

Safety Instructions & Operator's Manual for

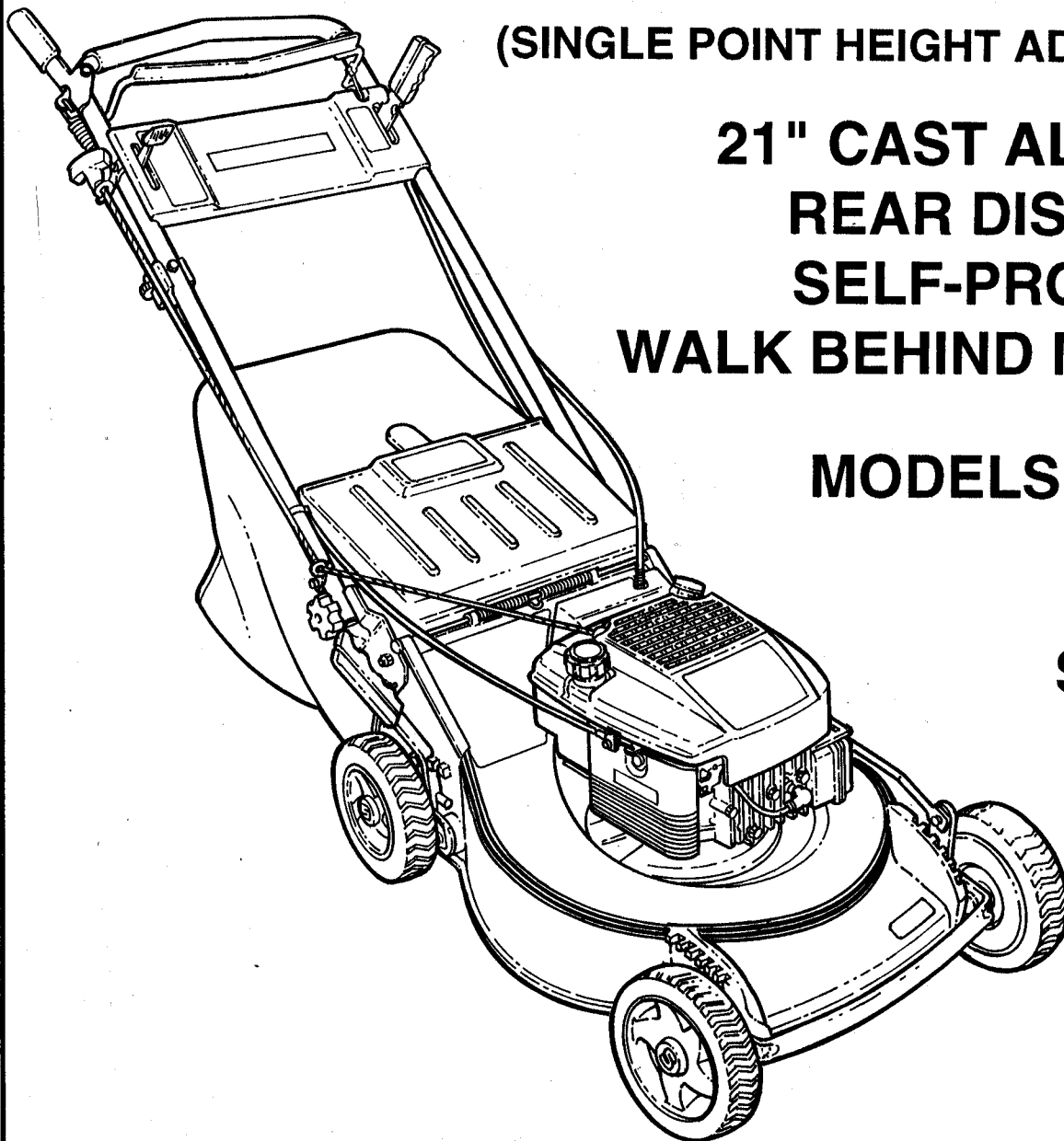
SNAPPER[®]

(SINGLE POINT HEIGHT ADJUSTMENT)

**21" CAST ALUMINUM
REAR DISCHARGE
SELF-PROPELLED
WALK BEHIND MOWERS**

**MODELS XP21501
XP21551**

SERIES 1



Thank you for buying a SNAPPER product! Before operating your mower, read this manual carefully and pay particular attention to the IMPORTANT SAFETY INSTRUCTIONS on Page 2. Remember that mowers and all power equipment can be dangerous if used improperly and keep in mind that safety requires careful use in accordance with the instructions and common sense!

SNAPPER McDonough, GA., 30253 U.S.A.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: Failure to comply with the following instructions may result in serious injury to the operator or other persons. The owner of the mower must understand these instructions and, furthermore, must allow only persons who understand these instructions to operate mower. Each person operating the mower must be of sound mind and body and must not be under the influence of any substance which might impair vision, dexterity, or judgement. If you have any questions pertaining to your mower which your dealer cannot answer to your satisfaction, call or write the Customer Service Department at SNAPPER, McDonough, Georgia, 30253. Phone: (404) 954-2500.

TRAINING

1. Read this Manual carefully and question your dealer if something is not clear. Should the dealer be unavailable or unable to answer to your satisfaction, write or call our Customer Service Department at the factory. Be thoroughly familiar with the controls and proper use of the equipment.
2. DO NOT allow children in yard when mower is operated.
3. DO NOT allow pre-teenage children to operate mower.
4. Allow only responsible teenagers with mature judgement to operate mower and only under close supervision.
5. Keep the area clear of all persons, particularly small children, and pets.

PREPARATION

1. Never operate mower without proper guards, plates, safety switches, or other safety protective devices in place and properly connected. Inspect to determine that these safety devices are installed properly, are in good repair, and operate properly. If the condition or operation of these devices are questionable, they must be repaired or replaced before using the mower.
2. Thoroughly inspect the area where the mower is to be used and remove all stones, sticks, wire, bones and other foreign objects. Also note the location of holes, stumps, and other possible hazards.
3. DO NOT operate mower when barefoot or wearing open sandals. Always wear substantial footwear and long pants.
4. Fill gasoline tank before starting engine. Use approved gasoline container. DO NOT smoke near open gasoline container. DO NOT fill gasoline tank indoors or when engine is running. Allow engine to cool for at least ten minutes before refilling. Wipe off any spilled gasoline before starting engine. DO NOT run engine indoors.
5. Make sure that traction drive clutch control is disengaged before starting engine.
6. Never attempt to make a cutting height adjustment while the engine is running.
7. When mowing over rough ground or in tall grass, mower must be set at highest cutting position.
8. Mow only in daylight or in good artificial light.
9. Never operate mower in tall grass. Always be sure of your footing; keep a firm hold on the handle and walk; never run!
10. DO NOT operate mower without the grass bag and adapter or the side discharge chute in place.

