

MODEL NO. 944.604582

Caution:
Read and follow
all Safety Rules
and Instructions
Before Operating
This Equipment



# CRAFTSMAN®

18.0 HP
ELECTRIC START
3 in One Convertible
42" MOWER
5 SPEED TRANSAXLE
LAWN TRACTOR

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



#### **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 Authorized Service Centre/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 unit properly. Always observe the "SAFETY RULES".

| MODEL<br>NUMBER  | 944.604582   |
|------------------|--|
| SERIAL<br>NUMBER |  |
| DATEOFPUR        | CHASE  |
|                  | ND SERIAL NUMBERS WILL BE FOUND UNDER THE SEAT.                          |
|                  | RECORD BOTH SERIAL NUMBER AND RCHASE AND KEEP IN A SAFE PLACE 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 owner's manual.

#### **PRODUCT SPECIFICATIONS**

| HORSEPOWER:                    | 18.0   |
|--------------------------------|--|
| GASOLINE CAPACITY<br>AND TYPE: | 3.5 GALLONS<br>UNLEADED REGULAR                                |
| OIL TYPE (API-SF/SG):          | SAE 10W-30 (above 32°F)<br>SAE 5W-30 (below 32°F)              |
| OIL CAPACITY:                  | 3.0 PINTS  |
| SPARK PLUG:<br>(GAP: .030")    | CHAMPION RJ19LM  |
| VALVE CLEARANCE:               | INTAKE: .004"006"<br>EXHAUST: .007"009"                        |
| GROUND SPEED (MPH):            | FORWARD:  1st 1.1 2nd 2.1 3rd 3.1 4th 4.0 5th 5.1 REVERSE: 1.8 |
| TIRE PRESSURE:                 | FRONT: 14 PSI<br>REAR: 10 PSI                                  |
| CHARGING SYSTEM:               | 3 AMPS BATTERY<br>5 AMPS HEADLIGHTS                            |
| BLADE BOLT TORQUE:             | 30-35 FT. LBS.   |

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

A spark arrester for the muffler is available through your nearest Sears Authorized Service Centre/Department (See REPAIR PARTS section of this manual).

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### WARRANTY

#### LIMITED TWO (2) YEAR WARRANTY ON CRAFTSMAN TRACTOR (RIDING EQUIPMENT)

For Two (2) years from date of purchase Sears Canada, Inc. will repair or replace at Sears option free of charge parts which are defective as a result of material or workmanship.

#### **FULL ONE (1) YEAR WARRANTY ON BATTERY**

For One (1) year 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.

#### **COMMERCIAL OR RENTAL USE**

Warranty on Riding Equipment used for commercial or rental purposes is limited to ninety (90) days.

#### This Warranty does **NOT** cover:

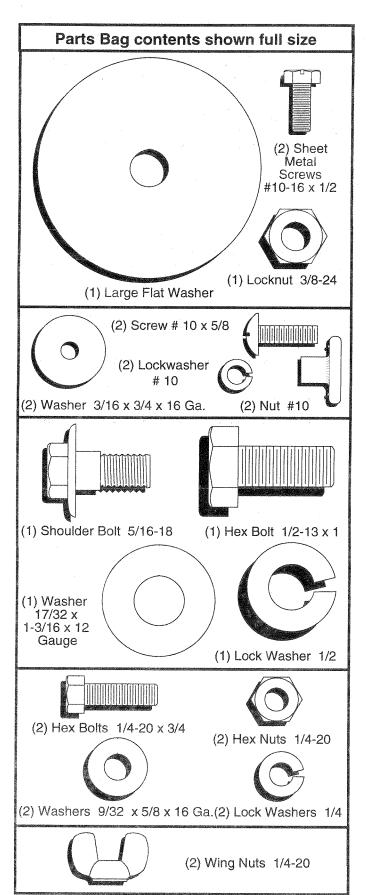
- 1. Pre-delivery set-up.
- 2. Tire replacement or repair caused by punctures from outside objects (such as nails, thorns, stumps, or glass).
- 3. Expendable items which become worn during normal use, such as blades, spark plug, air cleaners and belts.
- 4. Repairs necessary because of operator abuse or negligence, including damaged jackshaft or mandrel and the failure to operate and maintain the equipment according to the instructions contained in the Owner's Manual.
- 5. In Home service.

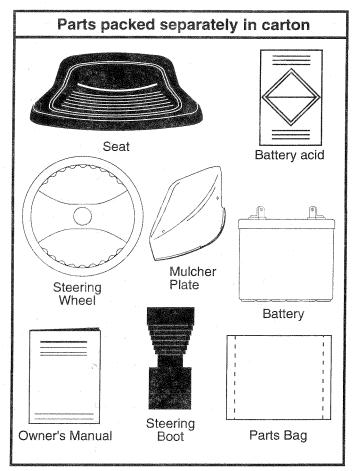
Warranty service is available by returning the Craftsman Riding Equipment to the nearest Sears Service Centre/Department in Canada. This warranty applies only while this product is in use in Canada.

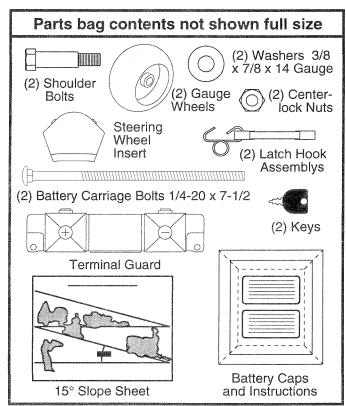
This warranty is in addition to any statutory warranty and does not exclude or limit legal rights you may have but shall run concurrently with applicable provincial legislation. Furthermore, some provinces do NOT allow limitation on how long an implied warranty will last so the above limitations may not apply to you.

SEARS CANADA, INC., TORONTO, ONTARIO M5B 2B8

## **CONTENTS OF HARDWARE PACK**







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

#### **TOOLS REQUIRED FOR ASSEMBLY**

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

(2) 7/16" wrenches

3/4" Socket w/drive ratchet

(1) 1/2" wrench

Tire pressure gauge

(1) 9/16" wrench

Phillips Screwdriver

Utility knife

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

#### TO REMOVE TRACTOR FROM CARTON

#### **UNPACK CARTON**

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

#### **BEFORE ROLLING TRACTOR OFF SKID**

#### ATTACH STEERING WHEEL (See Fig. 1)

- Slide the steering bushing over the steering shaft.
- Raise steering shaft forward until screw holes in dash line up with steering bushing. Install two (2) sheet metal screws and tighten securely.
- Position steering boot over steering shaft.
- Place tabs of steering boot over tab slots in dash and push down to secure.
- Slide steering wheel adapter onto upper steering shaft.
- Position front wheels of the tractor so they are pointing straight forward.
- Position steering wheel so cross bars are horizontal (left to right) and slide onto adapter.
- Assemble large flat washer and 3/8-24 locknut and tighten securely.
- Snap steering wheel insert into center of steering wheel.
- Remove protective plastic from tractor hood and grill.

IMPORTANT: CHECK FOR AND REMOVE ANY STAPLES IN SKID THAT MAY PUNCTURE TIRES WHERE TRACTOR IS TO ROLL OFF SKID.

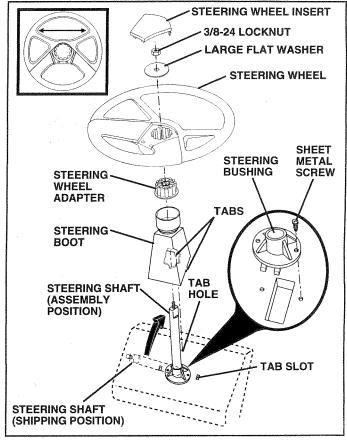


FIG. 1

#### TO ROLL TRACTOR OFF SKID (See Fig. 8)

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

#### **HOW TO SET UP YOUR TRACTOR**

#### PREPARE BATTERY (See Fig. 2)

CAUTION: Wear eye and face shield.



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

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

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

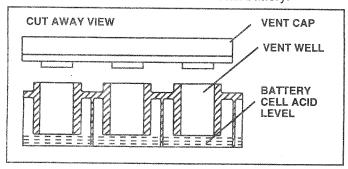
Your tractor has a battery charging system which is sufficient for normal use. However, periodic charging of the battery with an automotive charger will extend its life.

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

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

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

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



#### FIG. 2

#### **INSTALL SEAT (See Fig. 3)**

Adjust seat before tightening adjustment bolt.

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

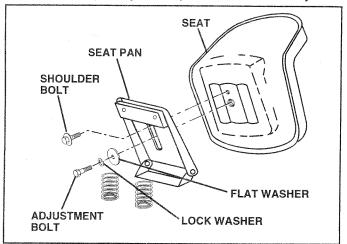


FIG. 3

#### **CHECK TIRE PRESSURE**

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

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

#### CHECK DECK LEVELNESS

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

## CHECK FOR PROPER POSITION OF ALL BELTS

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

#### **CHECK BRAKE SYSTEM**

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

#### **INSTALL BATTERY (See Figs. 4 and 5)**



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

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

**NOTE:** For ease of battery installation, the heat shield between engine and battery compartment may be removed. Before removing heat shield, note position and routing of all cables and wires. If you remove the shield, be sure it is reassembled properly after installing battery.

- Lift hood to raised position.
- Be sure battery drain tube has not come loose and is securely attached to drain in battery tray.
- Lower battery into battery tray with 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 battery as shown, lower battery bolts into key holes and slide square shafts of battery 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.

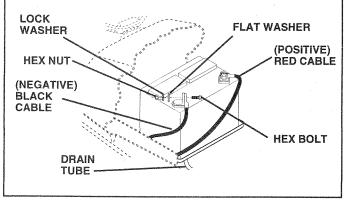


FIG. 4

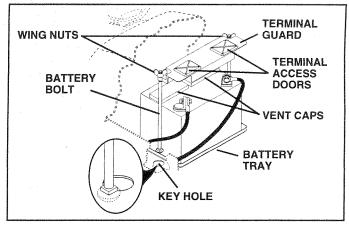


FIG. 5

## ASSEMBLE GAUGE WHEELS TO MOWER DECK (See Fig. 6)

Assemble gauge wheels with tractor on a flat level surface.

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

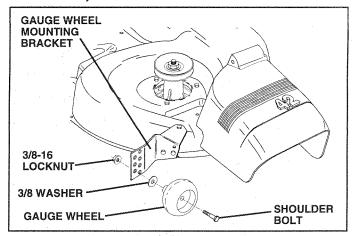


FIG. 6

## INSTALL MULCHER PLATE (See Figs. 7A & 7B)

 Install two latch hooks to mulcher plate using screw, washer, lock washer, and weld nut as shown.

**NOTE:** Pre-assemble weld nut to latch hook by inserting weld nut from the top with hook pointing down.

- Tighten hardware securely.
- Raise and hold deflector shield in upright position.
- Place front of mulcher plate over front of mower deck opening and slide into place, as shown.
- Hook front latch into hole on front of mower deck.
- Hook rear latch into hole on back of mower deck.



CAUTION: Do not remove discharge guard from mower. Raise and hold guard when attaching mulcher plate and allow it to rest on plate while in operation.

## TO CONVERT TO BAGGING OR DISCHARGING

Simply remove mulcher plate and store in a safe place. Your mower is now ready for discharging or installation of optional grass catcher accessory.

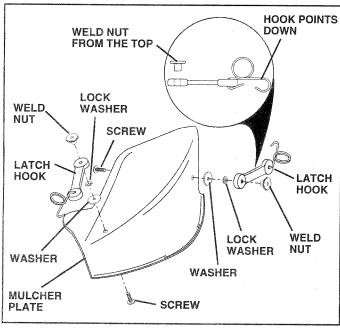


FIG. 7A

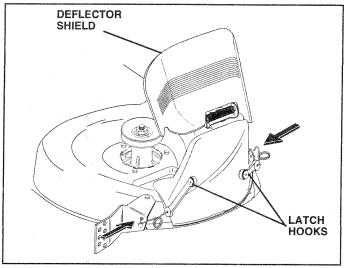


FIG. 7B

#### **✓ CHECKLIST**

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

#### PLEASE REVIEW THE FOLLOWING CHECKLIST:

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

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

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

#### **KNOW YOUR TRACTOR**

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

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

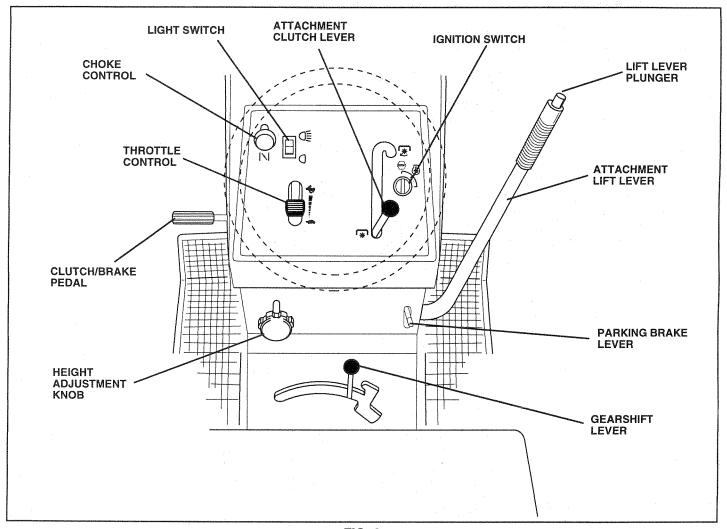


FIG. 8

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

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

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

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

**HEIGHT ADJUSTMENT KNOB-** Used to adjust the mower height.

**LIGHT SWITCH** - Turns the headlights on and off.

**GEARSHIFT LEVER -** Selects the speed and direction of the tractor.

**IGNITION SWITCH** - Used to start and stop the engine.

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

THROTTLE CONTROL - Used to control engine speed.

