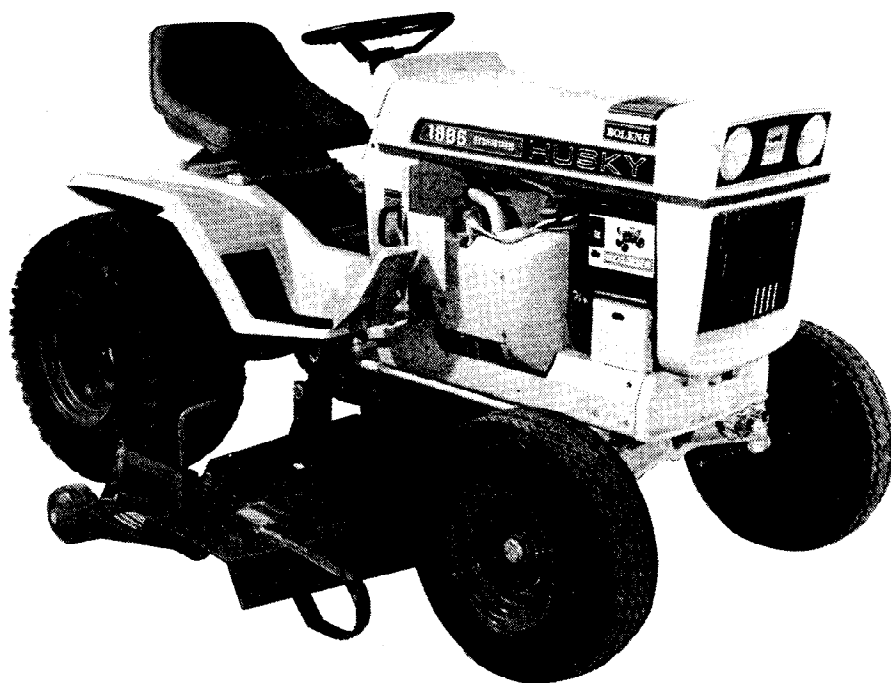


ROTARY MOWER ATTACHMENT

54 INCH
CENTER MOUNTED
MODEL 18070-03

OWNER OPERATION AND MAINTENANCE MANUAL



TO THE OWNER

This is an operational and general maintenance manual only and does not cover major repair. All major repair work must be performed by an authorized **BOLENS DEALER**, or the factory warranty is void. Bolens equipment is carefully engineered to give good performance if properly operated and maintained. Keep your equipment clean and lubricate it as prescribed in this manual. Periodically inspect your unit and perform any upkeep maintenance necessary.

Your dealer is obligated by the factory to completely assemble and service new equipment prior to first delivery, and thoroughly explain and demonstrate its operation. He will repair or replace any parts which fail due to defective material and/or workmanship during the warranty period.

IN EVENT OF ANY PROBLEM OR PARTS REQUIRED ALWAYS CONTACT YOUR DEALER. DO NOT RETURN PARTS TO THE FACTORY. WE REQUIRE PRIOR FACTORY APPROVAL ON RETURNS, AND APPROVALS ARE ISSUED ONLY TO BOLENS DEALERS OR DISTRIBUTORS.



GENERAL SAFETY PRECAUTIONS



Preventing accidents is the responsibility of every equipment operator. The following general safety precautions *must* be fully understood and followed by every operator of this equipment. Review them frequently and **NEVER TAKE CHANCES. BE CAREFUL BEFORE, DURING AND RIGHT AFTER USE OF ANY POWERED EQUIPMENT. ACCIDENTS CAN BE PREVENTED.**