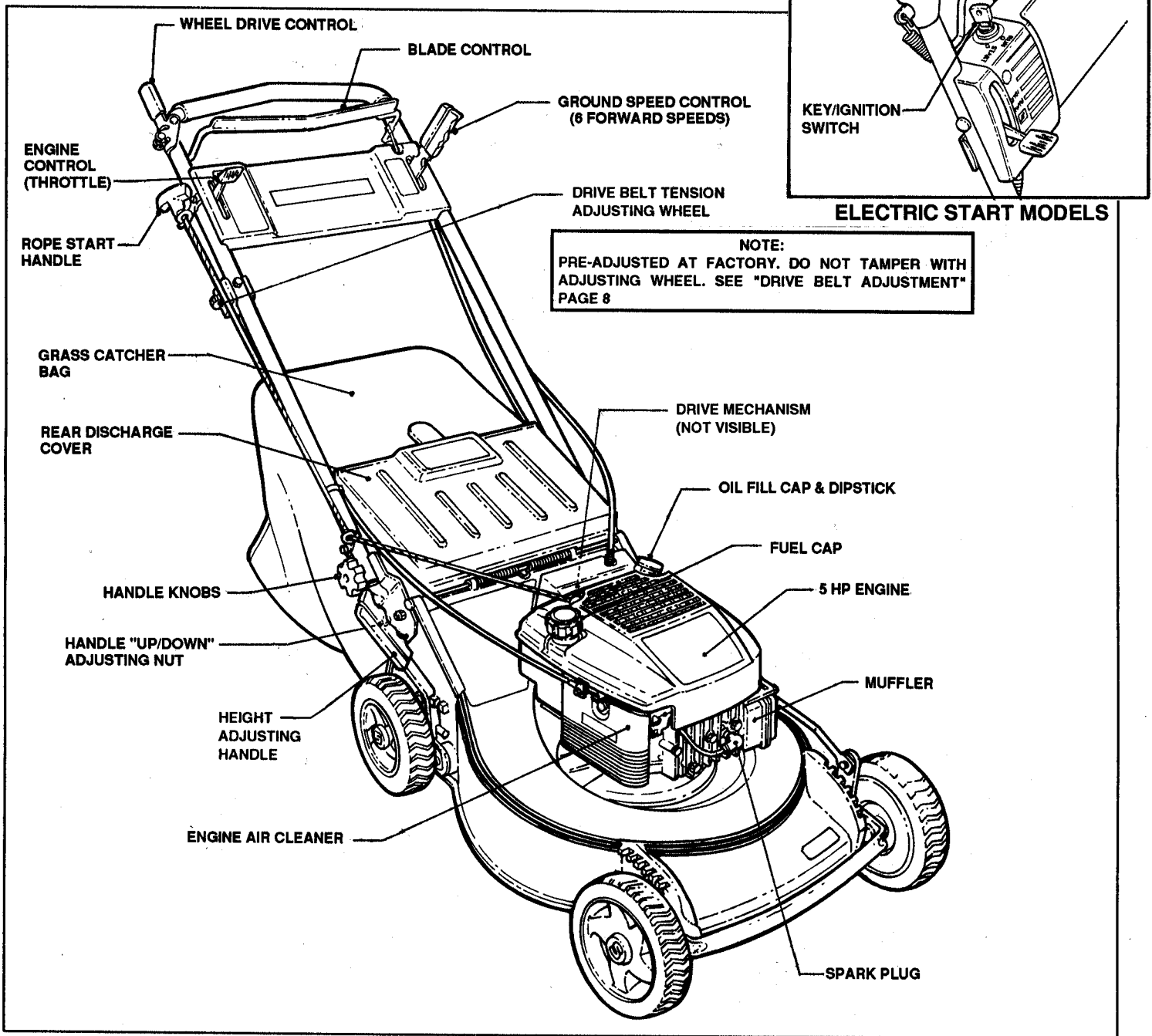
OPERATION

1. DO NOT change engine governor settings or overspeed engine.
2. DO NOT put hands or feet near or under rotating parts. Keep clear of discharge area while engine is running.
3. Stop engine when crossing gravel drives, walks, or roads, and under any conditions where thrown objects might be a hazard.
4. After striking a foreign object or if mower vibrates abnormally, stop the engine, disconnect and secure spark plug wire. Inspect the mower for any damage and repair the damage.
5. Stop blade and engine whenever you leave the operating position behind the handle for any reason, including clearing grass, emptying grass bag and making any adjustments, repairs, or inspections.
6. Before cleaning, repairing or inspecting, make certain blade and all moving parts have stopped. Disconnect and secure spark plug wire away from plug to prevent accidental starting.
7. Stop engine and wait until the blade comes to complete stop before removing grass bag and/or clearing grass.
8. Mow across slopes, never up-and-down. Exercise CAUTION when changing directions on slopes. DO NOT mow steep slopes or other areas where stability or traction is in doubt.

MAINTENANCE AND STORAGE

1. Keep all nuts, bolts, and screws tight to be sure mower is in safe operating condition.
2. Never store mower with gasoline in tank inside of a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
3. To reduce fire hazard, keep mower free of grass, leaves or excessive grease.
4. Check grass bag assembly frequently for wear or deterioration. Replace with new bag if loose seams or tears are evident. Replace slider or bag adapter if broken or cracked.
5. Have your mower inspected and serviced each year by an authorized Snapper dealer. Determine if any additional devices are available which might upgrade the safety of your mower.
6. Factory specified Snapper replacement parts must be used to assure adequate protection against injury.

FAMILIARIZATION



NOTE:
 PRE-ADJUSTED AT FACTORY. DO NOT TAMPER WITH
 ADJUSTING WHEEL. SEE "DRIVE BELT ADJUSTMENT"
 PAGE 8

FIGURE 1

INTRODUCTION

This manual has been prepared for the operators of the SNAPPER SINGLE POINT HEIGHT ADJUSTMENT, REAR DISCHARGE, 21" CAST ALUMINUM DECK WALK BEHIND MOWERS. Its purpose, aside from recommending operating and routine service requirements, is to promote safety through the use of accepted operating practices. **READ, UNDERSTAND AND FOLLOW** the SAFETY PRECAUTIONS on Page 2 of this manual and all safety messages on the tractor and attachments before operating the machine.

NOMENCLATURE

The nomenclature drawing above (Figure 1) shows the essential parts of the SNAPPER SINGLE POINT HEIGHT ADJUSTMENT, WALK BEHIND MOWER. It is recommended that all operators of this equipment become thoroughly familiar with the controls, parts and operation of this machine before operating. Specific details involving the engine are found in the separate engine owner's manual. Study these manuals before operating and keep both handy for future reference.

OPERATING INSTRUCTIONS

BEFORE OPERATING:

Be thoroughly familiar with all controls and how to use them before operating your mower. **Know beforehand how to STOP the engine, wheel drive and mower blade in preparation for possible emergencies.**

STOPPING

- **ENGINE:** STOP ENGINE by releasing the BLADE CONTROL. See Figure 2.
- **MOWER BLADE:** STOP MOWER BLADE by releasing the BLADE CONTROL.
- **WHEEL DRIVE:** STOP FORWARD MOTION of mower by releasing WHEEL DRIVE CONTROL.

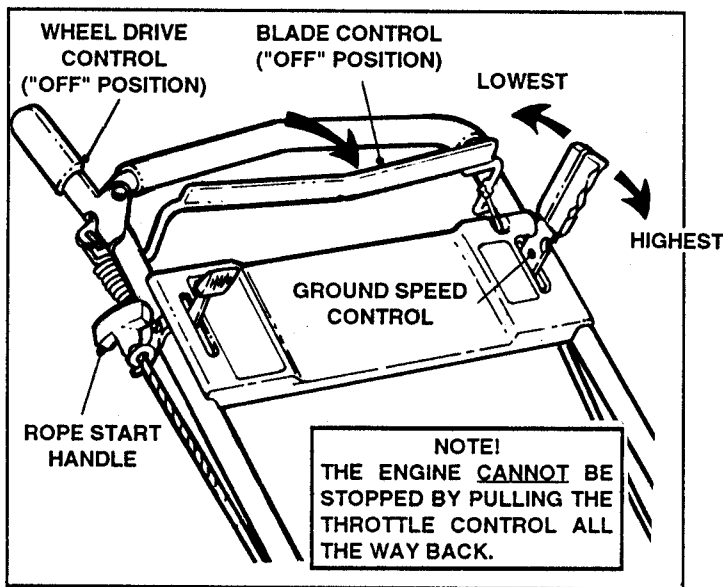


FIGURE 2

PRE-START CHECK LIST

Make the following checks and perform the service as required before each startup.

- CLEAN EXTERIOR SURFACES of cutting deck and engine of any accumulation of dirt, grass, oil, etc. Keep engine air intake screens and cooling fins clear at all times.
- CHECK ENGINE OIL and add oil as needed to bring level up to (but not over) the full mark. (Refer to engine manual for oil specifications).
- CHECK BLADE CONTROL to insure it works freely.
- CHECK CUTTING HEIGHT. Adjust as required.
- CHECK GUARDS and GRASS BAG to make sure they are in proper position and securely tightened.
- CHECK FUEL LEVEL in tank after pushing mower outdoors where fumes are safely dissipated.

STARTING/STOPPING ENGINE

1. Move THROTTLE to CHOKE position.
2. Hold BLADE CONTROL against handlebar with left hand.
3. Pull ROPE START HANDLE until engine starts. Refer to Figure 2.
4. After engine has warmed up, move THROTTLE to "FAST" position to begin mowing.
5. Stop engine by releasing BLADE CONTROL.

GROUND SPEED CONTROL

The mower has six (6) forward speeds. The GROUND SPEED CONTROL lever is pushed in towards the center and moved to the front or rear to select the desired speed. See Figure 3.

