

MODEL NO. 944.603130

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



# **CRAFTSMAN®**

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

- Assembly
- Operation
- Maintenance
- Service and Adjustments
- Repair Parts

# A 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.
- Data indicates that operators, age 60 years and above, are involved in a large percentage of riding mower-related injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.
- Keep machine free of grass, leaves or other debris build-up which can touch hot exhaust / engine parts and burn. Do not allow the mower deck to plow leaves or other debris which can cause build-up to occur. Clean any oil or fuel spillage before operating or storing the machine. Allow machine to cool before storage.

#### **II. SLOPE OPERATION**

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

#### DO:

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

#### DO NOT:

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

### III. CHILDREN

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

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

#### IV SERVICE

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

# SAFETY RULES SAFE OPERATION PRACTICES FOR RIDE-ON MOWERS











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



WARNING: Do not coast down a hill in neutral, you may lose control of the tractor.



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



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

# **TABLE OF CONTENTS**

SAFETY RULES	2-3
PRODUCT SPECIFICATIONS	4
WARRANTY	4
CUSTOMER RESPONSIBILITIES	4
ASSEMBLY	0-13
OPERATION	1/1
MAINTENANCE SCHEDULE	

MAINTENANCE	14-18
SERVICE AND ADJUSTMENTS	19-23
SERVICE AND ADJUST MICH 19	24
STORAGE	ne ne
TROUBLESHOOTING	
REPAIR PARTS - TRACTOR	28-43
REPAIR PARTS - ENGINE	44-49
PARTS ORDERING/SERVICE	BACK COVER
PARIS ORDERING/SERVICE	,,,,,,,,, DMOIL OUT

## PRODUCT SPECIFICATIONS

GASOLINE CAPACITY	1.25 GALLONS
AND TYPE:	UNLEADED REGULAR
OIL TYPE (API-SF-SJ):	SAE 30 (above 32°F)
	SAE 5W-30 (below 32°F)
	SYNTHETIC (below 0°F)
Your tractor was shipped from t	he factory with non-synthetic
SAE 10W-30 motor oil.	
OIL CAPACITY:	W/ FILTER 3.5 PINTS
	W/O FILTER 3.0 PINTS
SPARK PLUG:	CHAMPION RC12YC
(GAP: .030")	
GROUND SPEED (MPH):	FORWARD:
	1st 1.1
	2nd 2.2
	3rd 3.4
	4th 4.3
	5th 5.5
	REVERSE: 1.7
TIRE PRESSURE:	FRONT: 14 PSI
	REAR: 12 PSI
CHARGING SYSTEM:	3 AMPS BATTERY
	5 AMPS HEADLIGHTS
BATTERY:	AMP/HR: 28
	MIN. CCA: 230
	CASE SIZE: U1R
BLADE BOLT TORQUE:	27-35 FT. LBS.

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

Should you experience any problem you cannot easily remedy, please contact your nearest authorized service center/department. We have competent, well-trained technicians and the proper tools to service or repair this tractor.

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

## MAINTENANCE AGREEMENT

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

## **CUSTOMER RESPONSIBILITIES**

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

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

A spark arrester for the muffler is available through your nearest authorized service center/department (See REPAIR PARTS section of this manual).

# 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:

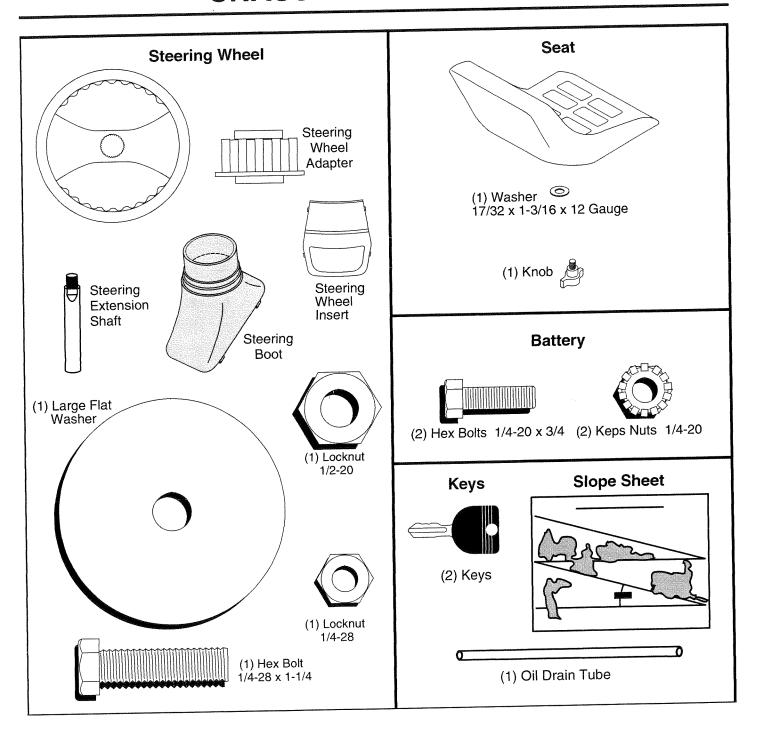
- 1. Pre-delivery set-up.
- 2. Tire replacement or repair caused by punctures from outside objects (such as nails, thorns, stumps, or glass).
- 3. Expendable items which become worn during normal use, such as blades, spark plug, air cleaners and belts.
- 4. Repairs necessary because of operator abuse 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

# **UNASSEMBLED PARTS**



# **ASSEMBLY**

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

## TOOLS REQUIRED FOR ASSEMBLY

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

(1) 3/4" wrench

Pliers

(2) 7/16" wrenches

Tire pressure gauge

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.
- Cut along dotted lines on all four panels of carton. Remove end panels and lay side panels flat.
- Check for any additional loose parts or cartons and remove.

# BEFORE REMOVING TRACTOR FROM SKID

## ATTACH STEERING WHEEL (See Fig. 1)

ASSEMBLE EXTENSION SHAFT AND BOOT

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

**IMPORTANT**: TIGHTEN BOLT AND NUT SECURELY TO 10-12 FT. LBS TORQUE.

 Place tabs of steering boot over tab slots in dash and push down to secure.

#### **INSTALL STEERING WHEEL**

- Position front wheels of the tractor so they are pointing straight forward.
- Remove steering wheel adapter from steering wheel and slide adapter onto steering shaft extension.
- Position steering wheel so cross bars are horizontal (left to right) and slide inside boot and onto adapter.
- Assemble large flat washer, 1/2 hex nut and tighten securely.
- Snap steering wheel insert into center of steering wheel.
- Remove protective materials from tractor hood and grill.

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

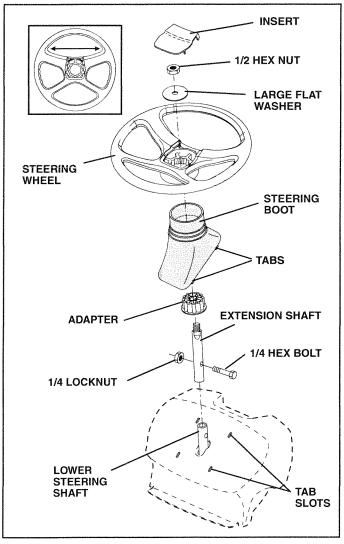


FIG. 1

## HOW TO SET UP YOUR TRACTOR

## **INSTALL SEAT (See Fig. 2)**

Adjust seat before tightening adjustment knob.

- Remove adjustment knob and flat washer securing seat to cardboard packing and set aside for assembly of seat to tractor.
- Pivot seat upward and remove from the cardboard packing. Remove the cardboard packing and discard.
- Place seat on seat pan so head of shoulder bolt is positioned over large slotted hole in pan.
- Push down on seat to engage shoulder bolt in slot and pull seat towards rear of tractor.
- Pivot seat and pan forward and assemble adjustment knob and flat washer loosely. Do not tighten.
- Lower seat into operating position and sit on seat.
- Slide seat until a comfortable position is reached which allows you to press clutch/brake pedal all the way down.

# **ASSEMBLY**

- Get off seat without moving its adjusted position.
- Raise seat and tighten adjustment knob securely.

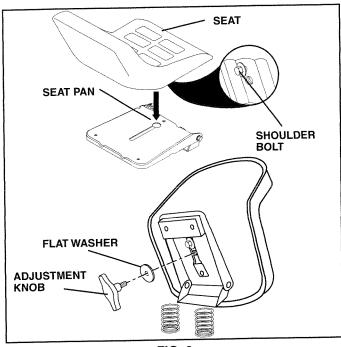


FIG. 2 **CONNECT BATTERY (See Figs. 3 and 4)** 



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

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

- Lift seat pan to raised position.
- Remove terminal protective caps and discard.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps.
- First connect RED battery cable to positive (+) terminal with hex bolt and keps nut as shown. Tighten securely. Slide terminal cover over terminal.
- Connect BLACK grounding cable to negative (-) terminal with remaining hex bolt and keps nut. Tighten securely.

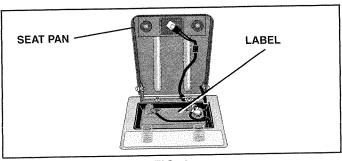


FIG. 3

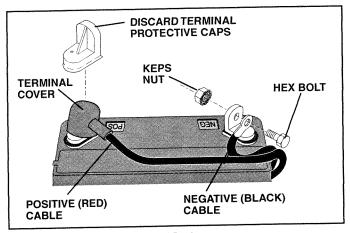


FIG. 4

NOTE: You may now roll or drive your tractor off the skid. Follow the appropriate instruction below to remove the tractor from the skid.

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

- Press lift lever plunger and raise attachment lift lever to its highest position.
- Release parking brake by depressing clutch/brake
- Place gearshift lever in neutral (N) position.
- Roll tractor forward off skid.
- Remove banding holding the deflector shield up against tractor.

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

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

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

Continue with the instructions that follow.

# **ASSEMBLY**

#### **CHECK TIRE PRESSURE**

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

 Reduce tire pressure to PSI shown in "PRODUCT SPECIFICATIONS" section of this manual.

### **CHECK DECK LEVELNESS**

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

# CHECK FOR PROPER POSITION OF ALL BELTS

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

### **CHECK BRAKE SYSTEM**

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

## ✓ CHECKLIST

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

#### PI FASE 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.

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



REVERSE





LIGHTS ON



**ENGINE ON** 













SLOW



IGNITION







**PARKING BRAKE** 







PARKING BRAKE PARKING BRAKE UNLOCKED



OVER TEMP LIGHT





OIL PRESSURE



BATTERY









LOCKED





MOWER LIFT



ATTACHMENT

ATTACHMENT CLUTCH ENGAGED CLUTCH DISENGAGED



DANGER, KEEP HANDS AND FEET AWAY



**KEEP AREA CLEAR** 

will result in death or serious injury.

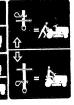






**SLOPE HAZARDS** (SEE SAFETY RULES SECTION)





FREE WHEEL (Automatic Models only)





WARNING indicates a hazard which, if not avoided, could result in death or serious injury.

DANGER indicates a hazard which, if not avoided,



CAUTION indicates a hazard which, if not avoided, might result in minor or moderate injury.

CAUTION when used without the alert symbol, indicates a situation that could result in damage to the tractor and/or engine.



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



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



Failure to follow instructions could result in serious injury or death. The safety alert symbol is used to identify safety information about hazards which can result in death, serious injury and/or property damage.

property damage.

### **KNOW YOUR TRACTOR**

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

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

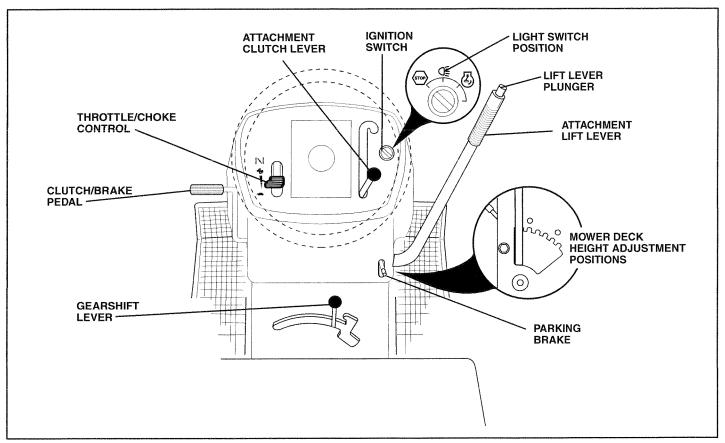


FIG. 5

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

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

**LIGHT SWITCH POSITION**: Turns the headlights on and off

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

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

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

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

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

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

**IGNITION SWITCH**: Used for starting and stopping the engine.



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

## HOW TO USE YOUR TRACTOR

# TO SET PARKING BRAKE (See Fig. 6)

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

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

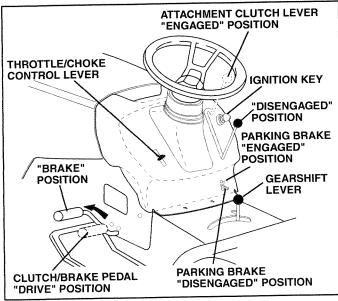


FIG. 6

## STOPPING (See Fig. 6)

### **MOWER BLADES -**

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

## **GROUND DRIVE -**

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

#### **ENGINE** -

Move throttle control to slow position.

