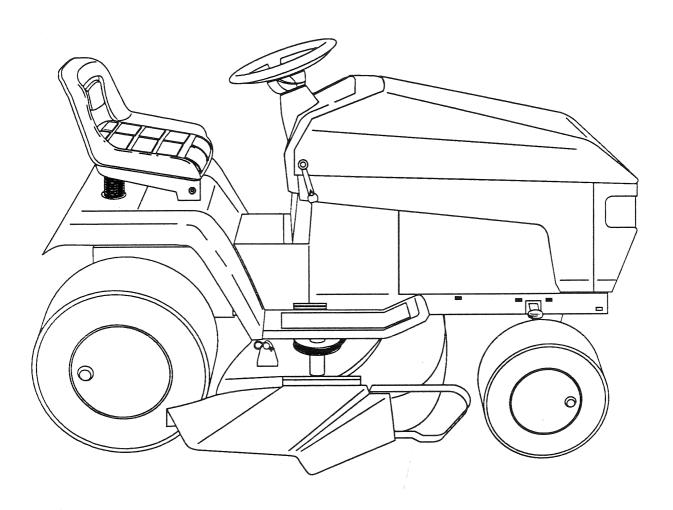
# **OPERATOR'S MANUAL**

# **HVYT125AR**







# HUSQVARNA FOREST & GARDEN CO. WARRANTY STATEMENT

# SECTION 1: LIMITED WARRANTY

Husqvarna Forest & Garden Company ("Husqvarna") warrants Husqvarna product to the original purchaser to be from defective material and workmanship from the date of purchase for the "Warranty Period" here stated dependent upon the type of product use. Warranty period is as follows for products listed

5 Year WARRANTY: Plastic walk behind mower decks

dal, noninstitutional or nonincome producing use. Ignition systems on the chain saws, dearing saws and 18RL, 22R/RL & 25R/ 2 Year Warranty: Riding lawn mowers, yard and garden tractors, walk behind mowers, tillers and attachments for noncommer . trimmers.

I Year Warranty: Chain saws, clearing saws, trimmers, blowers and batteries for noncommercial, noninstitutional or nonincome producing use.

90 Day Warranty: Any Husqvarna product used for commercial, professional, or income producing use.

30 Day Warranty: Any Husqvarna product used for rental purposes. Husqvarna professional bow bars

Replecement Part Warranty: Same length of time as original product warranty from the date of part purchase.

# OBLIGATIONS UNDER THE WARRANT **ECTION 2: HUSQVARNA'S**

Husqvama will remedy defects in material and workmanship during the warranty period by repairing or replacing, at Husqvarna's option, the defective component without charge for parts or labor.

# COVERED BY THIS WARRANTY SECTION 3: ITEMS NO

The following items are not covered by this warranty:

- Normal customer maintenance items (i.e., betts, blades, blade adapters, bubs, filters, guide bars, lubricants, rewind springs, saw chain, spark plugs, starter ropes and tines)
- Normal wear, normal adjustment, standard hardware or Items worn through regular use. ଉଚ୍ଚ
  - Natural discoloration of material due to utraviolet light.
    - The replacement of maintenance or worn items.
- Briggs & Stratton, Kawasaki and Kohler engines, including starters, generators, atternators and accessories. These tiems are covered by the engine manufacturer's warranty as stated with the product Information supplied at the time of purchase. All claims for specified engines, starters, generators, alternators and accessories should be sent to the 3
- Foote, Sundstrand and Tecumseh-Peerless drive systems. These items are covered by the drive system manufacturer's warranty as stated with the product information supplied at the time of purchase. All claims for specified drive systems should be sent to the appropriate manufacturer. ø

# SECTION 4: EXCEPTIONS AND LIMITATIONS

This warranty shall be inapplicable to conditions resulting from the following:

 Accident, abuse, misuse, negligence and neglect, including stale fuel, dirt abrasives, moisture, rust, corrosion, or any adverse reaction due to incorrect storage habits.

- Failure to operate or maintain the unit in accordance with the Owner's/Operator's manual or instruction sheet furnished by Ø
- Alterations or modifications that affect the unit's performance, operation, safety, durability, change its intended use, or cause failure of compilance with current regulatory standards or applicable federal, state or local laws ල
- Use of parts or accessories which are not officially approved by Husqvarna Forest & Garden Company. €
- (5) Additional damage to parts or components due to continued use occurring after any of the above.

HUSOVARNA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSECUENTIAL DAMAGES FOR BREACH OF ANY ANY INCIDENTAL OR CONSECUENTIAL DAMAGES FOR BREACH OF ANY ANY IMPLIED WARRANTY ON THESE PRODUCTS EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW. ANY IMPLIED WARRANTY OF MERCHANTABLY TO RIFINESS FOR A PARTICULAR PUBPOSE ON THESE PRODUCTS IS LIMITED IN DURATION TO THE WARRANTY PERIOD AS DEFINED IN THE LIMITED WARRANTY STATEMENT HUSOVARNA RESERVES THE RIGHT TO CHANGE OR IMPROVE THE DESIGN OF THE PRODUCT WITHOUT NOTICE, AND DOES NOT REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. ASSUME OBLIGATION TO UPDATE PREVIOUSLY MANUFACTURED PRODUCTS. Some states do not allow the exclusion of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

# SECTION 5: CUSTOMER RESPONSIBILITIES

The customer must exhibit reasonable care, maintenance, operation, storage and general upkeep as written in the maintenance section of the Owner's/Operator's manual. Should an operational problem or failure occur the product should not be used, but delivered as is to an authorized Husquarna dealer for evaluation. Proof of purchase, as explained in section 6, rests solely with the customer.

# SECTION 6: PROCEDURE TO OBTAIN WARRANTY CONSIDERATION

it is the Owner's and Dealer's responsibility to make certain that the Warranty Registration Card is properly illied out and mailed to Husqvarna Forest & Garden Company. This card should be mailed within ten (10) days from the date of purchase in order to assist in the validation of the warranty and to provide poet-sale service. Proof of purchase must be presented to the authorized Husqvarna dealer in order to obtain warranty service. This receipt must include date purchased, model number, serial number, and complete name and address of the selling dealer To obtain the benefit of this warranty, the product believed to be defective must be delivered in a timely manner, within thirty (30) days from date of operational problem or failure, and during the warranty period, to any authorized Husquarra dealer. The product must be delivered to the dealer, at the owner's expense. An authorized Husquarna dealer can be normally located through the "Y ellow Pages" of the local telephone directory.

# HUSQVARNA FOREST & GARDEN CO. 907 W. IRVING PARK ROAD ITASCA, ILLINOIS 60143



LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAU-TIONS. IT MEANS - ATTENTION! BE-COME ALERT! YOUR SAFETY IS IN-VOLVED. CAUTION: LOOK FOR THIS WORD TO POINT OUT IMPORTANT EQUIPMENT PRECAUTIONS.

NOTE: LOOK FOR THIS WORD TO POINT OUT IM-PORTANT INFORMATION ABOUT THE OPERATION AND PERFORMANCE OF YOUR TRACTOR.



# **RULES FOR SAFE OPERATION**

**WARNING:** This unit 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 area laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. (See REPAIR PARTS for part number identification).

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other States may have similar laws. Federal laws apply on federal lands.

- Know the controls and how to stop quickly. READ THIS OWNER'S MANUAL and instructions furnished with attachments
- Do not allow children to operate the machine. Do not allow adults to operate it without proper instruction.
- Do not carry passengers. Do not mow when children and others are around.
- Always wear substantial footwear. Do not wear loose fitting clothing that could get caught in moving parts.
- Keep your eyes and mind on your tractor, mower, and the area being cut. Do not let other interests distract you.
- Do not attempt to operate your tractor or mower when not in the driver's seat.
- Always get on or off your tractor from the operator's left hand side.
- Clear the work area of objects (wire, rocks, etc.) which might be picked up and thrown.
- Disengage all attachment clutches before attempting to start the engine.
- 10. Disengage power to attachments and stop the engine before leaving the operator's position.
- Disengage power to mower, stop the engine, and disconnect spark plug wire(s) from spark plug(s) before cleaning, making an adjustment, or repair. Be careful to avoid touching hot muffler or engine components.
- 12. Disengage power to attachments when transporting or not in
- 13. Take all possible precautions when leaving the vehicle unattended. Disengage the power take-off, lower the attachments, shift into neutral, set the parking brake, stop the engine, and remove the key.
- 14. Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of slopes (not greater than 15°), never across the face. Refer to page 27.
- Reduce speed on slopes and make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
- While going up or down slopes, place gear shift control lever in 1st gear position to negotiate the slope without stopping.
- Never mow in wet or slippery grass, when traction is unsure, or at a speed which could cause a skid.
- Stay alert for holes in the terrain and other hidden hazards.
   Keep away from drop-offs.
- Do not drive too close to creeks, ditches, and public highways.
- Exercise special care when mowing around fixed objects in order to prevent the blades from striking them. Never deliberately run tractor or mower into or over any foreign objects.
- 21. Never shift gears until tractor ∞mes to a stop.
- 22. Never place hands or feet under the mower, in discharge chute, or near any moving parts while tractor or mower is running. Always keep clear of discharge chute.
- 23. Use care when pulling loads or using heavy equipment.
  - a. Use only approved drawbar hitch points.
  - b. Limit loads to those you can safely control.

