

# 61VG31A

# OPERATORS SERIOUS NOVVING MACHINES

### GENERAL

This manual contains techincal data on the following Encore commercial mowers.

52K650ZP; 52K700ZP; 52K850ZP; 61K650P 61B850P; 61B950P; 61K650ZP; 61K700ZP 61K850ZP; 61B850ZP; 72B850P; 72B950P 72B850ZP; 72K850ZP -- 52K23A; 52K25A 52K27L; 61K27L; 51B27LD; 61K25A; 61B31LP 72K27L; 72B27LD; 72B31LP

### INTRODUCTION

Your mower was built to the highest standards in the industry. However, the prolonged life and maximum efficiency of your mower depends on you following the operating, maintenance and adjustment instructions in this manual.

We encourage you to contact your local Encore dealer for repairs. All Encore dealers are informed of the latest methods to service this equipment and provide prompt and efficient service. They carry a full line of Encore service parts.

A replacement Operator's Manual is available from your Encore Dealer or by contacting Encore Manufacturing Co., Inc., Service Department at PO Box 888, Beatrice, NE 68310. Please indicate the complete model and serial number of your Encore product.

The "Right" and "Left","Front" and "Rear" of the machine are referenced from the operator's perspective when in the normal operating position and facing forward travel direction.

### **GENERAL SAFETY INSTRUCTIONS**

**READ THIS OPERATOR'S MANUAL** and instructions furnished with attachments. Perform only those maintenance procedures described in this manual. If major repairs are ever needed or assistance is desired, contact an Authorized Encore Dealer. To ensure optimum performance and safety, always purchase genuine Encore replacement parts and accessories

# SIGNAL WORDS



This symbol means "Attention! Become Alert! Your Safety is Involved!" The symbol is used with the following signal action words to attract your attention to safety messages. The message that follows the symbol contains important information about safety.

#### Signal Word:



The signal action word "WARNING" denotes that a hazard exists on or near the machine that can result in injury or death if proper precautions are not taken.

# **A** CAUTION:

The signal action word "CAUTION" is a reminder of safety practices on or near the machine that could result in personal injury if proper precautions are not taken.

# NOTES:

The signal action word "NOTES" denotes relevant information to assist you in the performance of a task.

# **ENCORE PROWLER MID CUT**

Your mower is only as safe as the operator! Operator carelessness or error may result in serious bodily injury. Improper maintenance of the machine may also result in injury. Please read and follow these instructions on Safe Operation and be certain that anyone using this mower fully understands and follows these instructions.

1. Familiarize yourself with the controls and know how to stop the rider and mower deck quickly.

**A WARNING**:

**DO NOT** allow children to operate the machine. **DO NOT** allow any adult to operate the machine without proper instruction.

- 2. Inspect your work area carefully. Remove debris from the area to be cut. Keep all bystanders away from the mowing area.
- 3. Avoid contact with moving parts. Keep hands and feet clear of the mower deck.
- 4. Never direct the discharge of material toward bystanders nor allow anyone near the machine while in operation.
- 5. The machine is not intended for highway or street use. Never carry passengers!
- 6. Never tamper with safety devices or guards. If a guard or safety device is damaged or removed, replace it before operating the rider.
- Handle gasoline carefully. Use an approved gasoline container. Fill the fuel tank, to within 1" from the neck, with good quality unleaded gasoline.

# **▲ CAUTION:**

Never add fuel to the tank while the engine is running or hot. ALWAYS WAIT at least five minutes before refueling and REFUEL WITH THE ENGINE OFF. KEEP FUEL AWAY FROM SPARKS OR FLAMES. WIPE AWAY any fuel spillage BEFORE starting unit. Never fill the fuel tank indoors. Wipe up any spilled gasoline. **Gasoline is highly flammable - NO SMOKING.** 