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

- Turn ignition key to "OFF" position and remove key. Always remove key when leaving tractor to prevent unauthorized use.
- Never use choke to stop engine.

**IMPORTANT:** LEAVING THE IGNITION SWITCH IN ANY POSITION OTHER THAN "OFF" WILL CAUSE THE BATTERY TO BE DISCHARGED, (DEAD).

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



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

# TO USE THROTTLE CONTROL (See Fig. 6)

Always operate engine at full throttle.

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

# TO MOVE FORWARD AND BACKWARD (See Fig. 6)

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

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

IMPORTANT: BRING TRACTOR TO A COMPLETE STOP BEFORE SHIFTING OR CHANGING GEARS. FAILURE TO DO SO WILL SHORTEN THE USEFUL LIFE OF YOUR TRANSAXLE.

# TO ADJUST MOWER CUTTING HEIGHT (See Fig. 6)

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

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

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

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

## TO OPERATE MOWER (See Fig. 7)

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

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



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

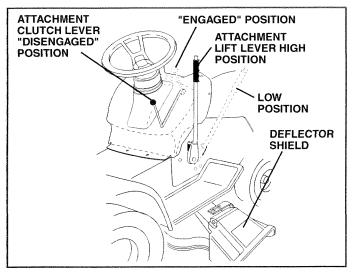


FIG. 7

### TO OPERATE ON HILLS



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

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

#### **TO TRANSPORT**

- Raise attachment lift to highest position with attachment lift control.
- When pushing or towing your tractor, be sure gearshift lever is in neutral (N) position.

• Do not push or tow tractor at more than five (5) MPH. **NOTE**: To protect hood from damage when transporting your tractor on a truck or a trailer, be sure hood is closed and secured to tractor. Use an appropriate means of tying hood to tractor (rope, cord, etc.).

## TOWING CARTS AND OTHER ATTACH-MENTS

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

## BEFORE STARTING THE ENGINE

### CHECK ENGINE OIL LEVEL

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

## ADD GASOLINE

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



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

IMPORTANT: WHEN OPERATING IN TEMPERATURES BELOW32°F(0°C), USE FRESH, CLEAN WINTER GRADE GASOLINE TO HELP INSURE GOOD COLD WEATHER STARTING.

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

# TO START ENGINE (See Fig. 6)

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

- Sit on seat in operating position, depress clutch/brake pedal and set parking brake.
- Place gear shift lever in neutral (N) position.
- Move attachment clutch to "DISENGAGED" position.
- Move throttle control to choke position.

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

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

## WARM WEATHER STARTING (50° F and above)

- When engine starts, move the throttle control to the fast position.
- The attachments and ground drive can now be used. If the engine does not accept the load, restart the engine and allow it to warm up for one minute using the choke as described above.

## COLD WEATHER STARTING (50° F and below)

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

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

## **MOWING TIPS**

- 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. 8).

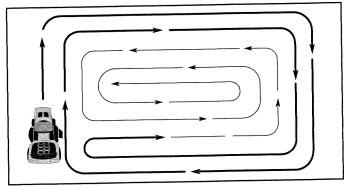


FIG. 8

- 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.

AS	MAINTENANCE SCHEDUL LL IN DATES S YOU COMPLETE EGULAR SERVICE	E	JEFORE	EACH U	HOURE HOURE	5 HOUR VERY 5	S HOUS	O HOU	RS ON SEASONES SEFORES	ORACIE SERVIC	E DATES
l deservation of	Check Brake Operation	V	V								
İ	Check Tire Pressure	V	•								
Т	Check Operator Presence and Interlock Systems	V									
R	Check for Loose Fasteners	V				5		V			
A	Sharpen/Replace Mower Blades			<b>1</b> 3							
C	Lubrication Chart							V			
lo	Check Battery Level			<b>V</b> 4							
R	Clean Battery and Terminals			•				-			
1	Check Transaxle Cooling			V							
	Check V-Belts					V					
	Check Engine Oil Level	V	•								
	Change Engine Oil (with oil filter)				1,2			1			
E	Change Engine Oil (without oil filter)			1,2				~			
N	Clean Air Filter			<b>1</b> 2							
G	Clean Air Screen			<b>V</b> 2							
	Inspect Muffler/Spark Arrester				V						
N E	Replace Oil Filter (If equipped)					1,2					
B	Clean Engine Cooling Fins					<b>V</b> 2					
	Replace Spark Plug					V	Les .				
	Replace Air Filter Paper Cartridge					<b>1</b> /2					
	Replace Fuel Filter						V				

- 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.

## GENERAL RECOMMENDATIONS

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

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

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

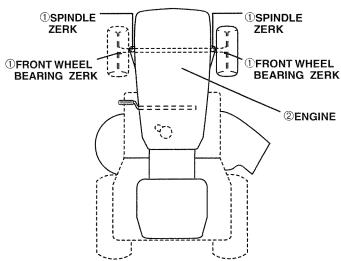
 Once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear.
 A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

### **BEFORE EACH USE**

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

- 3 Replace blades more often when mowing in sandy soil.
- 4 Not required if equipped with maintenance-free battery.
- 5 Tighten front axle pivot bolt to 35 ft.-lbs. maximum. Do not overtighten.

#### **LUBRICATION CHART**



- **©GENERAL PURPOSE GREASE**
- ©REFER TO MAINTENANCE "ENGINE" SECTION

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

## **TRACTOR**

Always observe safety rules when performing any maintenance.

## **BRAKE OPERATION**

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

#### **TIRES**

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

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

## OPERATOR PRESENCE SYSTEM

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

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

## **BLADE CARE**

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

# **BLADE REMOVAL (See Fig. 9)**

- Raise mower to highest position to allow access to blades.
- Remove blade bolt, lock washer and flat washer securing blade.
- Install new or resharpened blade with trailing edge up towards deck as shown.

IMPORTANT: TO ENSURE PROPER ASSEMBLY, CENTER HOLE IN BLADE MUST ALIGN WITH STAR ON MANDREL ASSEMBLY.

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

IMPORTANT: BLADE BOLT IS GRADE 8 HEAT TREATED.

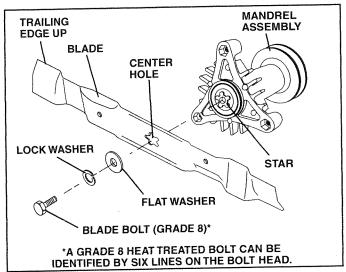


FIG. 9

# TO SHARPEN BLADE (See Fig. 10)

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

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

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

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

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

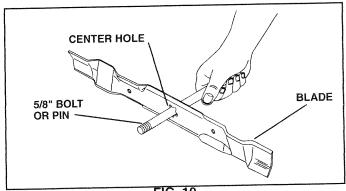


FIG. 10

#### **BATTERY**

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

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

NOTE: The original equipment battery on your tractor is maintenance free. Do not attempt to open or remove caps

or covers. Adding or checking level of electrolyte is not necessary.

### TO CLEAN BATTERY AND TERMINALS

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

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

#### **V-BELTS**

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

### TRANSAXLE COOLING

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

### **ENGINE**

#### LUBRICATION

Only use high quality detergent oil rated with API service classification SF-SJ. Select the oil's SAE viscosity grade according to your expected operating temperature. When operating in temperatures below 0° F (-18° C) synthetic oil must be used.

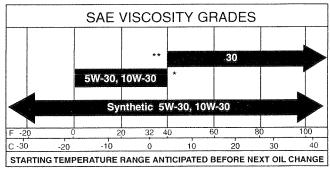


FIG. 11

\* CAUTION: Air cooled engines run hotter than automotive engines. The use of non-synthetic multi-viscosity oils (5W30, 10W30 etc.) in temperatures above 40° F (4° C) will result in higher than normal oil consumption. When using a multi-viscosity oil, check oil level more frequently.

\*\* **CAUTION:** SAE 30 oil, if used below 40° F (4° C), will result in hard starting and possible engine bore damage due to inadequate lubrication.



NOTE: Synthetic oil meeting ILSAC GF-2, API certification mark and API service symbol (shown at left) with "SJ/CF ENERGY CONSERVING" or higher, is an acceptable oil at all temperatures. Use of synthetic oil does not alter required oil change intervals.

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

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

TO CHANGE ENGINE OIL (See Figs. 11 and 12)

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

- Be sure tractor is on level surface.
- Oil will drain more freely when warm.
- Catch oil in a suitable container.
- Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine when changing oil.

Remove yellow cap from end of drain valve and install the drain tube onto the fitting.

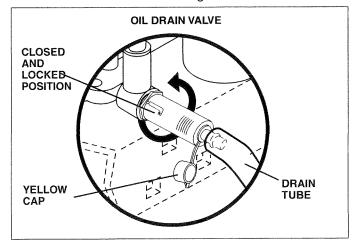


FIG. 12

- Unlock drain valve by pushing inward and turning counterclockwise.
- To open, pull out on the drain valve.
- After oil has drained completely, close and lock the drain valve by pushing inward and turning clockwise until the pin is in the locked position as shown.
- Remove the drain tube and replace the cap onto to the bottom fitting of the drain valve.
- Refill engine with oil through oil fill dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PRODUCT SPECIFICATIONS" section of this manual.
- Use gauge on oil fill cap/dipstick for checking level.
   Be sure dipstick cap is tightened securely for accurate reading. Keep oil at "FULL" line on dipstick.

### **CLEAN AIR SCREEN**

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

## **ENGINE COOLING FINS (See Fig. 13)**

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

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

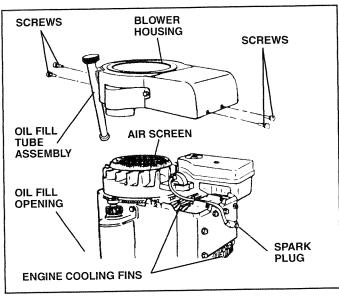


FIG. 13

# AIR FILTER (See Fig. 14)

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

Service air cleaner more often under dusty conditions.

- Pull up on air filter cover handle and rotate towards engine.
- · Remove cover.
- Carefully remove air filter cartridge and pre-cleaner from base.
- Clean base carefully to prevent debris from falling into carburetor.

NOTE: If very dirty or damaged, replace cartridge.

- Place new pre-cleaner and cartridge firmly in base.
- Align tabs on cover with slots in blower housing and replace cover.
- Hook handle on cover and push down on handle to close.

**IMPORTANT:** Petroleum solvents, such as kerosene, are not to be used to clean the cartridge. They may cause deterioration of the cartridge. Do not oil cartridge. Do not use pressurized air to clean cartridge.

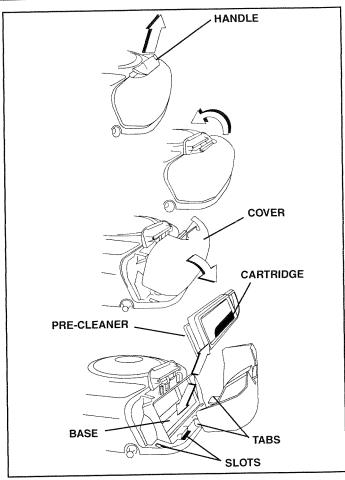


FIG. 14

#### **MUFFLER**

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

## SPARK PLUGS

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

## IN-LINE FUEL FILTER (See Fig. 15)

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.

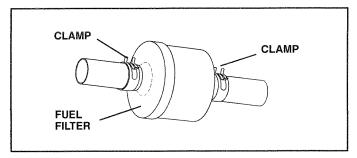


FIG. 15

## **CLEANING**

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

We do not recommend using a garden hose or pressure washer to clean your tractor unless the engine and transmission are covered to keep water out. Water in engine or transmission will shorten the useful life of your tractor. Use compressed air or a leaf blower to remove grass, leaves and trash from tractor and mower.