1. Regard your mower as a piece of power equipment. Teach this to all who operate the equipment. Power equipment not properly operated can be very dangerous.
2. Children shall not be allowed to operate unit at any time. The average child is not capable of coping with the intricacies of operating a power tool.
3. Be sure you know how to stop the mower and engine quickly, in case a person, pet or object suddenly appears in the path of or dangerously close to unit.
4. Before using mower, clear the entire lawn area of all debris that could be thrown by the blade. Debris can be ejected at high velocity out of the discharge chute, causing injury to persons or pets and damage to objects the debris would strike.
5. When you mow on rough terrain, in high grass, the mower should be set at the highest cutting level to minimize possible ejection of debris.
6. Mow only during daylight hours. If you mowed after sundown you may not be able to see any object accidentally left on the lawn. Artificial lighting may not be enough to illuminate the area to be mowed.
7. Be alert at all times. Give complete and undivided attention to the job you are doing. This should minimize the possibility of getting into dangerous situations.
8. No persons should be allowed in or near working area when mower is being used, particularly small children. This will minimize the possibility of any persons being injured by the mower or debris ejected by the mower.
9. Disengage mower and stop the engine whenever you leave the tractor. This will help prevent runaways and/or injury to children or another person.
10. When operating over uneven terrain and slopes use extreme care and make sure of solid firm footing at all times. This will help prevent both the operator from being thrown from unit or the unit being upset accidentally.
11. Use special care when mowing near objects to prevent the blades from striking them, as severe damage could result.
12. Stop the tractor and disengage mower when any other person approaches. Do not pass or stand on the grass discharge side of the mower or allow anyone else to do so with the engine running. Objects such as wire, sticks, stones, small toys and etc. can be ejected at high velocity out of the discharge chute.
13. Do not carry passengers. The passengers could fall off unit, receiving injuries.
14. Engine must be stopped and spark plug wire disconnected before adjusting mower, or changing attachments. A gasoline engine can be started, if the blade or P.T.O. shaft is turned in the course of making adjustments or repairs, resulting in injury.
15. Efficient mowing results and maximum safety can only be expected if the mower is maintained and operated correctly. Keep mower free of excess grease and oil.
16. Never wear loose clothing when operating unit. It could become entangled in moving parts, causing injury to the wearer.
17. Wear substantial footwear at all times to ensure as much protection as possible.
18. Do not allow adults to operate unit without proper instructions, including all safety instructions. In doing so, you will be sure they know how to operate unit properly and also are aware of all the safety precautions.
19. Study your manual. Know your equipment before operating it. Take time to operate the unit in the safest manner.
20. Always follow manufacturer's operational suggestions for most efficient and safest operation of unit.
21. Always make certain no one is in the way before using reverse. This will prevent the possibility of backing over objects in the rear of the unit.
22. After striking a foreign object the mower should be stopped and the engine shut off and the unit inspected for any damage. If any damage has occurred the damage should be repaired before restarting and operating the unit. This is necessary to avoid further damage to the unit, uneven cuts etc., and/or possible injury to the operator or bystanders.

MODEL NUMBER

To ensure prompt service when repairs or adjustments are required, your Bolens Dealer must have the following information:

For your own personal reference, fill in the spaces provided below.

Model Number of Unit 18070-03

Serial Number of Unit _____

Your Bolens Dealer has available a Parts List for your unit. He can identify any parts you may require and furnish genuine factory replacements.