- Do not turn sharply. Use care when backing.
- d. Use counterweight or wheel weights when suggested in owner's manual.
- 24. Watch out for traffic when crossing or near roadways.
- 25. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near the vehicle while in operation.
- 26. Handle gasoline with care it is highly flammable.
  - a. Use approved gasoline containers.
  - b. Never remove the fuel cap of the fuel tank or add gasoline to a running or hot engine or an engine that has not been allowed to cool for several minutes after running. Never fill tank indoors. Always clean up spilled gasoline.
  - Open doors if the engine is run in the garage exhaust fumes are dangerous. Do not run the engine indoors.
- 27. Keep the vehicle and attachments in good operating condition, and keep safety devices in place and working.
- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- 29. Never store the equipment 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.
- To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease. Do not clean product while engine is running.
- Except for adjustments, DO NOT operate engine if air cleaner or cover directly over carburetor air intake is removed. Removal of such part could create a fire hazard.
- Do not operate without a muffler, or tamper with exhaust system. Damaged mufflers or spark arresters could create a fire hazard. Inspect periodically and replace if necessary.
- 33. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object, and the damage should be repaired before restarting and operating the equipment.
- 34. Do not change the engine governor settings or overspeed the engine; severe damage or injury may result.
- 35. When using the vehicle with mower, proceed as follows:
  - a. Mow only in daylight or in good artificial light.
  - b. Shut the engine off when unclogging chute.
  - Check the blade mounting bolts for proper tightness at frequent intervals.
- Do not operate the mower without the entire grass catcher, on mowers so equipped, or the deflector shield in place.
- Disengage power to mower before backing up. Do not mow in reverse unless absolutely necessary and then only after careful observation of the entire area behind the mower.
- 38. Under normal usage the grass catcher bag material is subject to deterioration and wear. It should be checked frequently for bag replacement Replacement bags should be checked to ensure compliance with the original manufacturer's recommendations or specifications.

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# **ASSEMBLY**

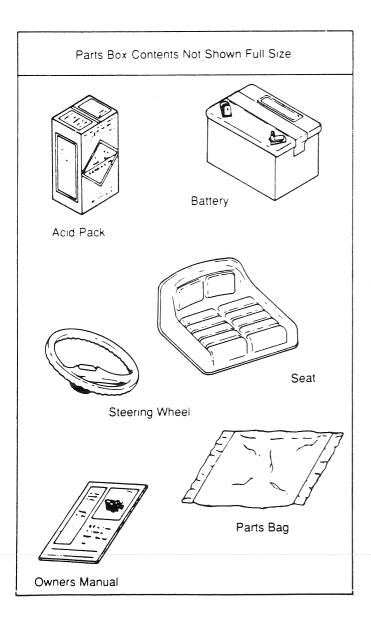
#### 1. Unpack Tractor

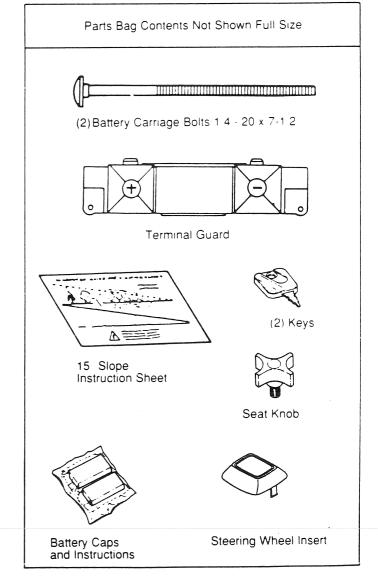
- a. Take items out of box. The box contains the items shown below.
- b. Cut down four corners of the carton with a utility knife and fold down sides.
- c. Disengage Parking Brake.
- d. Install Steering Wheel
  - 1.Remove Hex Nut and Washer from Steering Column (Fig.1)
  - 2. POSITION FRONT WHEELS FORWARD, then position Steering Wheel over Steering Wheel Adapter with Steering Wheel spokes as shown in Figure 1.
  - 3. Install Washer over Steering Wheel and secure with Hex Nut. Tighten securely.
  - 4. Snap Steering Wheel Insert in place on Steering Wheel. Steering Wheel Insert found in Bag of Parts.

- e. Remove plastic on tractor hood.
- f. Raise attachment lift handle.
- a. Roll Tractor off skid. Be careful of staples in skid



The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before starting your tractor and while moving. We recommend Wide Vision Safety Mask for over the spectacles or standard safety glasses.





# **ASSEMBLY**

ASSEMBLY LOCATION	PARTS BAG CONTENTS SHOWN FULL SIZE
BATTERY	(2) Wing Nut, 1/4 - 20
BATTERY TERMINALS	(2) Hex Bolt, 1 4 - 20 x 3 4 (2) Lockwasher 1 4 (2) Washer 9 32 x 5 8 x 16 Ga. (2) Hex Nut, 1 4 - 20
SEAT	(1) Lockwasher 1 2  (1) Washer 17/32 x 1 3/16 x 12 Ga.

To assemble tractor you will need:

(2) 7/16" Wrenches

Tire Pressure Gauge

(1) 1/2" Wrench

Screwdriver

(1) 9/16" Wrenches

Utility Knife

(1) 3/4" Wrench

(2) 11/16" Wrench NOTE: RIGHT HAND (R.H.) AND LEFT HAND (L.H.) ARE DETERMINED FROM OPERATOR'S POSITION

WHILE SEATED ON THE TRACTOR.

#### WEAR EYE AND FACE SHIELD.



WASH HANDS OR CLOTHING IM-MEDIATELY IF ACCIDENTALLY IN CONTACT WITH BATTERY ACID.

DO NOT SMOKE: FUMES FROM CHARGED BATTERY ACID ARE EXPLOSIVE.

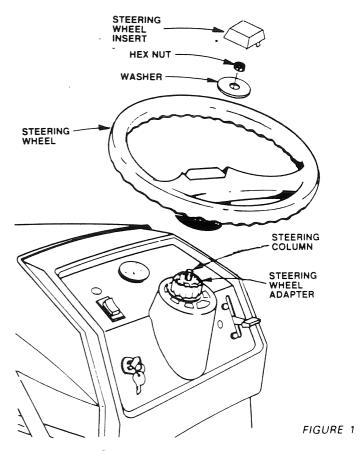
READ THE INSTRUCTIONS INCLUD-ED WITH THE BATTERY VENT CAPS IN THE BAG OF PARTS. ALWAYS WEAR GLOYES, CLOTHING AND GOGGLES TO PROTECT YOUR HANDS. SKIN AND EYES.

#### Prepare Battery

Fill and charge battery (before installing). NOTE: SEE DETAILED INSTRUCTIONS PACKAGED WITH BATTERY VENT CAPS FOUND IN BAG OF PARTS.

- Fill each cell with battery acid. Add the acid until it reaches the bottom of the vent tubes (Fig. 3). Do not add the acid beyond this level or the additional acid can come out when the battery is charged
- b. After cells are filled, tilt battery from side to side to release air bubbles.
- c. Allow battery to stand and settle for at least thirty minutes. If the level of acid falls below the point described in step (a), add more acid until the correct level is reached. Install the battery caps, found in the bag of parts, to cover the vent tubes. Wash the top of the battery with water to remove any acid, then wipe dry.
- d. Check battery case for leakage to make sure that no damage has occured in handling.
- e Neutralize exess battery acid for disposal by adding it to 10,2cm (4 inches) of water in a 19 litre (5 gallon) plastic container. Stir with a wooden or plastic paddle while adding baking soda until the addition of more soda causes no more foaming.
- f. It is recommended that the battery be charged before use. Use a 12 volt battery charger. Charge battery at a rate of 6 amperes for 1 hour NOTE: OBSERVE SAFETY PRECAU-TIONS, LISTED IN BOX ABOVE, REQUIRED FOR BATTERY CHARGING. Check the acid level after the battery is charged. If the acid has fallen below the correct level, add distilled or iron free water.

