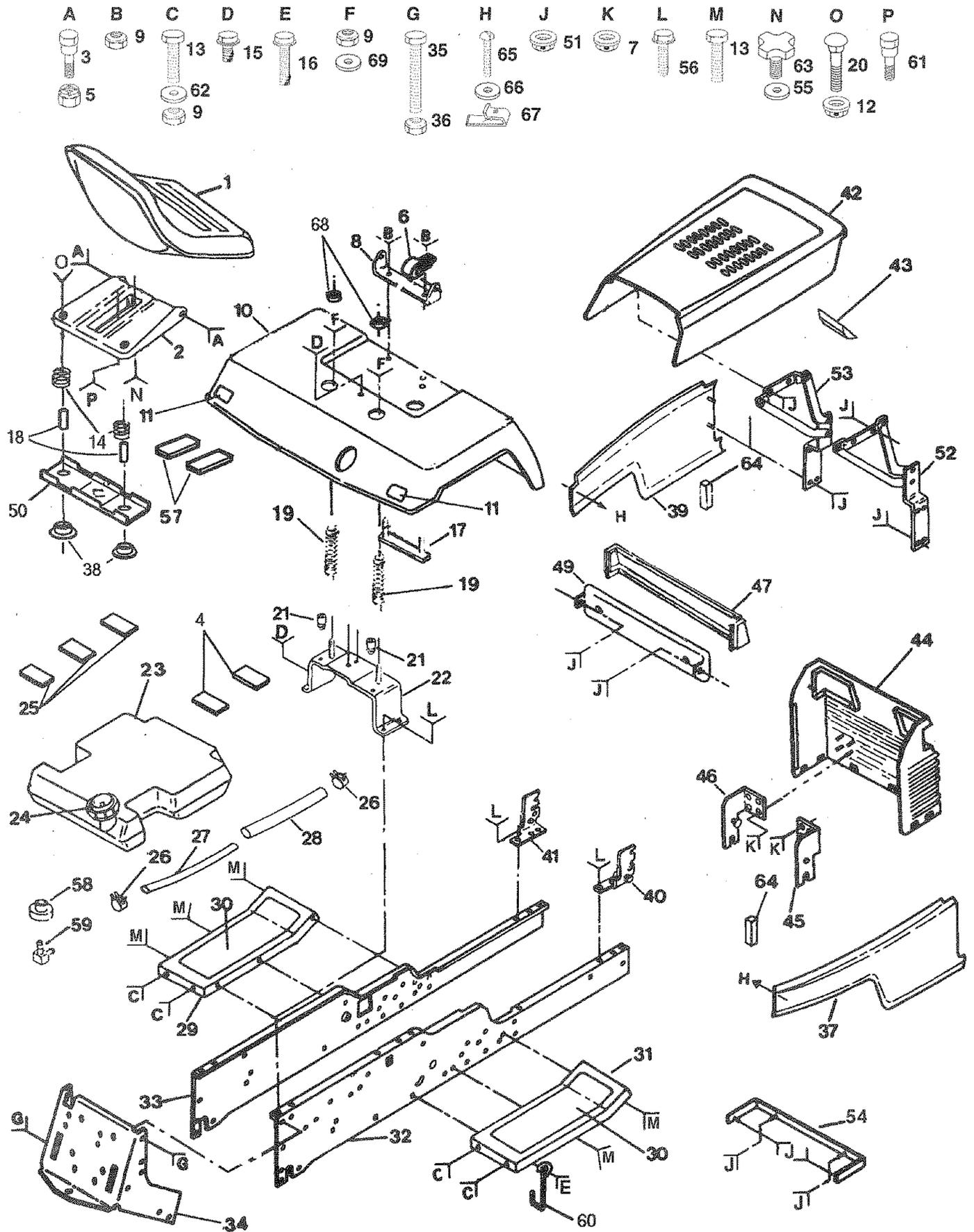
KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1	109310X	Key	
2	STD365402	Switch, Ignition	
3	123620X	Cover, Key Switch	
4	124211X	Nut, Ignition	
5	4171R	Clip	
6	110712X	Switch, Light	
7	121537X	Battery	
8	7603J	Tray, Battery	
9	7697J	Tube, Battery Drain	
10	109596X	Clamp, Hose	
11	138406	Solenoid	
12	10090400	Washer, Lock 1/4	
13	STD541225	Nut, Hex, Jam 1/4-20	
14	17720408	Screw Thd. Cut. 1/4-20 x 1/2 TY23	
15	104445X	Switch, Interlock	
16	71031008	Screw, Hex Washer Head #10-32 x 1/2	
17	73951000	Nut, Hex, Keps #10-32	
18	74520636	Bolt, Hex 3/8-16 x 2-1/4 Grade 5	
19	139207	Harness, Ignition	
20	4152J	Bulb, Headlight	
21	108824X	Fuse	
22	71130724	Bolt, Hex Head, Fin. 7/16-20 UNF x 1-1/2 Grade 8	
23	STD523707	Bolt, Hex Head 3/8-16 x 3/4	
24	121080X	Cable, Ground	
25	11050600	Washer, Lock, External Tooth 3/8	
26	4021J	Switch, P.T.O.	
27	4022J	Nut, Hex	
28	4799J	Cable, Battery	
29	131563	Cover Terminal	
30	74641008	Screw #10-32 x 1/2	
31	129458	Cable, Starter	
32	127170X	Clutch, Electric	
33	128224	Spacer, Clutch	
34	110882X	Stop, Clutch	
35	126197X	Washer 1-1/2 x 15/32 x .250	
36	STD551137	Washer, Lock 3/8	
37	72240460	Bolt, Carriage 1/4-20 x 7-1/2	
39	123198X	Nut, Wing 1/4-20	
40	102476X	Guard, Terminal	
41	STD522507	Bolt, Hex Head 1/4-20 x 3/4	
42	STD551025	Washer 9/32 x 5/8 x 16 Gauge	
43	STD541025	Nut, Hex 1/4-20	
44	STD551125	Washer, Lock 1/4	
45	136850	Harness, Light Socket (Includes Key #20)	
46	121305X	Switch, Plunger	
47	19171216	Washer 17/32 x 3/4 x 16 Gauge	
48	109748X	Relay, Operator Presence	
49	121264X	Cap Set, Battery	
50	122822X	Ammeter	
51	10040700	Washer, Lock, Heavy Helical Spring 7/16	
52	124371X	Actuator, Electric	
53	7085J	Pin, Actuator	
54	4940M	Retainer, Spring	
55	72110608	Bolt, Carriage 3/8-16 x 1 Grade 5	
56	10040600	Washer, Lock Hvy Helcl Spr 3/8	
57	73220600	Nut, Hex 3/8-16	
58	5950J	Bushing	
59	677A886	Bracket Asm. Actuator	
60	131133	Harness Asm. Lift Switch	
61	9698R	Ground Wire	
62	8984R	Lift Switch	
63	127017X	Lift Harness	

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

REPAIR PARTS

20 HP TRACTOR -- MODEL NUMBER 917.250051

CHASSIS AND ENCLOSURES



REPAIR PARTS

20 HP TRACTOR - - MODEL NUMBER 917.250051

CHASSIS AND ENCLOSURES

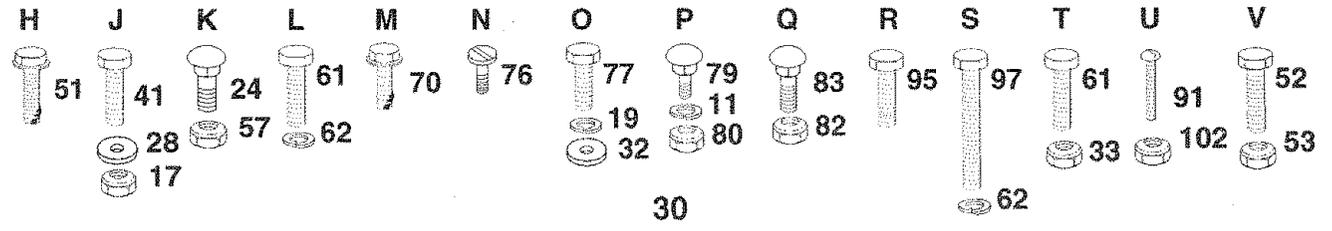
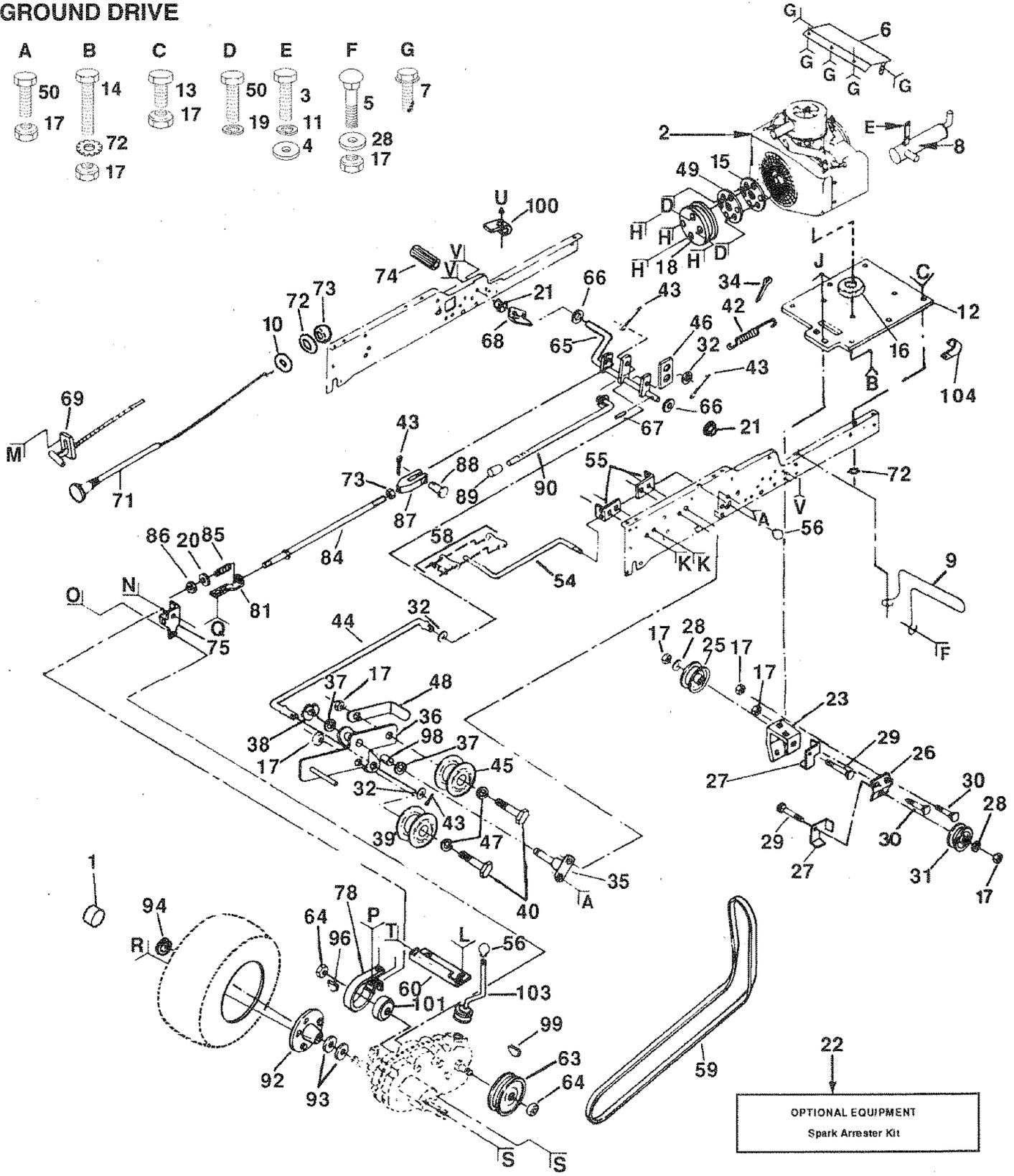
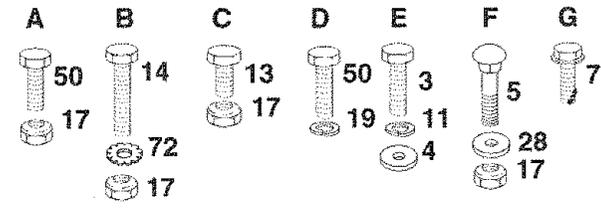
KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1 127439	Seat	37 108403X459	Side Panel, R.H.
2 131451	Pan, Seat	38 121248X	Bushing, Snap
3 105529X	Bolt, Shoulder	39 108410X459	Side Panel, L.H.
4 109227X	Pad, Spacer	40 130523	Bracket, Pivot, Frame, R.H.
5 73680500	Nut, Crownlock 5/16-18	41 121055X	Bracket, Pivot, Frame, L.H.
6 2751R	Clip	42 106013X459	Hood
7 120579X	Nut, Pal	43 136532	Bumper Hood
8 126656X	Bracket, Pivot, Seat	44 120153X	Grill
9 73680600	Locknut 3/8-16	45 108512X	Bracket, Grill Pivot, R.H.
10 121642X459	Fender	46 108513X	Bracket, Grill Pivot, L.H.
11 106202X	Reflector, Taillight	47 110898X	Lens, Headlight Bar
12 123976X	Nut, Hex Flange Head 1/4-20	49 132257	Bezel
13 STD523707	Bolt, Hex Head 3/8-16 x 3/4	50 121246X	Bracket, Switch
14 123740X	Spring	51 108067X	Nut, Pal
15 17490608	Screw, Hex Washer Head, Thd., Roll. 3/8-16 x 1/2	52 106091X	Hinge, R.H.
16 17490616	Screw, Hex Washer Head, Thd., Roll. 3/8-16 x 1	53 106090X	Hinge, L.H.
17 105511X	Strap, Fender	54 110350X459	Strap, Grill
18 121249X	Spacer, Split	55 19171912	Washer 17/32 x 1-3/16 x 12 Gauge
19 124181X	Spring, Compression	56 17490612	Screw, Hex Head, Thd., Roll. 3/8-16 x 3/4
20 72050411	Bolt, Carriage 1/4-20 x 1-3/8	57 121251X	Strip, Foam
21 105531X	Nut, Push	58 3645J	Bushing
22 105509X	Bracket, Fender	59 139277	Stem, Fuel Tank
23 127334X	Fuel Tank	60 105500X	Retainer, Belt, Lower
24 123549X	Cap, Fuel Tank	61 127018X	Bolt, Shoulder 5/16-18 UNC
25 106082X	Pad, Spacer	62 19131312	Washer 13/32 x 13/16 x 12 Gauge
26 123487X	Clamp, Hose	63 120068X	Knob
27 7834R	Line, Fuel	64 106088X	Strip, Foam
28 7833R	Line, Fuel	65 106909X	Screw, Special
29 105465X459	Footrest, L.H.	66 106910X	Washer
30 105466X	Pad, Footrest	67 108402X	U-Clip
31 105464X459	Footrest, R.H.	68 124238X	Cap, Spring
32 138597	Rail, Frame, R.H.	69 19131614	Washer 13/32 x 1 x 14 Gauge
33 110893X	Rail, Frame, L.H.		
34 7982J	Drawbar		
35 74760716	Bolt, Hex Head 7/16-14 x 1		
36 73800600	Locknut 7/16-14		