WARNING: TO AVOID SERIOUS INJURY, 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 to "STOP" 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. 16)

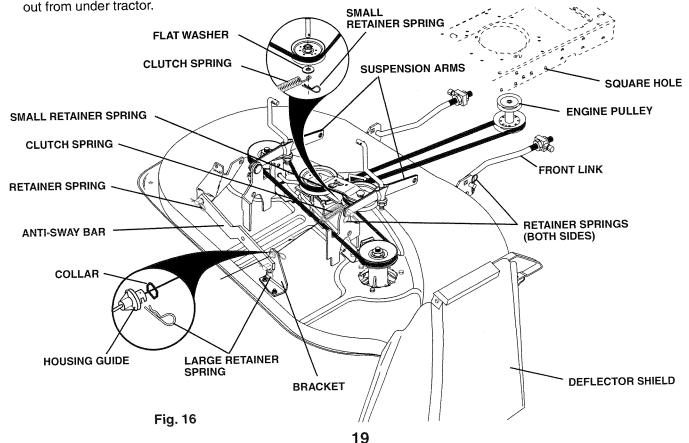
Mower will be easier to remove from the right side of tractor.

- Place attachment clutch in "DISENGAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- Roll belt off engine pulley.
- Remove small retainer spring, and remove clutch spring off pulley bolt.
- Remove large retainer spring, slide collar off and push housing guide out of bracket.
- Disconnect anti-swaybar from chassis bracket by removing retainer spring.
- Disconnect suspension arms from rear deck brackets by removing retainer springs.
- Disconnect front links from deck by removing retainer springs.

 Raise lift lever to raise suspension arms. Slide mower out from under tractor. IMPORTANT: IF AN ATTACHMENT OTHER THAN THE MOWER DECK IS TO BE MOUNTED ON THE TRACTOR, REMOVE THE FRONT LINKS AND HOOK THE CLUTCH SPRING INTO SQUARE HOLE IN FRAME.

# TO INSTALL MOWER (See Fig. 16)

- Raise attachment lift lever to its highest position.
- Slide mower under tractor with deflector shield to right side of tractor.
- Lower lift lever to its lowest position.
- Connect front links to mower deck and secure with retainer springs.
- Connect suspension arms to rear deck brackets and secure with retainer springs.
- Connect anti-swaybar to chassis bracket and secure with retainer spring.
- Push clutch cable housing guide into bracket, slide collar onto guide and secure with large retainer spring.
- Place flat washer and clutch spring on idler pulley bolt and secure with small retainer spring.
- Install belt onto engine pulley.



#### TO LEVEL MOWER HOUSING

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

### SIDE-TO-SIDE ADJUSTMENT (See Figs. 17 and 18)

- 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.

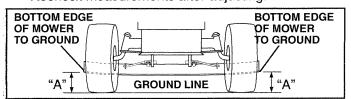


FIG. 17

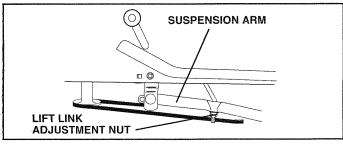


FIG. 18

FRONT-TO-BACK ADJUSTMENT (See Figs. 19 and 20)

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

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

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

- Before making any necessary adjustments, check that both front links are equal in length.
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of mower loosen nut "E" on both front links an equal number of turns.
- When distance "D" is 1/8" to 1/2" lower at front than rear, tighten nuts "F" against trunnion on both front links.

- To raise front of mower, loosen nut "F" from trunnion on both front links. Tighten nut "E" on both front links an equal number of turns. The two front links must remain equal in length.
- When distance "D" is 1/8" to 1/2" lower at front than rear, tighten nut "F" against trunnion on both front links.
- Recheck side-to-side adjustment.

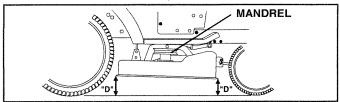


FIG. 19

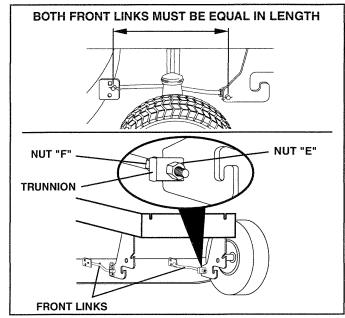


FIG. 20

# TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 21)

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

#### **BELT REMOVAL -**

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

#### **BELT INSTALLATION -**

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

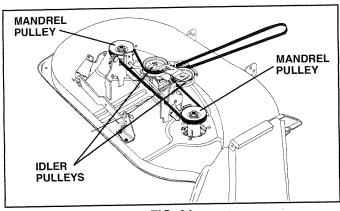


FIG. 21

## TO CHECK AND ADJUST BRAKE (See Fig. 22)

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

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

### TO CHECK BRAKE

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

The rear wheels must lock and skid when you try to manually push the tractor forward. If the rear wheels rotate, the brake needs to be adjusted or the pads need to be replaced.

#### TO ADJUST BRAKE

- Depress clutch/brake pedal all the way down 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 five (5) feet in highest gear, further maintenance is necessary. Replace brake pads or contact a qualified service center.

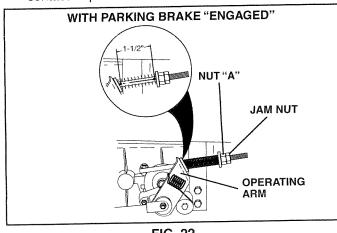


FIG. 22

## TO REPLACE MOTION DRIVE BELT (See Fig. 23)

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

## BELT REMOVAL -

Remove mower (See "TO REMOVE MOWER" in this section of manual).

NOTE: Observe entire motion drive belt and position of all belt guides and keepers.

Remove belt from stationary idler and clutching idler.

Remove belt downward from around engine pulley.

Pull belt slack toward rear of tractor. Remove belt upwards from transaxle pulley by deflecting belt keep-

Remove belt from center span keeper and pull belt away from tractor.

### **BELT INSTALLATION -**

Carefully work new belt down between transaxle belt keepers and onto the input pulley.

Slide belt into the center span keeper.

Pull belt toward front of tractor and roll around the top groove of engine pulley.

Install belt through stationary idler and clutching

Make sure belt is in all pulley grooves and inside all belt guides and keepers.

Install mower (See "TO INSTALL MOWER" in this section of manual).

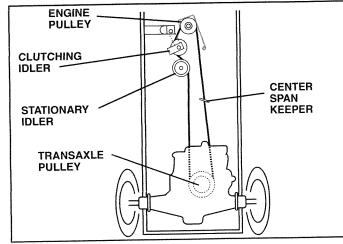


FIG. 23

# 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. 24)

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

NOTE: To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local

parts dealer. Tire sealant also prevents tire dry rot and corrosion.

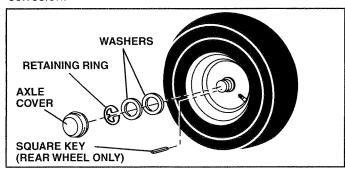


FIG. 24

# TO START ENGINE WITH A WEAK BATTERY (See Fig. 25)



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

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

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

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

#### TO ATTACH JUMPER CABLES -

- Connect one end of the RED cable to the POSITIVE (+) terminal of each battery(A-B), taking care not to short against tractor chassis.
- Connect one end of the BLACK cable to the NEGATIVE
   (-) terminal (C) of fully charged battery.
- Connect the other end of the BLACK cable (D) 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.

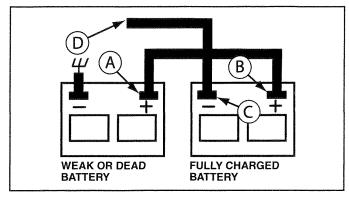


FIG. 25

### TO REPLACE HEADLIGHT BULB

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

### **INTERLOCKS AND RELAYS**

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

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

#### TO REPLACE FUSE

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

# TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 26)

- 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.

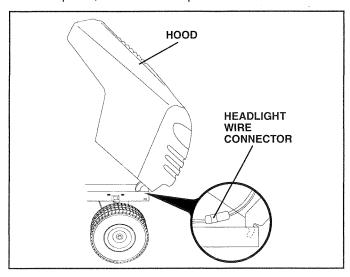


FIG. 26

## **ENGINE**

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

# TO ADJUST THROTTLE CONTROL CABLE (See Fig. 27)

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

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

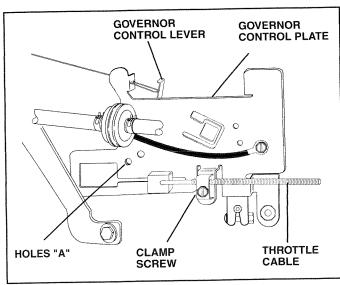


FIG. 27

# TO ADJUST CARBURETOR (See Fig. 28)

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

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

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

**IMPORTANT:** DAMAGE TO THE NEEDLE VALVE AND THE SEAT IN CARBURETOR MAY RESULT IF SCREW IS TURNED IN TOO TIGHT.

## PRELIMINARY SETTING -

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

### FINAL SETTING -

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

## **ACCELERATION TEST -**

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

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

IMPORTANT: NEVERTAMPERWITHTHE ENGINE GOVERNOR, WHICH IS FACTORY SET FOR PROPER ENGINE SPEED. OVERSPEEDING THE ENGINE ABOVE THE FACTORY HIGH SPEED SETTING CAN BE DANGEROUS. IF YOU THINK THE ENGINE-GOVERNED HIGH SPEED NEEDS ADJUSTING, CONTACTYOUR NEAREST AUTHORIZED SERVICE CENTER/DEPARTMENT, WHICH HAS PROPER EQUIPMENT AND EXPERIENCE TO MAKE ANY NECESSARY ADJUSTMENTS.

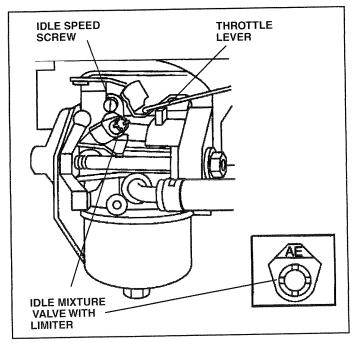


FIG. 28

# **STORAGE**

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



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

## **TRACTOR**

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

- Clean entire tractor (See "CLEANING" in the Maintenance 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 Maintenance 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 Maintenance section of this manual).
- After cleaning, leave cables disconnected and place cables where they cannot come in contact with battery terminals.
- If battery is removed from tractor for storage, do not store battery directly on concrete or damp surfaces.

### **ENGINE**

#### **FUEL SYSTEM**

IMPORTANT: IT IS IMPORTANT TO PREVENT GUM DEPOSITS FROM FORMING IN ESSENTIAL FUEL SYSTEM PARTS SUCH AS CARBURETOR, FUEL FILTER, FUEL HOSE, OR TANK DURING STORAGE. ALSO, EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OR USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF AN ENGINE WHILE IN STORAGE.