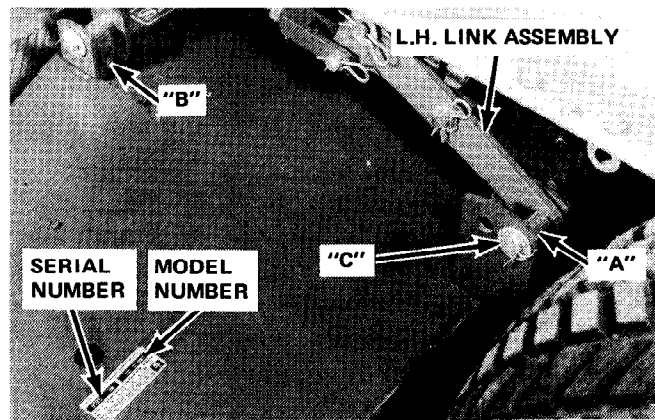
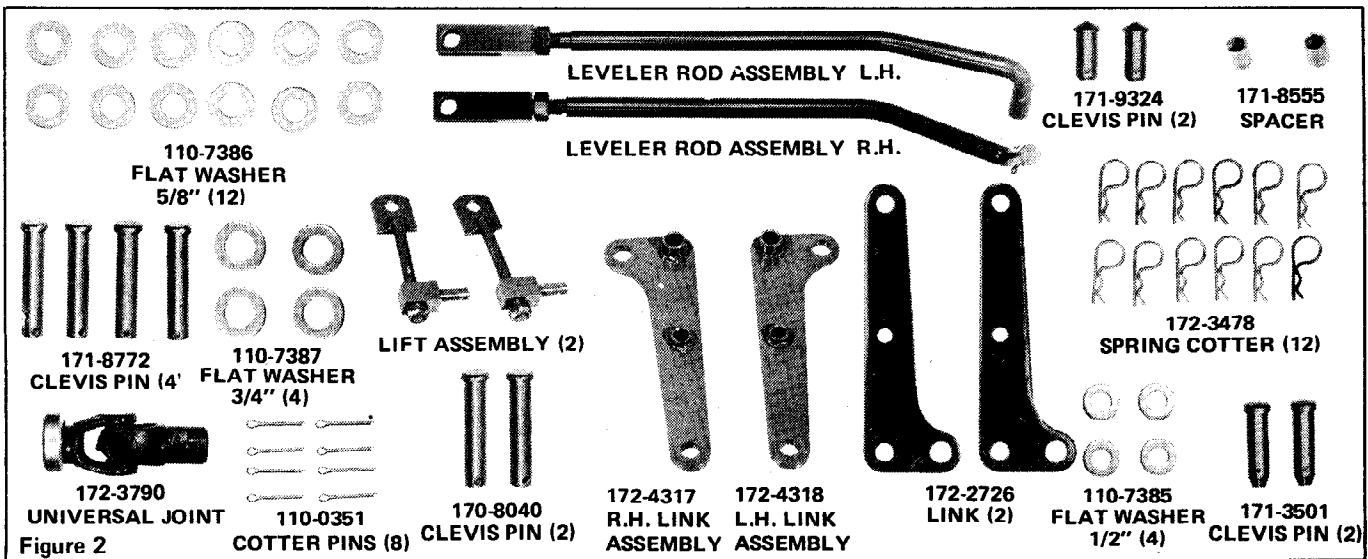


FIGURE 1

ASSEMBLY



This mower is shipped complete with all parts required to mount it to your Husky tractor. To facilitate packaging requirements, the mounting linkage has been shipped loose and must be assembled to the mower as follows:

A. Attach link assemblies 172-4317 and 172-4318 Figures 1 and 3 onto rear mower base lift brackets. Place the link assemblies between the uprights of the lift brackets as shown in Figures 1 and 3. Place spacer No. 171-8555 between outside lift bracket upright and link assembly, see "A" Figure 1. Secure the link assembly and spacer to the rear hole of lift bracket, see "C" Figure 1, with clevis pin No. 171-8772, 5/8" flat washer, No. 110-7386 and cotter pin No. 110-0351. Install clevis pin, washer and cotter pin as shown in Figure 1.

B. Attach the two lift assemblies to the above rear link assemblies as shown in Figure 3. Secure with 1/2" flat washer No. 110-7385 and spring cotter No. 172-3478.

C. Attach the two links No. 172-2726 to the inside of the front lift brackets, see Figures 1 and 3. Secure with clevis pin No. 170-8040, two 5/8" flat washers No. 110-7386 and cotter pin No. 110-0351.

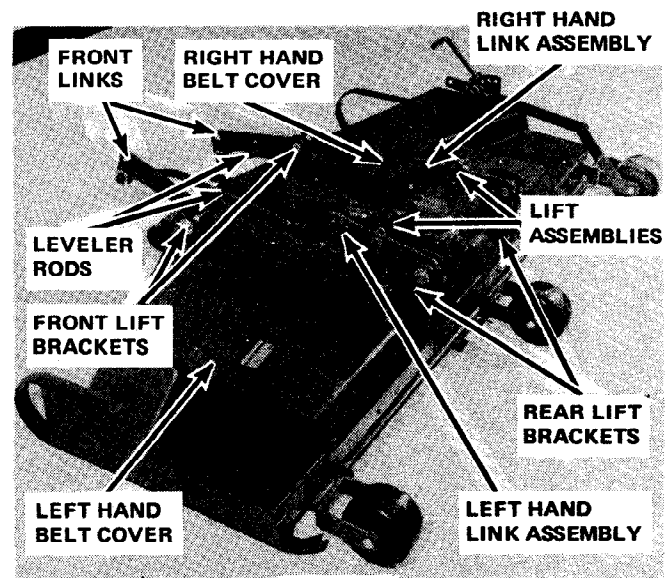


FIGURE 3

NOTE: ONE FLAT WASHER IS TO BE INSTALLED NEXT TO THE CLEVIS PIN HEAD AND THE OTHER UNDER THE COTTER PIN AS SHOWN IN FIGURES 1 AND 3. INSTALL CLEVIS PIN WITH THE HEAD TO THE INSIDE OF MOWER AS SHOWN IN FIGURES 1 AND 3.