- 8. Drive levers must be in the Neutral position and the Blade Clutch must be disengaged before starting engine.
- 9. Operator must wear proper shoes and clothing, which may include safety glasses and ear protection.
- 10. Mow only during daylight hours or under very good artificial light.
- 11. The safety shield over the Grass Discharge area must always be bolted in place and in the DOWN position unless the Grass Catcher is being used.
- 12. If a solid object has been hit by the blades stop the machine and check for damage. Repair or replace any damaged/broken part prior to restarting the engine.
- 13. To avoid burns, **DO NOT TOUCH** the engine or muffler immediately after operation.
- 14. Disengage blades when transporting and when crossing walks and gravel roads.
- 15. **Do NOT** mow close to drop-offs, deep ditches or other hazards. **Do NOT** stop or start suddenly when going uphill or downhill. Mow up and down the face of steep slopes; NEVER mow across the face. If a steep hill must be ascended, BACK up the hill, drive forward when descending.
- 16. Reduce speed and exercise extreme caution on slopes and in sharp turns to prevent tipping or loss of control. Be especially cautious when changing direction on slopes.
- The Mid-Cut Prowler is NOT designed for towing. Only factory approved Grass Collection Systems are permitted.

### **ASSEMBLY INSTRUCTIONS:**

1. Remove tractor from the crate. Lay out all the hardware and parts from the inner box: Parts will consist of:

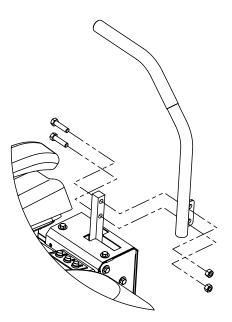
- 1 seat
- 1 bolt bag
- 1 literature packet
- 2 handles

2. Open bolt bag and lay out

- 1 oil breather cap
- 4 5/16-18 X 1 ¼ bolt
- 4 5/16-18 whiz lock nut
- 4 5/16-18 nylock nut
- 4 5/16- std flat washers

3. Take 4 - 5/16 std flat washers and 4 - 5/16 nylock nuts and bolt the seat into place. Slide the studs of the seat though the seat plate and secure with one flat washer and nylock nut on each of the 4 studs. (Slide the seat all the way back onto seat tracks in order to flip seat forward.) At this time you may also connect the seat switch wires.

4. Using the 4 -  $5/16 - 18 \times 1 \frac{1}{4}$  bolts, bolt the handles into place. Note: Handle mounts to the outside of the square control block with whiz locks located on slotted or handle side.



5. Place breather cap on oil tank. Note: The oil tank is pre-filled from the factory with 20w50 oil and should be visible in the sight glass located on the back of the tank. The correct level is mid-point in the sight glass.

### **Battery:**

Units SN 43276 & above have sealed battery - Require no filling or charging

Important for units prior to SN 43276:

Do not overfill battery! Electrolyte will overflow onto parts of the machine, resulting in severe corrosion. THE MACHINE IS SHIPPED WITH A DRY BATTERY!!

1. Remove the battery from the machine. Tilt seat up to gain access to the battery. Disconnect battery cables- NEGATIVE (black) CABLE FIRST. Remove battery hold down and lift battery out.

2. Place battery on a level surface and remove vent caps.

3. Fill cells with battery grade sulfuric acid (1.265 specific gravity) to halfway between the top of the separators and bottom of vent well.

4. Let battery stand for ½ hour after filling. If battery acid level has fallen, refill to level above plates.

5. Charge the battery at 4 to 5 amps for 3-5 hours.

6. After charging, install vent caps and wash off any acid with water and dry battery.

7. Install battery in machine and secure battery hold-down. DO NOT over tighten. When reconnecting the battery cables the POSITIVE (red) CABLE MUST BE ATTACHED FIRST, then connect the Negative (black) Cable and black wire to the battery terminal. Slip the insulator boot over the Positive Terminal.

NOTE: If time does not permit charging the battery, or if charging equipment is not available, follow steps 1-4 and install as described in step 7. Then run to vehicle continuously for 20 to 30 minutes to sufficiently charge the battery.

# **Fuel and Oil Recommendations**

## NOTE:

Consult Engine Manual for Engine Manufactures Recommendations on Operation and Maintenance Information.

# **▲ CAUTION:**

Engines are NOT shipped serviced from factory. You must service engine before cranking it!

#### GAS UNITS FUEL:

Use only clean, fresh, unleaded regular grade gasoline.

#### CAUTION:

Do not mix oil with gasoline.

#### **OCTANE RATING:**

The octane rating of gasoline is a measure of its resistance to "knocking". Using a minimum of 87 octane by the anti-knock index is recommenced. The anti-knock index is posted on service station pumps in the U.S.A.

NOTE: If "knocking or pinging" occurs, use a different brand of gasoline or higher octane rating.