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

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

#### **ENGINE OIL**

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

### CYLINDER(S)

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

## **OTHER**

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

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

# TROUBLESHOOTING POINTS

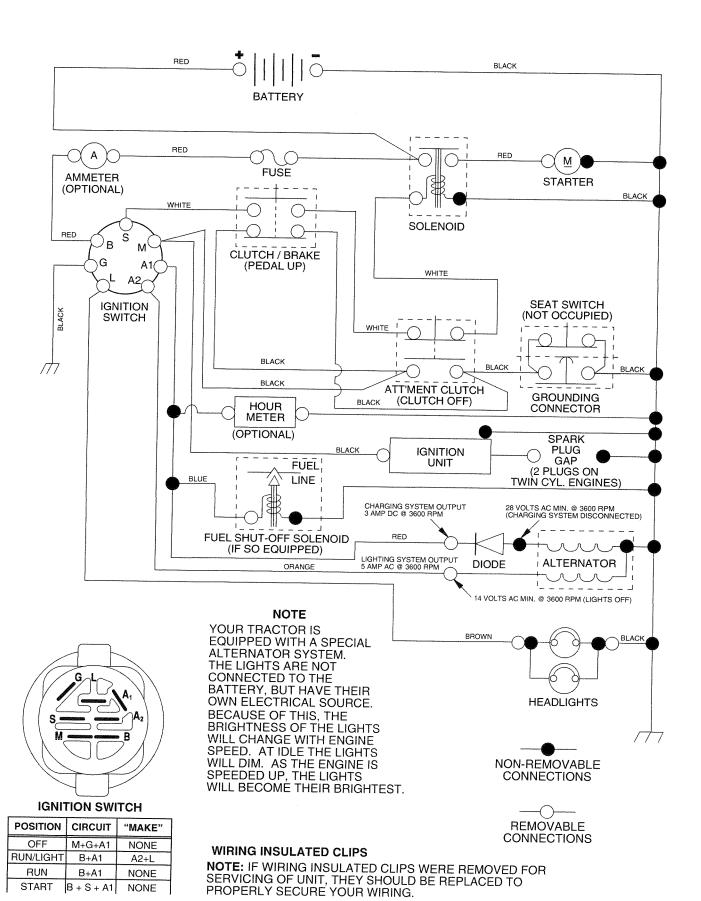
PROBLEM	CAUSE	CORRECTION
Vill not start	<ol> <li>Out of fuel.</li> <li>Engine not "CHOKED" properly.</li> <li>Engine flooded.</li> <li>Bad spark plug.</li> <li>Dirty air filter.</li> <li>Dirty fuel filter.</li> <li>Water in fuel.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</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>See "To Adjust Carburetor" in Service Adjustments section.</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> </ol> 8. Engine valves out of adjustment.	<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>See "To Adjust Carburetor" in Service Adjustments section.</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 start	<ol> <li>Weak or dead battery.</li> <li>Corroded battery terminals.</li> <li>Loose or damaged wiring.</li> <li>Faulty solenoid or starter.</li> </ol>	<ol> <li>Recharge or replace battery.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace solenoid or starter.</li> </ol>
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>Dirty logged muffler.</li> <li>Dirty/clogged muffler.</li> <li>Loose or damaged wiring.</li> <li>Carburetor 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>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>
Excessive vibration	Worn, bent or loose blade.     Bent blade mandrel.     Loose/damaged part(s).	<ol> <li>Replace blade. Tighten blade bolt.</li> <li>Replace blade mandrel.</li> <li>Tighten loose part(s). Replace damaged parts.</li> </ol>

# 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	Obstruction in clutch mechanism.     Worn/damaged mower drive belt.     Frozen idler pulley.     Frozen blade mandrel.	Remove obstruction.     Replace mower drive belt.     Replace idler pulley.     Replace blade mandrel.
Poor grass discharge	<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 (if so equipped)	<ol> <li>Switch is "OFF".</li> <li>Bulb(s) or lamp(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) or lamp(s).</li> <li>Check/replace light switch.</li> <li>Check wiring and connections.</li> <li>Replace fuse.</li> </ol>
Battery will not charge	Bad battery cell(s).     Poor cable connections.     Faulty regulator (if so equipped).     Faulty alternator.	<ol> <li>Replace battery.</li> <li>Check/clean all connections.</li> <li>Replace regulator.</li> <li>Replace alternator.</li> </ol>
Engine "backfires" when turning engine "OFF"	Engine throttle control not set at "SLOW" position for 30 seconds before stopping engine.	Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.

# TRACTOR - - MODEL NUMBER 944.603130

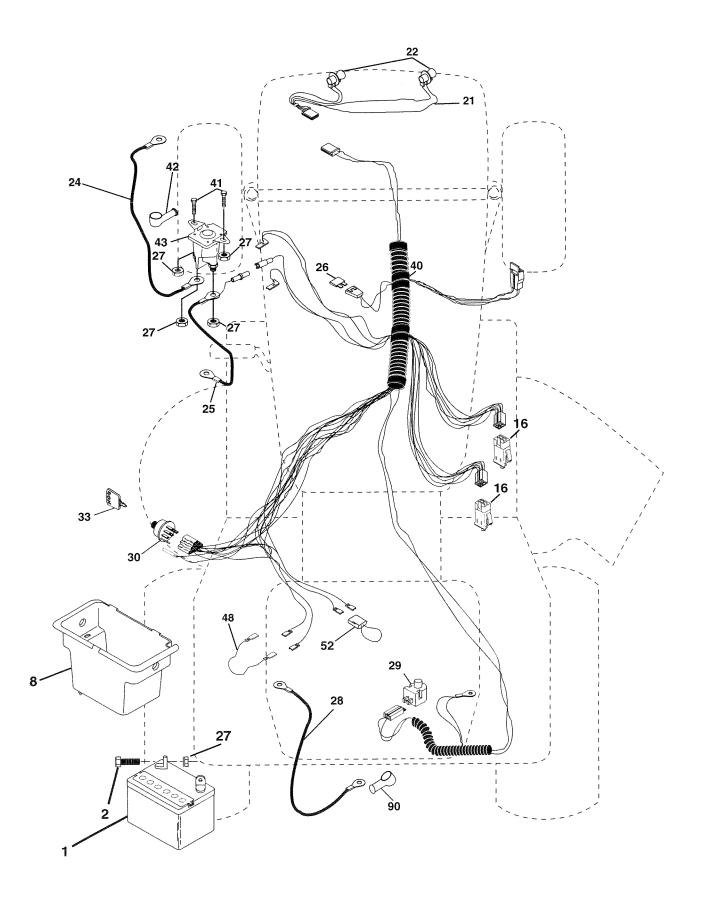
## **SCHEMATIC**



97

# TRACTOR - - MODEL NUMBER 944.603130

# ELECTRICAL



# **TRACTOR - - MODEL NUMBER 944.603130**

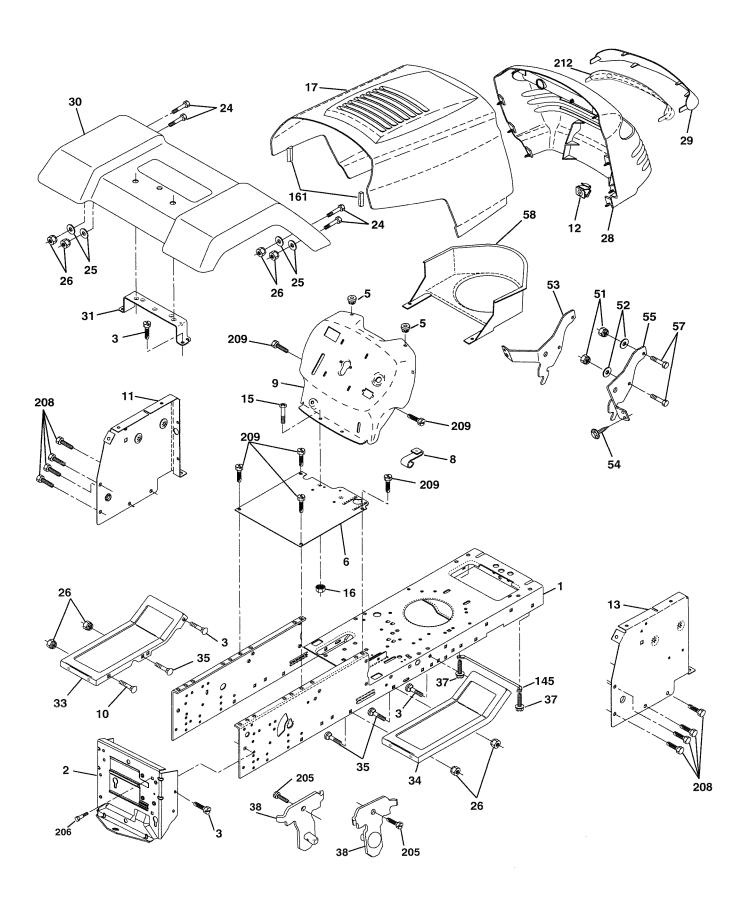
## **ELECTRICAL**

KEY	PART	
NO.	NO.	DESCRIPTION
1	163465	Battery
2	74760412	Bolt Hex Hd 1/4-20unc X 3/4
8	176689	Box Battery Fender
16	176138	Switch Interlock
21	175685	Harness Asm Light W/4152J
22		Bulb Light #1156
24	4799J	Cable Battery 6 Ga 11"red
25	146147	Cable Battery 6 Ga w/16 wire,red
26		Fuse 20 AMP
27	73510400	Nut Keps Hex 1/4-20 Unc
28	4207J	Cable Ground 6 Ga 12" black
29	121305X	Switch Plunger Nc Gray
30		Switch Ign Delta Push-In
33	140403	Key Ign
40	179720	Harness Ign
41	71110408	Bolt Blk Fin Hex 1/4-20 X 1/2
42	131563	Cover Terminal Red
43	178861	Solenoid
48	140844	Adapter Ammeter
52	141940	Protection Wire Loop
90	180449	Cover Terminal Battery

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

# TRACTOR - - MODEL NUMBER 944.603130

# **CHASSIS AND ENCLOSURES**



# **TRACTOR - - MODEL NUMBER 944.603130**

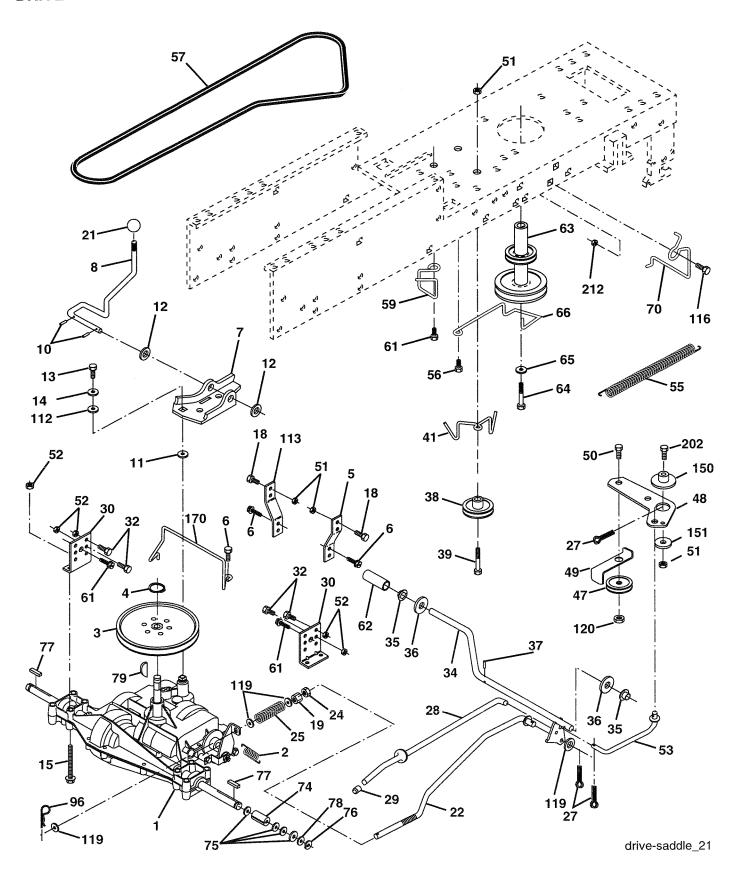
# **CHASSIS AND ENCLOSURES**

KEY NO.		DESCRIPTION
1 2	174620	Chassis
3	176554 17060612	Drawbar
5	155272	Screw 3/8-16 x 3/4
6	174643X014	Bumper Hood/Dash
8	155138	Saddle Siksor Flat Lt 6Sp
9	168347X012	Clip Retainer Slide-On  Dash Private Label
10	72140608	Bolt RdHd Sgnk. 3/8-16 Unc x 1
11	174996	Panel Asm. Dash Lh
12	145660	Clip Tinnerman Grile P/L
13	172105X010	Panel Dash Rh
15	74180512	Screw Mach Trhd 5/16-18 Unc x 3/4
16	73510500	Nut Keps 5/16-18 Unc
17	159639X558	Hood Pnt STL P/L w/trim
18	184921	Bumper Hood
24	74780616	Bolt Fin Hex 3/8-16 Unc x 1 Gr. 5
25	19131312	Washer 13/32 x 13/16 x 12 Ga.
26	73800600	Nut Lock Hex w/Insert 3/8-16 UNC
28	179777	Grille/Lens Asm
29	150209X599	Lens Grille Private label
30 31	169465X558	Fender Asm LT w/o Shift
33	136619	Bracket Fender
34	179716X558 179717X558	Footrest Pat PLI
35	72110606	Footrest Pnt RH
37	17490508	Bolt RdHd Sht. Sqnk. 3/8-16 x 3/4 Screw Thdrol 5/16-18 x 1/2 Tyt
38	175710	Bracket Asm Pivot Mower Rear
51	73800400	Nut Lock Hex W/Ins. 1/4-20
52	19091416	Washer 9/32 x 7/8 x 16 Ga.
53	144697	Bracket Grille LH
54	161464	Screw Hex Wshd 8-18 x 7/8
55	144696	Bracket, Grille RH
57	74780412	Bolt Fin Hex 1/4-20 x .75
58	150127	Air Duct Private Label
145	156524	Rod Pivot Chassis/Hood
205	17490608	Screw Thdrol 3/8-16 x 1/2
206	170165	Bolt Shoulder 5/16-18 TT
208	17670608	Screw Thdrol 3/8-16 x 1/2
209	17000612	Screw Hex Wsh Thdrol 3/8-16
212	156494	Insert lens Rerlective
	5479J	Plug Btn Blk