MOUNTING AND LEVELLING

1. With tractor on a level surface, check tire pressure, 8 lbs. front and rear. Turn tractor front wheels to extreme left. Slide mower under tractor from RIGHT HAND side.

2. Pin mower rear link assemblies (through top hole) to the OUTSIDE of tractor rear hitch supports "A" Figure 5, located just forward of the tractor hydraulic lift arms on the inside of main frame. Use clevis pins, flat washer and spring cotters, inserting clevis pins from inside out, flat washer to the outside between link and spring cotter.

NOTE: BE SURE LIFT LINK PIN IS INSTALLED INTO REAR HOLE OF REAR MOWER HITCH BRACKET; SEE "C" FIGURE 1. BE SURE FRONT MOWER HITCH BRACKET IS INSTALLED IN FRONT SET OF MOUNTING HOLES ON THE MOWER DECK; SEE "B" FIGURE 1.

3. Pin mower front hitch arms (through top hole) to the OUTSIDE of tractor front hitch supports "B" Figure 5, located approximately six inches behind the front axle. Use clevis pins and spring cotters, inserting clevis pins from outside in.

NOTE: IT IS IMPORTANT THAT THE FRONT AND REAR MOWER ARMS ARE MOUNTED ON THE OUTSIDE OF THE TRACTOR HITCH SUPPORTS, AS STATED ABOVE, TO ALLOW FREE MOVEMENT OF THE MOWER AT ALL TIMES.

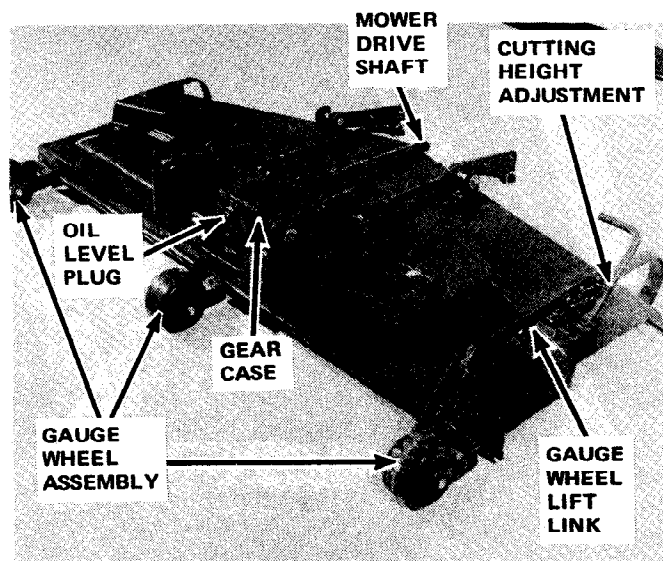


FIGURE 4

4. Attach leveler rods, Figure 3, (hook end forward and down) to lower hole in front hitch arms from inside out with flat washer on both sides of hitch arms, and secure with cotter pins.

NOTE: BE SURE TO MOUNT LEVELER RODS; TURN BUCKLES TO THE REAR; WITH THE ROD BEND TO THE FRONT AND DOWN. ADJUST TURN BUCKLES SO THAT LEVELER RODS ARE AS SHORT AS POSSIBLE AND THAT HOLES IN BUCKLES ALIGN WITH LOWER HOLES IN REAR HITCH ARMS. SECURE WITH CLEVIS PINS AND SPRING COTTERS. INSERT CLEVIS PINS FROM INSIDE OUT.

5. LEVELLING

After initial hook up has been made, disconnect gauge wheel lift link. Place tractor in PARK, start tractor engine and hold hydraulic lift lever in "DOWN" position until front section of lift arms are in their lowest position. Allow hydraulic lift control lever to return to "NEUTRAL" and stop engine. Loosen front hitch brackets. Realign front hitch brackets and retighten capscrews. Reconnect gauge wheel lift link.