# *ASSEMBLY*



#### 3. Install Seat.

Seat position should be adjusted forward or backward so that the operator can comfortably reach Clutch/Brake Pedal and safely operate tractor.

- a. Place seat on seat pan. Screw Seat Knob, Lockwasher and Flat Washer into Seat (Fig. 2). Screw Shoulder Bolt into Seat (Fig. 2). Seat Knob, Shoulder Bolt and Washers found in Bag of Parts (shown full size on page 6).
- b. Tighten Shoulder Bolt using a 1/2" wrench. NŎTE: THE SHOULDER BOLT WILL BE LOOSE IN THE SEAT PAN SLOT.
- c. Tighten Seat Knob, Lockwasher and Flat Washer by hand.
- d. Place Seat in operating position. Sit on the Seat and press Clutch/Brake pedal all the way down. If operating position is not comfortable, adjust Seat.
- e. To adjust: Raise Seat. Loosen Seat Knob. Slide Seat to desired position. Tighten Seat Knob securely.



SEAT KNOB, LOCKWASHER AND FLAT WASHER MUST BE TIGHTENED SECURELY TO PREVENT MOVEMENT OF SEAT.

# **ASSEMBLY**

#### 4. Check Tires

Check the air pressure in the tires. Tires with too much air pressure will cause the unit to ride rough. The wrong air pressure will also keep the mower from cutting level. The correct air pressure is shown on the side of the tires. If the air pressure is not shown, set to pressures shown in the REPAIR AND ADJUSTMENT section (page 14).

#### 5. Install Battery



BEFORE INSTALLING BATTERY, REMOVE METAL BRACELETS, WRISTWATCH BANDS, RINGS, ETC. FROM YOUR PERSON. TOUCHING THESE ITEMS TO BATTERY TERMINALS COULD RESULT IN BURNS.

Place Battery into Battery Tray with Battery terminals toward rear of Tractor (Fig. 4) Make sure Battery rests in Battery tray.

NOTE BE SURE BATTERY DRAIN TUBE IS SECURELY ATTACHED TO BATTERY TRAY DRAIN

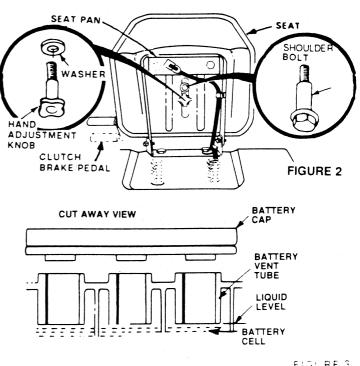


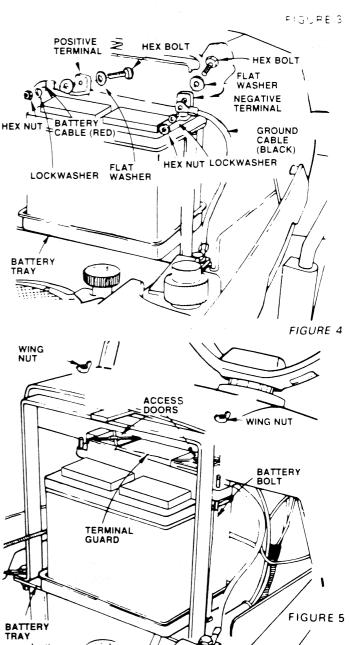
POSITIVE TERMINAL MUST BE CON-NECTED FIRST TO PREVENT SPARKS FROM ACCIDENTAL GROUNDING

- b. Connect RED battery cable to positive (+) battery terminal with hex bott, flat washer, lockwasher and hex nut (shown full size on pg. 6) found in bag of parts. Tighten securely with two 7 16" wrenches. (Fig. 4)
- c. Connect BLACK ground cable to negative (-) battery terminal with remaning hex bolt, flat washer, lock-washer and hex nut (shown full size on pg. 6) found in bag of parts. Tighten securely, (Fig. 4)
- d. To prevent corrosion, apply grease to the battery terminals after installing cables.
- e. Using the square hole on one side of the Battery support, slide Battery Bolt into frame hole (head of Bolt down). Fasten the Battery Bolt to the Terminal Guard using Wing Nut(shown full size on page 6) as shown in Fig. 5)
- f. Assemble the remaining battery bolt to other side of battery support and fasten terminal guard to it with remaining wing nut, (Shown full size on pg. 6). Tighten wing nuts securely by hand (Fig. 5).

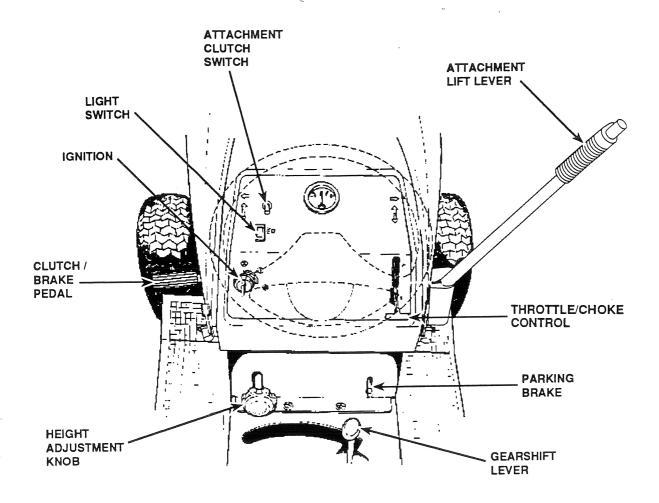
NOTE KEEP TERMINAL ACCESS DOORS CLOSED WHEN NOT IN USE.

CAUTION: DO NOT START ENGINE UNTIL YOU HAVE REVIEWED THE OPERATION SECTION OF THIS MANUAL.





# **OPERATION**



**ATTACHMENT CLUTCH SWITCH:** Pull switch out and up to engage attachment. There will be an engine hesitation as the clutch engages.

**ATTACHMENT LIFT LEVER:** Use the attachment lift lever to raise and lower the attachment mounted to your tractor. Pull lever back slightly and push button, then move the lift lever forward to lower attachment.

**CLUTCH/BRAKE PEDAL**: The pedal has 2 functions; a clutch and a brake. To engage the brake push the pedal completely down.

ATTACHMENT HEIGHT ADJUSTMENT KNOB: Use the height adjustment knob to adjust the mower height. With the attachment lift lever in the "up" position, turn knob clockwise ( ) to raise cutting height and counterclockwise ( ) to lower cutting height.

**GEARSHIFT**: Press the clutch brake pedal down firmly and move gear shift lever to desired speed.

**IGNITION**: Place key in ignition and turn to the right to start. The switch spring returns from the start positon.

LIGHT SWITCH: Turns the headlights on and off.

PARKING BRAKE: To set the parking brake, push the clutch/brake pedal completely down. Hold the parking brake lever in "Engage" position and release pressure from pedal. Clutch/brake pedal will remain in brake position.

THROTTLE/CHOKE CONTROL: Use the throttle control to increase or decrease the speed of the engine, and to choke the engine for starting. Push lever—forward to choke.

# **OPERATION**

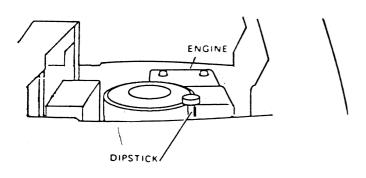


FIGURE 6

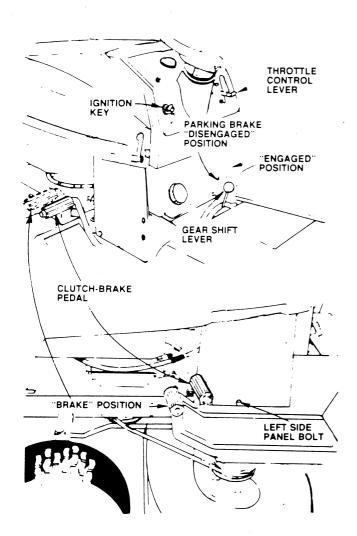


FIGURE 7

### 1. Stopping Your Tractor

NOTE: REMOVE KEY WHEN LEAVING TRACTOR TO PREVENT UNAUTHORIZED USE.