Oxygenates (either ethanol or MTBE) are added to the gasoline. If you use the oxygenated fuel be sure it is unleaded and meets the minimum octane rating requirement.

#### ! WARNING !

Gasoline is extremely flammable and can be explosive under certain conditions.

Before refueling, turn the engine switch OFF. **Do not smoke!** Make sure the area is well ventilated and free from any source of flame or sparks, including any appliances with a pilot light. Never fill tank so that fuel level rises into the filler neck. If tank is overfilled, heat may cause fuel to expand and overflow through vents in tank cap. After refueling make sure tank cap is securely closed. If gasoline is spilled, wipe it up immediately.

DIESEL UNITS FUEL:

# **A CAUTION:**

On Diesel engine model series 432447, 522447 & 582447 - THESE ENGINES ARE CERTIFIED TO OPERATE ON DIESEL FUEL ONLY.

Use clean, fresh diesel with a minimum of 40 cetane. Purchase fuel in quantity that can be used within 30 days to assure fuel freshness.

#### Note: <u>DO NOT use kerosene or gasoline instead</u> of diesel fuel. Failure to observe this caution will damage engine.

#### ALL UNITS FUEL LEVELS:

Keep tank full. Do NOT over fill. Allow space in tank for fuel expansion. Check for fuel leaks at fuel filter, injector pump, fuel pipes and etc.

If the fuel tank does run dry and the engine is equipped with a fuel filter with priming pump, stroke the pump to bleed the air from the fuel filter system.

#### ENGINE OIL:



The following oils are recommended for gasoline engines.

API Service Classification: SF, SG, SH or SJ

NOTE:

Using multi-grade oils (5w-20, 10w30, and 10w40) will increase oil consumption. Check oils more frequently when using them.

#### ENGINE OIL CAPACITIES:

### NOTE:

Consult Engine Manual for Engine Manufactures Recommendations on Operation and Maintenance Information.

Gasoline two cylinder Models FD671D, FD711D and FD750D hold 1.8L or 1.9 Qrts. when oil filter is NOT removed. When filter is removed 2.0L or 2.1 Qrts.

Engine models FH601D, FH641D and FH680 hold 1.4L or 1.5 Qrts. when filter is NOT removed. When filter is removed 1.6L or 1.7 Qrts.

DIESEL OIL CAPACITY INCLUDING OIL FILTER IS APPROXIMATELY 3.3L OR 3.5 QRTS.

#### COOLANT:

Engines that are liquid cooled use a 50/50% mixture of phosphate –free antifreeze and tap water. This 50/50 % mixture is required for heat dissipation, operation at low ambient temperature, rust resistance and lubrication. Fill radiator reservoir to bottom of the fill cap seat.

Check coolant daily before starting the engine. Be sure the engine is level. Check coolant level only at the overflow reservoir located at the side of the radiator. The cooling system is a closed type. Never open the radiator cap, doing so may induce air into the cooling system and may cause over heating. The coolant level should be between the "H" and "L" marks on over flow bottle.

#### STARTING ENGINE:

1. Move levers to the center of the control panel and place them in the lock out position by pushing them outward.

2. Set the Parking Brake to the ON position.

3. Make sure that the PTO is disengaged, by pushing the switch to the DOWN position.

4. Set Engine Choke Control to for cold starts to FULL position.

FOR DIESEL UNITS: WITH THE THROTTLE SET IN "SLOW "POSITION, TURN THE KEY TO THE "ON" POSITION AND WAIT APPROXIMATELY 5 SECONDS FOR THE GLOW PLUGS TO CYCLE (INDICATOR LIGHT SHOULD BE ON WHILE PLUGS ARE PREHEATING COMBUSTION CHAMBER). WHEN THE LIGHT GOES OUT, TURN THE KEY TO THE "START" POSITION. Let the engine warm up for a few minutes before applying load.

5. Set Throttle to approximately half throttle and turn key to "START" position. Release to run as soon as engine starts. NOTE: Prolonged cranking will damage the starter motor and shorten battery life.

6. Adjust Engine Throttle and Choke for desired engine smoothness and speed. NOTE: Let engine warm up for 3 to 4 minutes before applying load.