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

REPAIR PARTS

20 HP TRACTOR -- MODEL NUMBER 917.250051

GROUND DRIVE



REPAIR PARTS

20 HP TRACTOR - - MODEL NUMBER 917.250051

GROUND DRIVE

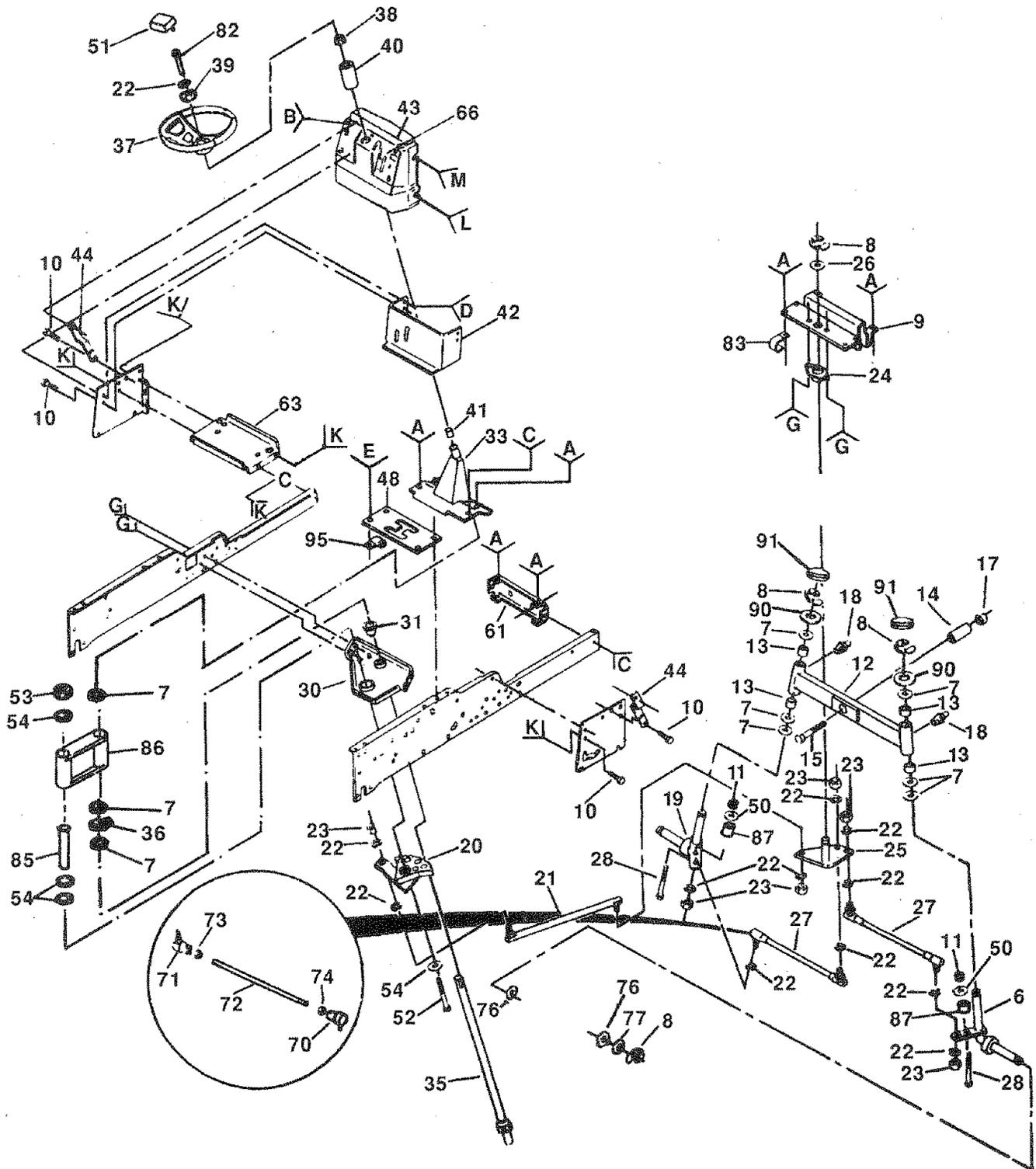
KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1 136327	Cover, Wheel Hub	53 73680400	Nut, Crownlock 1/4-20
2 139360	Engine, Kohler, 20 HP, Model No. M20QS, Type No. 49634	54 122253X	Rod, Shift, Hi-Lo
3 74780412	Bolt, Hex Head 1/4-20 x 3/4	55 105598X	Bracket, Shift Rod
4 19091212	Washer 9/32 x 3/4 x 12 Gauge	56 106932X	Knob
5 72140610	Bolt, Carriage 3/8-16 x 1-1/4	57 73680500	Locknut 5/16-18
6 128124	Heat Shield, Front	58 122268X	Clip, Spring, Connecting Link
7 17720408	Screw, Hex Head, Thread Cutting 1/4-20 x 1/2	59 110883X	V-Belt
8 127881	Muffler	60 120404X	Bracket, Support, Transaxle
9 108885X	Guard, Muffler	61 74760716	Bolt, Hex Head 7/16-14 x 1
10 19132616	Washer 13/32 x 1-5/8 x 16 Gauge	62 STD551143	Washer, Lock 7/16
11 STD551125	Washer, Lock 1/4	63 137524	Pulley, Transaxle
12 110867X	Base, Engine	64 9204H	Locknut 1/2-20
13 STD523707	Bolt, Hex Head 3/8-16 x 3/4	65 104375X	Shaft, Foot Pedal
14 74780624	Bolt 3/8-16 x 1-1/2	66 121749X	Washer 25/32 x 1-1/4 x 16 Gauge
15 110947X	Guard, Chaft	67 STD571812	Pin, Roll 3/16 x 1-14
16 133692	Spacer Plate, Engine Mounting	68 104601X	Bracket, Interlock
17 73680600	Locknut 3/8-16	69 132755	Control, Throttle
18 121355X	Pulley, Ground Drive	70 17720410	Screw, Hex Head, Thread Cutting 1/4-20 x 1
19 STD551137	Washer, Lock 3/8	71 132777	Control, Choke
20 19131614	Washer 13/32 x 1 x 14 Gauge	72 11050600	Washer, Lock, External Tooth 3/8
21 110895X	Nyliner	73 STD541137	Nut, Hex 3/8-24
22 132922	Kit, Spark Arrester	74 8883R	Cover, Foot Pedal
23 121063X	Bracket, V-Pulley, Mule Drive	75 677A637	Bracket, Brake
24 72140506	Bolt, Carriage 5/16-18 x 3/4	76 74370612	Screw, Machine, Undercut Flat Head 3/8-16 x 3/4
25 101344L	Pulley	77 74760614	Bolt, Hex Head 3/8-16 x 7/8
26 122825X	Bracket, Flat Idler	78 101122M	Band, Brake
27 122824X	Belt Guard, Mule Drive	79 72140405	Bolt, Carriage 1/4-20 x 5/8
28 19131612	Washer 13/32 x 1 x 12 Gauge	80 STD541025	Nut, Hex 1/4-20
29 72110614	Bolt, Carriage 3/8-16 x 1-3/4	81 7229J	Guide, Brake Rod
30 72140606	Bolt, Carriage 3/8-16 x 3/4	82 1685H	Locknut 5/16-18
31 102403X	Idler, Flat	83 STD533110	Bolt, Carriage 5/16-18 x 3/4
32 STD551037	Washer 13/32 x 13/16 x 16 Gauge	84 5308J	Rod, Brake
33 73680700	Nut, Crownlock 7/16-14	85 7241J	Spring, Compression
34 76020816	Pin, Cotter 1/4 x 1	86 73530600	Nut, Crownlock 3/8-24
35 101358K	Clutch Bracket Assembly	87 100604K	Yoke
36 121356X	Bracket, Clutch, with Bearing (Includes Key Number 98)	88 5102J	Pin, Clevis
37 207J	Washer, Hardened	89 124236X	Cap, Plunger
38 12000039	Ring, Klip	90 136284	Rod, Parking Brake
39 121361X	Idler, Grooved	91 74321016	Screw, Fin. #10-24 x 1
40 STD523715	Bolt, Hex Head 3/8-16 x 1-3/4	92 135758X431	Hub, Wheel and Bushing
41 74760620	Bolt, Hex Head 3/8-16 x 1-1/4	93 7563R	Washer, Thrust, Axle
42 121357X	Spring, Extension, Clutch	94 12000034	Ring, Klip
43 STD570907	Pin, Cotter 3/32 x 3/4	95 1304H	Bolt, Hub
44 101356L	Rod, Clutch	96 2228M	Key, Woodruff
45 104360X	Idler, Flat	97 74760720	Bolt, Hex Head 7/16-14 x 1-1/4
46 121358X	Retainer, Spring	98 105706X	Bearing, Idler
47 19131413	Washer 13/32 x 7/8 x 13 Gauge	99 9858M1	Key, Woodruff
48 121360X	Retainer, Belt	100 5304J	Actuator, Interlock Switch
49 104577X	Adapter	101 214J	Drum, Brake
50 STD523710	Bolt, Hex Head 3/8-16 x 1 Grade 5	102 STD541410	Locknut #10-24
51 17190516	Screw, Hex Head, Thread Cutting 5/16-18 x 1	103 633A109	Assembly, Gearshift Lever
52 STD522507	Bolt, Hex Head 1/4-20 x 3/4	104 2751R	Clip Fuel Line

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

REPAIR PARTS

20 HP TRACTOR -- MODEL NUMBER 917.250051

STEERING ASSEMBLY



- | | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| A | B | C | D | E | G | K | L | M |
| 10 | 92 | 34 | 11 | 49 | 82 | 75 | 46 | 32 |
| 11 | 93 | | | | 11 | 62 | 45 | 45 |
| | 94 | | | | | | 47 | 22 |
| | | | | | | | 22 | 60 |
| | | | | | | | 60 | |