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

# **TRACTOR - - MODEL NUMBER 944.603130**

## **DRIVE**



# **TRACTOR - - MODEL NUMBER 944.603130**

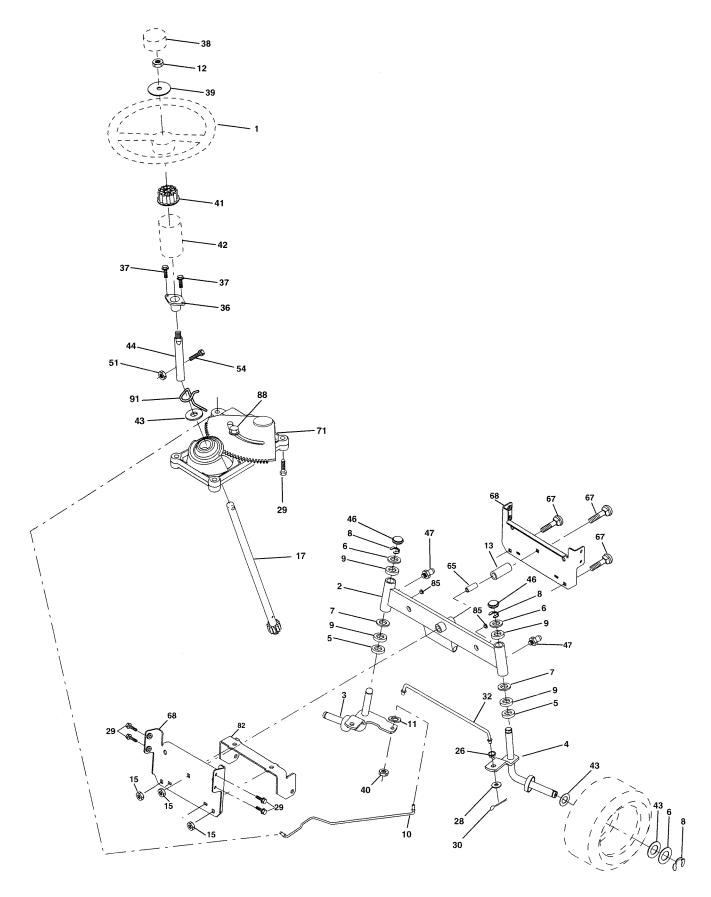
## DRIVE

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	07 05 05 with pin per	Transaxle (See Breakdown)	51	STD541437	Nut Crown Lock 3/8-16
2	1.46600	Dana Model 4360-139	52	STD541431	Nut Crown Lock 5/16-18
2 3	146682 123666X	Spring Extension Brake	53	105710X	Link Clutch 7 66
4	12000028	Pulley Transaxle 18" tires Ring Retainer # 5100-62	55 56	105709X	Spring Return Clutch 6 75
5	121520X	Strap Torque Rh Pnt Blk	56 57	17060620 160855	Screw 3/8-16 x 1
6	17000512	Screw 5/16-18 X 3/4	59	169691	V-belt Ground Drive 95 30
7	162240	Plate Pnt Rod Shift T/a (blk)	61	17120614	Keeper Belt Span Ctr. Screw 3/8-16x3/4
8	131679	Rod Shifter Black(dana)	62	8883R	Cover Pedal Blk Round
10	STD561210	Pin Cotter 1/8 x 1	63	175410	Pulley Engine
11 12	105701X	Washer Plate Shf 388 Sq Hole	64	173937	Bolt, Hex 7/16-20 x 4 Grade 5
13	19151216 74550412	Washer 15/32 X 3/4 X 16ga	65	STD551143	Washer, Lock, Hvy Hlcl Spring
14	STD551125	Bolt 1/4-28 UNF Gr. 8 W/Patch Washer Lock Hvy Helical 1/4	00	454770	7/16
15	74490544	Bolt Hex Flghd 5/16-18 x Gr. 5	66 70	154778	Keeper Belt Engine Flproof
18	STD523710	Bolt Fin Hex 3/8-16 UNC x 1 Gr. 5	70 74	134683 109502X	Guide Belt Dr Mower Rh
19	STD541437	Nut Lock Hex 3/8-16	75	121749X	Spacer Split Washer 25/32 X 1 1/4 X 16 Ga
21	106933X	Knob Rd 1/2-13 Pistc Thds Blk	76	STD581075	E Ring
22	130804	Rod Brake Lt	77	123583X	Key Square 2 0 X 1845/1865
24	STD541237	Nut Hex Jam 3/8-16	78	121748X	Washer 25/32 X 1 5/8 X 16 Ga
25 27	106888X STD561210	Spring Rod Brake 2 00 Zinc	79	2228M	Key Woodruff #9 3/16 x 3/4
28	175765	Pin Cotter Rod Brake Parking Lt/Yt	96	4497H	Spring Retainer
29	71673	Cap Parking Brake	112	19091210	Washer 9/32 X 3/4 X 10 Ga
30	174973	Bracket Transmission	113 116	127285X 72140608	Strap Torque LH
32	STD523107	Bolt Hex Hd.5/16-18 x 3/4	119	STD551037	Bolt 3/8-16 x 1 Washer 13/32 x 5/8 x 16 Ga.
34	175578	Shaft Asm Pedal Foot Nibbed	120	73900600	Nut Lock 3/8-16
35	120183X	Bearing Nylon Blk 629 ld	150	175456	Spacer Retainer
36	STD551062	Washer 21/32 x 1 x 16 Ga.	151	19133210	Washer 13/32 x 2 x 10 Ga.
37 38	STD571810	Roll Pin 3/16 x 1"	170	178394	Keeper Belt Transaxle
39	179114 74760648	Pulley Composite Flat	202	72110614	Bolt Car Sh 3/8-16 x 1-3/4 Gr. 5
41	175556	Bolt Fin Hex 3/8-16 Unc x 2-3/4 Keeper Belt Idler	212	145212	Nut Hexflange Lock
47	127783	Pulley Idler V Groove Plastic	250	17060612	Screw 3/8-16 x .75
48	154407	Bellcrank Clutch Grnd Drv Stl			
49	123205X	Retainer Belt Style Spring			
50	72110612	Bolt Carr. Sh. 3/8-16 x 1-1/2 Gr. 5	NOTE 1 inch	: All componer = 25.4 mm	nt dimensions given in U.S. inches

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

# **TRACTOR - - MODEL NUMBER 944.603130**

# STEERING ASSEMBLY



# **TRACTOR - - MODEL NUMBER 944.603130**

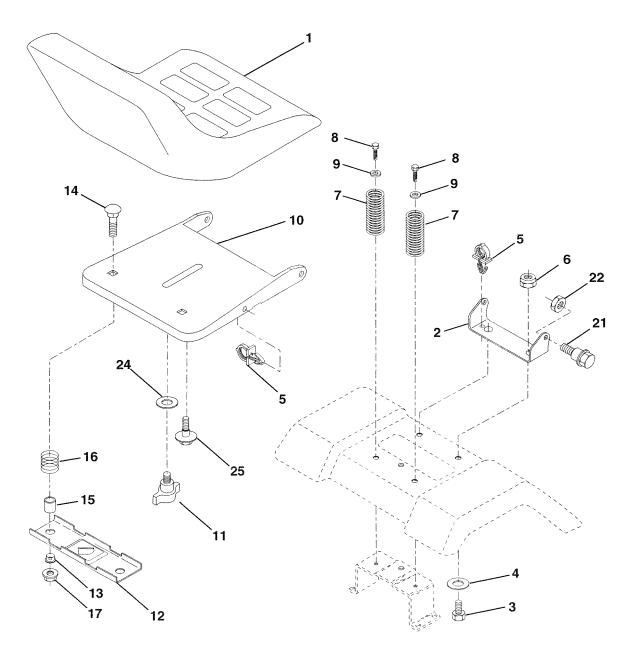
# STEERING ASSEMBLY

KEY		DECOMPRISA
NO.	NO.	DESCRIPTION
1 2	140044X428	Wheel Steering
3	175131	Axle Asm Front
4	169840 169839	Spindle Asm Dh
5	6266H	Spindle Asm Rh Bearing Race Thrust Harden
6	121748X	Washer 25/32 X 1 5/8 X 16ga
7	19272016	Washer 27/32 X 1 1/4 X 16 Ga
8	12000029	Ring Klip #t5304-75
9	3366R	Bearing Col Strg Blk
10	175121	Link Drag
11	10040600	Lockwasher
12	73940800	Nut Hex Jam Toplock 1/2-20 Unf
13	136518	Spacer Bearing Axle Front
15	145212	Nut Hex Flange Lock
17	180641	Shaft Asm Strg
26 28	126847X	Bushing Rod Tie Blk Lt
29	19131416 17060612	Washer 13/32 X 7/8 X 16ga
30	76020412	Screw 3/8-16x3/4 Pin
32	130465	Rod Tie Wire Form 19 75 Mech
36	155099	Bushing Strg 5/8 ld Dash
37	152927	Screw TT #10-32 x 5 x 3/8 Flange
38	140045X428	Insert Cap Strg
39	19183812	Washer 9/16 ID x 2-3/8 OD 12 Ga
40	7810H	Locknut Center
41	100711L	Adaptor Wheel Strg 640/635id
42	145054X428	Boot Dash Steering
43	121749X	Washer 25/32 X 1 1/4 X 16 Ga
44 46	180640	Extension Steering
46 47	121232X	Cap Spindle Fr Top Blk
51	183226 73540400	Fitting Grease
54	71130420	Nut Crownlock 1/4-28 Bolt Hex 1/4-28 Unf x 1-1/4 Gr. 8
65	160367	Spacer Brace Axle
67	72110618	Bolt RdHd Sq 3/8-16 Unc x 2-1/4
68	169827	Brace Axle
71	175146	Steering Asm.
82	169835	Bracket Susp Chassis Front
85	133835	Fastner Christmas Tree
88	175118	Screw 7/16-20
91	175553	Steering Clip

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

# **TRACTOR - - MODEL NUMBER 944.603130**

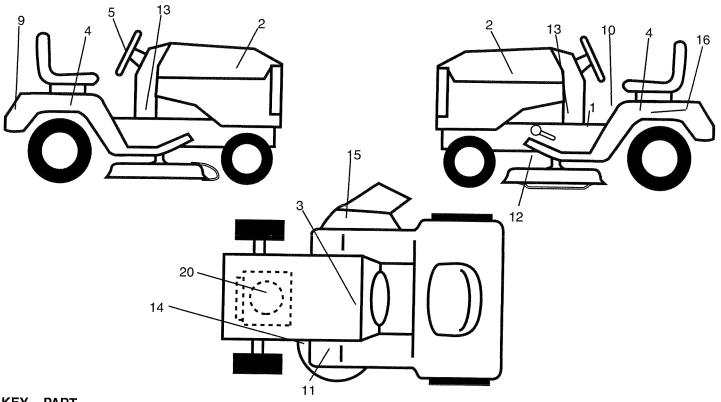
## **SEAT ASSEMBLY**



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12	127427 140551 71110616 19131610 145006 73800600 124181X 17000616 19131614 182493 166369 121246X	Seat Bracket Pnt Pivot Seat (blk) Bolt Fin Hex 3/8-16 x 1 Washer 13/32 X 1 X 10 Ga Clip Push-In Hinged Nut Lock Hex 3/8-16 Spring Seat Cprsn 2 250 Blk Zi Screw 3/8-16 X 1-1/2 Washer 13/32 X 1 X 14 Ga Pan Pnt Seat (blk) Knob Seat Adj Wingnut Bracket Pnt Mounting Switch		121248X 72050412 134300 121250X 123976X 171852 STD541431 19171912 127018X E: All compone	Bushing Snap Blk Nyl 50 ld Bolt Rdhd Sht Nk 1/4-20x1-1/2 Spacer Split 28 X96 Yel Zinc Spring Cprsn 1 27 Blk Pnt Nut Lock 1/4 Lge Flg Gr 5 Zinc Bolt Shoulder 5/16-18 Unc Blkz-2A Nut Lock 5/16-18 Washer 17/32 X 1-3/16 X 12 Ga Bolt Shoulder 5/16-18 X 62  nt dimensions given in U.S. inches