#### **STOPPING ENGINE:**

1. Lower the engine speed to an idle. Keep engine running at idle for about one minute.

2. Turn the engine switch to "OFF" position.

#### **EMERGENCY STOP:**

Immediately turn the engine key to the OFF position and close the fuel valve.

! WARNING ! ALWAYS REMOVE THE KEY FROM THE SWITCH WHEN LEAVING EQUIPMENT UNATTENDED OR WHEN EQUIPMENT IS NOT IN USE.

#### **TEST OPERATION:**

Once the engine is started you are ready to test drive the unit. NOTE: IF THE OPERATOR IS INEXPERIENCED WITH THE ZERO TURNING RADIUS LEVER STEERING & SPEED CONTROL, HE/ SHE SHOULD FOLLOW THESE RECOMMENDATIONS.

#### **TEST OPERATION – (continued)**

- 1. Release the Park Brake Lever by pushing it forward.
- 2. To drive unit bring both handles in so that they are positioned in front of the operator. Slowly move the handles forward to increase speed, ease handles forward evenly. To decrease speed ease handles back. To back up continue to ease handles all the way back toward the operator. To "zero turn" slowly move the right handle forward to turn left or left handle forward to turn right. To prevent turf tear when zero turning always ease unit into reverse and ease either right or left lever forward.
- Engage mower blades by pulling up on PTO switch. Note: Discharge chute should always be in the DOWN position. Never point discharge toward bystanders.
- To STOP, disengage PTO Switch and slow engine to half throttle. Move Control Levers to Lock or Neutral position and apply Park Brake. Let unit run at ½ throttle for 60 seconds, for a cool down period before turning key to OFF position.

#### CONTROLS:

Your Encore Prowler is equipped with a Safety Interlock System that is designed to help prevent possible serious injuries. Understanding and maintaining this system is vital for safe operation.

#### TO START ENGINE:

- 1. Blades (PTO) switch must be OFF.
- 2. Control Levers must be in Neutral position.
- 3. Park Brake must be ON.
- 4. Operator must be in seat.

#### **ENGINE WILL KILL IF:**

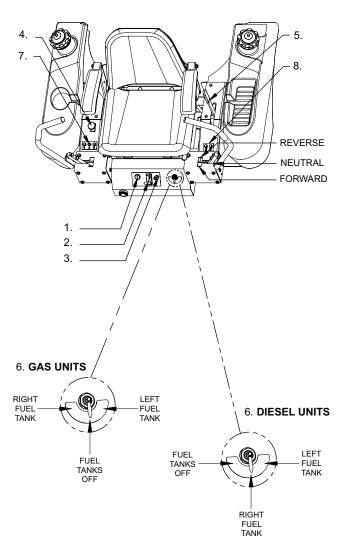
1. The operator leaves the seat with ANY or ALL the following conditions.

- \* The Control Levers OUT of Neutral.
- \* The Blade (PTO) switch is engaged.
- \* Park Brake in the OFF position.
- 2. The Park Brake is set BEFORE the Control Levers are in Neutral. ! WARNING !

#### DO NOT OPERATE MOWER WITH THE INTERLOCK SYSTEM DISCONNECTED OR MALFUNCTIONING. FAILURE TO HEED THIS

#### WARNING MAY RESULT IN INJURY TO YOURSELF AND OTHERS OR PROPERTY DAMAGE COULD RESULT.

#### **CONTROL LOCATIONS:**



- 1. Ignition Key- On front control panel
- 2. Engine Throttle- On front control panel
- 3. Engine Choke On front control panel
- 4. Blade Switch Right hand console
- 5. Parking Brake Left hand console
- 6. Fuel Valve- On front panel
- 7. Indicator Lights (oil, alt and temp) Right hand console.
- 8. Diesel units will have glow plugs and fuel filter lights located on the left console.
- 9. Hour meter is located behind the seat on the left hand side standing in front of the machine.
- 10. Serial Plate is located under the seat, on the inside of the right side of the seat frame.

#### DRIVE ADJUSTMENTS:

If the mower is not tracking straight or if the unit creeps in the "Neutral Stop" position proceed with the following instructions.

TIRE PRESSURE:

Checking air pressure in the tires is critical for proper drive or tracking.

NOTE: <u>DO NOT ADD ANY TYPE OF TIRE LINER</u> <u>OR FOAM FILL MATERIAL TO THE TIRES!</u> Excessive loads created by foam filled tires may cause failures to the hydro drive system, frame and other components. Foam filling tires will void warranty.