REPAIR PARTS

20 HP TRACTOR - - MODEL NUMBER 917.250051

STEERING ASSEMBLY

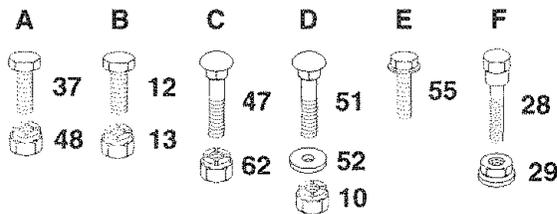
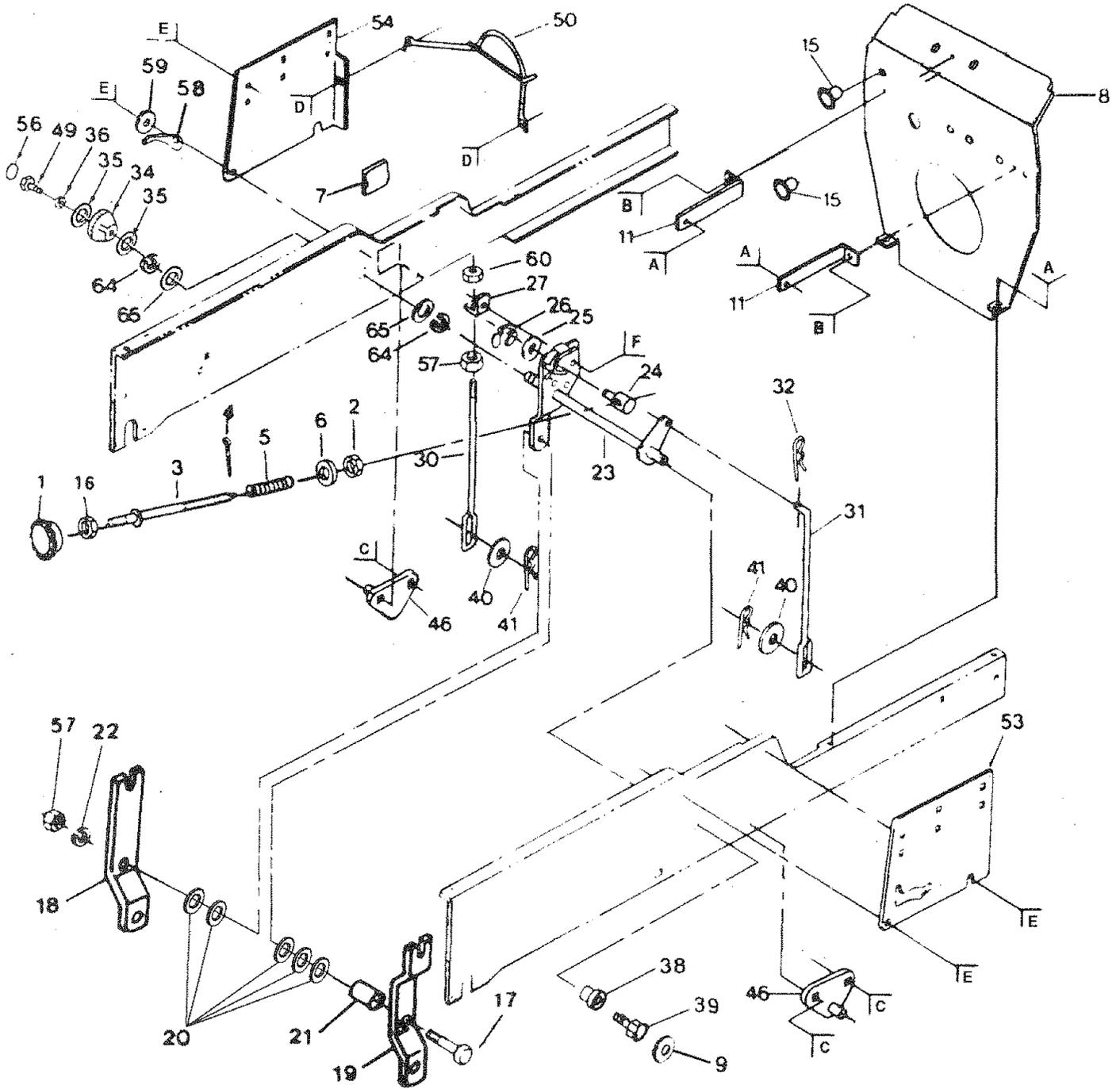
KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
6	106045X	Spindle, R.H.	
7	6266H	Bearing, Axle	
8	12000029	Klip, Ring	
9	5284J	Bracket, Axle	
10	STD523707	Bolt, Hex 3/8-16 x 3/4	
11	73680600	Nut, Crownlock 3/8-16	
12	137094	Axle, Front (Includes Key No. 13)	
13	1309H	Bearing	
14	136518	Spacer, Bearing, Axle, Front	
15	74781044	Bolt, Hex 5/8-11 x 2-3/4 Grade 5	
17	73681000	Nut, Crownlock 5/8-11	
18	6855M	Fitting, Grease	
19	106046X	Spindle, L.H.	
20	120424X	Sector Assembly	
21	110497X	Link, Drag	
22	STD551137	Washer, Lock 3/8	
23	STD541137	Nut, Hex 3/8-24	
24	5292J	Bushing, Bellcrank	
25	108137X	Bellcrank	
26	19292016	Washer 29/32 x 1-1/4 x 16 Gauge	
27	109849X	Rod, Tie	
28	74520628	Bolt, Hex Fin 3/8-16 UNC x 1-3/4	
30	102439X	Bracket, Support, Steering	
31	104239X	Bearing, Flanged	
32	72110608	Bolt, Carriage 3/8-16 x 1 Grade 5	
33	101274N	Support, Steering	
34	17490612	Screw, Hex Washer Head, Thread Rolling 3/8-16 x 3/4	
35	102458X	Shaft, Steering	
36	12000034	Klip, Ring	
37	121021X	Wheel, Steering	
38	100711L	Adapter, Steering	
39	19133808	Washer	
40	121050X	Sleeve, Steering	
41	9038R	Bearing	
42	105519X	Dash, Lower	
43	120028X	Dash	
44	105525X	Bracket, Support, Dash	
45	19171416	Washer 17/32 x 7/8 x 16 Gauge	
46	72110622	Bolt, Carriage 3/8-16 x 2-3/4	
47	121235X	Spacer	
48	106042X018	Cover, Gate, Shift	
49	17720408	Screw, Hex Washer Head, Thread Cutting 1/4-20 x 1/2	
50	19131212	Washer 13/32 X 3/4 X 12 Gauge	
51	100710L	Insert, Steering Wheel	
52	74780880	Bolt, Hex 1/2-13 x 5	
53	73680800	Nut, Crownlock 1/2-13	
54	19172610	Washer 17/32 x 1-5/8 x 10	
60	STD541037	Nut, Hex 3/8-16	
61	5213J	Bracket, Frame Front	
62	73680500	Nut, Crownlock 5/16-18	
63	137563	Support, Battery	
66	124557X011	Dashplate	
70	109850X	Joint, Tie Rod, R.H. Thread	
71	109851X	Joint, Tie Rod, L. H. Thread	
72	7919J	Rod, Tie	
73	73700600	Nut, Hex, Jam 3/8-24 L.H.	
74	STD541337	Nut, Hex, Jam 3/8-24 R.H.	
75	STD533107	Bolt, Carriage 5/16-18 x 3/4	
76	121749X	Washer 13/32 x 1-1/4 x 16 Gauge	
77	121748X	Washer 25/32 x 1-1/4 x 16 Gauge	
82	STD523710	Bolt, Hex 3/8-16 x 1 Grade 5	
83	100207K	Clip 3/8	
85	120199X	Tube	
86	121177X	Collar	
87	101496X	Spacer, Split	
90	121748X	Washer 25/32 x 1-5/8 x 16 Gauge	
91	121232X	Cap, Spindle	
92	74180412	Screw, Machine 1/4-20 x 3/4	
93	19091216	Washer 9/32 x 3/4 x 16 Gauge	
94	73510400	Nut, Hex, Keps 1/4-20	
95	4171R	Clip	

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

REPAIR PARTS

20 HP TRACTOR -- MODEL NUMBER 917.250051

LIFT ADJUSTMENT



REPAIR PARTS

20 HP TRACTOR - - MODEL NUMBER 917.250051

LIFT ADJUSTMENT

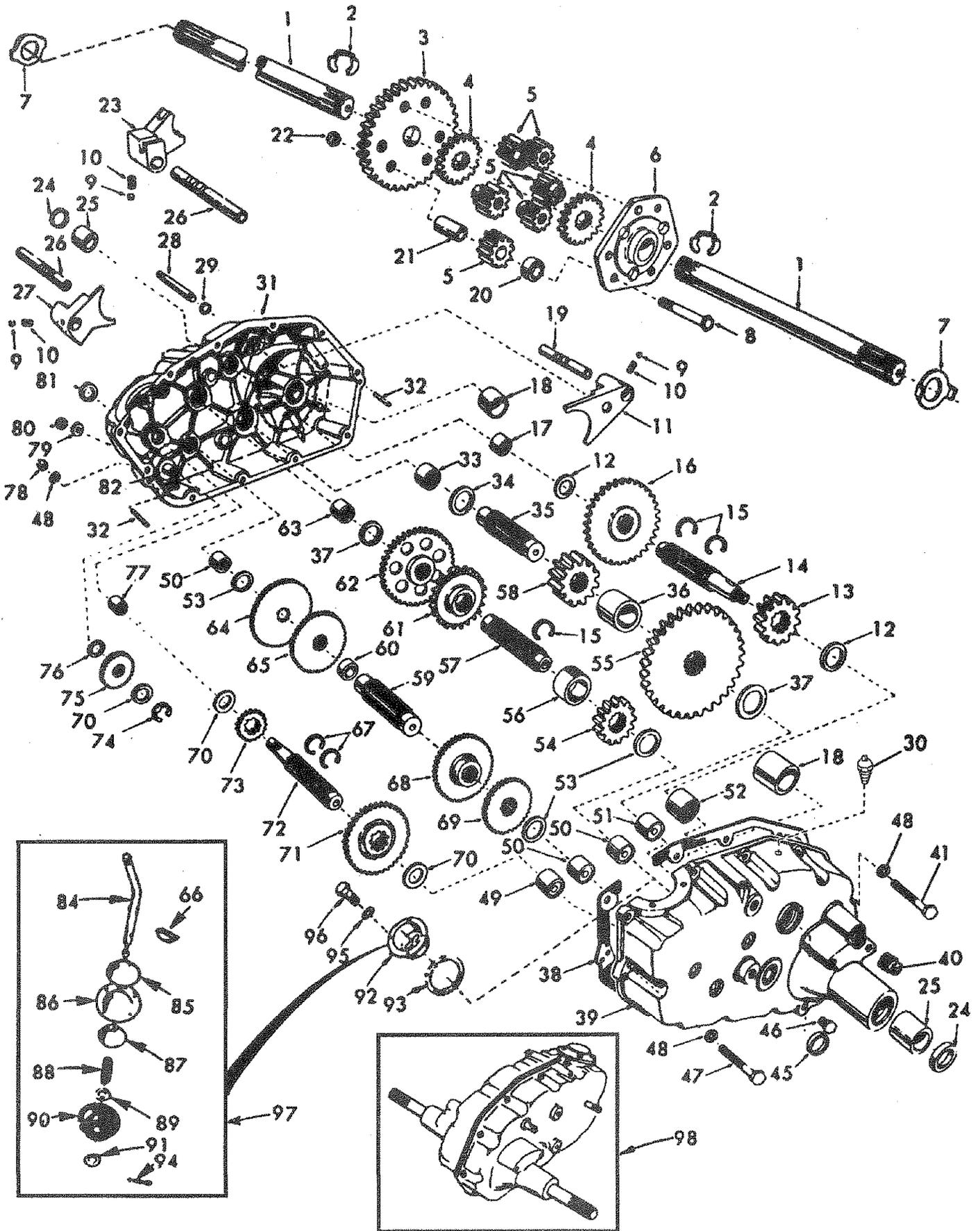
KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION		
1	138057	Knob, Inf 3/8-16	32	4939M	Retainer, Spring
2	110807X	Nut, Special	34	123934X	Scale, Height Indicator
3	110811X	Rod, Adjust, Lift	35	19112410	Washer 11/32 x 1-1/2 x 10 Gauge
4	STD570907	Pin, Cotter 3/32 x 1/2	36	STD551131	Washer, Lock
5	2876H	Spring	37	STD523107	Bolt, Hex Head 5/16-18 x 3/4
6	19131016	Washer 13/32 x 5/8 x 16 Gauge	38	105624X	Hub, Lift Shaft
7	121794X	Cover, Access	39	STD523710	Bolt, Hex Head 3/8-16 x 1
8	127808	Shield, Heat, Rear	46	105501X	Bracket, Suspension, Mower
9	109412X	Cap, Spring	47	STD533707	Bolt, Carriage 3/8-16 x 3/4
10	STD541431	Nut, Crownlock 5/16-18	48	STD541431	Nut, Crownlock 3/8-16
11	128278	Brace, Heat Shield	49	74780516	Bolt, Hex Head 5/16-18 x 1
12	STD522505	Bolt, Hex 1/4-20 x 1/2 Grade 5	50	126651X	Guard, Belt, Engine
13	73680400	Nut, Crownlock 1/4-20	51	STD533110	Bolt, Carriage 5/16-18 x 1
15	110436X	Grommet, Split	52	19111610	Washer 11/32 x 1 x 10 Gauge
16	STD541237	Nut, Hex, Jam 3/8-16 UNC	53	121045X	Panel, Side, RH
17	74520628	Bolt 3/8-16 x 1-3/4 Grade 5	54	121046X	Panel, Side, LH
18	5948J	Bracket, Lift, LH	55	17490608	Bolt, Hex Washer Head, Thd., Roll. 3/8-16 x 1/2
19	5947J	Bracket, Lift, RH	56	123935X	Plug, Hole
20	19172410	Washer 17/32 x 1-1/2 x 10 Gauge	57	STD541037	Nut, Hex 3/8-16
21	5949J	Tube .384 x 1-1/2 x 15/16	58	123933X505	Pointer, Height Indicator
23	124217X	Shaft, Lift	59	120529X	Washer, Nylon .44 x .75 x .032
24	110810X	Trunnion, Depth Stop	60	STD541437	Locknut, Hex, Washer Insert 3/8-16
25	19151216	Washer 15/32 x 3/4 x 16 Gauge	62	STD541437	Nut, Centerlock 3/8-16
26	12000037	Klip Ring	64	12000022	E-Ring
27	7594J	Bracket, Lift, LH	65	19292016	Washer 29/32 x 1-1/4 x 16 Gauge
28	7901J	Bolt, Shoulder			
29	STD541237	Nut, Hex, Flange 1/4-20			
30	7596J	Link, Lift, LH			
31	105503X	Link, Lift, RH			