Change ground speed for varying grass conditions, not engine speed.

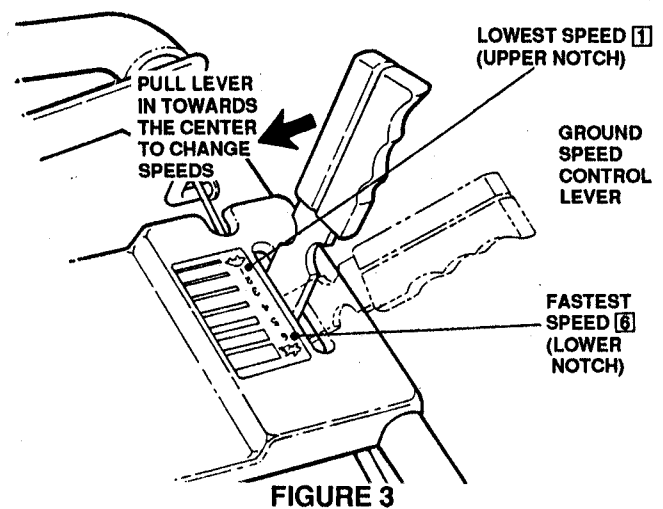


FIGURE 3

NOTE

DO NOT move the GROUND SPEED CONTROL LEVER unless the engine is running!

ELECTRIC START

The KEY/IGNITION switch has two positions - RUN & START. The engine **CAN NOT** be stopped at the switch! STOP ENGINE by releasing the BLADE CONTROL. See Figure 3A.

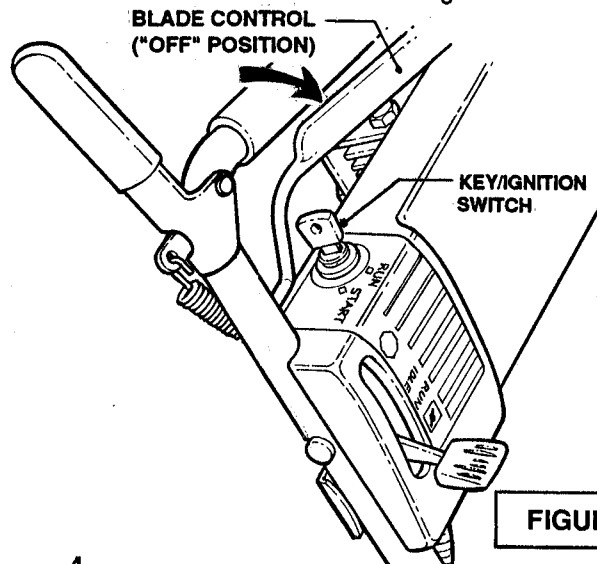


FIGURE 3A

OPERATING INSTRUCTIONS

1. Move ENGINE CONTROL lever to START position.
2. Turn the IGNITION KEY to START position and hold until the engine starts, then release.

CUTTING HEIGHT ADJUSTMENT

Stop motor and adjust *blade cutting height* as follows:

1. Pull ADJUSTING HANDLE out towards the wheel and move to desired notch. Release handle to lock in position. See Figure 4.

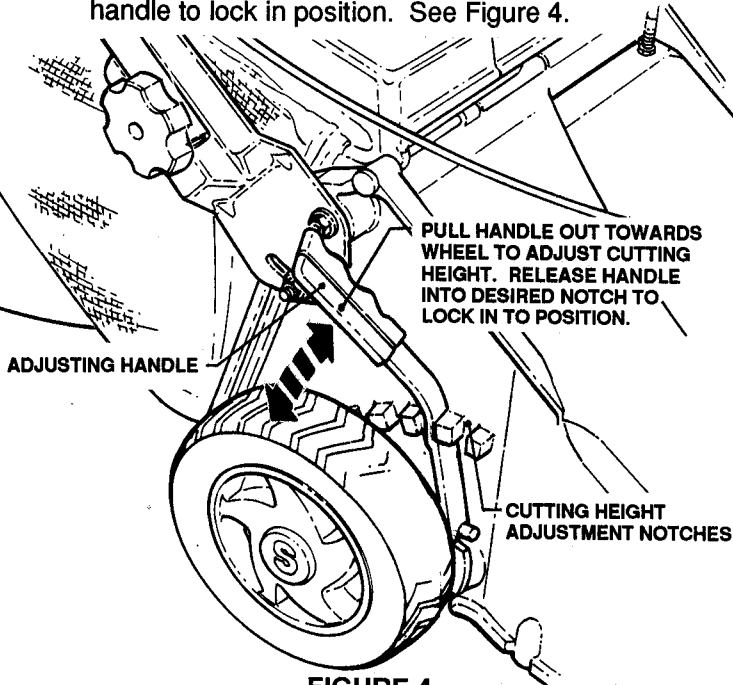


FIGURE 4

2. Push the handle all way forward for lowest cutting position.
3. Pull handle all way to the rear for highest cutting position.

HANDLE HEIGHT ADJUSTMENT

The bottom hole on each handlebar support is slotted to allow for handlebar height adjustment. See Figure 5.

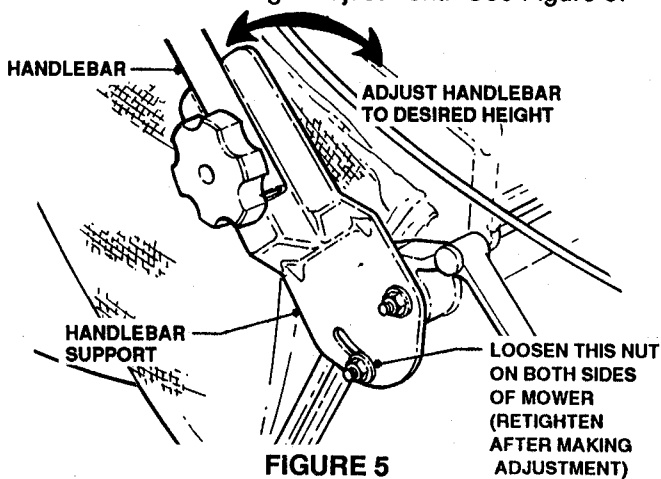


FIGURE 5

GRASS CATCHER

To install or remove the *Grass Catcher*, proceed as follows:

1. Stop engine.
2. Lift deflector shield.
3. Grasp handle and hold *Grass Catcher* up while inserting rod ends over tabs at rear of mower deck. See Figure 6.
4. Reverse procedure to remove *Grass Catcher*.

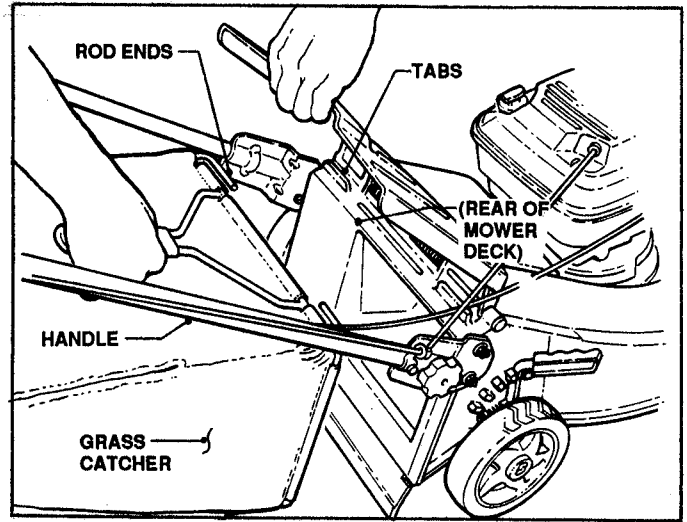


FIGURE 6

MOWING PROCEDURE

1. Perform PRE-START CHECK LIST.
2. Move mower to flat spot in area to be mowed.
3. Observe surroundings. Make sure there are no bystanders, children or animals in, or close by, the area to be mowed. Pick up any toys, sticks, etc., that could be thrown out by the mower blade. Make NOTE of any potential hazards.
4. Start mower engine.
5. Move THROTTLE to "FAST" engine speed. See Figure 7.