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

CHOKE CONTROL - Used when starting a cold engine.

| WEAR YOUR SAFETY GLASSES | The operation of any tra | actor can result in foreign object | s thrown into the eyes, which can resu | lt |
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|                          |                          |                                    |  |    |
| en,                      |                          |                                    |  |    |
| ~~ <u>~</u>              |                          |                                    | . <del>.</del>                         |    |
|                          |                          |                                    |  |    |

#### TO OPERATE MOWER (See Fig. 10)

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

- Select desired height of cut.
- Lower mower with attachment lift control.
- Start mower blades by engaging attachment clutch control.
- TO STOP MOWER BLADES disengage attachment clutch control.



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

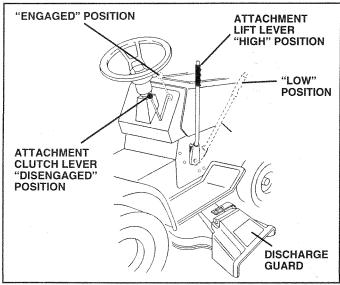


FIG. 10

#### TO OPERATE ON HILLS



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

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

#### TO TRANSPORT

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

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

#### BEFORE STARTING THE ENGINE

#### **CHECK ENGINE OIL LEVEL (See Fig. 17)**

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

#### ADD GASOLINE

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

IMPORTANT: WHEN OPERATING IN TEMPERATURES BELOW 32°F(0°C), USE FRESH, CLEAN WINTER GRADE GASOLINE TO HELP INSURE GOOD COLD WEATHER STARTING.

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



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

#### TO START ENGINE (See Fig. 9)

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

- Depress clutch/brake pedal and set parking brake.
- Place gearshift lever in neutral (N) position.
- Move attachment clutch to "DISENGAGED" position.
- Pull choke control out to choke (N) 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.

#### **MOWING TIPS**

- Tire chains cannot be used when the mower housing is attached to tractor.
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the machine. This will result in a more even distribution of clippings and more uniform cutting.
- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished (See Fig. 11).
- If grass is extremely tall, it should be mowed twice to reduce load and possible fire hazard from dried clippings. Make first cut relatively high; the second to the desired height.
- Do not mow grass when it is wet. Wet grass will plug mower and leave undesirable clumps. Allow grass to dry before mowing.
- Always operate engine at full throttle when mowing to assure better mowing performance and proper discharge of material. Regulate ground speed by selecting a low enough gear to give the mower cutting performance as well as the quality of cut desired.
- When operating attachments, select a ground speed that will suit the terrain and give best performance of the attachment being used.

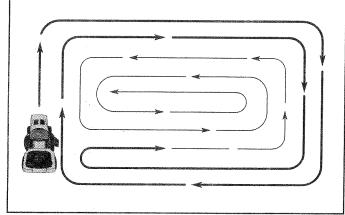


FIG. 11

#### **MULCHING MOWING TIPS**

**IMPORTANT:** FOR BEST PERFORMANCE, KEEP MOWER HOUSING FREE OF BUILT-UP GRASS AND TRASH. CLEAN AFTER EACH USE.

- The special mulching blade will recut the grass clippings many times and reduce them in size so that as they fall onto the lawn they will disperse into the grass and not be noticed. Also, the mulched grass will biodegrade quickly to provide nutrients for the lawn. Always mulch with your highest engine (blade) speed as this will provide the best recutting action of the blades.
- Avoid cutting your lawn when it is wet. Wet grass tends to form clumps and interferes with the mulching action. The best time to mow your lawn is the early afternoon. At this time the grass has dried and the newly cut area will not be exposed to the direct sun.
- For best results, adjust the mower cutting height so that the mower cuts off only the top one-third of the grass blades (See Fig. 12). For extremely heavy mulching, reduce your width of cut on each pass and mow slowly.
- Certain types of grass and grass conditions may require that an area be mulched a second time to completely hide the clippings. When doing a second cut, mow across or perpendicular to the first cut path.
- Change your cutting pattern from week to week. Mow north to south one week then change to east to west the next week. This will help prevent matting and graining of the lawn.

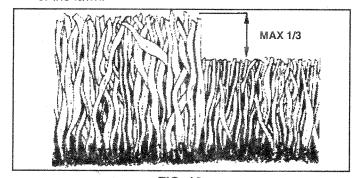


FIG. 12

| FI<br>AS | AINTENANCE SCHEDULI<br>LL IN DATES<br>BYOU COMPLETE<br>EGULAR SERVICE |   | a EFOR | EACH! | USE<br>HOURS<br>EVERY | HOUP     | S HOUS<br>25 HOUS<br>EVERY | AS HOU | RS HOUS | ERSON<br>ERSON | SERI | /ICE | DAT | ES |
|----------|---|---|--------|-------|-----------------------|----------|----------------------------|--------|---------|----------------|------|------|-----|----|
|          | Check Brake Operation   | V |        | 1     |                       |          |                            |        |         |                |      |      |     |    |
|          | Check Tire Pressure   | V |        | 6     |                       |          | -                          |        |         |                |      |      |     |    |
| I        | Check for Loose Fasteners   | 1 |        |       |                       |          | <b>1</b> 7                 |        | Barre   |                |      |      |     |    |
| R        | Sharpen/Replace Mower Blades  |   |        |       | <b>V</b> 4            |          |                            |        |         |                |      |      |     |    |
| A        | Lubrication Chart   |   |        |       | W                     |          |                            |        | 8       |                |      |      |     |    |
| ĬŤ       | Check Battery Level/Recharge  |   |        |       | <b>1</b> 6            |          |                            |        |         |                |      |      |     |    |
| 0        | Clean Battery and Terminals   |   |        |       | V                     |          |                            |        | 6       |                |      |      |     |    |
| R        | Check Transaxle Cooling   |   |        |       | 1                     |          |                            |        |         |                |      |      |     |    |
|          | Adjust Blade Belt(s) Tension  |   |        |       |                       |          | <b>1</b> 5                 |        |         |                |      |      |     |    |
|          | Adjust Motion Drive Belt(s) Tension                                   |   |        |       |                       |          | 5                          |        |         |                |      |      |     |    |
|          | Check Engine Oil Level  | 1 |        | 1     |                       |          |                            |        |         |                |      |      |     |    |
|          | Change Engine Oil   |   | 1      |       | 1,2,3                 |          |                            |        | 8       |                |      |      |     |    |
| lΕ       | Clean Air Filter  |   |        |       | <b>1</b> 2            |          |                            |        |         |                |      |      |     |    |
| N        | Clean Air Screen  |   |        |       | 2                     |          |                            |        |         |                |      |      |     |    |
| G        | Inspect Muffler/Spark Arrester  |   |        |       |                       | <b>V</b> | <b> </b>                   |        |         |                |      |      |     |    |
|          | Replace Oil Filter (If equipped)                                      |   |        |       |                       |          | 1,2                        |        |         |                |      |      |     |    |
| N<br>E   | Clean Engine Cooling Fins   |   |        |       |                       |          | <b>1</b> 2                 |        |         |                |      |      |     |    |
|          | Replace Spark Plug  |   |        |       |                       | ·····    | V                          | V      |         |                |      |      |     |    |
|          | Replace Air Filter Paper Cartridge                                    |   |        |       |                       |          | <b>V</b> 2                 |        |         |                |      |      |     |    |
|          | Replace Fuel Filter   |   |        |       |                       | 4        |                            | 1      |         |                |      |      |     |    |

- 1 Change more often when operating under a heavy load or in high ambient temperatures.
- 2 Service more often when operating in dirty or dusty conditions.
- 3 If equipped with oil filter, change oil every 50 hours.
- 4 Replace blades more often when mowing in sandy soil.

- 5 If equipped with adjustable system.
- 6 Not required if equipped with maintenance-free battery.
- 7 Tighten front axle pivot bolt to 35 ft.-lbs. maximum. Do not overtighten.

### **GENERAL RECOMMENDATIONS**

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

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

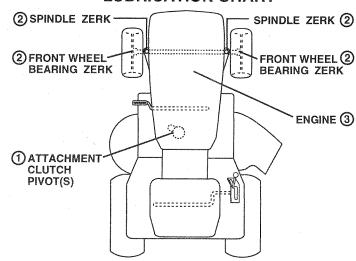
All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

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

#### **BEFORE EACH USE**

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

#### **LUBRICATION CHART**



- (1) SAE 30 OR 10W30 MOTOR OIL
- **②GENERAL PURPOSE GREASE**
- 3 REFER TO CUSTOMER RESPONSIBILITIES "ENGINE" SECTION

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

#### TRACTOR

Always observe safety rules when performing any maintenance.

#### **BRAKE OPERATION**

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

#### TIRES

- Maintain proper air pressure in all tires (See "PROD-UCT SPECIFICATIONS" on page 3 of this manual).
- Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

#### **BLADE CARE**

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

#### **BLADE REMOVAL (See Fig. 13)**

- Raise mower to highest position to allow access to blades.
- Remove hex bolt, lock washer and flat washer securing blade.
- Install new or resharpened blade with trailing edge up towards deck as shown.
- Reassemble hex bolt. lock washer and flat washer in exact order as shown.
- Tighten bolt securely (30-35 Ft. Lbs. torque).

IMPORTANT: BLADE BOLT IS GRADE 8 HEAT TREATED.

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

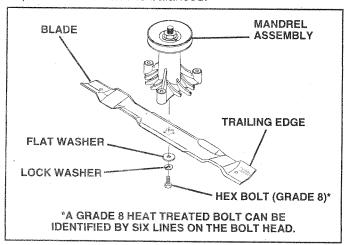


FIG. 13

### TO SHARPEN BLADE (See Fig. 14)

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

The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen while on the mower. 16

- To check blade balance, you will need a 5/8" diameter steel bolt, pin, or a cone balancer. (When using a cone balancer, follow the instructions supplied with balancer.)
- Slide blade on to an unthreaded portion of the steel bolt or pin and hold the bolt or pin parallel with the ground. If blade is balanced, it should remain in a horizontal position. If either end of the blade moves downward, sharpen the heavy end until the blade is balanced.

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

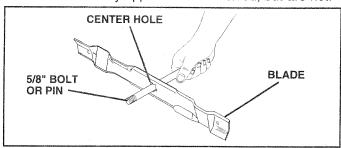


FIG. 14

#### **BATTERY** (See Fig. 15)

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.

#### 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).

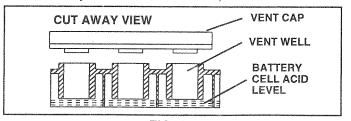


FIG. 15

#### V-BELTS

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

#### TRANSAXLE COOLING

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

#### **ENGINE**

#### LUBRICATION

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

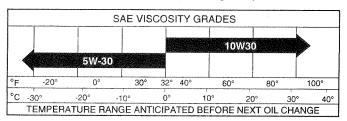


FIG. 16

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

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

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

#### TO CHANGE ENGINE OIL (See Fig. 16)

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

- Be sure tractor is on level surface.
- Oil will drain more freely when warm.
- · Catch oil in a suitable container.
- Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine when changing oil.
- Remove drain plug.
- After oil has drained completely, replace oil drain plug and tighten securely.
- Refill engine with oil through oil fill dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PRODUCT SPECIFICATIONS" on page 3 of this manual.
- Use gauge on oil fill cap/dipstick for checking level. Be sure dipstick cap is tightened securely for accurate reading. Keep oil at "FULL" line on dipstick.

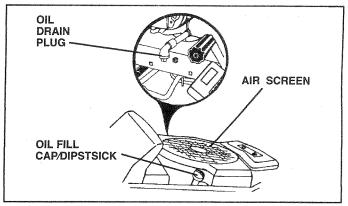


FIG. 17

#### AIR FILTER (See Fig. 18)

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

Service air cleaner more often under dusty conditions.

· Remove knob(s) and cover.

#### TO SERVICE PRE-CLEANER

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

#### TO SERVICE CARTRIDGE

- Remove wing nuts and cartridge plate.
- Carefully remove cartridge to prevent debris from entering carburetor.
- Clean cartridge by tapping gently on flat surface. If very dirty or damaged, replace cartridge.
- Reinstall cartridge plate, wing nuts, precleaner, cover and secure with knob(s).

IMPORTANT: PETROLEUM SOLVENTS, SUCH AS KEROSENE, ARE NOT TO BE USED TO CLEAN THE CARTRIDGE. THEY MAY CAUSE DETERIORATION OF THE CARTRIDGE. DO NOT OIL CARTRIDGE. DO NOT USE PRESSURIZED AIR TO CLEAN OR DRY CARTRIDGE.

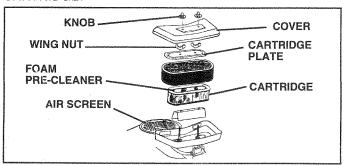


FIG. 18

#### CLEAN AIR SCREEN (See Fig. 18)

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

#### **ENGINE COOLING FINS (See Fig. 19)**

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

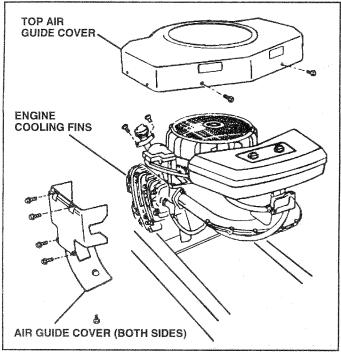


FIG. 19

#### **MUFFLER**

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

#### SPARK PLUGS

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

#### IN-LINE FUEL FILTER (See Fig. 20)

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.

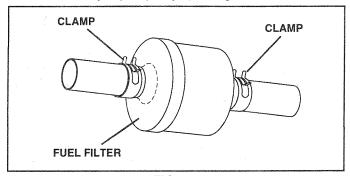


FIG. 20

#### **CLEANING**

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

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



#### **CAUTION: BEFORE PERFORMING ANY SERVICE OR ADJUSTMENTS:**

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

#### **TRACTOR**

#### TO REMOVE MOWER (See Fig. 21)

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

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

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

#### TO INSTALL MOWER (See Fig. 21)

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

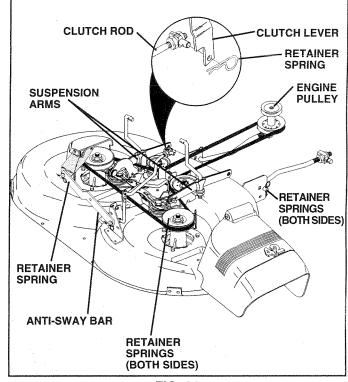


FIG. 21

#### TO LEVEL MOWER HOUSING

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

SIDE-TO-SIDE ADJUSTMENT (See Figs. 22 and 23)

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

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

· Recheck measurements after adjusting.