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

REPAIR PARTS

20 HP TRACTOR -- MODEL NUMBER 917.250051

TRANSAXLE



REPAIR PARTS

20 HP TRACTOR - - MODEL NUMBER 917.250051

TRANSAXLE

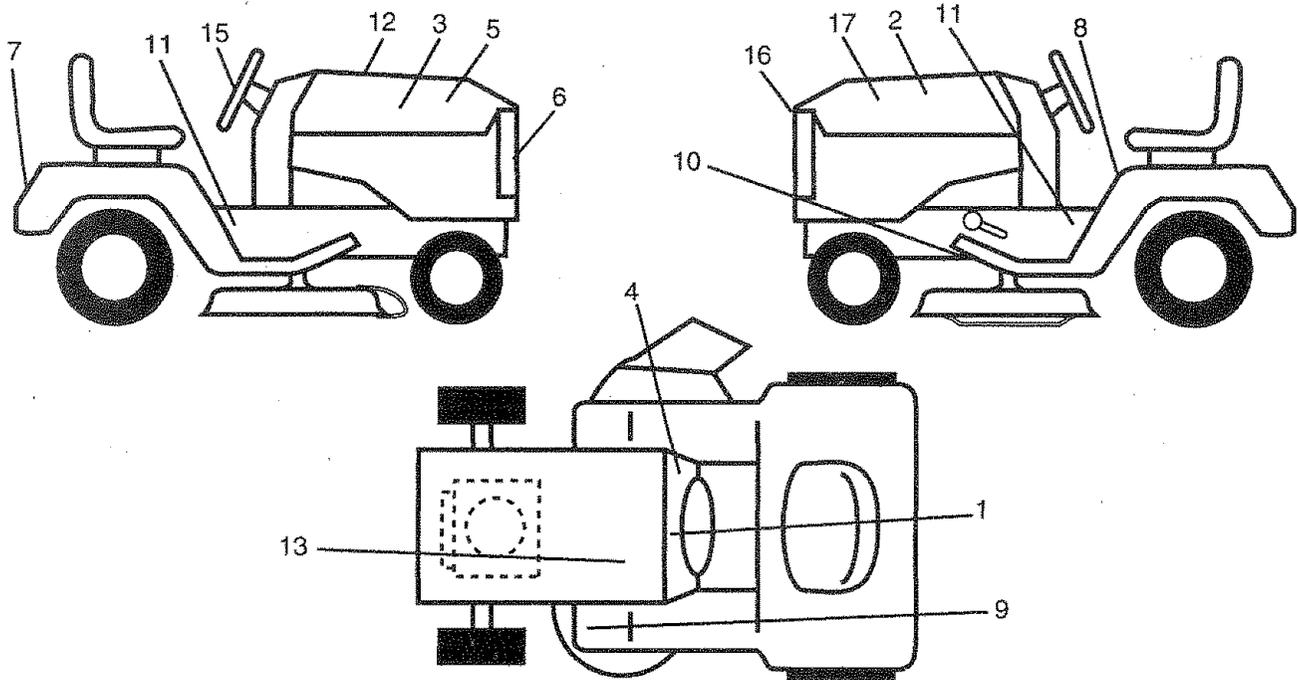
KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1 4197R	Axle Shaft	51 1529R	Needle Bearing
2 12000034	Retaining Ring	52 8119M	Needle Bearing
3 4199R	Final Drive Gear	53 4220R	Thrust Bearing Race
4 4216R	Differential Gear	54 4209R	3rd Reduction Pinion, Low
5 4215R	Differential Pinion	55 4213R	4th Reduction Gear
6 4217R	Differential Carrier	56 4442R	3rd Reduction Pinion Spacer
7 6256H	Axle Thrust Washer	57 4195R	2nd Reduction Gear Shaft
8 74020652	Bolt, Hex Head 3/8-24 x 3-1/4 (1" Thread Length)	58 4214R	Final Drive Pinion
9 7392M	Steel Ball	59 4194R	1st Reduction Gear Shaft
10 137261	Spring Shift Fork Detent	60 7528R	1st Reduction Shaft Spacer
11 4985R	Shift Fork, High-Low Range	61 4208R	3rd Reduction Pinion High
12 6266H	Thrust Bearing Race	62 4207R	2nd Reduction Gear
13 4212R	4th Reduction Pinion	63 7398H	Needle Bearing
14 4196R	3rd Reduction Gear Shaft	64 4203R	Low Speed Gear and 2nd Reduction Pinion Cluster
15 6276H	Snap Ring, Crescent Type	65 4204R	Reverse Gear
16 633A63	High-Low Range Gears	66 2898J	Key, Hi-Pro 1/8 x 17/32
17 8118M	Needle Bearing	67 4926H	Snap Ring, Crescent Type
18 8740H1	Sintered Iron Bearing	68 4205R	Intermediate Speed Gear
19 122238X	Shift Fork Shaft, High-Low Range	69 4206R	High Speed Gear
20 4218R	Differential Pinion Spacer	70 1370H	Thrust Bearing Race
21 6252H1	Differential Pinion Bushing	71 633A69	Intermediate and High Speed Cluster Pinions
22 7810H	Gripco Centerlock Nut 3/8-24	72 208J	Input Shaft
23 6262H	Shift Fork, R.H.	73 4201R	Low Speed Pinion
24 7393R	Oil Seal	74 12000002	E-Ring
25 992R1	Sintered Iron Bearing	75 1153R	Reverse Idler Gear
26 6216H	Shift Fork Shaft	76 7392H	Reverse Idler Thrust Washer
27 4986R	Shift Fork, L.H.	77 3990H	Needle Bearing
28 122254X	Shift Shaft, High-Low Range	78 73220500	Nut, Hex 5/16-18
29 6269H	Oil Seal	79 1167R	Sealing Washer
30 5855H	Pressure Relief Valve	80 73360700	Nut, Hex, Jam 7/16-20
31 137976	Gearcase, Reverse Idler Shaft and Bearings, R.H. (Includes Key No.'s 17, 18, 25, 33, 50, 63, 76, 77 & 82)	81 6270H	Oil Seal
32 6277H	Dowel Pin	82 7384H	Reverse Idler Shaft
33 4225R	Needle Bearing	84 5384J	Gearshift Lever, Bent
34 7396H	Thrust Bearing Race	85 2978J	Gearshift Cap
35 4198R	4th Reduction Gear Shaft	86 633A85	Gearshift Ball Cover and Pin
36 4200R	4th Reduction Gear Spacer	87 8739H1	Shift Lever Guide Ball, Keyed
37 7395H	Thrust Bearing Race	88 4924H	Spring
38 121878X	Gearcase Gasket	89 19151516	Washer 15/32 x 15/16 x 16 Gauge
39 137974	Gearcase and Bearings, L.H. (Includes Key Numbers 18, 25, 49, 50 (2), 51 and 52)	90 110542X	Shift Mechanism Seal
40 13320400	Pipe Plug 1/2-14 N.P.T.	91 19181511	Washer 9/16 x 15/16 x 12 Gauge
41 74780526	Bolt, Hex 5/16-18 UNC x 1-5/8	92 75J	Gearshift Gate and Reinforcement
45 6271H	Oil Seal	93 6274H	Shift Ball Cover Gasket
46 13060200	Pipe Plug 1/4-18 N.P.T.	94 76020412	Cotter Pin 1/8 x 3/4
47 74780524	Bolt, Hex 5/16-18 x 1-1/2 Grade 5	95 10040500	Washer, Lock 5/16
48 10040500	Washer, Lock, Extra Heavy 5/16	96 74760514	Bolt, Hex Head 5/16-18 UNC x 7/8
49 4895H	Needle Bearing	97 633A109	Gearshift Lever Assembly
50 4222R	Needle Bearing	98 137982	Transaxle Assembly (Less Brake Drum and Shift Lever)

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

REPAIR PARTS

20 HP TRACTOR -- MODEL NUMBER 917.250051

DECALS



KEY PART NO. NO.

DESCRIPTION

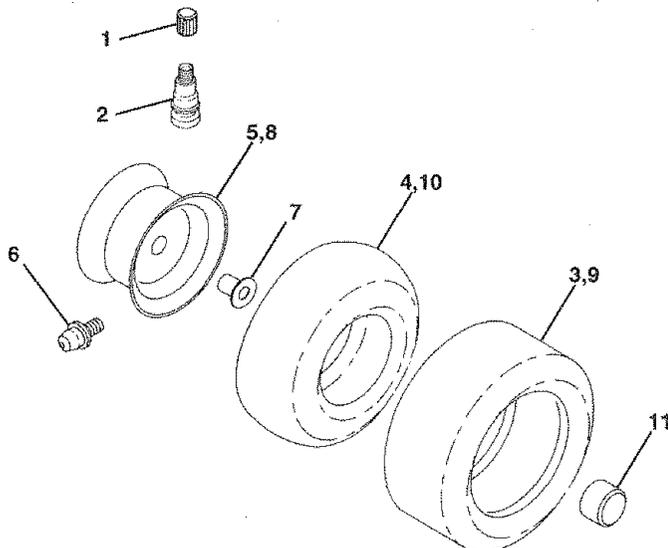
1	136794	Decal, Dash, Operating Instructions
2	128491	Decal, Hood, Stripe, L.H.
3	138292	Decal, Hood, Stripe, R.H.
4	138834	Decal, YT/GT Dash
5	133354	Decal, Side Panel, R.H.
6	105806X	Decal, Logo Grille
7	128314	Decal, Fender
8	137537	Decal, Caution

KEY PART NO. NO.

DESCRIPTION

9	4900J	Decal, Clutch/Brake
10	131283	Decal, V-Belt, Drive
11	130860	Decal, Chassis, Speed/Deck Size
12	133644	Decal, Maint. Cust. Sears
13	138047	Decal, Battery
15	132265	Decal, Steering Wheel Insert
16	132270	Decal, Grill, Stripe
17	138048	Decal, Side Panel, L.H.
--	139404	Manual, Owner's

WHEELS & TIRES



KEY PART NO. NO.