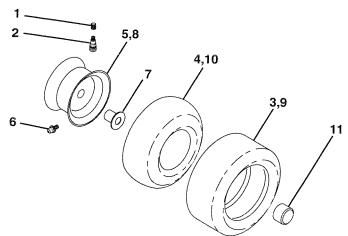
# TRACTOR - - MODEL NUMBER 944.603130

### **DECALS**



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 9 10 11	157163 171704 186850 172276 172275 163204 157140 181251	Decal Oper Sdl P/L Gear Dr E/F Decal Hood Logo Decal, Hood, Replacement Parts Decal Fender Sd White Decal Steering Wh Decal Craftsman Decal Caution English/French Decal Clutch/brake English/ French.	12 13 14 15 16 20	146046 177109 136832 170563 149517 176450 138311 184439 184440	Decal V-belt Dr Sch Tractor E Decal Panel Dash Decal V-belt Schematic 42"eng Decal Warning Mower Decal Battery Danger/Poison Decal HP Engine Decal Lift Handle Manual Owners English Manual Owners French

### WHEELS & TIRES



KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7	59192 65139 106222X 59904 106732X624 278H 9040H	Cap Valve Tire Stem Valve Tire F Ts 15 X 6 0 - 6 Service Tube Front (Service Item Only) Rim Asm 6"front Service Fitting Grease (Front Wheel Only) Bearing Flange (Front Wheel Only)
8 9 10 11	106108X624 124635X 7152J 104757X428 144334	Rim Asm 8"rear Service Tire R Ts 18x8.5-8 C Service Tube Rear (Service Item Only) Cap Axle Blk 1 50 X 1 00 Sealant, Tire (10 oz. Tube)

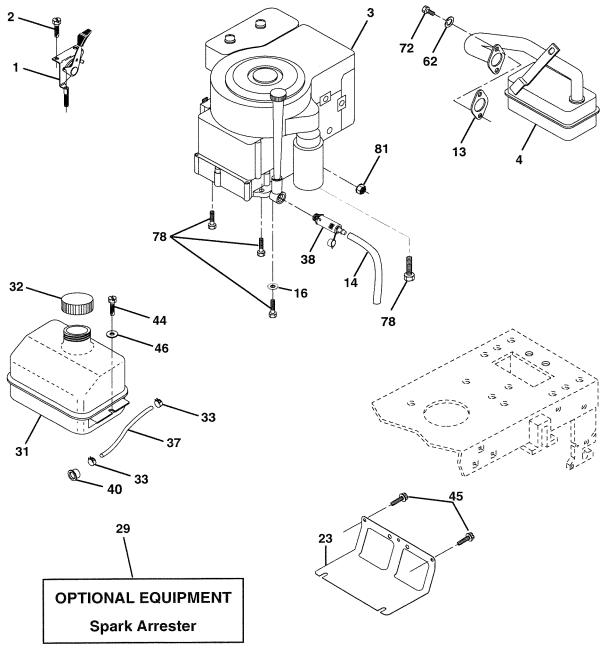
**NOTE:** All component dimensions given in U.S. inches 1 inch = 25.4 mm

## **TRACTOR - - MODEL NUMBER 944.603130**

### **ENGINE**

32 33

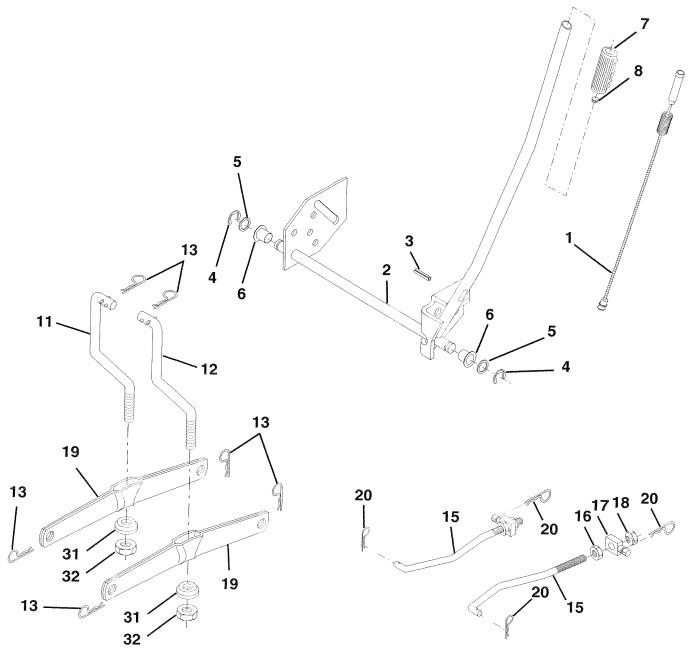
140527 123487X Cap Asm Fuel Clamp Hose Blk



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	170551	Control Throttle /Choke	37	137040	Line Fuel 20"
2	17720408	Screw Hex Thd Cut 1/4-20x5/8 T	38	181654	Plug Drain Oil Easy
3	17720400	Engine (See Breakdown) Briggs	40	124028X	Bushing Snap Nyl Blk Fuel Line
•		Model 28R707-1147-E1	44	17670412	Screw Hexwsh Thdrol 1/4-20x3/4
4	137348	Muffler Exhaust B&S Lt	45	17000612	Screw Hex Wsh Thdrol 3/8-16
13	165291	Gasket 1 313 ld Tin Plated	46	19091416	Washer 9/32 X 7/8 X 16ga
14	148456	Tube Drain Oil Easy	72	183906	Screw Scocket Head 5/16-18 x 1
16	11050600	Washer Lock Ext Tooth 3/8	78	17060620	Screw 3/8-16x1-1/4
23	169837	Shield Browning/Debris Guard	81	73510400	Nut Keps Hex 1/4-20 Unc
29	137180	Arrestor Spark			
31	184900	Tank Fuel 1 25 Fr			

# TRACTOR - - MODEL NUMBER 944.603130

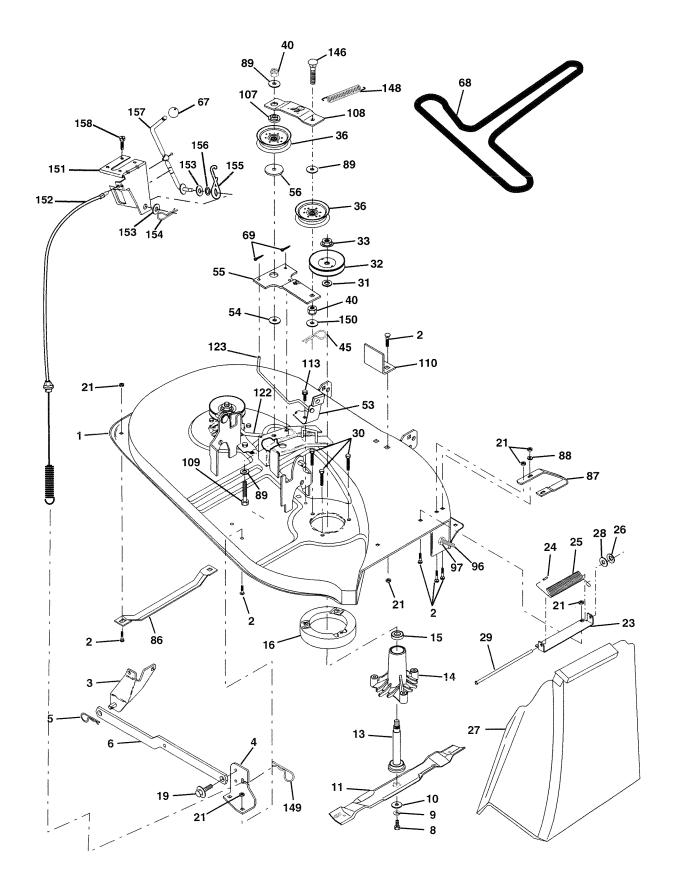
### **MOWER LIFT**



(EY IO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3	159460 159471 105767X STD581062 19211621 120183X 125631X 122365X 139865 139866 STD624008	Wire Asm Inner/Sprg W/PIngr LT Shaft Asm Lift Pin Groove E Ring #5133-62 Washer 21/32 x 1 x 21 Ga. Bearing Nylon Grip Handle Fluted Button Plunger Red Link Lift Lh Link Lift Rh Retainer Spring	15 16 17 18 19 20 31 32 <b>NOTE</b> 1 inch	173288 73350800 175689 73800800 139868 163552 169865 73540600 : All componer = 25.4 mm.	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 Bearing Pvt Lift Nut Crownlock 3/8-24  nt dimensions give in U.S.inches

# **TRACTOR - - MODEL NUMBER 944.603130**

### **MOWER DECK**

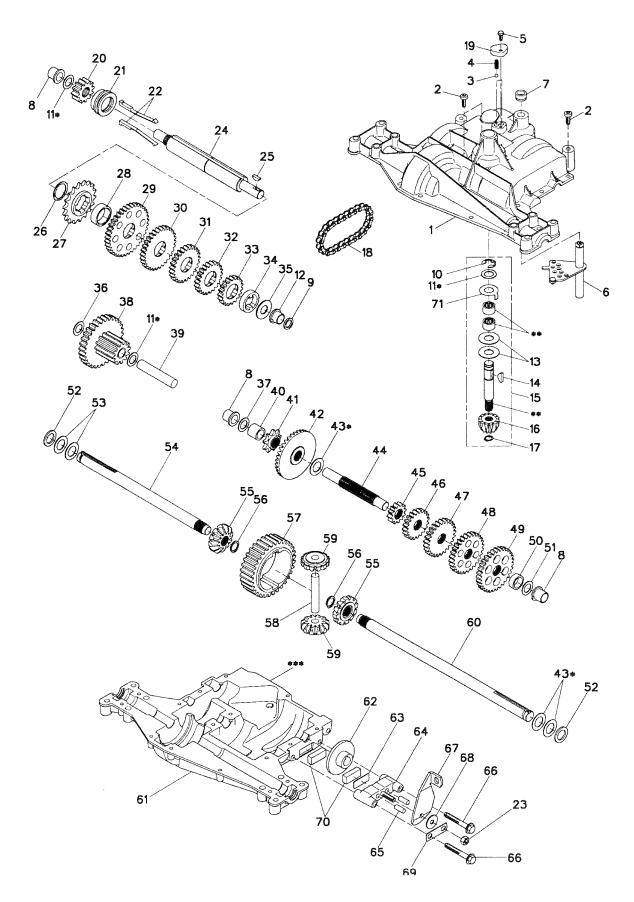


# **TRACTOR - - MODEL NUMBER 944.603130**

### **MOWER DECK**

KEY NO.	NO.	DESCRIPTION	KE\ NO.		DESCRIPTION
1	170280	Deck Asm Weldment	55	133840	Arm, Idler Assembly
2 3	72140506	Bolt	56	165723	Spacer, Retainer
4	138017 169970	Asm., Bar, Anti-Sway	67	149846	Knob Custom Oval
5	4939M	Bracket Sway Bar Deck 38/42"	68	144200	V-Belt, Mower
6	178024	Spring, Retainer	69	76020312	Pin, Cotter 3/32 x 3/4
8	850857	Bar Sway Deck Bolt 3/8-24 x 1.25 Gr. 8	86	7631J	Runner, LH
9	10030600	Washer, Lock	87	128772	Runner, RH
10	140296	Washer, Hardened	88	19111216	Washer 11/32 x 3/4 x 16 Ga.
	. 10200	(The following blades are available)	89	19131612	Washer 13/32 x 1 x 12 Ga.
11	134148	Blade, 38" Mulching STD (For	96	74930620	Bolt 3/8-16 x 1-1/4
		mulching mowers only)	97	73930600	Nut Centerlock 3/8-16
	139774	Blade, 38" Mulching Premium (For	107	133502	Spacer, Retainer
		better wear when mulching)	108	133503	Stiffener, Idler Arm
	138497	Blade, 38" Hi-Lift (For bagging and	109 110	74760640	Bolt, hex Head 3/8-16 x 2-1/2
		discharging)	113	142587	Upstop Deck Front 38"
13	137645	Asm., Shaft, Mandrel, Vented	122	17060512 131289	Screw, 5/16-18 x 3/4
14	128774	Housing, Mandrel, Vented	123	169971	Rod, Brake, LH
15	110485X	Bearing, Ball, Mandrel	146	165891	Rod, Brake, RH
16	174493	Stripper, Mower	148	169022	Bolt Carriage Idler
19	132827	Bolt, Shoulder	149	165898	Spring Return Idler
21	73680500	Nut, Crownlock 5/16 - 18 UNC	150	19091216	Retainer Spring Yelow Zinc Washer 9/32 x 3/4 x 16 Ga.
23	137607	Bracket, Deflector	151	169670	Bracket Clutch Cable
24	105304X	Cap, Sleeve	152	172758	Clutch Cable 38"/42"
25	123713X	Spring, Torsion, Deflector	153	169674	Washer Flat 3/8" Type B
26	110452X	Washer, Lock	154	169675	Spring Retainer
27 28	106736X428	Deflector, Shield	155	169671	Spring Retention Lvr Cltch Cab
29	19111016	Washer 11/32 x 5/8 x 16 Ga.	156	169672	Spacer Clutch Cable 3/8"
30	106735X 173984	Rod, Hinge	157	169669	Rod Clutch Cable 3/8"
31	129963	Screw Hex Thdrol	158	17720408	Screw Hex Thd Cut 1/4-20 x 1/2
32	153532	Washer, Spacer	eo na	130794	Mandrel Assembly (includes
33	178342	Pulley, Mandrel Nut Lock			Housing, Shaft and Shaft Hard-
36	131494	Pulley, Idler, Flat			ware Only - Pulley Not Included)
40	73680600	Nut, Crownlock 3/8 - 16 UNC		171665	Replacement Mower, Complete
	4497H	Retainer Spring 1: Zinc/Cad			,
53	130840	Brake Assembly	NOTE	: All compone	ent dimensions give in U.S.inches
54	178515	Washer, Hardened	1 inch	= 25.4 mm.	3.70 5.56103

