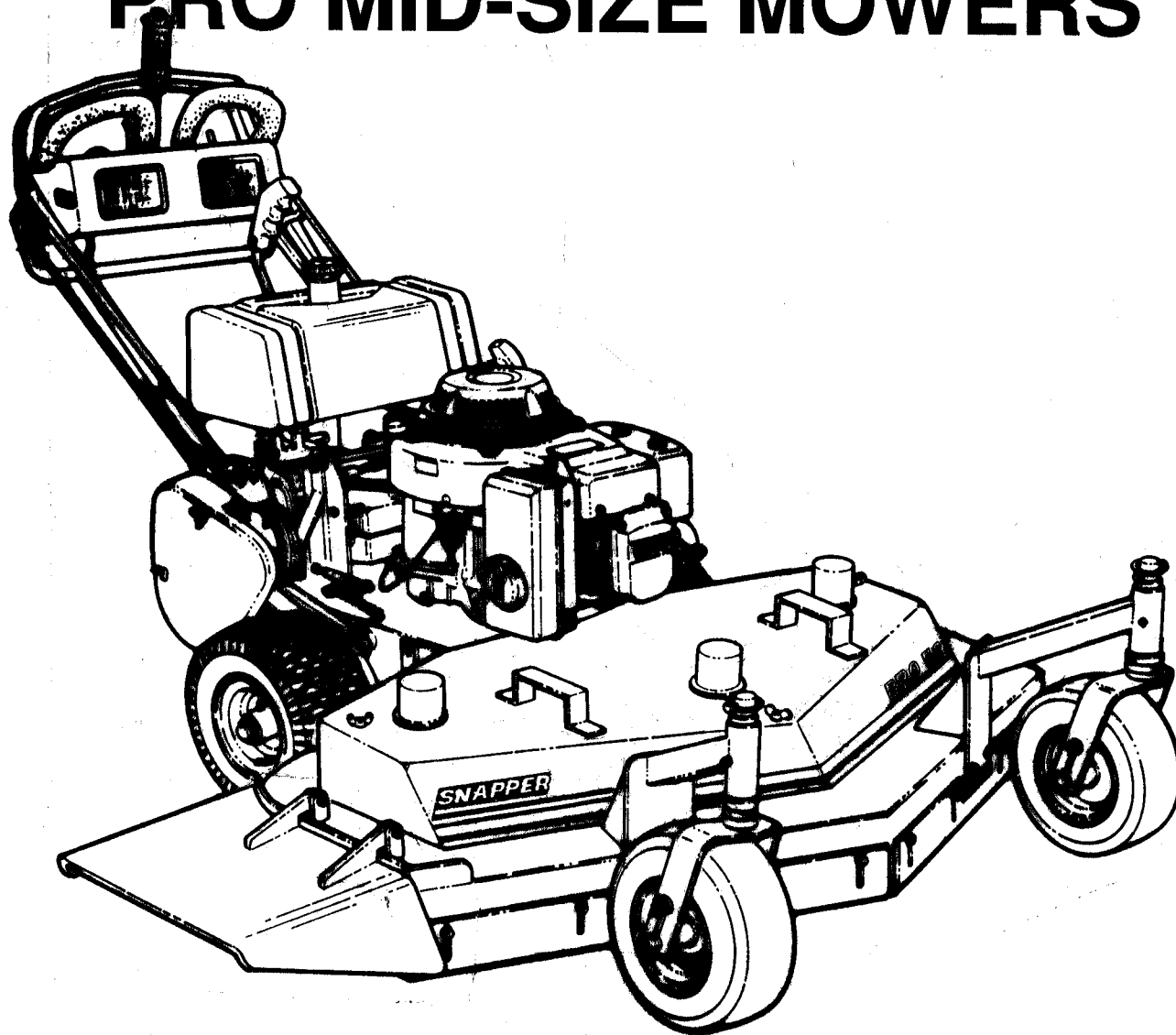


Safety Instruction, Service & Operators Manual for

# SNAPPER®

36", 48", 52", & 61"

## PRO MID-SIZE MOWERS



Thank you for buying a **SNAPPER** product! Before operating your mower, read and follow the Important Safety Instructions (on page 2) and the other instructions contained in this manual. Lawnmowers, and all power equipment, can be potentially dangerous if used improperly. **REMEMBER: SAFETY REQUIRES CAREFUL USE IN ACCORDANCE WITH INSTRUCTIONS AND COMMON SENSE.**

**SNAPPER POWER EQUIPMENT**

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

**E/I**

**FUGUA**  
INDUSTRIES  
Company

(I.R. 1/91) MANUAL #1-7526

# 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 the 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 judgment. 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 POWER EQUIPMENT, McDonough Georgia, 30253 (Phone 404-957-9141).

## 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 thorough 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 judgment 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. Lock both drive levers into NEUTRAL LOCK position before starting engine.
6. Never attempt to make a wheel height adjustment while engine is running.
7. When mowing over rough ground or in tall grass, mower must be set in highest cutting position.
8. Mow only in daylight or in good artificial light.
9. Never operate mower in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk, never run.

## OPERATION

1. Do not change engine governor settings or over-speed engine.
2. Do not put hands or feet near or under rotating parts. Keep clear of discharge area while engine is running.
3. Disengage blade drive 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 engine whenever you leave the operating position behind the handle for any reason, including emptying grass catcher 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 catcher and/or unclogging adapter.
8. Mow across slopes, never up-and-down. Exercise caution when changing directions on slopes. Do not mow steep slopes.
9. When parking mower, stop engine and leave drive levers in DRIVE position. Never park mower on slopes.
10. Do not use sulky on slopes.

## 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 the 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 catcher assembly frequently for wear or deterioration. Replace with new bag if loose seams or tears are evident.
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

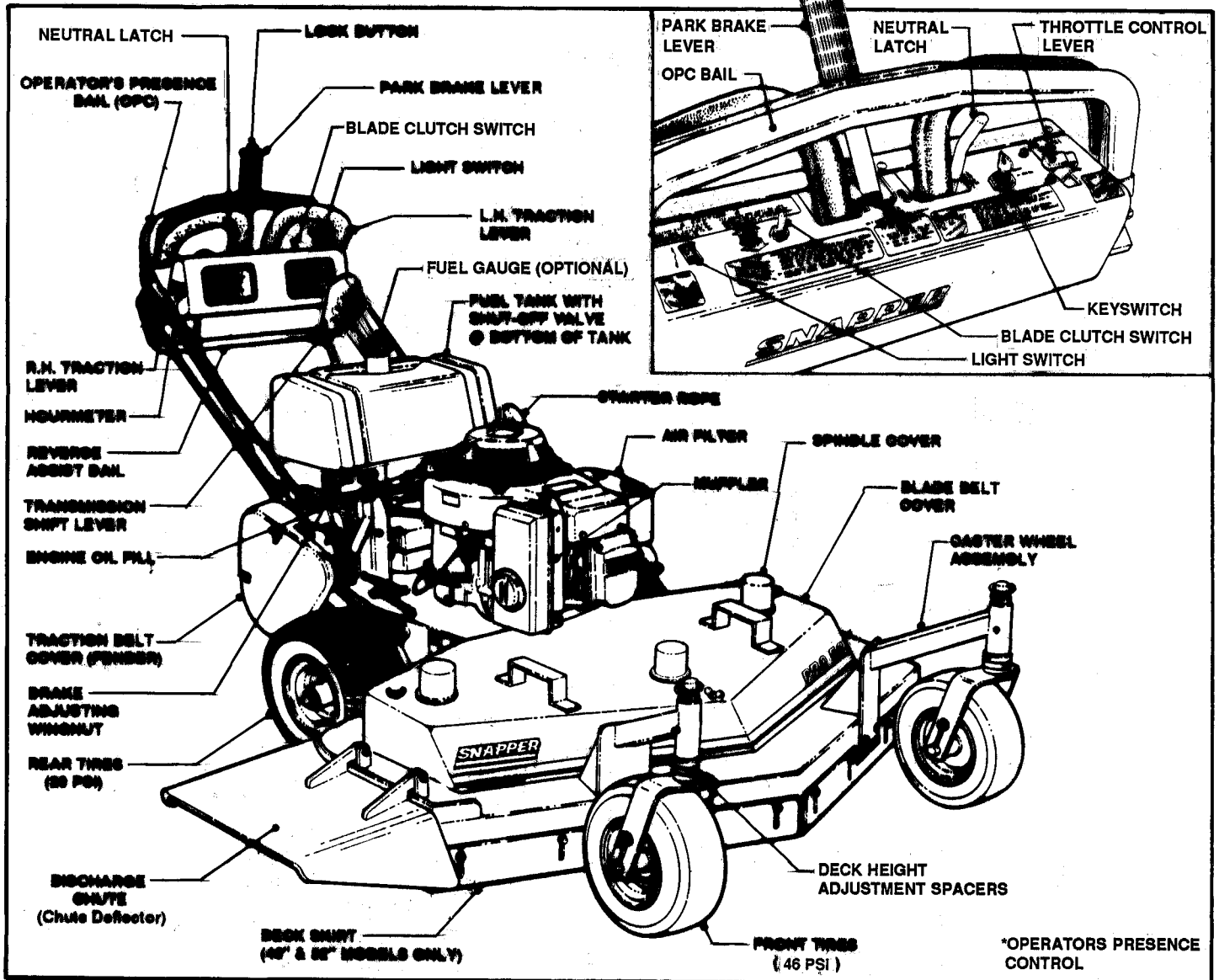


FIGURE 1

## INTRODUCTION

This manual has been prepared for the operators of the **SNAPPER 36", 48", 52" & 61" PRO MID-SIZE MOWERS**. **READ, UNDERSTAND AND FOLLOW** the safety and operating instructions herein.

Always apply Park Brake, stop the Blades and Engine and remove Ignition Key when it becomes necessary to leave the machine unattended.

These mowers feature a Light Touch Steering System, using individual belt drives and wheel brakes on each side of the machine. **LEARN HOW TO USE THESE IMPORTANT BRAKE/STEERING CONTROLS!** As an additional safety factor, these mowers are equipped with an "OPERATOR'S PRESENCE SYSTEM", this is an Electrical Interlock System which is

activated by depressing the OPERATOR'S PRESENCE CONTROL BAIL (OPC) against the handle bar. Releasing the OPERATOR'S PRESENCE BAIL while mowing or transporting, will break the electrical circuit and cause the engine (and mower) to stop.

## NOMENCLATURE

The nomenclature drawing above (Figure 1) shows the essential parts of the **SNAPPER 36", 48", 52" & 61" PRO MID-SIZE MOWERS**. 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 the mower. Know beforehand how to stop the Engine, Wheel Drives and Mower Blades in preparation for possible emergencies.

## EMERGENCY STOP

Squeeze both TRACTION LEVERS firmly against the Handlebar to stop forward motion. Using your thumb, push the NEUTRAL LATCH LEVER forward until it locks, then STOP ENGINE by turning the Keyswitch to "OFF" and/or by moving the THROTTLE CONTROL LEVER to "STOP". Move the BLADE CLUTCH SWITCH to the "OFF" position. Release NEUTRAL LATCH by squeezing both TRACTION LEVERS. See Figure 2.