DESCRIPTION

1	59192	Cap, Valve
2	65139	Stem, Valve
3	105588X	Tire, Rear
4	7154J	Tube, Rear Tire (Optional, Service Item Only)
5	3635R	Rim Assembly, Rear
6	278H	Fitting, Grease (Front Only)
7	9040H	Bearing, Flange (Front Only)
8	122974X	Rim Assembly, Front
9	106230X	Tire, Front
10	8134H	Tube, Front Tire (Optional, Service Item Only)
11	104757X	Cover, Axle

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

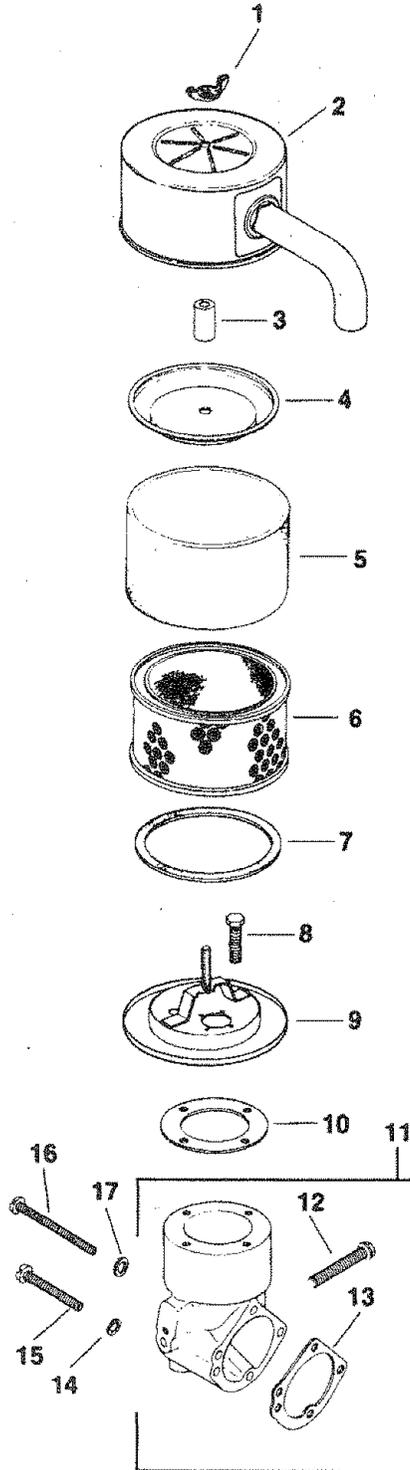
SERVICE NOTES

REPAIR PARTS

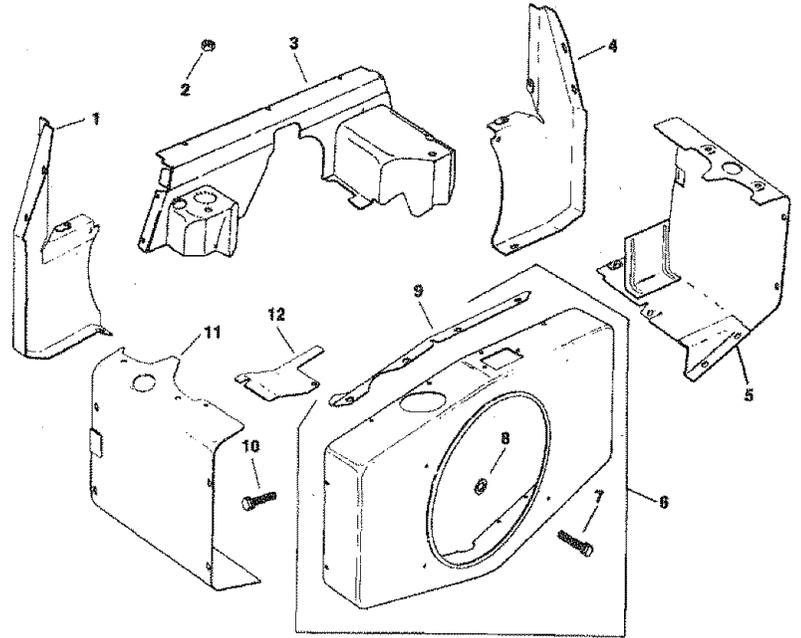
20 HP TRACTOR - - MODEL NUMBER 917.250051

KOHLER ENGINE - MODEL NUMBER M20QS, TYPE NUMBER 49634

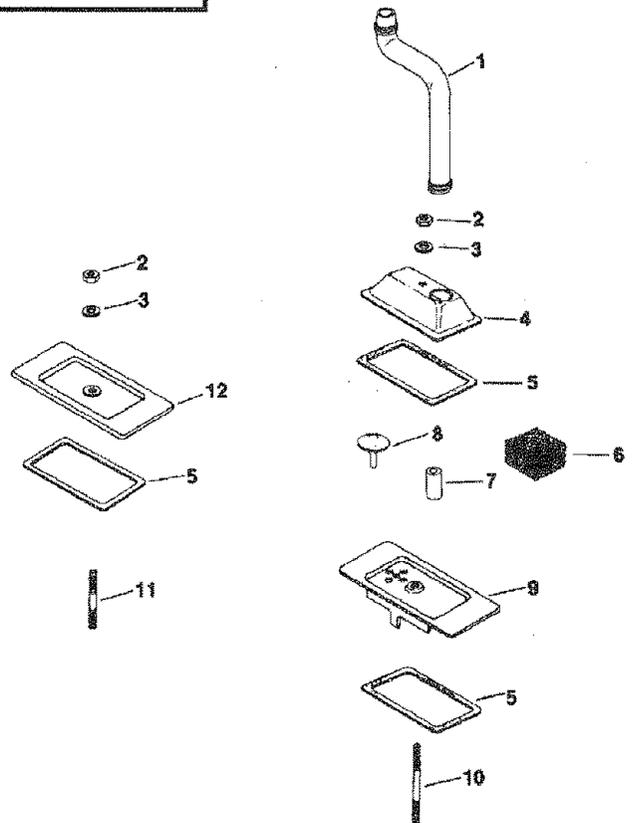
AIR INTAKE



BAFFLES AND SHROUD



BREATHER AND VENT



REPAIR PARTS

20 HP TRACTOR - - MODEL NUMBER 917.250051

KOHLER ENGINE - MODEL NUMBER M20QS, TYPE NUMBER 49634

AIR INTAKE

KEY PART NO. NO.	DESCRIPTION
1 X-276-7	Wing Nut 1/4-20
2 52 096 36	Cover, Air Cleaner
3 231032	Seal, Element Cover
4 52 082 04	Cover, Air Cleaner Element
5 45 083 01	Pre-Cleaner
6 45 083 02	Element, Air Cleaner
7 237423	Seal, Air Cleaner Cover
8 X-67-98	Screw, Hex Washer Head #10-32 x 9/16 (4)
9 52 201 06	Base, Air Cleaner
10 277093	Gasket, Air Cleaner Base
11 52 754 01	Kit, Elbow (Includes Key Numbers 12 and 13)
12 52 086 11	Screw, Hex Cap 1/4-20 x 5/8
13 25 041 06	Gasket, Elbow
14 X-22-9	Washer, Lock #10 (2)
15 X-50-57	Screw, Machine, Round Head #10-32 x 1-1/2 (2)
16 X-50-37	Screw, Machine, Round Head #10-32 x 2-1/4
17 X-25-79	Washer, Plain #10

NOT ILLUSTRATED

-- 25 113 15	Decal, Air Cleaner
-- 52 113 43	Decal, Air Cleaner

BAFFLES & SHROUD

KEY PART NO. NO.	DESCRIPTION
1 52 281 23	Duct, Air, #1 Side
2 X-82-2	Nut 5/16-18 (2)
3 52 282 01	Cover, Air Duct
4 52 281 05	Duct, Air, #2 Side
5 52 063 36	Baffle, #1 Cylinder Head
6 52 755 71	Kit, Blower Housing (Includes Key Numbers 7 and 9)
7 52 086 11	Screw, Self-Tapping 1/4-20 x 5/8 (6)
8 52 468 16	Washer, Flat 1/4 (2)
9 52 217 01	Support, Upper Housing
10 X-67-83	Screw, Hex Washer Head 1/4-20 x 7/16 (23)
11 52 063 30	Baffle, #2 Cylinder Head
12 52 063 01	Baffle, #2 Cylinder Top