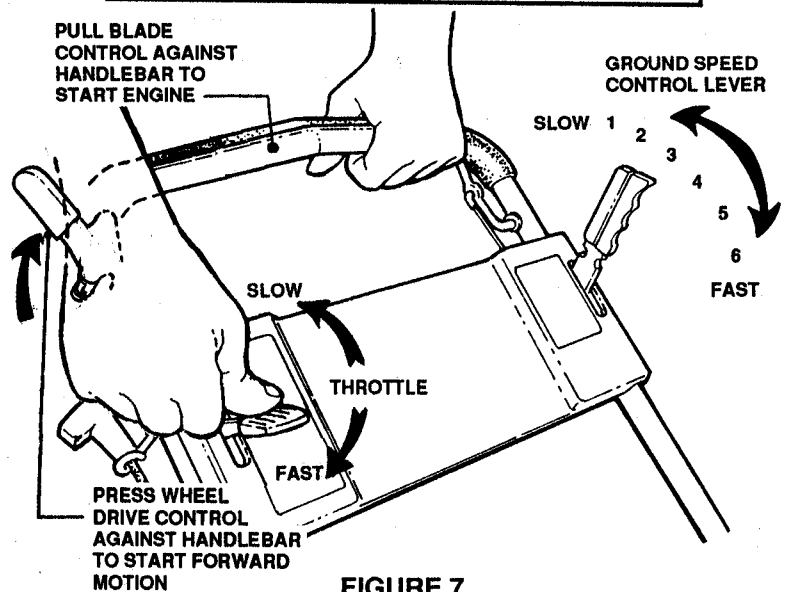
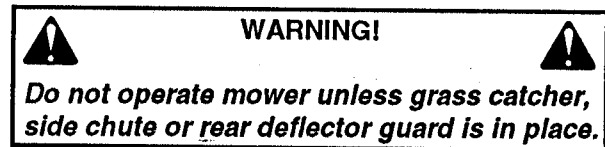


FIGURE 7

6. Move GROUND SPEED CONTROL LEVER to desired speed setting (until you become familiar with the mower, **SNAPPER** recommends that the GROUND SPEED CONTROL LEVER be kept in a low-speed position (1 or 2)).
7. Press WHEEL DRIVE CONTROL against handlebar to start forward motion. Refer to Figure 7.

SERVICE

To retain the quality of your mower, use Genuine **SNAPPER** Replacement Parts only. Contact your local **SNAPPER** Dealer for parts and service assistance. For the correct part or information for your particular mower, always mention model and serial number. We recommend returning the mower to an authorized **SNAPPER** Dealer on a yearly basis for inspection and addition of any new devices which might upgrade the **SAFETY** of your mower. For the nearest **SNAPPER** Dealer, check the Yellow Pages under the heading **LAWN MOWERS**. For engine parts and service, look for the engine manufacturer's dealers under the heading **ENGINES - gasoline**.

OIL FILLER/DIPSTICK
CAP

DRAIN CHUTE
(METAL OR CARDBOARD)

PLACE 2 QUART
CONTAINER UNDER
LEFT SIDE OF
MOWER DECK

REMOVE OIL
PLUG

FIGURE 9

WARNING!

Disconnect wire from spark plug before inspecting or servicing any part of the mower!

LUBRICATION SCHEDULE

• ENGINE (EVERY 25 HOURS)

1. Tilt mower up on its back wheels to remove oil drain plug from underneath. See Figure 8.

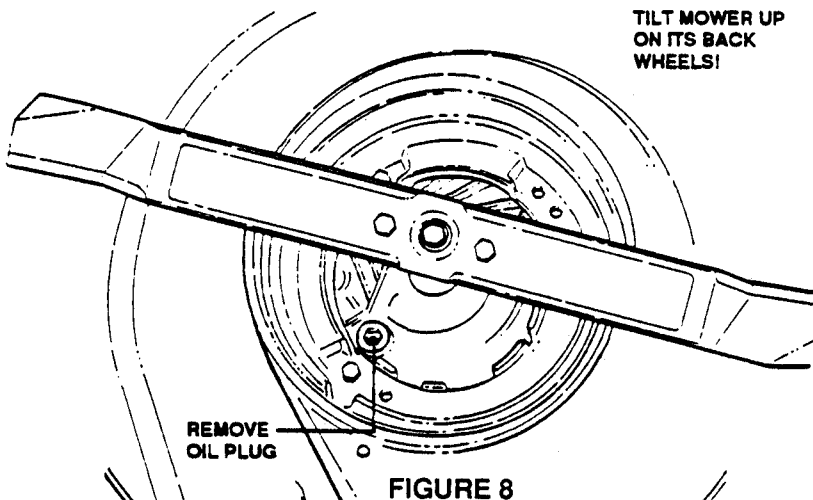


FIGURE 8

2. Lower mower back down onto its wheels and allow oil to drain completely.
3. Change oil every 25 hours, or as specified in engine manual. Check engine manual for type and amount of oil. Check oil level before each use.

LUBRICATION SCHEDULE

(KAWASAKI ENGINES ONLY)

ENGINE (EVERY 25 HOURS)

1. Roll mower to flat area.
2. Put flat container (2 quart minimum capacity) under left side of mower deck.
3. Fashion a drain chute out of metal or cardboard as shown in Figure 9.
4. Loosen oil filler/dipstick cap.
5. Place drain chute beneath oil drain and remove oil plug.
6. Allow mower to drain completely.
7. Change oil every 25 hours, or as specified in engine manual. Check engine manual for type and amount of oil. Check oil level before each use.

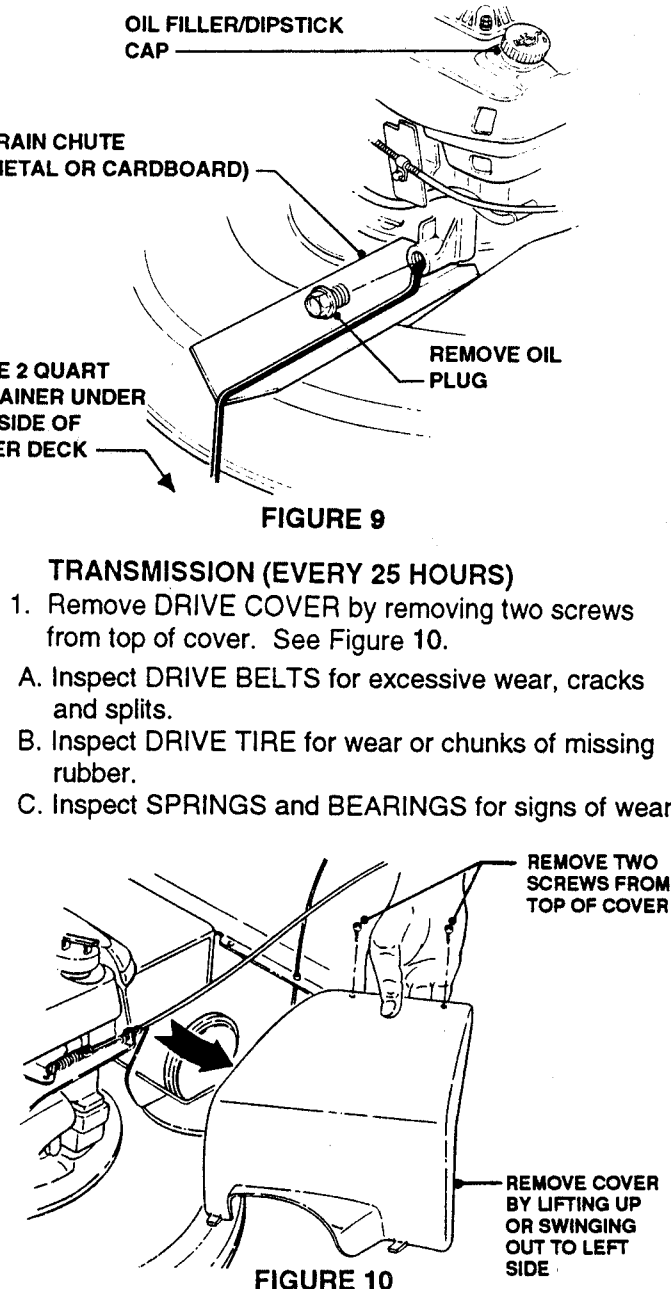


FIGURE 10

Remove transmission FILL PLUG. See Figure 11.