- Push clutch-brake pedal into full "BRAKE" position. Keep your foot on pedal(Fig. 7).
- b. Place attachment clutch switch in "DISENGAGED" position.
- c. Move gear shift lever to "NEUTRAL" postion.
- d Place parking brake in "ENGAGED" position and release pressure from clutch/brake. Pedal should remain in "BRAKE" position.
- Pedal should remain in "BRAKE" position.

  e. Move throttle control to "S" (slow) position.
- f. Turn ignition key to "OFF" position. Never use choke to stop engine.

## 2. Preparing The Engine



LEARN TO START, STOP AND RE-VERSE YOUR TRACTOR IN A LARGE, OPEN AREA.

- a. This engine has been shipped filled with summer weight oil (For cold weather operation see chart page 16). Check engine oil level. Refer to REPAIR AND ADJUSTMENT section (page 16).
- b. Fill fuel tank (Fig.6). Use fresh, clean, regular unleaded automotive gasoline. (Use of leaded gasoline will increase carbon and lead oxide deposits and reduce valve life). Capacity is 3.5 gallons.



FILL TO BOTTOM OF GAS TANK FILLER NECK. DO NOT OVERFILL. WIPE OFF ANY SPILLED OIL OR FUEL. DO NOT STORE, SPILL OR USE GASOLINE NEAR AN OPEN FLAME.

CAUTION: EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OR USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF AN ENGINE WHILE IN STORAGE.

TO AVOID ENGINE PROBLEMS, THE FUEL SYSTEM SHOULD BE EMPTIED BEFORE STORAGE FOR 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.

# 3. Starting The Engine

- a. Move throttle control lever (Fig. 7) past "FAST" to the "CHOKE" position.
- b. Turn ignition key to "START" and release key as soon as engine starts.

# CAUTION: DO NOT RUN STARTER CONTINUOUSLY FOR MORE THAN FIFTEEN SECONDS PER MINUTE.

- c. If engine does not start after four or five tries, move throttle control lever to "FAST" position, wait a few minutes and try again. If the engine does not start after four or five more tries, see the TROUBLESHOOTING Chart (page 25).
- d. After the engine starts move throttle control lever slowly to the "SLOW" position.
- e. To start a hot engine move the throttle control lever to a position between "FAST" and "SLOW".



READ THE "RULES FOR SAFE OPERATION" CAREFULLY BEFORE OPERATING YOUR MOWER.

CAUTION: DO NOT ADD ADDITIONAL WEIGHT TO THE TRACTOR OTHER THAN THE OPTIONAL WHEEL WEIGHTS. EXCESSIVE WEIGHT MAY OVERLOAD AND DAMAGE THE TRANSAXLE.



ALWAYS WEAR SUBSTANTIAL FOOT-WEAR AND AVOID LOOSE FITTING CLOTHING THAT COULD GET CAUGHT IN MOVING PARTS.

## CAUTION TO AVOID INJURY

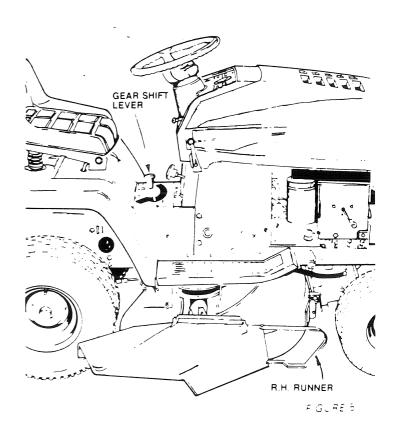
- 1. Read owner's manual.
- 2. Know location and function of all controls.
- 3. Keep guards, safety shield and switches in place and working.
- 4. Remove objects that can be thrown by blades.
- 5. Do not mow when children and others are around.
- 6. Never carry children or passengers.
- 7. Always look behind machine before backing.
- 8. Do not mow where machine can tip or slip.
- 9. If machine stops going uphill, stop blades and back slowly down.
- 10. Be sure blades and engine have stopped before placing hands or feet near the blades.
- 11. Remove key when leaving machine.

MAKE SURE PARKING BRAKE WILL HOLD TRACTOR SECURE.



NEVER PLACE YOUR HANDS OR FEET IN OR UNDER ANY POWERED ATTACHMENT OR NEAR ANY MOVING PART WHILE TRACTOR OR ANY POWERED ATTACHMENT IS RUNNING.

# **OPERATION**



# 4. Operating Your Lawn Tractor & Mower



DO NOT OPERATE THE MOWER WITH-OUT EITHER THE ENTIRE GRASS CATCHER, ON MOWERS SO EQUIPPED, OR THE DEFLECTOR SHIELD IN PLACE.

NOTE: THIS 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 LEVER ENGAGED WILL SHUT OFF THE ENGINE.

- a. Move the attachment lift lever to the high position and adjust height of cut to mid range.
- b. Start the engine. (See Starting the Engine)
- c. Move the throttle lever to mid range position Select a low (1st or 2nd) gear until you become more familiar with the operation of the unit
- d. Slowly release clutch brake pedal and proceed to the mowing area.
- e. Stop the unit, then select a mowing speed. (See Speed Selection Guide, page 12).
- f. Move throttle lever to half throttle and slowly move attachment clutch switch to engaged position, Fig. 8.

# **OPERATION**

- g. Slowly release clutch brake pedal.
- h. Move throttle lever to fast position.
- Observe height of cut and readjust as desired.

CAUTION: BEFORE YOU MOVE THE GEAR SHIFT LEVER, COME TO A COMPLETE STOP. FAILURE TO DO SO CAN RESULT IN GEAR BOX DAMAGE.

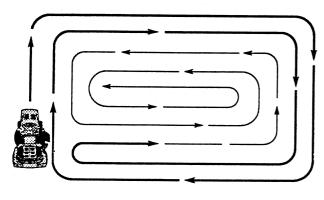


FIGURE 9

SPEED SELECTION GUIDE			
FUNCTION	GEARSHIFT	THROTTLE	
Normal Mowing	2 or 3		
Heavy Mowing	1 or 2	FAST	
Snow Blowing	1		
Snow Blade	2	SLOW	
Transport	4 through 6	to FAST	

#### 5. Mowing Tips

NOTE: TIRE CHAINS CANNOT BE USED WITH THE MOWER ATTACHED.

- a. Mower should be adjusted properly front to back and side to side for good mowing performance. Refer to REPAIR AND ADJUSTMENT section (page 22).
- b. Use the runner on the R.H. side as a guide; the blade cuts approximately 25,4 mm (one inch) outside the runner (Fig. 8).
- c. 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.
- d. When mowing large areas (Fig. 9), start by turning to the right so that the clippins will discharge away from shrubs, fences, driveways, etc. After two or three rounds, mow in the opposite direction making left hand turns until finished.
- e. If grass is extremely tall, it should be mowed twice. The first time cut relatively high; the second time to the desired height.
- The left hand side of mower should be used for trimming.
- g. See Speed Selection Chart.
- h. Do not mow tall, dry, (brown) grass over 15 cm. (6 inches) tall. It is a fire hazard.

#### 6. Operating The Tractor On Hills



DO NOT DRIVE UP OR DOWN HILLS WITH SLOPES GREATER THAN 15° AND DO NOT DRIVE ACROSS ANY SLOPE.

- a. Move gear shift lever to ''1st'' gear before starting up or down hills.
- b. AVOID STOPPING OR SHIFTING ON HILLS.
- c. If slowing is necessary, move throttle control lever to slower position.



LEAVE ENOUGH ROOM WHEN STOP-PING AND STARTING TO ALLOW SLIGHT TRACTOR ROLL DOWNHILL AS CLUTCH-BRAKE PEDAL MOVES THROUGH CLUTCH POSITION.

- d. If stopping is absolutely necessary, push clutch/brake pedal quickly to brake position.
- e. To restart tractor movement, make sure tractor is in the lowest speed range ("1st" Gear) and release clutch-brake pedal SLOWLY.
- f. Make all turns gradually.

#### 7. Transporting Your Tractor

a. For pushing or towing your tractor, place gear shift lever in "N" position. Do not tow or push at more than 9,6 Kmh (6 MPH).