Front tires: 20 to 22 psi Drive tires: 12 to14 psi

#### **NEUTRAL ADJUSTMENTS – DRIVE:**

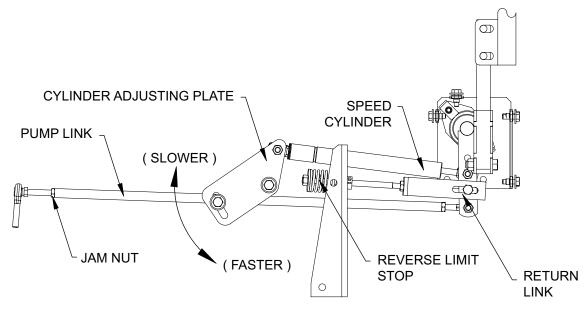
- 1. Raise the drive wheels of the mower off of the ground. Safely block the frame in this position so it is secure.
- 2. With the unit blocked up securely and the arms in the neutral position (in the lock out position) sit in the operators seat and start the engine. With the engine running release the park brake and check to see if there is any wheel creep (any rotation).
- 3. If wheels rotate with the control levers in lock position, stop the engine and remove the belt cover between the seat frame and engine by removing the 2  $\frac{1}{4} \times \frac{3}{4}$  bolts.

- 4. All neutral creep (rotation) should be adjusted out of the drive. This adjustment is performed at the adjustable Pump Link on each corresponding pump. (See fig.) Loosen the jam nut between the ball stud and the control rod. Tread the stud into the control rod if there is forward rotation and out of the control rod if there is reverse rotation. Never adjust the link more than 2 full turns at a time. Retighten the jam nut and start the engine, and repeat step #2.
- 5. If the wheel still rotates in the Neutral Lock position with the brake OFF repeat step #4.

#### **TRACKING ADJUSTMENT:**

If the machine pulls left or right on a level, flat surface begin by checking the tire pressure. The front tires should have 20 to 22 PSI and the rear tires should have 12 to 14 PSI. If tire pressures are correct examine the dampening cylinders. The cylinders are preset from factory to limit the forward motion of the control levers. (When the control lever is at full speed, all the way forward in the control slot, the damping cylinder should bottom out.) To adjust tracking, loosen the two bolts on the cylinder adjusting plate. Push adjusting plate to move the cylinder forward on the fast side. This will restrict the movement of the control lever to even out tracking. Always slow the fast side of the machine down if tracking is necessary.

**Note:** On uneven surfaces the operator is responsible in keeping the machine traveling in a straight line.



#### LEVELING THE DECK:

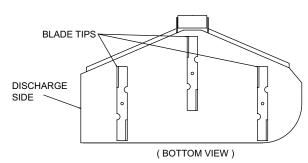
The deck comes from the manufacturer preleveled. If the deck does not appear to be cutting level, follow this procedure.

- 1. Set all tire pressures to correct specification.
- Place machine on a level cutting surface and inspect blades to make sure that one is not damaged or bent.
- 3. Stop engine and Remove the ignition key. While wearing heavy gloves rotate the blades so that they are all pointing to the forward side of the deck. (See fig.1) Measure from the blade tip to the ground on all three blades. If there is more than 3/16" difference from one side of the deck to the other, the deck should be leveled.

5. Reassemble the spring rod and replace the clevis pin. Now move the deck up and down and recheck the side to side blade measurement.

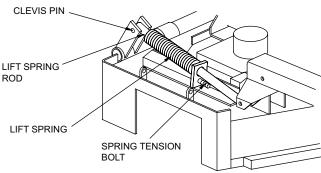
#### **BELT ADJUSMENT:**

Remove the key from ignition switch. Flip up the floor plate (See fig. 3) to gain access to the deck drive belt and the eyebolt assembly that is used for adjusting the spring tension. The spring tension is measured by the gap between the coils and should be approximately 1/8". By turning the 5/ 16" nylock nut on the end of the eyebolt clockwise, it will increase tension. Moving the deck bracket into the second slot (See fig. 3) may also increase tension.