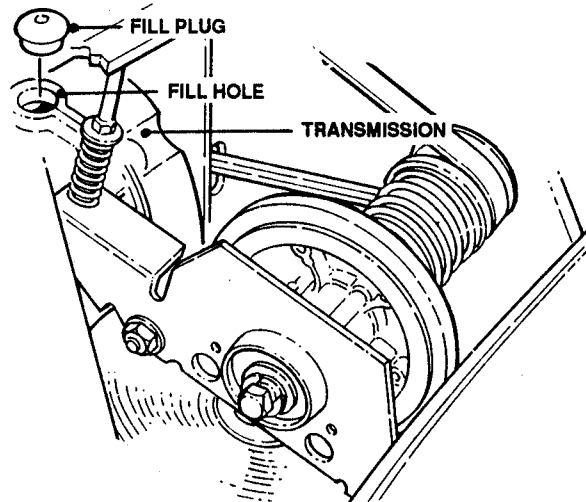


FIGURE 11

SERVICE

- Look into FILL HOLE. If grease IS NOT visible on the small gear directly below the fill hole while rolling the unit, add a small amount of SNAPPER transmission grease to transmission. DO NOT overfill or it will cause leaks.

NOTE

SNAPPER transmission grease (Part No. 6-1017) is available in a convenient squeeze container from any SNAPPER Dealer.



CAUTION



Do not spill oil or grease on the surface of the drive disc.

CUTTING BLADE SERVICE

- Check at frequent intervals to make sure the Blade is securely tightened and that it is in good condition. Torque 25 to 45 FOOT POUNDS.
- Replace Blade if badly chipped, bent, out of balance, or as soon as notch starts wearing in the tip between the flat surface and upturned lift as shown in Figure 12. This type wear pattern occurs more rapidly under sandy soil conditions.

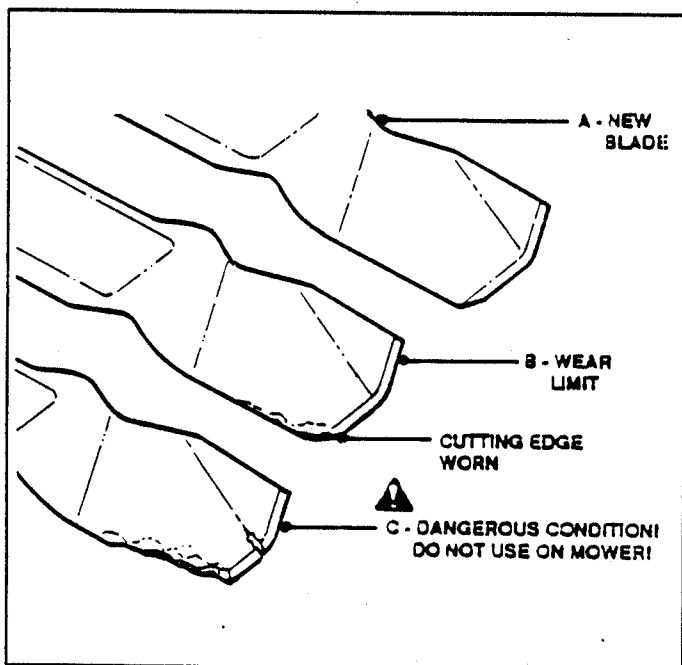


FIGURE 12



DANGER



Never operate the mower with blade worn to the extent shown in View C as the tip could fly off, causing personal injury or property damage.

- Sharpen Blade when the cutting edges become dull if the blade is in otherwise good condition. When dull, the grass cut ends will be ragged and usually turn brown soon after mowing. For best results, remove the blade and sharpen it on a grinding wheel at an angle of 22 to 28 degrees. The cutting surface should extend in about 2 1/2" from the tips. Check the blade after sharpening to determine that it is still balanced. It will cause excessive vibration if unbalanced. See Figure 13.

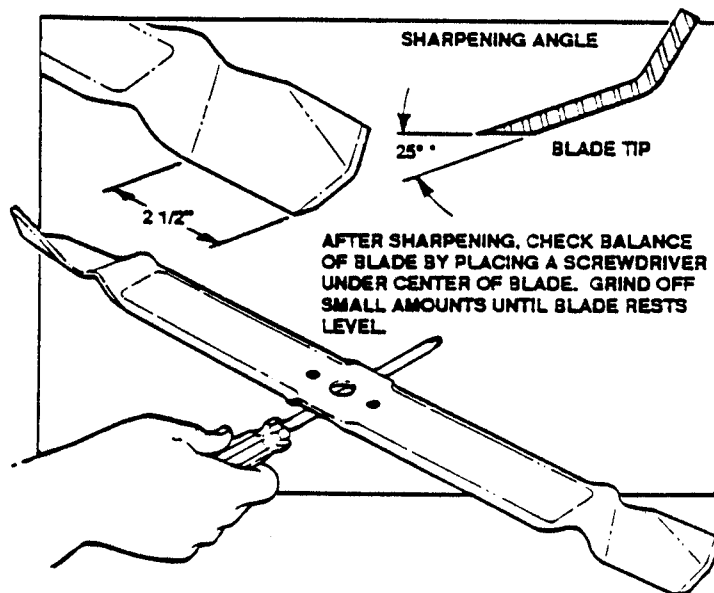


FIGURE 13

- Reinstall sharpened blade and components as shown in Figure 14.

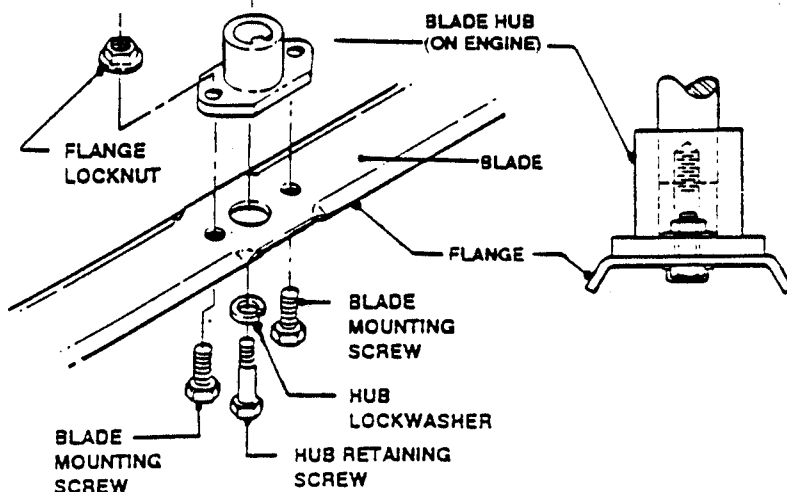


FIGURE 14

- Tighten the special blade retaining capscrew to 25 to 45 FOOT POUNDS TORQUE

SERVICE

BATTERY CHARGING

A plug-in battery charger is available from your Snapper Dealer. It operates on 120V/60hz household current. When re-charging the battery, disconnect the mower wiring harness. Plug the charger into a household outlet and connect the charger lead to the battery harness. If the battery is weak, charge for 48 hours. If the battery is completely discharged, charge for 72 hours.

DRIVE BELT ADJUSTMENT

During operation, if the mower will not power itself uphill or, while on level ground the mower drive seems to be slipping, then the mower drive belt probably needs adjusting. Proceed as follows:

1. Push mower to level area.
2. Release Wheel Drive Control lever.
3. Continue to hold Blade Control against handlebar and allow engine to keep running.
4. Reach down with right hand and turn Drive Belt Tension Adjusting Wheel counterclockwise two (2) complete turns. See Figure 15.

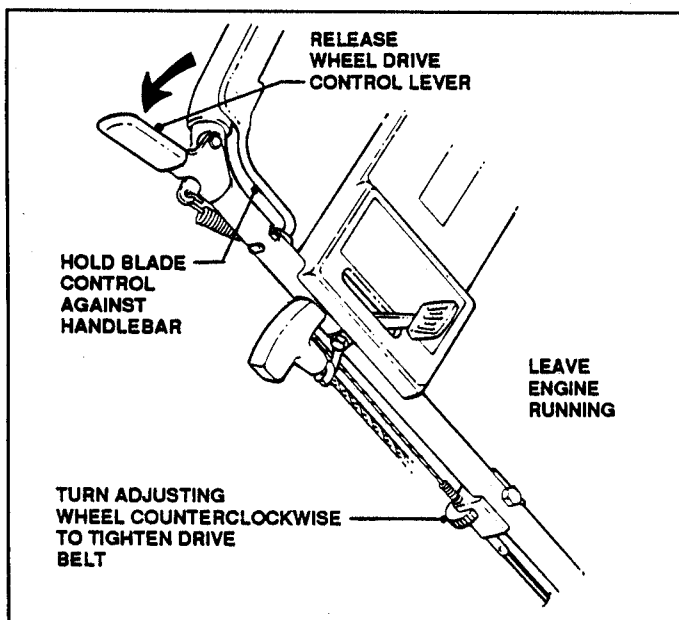


FIGURE 15

5. Press Wheel Drive Control lever against handlebar and allow mower to propel itself forward.
6. If forward motion of mower is still unsatisfactory, turn Adjusting Wheel another time.



