OPERATION

12. OPERATION OF UNIT

- a. Place throttle control lever in "Slow" position.
- Fully depress clutch/brake pedal and move gear shift lever todesired gear.
- Slowly release clutch/brake pedal to start motion.
- d. Move throttle control to a faster position or stop unit and shift to a higher gear if speed is too slow. NOTE: Always select a safe speed for proper control of your unit depending upon the area being mowed.
- For mowing heavy grass, place throttle control in "Fast" position and place gear shift lever in first gear.

13. OPERATION ON HILLS



DO NOT DRIVE UP OR DOWN HILLS WITH SLOPES GREATER THAN 15°. NEVER DRIVE ACROSS ANY SLOPE.



REDUCE SPEED AND EXERCISE EXTREME CAU-TION ON SLOPES AND IN SHARP TURNS TO PRE-VENT TIPPING OR LOSS OF CONTROL. BE ESPECIALLY CAUTIOUS WHEN CHANGING DIRECTION ON SLOPES.

- Shift to the lowest gear before starting up or down hills. Move throttle control lever to a slower position if necessary.
- AVOID STOPPING OR SHIFTING ON HILLS. If stopping is absolutely necessary, quickly depress clutch/brake pedal and engage parking brake.
- c. To restart, make sure gear shift lever is in low gear and throttle is in "Slow" position. Slowly release clutch/brake pedal.
- Leave enough room when stopping and starting to allow slight downhill roll as brake releases and clutch engages.

MAINTENANCE

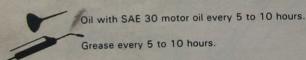
Use the following maintenance schedule to keep your unit in good operating condition. All maintenance information on the engine is found in the "Engine Owner's Manual".

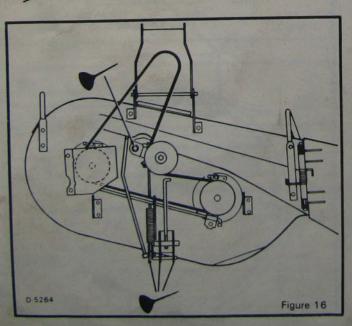


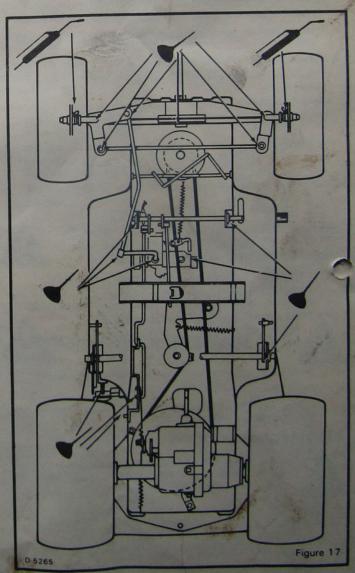
BEFORE MAKING ANY INSPECTION, ADJUST-MENT (EXCEPT CARBURATOR) OR REPAIR, DISCONNECT SPARK PLUG WIRE.

EVERY 10 HOURS

1. LUBRICATION







2. CHECK BATTERY

- a. Keep battery terminals clean and battery cables tight.
- Check battery acid level in each cell. Acid should reach bottom of vent well. Add water if necessary.

IMPORTANT: Permanent damage to the battery can result if the acid level is not properly maintained.

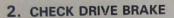
EVERY 25 HOURS

1. CLUTCH/BRAKE PEDAL ADJUSTMENT figure 19

Check for 1/8 inch clearance between rear of clutch/brake pedal and back of slot in running board. If there is more or less than 1/8 inch clearance an adjustment is required.

- a. Disconnect the adjusting nut from the lever assembly (see illustration)
- b. Rotate the adjusting nut until a clearance of 1/8 inch is achieved with the clutch rod reassembled to the lever assembly. Lengthening the clutch rod will increase the pedal clearance.

Check the brake rod after any adjustment to the pedal as explained in (f) under "CHECK DRIVE BRAKE".