#### FIG. 1

4. To adjust the deck height, remove the clevis pin from the lift spring rod. This may be accomplished by moving the lift arm to a point that relieves the pressure off the pin. (See fig. 2) To raise the deck, thread the back of the



#### FIG. 2

spring rod clockwise. To lower the deck, turn the spring rod counter clockwise (Note: That when changing the length of the spring rod do so in two turn increments). At this time also inspect the bushings or washers, at the base of the spring (by the spring bolt) and check for binding.

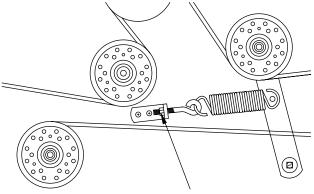


FIG.	3
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BELT TENSION ADJUSTMENT

#### MAINTENANCE

### ! CAUTION !

Before performing any maintenance work, turn OFF engine, remove key and disconnect Spark Plugs. Use extreme care when working on machinery. Do not wear loose fitting clothes, and observe all common safety practices with tools. Also let all hydraulic and engine parts cool before servicing any filters or engine parts.

#### **! BATTERY WARNING !** AVOID SERIOUS INJURY OR DEATH:

THE BATTERY CONTAINS SULFURIC ACID. AVOID CONTACT WITH SKIN, EYES OR CLOTHING. ANTIDOTE: INTERNAL- DRINK LARGE QUANTITIES OF WATER OR MILK, FOLLOW WITH MILK OF MAGNESIA, BEATEN EGGS OR VEGETABLE OIL. CALL PHYSICIAN IMMEDIATELY. EYES AND SKIN SHOULD BE FLUSHED WITH WATER AND GET PROMPT MEDICAL ATTENTION.

BATTERIES PRODUCE EXPLOSIVE GASES. KEEP SPARKS, FLAMES AND SMOKING MATERIALS AWAY. VENTILATE WHEN CHARGING IN AN ENCLOSED SPACE. WEAR EYE PROTECTION WHEN WORKING NEAR BATTERIES.

#### KEEP OUT OF REACH OF CHILDREN.

Keep the electrolyte level above the plates in each cell by adding distilled water, as it becomes necessary. Add water just before operating the mower to mix the water with solution. Be careful not to over fill the battery, the electrolyte solution is corrosive and can cause damage to surrounding metal parts if it should spill. Keep your battery at 1.260 specific gravity charge. When taking the battery out of the mower for servicing, make sure to reconnect the cables to the Battery, exactly as they were prior to removal. Keep the battery clean. Remove corrosion around the battery terminals by applying a solution of one part baking soda to four parts water. Coat all exposed terminal surfaces with a light layer of grease or petroleum jelly to prevent corrosion.

#### **DRIVE BELTS:**

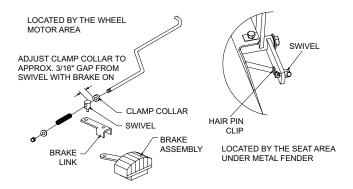
All drive belts are spring loaded and selftensioning, however, after the first 8-10 hours of operation, the belts should be checked for proper alignment and wear. There after check the belts every 40 hours of operation or weekly, whichever occurs first.

#### TIRES:

Correct tire pressure is essential for efficient operation of the mower. Check tire air pressure periodically. Inflate tires to the pressure listed:

> Front Tires 20 to 22 psi Dive tires 12 to 14 psi

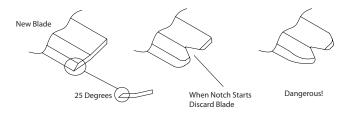
Lug nuts should be checked regularly for tightness. Torque lug nuts to 50ft./lbs. The center hub nut should be torqued to 175-200ft./lbs.



#### BRAKES:

After the first 40 hours of use check brakes for adjustment. Brakes are adjusted by setting the lock collars on the brake rods located by each drive wheel. There must be 1/8 to 1/4 inch of gap between the lock collar and swivel with the brake in the ON position. This distance should be checked bi-weekly. After adjusting the lock collar, you may have to also adjust the brake link by pulling the hair pin clip and adjusting swivel accordingly.

#### MOWER BLADES:



Service interval: Daily Stop engine, set park brake, and remove engine key before servicing blades.

Raise the mower deck to the highest position.

#### **! WARNING !**

Always wear proper hand and eye protection when working with cutter blades. Check the cutter blades for straightness. If the cutter blades appear bent, they will need to be replaced.