CAUTION

Do not overstress drive belt! Turn Adjusting Wheel only as much as is required for mower to propel itself forward!



DRIVEN "V" BELT REPLACEMENT

The condition of the DRIVEN "V" Belt should be checked at the beginning and end of each mowing season. The belt should be inspected for signs of excessive wear, fraying, cracks, etc. If the Driven "V" Belt shows any of the above symptoms, it should be replaced as follows:

1. Stop engine.
2. Disconnect spark plug wire.
3. Remove belt cover.
4. Remove Ground Speed Drive Cable as shown in Figure 16.

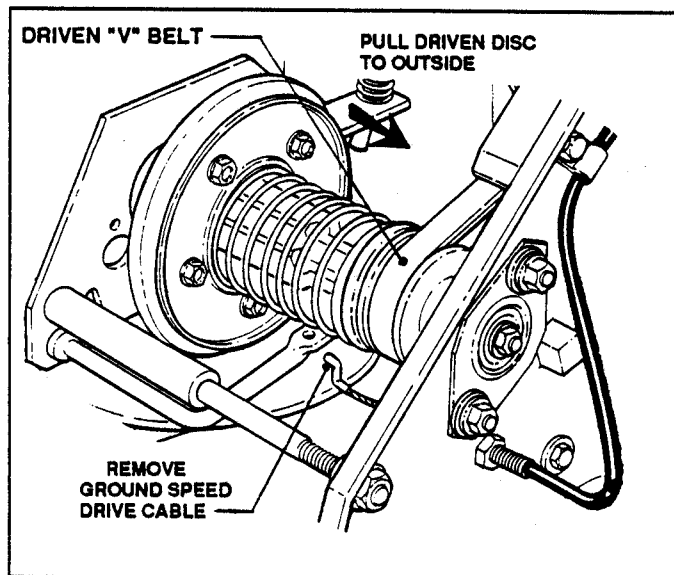


FIGURE 16

5. Remove retaining nut and flat washer from end of shaft. Remove flange lock nut as shown and remove lock nut from other end of same shaft found under deck. See Figure 17.

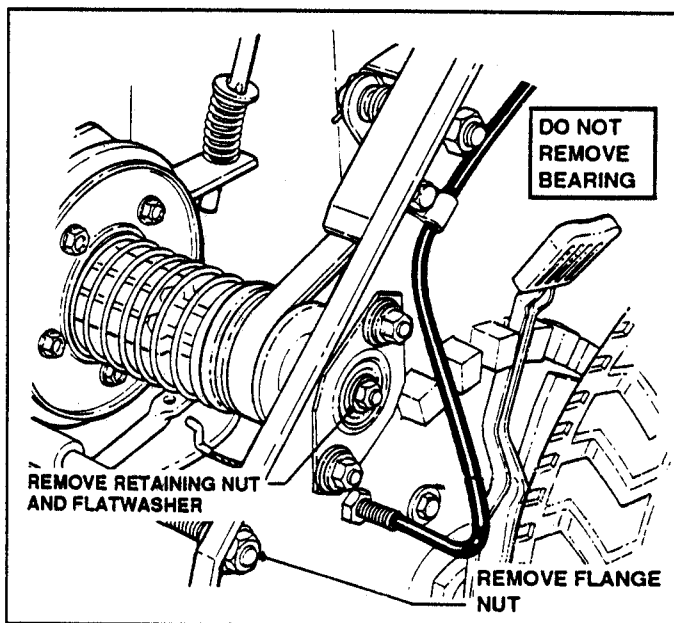


FIGURE 17

SERVICE

6. Push Driven Disc towards L.H. side of mower deck and remove Tension Rod by pressing down on rod and spring and pulling rod out from under deck. See Figure 18.
7. At this point driven disc assembly can be removed. Replacement of rubber driven disc or driven "V" belt can be done at this point without any other disassembly. If replacement of other parts is needed continue on to step 8.

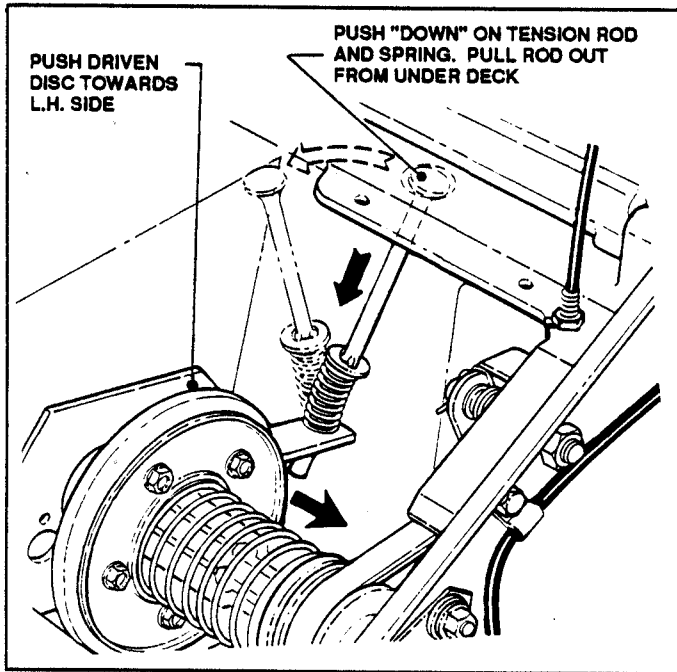


FIGURE 18

11. Release pressure on idler Torsion Spring by prying out upper end of spring with screwdriver. See Figure 20.

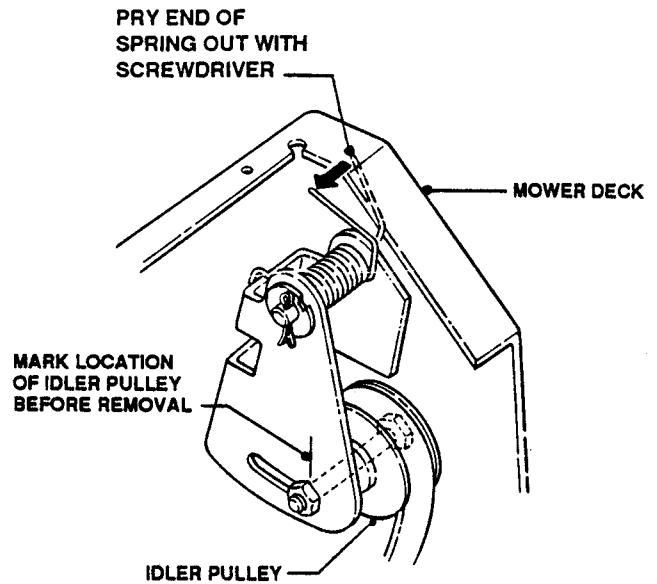


FIGURE 20

NOTE

Mark location of Idler Pulley before removal. Replace in same location.

8. Slide belt off Driven Disc pulley.
9. Rotate Driven Disc assembly "UP" so that the rubber tire will clear the bolt head in the center of the Drive Disc.
10. After rotating "UP", push Driven Disc assembly towards center of mower until Spacer, Pulley and Spring can be removed from Hex Shaft. See Figure 19.
12. Remove Cotter Pin.
13. Remove Idler Assembly from mounting post.
14. Remove Idler Pulley from bracket (MARK IDLER LOCATION!). See Figure 21.
15. Remove and replace Poly-V drive belt.
16. Reassemble in reverse order of above.