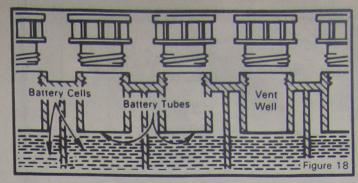


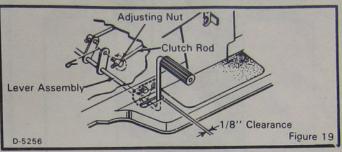
Fully depress clutch/brake pedal and engage the parking brake. Push your unit, if the rear wheels turn the drive brake needs adjusting. Release parking brake and proceed as follows:

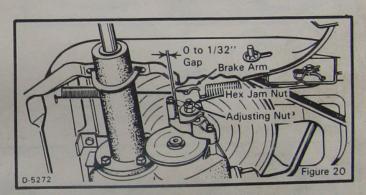
- a. Loosen the hex jam nut (see figure 20).
- b. Push forward on the brake arm and turn the adjusting nut clockwise until there is a gap of 0 to 1/32 inch between the stop bolt and the brake arm (see figure 20).
- c. Hold the adjusting nut and securely tighten the hex jam nut.
- d. Push forward on the brake arm and check for a gap of 0 to 1/32 inch.
- Engage the parking brake. Push your unit, if the rear wheels do not turn the brake is in correct adjustment.
- f. Release the parking brake and check for proper adjustment of the brake rod (figure 21). The center end of the brake rod must line up with the center of the "V" notch as shown in figure 21.
- g. If adjustment of brake rod is necessary, remove the hair pin and washer from the end of the brake rod. Rotate brake rod until the center end of the rod lines up with the center of the "V" notch. Replace hairpin.
- Correct brake rod adjustment will result in a slight clearance between the parking brake knob and the forward end of the frame slot when the clutch/brake pedal is fully depressed (see figure 22).

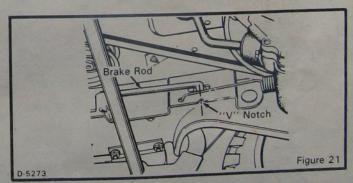
3. CHECK TIRE PRESSURE

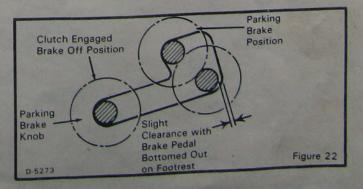
Tires with incorrect air pressure will cause a rough ride and when mowing an uneven cut. Keep tires inflated to the p.s.i. (pounds per square inch) indicated on tire. If not indicated, inflate to 10-12 p.s.i.

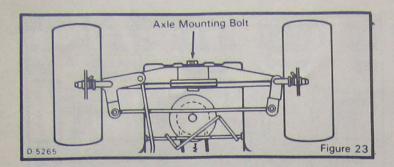


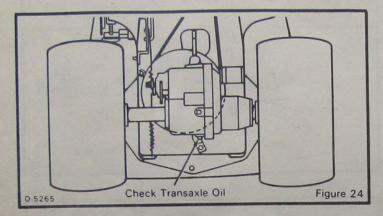












EVERY 50 HOURS

1. FRONT AXLE ADJUSTMENT

The front axle is supported by an axle support bracket and can be adjusted by tightening the axle mounting bolt. After approximately 50 hours of operation the front axle may become loose. If so, tighten the axle mounting bolt as required.

2. CHECK TRANSAXLE OIL

Check oil in transaxle every 50 hours of operation. Remove oil fill plug and check oil level. Oil should be even with hole. If not, add SAE 90 gear lubricant.

AS NEEDED

1. REMOVAL OF BLADE HOUSING

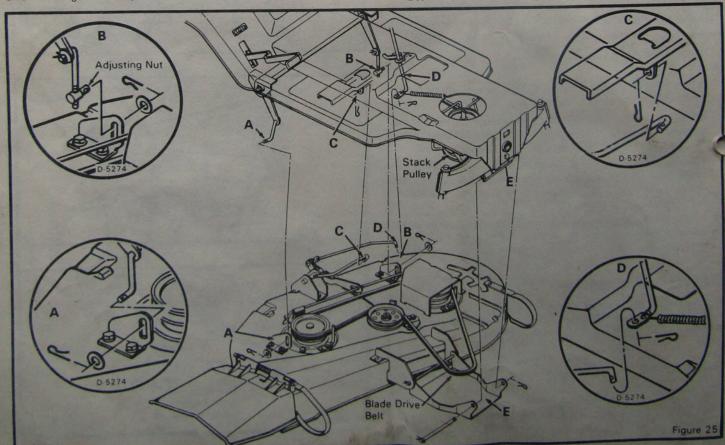
Remove the blade housing from the chassis to service the drive belt, blade(s) or brake components. This may be done as follows:

a. Place the lift lever in "Lo" position and move the blade rotation

- control lever to the "Disengage" position.
- Remove hair pins and washers from right and left hanger rods. See drawings "A" and "B" below.
- Disconnect control rod from the blade rotation control lever. See drawing "D" below.
- Disconnect link rod from chassis. See drawing "C" below.
- Disconnect the front hanger from the chassis. See drawing "E"
- Remove blade drive belt from engine stack pulley. Belt removal may be easier if the four screws holding the belt guide at the stack pulley are loosened and the belt guide moved away from the stack
- Turn steering wheel completely to the left and slide mower housing out from the right side of the chassis.

2. REPLACEMENT OF BLADE HOUSING

- Turn steering wheel completely to the left. Slide blade housing under from the right side of the chassis.
- Place the V-side of the blade drive belt on engine stack pulley. Th belt must be inside of the belt guide. Position belt guide 1/4 inch from stack pulley and tighten the four belt guide screws.
- Assemble front hanger to chassis with rod and secure with hair
- Attach right and left hanger rods to mower housing. Secure with d. washers and hair pins.
- Attach link rod to chassis support with hair pin.
- Connect the control rod to the blade rotation control lever and secure with hair pin.
- Engage blade rotation control lever. Check to be sure belt is properly seated in all pulleys and inside of all belt guides (see figure 26).



3. BELT REPLACEMENT-BLADE HOUSING

- Remove blade housing as outlined under "Removal of Blade Hous-
- Remove the jackshaft pulley cover.
- Remove the hex nut from the idler pulley and remove the idler
- Carefully spring the two brake pads away from the jackshaft pulley and remove belt. Replace only with factory replacement belt.
- Carefully spring the two brake pads away from the jackshaft pulleys. Install new belt with the "V" side of the belt fitted into the jackshaft pulley as shown in drawing "A".
- Reassemble idler pulley with the flat side of the belt aganist the idler pulley as shown in drawing "B". Secure idler pulley with hex nut.
- Reassemble the jackshaft pulley cover.
- Replace blade housing as outlined under "Replacement of Blade h. Housing".
- Before mowing, check the operation of the blade rotation control lever as outlined in the "Assembly" section of this manual.



OPERATE MOWER ONLY WITH BELT INSIDE OF THE BELT GUIDES.

4. BLADE HOUSING LEVEL ADJUSTMENT



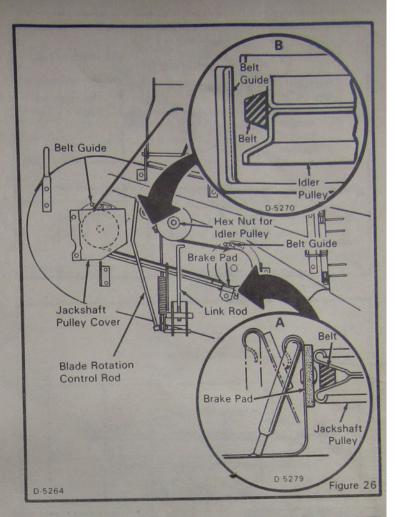
TURN THE IGNITION SWITCH TO THE OFF POSI-TION AND DISCONNECT THE SPARK PLUG WIRE TO PREVENT ANY ACCIDENTAL STARTING BEFORE MAKING ANY INSPECTION, ADJUST-MENT, OR REPAIR.