FRONT-TO-BACK ADJUSTMENT (See Figs. 24 and 25)

IMPORTANT: DECK MUST BE LEVEL SIDE-TO-SIDE. IF THE FOLLOWING FRONT-TO-BACK ADJUSTMENT IS NECESSARY, BE SURE TO ADJUST BOTH FRONT LINKS EQUALLY SO MOWER WILL STAY LEVEL SIDE-TO-SIDE.

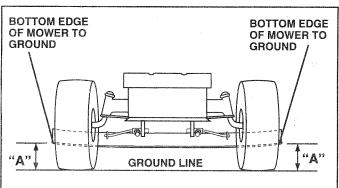


FIG. 22

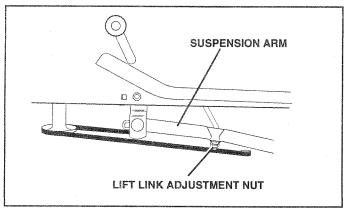


FIG. 23

To obtain the best cutting results, the mower housing should be adjusted so that the front is approximately 1/4" to 3/4" lower than the rear when the mower is in its highest position.

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

- Before making any necessary adjustments, check that both front links are equal in length. Both links should be approximately 10-3/8".
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of mower loosen nut "E" on both front links an equal number of turns.
- When distance "D" is 1/4" to 3/4" lower at front than rear, tighten nuts "F" against trunnion on both front links
- To raise front of mower, loosen nut "F" from trunnion on both front links. Tighten nut "E" on both front links an equal number of turns.
- When distance "D" is 1/4" to 3/4" lower at front than rear, tighten nut "F" against trunnion on both front links.
- Recheck side-to-side adjustment.

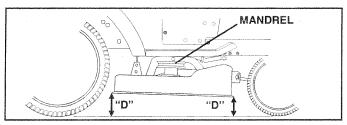


FIG. 24

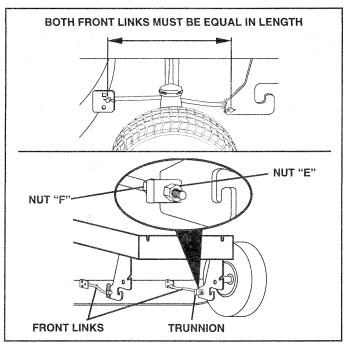


FIG. 25

## TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 26)

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

#### **BELT REMOVAL -**

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

#### **BELT INSTALLATION -**

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

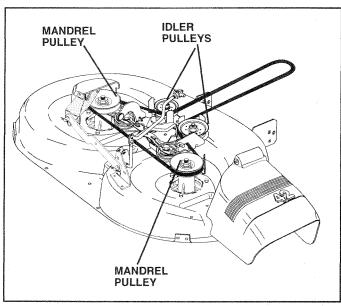


FIG. 26

#### TO ADJUST BRAKE (See Fig. 27)

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

If tractor requires more than six (6) feet stopping distance at high speed in highest gear, then brake must be adjusted.

- Depress clutch/brake pedal and engage parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- If distance is other than 1-1/2", loosen jam nut and turn nut "A" until distance becomes 1-1/2". Retighten jam nut against nut "A".
- Road test tractor for proper stopping distance as stated above. Readjust if necessary. If stopping distance is still greater than six (6) feet in highest gear, further maintenance is necessary. Contact your nearest authorized service center/department.

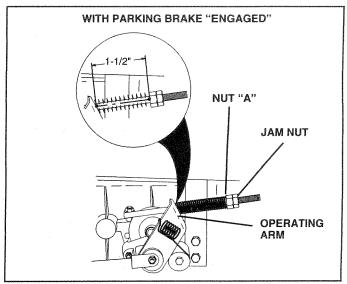


FIG. 27

## TO REPLACE MOTION DRIVE BELT (See Fig. 28)

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

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

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

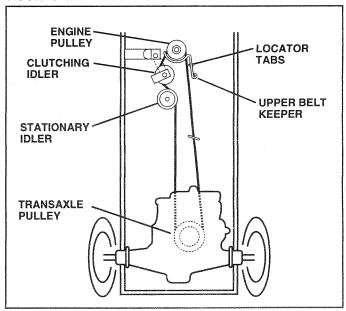


FIG. 28

#### TO ADJUST STEERING WHEEL ALIGNMENT

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

#### FRONT WHEEL TOE-IN/CAMBER

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

## TO REMOVE WHEEL FOR REPAIRS (See Fig. 29)

- Block up axle securely.
- Remove axle cover, retaining ring and washers to allow wheel removal (rear wheel contains a square key - Do not lose).
- Repair tire and reassemble.
- On rear wheels only: align grooves in rear wheel hub and axle. Insert square key.
- Replace washers and snap retaining ring securely in axle groove.
- · Replace axle cover.

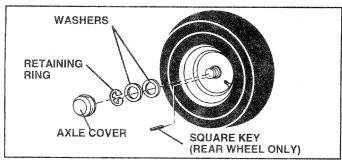


FIG. 29

## TO START ENGINE WITH A WEAK BATTERY (See Fig. 30)



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

If your battery is too weak to start the engine, it should be recharged. If "jumper cables" are used for emergency starting, follow this procedure:

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

#### TO ATTACH JUMPER CABLES -

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

#### TO REMOVE CABLES, REVERSE ORDER -

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

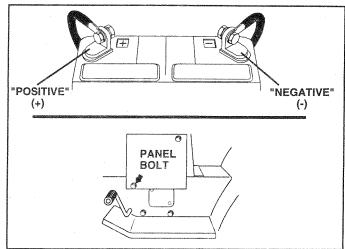


FIG. 30

#### TO REPLACE HEADLIGHT BULB

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

#### INTERLOCKS AND RELAYS

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

 Check wiring. See electrical wiring diagram in the Repair Parts section of this manual.

#### TO REPLACE FUSE

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

## TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 31)

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

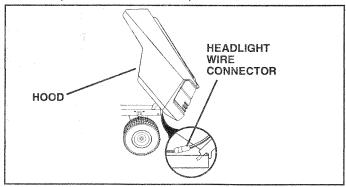


FIG. 31

#### **ENGINE**

## TO ADJUST THROTTLE CONTROL CABLE (See Fig. 32)

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 (4) position.
- Check that swivel is against side of quarter circle. If it is not, loosen cable clamp screw and pull cable back until swivel is against quarter circle. Tighten cable clamp screw securely.

#### TO ADJUST CHOKE CONTROL (See Fig. 33)

The choke 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 choke control (located on dash panel) to full choke ( \ ) position.
- Remove air cleaner cover, filter and cartridge plate to expose carburetor choke (see "AIR FILTER" in the Customer Responsibilities section of this manual).
- Choke should be closed. If it is not, loosen casing clamp screw and move choke cable until choke is completely closed. Tighten casing clamp screw securely.
- · Reassemble air cleaner.

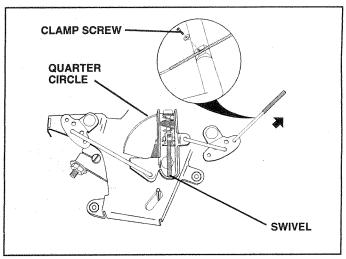


FIG. 32

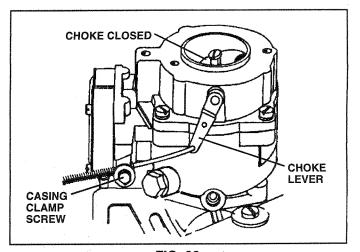


FIG. 33

## TO ADJUST CARBURETOR (See Figs. 34 & 35)

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

In general, turning the mixture screw in (clockwise) decreases the supply of fuel to the engine giving a leaner fuel/air mixture. Turning the mixture screw 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 mixture screw in (clockwise) closing it finger tight and then turn out (counterclockwise) 1-1/4 to 1-1/2 turns.

#### FINAL SETTING -

- Start engine and allow to warm for five minutes. Make final adjustments with engine running and shift/ motion control lever in neutral (N) position.
- With throttle control lever in slow (
   ) position, hold throttle lever against idle speed screw and adjust idle speed screw to obtain 1200 to 1400 RPM.
- While still holding throttle lever against idle speed screw, turn idle mixture screw in (clockwise) until engine begins to die and then turn out (counterclockwise) until engine runs rough. Turn screw to a point midway between those two positions.
- Continue to hold throttle lever against idle speed screw and adjust idle speed screw to obtain 900 to 1200 RPM.
   Release throttle lever.

#### **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.

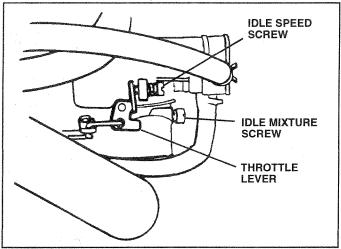


FIG. 34

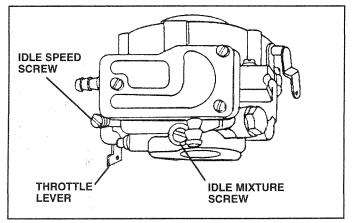


FIG. 35

## **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 SYSTEMPARTS SUCH AS CARBURETOR, FUEL FILTER, FUEL HOSE, OR TANK DURING STORAGE. ALSO, EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OR USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF AN ENGINE WHILE IN STORAGE.

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

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

#### **ENGINE OIL**

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

#### **CYLINDERS**

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

#### OTHER

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

**IMPORTANT**: NEVER COVER TRACTOR WHILE ENGINE AND EXHAUST AREAS ARE STILL WARM.

## TROUBLESHOOTING POINTS

| PROBLEM                             | CAUSE  | CORRECTION  |
|-------------------------------------|--|---|
| Will not start                      | <ol> <li>Out of fuel.</li> <li>Engine not "CHOKED" properly.</li> <li>Engine flooded.</li> <li>Bad spark plug.</li> <li>Dirty air filter.</li> <li>Dirty fuel filter.</li> <li>Water in fuel.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</li> </ol>  | <ol> <li>Fill fuel tank.</li> <li>See "TO START ENGINE" in Operation section.</li> <li>Wait several minutes before attempting to start.</li> <li>Replace spark plug.</li> <li>Clean/replace air filter.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>Check all wiring.</li> <li>Contact an authorized service center/department.</li> <li>Contact an authorized service center/department.</li> </ol>   |
| Hard to start                       | <ol> <li>Dirty air filter.</li> <li>Bad spark plug.</li> <li>Weak or dead battery.</li> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</li> </ol>   | <ol> <li>Clean/replace air filter.</li> <li>Replace spark plug.</li> <li>Recharge or replace battery.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with fresh gasoline.</li> <li>Check all wiring.</li> <li>Contact an authorized service center/department.</li> <li>Contact an authorized service center/department.</li> </ol>  |
| Engine will not turn over           | <ol> <li>Clutch/brake pedal not depressed.</li> <li>Attachment clutch is engaged.</li> <li>Weak or dead battery.</li> <li>Blown fuse.</li> <li>Corroded battery terminals.</li> <li>Loose or damaged wiring.</li> <li>Faulty ignition switch.</li> <li>Faulty solenoid or starter.</li> <li>Faulty operator presence switch(es).</li> </ol>  | <ol> <li>Depress clutch/brake pedal.</li> <li>Disengage attachment clutch.</li> <li>Recharge or replace battery.</li> <li>Replace fuse.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace ignition switch.</li> <li>Check/replace solenoid or starter.</li> <li>Contact an authorized service center/department.</li> </ol>   |
| Engine clicks but will not<br>start | Weak or dead battery.     Corroded battery terminals.     Loose or damaged wiring.     Faulty solenoid or starter.   | Recharge or replace battery.     Clean battery terminals.     Check all wiring.     Check/replace solenoid or starter.  |
| Loss of power                       | <ol> <li>Cutting too much grass/too fast.</li> <li>Throttle in "CHOKE" position.</li> <li>Build-up of grass, leaves and trash under mower.</li> <li>Dirty air filter.</li> <li>Low oil level/dirty oil.</li> <li>Faulty spark plug.</li> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> <li>Water in fuel.</li> <li>Spark plug wire loose.</li> <li>Dirty engine air screen/fins.</li> <li>Dirty/clogged muffler.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</li> </ol> | <ol> <li>Set in "Higher Cut" position/reduce speed.</li> <li>Adjust throttle control.</li> <li>Clean underside of mower housing.</li> <li>Clean/replace air filter.</li> <li>Check oil level/change oil.</li> <li>Clean and regap or change spark plug.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with fresh gasoline.</li> <li>Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>Connect and tighten spark plug wire.</li> <li>Clean engine air screen/fins.</li> <li>Clean/replace muffler.</li> <li>Check all wiring.</li> <li>Contact an authorized service center/department.</li> <li>Contact an authorized service center/department.</li> </ol> |
| Excessive vibration                 | Worn, bent or loose blade.     Bent blade mandrel.     Loose/damaged part(s).  | Replace blade. Tighten blade bolt.     Replace blade mandrel.     Tighten loose part(s). Replace damaged parts.   |