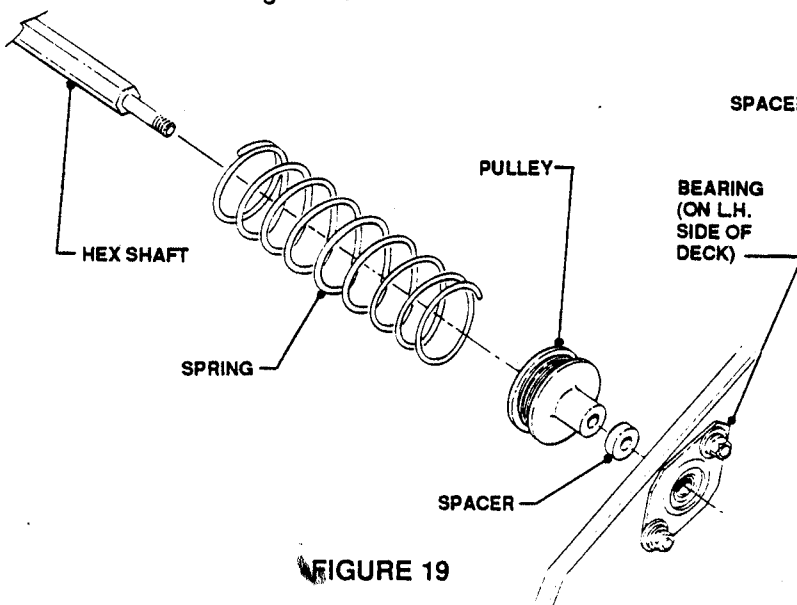


FIGURE 19

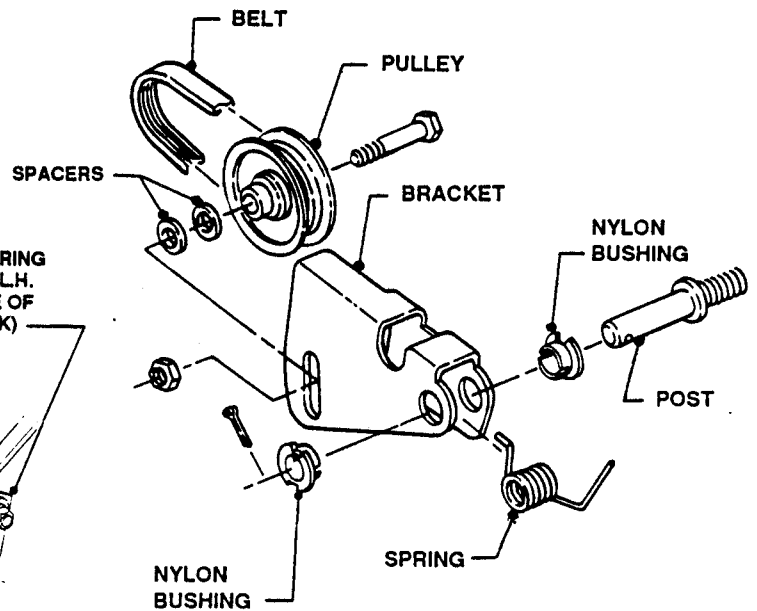


FIGURE 21

SERVICE

IMPORTANT NOTE!

Before reattaching Ground Speed Drive Cable (Refer to Figure 16), the Adjusting Wheel should be turned clockwise to lengthen the cable for easier installation. After the cable has been attached, rotate the Adjusting Wheel counterclockwise until the Drive Belt has enough tension to power the mower. **DO NOT OVER-TENSION BELT!** See Figure 22.

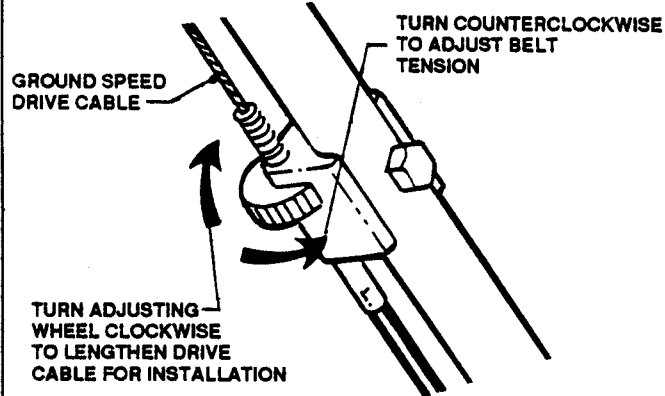


FIGURE 22

DRIVEN DISC TIRE REPLACEMENT

If the rubber tire on the Driven Disc is badly chunked or worn down to within 1/16" of the metal rim of the Driven Disc, it must be replaced. Proceed as follows:

1. Stop engine.
2. Disconnect spark plug wire.
3. Dissassemble Driven Disc assembly as outlined in "MOWER DRIVE BELT REPLACEMENT".

NOTE

In following "DRIVEN "V" BELT REPLACEMENT" instructions, omit that part dealing with idler removal.

4. Remove the five machine screws and plate securing the Driven Disc rubber ring to the hub. See Figure 23.

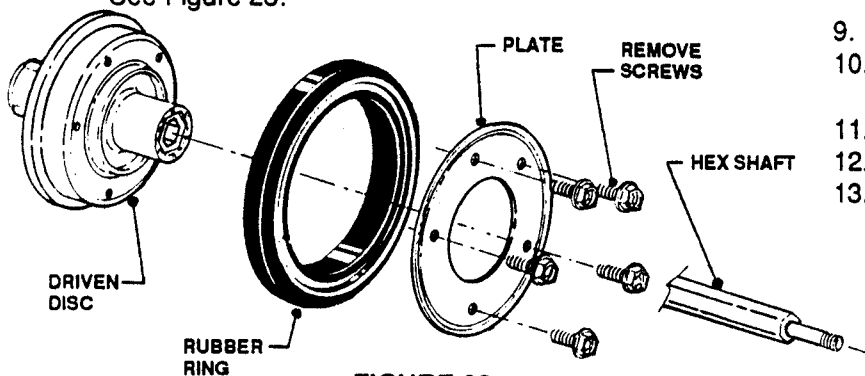


FIGURE 23

5. Install new rubber ring.
6. Reassemble Driven Disc.
7. Reassemble all components in reverse order.

DRIVE "V" BELT REPLACEMENT

The Drive "V" Belt is self-adjusting. It also should be inspected at the beginning and end of each mowing season for signs of wear, fraying, cracks, etc. If the Blade Drive Belt shows any signs of excessive wear, it should be replaced as follows:

1. Stop engine.
2. Disconnect spark plug wire.
3. Drain gasoline from tank.
4. Remove belt cover.
5. Remove Ground Speed Drive Cable. See Figure 24.

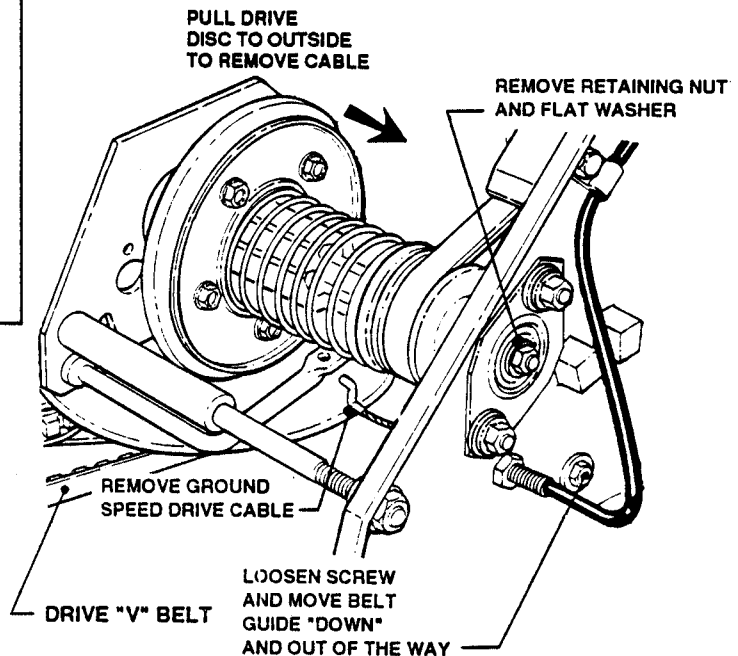


FIGURE 24

6. Loosen Belt Guide and move "DOWN" and out of the way. See Figure 24, above.
7. Remove retaining nut and flatwasher from end of shaft (DO NOT REMOVE BEARING).
8. Remove spacer, pulley and spring from hex shaft.
9. Move Poly V-Belt out of the way.
10. Rotate Driven Disc assembly "UP" and slide to the inside as far as possible.
11. Tilt mower up on its right-hand side.
12. Remove mower blade.
13. Using a TMTORX bit to hold the inside of the Drive Disc bolt, remove the nut and washer from underside of mower with a 11/16" socket. See Figure 25.