# **MAINTENANCE**

To keep your tractor running better, longer, perform necessary service using the following maintenance schedule:

# With Every Mowing

- 1. Make sure all nuts on bolts are tight and cotter pins and retainer springs are secure.
- 2. Observe all safety precautions.
- 3. Keep tractor well lubricated (refer to page 17).
- 4. Changing oil after the first two hours (or two mowings) will help eliminate break-in residue which may be damaging to your engine. Refer to page 16.



BEFORE MAKING ANY INSPECTION, ADJUSTMENT, OR REPAIR:

- 1. PUSH CLUTCH/BRAKE PEDAL COM-PLETELY DOWN.
- 2. MOVE GEAR SHIFT CONTROL LEVER TO NEUTRAL POSITION.
- 3. PLACE PARKING BRAKE IN "ENGAGED" POSITION, REMOVE FOOT FROM PEDAL.
- 4. DISENGAGE ATTACHMENT CLUTCH SWITCH.
- 5. SHUT OFF THE ENGINE.
- 6. MAKE ABSOLUTELY SURE THE BLADES AND ALL MOVING PARTS HAVE COMPLETELY STOPPED.
- 7. DISCONNECT THE SPARK PLUG WIRE FROM THE SPARK PLUG AND KEEP WIRE AWAY FROM THE SPARK PLUG TO PREVENT INJURY FROM ACCIDENTAL STARTING. BE CAREFUL TO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS.

# SERVICE RECORD

(Enter Date Maintenance Performed)

SERVICE RECORD	SCH	EDULE					
Fill in dates as you complete regular service	FIRST 2 HOURS	EVERY 5 HOURS	EVERY 25 HOURS	50	EVERY 100 HOURS		
Blades - sharpen							
Brake Adjustment			1				
Check Battery				~			
Change Engine Oil	10						
Check Engine Oil Level							
Clean Air Cleaner Element				10			
Check Muffler				~			
Clean Air Screen				1			
Clean Front Grill				~			
Lubricate Tractor				~			
Replace Spark Plug							
Replace Air Cleaner Element					~		
Check Tire Pressure			1				
Replace Fuel Filter					1		

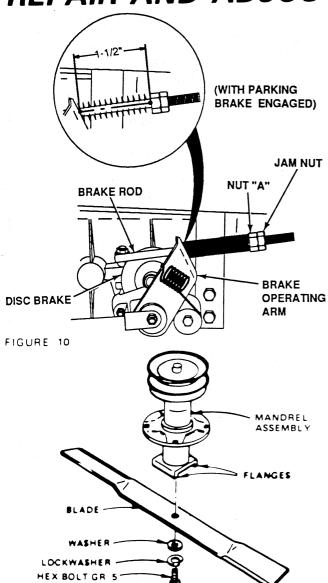
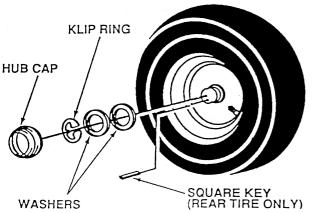


FIGURE 11



A GRADE 5 HEAT TREATED BOLT CAN BE IDENTIFIED BY THREE LINES ON THE BOLT HEAD AS SHOWN AT LEFT.



## 1. Brake Adjustment

This tractor is equipped with an adjustable brake system mounted on the right side of the transaxle (Fig. 10).



IF TRACTOR REQUIRES MORE THAN 1,8 METERS (6 FEET) STOPPING DISTANCE IN HIGHEST GEAR, THEN BRAKE MUST BE ADJUSTED.

- a. Depress clutch/brake pedal and engage parking
- b. Measure distance between brake operating arm and nut "A" on brake rod.
- c. If distance is other than 3,8 cm (1.5 inches) loosen Jam Nut (Fig.15) and turn Nut "A" until distance becomes 3.8 cm (1.5 inches ). Retighten Jam Nut against Nut"A".

Road test tractor for proper stopping distance as stated above. Readjust if necessary.

## 2. Tire Care

- a. Maintain tire pressure of 1 Kg/cm² (14PSI) in front tires and 0,84 Kg/cm² (12PSI) in rear tires.
- b. Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- c. Avoid stumps, stones, deep ruts and other hazards that may cause tire damage.
- d. When removing wheel for tire repair (Fig. 12)
  - 1. Block up axle securely.
  - 2. Remove hub cap, klip ring and washers to allow wheel removal (rear wheel contains a square key - Do not lose).
  - 3. Repair tire and reassemble.
  - 4. On rear wheels only align slots in rear wheel hub and axle. Insert square key.
  - 5. Replace washers and snap klip ring securely in axle
  - gróove. 6. Replace hub cap.



WHEN MOUNTING TIRES, BEADS MUST BE SEATED. OVERINFLATION CAN CAUSE AN EXPLOSION.

#### Blade Care

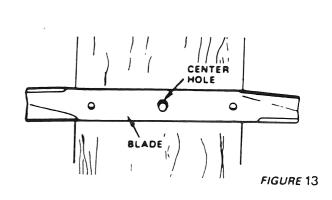
For best results mower blades must be kept sharp. The blades can be sharpened with a few strokes of a file, or on a grinding wheel. We suggest they be sharpened after every 25 hours of mowing. Do not attempt to sharpen while on mower. If you mow in sandy soil check the blades after each two mowings. The sand wears the blade away rapidly.

#### a. Blade Replacement

Raise mower to highest position to permit access to blades.

- 1. Remove the hex head bolt, lockwasher and flat washer (Fig. 11) (turn counterclockwise) ( \_\_\_\_).
- 2. Remove and discard old blade.
- 3. Clean top and bottom of mower housing.
- 4. Install new blade with SHARP EDGE DOWN and secure with flat washer, lockwasher and hex head bolt. TIGHTEN SECURELY.

- b. When grinding, care should be taken to maintain blade balance and the blade should be checked for proper balance before reinstallation on mower. An unbalanced or bent blade will cause excessive vibration when running, and eventual damage to mower or engine. Replace bent or damaged blades.
- c. To check blade balance, drive a nail into a beam or wall. Leave about one inch of the straight nail exposed. Place center hole of clean blade over the head of the nail (Fig. 13). NOTE: CENTER HOLE OF BLADE ON NAIL, IF BLADE IS PROPERLY BALANCED, BLADE SHOULD REMAIN IN POSITION SHOWN IN FIG. 13. IF EITHER END OF THE BLADE MOVES DOWNWARD, BLADE IS NOT BALANCED. SHARPEN THE HEAVY END UNTIL BLADE IS BALANCED.





ALWAYS USE GRADE 5 HEAT TREATED BOLTS TO ATTACH BLADES. DO NOT USE PLATED BOLTS. CHECK BOLTS IN BLADES OCCASIONALLY TO MAKE SURE BOLTS ARE TIGHT. TORQUE BOLTS TO 37 - 47 Nm (27 - 35 FT.lbs.)

# 4. BATTERY CARE

#### Check Battery

- a. Battery acid solution level in each battery cell should be even with bottoms of vent tubes in cells (Fig. 14). Add ONLY distilled or iron free water if necessary. NOTE: DO NOT OVERFILL.
- b. Keep battery and terminals clean.
- c. Keep battery bolts tight.
- d. Keep vent caps tight and small vent holes in caps open.
- e. Recharge at 6 amperes for 1 hour if necessary.

### Clean Battery and Terminals

Corrosion and dirt on the battery and terminals cause the battery to ''leak'' power and hinders the operation of the charger.



LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES. KEEP SPARKS, FLAME AND SMOKING MATERIALS AWAY FROM BATTERIES. ALWAYS SHIELD YOUR EYES AROUND BATTERIES.

- a. Remove terminal guard.
- b. Disconnect BLACK battery cable, then RED battery cable, and remove battery from tractor.
- c. Wash battery with 60 ml (4 tablespoons ) of baking soda to 4 litres (1 gallon ) of water. NOTE: BE CAREFULL NOT TO GET THE SODA SOLUTION INTO THE CELLS.
- d. Rinse the battery with plain water, dry and reinstall on tractor.
- e. Clean terminals and battery cable ends with wire brush until bright.

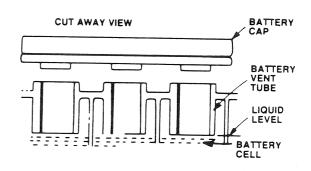


FIGURE 14

- f. Replace battery cables, connecting RED battery cable to positive terminal first, then BLACK battery cable to negative terminal. Coat terminal connections with grease after installation of cables.
- g. Replace terminal guard.