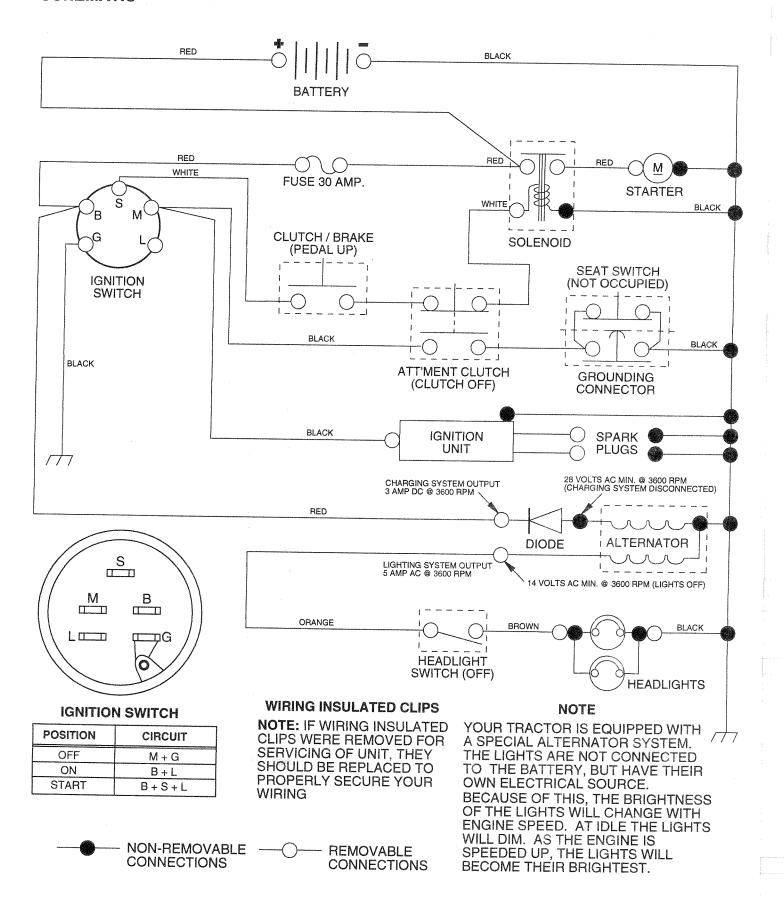
## TROUBLESHOOTING POINTS

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

## **SERVICE NOTES**

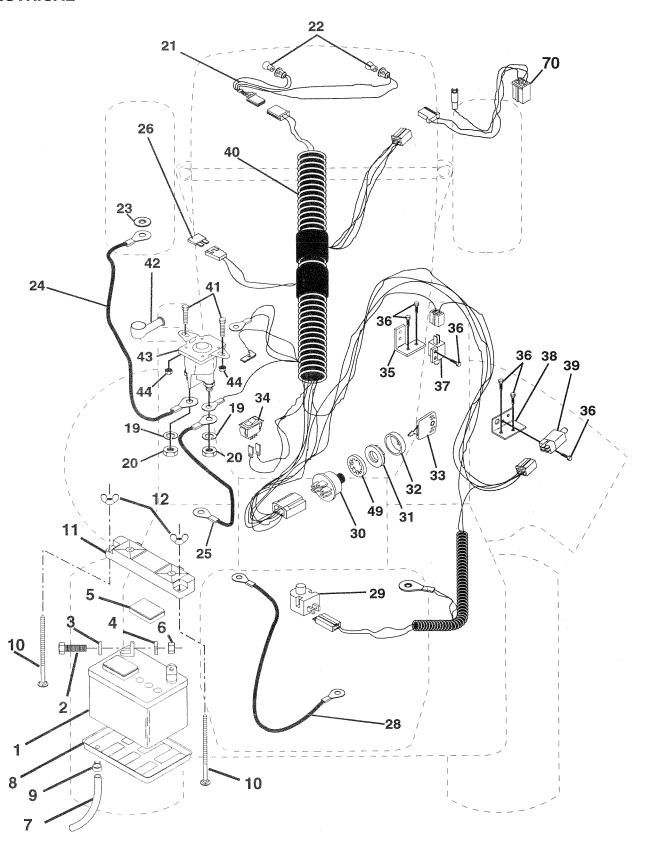
### 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

#### SCHEMATIC



### 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

#### ELECTRICAL



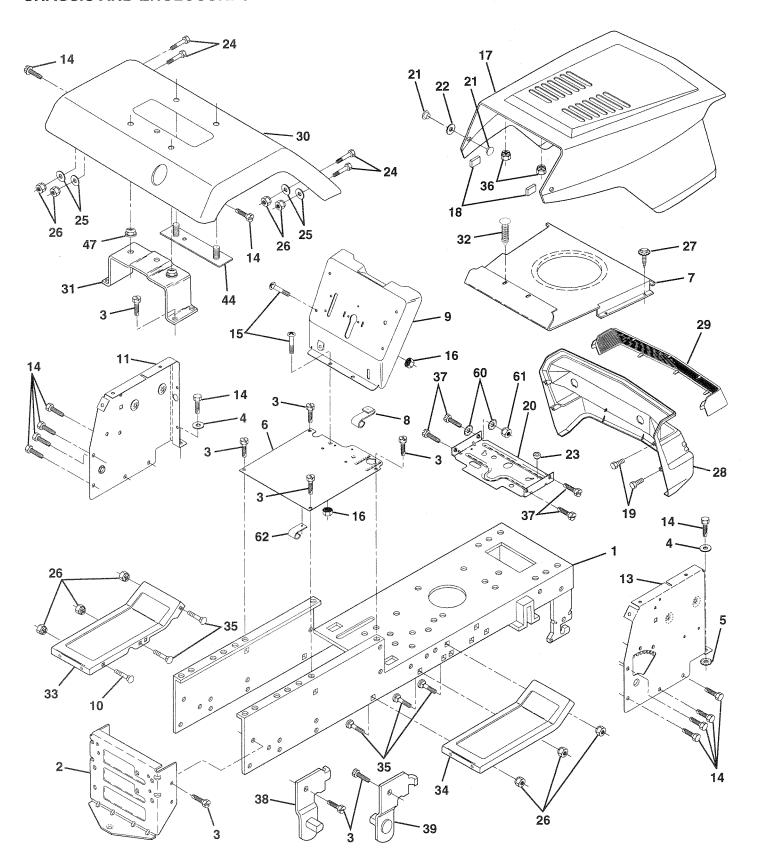
## 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

### **ELECTRICAL**

|  | EY PA   | ART<br>D. | DESCRIPTION  |
|--|---|-----------|--|
| 1 2 3 4 5 6 7 8 9 10 11 20 22 22 22 26 8 29 31 23 34 35 6 37 8 39 40 41 42 43 44 49 70 <b>NOTE</b> | 102476 123198 100904 733504 136850 4152J 111504 108423 4206J 121305 144921 140400 141226 140403 110712 108236 170210 104445 140336 109553 140414 7111044 131563 138406 7364040 1115100 140413 | 412       | Battery 12 Volt 30 Amp Bolt Hex Hd 1/4-20unc X 3/4 Washer 9/32 X 5/8 X 16 Ga Washer Lock Hvy Helical 1/4 Caps Battery 20/25/30 AMP Nut Fin Hex 1/4-20 Unc Tube Plastic 46" Tray Battery Clamp Hose Olive Bolt Carriage 1/4-20 x 7-1/2 Guard Terminal Nut Plastic Locking Wing 1/4-20 Washer Lock 1/4 Nut Jam Hex 1/4-20 Unc Harness Asm Light W/4152J Bulb Light #1156 Washer Lock Internal Tooth 1/4 Cable Battery 6 Ga 16"red Cable Battery 6 Ga 22"red use 30 AMP Auto Green Cable Ground 6 Ga 12" black witch Plunger Nc Gray witch Ign 3 ut Ignition over Switch Ignition ey Ign witch Light Blk Blk Red racket Switch Clutch crew Tap Hex #10-24unc X 1/2 witch Intlk Clutch Gry 2 Term racket Switch Interlock witch Intlk Clutch Gry 4 Term arness Ign olt Blk Fin Hex 1/4-20 x 1/2 over Terminal Red olenoid ut Keps Hex 1/4-20 Unc asher Lock Internal Tooth 5/8 arness Eng Briggs/Tec Dual dimensions give in U.S. inches mm. |

### 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

#### **CHASSIS AND ENCLOSURES**



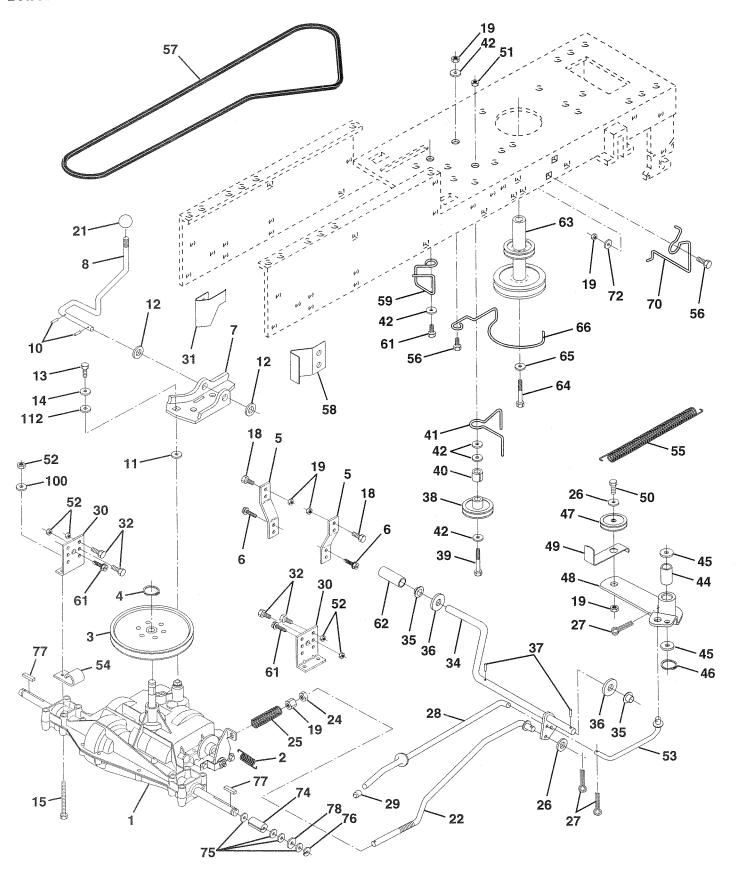
# 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582 CHASSIS AND ENCLOSURES

| KEY<br>NO.   | PART<br>NO.   | DESCRIPTION   |
|--|---|---|
| NO. 1234567890112314567890112322222222223333333333333456789447 | NO.  140341 140356 17490612 STD551025 11050600 140290X015 142844 126471X 140637X014 STD533710 135464 11030400 126276X 17490608 74180512 STD541431 137386X417 126938X 17521312 140281 122933X 124479X 124028X STD541437 17030808 140135 124029X 121642X417 137113 133835 105465X417 105464X417 STD533707 108067X 17490512 139886 139887 140675 105531X | Chasis Weldment 11Ga. Drawbar, Stretch Screw Thdrol 3/8-16x3/4 Ty-tt Washer 13/32 X 3/4 X 16 Ga Washer Lock Ext Tooth 3/8 Saddle Silkscreen 5 Sp Shield Heat Hood GT Clip Insulator .406 Mt. Hole Dash Silkscreened Bolt Carriage 3/8-16unc X 1 Panel Pnt Dash Lh Washer Lock 1/4 Int/Ext Panel Dash Rh Weldment Scre wThdrol 3/8-16x1/2 Ty-tt Screw Mach Trhd 5/16-18uncx3/4 Nut Keps 5/16-18 Unc Hood Asm Pnt Weldment GT Slope Hood Bumpers Screw Sltd Hex Hd w/Pl Washer Support Battery Riet Ratchet Nylon Washer Nylon Blk 28 x 75 x 19 Bushing Snap Nyl Blk Fuel Line Bolt Fin Hex 3/8-16unc X 1 Gr. 5 Washer 13/32 X 13/16 X 12 Ga Nut Crownlock 3/8-16 Unc Screw Spiderloc Hex Hd. #8 x 1/2 AB Grille Grey Lens Highlight Bar Clear Fender Pnt Bracket Pnt Fender Fastener Christmas Tree Footrest Pnt LH (Silver) Footrest Pnt RH (Silver) Bolt Rdhd Sht Sqnk 3/8-16 X3/4 Nut Pal Screw Thdrol 5/16-18 x 3/4 Bracket, Asm. Pivot, Lh., Mower Rear Bracket, Asm. Pivot, Rh., Mower Rear Strap Asm. Fender Nut Push Nylon |
| 60<br>61<br>62   | 11050500<br>73680500<br>141606  | Washer Lock Ext. Tooth 5/16<br>Nut Crownlock 5/16-18 UNC<br>Clip Wire   |

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

## 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

#### DRIVE



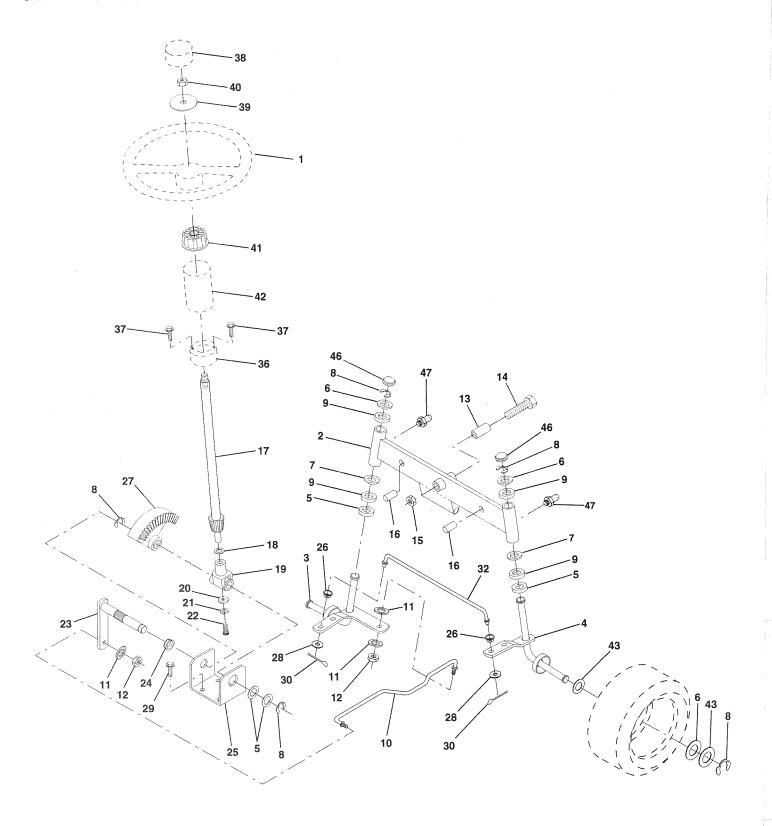
## 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