FIGURE 2

## NORMAL OPERATING STOP

1. Squeeze both TRACTION LEVERS firmly against the Handlebar and push the NEUTRAL LATCH LEVER forward until it locks. (Refer to Figure 2.)
2. Move THROTTLE CONTROL LEVER to "STOP". See Figure 3.

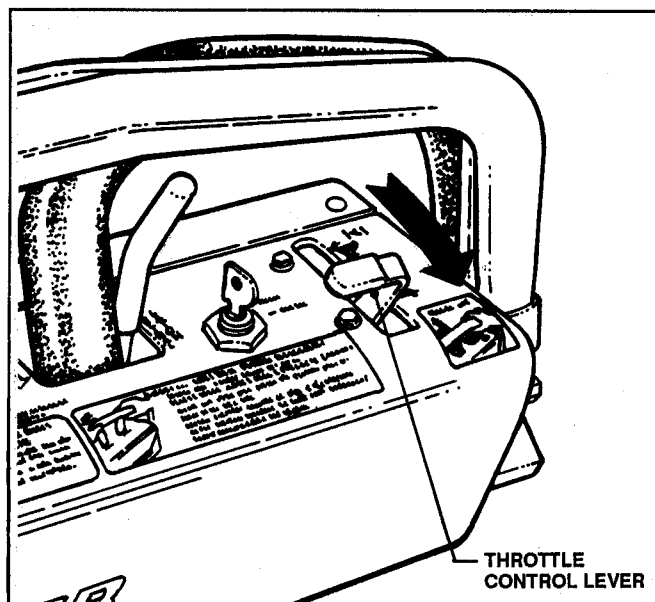


FIGURE 3

3. Place SHIFT LEVER in "NEUTRAL" (N) position. See Figure 4.

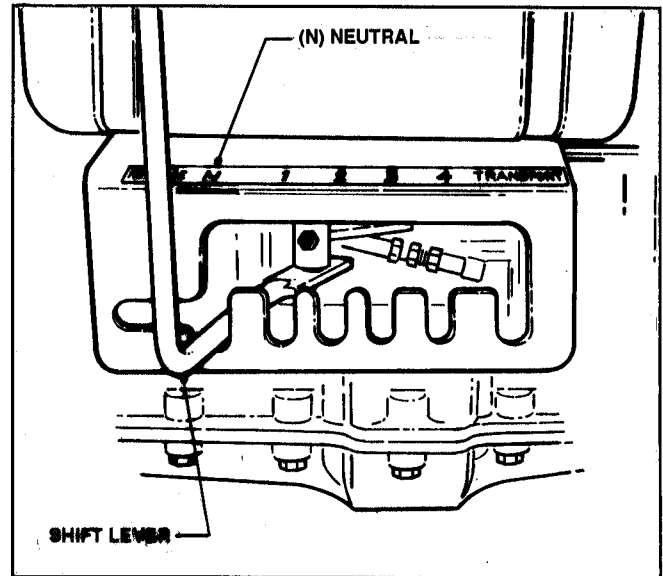


FIGURE 4

4. Move the BLADE CLUTCH SWITCH to the "OFF" position.
5. STOP ENGINE by turning the KEYSWITCH to "OFF" and/or by moving THROTTLE CONTROL to "STOP" position.
6. Release OPERATOR'S PRESENCE Bail.
7. Pull the PARK BRAKE LEVER firmly against the Handlebar until it locks and the button pops up. See Figure 5.

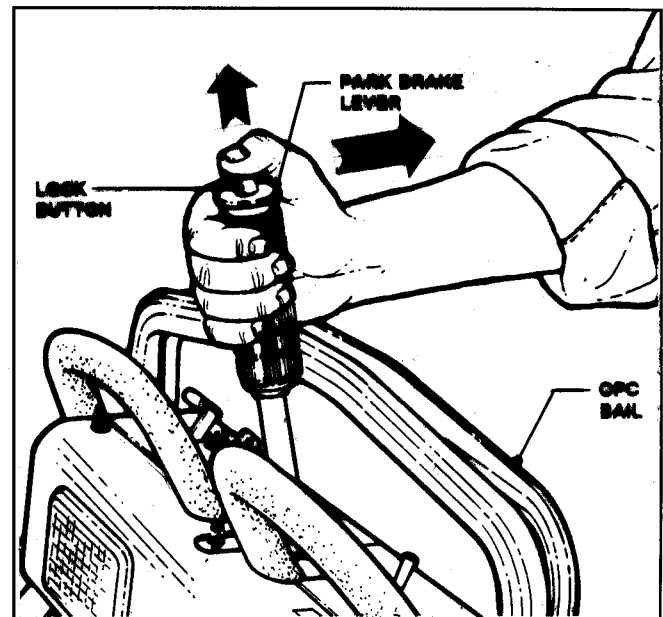


FIGURE 5

**NOTE**  
CLOSE FUEL SHUT-OFF VALVE AT END OF EACH MOWING OPERATION.

# OPERATING INSTRUCTIONS

## PRE-START CHECK LIST

Make the following checks and perform the services as required before each start up.

- If required, make cutting height adjustments. Refer to CUTTING HEIGHT ADJUSTMENTS, Page 14.
- CHECK TIRES and add air as needed to bring pressure to 46 psi in front and 28 psi in rear tires.
- CHECK GUARDS, DEFLECTOR & COVERS to make sure all are in place and secure.
- CHECK CONDITION of BLADE DRIVE BELT. If damaged, replace with original part. (Refer to BLADE DRIVE BELT REPLACEMENT, Page 12).
- CLEAN INTERIOR & EXTERIOR SURFACES of cutting deck and clean 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).
- ADD FUEL to tank after pushing the mower outside where fumes can be dissipated. Make sure cap is tightened after refueling. (Refer to engine manual for fuel specifications).

### NOTE

DO NOT ADD FUEL WHILE ENGINE IS RUNNING.

### NOTE

USE FRESH, CLEAN, LEAD-FREE GASOLINE. DO NOT USE GASOLINE THAT HAS BEEN STORED FOR LONG PERIODS. LEADED GASOLINE OR GASOHOL IS NOT RECOMMENDED.

## STARTING & OPERATING

**ENGINE: START ENGINE** as follows:

1. Turn Fuel Tank SHUT OFF VALVE "ON".
2. Pull the PARK BRAKE LEVER firmly against the Handlebar until it locks and the button pops up. See Figure 6.

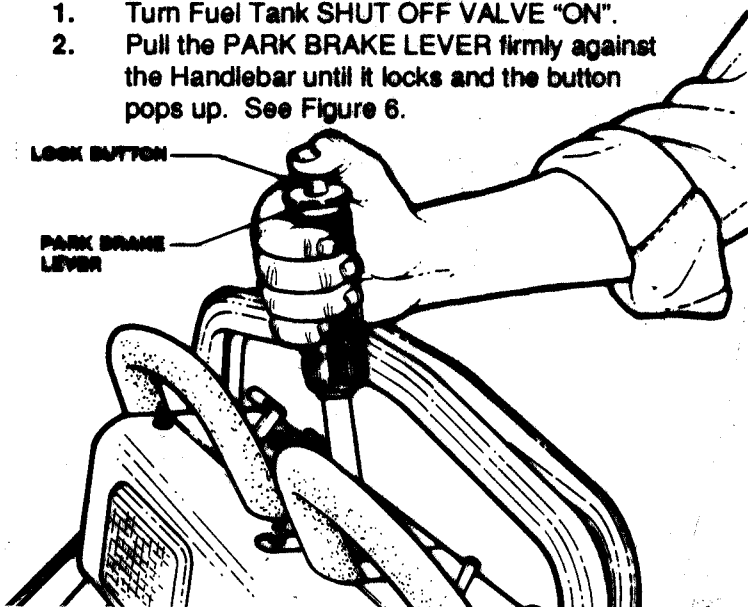


FIGURE 6

3. Place transmission SHIFT LEVER in "NEUTRAL" (N) position. See Figure 7.

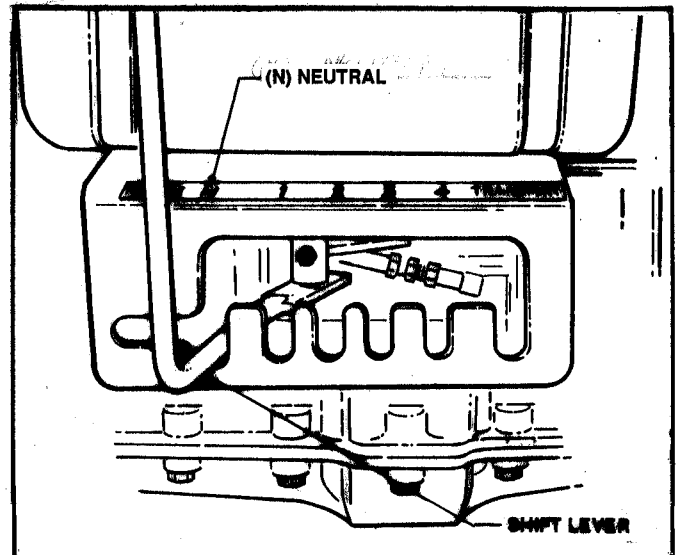


FIGURE 7

4. Place BLADE CLUTCH SWITCH in "OFF" position. See Figure 8.

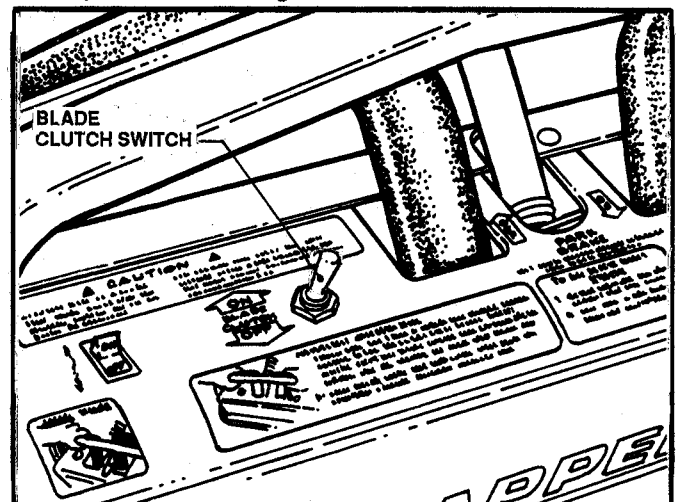


FIGURE 8

5. Move THROTTLE CONTROL to "CHOKE" (1/1) position. See Figure 9.

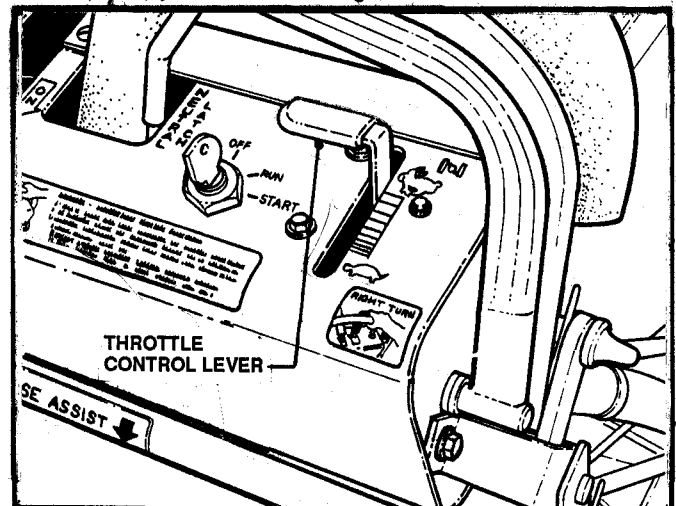


FIGURE 9

- 5A. 18 Kohler has choke control - PULL OUT CHOKE KNOB IF APPLICABLE.