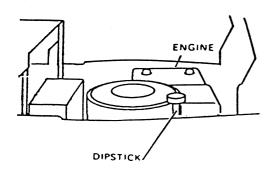
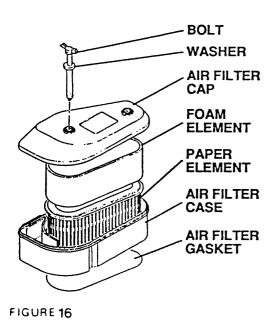


FIGURE 15



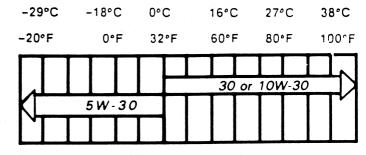
5. Change Engine Oil

The best time to change engine oil is at the end of a day's operation when all dirt and foreign materials are suspended in the hot oil.

Capacity is 1,4 litres (44 U.S. fluid ounces). NOTE: DO NOT OVERFILL. Dipstick assembly must be securely tightened into tube at all times when engine is operating.

CAUTION: TO AVOID DAMAGE TO THE STARTING

SYSTEM, USE SAE 5W30 OIL WHEN THE TEMPERATURE FALLS BELOW 0°C(32°F).



# 6. Check Engine Oil Level



DO NOT CHECK ENGINE OIL LEVEL WITH ENGINE RUNNING.

Several minutes after stopping engine, check engine oil level with tractor on level ground. Wipe dipstick (Fig. 15) clean, screw it down tight for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark is reached. (See chart above). NOTE: DO NOT OVERFILL.

# 7. Clean Air Cleaner Element (Fig. 16)

- a. Remove two bolts and air filter cap.
- b. Remove foam element. Wash foam in liquid detergent and warm water to remove dirt. Wrap foam in cloth and squeeze dry. Soak foam in clean engine oil, then squeeze out excess oil.
- c. Remove paper element and clean by gently tapping or washing in detergent and water. Do not use pressurized air on paper element to avoid breakage. Do not oil paper element.

#### 8. Clean Air Screen



ALWAYS WEAR EYE AND FACE PROTECTION WHEN USING COM-PRESSED AIR.

Air Screen must allow free-flow of air to prevent engine damage from overheating. Clean with a wire brush, compressed air or water pressure to remove dirt, chaff, stubborn dried gum and fibers.

# Recommended SAE Viscosity Grades

Determine temperature range expected before next oil change. All oil must meet A.P.I. service classification SD, SE or SF.

#### 9. Check Muffler

Inspect and replace damaged muffler and/or deflector as it could create a fire hazard and/or damage.



DO NOT TOUCH HOT MUFFLER, CYLINDER OR FINS AS CONTACT MAY CAUSE BURNS.

#### 10. Lubricate Pivot Points

Place several drops of SAE 30 oil at points where parts move against each other.

See Lubrication Chart page 24.

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

NOTE: YOUR TRACTOR IS EQUIPPED WITH A 12 VOLT NEGATIVE GROUNDED SYSTEM. THE OTHER VEHICLE MUST ALSO BE A 12 VOLT NEGATIVE GROUNDED SYSTEM.



LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES. KEEP SPARKS, FLAME AND SMOKING MATERIALS AWAY FROM BATTERIES. ALWAYS WEAR EYE PROTECTION WHEN AROUND BATTERIES.

- a. Connect each end of the RED cable to the POSITIVE (+) terminals of each battery (taking care not to short against chassis). (Fig. 18)
- b. Connect one end of the BLACK cable to the NEGATIVE (-) terminal of fully charged battery.
- c. Connect the other end of the cable to the L.H. side panel bolt (Fig. 19) NOTE: KEEP AWAY FROM GAS TANK AND BATTERY.
- d. Disconnect cables in reverse order:
  - 1. L.H. side Panel Bolt
  - 2. Negative terminal of fully charged battery
  - 3. Positive terminals



DO NOT USE YOUR TRACTOR BATTERY TO START OTHER VEHICLES.

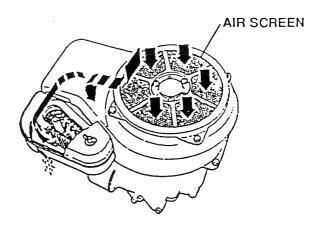
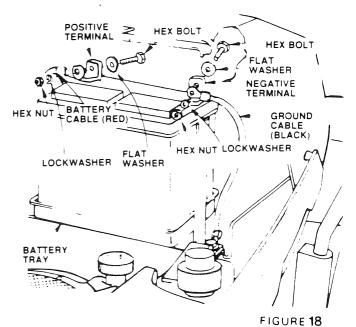


FIGURE 17



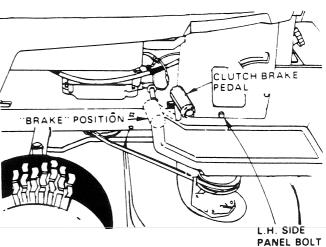


FIGURE 19

# 12. Throttle Control Cable Adjustment

Never attempt to change maximum engine speed. This is preset at the factory and should only be changed by a qualified service technician.

- a. Link throttle cable (G) to speed control ]ever (C) and clamp throttle cable outer housing (F) temporalily (Fig. 20).
- b. With throttle lever on dash in "FAST" position, align hole (B) of speed control lever (C) with hole (D) of control plate (E) and insert 5 mm (0.24 in.) dia, pin or 5 mm bolt through two holes (Fig. 20).
- Pull out throttle cable outer housing (F) to remove any slack and tighten cable clamp bolt (A) (Fig. 20).
- d. Remove 6 mm pin and set throttle lever on dash in "CHOKE" position. Make sure carb. choke valve is completely closed (Fig. 20).

NOTE: AIR CLEANER MUST BE INSTALLED TO ENGINE BEFORE STARTING.

Fast Idle Speed Adjustment

- a. Start and warm up engine without load.
- b. Loosen two control plate bolts (I) (Fig. 20).
- c. Align hole (B) of speed control lever (C) with hole (D) of control plate (E) and insert 6 mm (0.24 in,) dia, pin or 6 mm bolt through two holes (Fig. 20).

NOTE: MAKE SURE CHOKE VALVE IS FULLY OPENED.



REFER TO "STARTING THE ENGINE" PAGE

- d. Adjust fast idle speed for specified rpm (3275-3425 rpm) by moving control plate (E) (Fig. 20).
- e. Tighten two bolts (I) securely in a manner to avoid changing specified speed (Fig. 20).
- Stop engine, remove 6 mm pin, and set throttle lever on dash in "CHOKE" position. Make sure carb. choke valve is closed completely (Fig. 20).

#### Slow Idle Speed Adjustment

- a. Tum carb. pilot screw (B) in until it just seats and then back out 1-1/2 turns (Fig. 20A).
- b. Start and warm up engine without load.
- c. Move throttle lever on dash to "SLOW" position.
- d. Adjust slow idle speed to specified rpm (1450-1650 rpm) by moving throttle stop screw(A) (Fig. 20A).
- e. Adjust pilot screw (B) until engine idles at maximum speed and then turn pilot screw out additional 1/4 turn (Fig. 20A).
- f. Re-adjust slow idle speed, to specified rpm (1450-1650 rpm).

14. Replace Spark Plug

Replace spark plug at the beginning of each mowing season or every 100 hours, whichever comes first. Gap should be set at 0,762 mm (0.030. inch)(Fig. 21). Replace with Champion RN 11 YC.

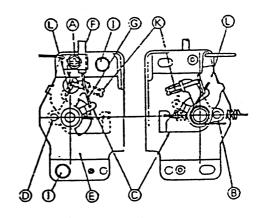


FIGURE 20

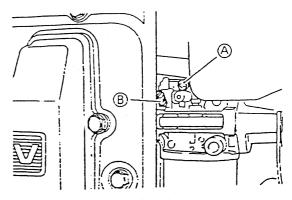


FIGURE 20A

# 15. Replace In-Line Fuel Filter

If fuel filter is clogged, obstructing fuel flow to caburetor, replacement is required.

- With engine cool, remove filter, and plug fuel line sections that were removed from both ends of fuel filter (fig. 20).
- b. Place new fuel filter in positions in fuel line.



BE SURE THEIR ARE NO FUEL LINE LEAKS AND THAT HOSE CLAMPS ARE PROPERLY INSTALLED.