BREATHER & VENT

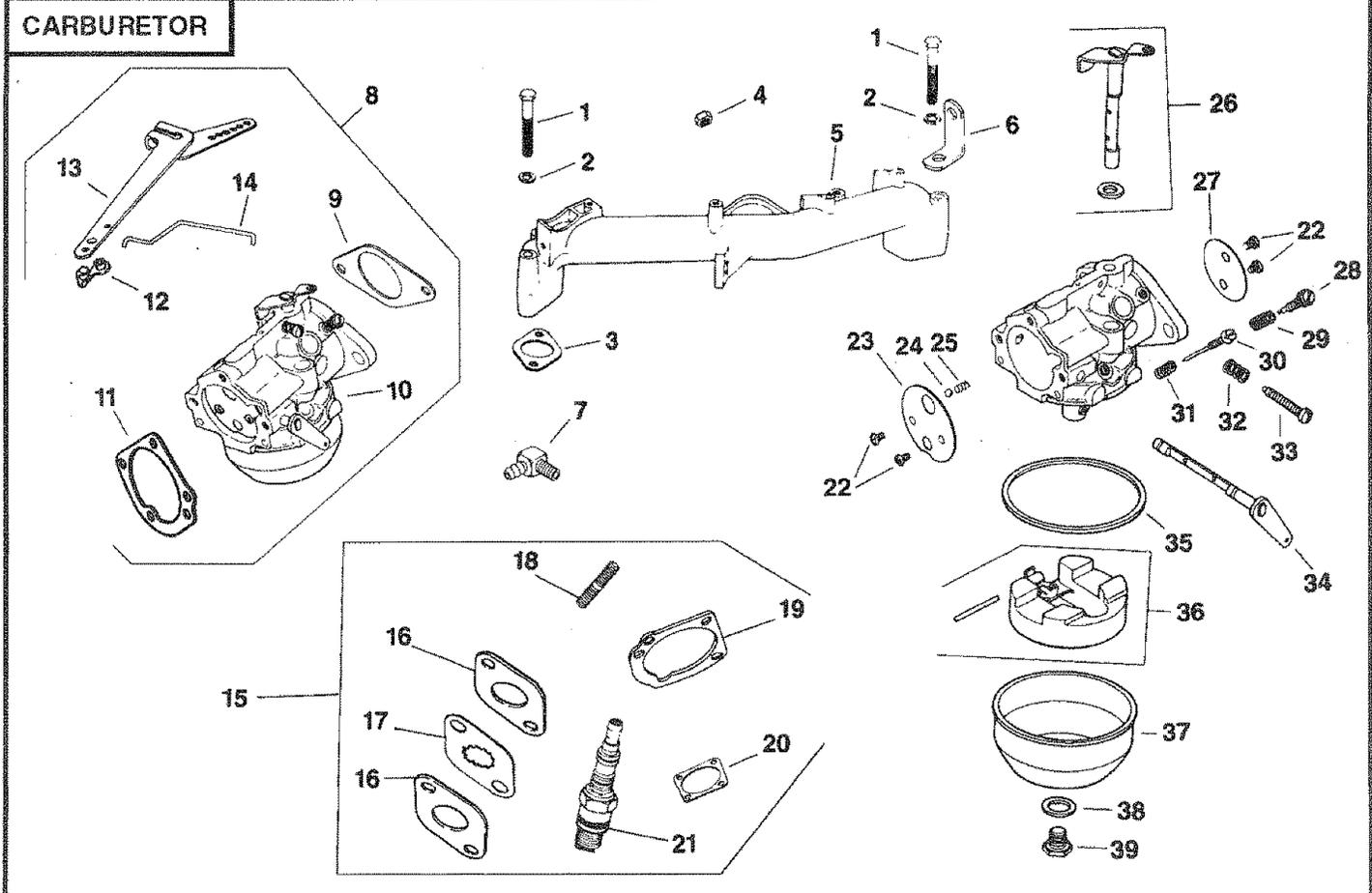
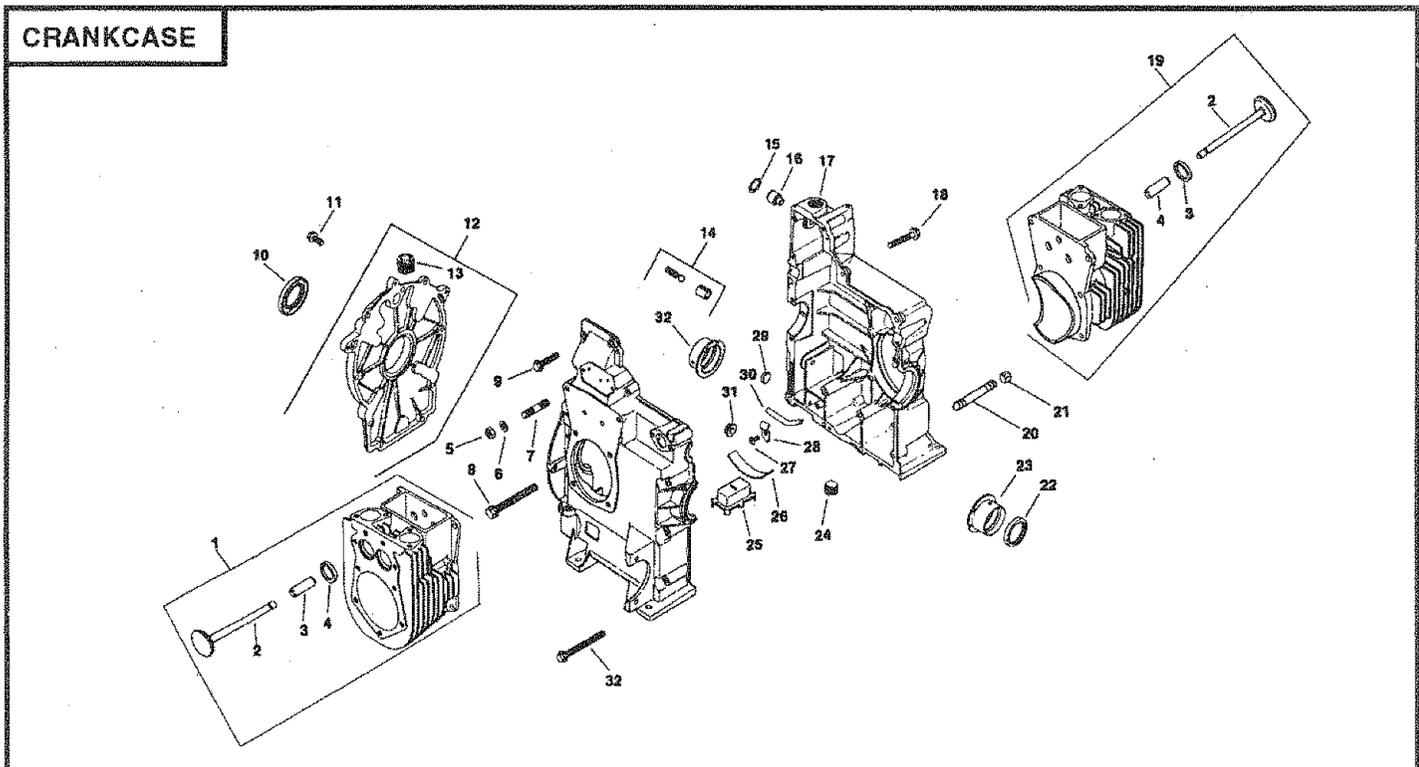
KEY PART NO. NO.	DESCRIPTION
1 52 326 05	Hose, Breather
2 X-81-1	Nut, Hex 1/4-20 (2)
3 X-25-12	Washer, Plain 1/4 (2)
4 52 096 08	Cover, #1 Upper Cylinder Valve
5 52 055 01	Gasket, Cover (3)
6 231419	Filter, Breather
7 52 032 04	Seal, Breather
8 52 462 01	Valve, Breather
9 52 096 22	Cover, #1 Lower Cylinder Valve
10 275220	Stud, #1 Cylinder Valve Cover 1/4-20 x 3-1/4
11 X-352-39	Stud, #2 Cylinder Valve Cover 1/4-20 x 2-1/4
12 52 096 18	Cover, #2 Cylinder Valve

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

REPAIR PARTS

20 HP TRACTOR - - MODEL NUMBER 917.250051

KOHLER ENGINE - MODEL NUMBER M20QS, TYPE NUMBER 49634



REPAIR PARTS

20 HP TRACTOR - - MODEL NUMBER 917.250051

KOHLER ENGINE - MODEL NUMBER M20QS, TYPE NUMBER 49634

CRANKCASE

KEY PART NO.	NO.	DESCRIPTION
1	82 755 19	Kit, #2 Cylinder Barrel (Includes Key Numbers 2 thru 4)
2	52 016 06	Valve, Exhaust
3	52 316 06	Guide, Valve (2)
4	52 031 01	Insert, Valve Seat (2)
5	X-82-2	Nut, Hex 5/16-18 (12)
6	52 468 12	Washer, Flat 5/16 (12)
7	52 072 12	Step Stud 5/16-18 x 3/4, 3/8-16 x 5/8, 2" Long (12)
8	25 086 13	Screw, Hex Flange 3/8-16 x 3-5/8 (2)
9	25 086 10	Screw, Hex Flange 5/16-18 x 1-1/2 (3)
10	X-583-5	Seal, Oil, Rear
11	X-802-9	Screw, Washer Head 5/16-18 x 1 (9)
12	52 755 57	Kit, Closure Plate (Includes Key Number 13)
13	X-75-23	Plug, 1/8 N.P.T.F.
14	52 755 50	Kit, Oil Relief
15	X-269-43	Ring, Retaining
16	52 078 05	Shaft, Governor
17	---	Crankcase (Service with Short Block, Part Number 52 522 77)
18	25 086 12	Screw, Hex Flange 5/16-18 x 2 (2)
19	82 755 18	Kit, #1 Cylinder Barrel (Includes Key Numbers 2 thru 4)
20	12 136 07	Nipple, Pipe
21	12 173 03	Cap, Pipe
22	52 032 10	Seal
23	52 030 10	Bearing, Sleeve, Standard (2)
	52 030 11	Bearing, Sleeve .010" (2)
	52 030 12	Bearing, Sleeve .020" (2)
24	X-75-32	Plug, Hex, ctsk. 3/8 N.P.T.F. (2)
25	52 095 03	Housing, Oil Pickup
26	52 237 02	Clamp, Spring
27	X-67-64	Screw, Hex Washer Head #10-32 x 7/16
28	52 237 05	Clamp, Tube
29	X-702-15	Plug, Cup 5/16
30	52 123 10	Tube, Dipstick
31	52 139 08	Plug
32	52 032 10	Seal, Oil, Front
33	25 086 11	Screw, Hex Flange 5/16-18 x 3-1/2 (8)

CARBURETOR

KEY PART NO.	NO.	DESCRIPTION
1	X-6-8	Screw, Hex Cap 5/16-18 x 2-3/4 (4)
2	X-21-1	Washer, Lock 5/16 (4)
3	52 041 09	Gasket, Intake (2)
4	X-77-2	Nut 5/16 (2)
5	52 164 10	Manifold, Intake
6	52 445 02	Strap, Lifting (2)
7	25 155 02	Connector, Hose
8	52 853 27	Kit, Carburetor with Gasket (Includes Key Numbers 9 thru 14)
9	271030	Gasket, Carburetor
10	52 053 58	Carburetor Assembly (Information Only - Not Available Separately) (Includes Key Numbers 22 thru 39)
	or	
	52 053 63	
11	25 041 06	Gasket, Air Cleaner
12	25 158 11	Bushing, Governor Linkage (2)
13	52 186 06	Arm, Governor
14	82 755 07	Kit, Governor Linkage (Includes Key Numbers 16 thru 21)
15	82 755 24	Kit, Carburetor Baffle (Includes Key Numbers 16 thru 21)
16	271030	Gasket, Carburetor (2)
17	52 063 40	Baffle, Carburetor
18	41 072 19	Stud 5/16-18 x 1-1/4 (2)
19	25 041 06	Gasket, Air Cleaner Elbow
20	277093	Gasket, Air Cleaner
21	52 132 02	Spark Plug (2)
22	25 086 27	Screw, Throttle and Choke Plate (4)
23	25 146 03	Plate, Choke
24	25 194 01	Ball, Choke, Friction
25	25 089 03	Spring, Choke, Friction
26	52 144 18	Shaft, Throttle with Lever and Seal
27	25 146 02	Plate, Throttle
28	25 368 01	Needle, Idle Fuel Adjust
29	25 089 02	Spring, Idle, Fuel
30	25 086 26	Screw, Idle Speed Adjust
31	25 089 04	Spring, Idle Speed
32	25 089 02	Spring, Main Fuel
33	25 368 03	Needle, Main Fuel
34	52 090 12	Lever, Choke
35	25 041 04	Gasket, Bowl
36	25 757 09	Kit, Float
37	25 104 01	Bowl, Fuel
38	25 041 03	Gasket, Bowl Retainer Screw
39	25 100 05	Screw, Bowl Retainer

NOT ILLUSTRATED

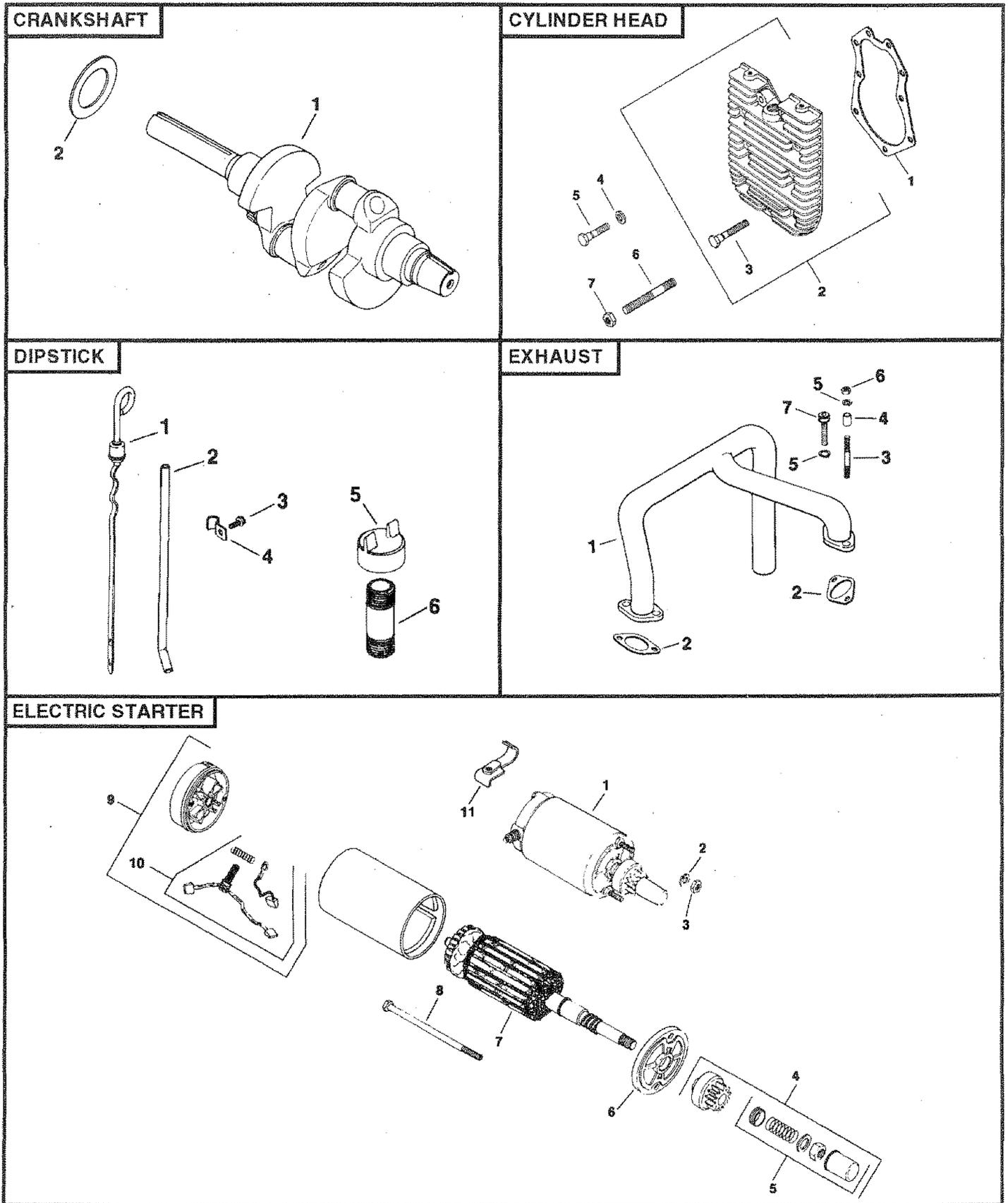
-- 25 757 11 Kit, Carburetor Repair

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

REPAIR PARTS

20 HP TRACTOR - - MODEL NUMBER 917.250051

KOHLER ENGINE - MODEL NUMBER M20QS, TYPE NUMBER 49634



REPAIR PARTS

20 HP TRACTOR - - MODEL NUMBER 917.250051

KOHLER ENGINE - MODEL NUMBER M20QS, TYPE NUMBER 49634

CRANKSHAFT

KEY PART NO. NO.	DESCRIPTION
1 52 014 76	Crankshaft
2 52 468 03	Washer, Thrust .119/.122 (A.R.)
52 468 04	Washer, Thrust .128/.131
52 468 05	Washer, Thrust .137/.140 (A.R.)