# OPERATING INSTRUCTIONS

6. Turn KEYSWITCH to "RUN" position. Refer to Figure 9.
7. Pull starter rope until engine starts.
8. WARM-UP ENGINE momentarily, then move the ENGINE CONTROL to the rear of "CHOKE" position until engine runs smoothly. (On models with MANUAL CHOKE, push CHOKE knob "IN" slowly). Set desired speed. Best cutting performance is obtained with engine at or near top speed.
9. Depress OPERATOR'S PRESENCE bail against handlebar. See Figure 10.

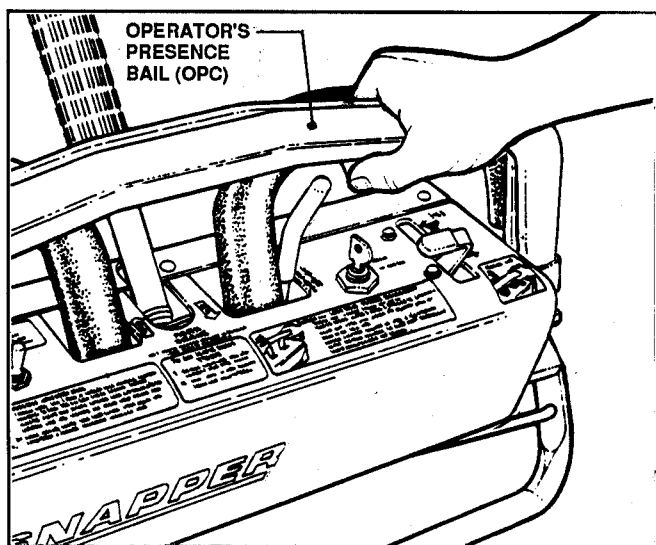


FIGURE 10

## NOTE

RELEASING THE OPERATOR'S PRESENCE CONTROL BAIL (OPC) WILL CAUSE ENGINE TO STOP IF MOWER IS IN GEAR OR BLADE CLUTCH SWITCH IS "ON".

## CAUTION!

DURING INITIAL TRAINING TIME WITH MOWER, IT IS ADVISED THAT THE OPERATOR(S) PRACTICE ALL MOWER MOVEMENTS WHILE OPERATING THE MOWER WITH THE SHIFT LEVER IN THE NO. 1 TRANSMISSION POSITION.

## WARNING!

ALL MODELS OF THE **SNAPPER PRO MID-SIZE MOWERS** ARE EQUIPPED WITH A "TRANSPORT" POSITION ON THE SHIFT SELECTOR PANEL. THIS POSITION ("TRANSPORT") ALLOWS THE MOWER TO TRAVEL FORWARD AT 6 MPH - **IT IS NOT TO BE USED WHILE WALKING!** ONLY USE FOR TRANSPORTING IN OPEN AREAS WHEN USING RIDER ATTACHMENT!

10. Release PARK BRAKE LEVER by pulling back on LEVER until LOCK BUTTON can be depressed. Allow the PARK BRAKE LEVER to go forward SLOWLY!
11. Place TRACTION LEVERS in NEUTRAL.
12. Place TRANSMISSION SHIFT LEVER in No. 1 position.
13. Place BLADE CLUTCH SWITCH in "ON" position.
14. Squeeze both TRACTION LEVERS releasing NEUTRAL LATCH. Slowly release both TRACTION LEVERS. See Figure 11.

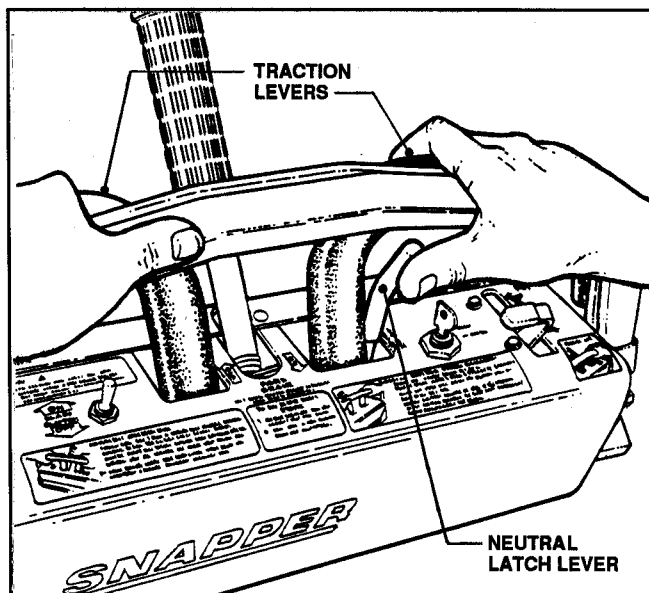


FIGURE 11

15. THE MOWER IS TURNED by clutching wheel belts while engaging wheel brakes - turn left by pulling the left hand TRACTION LEVER or turn right by using the right hand TRACTION LEVER. See Figure 11A. The more pressure applied while pulling the Lever, the sharper the mower will turn.

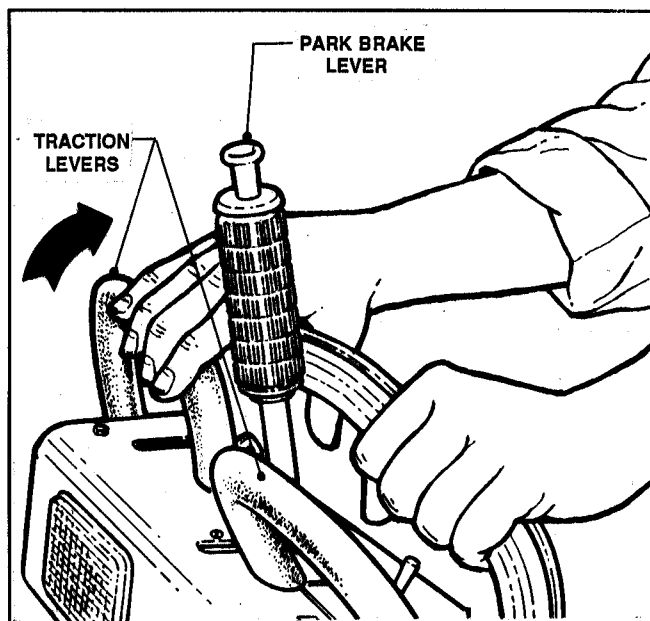


FIGURE 11A

# OPERATING INSTRUCTIONS

16. To stop the mower, squeeze both TRACTION LEVERS firmly against the handlebar and push the NEUTRAL LATCH forward. Place the BLADE CLUTCH SWITCH in "OFF" position and release the OPERATOR'S PRESENCE CONTROL ball (OPC). This procedure allows the engine to continue running while in a NEUTRAL position without the operator holding the controls. Set PARK BRAKE whenever Operator leaves the Operator's Position.

## REVERSE OPERATION

To reverse direction of mower, stop mower and engage NEUTRAL LATCH, then place BLADE CLUTCH SWITCH in "OFF" position. Move TRANSMISSION SHIFT LEVER to "REVERSE" position and release NEUTRAL LATCH LEVER. With one hand, lift "UP" on REVERSE ASSIST bail to back up. Hold OPERATOR'S PRESENCE CONTROL ball (OPC) against handlebar with other hand. See Figure 12.

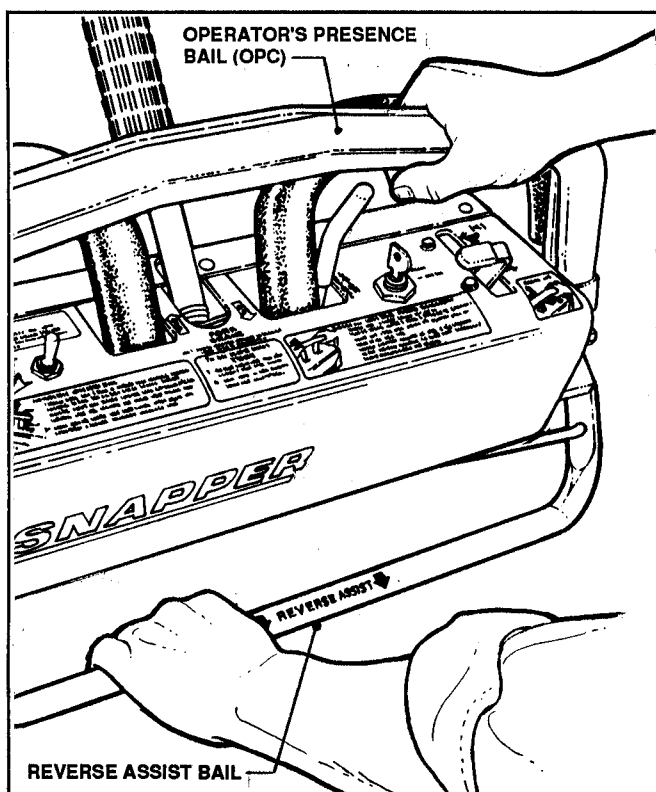


FIGURE 12

## NEUTRAL LATCH

The NEUTRAL LATCH, when engaged, locks both Traction Wheel Drives in NEUTRAL and allows the operator to move the mower about manually without use of engine power. This is especially helpful when moving short distances without engine power, or while setting Park Brake.

## NEUTRAL LATCH OPERATION

1. Pull back on both TRACTION LEVERS to stop mower movement.
2. Using thumb, push NEUTRAL LATCH LEVER forward until it locks. See Figure 13.

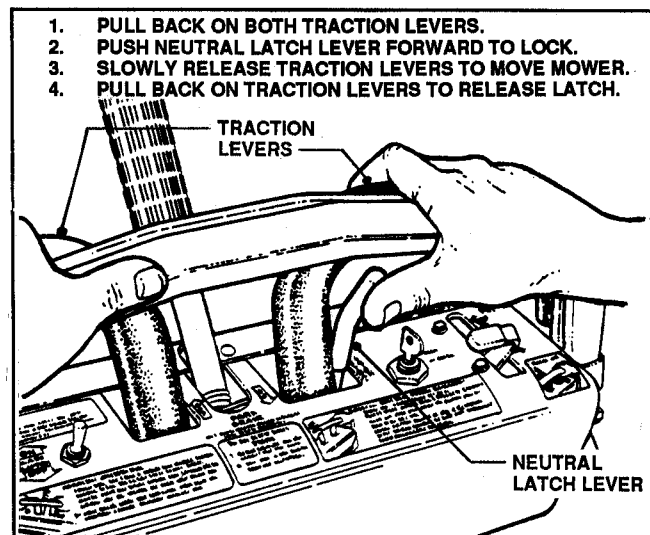


FIGURE 13

3. Release both TRACTION LEVERS slowly and manually move mower to desired location.
4. To release NEUTRAL LATCH, pull back on both TRACTION LEVERS, allowing NEUTRAL LATCH to move to release position. Slowly release both TRACTION LEVERS.