#### ! WARNING !

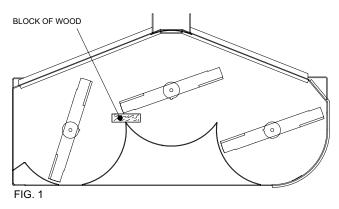
Do not attempt to straighten a bent blade or weld a broken or cracked blade. Always replace it with a new blade to assure safety.

If a blade cutting edge is dull or nicked, it should be sharpened. Remove the blades for sharpening.

Raise cutter deck to transport position. Lift the front of unit using jack stands or equivalent support making sure that the machine is secure.

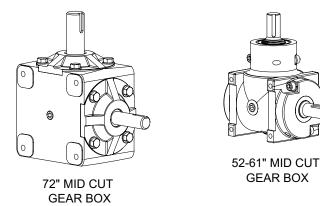
Clean out any grass build-up from the underside of the deck and in deck discharge chute.

Remove or install the blades by placing a block of wood between the front or rear baffles and the blade. When replacing the blade bolt be sure the spring disk washer cone is installed toward the bolt head (See fig. 1).



NOTE: Always balance the blade after sharpening.

#### **CUTTER DECK GEARBOX:**



### CAUTION

The cutter deck gearbox can reach high operating temperatures. Allow the cutter deck gearbox to cool before servicing.

#### CHECKING LUBRICANT LEVELS:

### CAUTION

The fluid level in the gear box should be checked after every 100 hours of operation or bi-weekly, which ever occurs first.

Remove ignition key and raise deck to transport position. Clean and remove the check plug from the side of the gearbox. Visually check that the lubricant level is up to the bottom edge of the check-plug hole. If lubricant is low, add SAE 80W90 lubricant through the check-plug hole. Install the check plug and tighten securely. The lubricant in the cutter deck gearbox should be changed after every 500 hours of operation or yearly, whichever occurs first.

Place a suitable container beneath the cutter deck gearbox and locate the gearbox drain plug.

Remove the drain plug, drain the lubricant into the container and properly discard it.

Reinstall the drain plug and add SAE 80w90 lubricant through the check-plug in the gearbox, until it is level with the bottom of the check-plug hole. Install the check plug and tighten securely.

#### HYDRAULIC SYSTEM:

The hydraulic oil should be changed after every 500 hours or annually, which ever comes first. The oil should also be changed if the color of the fluid has become black or milky. A black color and/or a rancid odor usually indicates possible over heating of the oil, and a milky color usually indicates water in the hydraulic oil.

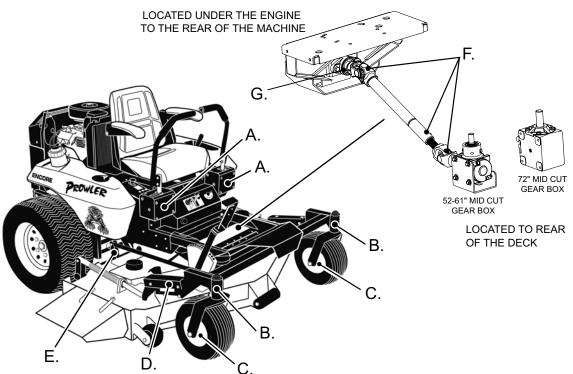
Park mower on a level surface and stop the engine. Place a suitable container under the hydraulic oil reservoir. Remove the fill cap from the reservoir. Remove the drain plug from the bottom of the tank and allow oil to drain into the container. While the reservoir is draining replace the hydraulic filter.

Replace the drain plug and fill reservoir to sight glass (located in the rear side of the tank) with 20W50 motor oil. This will require approximately 7qts of oil.

#### ! WARNING !

To avoid serious Burn injuries: Allow engine, and hydraulic fluids to cool before servicing transmission or engine systems.