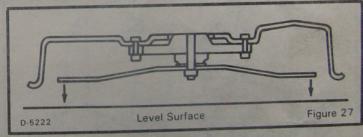
- Place the unit on a hard level surface, such as a driveway or garage floor.
- Check tire pressure. Incorrect tire pressure will cause an uneven cut. Keep tires inflated between 10-12 p.s.i. (pounds per square inch).
- Engage the Blade Rotation Control Lever and adjust the cutting height to the mid-range position.
- There are two basic adjustments for leveling your blade housing, the FRONT TO BACK and the SIDE TO SIDE. To adjust proceed as follows:

FRONT TO BACK ADJUSTMENT

Position the right cutting blade in line with the length of the unit. Using a small ruler, measure from the level surface to the underside of the blade tips. The front blade tip should be one-eighth inch lower than the rear blade tip. If not, then adjust as follows:

- Disconnect the link rod (see figure 26) from the chassis support by removing the hairpin.
- Turning the link rod clockwise will shorten the rod lowering the front blade tip and counter-clockwise will lengthen and raise the front blade tip.
- Replace the link rod into the support channel. Check the front and rear blade tips for correct adjustment. Secure with hairpin.





SIDE TO SIDE ADJUSTMENT

Position both right and left blades straight across the blade housing. Using a small ruler, measure from the level surface to the underside of the blade tips at each side of the mower housing. The outer blade tips should be the same height. If not, the adjust as follows:

- Disconnect the adjusting nut from the lifter assembly by removing the hairpin (see drawing "B" in figure 25 for location of adjusting
- Turning the adjusting nut clockwise will shorten the rod raising the left side of the blade housing. Turning the adjusting nut counterclockwise will lengthen the rod and lower the left side of the blade housing.
- Replace the adjusting nut into the lifter assembly. Check the blade tips for correct adjustment. Secure adjusting nut with hairpin.

5. FUEL FILTER

Occasionally check fuel filter. If fuel filter is dirty or clogged the engine may run rough or loose power. Remove old filter and replace with new

FUEL TANK MUST BE EMPTY BEFORE REPLACING FUEL LINE OR FILTER.

6. BLADE HOUSING CLEANING



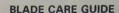
STOP ENGINE AND DISCONNECT SPARK PLUG WIRE BEFORE ATTEMPTING TO CLEAN BLADE HOUSING.

Clean collected grass and debris from top of mower housing to ensure proper operation of the mower belt drive system. Keep the underside of the blade housing clean and free from grass build-up to maintain cutting performance. Clean the underside after each mowing if cutting heavy, moist grass.

7. BLADE MAINTENANCE

The blade(s) will become worn after prolonged use. Cutting efficency will be reduced and the blade(s) should be replaced with factory replacement blade(s). To replace blade(s) proceed as follows:

- a. Remove blade housing as outlined under "Removal of Blade Housing".
- Block blade with a piece of wood to prevent rotation and remove blade mounting nut and blade,
- c. Note the word UP stamped on blade. Replace blade with the side marked UP onto the jackshaft first. This will insure that the blade is assembled with the unsharpened edges turned up.
- Secure blade with blade mounting nut. Tighten nut to 30 foot pounds of torque.



- a. A bent blade or an unlevel blade housing will result in an unexcut. See "Blade Housing Level Adjustment.
- A dull blade will result in splitting or bruising the grass ends causing rapid browning. Maintain a sharp cutting edge by filing or grinding the cutting edge, retaining the bevel edge.
- Stop the mower and check blade after striking an object. A bent or damaged blade will cause vibration which is a hazard and must be replaced.
- d. The blade adapter is designed to break, preventing engine damage, when the blade strikes an object. Stop the mower and check for a broken blade adapter if the blade strikes a large rock, tree stump, or other hidden objects.

8. DRIVE BELT REPLACEMENT

- Remove blade housing as outlined under "Removal of Blade Housing".
- b. Engage parking brake. Turn front wheels completely to left.
- c. Remove hex nut from idler pulley and remove pulley
- d. Loosen screw on belt guide #2. Loosen nut on belt guide #3.
- Remove belt from drive pulley and stack pulley. Guide belt around gear shift lever and remove from unit.
- f. Replace belt with factory replacement.
- Guide belt around gear shift lever (see figure 30) and attach to stack pulley first and then drive pulley.
- h. Position belt guide #2 1/8 inch from drive pulley and secure screw. Position belt guide #31/8 inch away from drive pulley a tighten nut securely.
- Reassemble idler pulley with flat side of the belt against the idler pulley as shown in drawing "A". Secure idler pulley with hex nut.
- j. Before operating check clutch/brake pedal adjustment under "Every 25 Hours" in the Maintenance Section.
- k. Replace blade housing as outlined under "Replacement of Blade Housing".