### CAUTION!

#### PARKING ON A HILL!

Although it is not recommended to park the PRO MID-SIZE MOWER on a hill, the following instructions must be strictly adhered to in order to park the mower safely.

1. STOP THE MOWER IN PLACE.
2. LOCK THE PARK BRAKE.
3. DISENGAGE THE MOWER BLADES.

### WARNING!

Make sure that the PARK BRAKE has been properly adjusted before parking the mower. While on level ground, with the PARK BRAKE engaged, attempt to push or pull the mower. If the mower can be moved, then adjust BRAKES as outlined on page 15, "ADJUSTING STEERING".

# SERVICE & LUBRICATION CHART

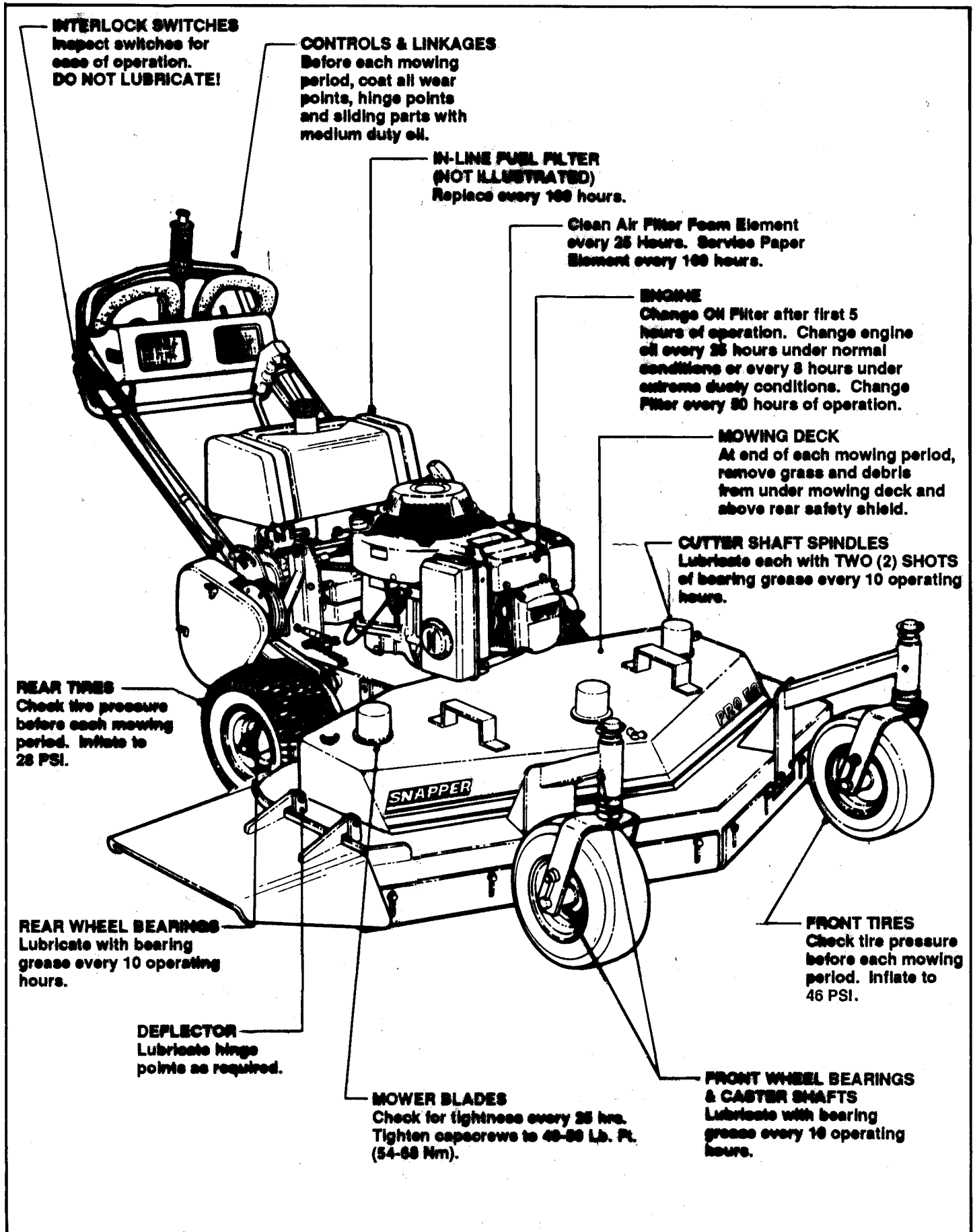


FIGURE 13



# SERVICE

## SERVICE ASSISTANCE - REPLACEMENT PARTS

To retain the quality of your mower, use genuine **SNAPPER** replacement parts only. Contact your local **SNAPPER** dealer for parts and service and service assistance. For the correct part or information for your mower, always mention model and serial number. We recommend returning your mower to an authorized **SNAPPER** dealer on a yearly basis for inspection and addition of any new devices which might upgrade the performance and 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**. For Transmission service or parts, see the **PEERLESS** Dealer or Sales Representative and refer to **TRANSAXLE Model 820-017**.

### WARNING!

BEFORE PERFORMING SERVICE ON MOWER, TURN ENGINE OFF, CLOSE FUEL SHUT-OFF VALVE(S), AND DISCONNECT BATTERY (ON ELECTRIC-START MODELS) AND ALLOW ENGINE TO COOL. DISCONNECT SPARK PLUG(S). IF MOWER IS TO BE RAISED OR TILTED, MAKE SURE TO SECURE MOWER IN PLACE TO PREVENT IT FROM FALLING.

### NOTE

ALL MOWERS SHOULD BE TILTED WITH THE CARBURETOR SIDE "UP".

## LUBRICATION

- **ENGINE:** Change oil per instructions in engine manual. Check oil before each use.

## EVERY 10 OPERATING HOURS

- **FRONT WHEEL BEARINGS AND CASTER SHAFTS:** Lubricate through fittings with bearing grease from a pressure gun. See Figure 14.

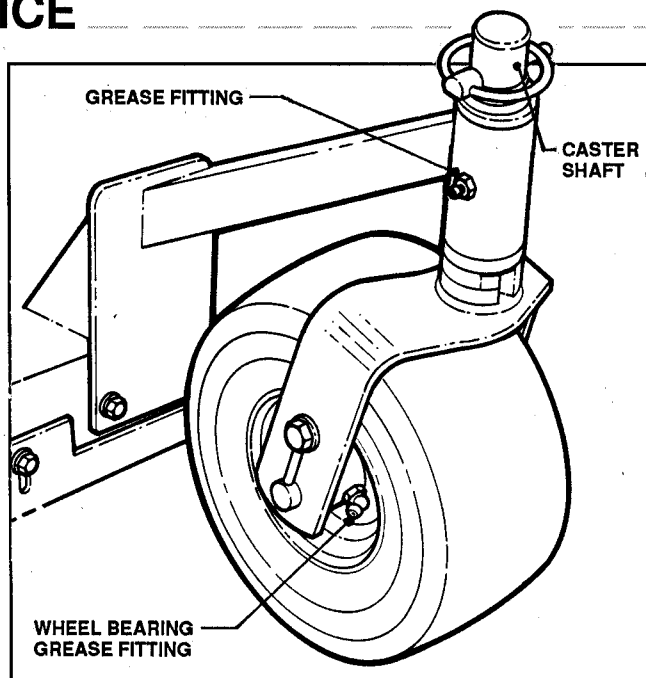


FIGURE 14

- **BRAKE, TRACTION & REVERSE ARM ASSEMBLIES:** Lubricate through fittings with bearing grease from a pressure gun. See Figure 15.

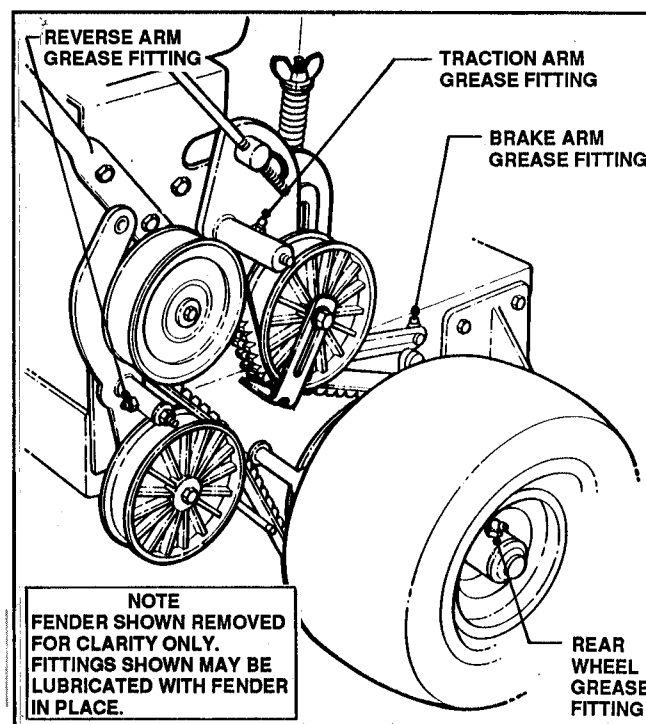


FIGURE 15

- **REAR WHEEL BEARINGS:** Lubricate through fittings with bearing grease from a pressure gun. Refer to Figure 15.

# SERVICE

## EVERY 10 OPERATING HOURS (Cont'd)

- **UPPER HANDLE, PARK BRAKE, TRACTION LEVER & BAIL ASSEMBLIES:**  
Lubricate each fitting with one shot of bearing grease from a pressure gun. See Figure 16.

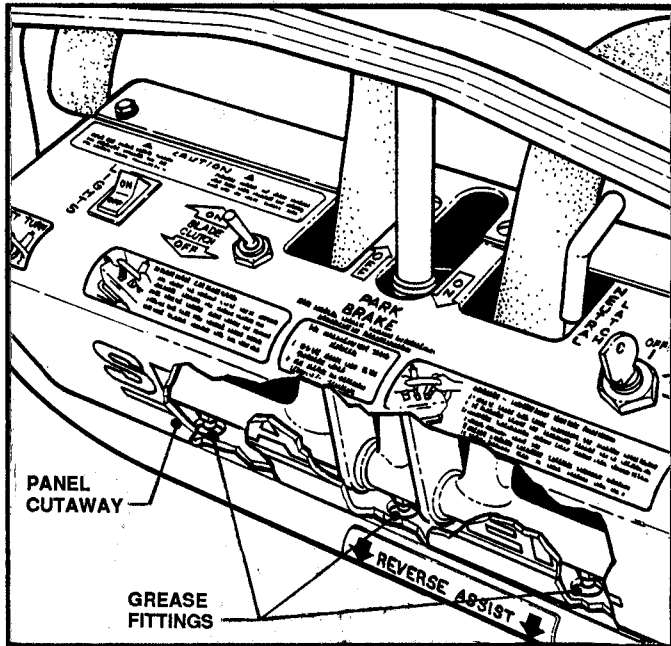


FIGURE 16

**CAUTION**  
DO NOT OVER-GREASE.

- **SHIFT HANDLE & TRANSMISSION SHIFT PIVOT:**  
Lubricate shift pivot fitting with bearing grease from a pressure gun. See Figure 17.