Raise mower with lift and check level of mower. If mower needs relevening, proceed as follows:

A. Remove clevis pins of leveler rods.

B. Loosen front hitch brackets. If mower is low in front move hitch brackets towards rear of mower. If mower is high in front move hitch brackets towards front of mower.

C. Securely retighten brackets.

D. Loosen lock nuts on leveler rod clevises. Readjust clevises on leveler rods to align holes and allow clevis pin to enter freely. Secure lock nut.

6. Position stop nuts on lift links flush with bottom of lift link studs.

NOTE: A SLIGHT BINDING IN FRONT AND REAR HITCH ARMS MAY OCCUR DUE TO MANUFACTURING TOLERANCES, AFTER THE INITIAL HOOK-UP HAS BEEN MADE. ADJUST FRONT MOWER LIFT BRACKETS IN SLOTTED HOLES PROVIDED FOR FREE MOVEMENT OF LIFT ARMS. THEN TIGHTEN BRACKETS SECURELY.

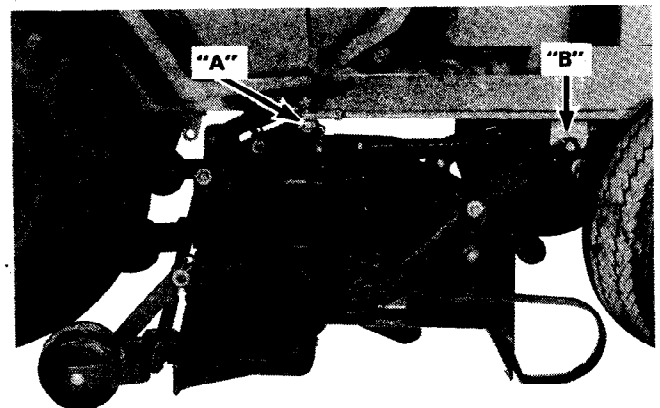


FIGURE 5

MOUNTING AND LEVELLING (Continued)

7. Insert offset section on lift link over half inch pins (integral to tractor lift arms), with the flush side towards inside of mower, and secure with flat washer and spring cotter. Install free floating stud of lift link into mower lift arms and secure with flat washer and spring cotter. See "A" Figure 6.

8. Start engine; place lift lever in FLOAT position; observe position of stop nuts, and adjust so both nuts are directly under mower lift link studs. See "B" and "C" Figure 6. This adjustment will give maximum below ground level float. Should a higher maximum lift be desired, turn both stop nuts the same number of turns up on the studs until desired height is obtained.

If mower needs levelling from side to side, adjust by turning nut "C" Figure 6 either up or down on lift studs "A" Figure 6.

9. Depress lock collar on universal joint and slide over rear splined end of tractor P.T.O. shaft. Slide universal joint onto P.T.O. shaft until lock collar snaps into groove in shaft, locking it on. Grease shaft of mower universal drive and insert into free end of universal joint on P.T.O.



CAUTION

BE SURE ATTACHMENT IS COMPLETELY HOOKED UP BEFORE USING HYDRAULIC LIFT, OR DAMAGE COULD RESULT. MOVE THE ATTACHMENT THROUGH ITS COMPLETE RANGE SLOWLY TO MAKE SURE IT DOES NOT INTERFERE OR BIND. MAKE NECESSARY CORRECTIONS OR ADJUSTMENTS REQUIRED BEFORE OPERATING.