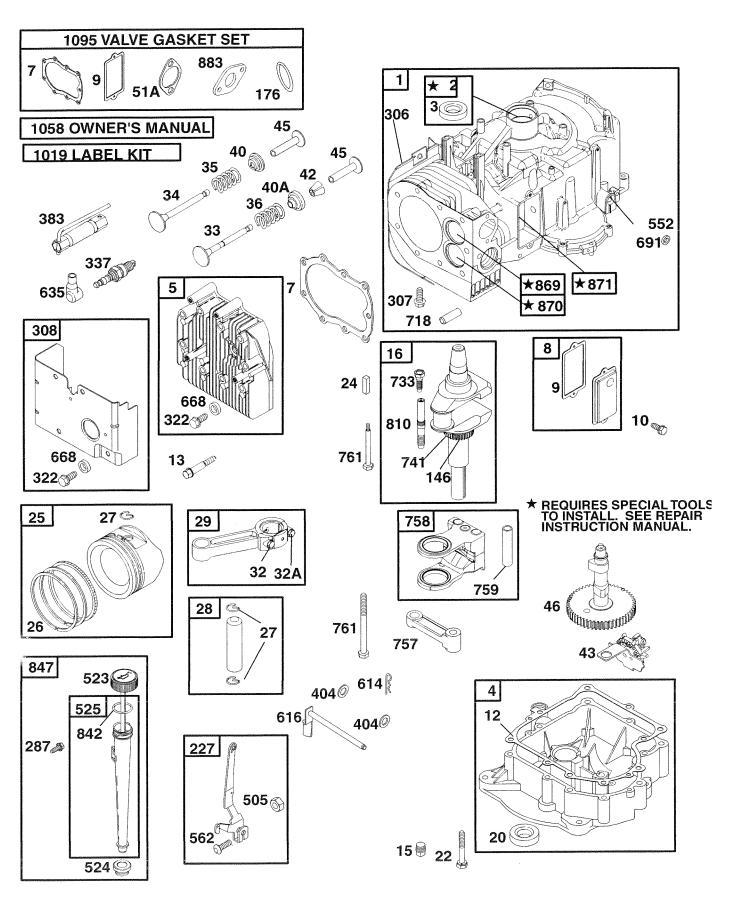
# TRACTOR - - MODEL NUMBER 944.603130 DANA TRANSAXLE - MODEL NUMBER 4360-139

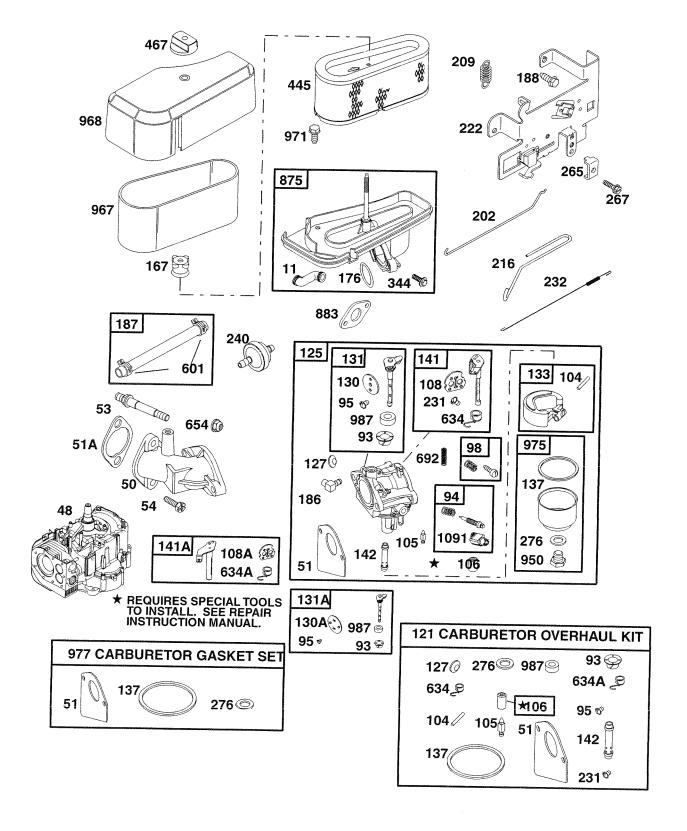


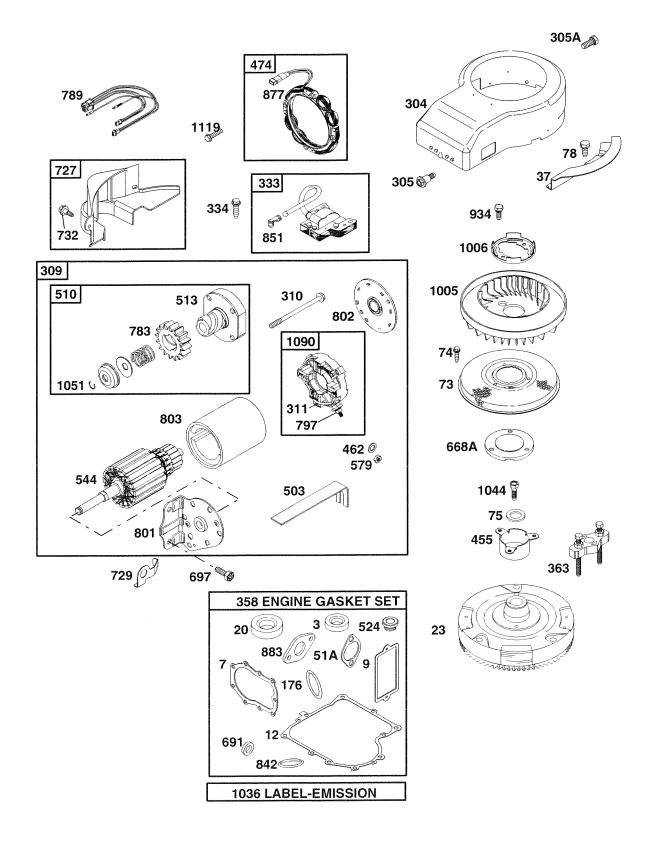
# TRACTOR - - MODEL NUMBER 944.603130 DANA TRANSAXLE - MODEL NUMBER 4360-139

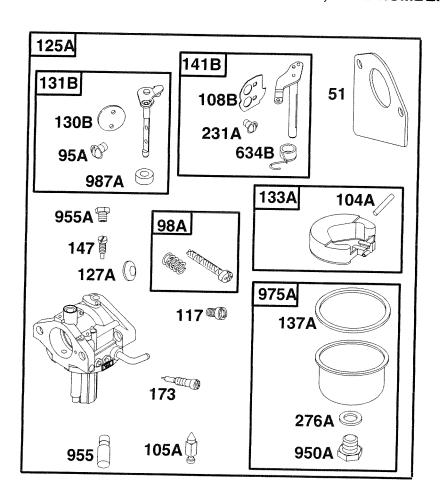
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	170981	Housing, Upper	41	105928X	Convented OT
2	2274J	Screw, Tapping, 1/4-20 X .734	42	170988	Sprocket, 9T
3	134400	Ball, Detent	43	134394	Gear, Bevel, 36T
4	105904X	Spring, Detent	44	120473X	* Assy, Kit, Shim, .750 Shaft
5	160940	Screw, Tapping, No. 10-24 X .482	45	142678	Shaft, Drive
6	138235	Assy, Kit, Shifter	46	124641 X	Gear, Spur, 12T
7	108727X	V-Ring	47	106589X	Gear, Spur, 20T
8	148266	Bearing, Flange	48	120408X	Gear, Spur, 25T
9	148269	Seal, Oil	49	105937X	Gear, Spur, 28T
10	2225J	Ring, Retaining	50	105937X 105936X	Gear, Spur, 31T
11	134793	* Assy, Kit, Shim, .625 Shaft	51	2226J	Spacer, .781 X 1.00 X .375
12	148268	Bearing, Flange	52	134401	Washer, Plain, .632 X 1.00 X .060
13	120415X	Washer, Plain, .632 X 1.38 X .046	53	2264J	Washer, Neoprene
14	142674	Key, Woodruff, No. 9	54	160946	Washer, Plain, .758 X 1.25 X .031
15	170983	Assy, Kit, Input Shaft	55	170990	Axle, LH
16	170986	Pinion, Bevel, 12T	56	160948	Gear, Miter, T, Splined
17	105909X	Ring, Retaining	57	1100948 110071X	Ring, Retaining
18	105910X	Chain, 24 Pitches	58	120952X	Gear, Spur, 32T
19	160942	Cover, Detent	59	170991	Shaft, Cross
20	160943	Gear, Spur, 1 2T	60	160950	Gear, Miter, 1 2T, Idler
21	148267	Collar, Clutch	61	170992	Axle, RH
22	138236	Assy, Kit, Clutch Keys	62	7294J	Housing, Lower
23	73810500	Nut, Lock, 5/16-24	63	108989X	Disc, Brake
24	142676	Shaft, Intermediate	64	160952	Spacer, Brake Puck
25	2244J	Key, Woodruff, No. 61	65	120954X	Jaw, Brake Pin, Dowel
26	105916X	Ring, Retaining		160953	
27	12047OX	Sprocket, 1 8T		138244	Screw, Tapping, 5/16-18 X 2.35
28	110070X	Spacer, 1. 131 X 1.45 X .494		108996X	Lever, Actuating
29	142677	Gear, Spur, 37T		160954	Washer, Plain, .321 X 1.00 X .055
30	124644X	Gear, Spur, 30T	70	120951X	Bracket, Anti-Rotation Puck, Friction
31	108980X	Gear, Spur, 25T		174256	Washer, Anti Rotation
32	120406X	Gear, Spur, 22T		120416X	Grease
33	134796	Gear, Spur, 1 9T	, _	1204107	Crease
34	134797	Spacer, 1. 133 X 1.50 X .375	NOTE	· All component	dimensions given in U.S. inches
35	105925X	Washer, Plain, .640 X 1.37 X .061	1 inch	= 25.4 mm	differisions given in 0.5. inches
	2228J	Washer, Plain, .632 X 1.00 X .046			nations to maintain proper clearances.
	170987	Washer, Plain, .632 X 1.00 X .031	000	in various combi	mations to maintain proper clearances.
	174255	Assy, Gear, Comb., 12T & 30T	* * Orc	ler Key No. 15.	
	124639X	Shaft, Idler		ic, 10y 140. 15.	
10	120472X	Spacer, .633 X .87 X .755	* * * Si	licone Sealant to	b be applied between Upper and Lower
			Housir	ngs (use Loctite	Ultra Gray Silicone 5699 or equivalent).