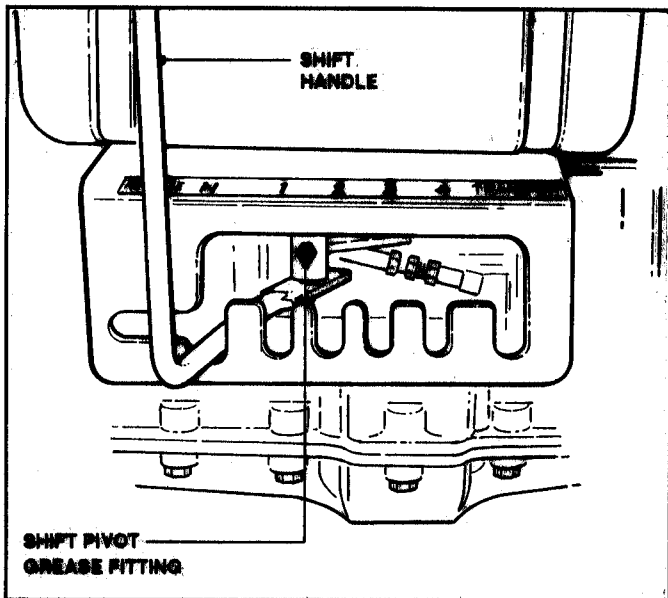


FIGURE 17

- **TRANSMISSION IDLER:**  
Lubricate fitting with bearing grease from a pressure gun. See Figure 18.

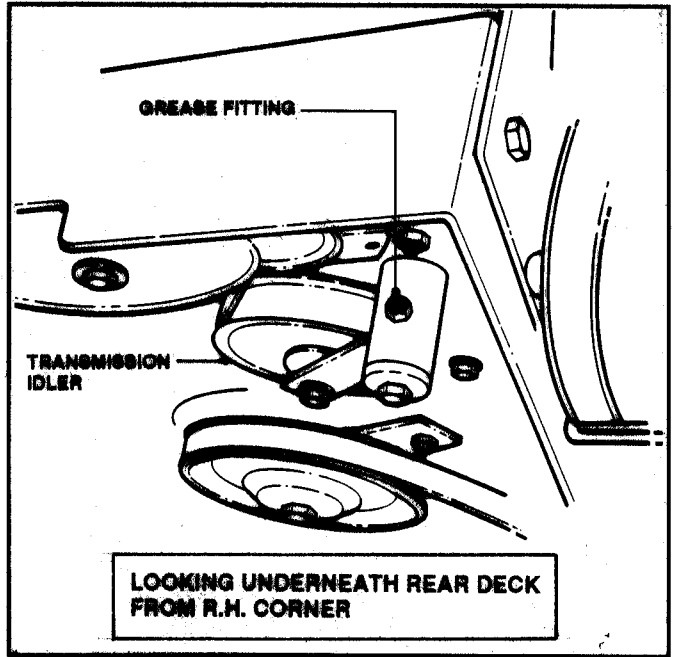


FIGURE 18

- **DECK IDLER:**  
Lubricate Idler Fitting with two shots of bearing grease from a pressure gun. See Figure 19.
- **CUTTER SHAFT SPINDLES:**  
Cutter Spindle Bearings need purging DAILY with bearing grease from a pressure gun. See Figure 19.

**NOTE**  
AFTER GREASING, WIPE AWAY ANY EXCESS GREASE FROM TOP OF SPINDLE HOUSING.

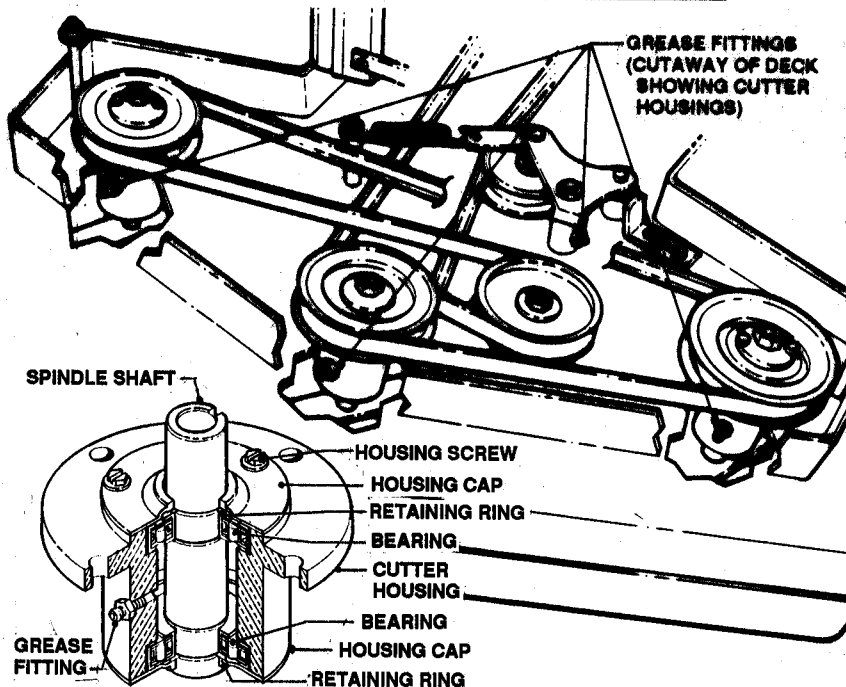


FIGURE 19

# SERVICE

- CONTROLS & LINKAGES:**  
 These include the PARK BRAKE, TRANSMISSION, DRIVE and BLADE controls and linkages. They should be inspected before each mowing period for worn or broken linkages or hairpin cotters. Coat all wear points, hinge points and sliding parts with a medium duty motor oil.
- IN-LINE FUEL FILTER:**  
 An in-line fuel filter is provided between the fuel tank and carburetor to protect the engine against damage from impurities in the gasoline. Check this occasionally for leakage, especially around the hose clamp areas. Replace the filter (SNAPPER #1-4359) before the screen becomes totally clogged with sediment or after every 100 hours of operation. Make sure the replacement filter is installed with side marked "IN" towards tank, and "OUT" toward carburetor. See Figure 20.

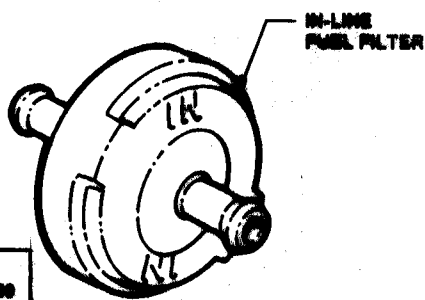


FIGURE 20

If blades are in good condition, sharpen at an angle of 22-28 degrees in about 2-1/2" from tips. See Figure 22.

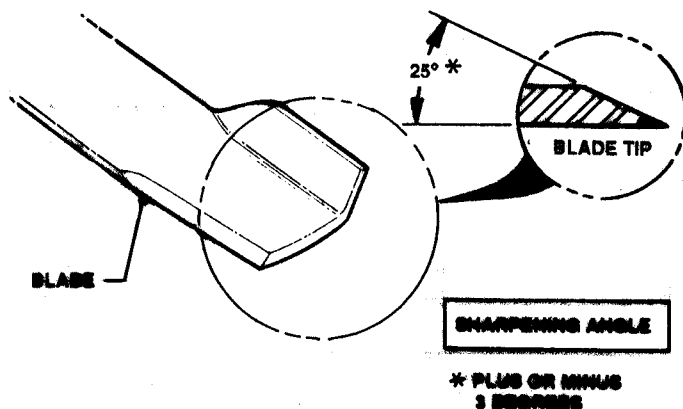


FIGURE 22

## CUTTING BLADE SERVICE

Check blades at frequent intervals to insure they are securely tightened and in good condition. Replace if chipped, bent or notched. See Figure 21.

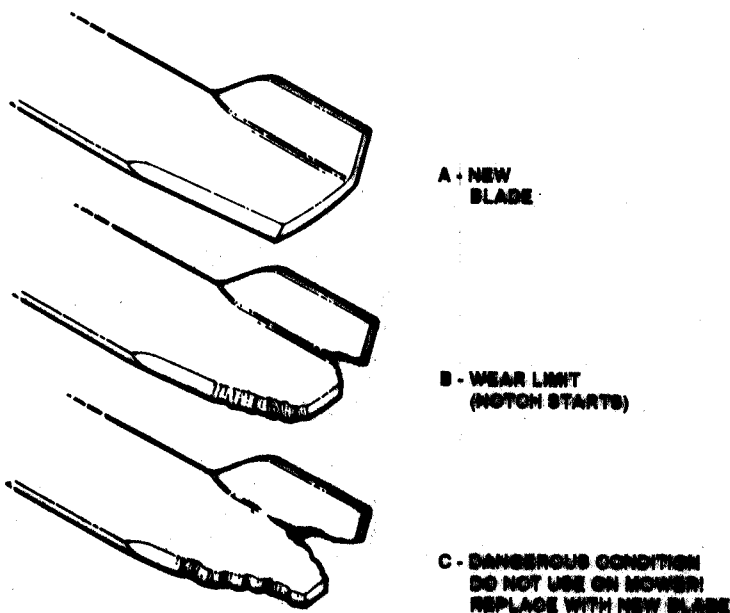


FIGURE 21

**NOTE**  
 AFTER SHARPENING, CHECK BLADES FOR PROPER BALANCE. IF REQUIRED, CORRECT BALANCE TO PREVENT EXCESSIVE VIBRATION. BE CAREFUL TO AVOID CUTTING YOURSELF ON SHARP BLADE!

Install blades with retaining hardware as shown below and tighten to 40-50 Ft. Lbs. See Figure 23.