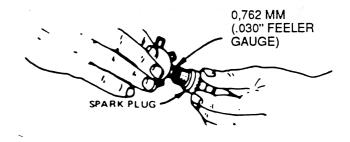


FIGURE 21

#### 16. Motion Drive Belt Removal

The tractor drive belt may be replaced without tools. Park the tractor on level area. Engage parking brake. NOTE: A BELT INSTALLATION DECAL IS UNDER LEFT FOOTREST.

- a. Remove mower. (See mower section, page 20).
- b. Remove two retainer springs from belt guide bracket below transaxle pulley. Remove bracket (Fig. 22).
- c. Swing belt guides away from belt, toward rear of tractor (Fig. 22).
- d. Roll belt over top of transaxle pulley.
- e. Roll belt over engine pulley and off idler (Fig. 23).
- f. Release parking brake. Pull belt as far as possible over top of clutch pulley.
- g. Reset parking brake. Pull belt over top of clutch pulley (Fig. 23).
- h. Pull belt out through shift gate to remove from tractor (Fig. 24).

Install belt by reversing above procedure.

NOTE: REPLACE ONLY WITH BELT LISTED IN MANUAL.

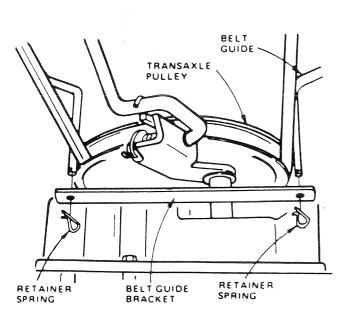
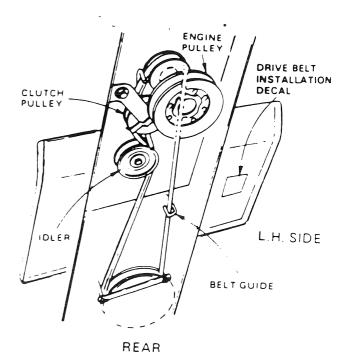
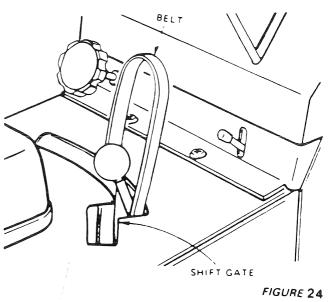


FIGURE 22



VIEWED FROM BOTTOM OF TRACTOR

FIGURE 23



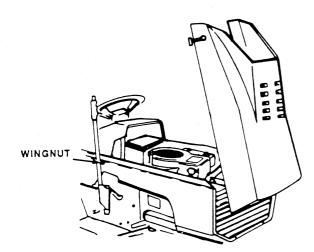
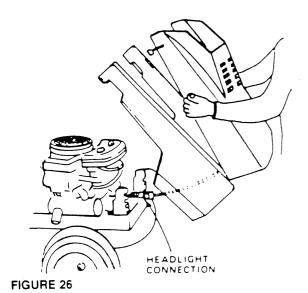
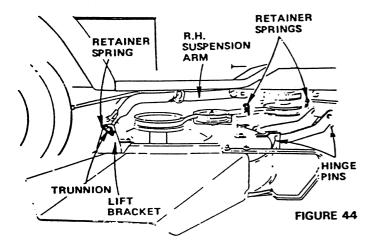


FIGURE 25





## 17. Fuse Replacement

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

#### 18. Hood Removal

- a. To raise hood, lift at rear of hood.
- b. To remove hood, grill and side panels, raise hood and loosen wing nut on each side panel. (Fig. 25).
- c. Unsnap headlight connection (Fig. 26).
- d. Stand in front of tractor. Grasp hood and tilt forward and lift off (Fig. 26).
- e. To reinstall, reverse above procedure.

#### 19. Mower Removal

- a. Remove mower belt per instructions under "Mower Drive Belt Removal" through step(c).
- b. Pull retainer springs out of rear suspension trunnions. Remove rear suspension trunnions from lift brackets (Fig. 27).
- c. Pull retainer spring out of rear hinge pin. Remove rear hinge pin. (Fig. 27)
- d. Pull retainer spring out of front hinge pin. Remove front hinge pin (Fig. 27).
- e. Use lift lever to raise suspension arms. Slide mower out from under tractor.

NOTE: IF AN ATTACHMENT OTHER THAN THE MOWER DECK IS TO BE MOUNTED ON THE TRACTOR, THE L.H. AND R.H. SUSPENSION ARMS (FIG. 27) SHOULD BE REMOVED FROM TRACTOR.

# 20. Mower Installation

Your Mower installs without the use of tools. Raise Attachment Lift Lever (Fig. 28) to its highest position. Turn height adjustment knob to lowest position (Fig. 30).

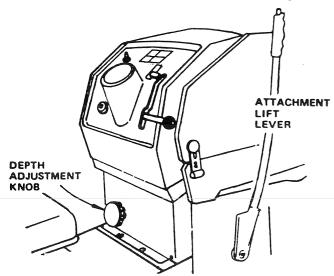
- a. Slide Mower under tractor, discharge guard to R.H. Side.
- b. Install front hinge pin through axle and parallel link (Fig. 31). Secure with retainer spring.
- c. Install rear hinge pin through mower lift brackets and parallel link (Fig. 31). Secure with retainer spring.
- d. Move Attachment lift lever (Fig. 28) forward to lower suspension arms. Slide trunnions through lift bracket holes and secure with retainer springs (Fig. 27).
- e. Roll belt over engine pulley. Make sure belt is inside belt guides (Fig. 30). See belt drive schematic decal on mower housing.
- f. Use Attachment lift lever (Fig. 28) to raise mower.
- g. Turn height adjustment knob clockwise ( ) to the middle of its travel, or to desired cut height (Fig. 30).

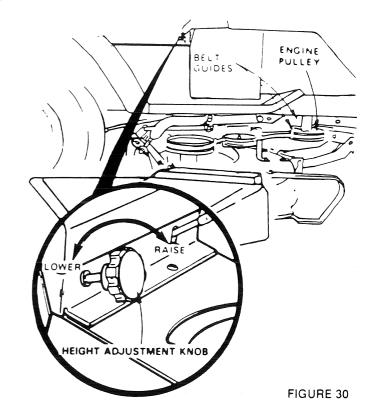
#### 21. Mower Drive Belt Removal

NOTE: MOWER BELT INSTALLATION DECAL LOCATED ON MOWER HOUSING.

REPLACE ONLY WITH THE BELTS SPECIFIED IN THIS MANUAL.

- Place attachment clutch switch in "Disengaged" position.
- b. Turn height adjustment knob to lowest position. Move Attachment lift lever (Fig. 28) forward to lower mower to its lowest position.
- c. Roll belt off engine pulley (Fig. 30).
- d. Pull belt off both mower deck pulleys.
- e. Spring belt guide away from idler pulley and pull belt off idler pulley.
- f. Slide belt from under extension spring.





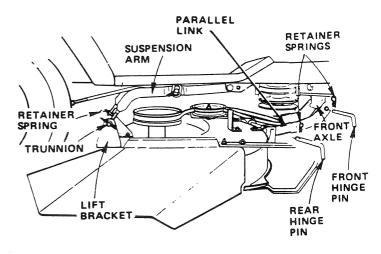


FIGURE 31

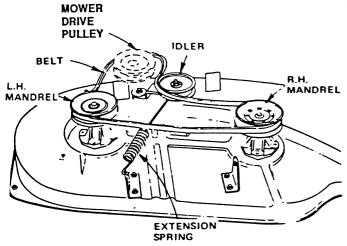
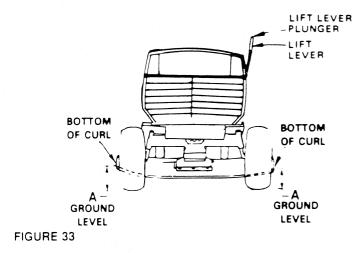


FIGURE 32



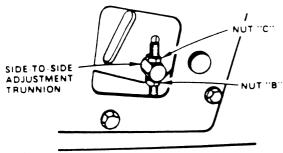


FIGURE 34

# 22. Mower Drive Belt Replacement

REPLACE ONLY WITH THE BELTS SPECIFIED IN THIS MANUAL.

- 1. Place attachment clutch switch in "DISENGAGED" position.
- 2. Turn depth adjustment knob to lowest position. Move attachment lift lever forward to lower mower to its lowest position.
- 3. Roll belt off L.H. mandrel pulley (Fig. 32).
- 4. Pull belt off R.H. mandrel, Idler and mower drive pulley (Fig. 32).
- 5. To replace mower drive belt, reverse above procedure. Make sure drive belt is engaged in all pulleys.