#### DRIVE

| KEY<br>NO.   | PART<br>NO.  | DESCRIPTION  | KE'<br>NO.          |  | DESCRIPTION   |
|--|--|--|---------------------|--|---|
| 5<br>6<br>7<br>8<br>10<br>11<br>12<br>13<br>14<br>15<br>18<br>19<br>21<br>22<br>24<br>25<br>26<br>27<br>28<br>29<br>31<br>32<br>31<br>31<br>31<br>31<br>31<br>31<br>31<br>31<br>31<br>31<br>31<br>31<br>31 | 142608<br>110422X<br>123666X<br>12000028<br>121520X<br>17490512<br>130802<br>131679<br>76020416<br>105701X<br>19151216<br>74550412<br>10040400<br>74780544<br>74780616<br>73800600<br>106933X<br>130804<br>73350600<br>106888X<br>19131316<br>76020412<br>140448<br>124236X<br>130807<br>127275X<br>74760512<br>122424X<br>120183X<br>19211616<br>1572H<br>123674X<br>74760644<br>1470J<br>109070X | Transaxle 5sp Std D4360-82 Spring Return Brake T/a Zinc Pulley Transaxle 18"tires Ring Retainer # 5100-62 Strap Torque 30 Degrees Screw Thdrol 5/16-18 X 3/4 TYT Plate Rod Shift T/a Rod Shifter Blk (Dana) Pin Cotter 1/8 X 1 Cad Washer Plate Shf 388 Sq Hole Washer 15/32 X 3/4 X 16 Ga Bolt 1/4-28 UNF Gr. 8 W/Patch Washer Lock Hvy Helical 1/4 Bolt Fin Hex 5/16-18 x 2-3/4 Bolt Fin Hex 3/8-16unc X 1 Gr. 5 Nut lock Hex w/lns 3/8-16 Unc Knob Rd 1/2-13 Plstc Thds Blk Rod Brake LT Nut Hex Jam 3/8-16 Unc Spring Rod Brake 2 00 Zinc Washer 13/32 X 13/16 X 16 Ga Pin Cotter 1/8 X 3/4 Cad Rod Brake Parking LT Cap Brake Parking Red Bracket Transmission Keeper Belt LH LT 14 Ga Bolt Fin Hex 5/16-18 x 3/4 Shaft Asm Pedal Foot 1 930 Bearing Nylon Blk 629 Id Washer 21/32 X 1 X 16 Ga Pin Roll 3/16 X 1" Pulley Idler Flat Bolt Fin Hex 3/8-16unc X 2-3/4 Spacer Split 395 X 59 Bzp Keeper Belt Retainer | 112<br><b>NOT</b> I | 19131312<br>105706X<br>110812X<br>12000039<br>127783<br>123789X<br>123205X<br>74760624<br>73680600<br>73680500<br>105710X<br>2751R<br>105709X<br>74760620<br>130801<br>127274X<br>140312<br>17490612<br>8883R<br>140186<br>71170764<br>10040700<br>129921<br>134683<br>19132012<br>109502X<br>121749X<br>12000001<br>123583X<br>121748X<br>19111216<br>19091210<br>E: All composite of the composite of | Bearing Nyl 503 X 628 X 1 25 Washer Hardened Ring Klip #t5304-50 Pulley Idler V Groove Plastic Bellcrank Asm Clutch Retainer Belt Style Spring Bolt Hex Hd 3/8-16unc X 1-1/2 Nut Crownlock 3/8-16 Unc Nut Crownlock 5/16-18 unc Link Clutch 7 66 Clip Line Fuel Spring Return Clutch 6 75 Bolt Fin Hex 3/8-26 UNC x 1-1/4 V-Belt Ground Drive 95 25 Keeper Belt RH LT Pnt/zinc 16g Keeper Belt Chassis Span Ctr Screw Thdrol 3/8-16x3/4 Ty-tt Cover Pedal Blk Round Engine Pulley LT/YT Bolt Hex 7/16-20x4 Gr 5 Washer Lock Hvy Hlcl Spr 7/16 Keeper Belt Engine LH LT Guide Belt Mower Drive RH Washer 13/32 X 1-1/4 X 12 Ga Spacer Split 80x1 94 Cad/zinc Washer 25/32 X 1 1/4 X 16 Ga E-ring #5133-75 Key Square 2 0 X 1845/ 1865 Washer 25/32 X 1-5/8 X 16 Ga Washer 11/32 x 3/4 x 16 Ga. Washer 9/32 X 3/4 X 10 Ga |

### 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

#### STEERING ASSEMBLY



# 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

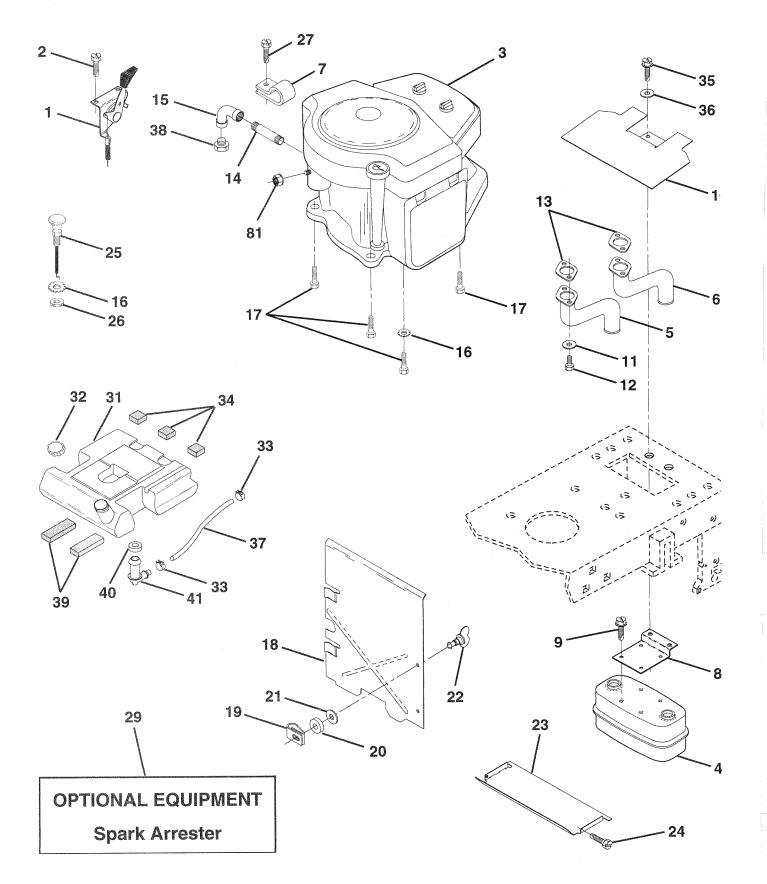
#### STEERING ASSEMBLY

| KE<br>NC                                      |  | DESCRIPTION   |
|---|--|---|
| 123456789011234567890122222222222333334423447 | 139768<br>142033<br>135227<br>135228<br>6266H<br>121748X<br>19272016<br>12000029<br>3366R<br>130468<br>10040600<br>73610600<br>110438X<br>74011056<br>73901000<br>132624<br>132614<br>57079<br>124035X<br>126684X<br>10040400<br>71070410<br>127501<br>109816X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>124036X<br>1240 | Wheel Steering Opp Sears Blk Axle Asm Fr LT W/gzks 38/42 Spindle Asm LH Spindle Asm RH Bearing Race Thrust Harden Washer 25/32 X 1-5/8 X 16 Ga Washer 27/32 X 1-1/4 X 16 Ga Ring Klip #t5304-75 Bearing Col Strg Blk Link Drag Sol Ball Jt 20 064 Washer Lock Hvy Hlcl Spr 3/8 Nut Fin Hex 3/8-24 Unf Spacer Bearing Axle Front Bolt Hex 5/8-11 Unc X 3-1/2 Nut Lock Flange 5/8-11 Unc Pin Axle 5/8 X 1 55/1 54 Lg Shaft Asm Strg 5/8 X 15 19 LT Washer Thrust 515x 750x 033 Support Shaft Washer Shim 1/4 X 5/8 X 062 Washer Lock Hvy Helical 1/4 Screw Hex Socket 1/4-20 X 5/8 Shaft Asm Pittman Nyliner Snap In Bracket Steering Bushing Link Drag Blk LR Gear Sector Washer 13/32 X 7/8 X 16 Ga Screw Thdrol 3/8-16x3/4 Ty-tt Pin Cotter 1/8 X 3/4 Cad Rod Tie Wire Form 19 75 Mech Bushing Strg 5/8 Id Dash Screw Slftp #10-16 X 1/2 Ty-b Cap Wheel Steer Opp Sears Blk Washer 13/32 X 2-3/8 X 8 Ga Nut Lock Center 3/8-24unf Adaptor Wheel Strg 640/ 635id Boot Steering Shaft Washer 25/32 X 1 1/4 X 16 Ga Cap Spindle Fr Top Blk Fitting Grease |

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

# 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

#### **ENGINE**



# 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

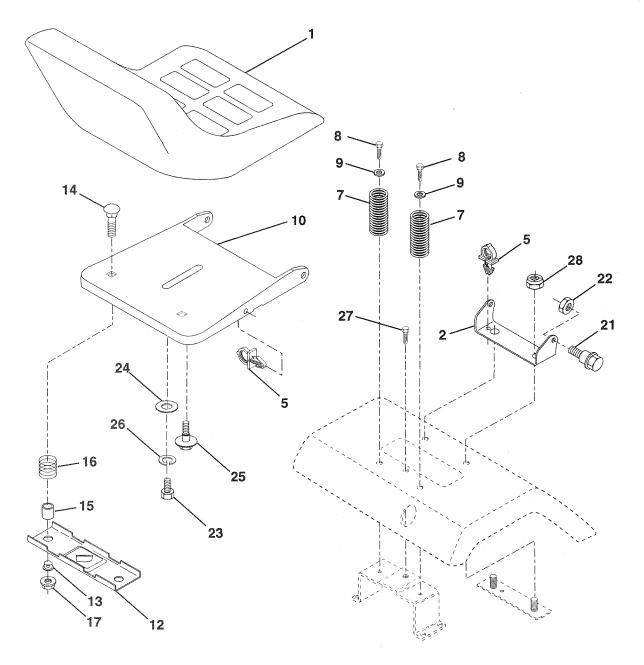
#### **ENGINE**

| NO<br>KE   |  | DESCRIPTION  |
|--|--|--|
| 1<br>2<br>3  | 132755<br>17720410<br>145319   | Control Throt Rh Blk Pdl 36 60<br>Screw Hex Thd Cut 1/4-20x5/8 T<br>Engine B&S 18hp, Model No.<br>422707, Type No. 1529-01   |
| 45<br>67<br>89<br>10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>21<br>22<br>22<br>24<br>25<br>27 | 137978<br>144069<br>144068<br>138129<br>122439X<br>17190408<br>143600<br>100040400<br>74780412<br>8545J<br>13280336<br>13200300<br>11050600<br>17490624<br>137358<br>105839X<br>105839X<br>105838X<br>110436X<br>123650X<br>128953<br>17021008<br>138127<br>73610600 | Muffler Exhaust Exhaust Asm. Left Exhaust Asm. Right Clamp Tube Double Engine Bracket Muffler Mounting Screw Hex Whs Thdcut 1/4-20 Unc Heat Shield Lt Washer Lock Hvy. Helical 1/4 Bolt Fin Hex 1/4-20 x 3/4 Gasket Muffler Nipple Pipe 4-1/2" Elbow Std 90 Degree 3/8-18 Npt Washer Lock Ext Tooth 3/8 Screw Thdrol 3/8-16x1-1/2 Tytt Heat Shield P t Gt/Slope Receptacle 1/4 turn Retainer 1/4 turn Bushing Snap Split Blk Stud 1/4 turn Shield Pnt Heat Browning Grass Screw Tap Hex #10-24 x 1/2 Control Choke Nut Hex 3/8-24 Unf Scre, self-tapping #10-24 x 1/2 Type TT-B (Order From Engine |
| 29<br>31<br>32<br>33<br>34<br>35<br>36<br>37<br>38   | 137180<br>141069<br>123549X<br>123487X<br>106082X<br>17490512<br>19132012<br>5277J   | Manufacturer) Arrestor Spark Tank Fuel 3 50 Rear Cap Asm Fuel W/sym Vented Clamp Hose Blk Strip Foam Screw Hexwsh Thdrol 5/16-18 x 3/4 Washer 13/32 x 1-1/4 x 12 Ga. Line Fuel   |
| 39<br>40<br>41<br>81   | 109227X<br>3645J<br>139277<br>73510400   | Plug Oil Drain (Order From Engine<br>Manufacturer)<br>Pad Spacer<br>Bushing<br>Stem Tank Fuel<br>Nut Keps Hex 1/4-20 Unc   |