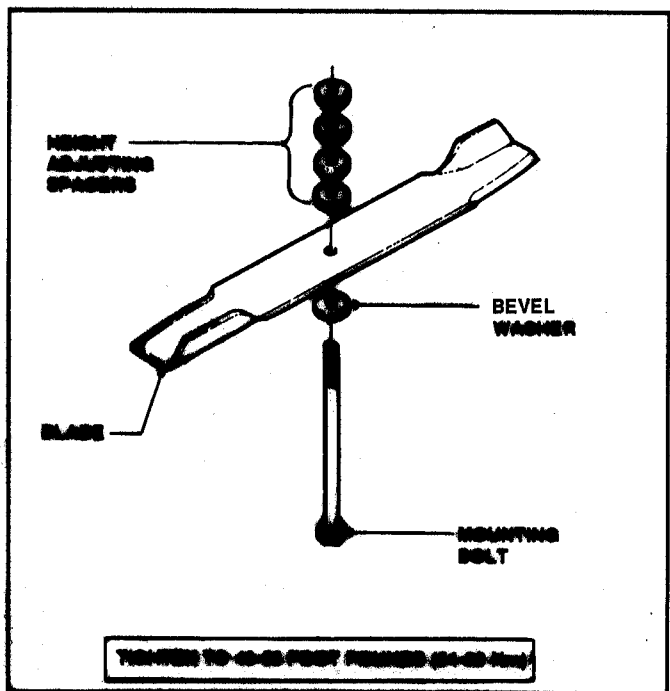


FIGURE 23

# SERVICE

## WHEEL DRIVE BELT REPLACEMENT

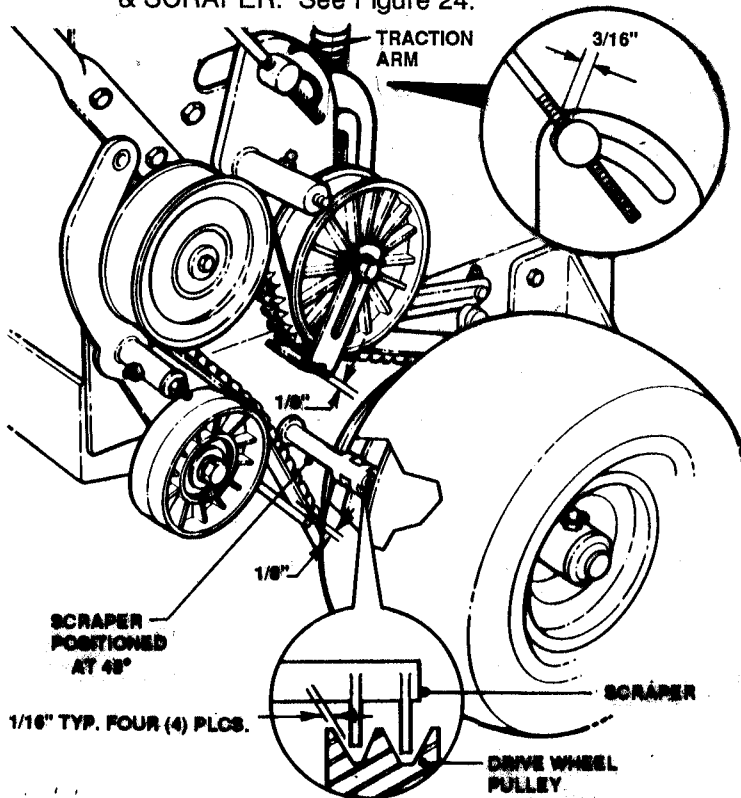
**WHEEL DRIVE BELT:** If belts are worn or damaged, wheels will not drive properly. To replace either belt, proceed as follows:

1. Pull PARK BRAKE LEVER back until it locks and button pops up.
2. Remove BELT GUARD (Fender).
3. Raise TOP IDLER PULLEY.
4. Remove DRIVE BELT.

### NOTE

IT MAY BE NECESSARY TO LOOSEN DRIVE BELT GUIDES AND SCRAPER TO REMOVE BELT.

5. Install new WHEEL DRIVE BELT.
6. Release PARK BRAKE LEVER and allow to go forward.
7. Readjust DRIVE and IDLER PULLEY BELT & SCRAPER. See Figure 24.



**FIGURE 24**

8. Place TRANSMISSION SHIFT in first gear, pull back on mower to seat belts, adjust LOWER BELT GUIDE.
9. Replace BELT GUARD (Fender).
10. Readjust TRACTION LINKAGES, 3/16" play between Swivel & Slot in Traction Arm.
11. Readjust brakes.

## CUTTING DECK SERVICE

If mower is cutting improperly, check the following:

1. Ground Speed - too high for proper cutting. Slow ground speed setting.
2. Engine Speed - too low for proper cutting. Increase engine speed.
3. Cutting Height - too low for ground/grass conditions. Adjust for higher cut. (See ADJUSTMENTS).
4. Blade Spacers - not positioned uniformly on all blade shafts. Visually inspect and replace or adjust as necessary.
5. Front Wheel Casters - Adjusted too high. Adjust as necessary. (See ADJUSTMENTS).
6. Belt Slippage - causing bad cutting pattern or uneven cut. Check belt idler spring tension and snubber position for proper adjustment.
7. Tire Pressure - Uneven tire pressure can cause an uneven cut from one side of the cutting swath to the other. Equalize tire pressures.
8. The **SNAPPER 36", 48", 52" & 61" PRO MID-SIZE MOWERS** all mow best with their mower decks set level front to rear and side to side or having the front slightly lower than the rear. An unlevel mower deck can cause an undesirable cutting pattern.

## BLADE DRIVE BELT REPLACEMENT

**BLADE DRIVE BELT (All Mowers):** If belt is excessively worn or damaged, blades will not drive properly. To replace this belt, proceed as follows:

1. Set PARK BRAKE.
  2. Disconnect spark plug wire(s) and secure away from spark plug.
  3. Remove BLADE BELT COVER from mower deck.
  4. Close fuel tank shut-off valve.
- **36" MOWER Only** - Follow Steps 5 through 10:
5. Remove Tension Spring from stud.
  6. Loosen snubber retaining bolts and move Snubber away from Idler Pulley.
  7. Remove BLADE DRIVE BELT from pulleys and electric clutch.
  8. Replace with new BLADE DRIVE BELT.
  9. Reinstall Idler Tension Spring and readjust Snubber.
  10. Replace BLADE BELT COVER and connect spark plug wire(s). Open fuel tank shut-off valve.

# SERVICE

- **48" & 52" MOWERS** - Follow Steps 11 through 16:
- 11. Loosen hardware on Belt Adjusting Rods to release tension from Idler Pulleys. See Figure 25.

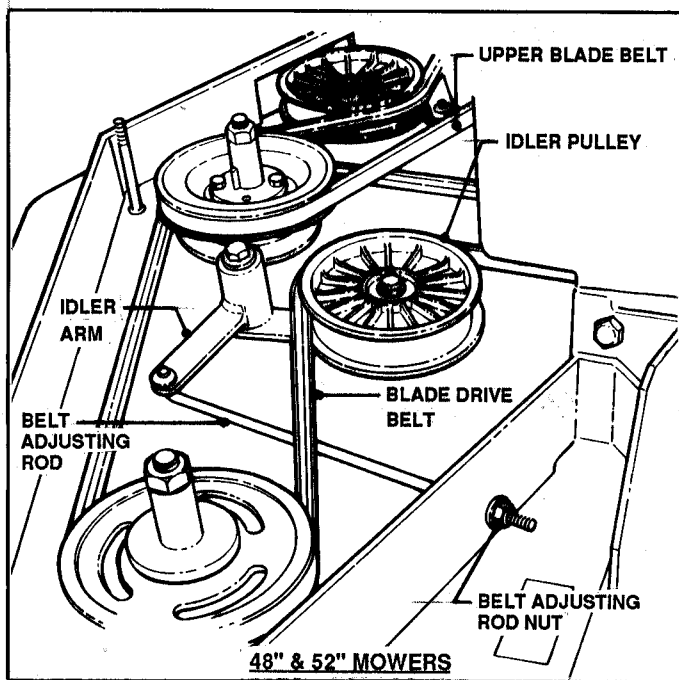


FIGURE 25

- 12. Remove Upper Blade Belt. Refer to Figure 25.
- 13. Remove BLADE DRIVE BELT from pulleys and electric clutch. Refer to Figure 25.
- 14. Replace with new BLADE DRIVE BELT.
- 15. Reinstall Upper Blade Belt. Adjust Idler Pulleys by tightening Belt Adjusting Rod nuts.
- 16. Replace BLADE BELT COVER and connect spark plug wire(s). Open fuel tank shut-off valve.

- **61" MOWER** - Follow Steps 17 through 23:
- 17. Disconnect Idler Tension Spring and Blade Spring from Idler Arm Assembly. See Figure 26.

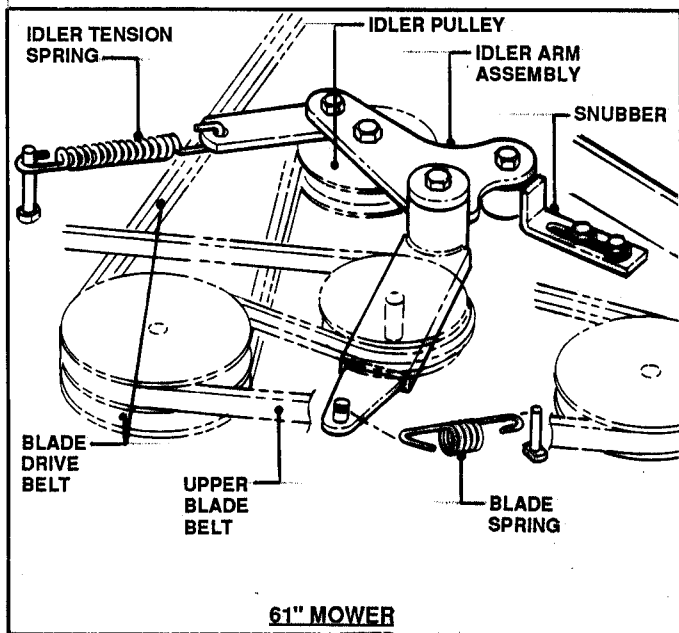


FIGURE 26

- 18. Loosen snubber retaining bolts and move Snubbers away from Pulleys. Refer to Figure 26.
- 19. Remove UPPER BLADE BELT. Refer to Figure 26.
- 20. Remove BLADE DRIVE BELT from center blade pulley and electric clutch.
- 21. Replace with new BLADE DRIVE BELT.
- 22. Reinstall Blade Belts, Idler Tension Spring and Blade Spring. Readjust Snubbers. (See ADJUSTMENTS.)
- 23. Replace BLADE BELT COVER and connect spark plug wire(s). Open fuel tank shut-off valve.

## TRANSMISSION DRIVE BELT REPLACEMENT

1. Apply PARK BRAKE LEVER.
2. Disconnect spark plug wire(s) and secure away from spark plug.
3. Close fuel shut-off valve.
4. Remove BLADE BELT COVER from deck.
5. Loosen CLUTCH STOPS and slide away from clutch. See Figure 27.