NOTE: MOWER BELT INSTALLATION DECALLOCATED ON MOWER HOUSING.

#### 23. Level Mower Housing

Adjust the mower while tractor is parked on level ground or driveway. Make sure tire pressures are correct.

#### Side-to-Side Mower Adjustment

- a. Depress lift lever plunger and use lift lever to raise mower to maximum cutting height.
- b. Measure height from bottom of curl to ground line at front of mower. Distance "A" should be the same on both sides (Fig. 33).
- c. If distance "A" needs to be changed, snap out access hole cover on L.H. side above footrest. Use 11/16" wrench on nuts "B" and "C" at side-to-side adjustment trunnion (Fig. 34).
- d. To raise left side of mower, loosen nut "B" and tighten nut "C".
- e. To lower left side of mower, loosen nut "C" and tighten nut "B"

NOTE: ONE ROTATION OF ADJUSTMENT NUTS IS EQUIVA-LENT TO APPROXIMATELY 5mm (3/16") HEIĞHT CHANGE.

- f. Be sure all nuts are securely tightened.
- q. Replace cover.

## Front-To-Rear Mower Adjustment

- a. To obtain the best cutting results, your mower housing should be adjusted so the front and rear flange distance "D" (Fig. 35) is 13mm (1/2") lower in front when the mower is positioned in the highest cutting position. NOTE: MEASURE DISTANCE "D" FROM GROUND LINE TO BOTTOM OF CURL ON RIGHT REAR FLANGE AND COMPARE TO DISTANCE "D" AT BOTTOM OF CURL ON RIGHT FRONT FLANGE.
- b. To raise rear of mower, loosen nut "E" on both rear suspension arms. Screw both nuts "F" up EQUAL NUMBER OF TURNS (Fig. 36).
- c. When distance "D" is 13mm (1/2") lower at front than rear tighten nuts "E".
- d. To lower rear of mower, loosen nut "F" on both rear suspension arms an EQUAL NUMBER OF TURNS (Fig. 36).
- e. When distance "D" is 13mm (1/2") rear, retighten nuts "E".

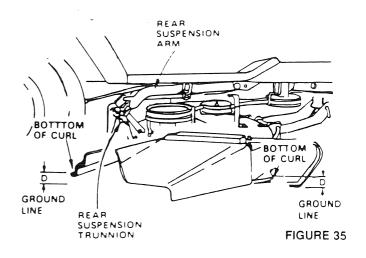
NOTE: WHEN ADJUSTING REAR SUSPENSION TRUN-NIONS, ALWAYS ADJUST BOTH EQUALLY SO MOWER WILL STAY LEVEL.

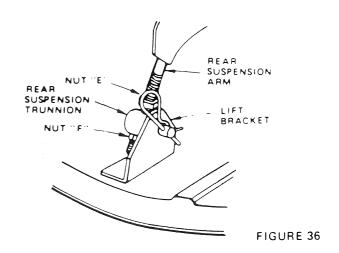
#### 24. Storage

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. give blades and underside of housing a good coat of grease or rust preventative. Store in a clean dry area.

#### A. Fuel System

It is important to prevent gum deposits from forming in essential fuel system parts such as the 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. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer.





#### B. Engine Oil

Drain (with engine warm) and replace with clean engine oil, (See chart page 16).

## C. Cylinder

- 1. Remove spark plug.
- 2. Pour 29,57 cc (1 ounce) of oil through spark plug hole into cylinder.
- 3. Turn ignition key to "START" position for a few seconds to distribute oil.
- 4. Replace with new spark plug.

# D. Battery

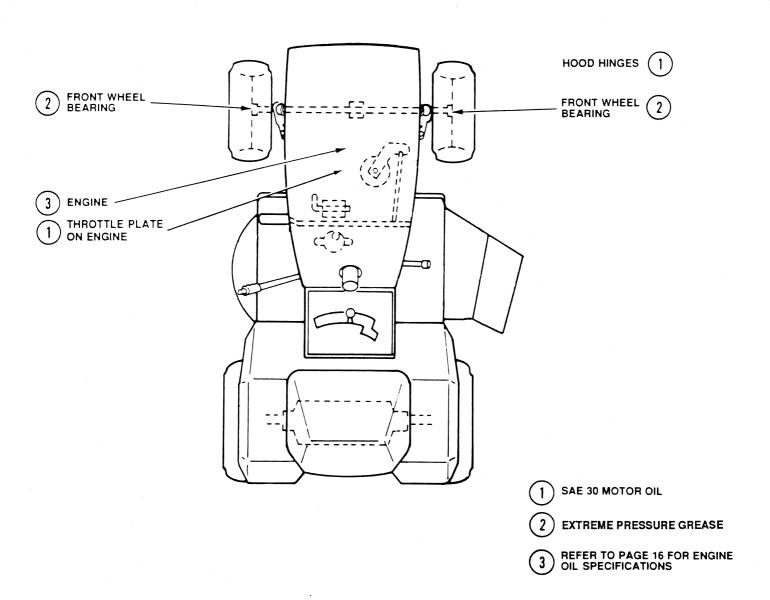
- Prior to storage, clean terminals and top of battery.
- 2. Disconnect cable from positive side of battery.

#### E. General Cleaning

Clean engine, battery, seat, finish, etc. of all foreign matter.

F. Store in a clean, dry area.

# LUBRICATION CHART



# **TROUBLE SHOOTING**

PROBLEM		Cause/Remedy
WILL NOT START		Push Clutch/Brake Pedal into Brake position Move Attachment Clutch Lever to "Disengaged" position
		Fill Tank with Gasoline. Check Fuel Line and Carburetor (clean if necessary).
		Recharge or replace Battery Check Wiring
WILL NOT TURN OVER		Replace Spark Plug(s) and adjust gap
WILL NOT TORN OVER		Charge or replace Battery
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·		12-F1 13
		Check all Wire Connections and "Ground" Points
ENGINE CLICKS BUT WON'T START		Replace starter Charge or Replace Battery
HARD TO START		Place Throttle Control in "FAST" position and run starter several times to clear out gas
		Remove Air Filter and clean
		Recharge or replace Battery
		Drain Fuel Tank and Carburetor, Use Fresh Fuel, Replace Fuel Filter
ENGINE MISSES OR LACKS POWER		
		Clean Air Screen
		Add or change oil Replace Spark Plug(s) and adjust gap
ENGINE OVERHEATS		Wagor Engine Cromacr
		Remove and clean Muffler or replace
NO LIGUTO		Use fresh fuel and adjust Carburetor
NO LIGHTS		Switch
WON'T CHARGE		
		Replace Regulator Replace Alternator
ENGINE WILL NOT SHUT DOWN WHEN OPERATOR LEAVES SEAT		NOTE: This tractor is equipped with an operator presence sensing system. Any
WHEN OF ENAPOREEAVES SEAT	_	attempt by the operator to leave the seat with the engine running and the mower
		clutch engaged will shut down the engine. Engage Attachment Clutch
		Check all Wire connections Check PTO Switch
UNSATISFACTORY MOWER PERFORMANCE UNEVEN DISTRIBUTION OF CLIPPINGS		Place Throttle Control in "FAST" position
		Check air pressure in Tires Check front-to-rear and side-to-side Mower adjustment
		Use a slower ground speed
		Replace Mower Blades Reinstall Mower Blades with Sharp Edge down
		Replace with proper Mower Blades Readjust Mower Drive Belt
MOWER BLADES WILL NOT ROTATE		Clean underside of Mower Deck Correct Clutch mechanism interference
		Install new Mower Drive Belt Adjust Mower Drive Belt
		Réplace frozen Mandrel
EXCESSIVE MOWER VIBRATION		Replace frozen Idler Pulley Replace bent or unbalanced Blades
WINDROWING STRIPPING OR		Replace Mandrel. Replace Deck
DROPPING OF GRASS CLIPPINGS		Set Throttle for maximum engine speed Let grass dry out
		Clean underside of Mower Deck Readjust Mower front-to-rear and side-to-side
LIMEVEN CUT OF COAL PING		Replace Blades
UNEVEN CUT OR SCALPING		Readjust Mower front-to-rear and side-to-side Replace Blades
		Replace bent Mandrel(s)

# REPAIR PARTS

# YARD TRACTOR

# **SCHEMATIC**