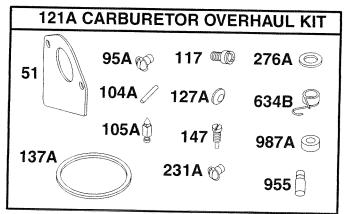
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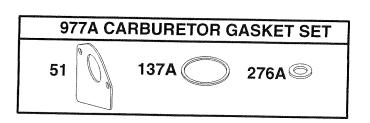












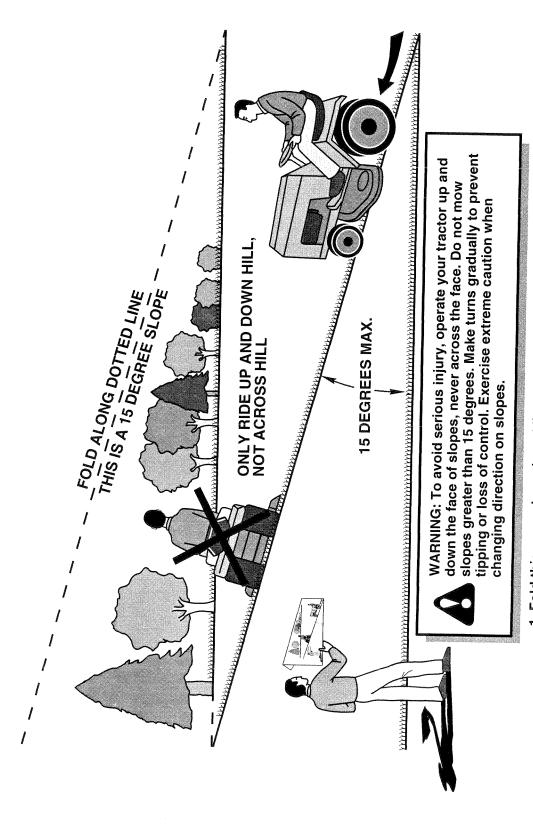
KEY	PART		KEY	PART	
NO.	NO.	DESCRIPTION	NO.	NO.	DESCRIPTION
1	496413	Cylinder Assembly	95A	690718	Ø Screw (Throttle Valve)
2	399269	Kit-Bushing/Seal	98	495800	Idle Speed Kit
3	391086	Seal-Oil (Magneto Side)	98A	694907	Idle Speed Kit
4	494238	Sump-Engine	104	690525	Ø Pin-Float Hinge
5	494240	Head-Cylinder		694918	Ø Pin-Float Hinge
7	271866	•+ Gasket-Cylinder Head	105	231855	Ø Valve-Float Needle
8	495735	Breather Assembly		694922	Ø Valve-Float Needle
9	27803	•+ Gasket-Breather	106	690577	Ø Seat-Inlet
10	691666	Screw (Breather Assembly)	108	690464	Valve-Choke (Manual Choke)
11	692253	Tube-Breather	108A	692344	Valve-Choke (Choke A Matic)
12	692226	<ul> <li>Gasket-Crankcase (.015 Thick, Std.)</li> </ul>	108B	694923	Valve-Choke
	692406	<ul><li>Gasket-Crankcase (.005 Thick)</li></ul>	117	690880	Ø Jet-Main (Standard)
	692405	<ul> <li>Gasket-Crankcase (.009 Thick)</li> </ul>		694925	Ø Jet-Main (High Altitude)
13	690904	Screw (Cylinder Head)	121	499220	Kit-Carburetor Overhaul (Walbro)
15	690946	Plug-Oil Drain	121A	694930	Kit-Carburetor Overhaul (Nikki)
16	693944	Crankshaft	125	498027	Carburetor (Walbro)
20	291675	<ul> <li>Seal-Oil (PTO Side)</li> </ul>	125A	694941	Carburetor (Nikki)
22	692125	Screw (Engine Sump)	127	695005	Ø Plug-Welch
23	693557	Flywheel (Steel Ring Gear)	127A	694916	Ø Plug-Welch
24	222698	Key-Flywheel	130		Valve-Throttle
25	499284	Piston Assembly (Standard)		694917	Valve-Throttle
	499288	Piston Assembly (.010 O.S.)	130B	694917	Valve-Throttle
	499292	Piston Assembly (.020 O.S.)	131	494885	Throttle Shaft Kit
	499296	Piston Assembly (.030 O.S.)		494379	Throttle Shaft Kit
26	391780	Ring Set-Piston (Standard)		694909	Throttle Shaft Kit
	392331	Ring Set-Piston (Chrome, Standard)		494381	Float-Carburetor
	391781	Ring Set-Piston (.010 O.S.)		694914	Float-Carburetor
	391782	Ring Set-Piston (.020 O.S.)	137	281165	؇ Gasket-Float Bowl
	499999	Ring Set-Piston (.030 O.S.)		694920	؇ Gasket-Float Bowl
27	691299	Lock-Piston Pin	141	495097	Choke Shaft Kit (Manual Choke)
28	498319	Pin-Piston (Standard)		495931	Choke Shaft Kit (Choke A Matic)
00	498320	Pin-Piston (.005 O.S.)		694913	Choke Shaft Kit
29	494504	Rod-Connecting (Standard)	142	691434	Ø Nozzle-Carburetor (Standard)
20	490469 690356	Rod-Connecting (.020 U.S.) Screw (Connecting Rod)	146	497737	Nozzle-Carburetor (High Altitude)
32 32A	690348	Screw (Connecting Rod) Screw (Connecting Rod)	146 147	691639 694927	Key-Timing Ø Jet-Pilot
33	262246	Valve-Exhaust	167	692297	Seal-Air Cleaner Nut
34	262247	Valve-Intake	173	694926	Valve-Idle Mixture
35	691605	Spring-Valve (Intake)	176	691917	•+ O-Ring Seal (Air Cleaner Base)
36	691597	Spring-Valve (Exhaust)	186	692317	Connector-Hose
37	690456	Guard-Flywheel	187	691050	Line-Fuel (Cut to Required Length)
40	690656	Retainer-Valve (Intake)	188	691693	Screw (Control Bracket)
40A	691939	Retainer-Valve (Exhaust)	202	691841	Link-Mechanical Governor
42	494553	Keeper-Valve	209	690480	Spring-Governor
43	691968	Slinger-Governor/Oil	216	691840	Link-Choke
45	691811	Tappet-Valve	222	694042	Bracket-Control
46	692123	Camshaft	227	691374	Control Lever-Governor
48	496050	Short Block (Replacement Engine	231	691636	Ø Screw (Choke Valve)
		311707-0028-E1)			,
50	691711	Manifold-Intake ^		RPM Setting	s: Low Speed: 1900-2100
51	692284	؇ Gasket-Intake		J	High Speed: 3000-3200
51A	272554	•+ Gasket-Intake	•	Included in E	Ingine Gasket Set, Key. No. 358
53	691098	Stud (Carburetor)	Ø		Carburetor Overhaul Kit, Key. No. 121 and
54	690953	Screw (Intake Manifold)		121A	•
73	690492	Screen-Rotating	‡	Included in C	Carburetor Gasket Set, Key. No. 977 and
74	691655	Screw (Rotating Screen)		977A	-
75	690582	Washer (Flywheel)	+	Included in V	alve Gasket Set, Key. No. 1095
78	690661	Screw (Flywheel Guard)	NOT	E: All compor	nent dimensions given in U.S. inches 1
93	690602	Ø Bushing-Throttle Shaft		inch = 25.4 n	•
94	498030	Idle Mixture Kit			
95	691636	Ø Screw (Throttle Valve) 48			

# TRACTOR - - MODEL NUMBER 944.603130 BRIGGS & STRATTON ENGINE - - MODEL NUMBER 28R707, TYPE NUMBER 1147-E1

KEY PART		1.5300	
NO. NO.	DESCRIPTION	KEY PART	
231A 690718	Ø Screw (Choke Valve)	NO. NO.	DESCRIPTION
232 691842	Spring-Governor Link	741 691284 757 691714	Gear-Timing
240 394358	Filter-Fuel	758 692423	Link-Counterweight
265 691024	Clamp-Casing	759 691239	Counterweight
267 695134	Screw (Casing Clamp)	761 691096	Pin-Counterweight Screw (Counterweight)
276 692255	؇ Sealing Washer	783 693713	Gear-Pinion
276A 690997	؇ Sealing Washer	789 695050	Harness-Wiring
287 691002	Screw (Dipstick Tube)	797 693167	Nut (Brush Retainer)
304 690844 305 692198	Housing-Blower	801 691429	Cap-Drive
305 692198 305A 692127	Screw (Blower Housing)	802 691286	Cap-End
306 690459	Screw (Blower Housing)	803 693757	Housing-Starter
307 691003	Shield-Cylinder Screw (Cylinder Shield)	810 691779	Extension-Crankshaft
308 491490	Cover-Cylinder Head	842 691870	<ul> <li>Dipstick/Tube Seal</li> </ul>
309 693551	Motor-Starter	847 496415	Dipstick/Tube Assembly
310 690323	Bolt (Starter Motor)	851 493880	Terminal-Spark Plug
311 497608	Brush Set	869 691802	Seat-Valve (Intake)
322 692198	Screw (Cylinder Head Cover)	870 262405	Seat-Valve (Exhaust)
333 492341	Armature-Magneto	871 261961	Bushing-Valve Guide (Exhaust Valve)
334 691061	Screw (Armature Magneto)	231218	Bushing-Valve Guide (Brass Intake
337 802592	Spark Plug	875 694942	Valve)
344 693675	Screw (Cable Clamp)	877 393456	Base-Air Cleaner
358 494241	Engine Gasket Set	883 692236	Wire-Alternator
363 19203	Flywheel Puller	934 691058	•+ Gasket-Exhaust
383 89838	Wrench-Spark Plug	950 691657	Screw (Fan Retainer) Screw-Float Bowl
404 691691	Washer (Governor Crank)	950A 694919	Screw-Float Bowl
145 496894 455 601170	Filter-Air Cleaner Cartridge	955 694924	Ø Plug-Carburetor
455 691173	Cup-Flywheel	955A 694921	Plug-Carburetor
162 691261 167 691668	Washer (Starter Cable)	967 272403	Filter-Pre Cleaner
167 691668 174 691063	Knob-Air Cleaner	968 691916	Cover-Air Cleaner
503 691532	Alternator	971 692126	Screw (Air Cleaner Base)
305 691251	Strap-Starter Nut (Governor Control Lever)	975 495933	Bowl-Float
510 693699	Drive-Starter	975A 694908	Bowl-Float
313 692024	Clutch-Drive	977 494385	Gasket Set-Carburetor
23 692014	Dipstick	977A 694931	Gasket Set-Carburetor
24 281370	Seal-Dipstick Tube	987 691326	Ø Seal-Throttle Shaft
25 691398	Tube-Dipstick	987A 690998	Ø Seal-Throttle Shaft
44 692034	Armature-Starter	1005 695056	Fan-Flywheel
52 491986	Bushing-Governor Lever	1006 690452	Hetainer-Fan
62 691119	Bolt (Governor Control Lever)	1019 491252 1036 695699	Kit-Label
79 691029	Nut (Starter Cable)	1044 691658	Label-Emissions
01 95162	Clamp-Hose	1051 691265	Screw (Flywheel)
14 691620	Pin-Cotter	1058 274787	Ring-Retainer Owner's Manual
16 692012	Crank-Governor	1090 691293	Retainer-Brush
34 690801	Ø Seal/Spring Assembly (Manual Choke)	1091 691333	Cap-Limiter
34A 690802	Ø Seal/Spring Assembly (Choke A Matic)	1095 498539	Valve Gasket Set
34B 694912 35 66538	Ø Seal/Spring Assembly	1119 691183	Screw (Alternator)
54 690958	Boot-Spark Plug	RPM Settings	: Low Speed: 1900-2100
38 690510	Nut (Carburetor) Spacer	· ·	High Speed: 3000-3200
38A 691323	Spacer Spacer	<ul> <li>Included in En</li> </ul>	gine Gasket Set, Key. No. 358
91 692407	Governor Shaft Seal	Ø Included in Ca	irburetor Overhaul Kit, Key. No. 121 and
32 690572	Spring-Detent	121A	
97 690372	Screw (Starter Motor)	‡ Included in Ca	rburetor Gasket Set, Key. No. 977 and
18 690959	Pin-Locating	977A	
27 490324	Cover-Starter Drive	<ul> <li>Included in Value</li> </ul>	ve Gasket Set, Key. No. 1095
9 691224	Clip-Wire	NOTE: All compone	nt dimensions given in U.S. inches 1
32 691002	Screw (Starter Drive Cover)	inch = 25.4 mr	
13 691658	Screw (Crankshaft Extension)		
		10	

# **SERVICE NOTES**

# SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



1. Fold this page along dotted line indicated above.

2. Hold page before you so that its left edge is vertically parallel to a tree trunk or other upright structure.

3. Sight across the fold in the direction of hill slope you want to measure.

4. Compare the angle of the fold with the slope of the hill.

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