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

#### 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

#### **SEAT ASSEMBLY**



| KEY<br>NO. | PART<br>NO. | DESCRIPTION                       | KEY<br>NO. | PART<br>NO. | DESCRIPTION                    |
|------------|-------------|-----------------------------------|------------|-------------|--------------------------------|
| 1          | 127437      | Seat                              | 17         | 123976X     | Nut Lock 1/4 Lge Flg Gr 5 Zinc |
| 2          | 140551      | Bracket Pivot Seat                | 21         | 139888      | Bolt Shoulder 5/16-18          |
| 5          | 145006      | Clip Push-In                      | 22         | 73800500    | Nut Lock Hex w/Insert 5/16-18  |
| 7          | 124181X     | Spring Seat Cprsn 2 250 Blk Zi    | 23         | 74780814    | Bolt Fin Hex 1/2-13 X 7/8 Gr 5 |
| 8          | 17490508    | Screw Thdrol 5/16 -18 x 1/2 Ty-tt | 24         | 19171912    | Washer 17/32 X 1-3/16 X 12 Ga  |
| 9          | 19131614    | Washer 13/32 X 1 X 14 Ga          | 25         | 127018X     | Bolt Shoulder 5/16-18 X 62     |
| 10         | 140552      | Pan Seat                          | 26         | 10040800    | Washer Lock Hvy Hlcl Spr 1/2   |
| 12         | 121246X     | Bracket Mounting Switch           | 27         | 17490608    | Screw Thdrol 3/8-16 x 1/2      |
| 13         | 121248X     | Bushing Snap Blk Nyl 50 ld        | 28         | 73680600    | Nut Crownlock 3/8-16 Unc       |
| 14         | 72050411    | Bolt Rohd Sht Nk 1/4-20x1-3/8     |            |             |                                |

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

Spacer Split 28x 96 Yel Zinc Spring Cprsn 1 27 Blk Pnt

15

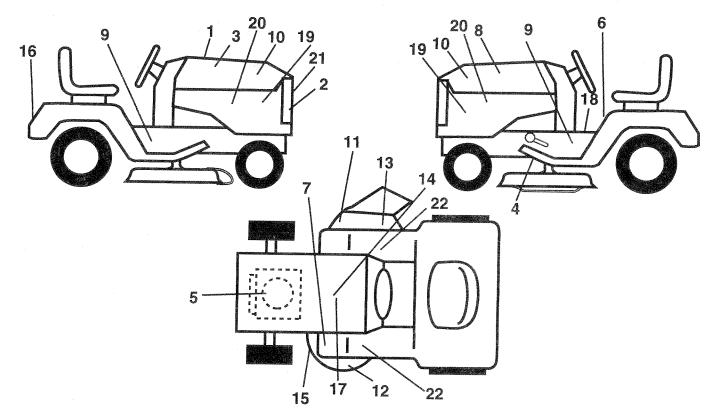
16

134300

121250X

# 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

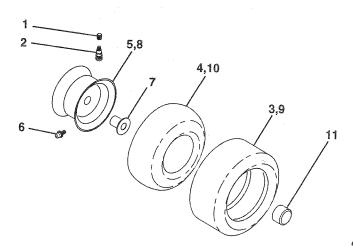
#### DECALS



| KEY | ' PART  | DESCRIPTION                    |
|-----|---------|--------------------------------|
| NO. | NO.     |                                |
| 1   | 138956  | Decal Instruction Dash Eng/fr  |
| 2   | 128261  | Decal Grille (Logo)            |
| 3   | 140560  | Decal Hood RH                  |
| 4   | 109199X | Decal V-Belt Dr Sch            |
| 5   | 135429  | Decal Engine                   |
| 6   | 133795  | Decal Caution Fender Eng/fr    |
| 7   | 101892X | Decal Clutch/brake Eng/fr      |
| 8   | 140561  | Decal Hood LH                  |
| 9   | 133139  | Decal Chassis 42" 5sp          |
| 10  | 142269  | Decal Hood Insert 18 HP TW Blk |
| 11  | 137259  | Decal Warning MULT-LANGUAGE    |
| 12  | 133179  | Decal Mower QC System          |
|     |         |                                |

| KEY<br>NO. |         | DESCRIPTION                      |
|------------|---------|----------------------------------|
| 13         | 133178  | Decal Mower 3 In One Convertible |
| 14         | 121549X | Decal Caution Battery Fr/ger     |
| 15         | 136832  | Decal V-Belt Sch                 |
| 16         | 125880X | Decal Fender Logo                |
| 17         | 138047  | Decal Battery Diehard Sears      |
| 18         | 140837  | Decal Brake Parking Saddle       |
| 19         | 142246  | Decal Panel Side B&S Black       |
| 20         | 138049  | Decal Panel Side Diehard Black   |
| 21         | 131265  | Decal Lightbox Grille Sloped     |
| 22         | 105466X | Decal Pad Footrest Rbr Sq        |
|            |         | Craftsman                        |
| 479 164    | 138311  | Decal Handle LFT Height Adj      |
|            | 146827  | Manual Owner's English           |
|            | 146828  | Manual Owner's French            |
|            |         |                                  |

#### WHEELS & TIRES

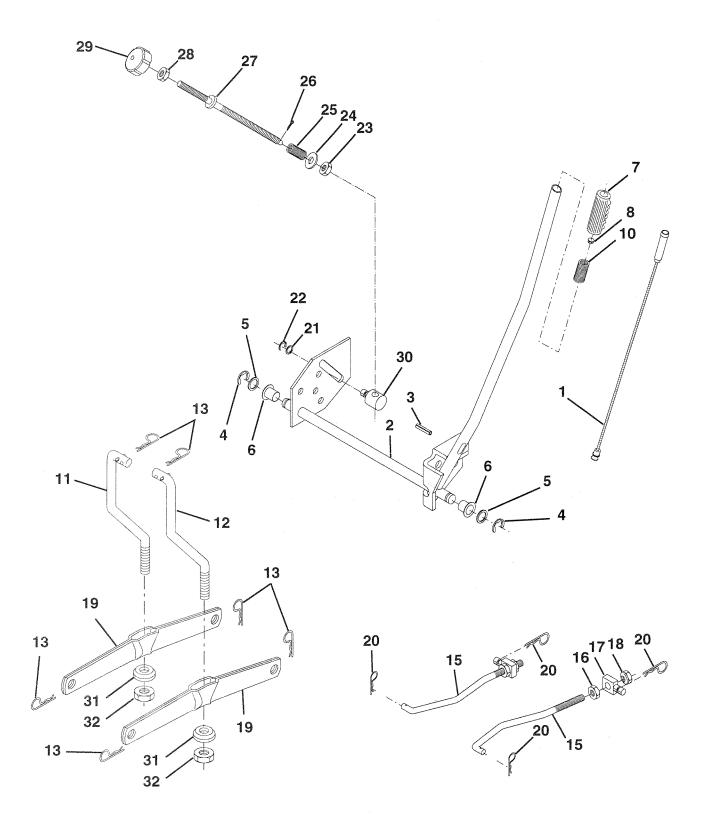


| KEY<br>NO.  | PART<br>NO.  | DESCRIPTION   |
|---|--|---|
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11 | 59192<br>65139<br>106222X<br>59904<br>106732X417<br>278H<br>9040H<br>106108X417<br>122082X<br>7152J<br>104757X | Cap Valve Tire Stem Valve Tire F Ts 15 X 6 0 - 6 Service Tube Front (Service Item Only) Rim Asm 6" (front Silver Service) Fitting Grease (Front Wheel Only) Bearing Flange (Front Wheel Only) Rim Asm 8" (rear Silver Service) Tire R Ts 20x10-8 C Service Tube Rear (Service Item Only) Cap Axle Blk 1 50 X 1 00 |

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

#### 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

#### LIFT LEVER



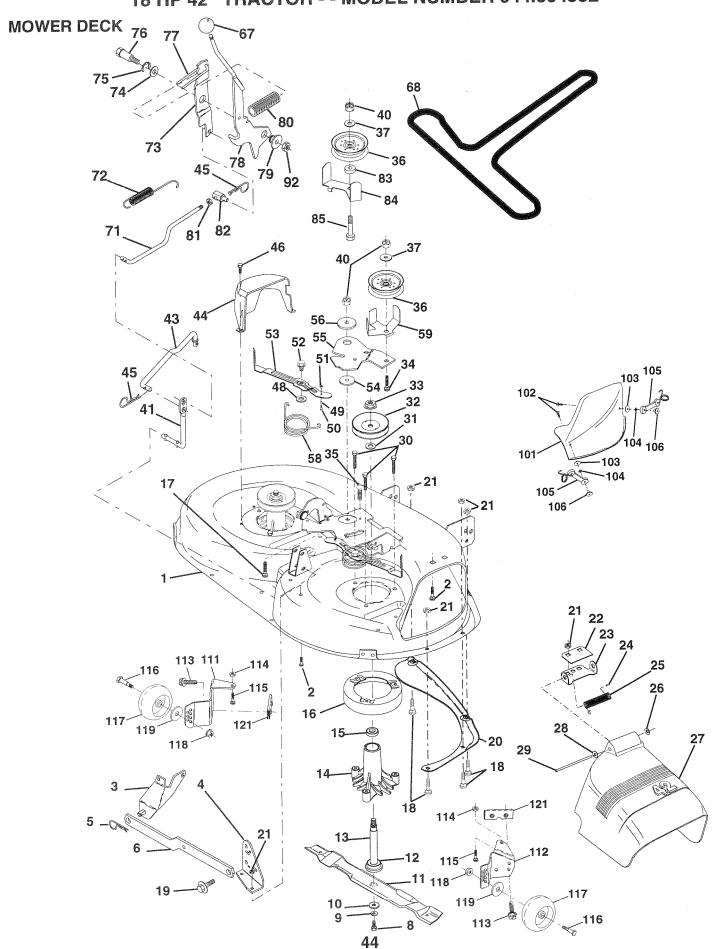
# 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

#### LIFT LEVER

| KEY<br>NO.   | PART<br>NO.   | DESCRIPTION   |
|--|---|---|
| 11<br>12<br>13<br>15<br>16<br>17<br>18<br>19<br>20<br>21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>31 | 4939M<br>127218<br>73350800<br>130171<br>73800800<br>139868 | Wire Asm Inner w/Plunger Shaft Asm Lift Pin Groove E Ring #5133-62 Washer 21/32 x 1 x 21 Ga. Bearing Nylon Grip Handle Fluted Blk Button Plunger Spring Cprsn Link Lift Lh Link Lift Rh Retainer Spring Link Front Nut Jam Hex 1/2 - 13 Unc Trunnion Blk Zinc Nut Lock w/Wsh 1/2 - 13 Unc Arm Suspension Rear Retainer Spring Washer 15/32 x 3/4 x 16 Ga. Ring Klip #T5304-37 Nut Special Washer 13/32 x 5/8 x 16 Ga. Spring 2-1/8" Pin Cotter 3/32 x 1/2 Rod Adj. Lift Nut Hex Jam 3/8-16 Knob Ing. 3/8-16 UNC Turnnion Dp Stop Dble Thds Plt Bearing Pvt. Lift Spherical Nut Crownlock 3/8-24 |

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

18 HP 42" TRACTOR - - MODEL NUMBER 944.604582



# 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582

#### **MOWER DECK**

STD541410 139888

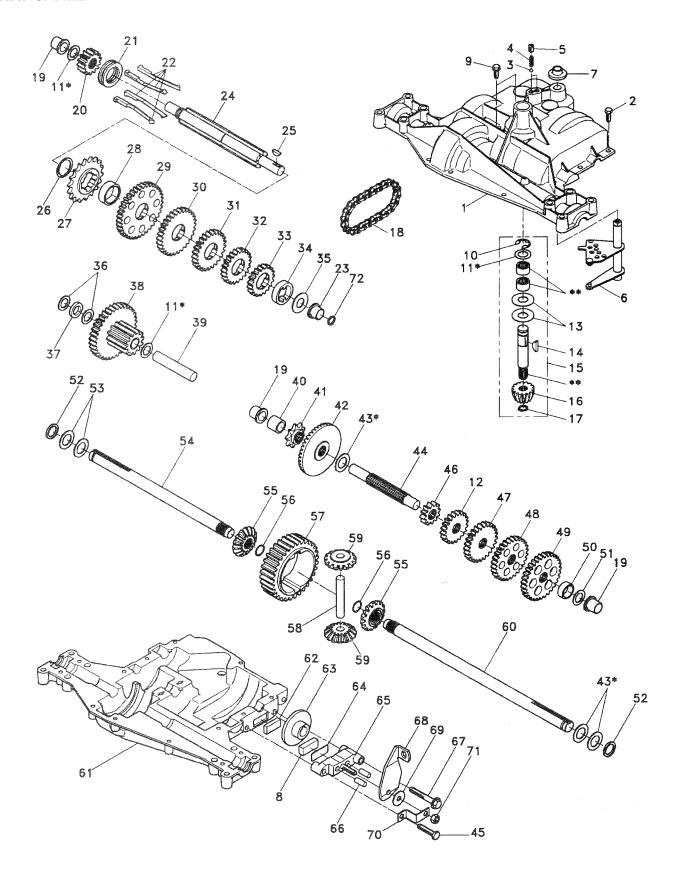
Bolt, Shoulder 5/16-18 UNC

| KE<br>NO       |   | DESCRIPTION   | KEY PART<br>NO. NO.  | DESCRIPTION                          |
|----------------|---|---|--|--------------------------------------|
| 12345678901123 | 144393<br>STD533107<br>138017<br>138440<br>STD624008<br>130832<br>73800500<br>850857<br>STD551137<br>140296<br>134149<br>129895<br>137645<br>128774<br>110485X<br>140329<br>72110610<br>72140505<br>132827<br>136888<br>STD541431<br>134753<br>131267<br>105304X<br>123713X<br>110452X<br>130968<br>19111016<br>131491<br>138776<br>129963<br>129861<br>137266<br>STD533717<br>133835<br>131494<br>STD5414437<br>133551<br>140083<br>140088<br>STD624003<br>137729<br>133944<br>133940<br>131340<br>STD541410 | Mower Deck Assembly, 42" Bolt Bracket Asm Fr. Sway Bar Bracket Asm Deck 42" Sway Bar Retainer Spring Arm, Suspension, Rear Locknut 5/16-18 Bolt 3/8-24 x 1.25 Grade 8 Washer, Lock Washer, Hardened Blade, Mulching, 42" Mower Deck Bearing, Ball Shaft Assembly, Mandrel, Vented (Includes Key Number 12) Housing, Mandrel, Vented Bearing, Ball, Mandrel Stripper, Vented Mower Deck Bolt, Carriage 3/8-16 x 1-1/4 Bolt, Carriage 3/8-16 x 1-1/4 Bolt, Shoulder Baffle, Vortex Nut Stiffener Bracket Bracket, Deflector Cap, Sleeve Spring, Torsion, Deflector Nut, Push Shield, Deflector Washer 11/32 x 5/8 x 16 Gauge Rod, Hinge Screw Thdrol. Hex Head Zinc Mower Washer, Spacer Pulley, Mandrel Nut, Toplock Flanged Bolt Fastner, Christmas Tree Pulley, Idler, Flat Washer 13/32 x 13/16 x 16 Gauge Nut Rod, Pivot, with Nibs Rod, Clutch, Secondary, with Nibs Guard, Mandrel, LH Retainer Screw Thd. Roll 1/4-20 x 5/8 Washer, Hardened Roller Assembly, Cam Follower Bolt, Shloulder #10-24 Grade 5 Locknut | 53 131845 54 133943 55 140084 56 122052X 58 140086 59 141043 67 106932X 68 144200 71 142427 72 131870 73 127847 74 121748X 75 12000029 76 128903 77 127845 78 140334 79 127498 80 128759 81 73350600 82 142028 83 120958X 84 144394 85 72140620 92 STD541437 101 136420 102 71161010 103 19061216 104 STD551110 105 130758 106 2029J 111 140353 112 132262 113 17490512 114 73510500 115 72110504 116 137644 117 133957 118 73930600 119 19121414 121 143723 130794 145411 | Mulcher Cover<br>Screw<br>Washer #10 |
| 52             | 139888  | Rolt Shoulder 5/16-19 LINC  | 1 inch = 2   | 5.4 mm                               |