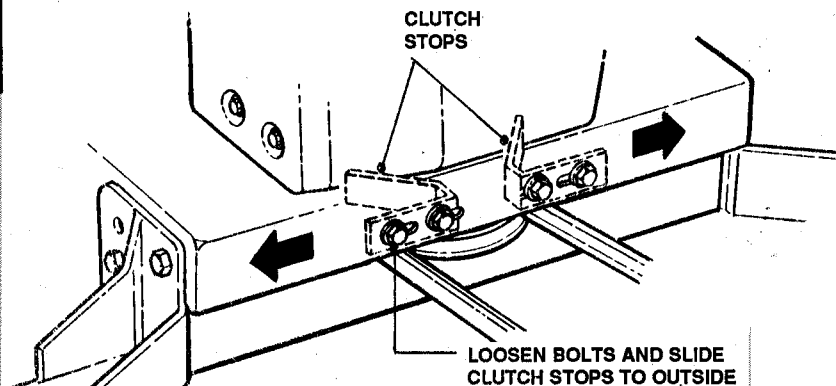


FIGURE 27

6. While lying down behind mower, push up on bottom of transmission shift lever while removing drive belt from around drive pulleys.
7. Replace with new belt in reverse order.

**NOTE**  
DO NOT CUT WARRANTY BELTS. THEY MAY BE NEEDED FOR TESTING BY FACTORY.

8. Reposition clutch stops and tighten bolts (stops should be adjusted to allow a slight rotational movement of clutch between stops).

# ADJUSTMENTS

## WARNING

BEFORE MAKING ANY CUTTING HEIGHT ADJUSTMENTS, TURN ENGINE OFF, REMOVE SWITCH KEY, CLOSE FUEL SHUT-OFF VALVE AND DISCONNECT SPARK PLUG WIRE(S).

## CUTTING HEIGHT ADJUSTMENTS

The **SNAPPER 36", 48", 52" & 61" PRO MID-SIZE MOWERS**, Mower Decks, Power Units and Caster Assemblies are shipped separate. When deck is positioned and bolted in 2-3/4 Range Holes, the cutting height will be 2-3/4" to 4-1/2".

## "QUICK-ADJUST" METHOD (ADJUSTING HEIGHT OF FRONT CASTER WHEELS)

The Spacers provided with each **CASTER WHEEL** Assembly are 1/2" thick. When placed above or below **CASTER SUPPORT TUBE**, they raise or lower cutting height in 1/2" increments thus providing a "QUICK-ADJUST" method.

1. Remove **RETAINER PIN** from **CASTER SHAFT**. See Figure 28.

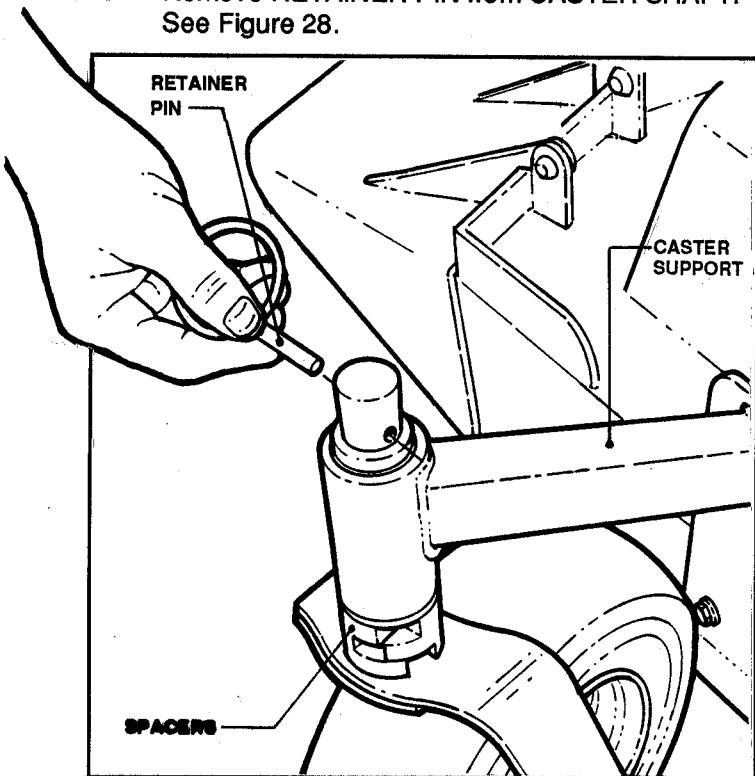


FIGURE 28

2. Lift up on **CASTER Support** while adding or removing bottom spacer. See Figure 29.

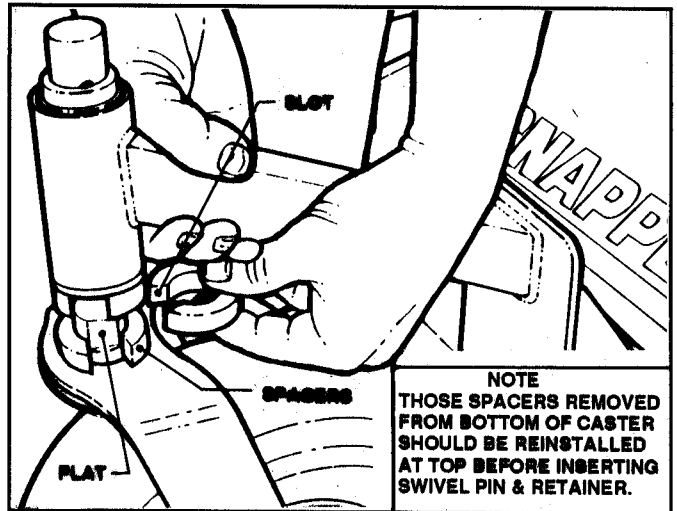


FIGURE 29

## NOTE

REMOVE (OR ADD) SPACERS BY ROTATING SLOTS TO ALIGN WITH FLAT AREA ON CASTER POST.

## (ADJUSTING CUTTING HEIGHT OF BLADES)

## NOTE

BLADE SPINDLE ADJUSTMENTS ARE ONLY FOR TEMPORARY REPOSITIONING OF BLADES FOR SPECIAL CUTTING CONDITIONS.

- To change cutting height of blades, move the Spacers from under the Cutter Housing to above the Cutter Pulley. (Each Spacer moved will give an additional 1/4" of cutting height. See Figure 30.

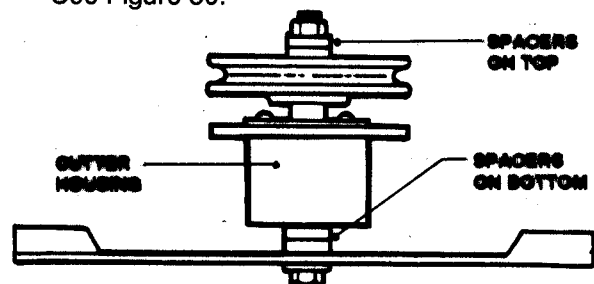


FIGURE 30

## NOTE

CHANGING THE CUTTING HEIGHT OF THE BLADES DOES NOT CHANGE DECK GROUND CLEARANCE. IF AN UNDESIRABLE CUTTING PATTERN RESULTS, THEN CUTTING HEIGHT ADJUSTMENT MUST BE MADE BY ADJUSTING HEIGHT OF FRONT CASTER WHEELS.

# ADJUSTMENTS

## STEERING

If machine is not as responsive as desired when either TRACTION LEVER is pulled, one or both brakes should be adjusted as follows:

1. Operate the mower on level terrain with the TRANSMISSION SHIFT LEVER in No. 1 position and the BLADE CLUTCH switch "OFF".
2. While remaining behind mower, reach down and turn brake-adjusting wingnut clockwise slightly until desired turning response is achieved when pulling TRACTION LEVERS to their brake position. (Clockwise turning tightens brake band, counterclockwise loosens.) See Figure 31.

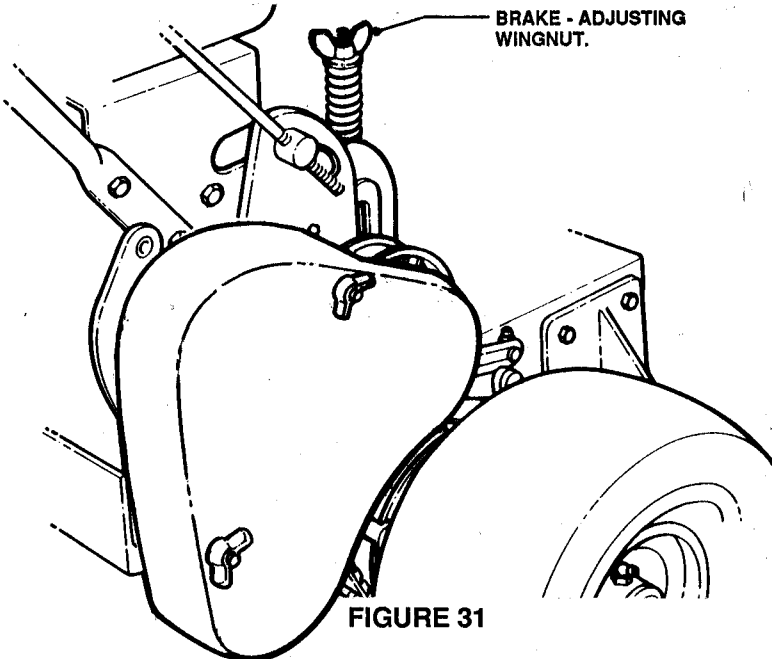


FIGURE 31

3. Both TRACTION LEVERS should be adjusted to allow 3/16" free travel, before disengaging traction pulley. See Figure 32.

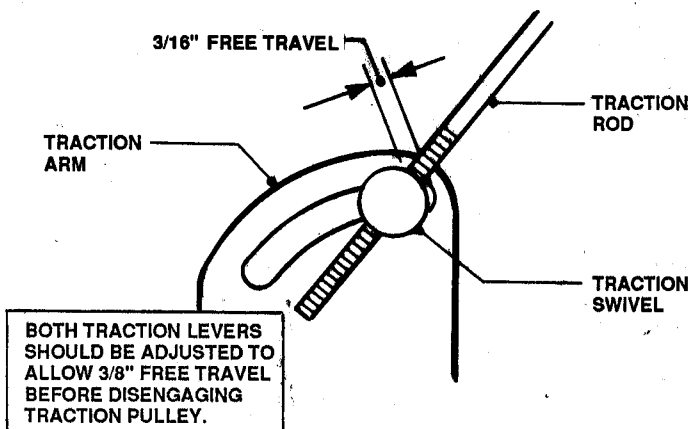


FIGURE 32

- A. If the free travel is more, or less, than 3/16", disconnect the TRACTION ROD from the TRACTION LEVER and adjust until proper clearance is attained.

- B. After adjusting TRACTION ROD, pull down slightly on TRACTION LEVER and locate upper end of TRACTION ROD over hole in end of lever. Adjustment is correct if rod covers half the hole. See Figure 32A.
- C. Reconnect TRACTION ROD to TRACTION LEVER. Secure with washer & hairpin cotter.