SERVICE

STORAGE PROCEDURE

Refer to the engine manual for directions regarding engine storage preparations.

Prepare the mower for "end of season" storage as follows:

1. Remove fuel from fuel tank. Run engine until carburetor bowl is empty.

CAUTION

DISCONNECT THE SPARK PLUG WIRE BEFORE ANY OTHER PREPARATIONS ARE MADE!

2. Tape all openings closed to prevent spraying water into exhaust or air intakes during washing.
3. Stand the mower on its rear wheels and thoroughly clean the underside of the deck. Scrape away any accumulation of grass with a putty knife and/or wire brush, then use a hose to wash down the underside of deck and allow to dry. Clean all external surfaces of mower and allow to dry.
4. Lubricate all exposed metal with a light coating of oil to prevent corrosion.
5. Drain oil and refill with new oil.
6. Change air filter.
7. If so equipped, empty the grass bag to prevent decay of debris and formation of mold while in storage. The grass bag may be washed in detergent, but allow it to dry thoroughly.
8. The handlebar may be tilted forward AFTER loosening both KNOBS. The Grass Bag does not have to be removed. See Figure 27
9. Store the mower in a shed or other dry area, protected from weather.
10. To reposition handlebar for mowing, fold handle back into mowing position and tighten knobs. Check cables for any kinks or bends. Refer to Figure 27.

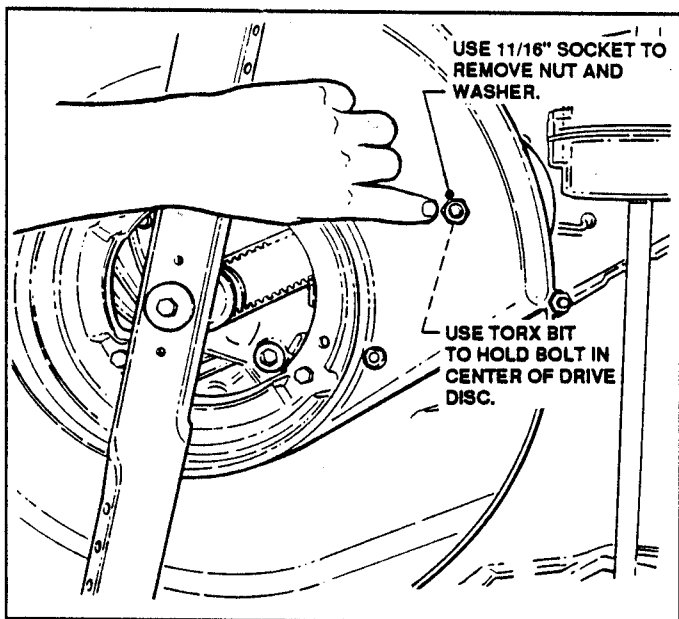


FIGURE 25

14. Remove Drive Disc bolt from top side of mower deck.
15. Lift Drive Disc "UP" and away from mower deck.

NOTE

If Idler and Idler Arm separate from deck, reseal both back into position.

16. Install new belt around blade pulley, then feed other end through deck opening and around Drive Disc pulley. See Figure 26.

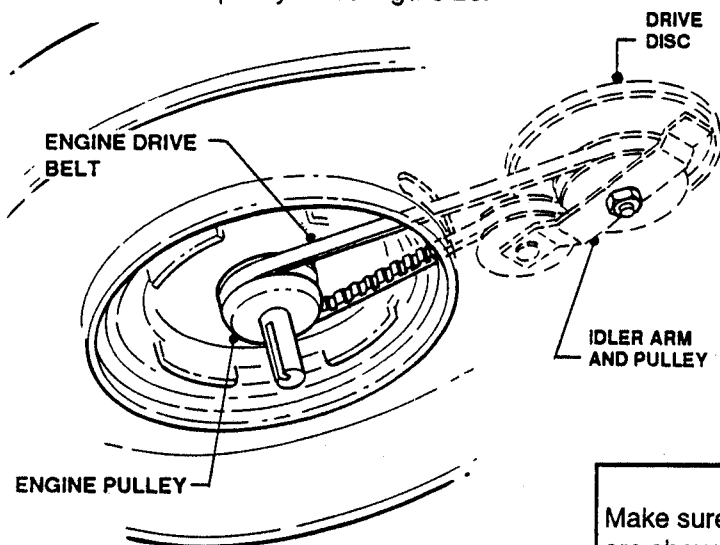


FIGURE 26

17. Reinstall Drive Disc to mower deck.
18. Reinstall all components in reverse order.

NOTE!

Make sure that control cables are above knobs before attempting to fold handlebar!

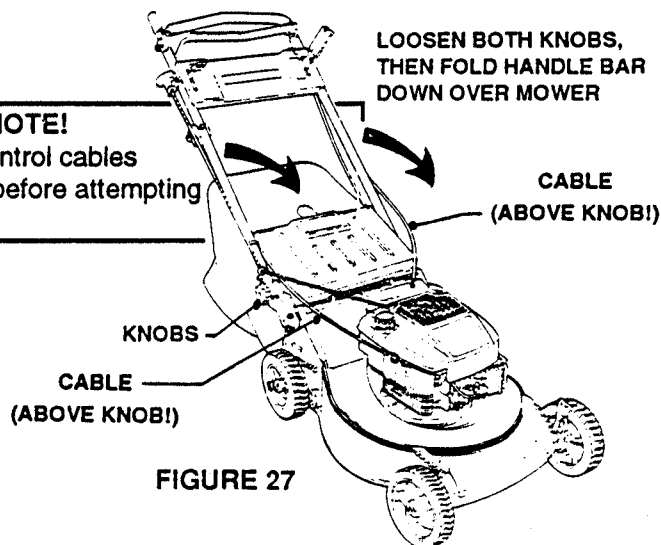


FIGURE 27

Safety Instructions & Operator's Manual for

SNAPPER®

(SINGLE POINT HEIGHT ADJUSTMENT)

MODELS XP21501

21" CAST ALUMINUM REAR DISCHARGE
WALK BEHIND MOWER

XP21551

SELF-PROPELLED

SERIES 1

SNAPPER®

2 YEAR LIMITED WARRANTY

For two (2) years from purchase date for the original purchaser's residential, non-commercial use, SNAPPER, through any SNAPPER dealer will replace, free of charge, any part or parts found upon examination by the factory at McDonough, Georgia, to be defective in material or workmanship or both.

For ninety (90) days from purchase date for the original purchaser's commercial, rental, or other non-residential use, SNAPPER, through any SNAPPER dealer will replace, free of charge, any part or parts found upon examination by the factory at McDonough, Georgia, to be defective in material or workmanship or both.

All transportation costs incurred by the purchaser in submitting material to a SNAPPER dealer for replacement under this warranty must be paid by the purchaser.

This warranty does not apply to engines and their components, or, Peerless® Transaxles, as these items are warranted separately by their manufacturers. This warranty does not apply to parts that have been damaged by accident, alteration, abuse, improper lubrication, normal wear, or other cause beyond our control.

There is no other express warranty.

Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to two (2) years from purchase date for the original purchaser's residential, non-commercial use [ninety (90) days from purchase for the original purchaser's commercial, rental or other non-residential use], and to the extent permitted by law, any and all implied warranties are excluded. This is the exclusive remedy. Liabilities for consequential damages, under any and all warranties are excluded.

Some states do not allow limitations on how long an implied warranty lasts, or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion 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.

WARNING: THE USE OF REPLACEMENT PARTS OTHER THAN GENUINE SNAPPER PARTS MAY IMPAIR THE SAFETY OF SNAPPER PRODUCTS AND WILL VOID ANY LIABILITY AND WARRANTY BY SNAPPER ASSOCIATED WITH THE USE OF SUCH PARTS.

IMPORTANT: Please fill out the attached SNAPPER Product Registration Card immediately and mail to:
SNAPPER, McDONOUGH, GEORGIA 30253

SNAPPER®

McDonough, GA., 30253 U.S.A.