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

# 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582 TRANSAXLE DANA - MODEL NUMBER 4360-82

#### **TRANSAXLE**

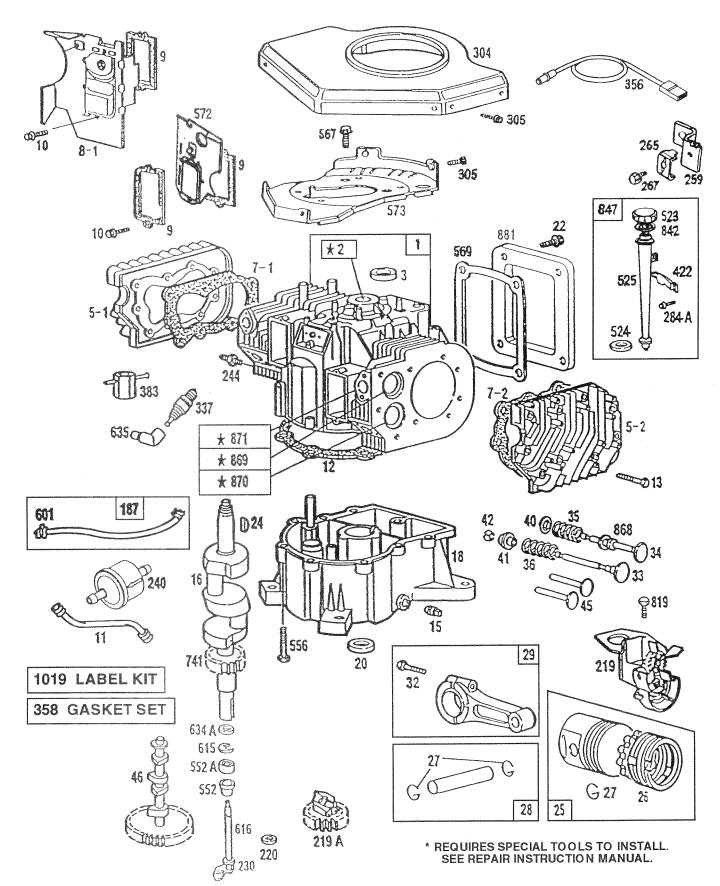


# 18 HP 42" TRACTOR - - MODEL NUMBER 944.604582 TRANSAXLE DANA - MODEL NUMBER 4360-82

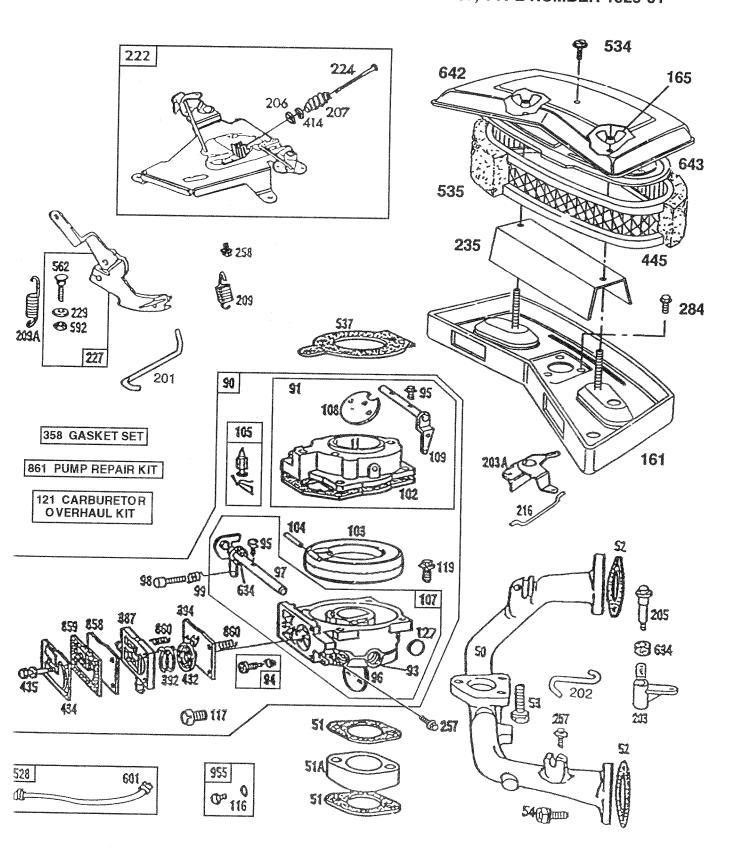
#### TRANSAXLE

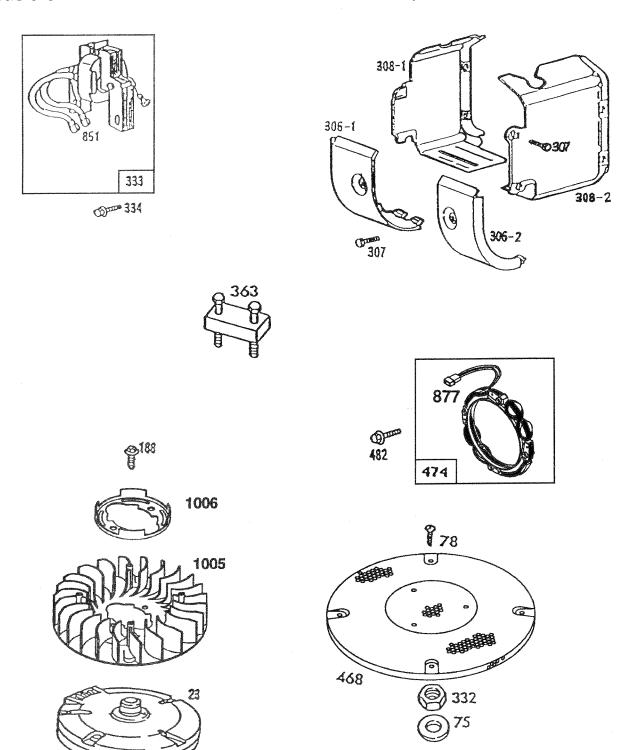
|                | PART<br>NO.                   | DESCRIPTION   |                | PART<br>NO.                          | DESCRIPTION  |
|----------------|-------------------------------|---|----------------|--------------------------------------|--|
| 1<br>2         | 142671<br>2274J               | Housing, Upper<br>Screw, Self-Tapping, Large<br>1/4-20 x .734                                   | 41<br>42<br>43 | 105928X<br>106605X                   | Sprocket, 9 Teeth<br>Gear, Bevel, 42 Teeth   |
| 3<br>4<br>5    | 134400<br>105904X<br>105905X  | Ball, Detent<br>Spring, Detent<br>Screw, Set  | 43<br>44<br>45 | 134394<br>120473X<br>106596X         | * Assembly, Kit, Shim .750 Shaft<br>Shaft, Drive<br>Screw, Self-Tapping, Large           |
| 6<br>7<br>8    | 134788<br>134399<br>120951X   | Kit, Shifter Assembly<br>Boot, Shifter<br>Puck, Friction  | 46<br>47<br>48 | 142678<br>106589X<br>120408X         | 5/16-18 x 1.44<br>Gear, Spur, 12 Teeth<br>Gear, Spur, 25 Teeth                           |
| 9<br>10<br>11  | 134791<br>142672              | Screw, Tapping w/Sealer<br>Ring, Retaining<br>* Assembly, Kit, Shim .625 Shaft                  | 49<br>50<br>51 | 105937X<br>105936X<br>2226J          | Gear, Spur, 28 Teeth<br>Gear, Spur, 31 Teeth<br>Spacer - 781 x 1.00 x .375               |
| 12<br>13<br>14 | 120407X<br>120415X<br>142674  | Gear, Spur, 20 Teeth<br>Washer, Plain .632 x 1.38 x .046<br>Key, Woodruff, #9                   | 52<br>53<br>54 | 134401<br>2264J<br>120474X           | Washer, Plain .632 x 1.00 x .060<br>Washer, Neoprene<br>Washer, Plain .758 x 1.25 x .031 |
| 15<br>16<br>17 | 106846X<br>106095X<br>105909X | Assembly, Kit, Input Shaft<br>Pinion, Bevel, 14 Teeth<br>Ring, Retaining                        | 55<br>56<br>57 | 120409X<br>105941X<br>110071X        | Axle, L.H.<br>Gear, Miter, 15 Teeth<br>Ring, Retaining                                   |
|                | 105910X<br>105911X<br>142675  | Chain, 24 Pitches<br>Bearing, Flange<br>Gear, Spur, 14 Teeth                                    | 58<br>59<br>60 | 120952X<br>106592X<br>120475X        | Gear, Spur, 32 Teeth<br>Shaft, Cross<br>Gear, Miter, 15 Teeth<br>Axle, R.H.              |
| 23             | 138246<br>138238<br>143051    | Collar, Clutch<br>Assembly, Kit, Clutch Keys<br>Bearing, Flange                                 | 61<br>62<br>63 | 142680<br>120961X<br>7294J           | Housing, Lower<br>Puck, Friction<br>Disc. Brake  |
| 26             | 143673<br>2244J<br>105916X    | Shaft, Intermediate<br>Key, Woodruff, #61<br>Ring, Retaining                                    | 64<br>65<br>66 | 108989X<br>120953X<br>120954X        | Spacer<br>Jaw, Brake<br>Pin, Dowel   |
| 28             | 120470X<br>110070X<br>142677  | Sprocket, 18 Teeth<br>Spacer<br>Gear, Spur, 37 Teeth  | 67<br>68       | 134799<br>138244                     | Screw, Self-Tapping, Large<br>5/16-18 x 2.25<br>Lever, Actuating                         |
| 31<br>32       | 120405X<br>108980X<br>120406X | Gear, Spur, 30 Teeth<br>Gear, Spur, 25 Teeth<br>Gear, Spur, 22 Teeth                            | 69<br>70<br>71 | 108996X<br>120956X<br>73810500       | Washer, Plain .321 x 1.00 x .055 Bracket, Anti-Rotation Locknut 5/16-24                  |
| 34<br>35       | 134796<br>134797<br>105925X   | Gear, Spur, 19 Teeth<br>Spacer 1.133 x 1.50 x .375<br>Washer, Plain .640 x 1.37 x .061          | 72<br>73       | 143045                               | Seal, Oil<br>Grease  |
| 37             | 108978X<br>110079X            | Washer, Plain .632 x 1.00 x .026<br>Spacer .630 x 1.00 x .169<br>Assembly, Gear, Combination of |                | Use in combinati<br>Order Key No. 19 | ions to maintain proper clearances   |
|                | 124639X                       | 12 Teeth and 35 Teeth<br>Shaft, Idler<br>Spacer .635 x .875 x .755                              |                | •                                    | dimensions given in U.S. inches  |

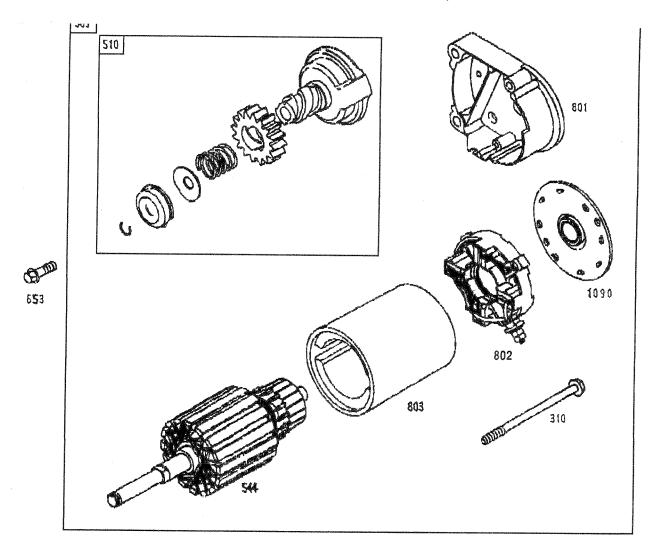
18 HP 42" TRACTOR - MODEL NUMBER 944.604582
BRIGGS & STRATTON ENGINE - MODEL NUMBER 422707, TYPE NUMBER 1529-01