CYLINDER HEAD

KEY PART NO. NO.	DESCRIPTION
1 52 041 20	Gasket, Head (2)
2 52 755 78	Kit, Cylinder Head (2) (Includes Key Number 3)
3 25 086 07	Screw, Hex Machine 5/16-18 x 2 (4)
4 220534	Washer, Plain 5/16 (18)
5 41 086 02	Screw, Hex Head 5/16-18 x 1-1/2 (8)
6 52 072 15	Stud 5/16-18 x 2 (6)
7 X-82-2	Nut, Hex 5/16-18 (6)

DIPSTICK

KEY PART NO. NO.	DESCRIPTION
1 52 038 04	Dipstick, Blade 11-5/16
2 52 123 09	Tube, Oil Level
3 X-67-64	Screw #10-32 x 3/8
4 52 154 01	Clip, Tube
5 52 173 01	Cap, Pipe
6 46 136 02	Pipe, Oil Fill 3/4 I.P. x 2-1/2

EXHAUST

KEY PART NO. NO.	DESCRIPTION
1 52 164 17	Manifold
2 52 041 14	Gasket, Exhaust (2)
3 52 072 13	Stud 5/16-18 x 4 (2)
4 52 112 08	Spacer (2)
5 X-21-1	Washer, Lock 5/16 (4)
6 X-82-2	Nut 5/16-18 (2)
7 X-55-6	Screw, Hex Socket Head 5/16-18 x 3/4 (2)

ELECTRIC STARTER

KEY PART NO. NO.	DESCRIPTION
1 52 098 06	Starter Assembly (Includes Key Numbers 4 thru 10)
2 X-20-1	Washer, Lock 1/4 (2)
3 X-81-1	Nut, Hex 1/4-20 (2)
4 52 755 05	Kit, Drive (Includes Key Number 5)
5 52 755 08	Kit, Drive Parts
6 52 227 01	Cap, Drive End
7 52 170 03	Armature
8 52 211 03	Bolt, Thru 1/4-20 x 6-7/8 (2)
9 52 227 07	Cap, Commutator End (Includes Key Number 10)
10 52 755 15	Kit, Brush
11 52 126 09	Bracket, Mounting

NOT ILLUSTRATED

-- 52 357 01	Lubricant, Starter
-- 25 450 03	Tag, Caution

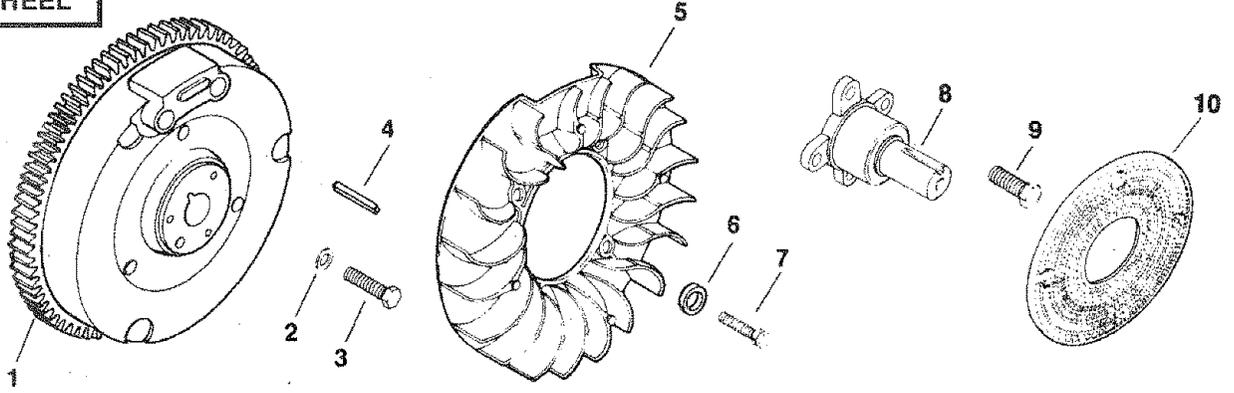
NOTE: All component dimensions given in U.S. inches
1 inch = 25.4 mm

REPAIR PARTS

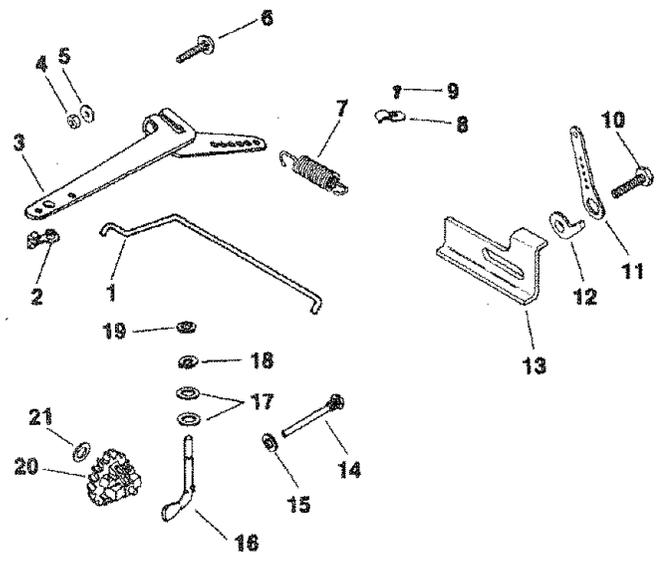
20 HP TRACTOR - - MODEL NUMBER 917.250051

KOHLER ENGINE - MODEL NUMBER M20QS, TYPE NUMBER 49634

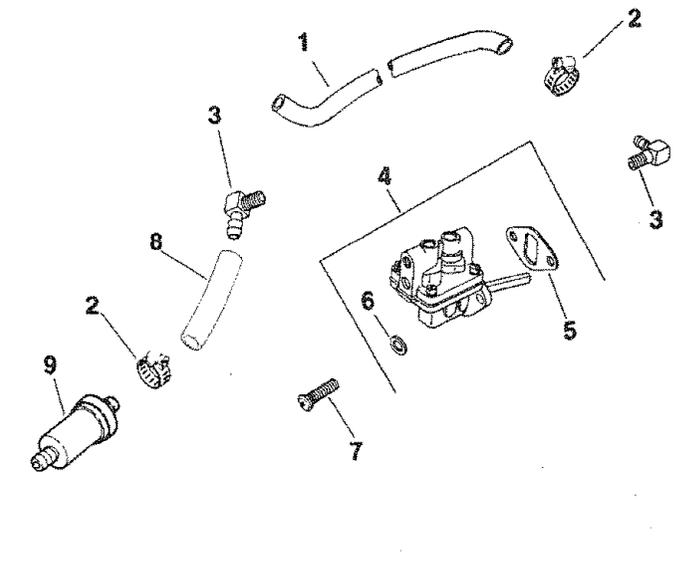
FLYWHEEL



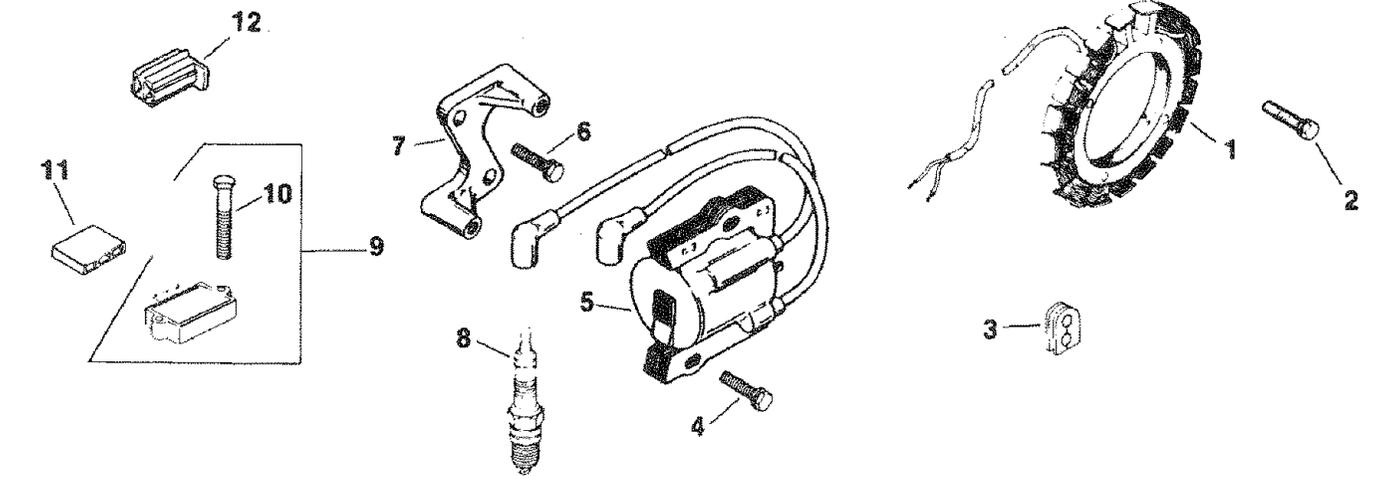
GOVERNOR



FUEL PUMP



IGNITION



REPAIR PARTS

20 HP TRACTOR - - MODEL NUMBER 917.250051

KOHLER ENGINE - MODEL NUMBER M20QS, TYPE NUMBER 49634

FLYWHEEL

KEY PART NO. NO.	DESCRIPTION
1 52 025 36	Flywheel
2 52 468 15	Washer, Plain
3 25 086 24	Screw, Hex Machine 3/8-24 x 1-1/4
4 X-286-17	Key, Square 3/16 x 7/8
5 25 157 01	Fan
6 25 112 04	Spacer (4)
7 25 086 21	Screw, Hex Washer Head 1/4-20 x 5/8 (4)
8 237373	Shaft, Front Drive
9 X-159-2	Screw, Hex Cap 3/8-16 x 1 (4)
10 25 162 02	Screen, Grass

FUEL PUMP

KEY PART NO. NO.	DESCRIPTION
1 52 353 04	Line, Fuel, 6-3/4" Long
2 X-426-9	Clamp, Hose (4)
3 25 155 02	Connector, Hose (2)
4 52 559 01	Pump, Fuel Assembly (Includes Key Numbers 5 and 6)
5 25 041 05	Gasket, Fuel Pump
6 X-25-63	Washer, Plain 1/4 (2)
7 47 086 08	Screw, Pozidriv, Truss Head 1/4-20 x 5/8 (2)
8 25 353 03	Line, Fuel, 13-1/2" Long
9 25 050 03	Filter, Fuel

GOVERNOR

KEY PART NO. NO.	DESCRIPTION
1 82 755 07	Kit, Governor Linkage
2 25 158 11	Bushing, Governor Linkage (2)
3 52 186 06	Arm, Governor
4 X-81-1	Nut, Hex 1/4-20
5 X-25-72	Washer, Plain 1/4
6 52 211 04	Screw, Round Head, Square Neck 1/4-20 x 1
7 52 091 04	Spring, Governor
8 235778	Clamp, Cable (2)
9 X-67-97	Screw, Hex Washer Head #10-24 x 3/8 (2)
10 X-67-62	Screw, Hex Washer Head 1/4-20 x 3/4
11 52 119 01	Lever, Speed Control
12 234614	Stop, Governor
13 52 531 02	Stop, High Speed
14 231355	Pin, Governor Stop
15 X-25-12	Washer, Plain 1/4
16 52 078 04	Shaft, Governor, Cross
17 X-25-102	Washer, Plain (2)
18 X-269-28	Retainer, Governor
19 X-25-63	Washer, Plain 1/4
20 A-235743-S	Kit, Governor Gear
21 237022	Washer