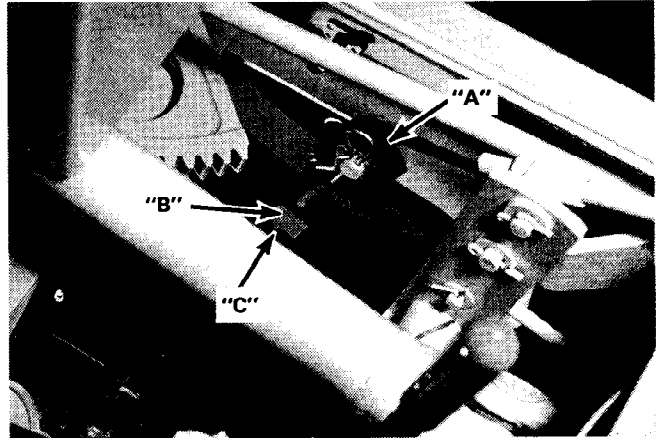


FIGURE 6

OPERATION



CAUTION

BEFORE USING MOWER, REMOVE STONES, WIRE, ETC. FROM AREA TO BE MOWED. BE SURE TO AVOID STRIKING PROTRUDING OBJECTS SUCH AS PIPES, ROOTS AND EARTH MOUNDS WITH CUTTING BLADES AS THIS COULD DAMAGE THE MOWER. NEVER PLACE HANDS OR FEET UNDER MOWER BASE WHEN ENGINE IS RUNNING.

Be sure the P.T.O. is disengaged and the tractor is in PARK before starting the engine. For best results, the engine should be set at full throttle to maintain sufficient blade speed. The ground speed should be controlled with the trac-

tor TRAVEL PEDAL and not by changing engine speed. When operating under heavy load, listen to the engine R.P.M. As the engine begins to strain, let up on the Travel Pedal accordingly (DO NOT ADVANCE TRAVEL PEDAL). By letting up on the Travel Pedal, the ground speed will decrease and the engine speed will increase to allow the blade speed to remain constant.

NOTE: THE MOWER WILL NOT CUT CLEAN WHEN THE GROUND SPEED IS TOO HIGH OR WHEN THE BLADE SPEED DROPS DUE TO OVER-LOAD.

CONTROLS

There are two controls for operating the mower: the tractor power take-off lever for engaging and disengaging the mower, and the tractor hydraulic lift lever to raise and lower the mower. The power take-off lever must be engaged slowly to start the mower and prevent premature belt failure.

NOTE: WHEN MOWING WITH MOWER IN HIGH CUTTING POSITIONS, AVOID TERRAIN WHICH COULD CAUSE THE WEIGHT OF THE TRACTOR TO RIDE ON MOWER CAUSING POSSIBLE DAMAGE TO THE MOWER.



CAUTION

AT NO TIME SHOULD MOWER BE OPERATED WITH ANTI-SCALP RUNNERS OR ROLLER IN CONSTANT CONTACT WITH THE GROUND. THIS PRACTICE WOULD LEAD TO PREMATURE MOWER FAILURE DUE TO SEVERE SHOCK-LOADING.

NOTE: ALWAYS START MOWER BEFORE LOWERING MOWER INTO THE GRASS.

HEIGHT OF CUT

The cutting height can be regulated by the hydraulic lift lever or the mower gauge wheels, and ranges from a low of approximately 1-1/4" to a high of approximately 5-1/2". When using the mower gauge wheels to regulate the cutting heights, always place the hydraulic lift lever in the **FLOAT POSITION** to allow mower to ride freely over rough terrain.

In areas where the use of the gauge wheels is not desired they may be raised to clear the ground. To raise the gauge wheels place the pin of the height adjustment mechanism into the rear or third hole of the lift link. Place height

adjustment all the way forward, the gauge wheels will now be raised to their maximum height. The height of cut can then be regulated with the hydraulic lift lever.

NOTE: WHEN MOWER GAUGE WHEELS ARE NOT BEING USED, HYDRAULIC LIFT LEVER MUST NOT BE PLACED IN THE FLOAT POSITION. MOWER IS TO BE LOWERED ONLY AS FAR AS NECESSARY, THEN ALLOW LIFT CONTROL LEVER TO GO BACK TO NEUTRAL, TO HOLD MOWER AT THE DESIRED HEIGHT.

DRIVE BELT

The mower has one drive belt which drives the three blades, as illustrated in Figure 7. This belt is under constant spring tension and requires no adjustment.

To replace the drive belt, proceed as follows:

- A. Remove mower from tractor.
- B. Remove the Left and Right hand covers from the mower deck and the Left hand mower gear case mounting bracket.
- C. Remove idler spring.
- D. Remove belt from blade spindle and idler pulleys, and slip off over top of gear case.
- E. Replace belt by reversing the above procedure.