### **Maintanence Reference Information**



#### **Grease Fitting Lubrication List**

- Α. Control Arm Pivots 1 Pump / 100 Hours
- **Caster Support Bearing** Β. 5 Pumps / 250 Hours
- C. Front Caster 2 Pumps / 40 Hours
- Pivot Joints (Left & Right Side) D. 1 Pump / 40 Hours

E. Back Rail 1 Pump / 40 Hours

Drive Shaft

- F. 1 Pump / 40 Hours
- G. Power Shaft Bearings 1 Pump / 250 Hours

MAINTENANCE	INTERVAL							
	DAILY	FIRST 8 HR.	EVERY 25 HR.	EVERY 50 HR.	EVERY 100 HR.	EVERY 200 HR.	EVERY 300 HR.	
CHECK AND ADD ENGINE OIL	•							
CHECK FOR LOOSE OR LOST NUTS AND SCREWS.	•							
CHECK FOR FUEL AND OIL LEAKAGE.	•							
CHEAK OR CLEAN AIR INTAKE SCREEN.	•							
CLEAN AIR CLEANER FOAM ELEMENT.			•					
CLEAN AIR CLEANER PAPER ELEMENT.					•			
CLEAN DUST AND DIRT FROM CYLINDER AND CYLINDER HEAD FINS.					•			
TIGHTEN NUTS AND SCREWS.					•			
CHANGE ENGINE OIL.		•			•			
CLEAN AND REGAP SPARK PLUG.					•			
CHANGE OIL FILTER.						•		
REPLACE AIR CLEANER PAPER ELEMENT.						•		
CLEAN COMBUSTION CHAMBER. *							•	
CHECK AND ADJUST VALVE CLEARANCE. *							•	
CLEAN AND LAP VALVE SEATING SURFACE. *							•	

NOTE:

Consult Engine Manual for Manufactures Engine Recommendations on Operation and Maintenance Information.

O: SERVICE MORE FREQUENTLY UNDER DUSTLY CONDITIONS.

<sup>\* :</sup> HAVE AN AUTHORIZED ENGINE MFG DEALER PERFORM THESE SERVICES

# Notes:

# Notes:

# ENCORE WARRANTY

# For Prowler and Z Series Mowers

# (excluding the Z 34)

This warranty extends to the original retail purchaser only and commences on the date of original retail purchase. Any part of the Encore commercial mower manufactured by Encore Mfg. Co., Inc. and found in reasonable judgment of Encore Mfg. Co., Inc. to be defective in material or workmanship will be repaired or replaced by an Authorized Encore Dealer without charge for parts and labor. The Encore mower including any defective part must be returned to an Authorized Encore Service Dealer within the warranty period. The expense of delivering the mower to the dealer for warranty work and the expense of returning it back to the owner after repair or replacement will be paid by the owner. This warranty is limited to two years for frame, deck, hydrostatic drive system (excluding hoses), cutter housings, gearbox, and driveshaft. The warranty will be **2 years from the date of purchase** against defects in workmanship and materials (90 days for rental use) for any Encore rider that is used for homeowner, commercial or any other income producing purpose. Belts, batteries, and tires are warranted for 90 days against defects in materials and workmanship.

Cutter housings, electrical components, hydraulic components and electric-clutch must be returned before warranty will be paid.

The engine is covered by its respective manufacturer please refer to the manufacture's warranty statement that is included in the literature packet. Engine warranties should be referred to the nearest authorized service outlet of the engine manufacturer.

The responsibility of Encore Mfg. Co., Inc. in respect to claim is limited to making the required repairs or replacements, and no claim of breach of warranty shall be cause for cancellation or recession of the contract of sale of any Encore mower.

Proof of purchase is required by both Encore and the servicing Dealer, before any warranty will be paid, and warranty work must be preformed by an Authorized Encore service dealer.

This warranty does not cover any Encore mower that has been altered or modified so as to adversely affect the intended use of the product, it operation, performance, or durability. This warranty also does not cover any mower that has been subject to misuse, neglect, negligence, accident or that has been operated in any way contrary to the operating instructions as specified in the Operators Manual.

Encore Mfg. Co., Inc. reserves the right to change or improve the design of any mower without assuming any obligation to modify any mower previously manufactured.

Encore Mfg. Co., Inc. obligation under warranty is strictly and excessively limited to repair or replacement of defective parts. Encore Mfg. Co., Inc. does not assume or authorize anyone to assume for them any other obligation.

ENCORE MFG. CO., INC. CANNOT BE RESPONSIBLE FOR THE WAY YOU OPERATE, OR THE CONDITIONS IN WHICH YOU OPERATE THE MOWER. USE COMMON SENSE AT ALL TIMES.

As of May 1, 2003 this warranty statement supersedes any warranty statement published by ENCORE MANUFACTURING CO., INC.