IGNITION

KEY PART NO. NO.	DESCRIPTION
1 237878	Kit, Stator
2 X-67-51	Screw, Hex Cap #10-24 x 3/4 (2)
3 52 313 02	Grommet
4 25 086 15	Screw, Hex Washer Head 1/4-20 x 1 (2)
5 52 584 02	Module, Ignition
6 25 086 16	Screw, Hex Washer Head 1/4-20 x 7/8 (2)
7 52 126 08	Bracket, Module
8 51 132 02	Spark Plug (2)
9 25 755 03	Kit, Rectifier-Regulator (Includes Key Number 10)
10 X-132-5	Screw, Hex Cap 1/4-20 x 5/8 (2)
11 236602	Connector
12 236473	Connector

NOT ILLUSTRATED

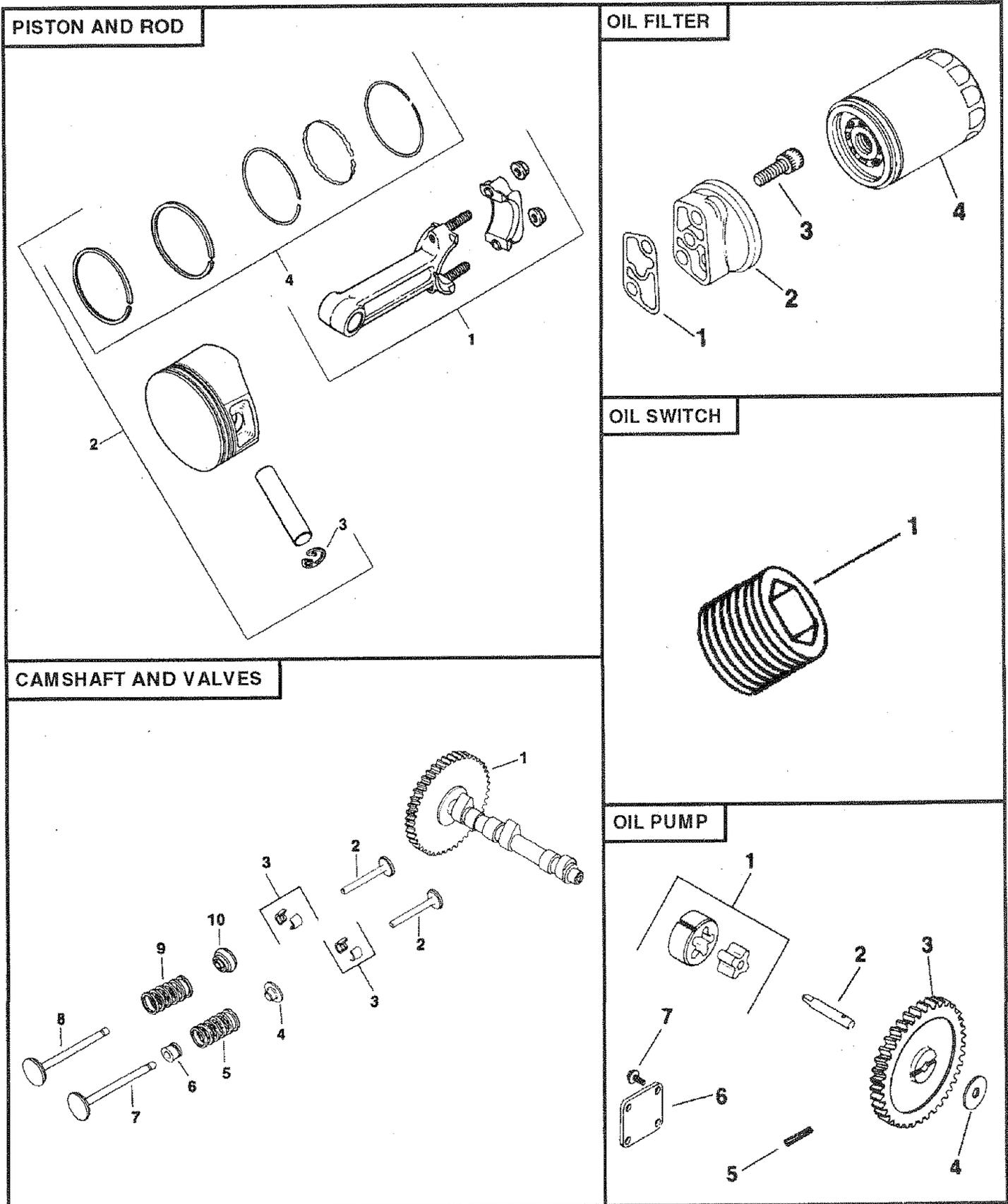
-- 25 518 21	Lead, Red, Rectifier-Regulator (5", 14 Gauge, Uninsulated Push On Tab Terminals)
-- 52 518 22	Lead, Black, Module To Connector (12-1/2", 18 Gauge, Insulated Push On Tab, Uninsulated Push On Tab Terminals)

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

REPAIR PARTS

20 HP TRACTOR -- MODEL NUMBER 917.250051

KOHLER ENGINE - MODEL NUMBER M20QS, TYPE NUMBER 49634



REPAIR PARTS

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PISTON & ROD

KEY PART NO.	NO.	DESCRIPTION
1	52 067 71	Connecting Rod, Standard (2)
	52 067 72	Connecting Rod .010" (2)
2	52 874 16	Piston with Ring Set, Standard (2)
	52 874 17	Piston with Ring Set .003" (2)
	52 874 18	Piston with Ring Set .010" (2)
	52 874 19	Piston with Ring Set .020" (2)
	52 874 20	Piston with Ring Set .030" (2)
3	52 141 01	Retainer, Piston Pin (4)
4	52 108 09	Ring Set, Standard and .003" (2)
	52 108 10	Ring Set .010" (2)
	52 108 11	Ring Set .020" (2)
	52 108 12	Ring Set .030" (2)

CAMSHAFT & VALVES

KEY PART NO.	NO.	DESCRIPTION
1	52 012 09	Camshaft
2	52 019 03	Tappet (4)
3	41 755 10	Kit, Retainer (4)
4	230011	Retainer, Intake Valve (2)
5	25 089 01	Spring, Intake Valve (2)
6	52 032 13	Seal, Intake Valve Stem (2)
7	52 017 07	Valve, Intake (2)
8	52 016 06	Valve, Exhaust (2)
9	25 089 01	Spring, Exhaust Valve (2)
10	52 413 01	Rotator, Exhaust Valve (2)

OIL FILTER

KEY PART NO.	NO.	DESCRIPTION
1	52 041 16	Gasket, Oil Filter
2	52 181 03	Adapter, Oil Filter
3	X-55-15	Screw, Hex Socket Head 5/16-18 x 1-1/4 (2)
4	52 050 02	Oil Filter

LOW OIL PRESSURE SWITCH

KEY PART NO.	NO.	DESCRIPTION
1	X-75-23	Plug, Pipe 1/8 N.P.T.F.

OIL PUMP

KEY PART NO.	NO.	DESCRIPTION
1	52 393 09	Rotor Set
2	52 144 05	Shaft, Oil Pump
3	52 043 05	Gear, Oil Pump
4	52 422 01	Spacer, Shim (A.R., Maximum of 2)
5	X-280-25	Pin, Roll
6	52 096 03	Cover, Oil Pump
7	X-67-64	Screw, Hex Washer Head #10-32 x 7/16 (4)

NOT ILLUSTRATED

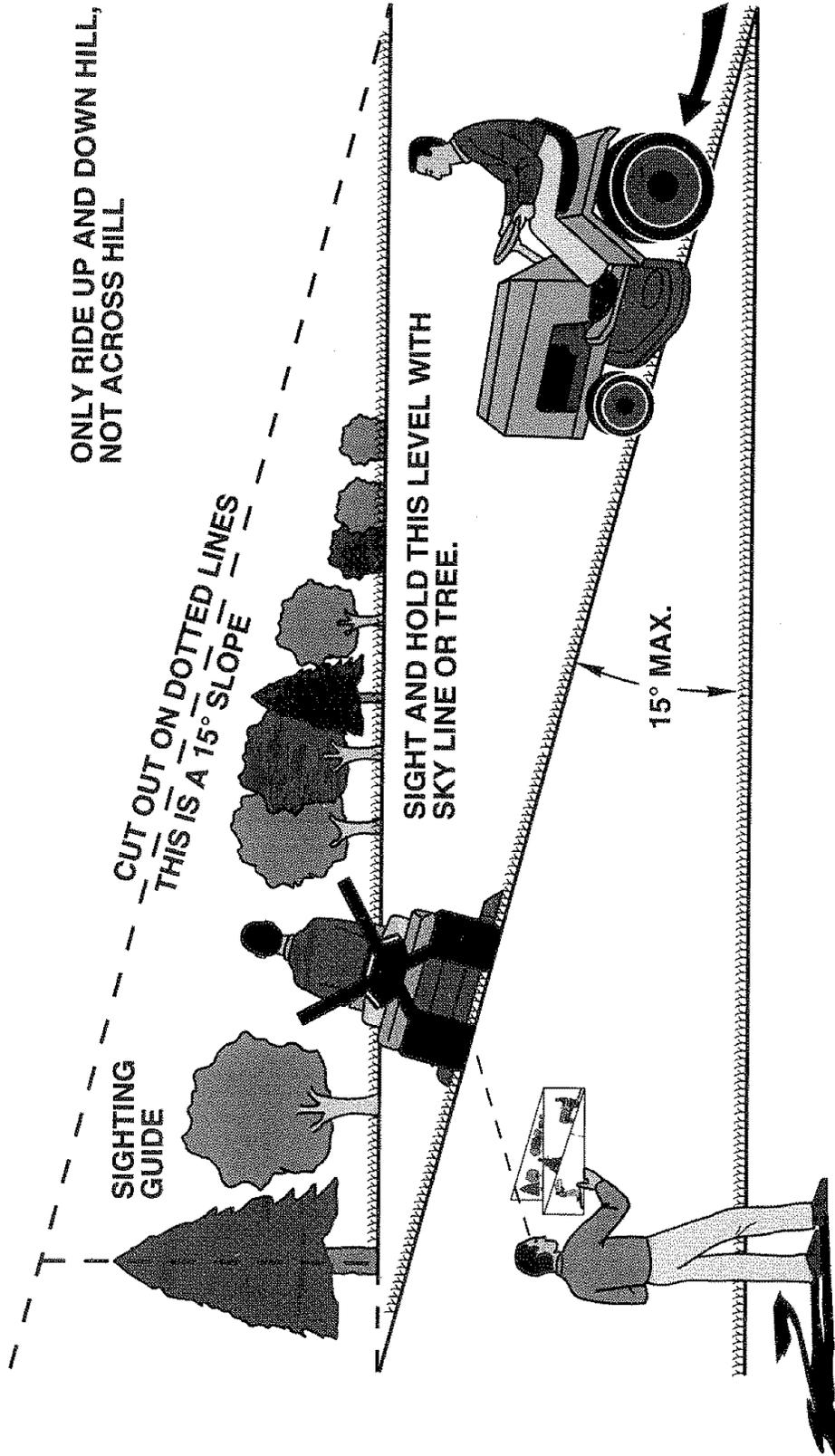
KEY PART NO.	NO.	DESCRIPTION
--	52 522 77	Short Block
--	52 755 94	Gasket Set

RPM Settings: Low Speed: 1150-1650
High Speed: 3325-3475

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

SERVICE NOTES

SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



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

SEARS

**OWNER'S
MANUAL**

**MODEL NO.
917.250051**

**HOW TO ORDER
REPAIR PARTS**

CRAFTSMAN®

**20.0 HP TWIN CYLINDER
ELECTRIC START
6 SPEED TRANSAXLE
GARDEN TRACTOR**

Each tractor has its own model number. Each engine has its own model number.

The model number for your tractor will be found on the model plate located under the seat.

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.

**WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE
FOLLOWING INFORMATION:**

- **PRODUCT - GARDEN TRACTOR**
- **MODEL NUMBER - 917.250051**
- **ENGINE MODEL NO. - M20QS-49634**
- **PART NUMBER**
- **PART DESCRIPTION**

Your Sears merchandise has added value when you consider Sears has service units nationwide staffed with Sears trained technicians... professional technicians specifically trained to insure that we meet our pledge to you, we service what we sell.