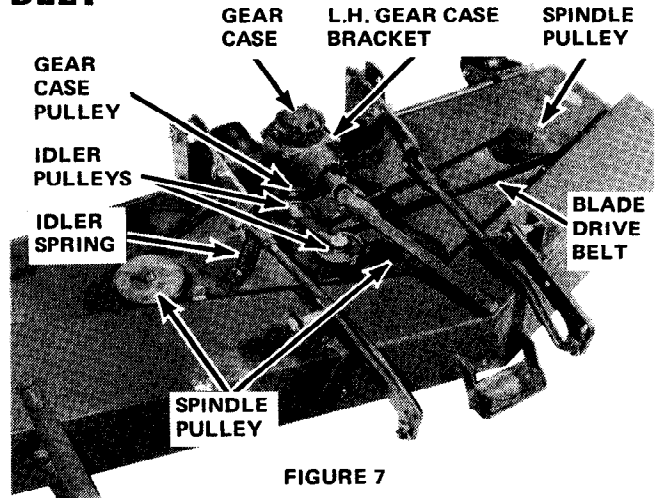


FIGURE 7

CUTTING BLADES

For efficient cutting, maintain sharp cutting edges on the blades at all times. When sharpening blades, be sure to grind or file equal portions off both ends to maintain balance, as an unbalanced blade will cause excessive vibration and ultimately premature failure. Always check blades on a blade balancer before reinstallation.

NOTE: WHEN REPLACING OR REINSTALLING ORIGINAL BLADES AFTER SHARPENING, BE SURE THE 5/16-18 x 3/4 HEX HEAD CAPSCREWS AND LOCKNUTS ARE ALSO REINSTALLED IN THE BLADE HUBS. BE SURE THE BLADES ARE FASTENED SECURELY AT ALL TIMES. TORQUE 3/8-24 x 1 CAPSCREWS IN CENTER OF BLADE TO 25 FT.-LBS. RECHECK PERIODICALLY.

LUBRICATION

The unit has five grease fittings: one on each blade spindle located on the top side of the mower; one on each universal joint. Lubricate grease fittings every 50 hours of operation or once each year whichever occurs first with Bolens grease No. 16020 and Bolens No. 16023 grease gun. Oil all linkages, gauge wheels and anti-scalp roller at periodic intervals.

NOTE: THE GEAR CASE IS FILLED AT THE FACTORY WITH 11 OZ. OF BOLENS NO. 16021 GEAR LUBE. REMOVE PLUG AT REAR OF GEAR CASE, FIGURE 8. CHECK OIL LEVEL — OIL SHOULD BE TO THE LEVEL OF THE PLUG OPENING — BEFORE RUNNING MOWER AND AT INTERVALS OF EVERY 25 HOURS OF OPERATION TO MAINTAIN PLUG LEVEL.

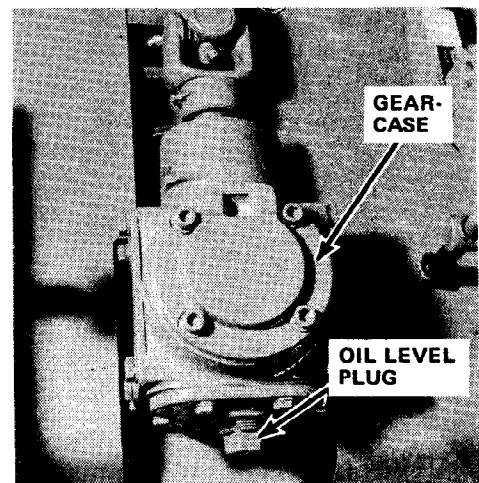


Figure 8

Bolens reserves the right to change specifications, add improvements or discontinue the manufacture of any of its equipment without notice or obligation to purchasers of its equipment.

Bolens' approval of the use of attachments manufactured by other manufacturers is limited to assurance that such use will not void Bolens warranty on the Bolens equipment to which the outside manufactured attachments are adapted. The responsibility for the design, performance, durability, safety in operation, service repair availability, and warranty obligation remain with the outside manufacturer. Bolens specifically excludes from its warranty obligation all such outside manufactured attachments.

Bolens warranty will be voided if unapproved attachments are adapted to use with Bolens equipment and are so used.



BOLENS

PORT WASHINGTON, WISCONSIN, U.S.A.