18 HP 42" TRACTOR - MODEL NUMBER 944.604582
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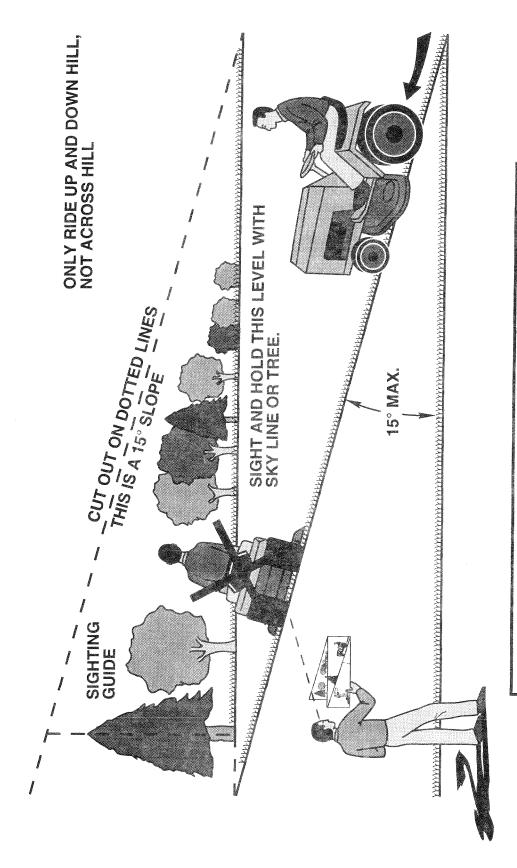




| KEY<br>NO.               | PART<br>NO.                               | DESCRIPTION  | KEY                      | 270884<br>PART<br>NO.                | * Gasket, Intake Manifold Mounting  DESCRIPTION   |
|--------------------------|---|--|--------------------------|--------------------------------------|---|
| 1<br>2<br>3              | 497074<br>491756<br>391086                | Cylinder Assembly<br>Bearing, Cylinder<br>* Seal, Oil  | 53<br>54                 | 93970<br>93208                       | Screw, Sems, Carburetor Mounting Screw, Sems,   |
| 5-1<br>5-2<br>7-1<br>7-2 | 493457<br>493458<br>271867<br>271868      | Head, Cylinder Number 1 Head, Cylinder Number 2 * Gasket, Cylinder Head Number 1 * Gasket, Cylinder Head Number 2                          | 75<br>78<br>90<br>91     | 222511<br>94834<br>495181<br>495035  | Intake Manifold Mounting<br>Washer, Spring<br>Screw, Sems<br>Carburetor Assembly<br>Body Assembly, Upper Carburetor |
| 8-1<br>8-2               | 495754<br>222892                          | Breather Assembly Number 1<br>Cover, Breather, Cylinder Number 2<br>(Use with Key Number 572,<br>Air Baffle with Mounting Holes)           | 93<br>94<br>95           | 231209<br>491538<br>93499            | Bushing, Throttle Shaft  ** Valve Assembly, Carburetor Idle Screw, Sems, Throttle and Choke Valve Mounting          |
| 9<br>10<br>11            | 27803<br>94830<br>280225                  | * Gasket, Valve Cover<br>Screw, Sems<br>Tube, Breather   | 96<br>97                 | 221939<br>392672                     | Valve, Throttle<br>Shaft and Lever, Throttle  |
| 12                       | 271703<br>271188<br>271189                | * Gasket, Crankcase Cover, 1/64"  * Gasket, Crankcase Cover, .005"  * Gasket, Crankcase Cover, .009"                                       |                          | 91920<br>26157<br>271607             | Screw, Machine, Fillister Head<br>Spring, Throttle Adjustment<br>** Gasket, Carburetor Body<br>Float, Carburetor    |
| 13<br>15<br>16           | 94565<br>94239<br>394028                  | Screw, Cylinder Head<br>Plug, Oil Drain<br>Crankshaft<br>Key, Timing Gear  | 104<br>105               | 298514<br>230896<br>394683<br>491543 | ** Pin, Float Hinge  ** Valve, Fuel Inlet  Body, Lower Carburetor   |
| 18<br>20<br>22           | 94196<br>493304<br>291675<br>94724        | Base Assembly, Crankcase  * Seal, Oil Screw, Sems,   | 108<br>109               | 223534<br>392673<br>280474           | Valve, Choke<br>Shaft and Lever, Choke<br>O-Ring  |
| 23                       | 491180                                    | Crankcase Cover Mounting<br>Flywheel and Ring Gear Assembly,<br>Magneto  | 119                      | 231338<br>94152<br>491539            | Jet, Needle Valve<br>Screw, Sems, Hex Head<br>Carburetor Overhaul Kit   |
| 24<br>25                 | 222698<br>394955<br>394956<br>394957      | Key, Flywheel Piston Assembly, Standard Size Piston Assembly, .010" Oversize Piston Assembly, .020" Oversize                               | 127<br>161<br>165        | 223472<br>496599<br>94289<br>299146  | Plug, Welch<br>Body, Air Cleaner<br>Nut, Wing<br>Line, Fuel, 28" (Cut to Suit)                                      |
| 26                       | 394958<br>394959<br>394960<br>394961      | Pision Assembly, .030" Oversize<br>Ring Set, Piston, Standard Size<br>Ring Set, Piston, .010" Oversize<br>Ring Set, Piston, .020" Oversize | 201<br>202               | 93535<br>262683<br>262684<br>280997  | Screw, Hex Head<br>Link, Governor<br>Link, Throttle<br>Crank, Bell  |
| 27<br>28                 | 394962<br>260924<br>299691                | Ring Set, Piston, .030" Oversize<br>Lock, Piston Pin<br>Pin Assy., Piston, Standard Size   | 205<br>206               | 94298                                | Crank, Bell<br>Screw, Shoulder<br>Nut, Square<br>Spring, Compression  |
| 29                       | 391286<br>394306<br>397158                | Pin Assy., Piston .005" Oversize<br>Rod Assembly, Connecting<br>Rod Assembly, Connecting,<br>.020" Undersize Crankpin Bore                 | 207<br>209<br>209<br>216 | 262352<br>A 261563                   | Spring, Gomplession<br>Spring, Governor<br>Spring, Governor Idle<br>Link  |
| 32<br>33<br>34           | 94671<br>390420<br>261528                 | Screw, Connecting Rod<br>Valve, Exhaust<br>Valve, Intake<br>Uses: 393606 Seal Assembly and<br>Retainer (Key Number 868)                    | 219<br>219<br>220<br>222 | A 394348<br>222773                   | Oil Slinger Assembly<br>Gear, Governor<br>Washer, Thrust<br>Plate Assembly, Governor Control                        |
| 35<br>36                 | 65906<br>26828                            | Spring, Intake Valve Spring, Exhaust Valve   | *                        |                                      | Gasket Set (495868)   |
| 40<br>41<br>42           | 22159 <b>6</b><br>29226 <b>0</b><br>93630 | Retainer, Intake Valve<br>Rotocoil, Exhaust Valve<br>Retainer, Exhaust Valve Rotocoil(2)   | ***                      | Included in                          | Carburetor Overhaul Kit (491539)<br>both Gasket Set (495868), and<br>Overhaul Kit (491539)                          |
| 45<br>46<br>50<br>51     | 261368<br>213421<br>213290<br>271412      | Tappet, Valve<br>Gear, Cam<br>Manifold, Intake<br>*** Gasket, Carburetor & Intake Elbow  | ****                     | Included in                          | both Carburetor Overhaul Kit (491539),<br>Repair Kit (393397)   |
|                          | 281411                                    | Spacer, Carburetor   | NO                       | TE: All comp                         | ponent dimensions given in U.S. inches<br>25.4 mm   |

| KEY PART<br>NO. NO.             | DESCRIPTION                                      | KEY PART<br>NO. NO.      | DESCRIPTION  |
|---------------------------------|--|--------------------------|--|
| 224 94297                       | Screw, Pan Head                                  | 567 93777                | Screw, Hex Head,   |
| 227 491297                      | Lever Assembly, Governor                         |                          | Back Plate to Cylinder   |
| 229 62199                       | Washer   | 569 272645               | * Gasket, Crankcase  |
| 230 223882                      | Washer, Governor Crank, Inside                   | 572 224816               | Baffle, Air, Cylinder Number 2                                       |
| 235 224995                      | Shield, Spitback                                 | 573 491304               | Back Plate Assembly  |
| 240 493629                      | Filter, Fuel (In Fuel Line to Tank)              | 592 92278                | Nut, Hex   |
| 244 230318                      | Connector, Impulse Pump                          | 601 93053                | Clamp, Fuel Line   |
| 257 93897                       | Screw, Sems                                      | 615 94296                | Retainer, E-Ring   |
| 258 93949                       | Screw, Sems                                      | 616 491530               | Crank, Governor  |
| 259 223890                      | Bracket, Cable                                   | 634 271013               | ** Washer, Throtte Shaft   |
| 265 221535                      | Clamp, Casing                                    | 634A 491287              | * Seal, Governor Shaft   |
| 267 93496                       | Screw, Hex Head                                  | 635 66538                | Elbow, Spark Plug  |
| 284 94264<br>284 <b>A</b> 93469 | Screw, Hex Head                                  | 642 225008               | Cover, Air Cleaner   |
| 304 49558 <b>8</b>              | Screw, Hex Head                                  | 643 496700               | Cartridge Plate, Air Cleaner   |
| 305 94786                       | Housing, Blower<br>Screw, Sems                   | 653 93585                | Screw, Hex Head  |
| 306-1 222846                    | Shield, Cylinder                                 | 726 391362               | Gear, Flywheel Ring  |
| 306-2 223734                    |  | 741 262694               | (Includes Mounting Parts)  |
| 307 93343                       | Screw, Sems                                      | 801 394860               | Gear, Timing<br>Cap, Drive   |
| 308-1 224774                    | Cover, Air Guide                                 | 802 497605               | Cap, End   |
| 308-2 224775                    |  |                          | s: 497608 Brush Set  |
| 09 497287                       | Motor, Starter                                   | 803 497604               | Housing, Starter   |
| 110 497602                      | Bolt, Thru                                       | 819 94675                | Screw, Hex Head  |
| 132 230674                      | Nut, Hex   | 842 270920               | * Seal, Oil Filler Cap   |
| 33 394891                       | Armature Group,                                  | 847 495715               | Dipstick and Tube Assembly   |
|                                 | MAGNETRON® Ignition                              | 851 493880               | Terminal, Ignition Cable   |
| 34 93381                        | Screw, Sems, Armature Mounting                   | 858 270989 **            | ** Diaphragm. Damping  |
| 37 802592                       | Plug, Spark, Resistor (with                      | 859 271025 **            | ** Gasket. Carburetor Pump   |
| FC 40470F                       | Gasket)  | 860 261358 ***           | ** Spring (2)  |
| 56 494 <b>705</b><br>58 495868  | Wire, Ground                                     | 861 393397               | Repair Kit, Pump   |
| 63 19203                        | Gasket Set                                       | 868 393606               | Seal Assembly and Retainer   |
| 00 19200                        | Puller, Flywheel<br>(Optional Accessory)         | 869 261463               | Seat, Intake Valve, Standard   |
| 83 89838                        | Wrench, Spark Plug                               | 870 213316<br>871 261961 | Seat, Exhaust Valve, Standard  |
| 87 280197                       | Body, Pump                                       | 871 261961<br>231218     | Guide, Exhaust Valve   |
| 92 261395                       | **** Spring, Pump                                | 877 393456               | Guide, Intake Valve (See Manual)<br>Connector Assembly, Dual-Circuit |
| 94 272638                       | **** Diaphragm                                   | 881 495901               | Cover Plate, Crankcase   |
| 14 220680                       | Washer   |                          | (Includes Gasket - Key #569)   |
| 22 222875                       | Clamp, Oil Filler                                | 955 397882               | Plug and Seal, Solenoid  |
| 32 221377                       | **** Cap, Spring                                 | 1005 281053              | Fan, Flywheel  |
| 34 223688                       | Cover, Diaphragm                                 | 1006 224413              | Retainer, Fan  |
| 35 93829                        | Screw, Diaphragm Cover                           | 1019 491262              | Decal Kiť  |
| 45 394019                       | Cartridge, Air Cleaner                           | 1090 497607              | Retainer, Brush  |
| 68 224521                       | Screen, Flush Rotating                           |                          |  |
| 74 393474                       | Stator, Alternator, Dual-Circuit                 | RPM Settings:            | Low: 1100-1400, High: 3200-3400                                      |
| 82 93621<br>10 497606           | Screw, Sems                                      |                          |  |
| 23 494927                       | Drive, Starter                                   | * Included in G          | asket Set (495868)   |
| 24 280860                       | Cap and Dipstick, Oil Filler * Seal, Filler Tube | ** Included in Co        | ashuratar Orientaril ICA (404 F00)                                   |
| 25 495348                       | Tube, Oil Filler                                 | iriciadea iii Ca         | arburetor Overhaul Kit (491539)                                      |
| 28 393815                       | Impulse Line and Clamp Assembly                  | *** Included in he       | oth Gasket Set (495868), and   |
| 34 94823                        | Screw, Round Head                                |                          | verhaul Kit (491539)   |
| 35 271271                       | Element, Air Cleaner                             | January O                | 101100)  |
| 37 271411                       | *** Gasket, Air Cleaner                          | **** Included in bo      | oth Carburetor Overhaul Kit  |
| 44 497603                       | Armature, Starter                                |                          | (491539),  |
| 52 262332                       | Lower Bushing, Governor                          | and Pump Re              | pàir Kit (393397)  |
| 52A 262331                      | Upper Bushing, Governor                          | N. M. Alba, MODEL GAMES  |  |
| 56 93585<br>52 93853            | Screw, Sems, Hex Head                            | NOTE: All compon         | ent dimensions given in U.S. inches                                  |
| JE 30000                        | Bolt, Governor Lever                             | 1 inch = 25              | .4 mm  |

# SERVICE NOTES



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. 944.604582

# HOW TO ORDER REPAIR PARTS

# CRAFTSMAN®

# 18.0 HP ELECTRIC START 3 in One Convertible 42" MOWER 5 SPEED TRANSAXLE LAWN 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 Canada, Inc. Service Centre/Department and most Retail Stores.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PRODUCT TRACTOR
- MODEL NUMBER 944.604582
- ENGINE MODEL NUMBER 422707, TYPE1529-01
- 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.

Sears Canada, Inc., Toronto, Ontario M5B 2B8