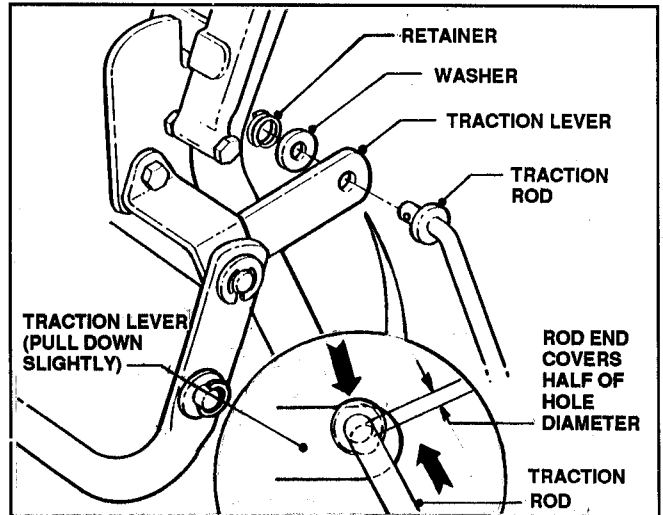


FIGURE 32A

## DRIVE BELT GUIDES

Proper adjustment for the Belt Guides is 1/8" from underside of Drive Belt. To test for proper adjustment, proceed as follows:

1. Place mower on level surface with engine "OFF" and PARK BRAKE LEVER released.
2. Place TRANSMISSION SHIFT LEVER in No. 1 position.
3. Using both hands, pull mower sharply to the rear - this will "set" the Drive Belts.
4. Measure distance between Belt Guides and bottom of belt. This dimension should be 1/8". See Figure 33.

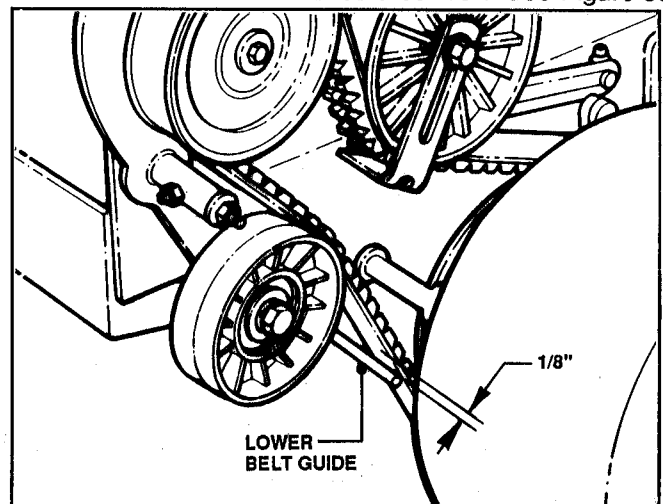


FIGURE 33

5. If adjustments are required, loosen Belt Guide retaining screw and adjust guide up or down until correct clearance (1/8") is attained. Retighten Belt Guide retaining screws.

# ADJUSTMENTS

## TRACTION PULLEY BELT GUIDE

The Traction Pulley Belt Guides should be adjusted each time the steering and Drive Belt Guides are adjusted.

Proper adjustment for the Traction Pulley Belt Guide is  $1/8$ " from bottom of Drive Belt to top of "V" on Belt Guide. (This dimension may be checked with the park brake lever released). To adjust, proceed as follows:

1. Loosen jam nut and nut on traction pulley bolt. See Figure 34.

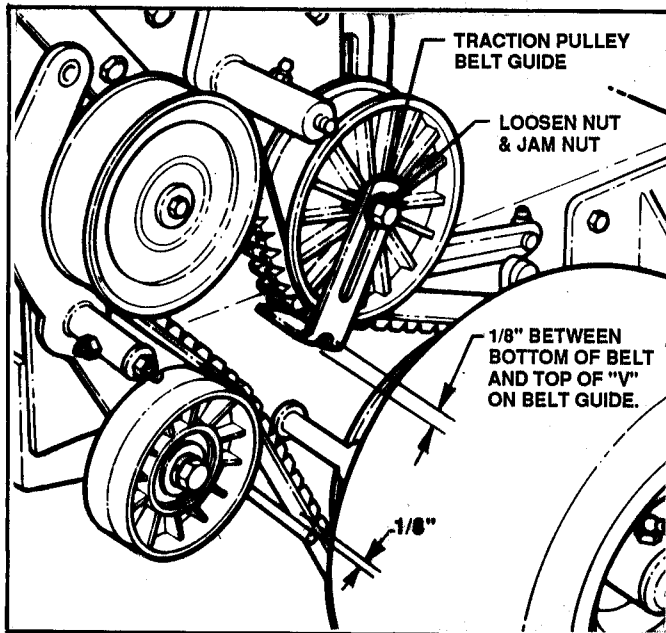


FIGURE 34

2. Slide belt guide up or down on axle bolt until proper clearance ( $1/8$ ") is attained. Retighten nut and jam nut.

## DRIVE WHEEL PULLEY SCRAPER

When properly adjusted, the Drive Wheel Pulley Scraper should be pointed approximately  $45^\circ$  (towards ground) and have a  $1/16$ " clearance from the "V" sides of each pulley groove. To adjust, proceed as follows:

1. Loosen pulley scraper nut located on inside wall of rear housing. See Figure 35.
2. Adjust scraper to proper degree and clearance. Retighten nut.

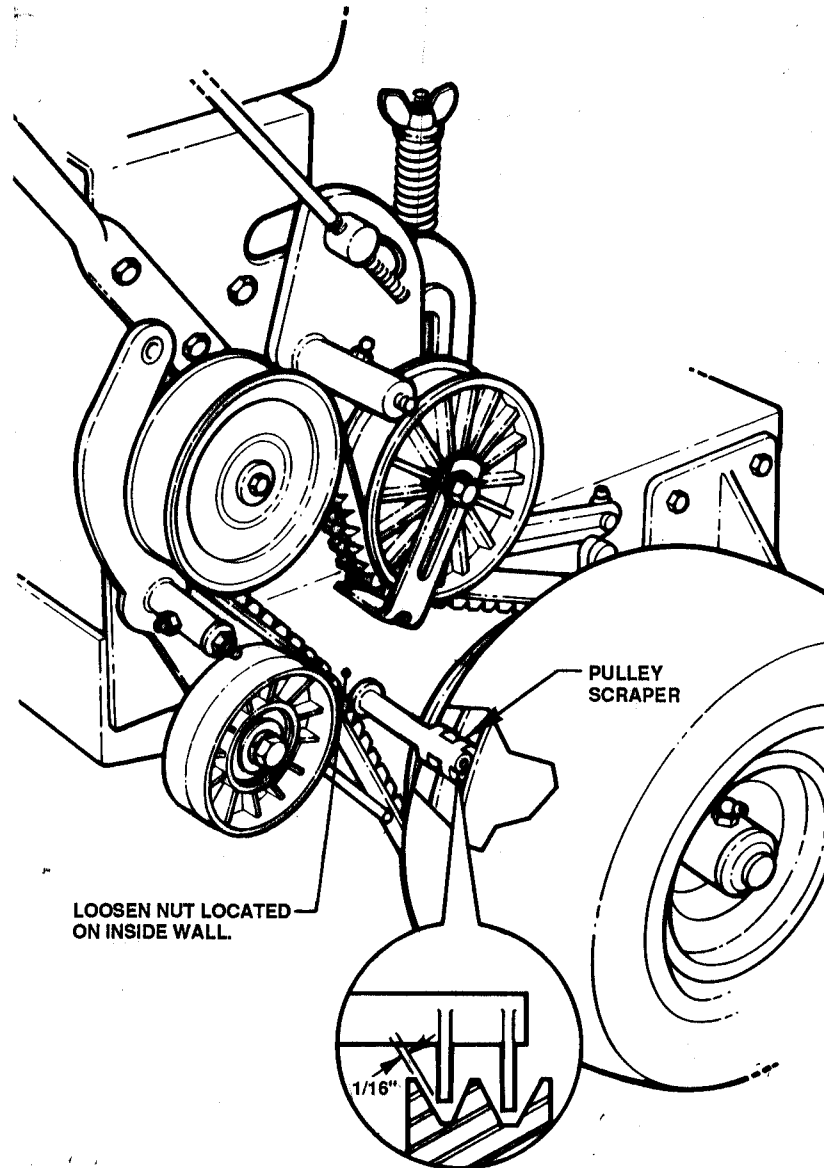


FIGURE 35

## TRANSMISSION SHIFT LEVER

1. Looking from the rear of the mower, the bottom of the Shift Lever should always have  $3/16$ " clearance from the bottom of the shift panel. See Figure 36.

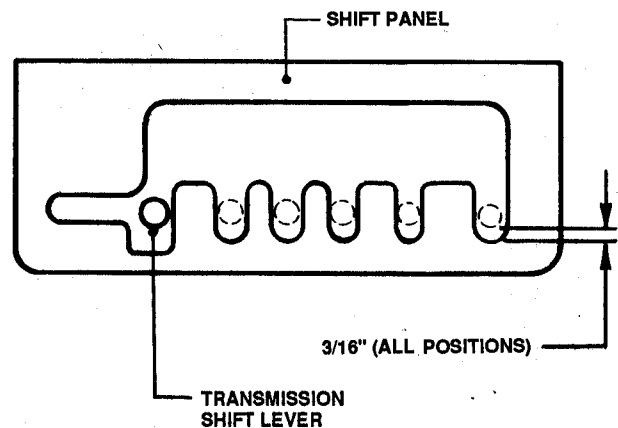


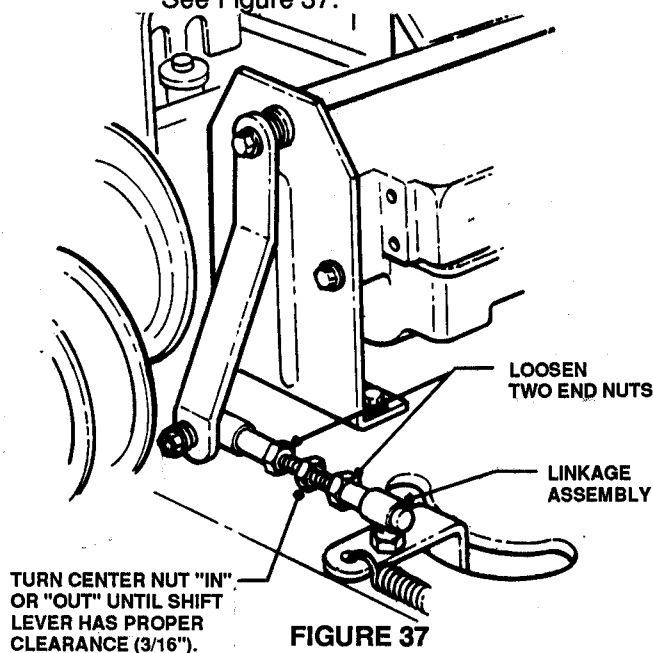
FIGURE 36



# ADJUSTMENTS

2. If the Shift Lever does not have proper clearance (3/16" in all positions), then the LINKAGE ASSEMBLY must be adjusted. Proceed as follows:

- A. Loosen the two end nuts on the linkage. See Figure 37.



- B. Turn center nut "IN" or "OUT" until Shift Lever has proper clearance (3/16").

- C. Retighten the two end nuts.

3. In addition to having the necessary 3/16" clearance, the Transmission Shift Lever should always be synchronized with the notches in the shift panel. To adjust, proceed as follows:

- A. Loosen the two end nuts on the shifter linkage. See Figure 38.

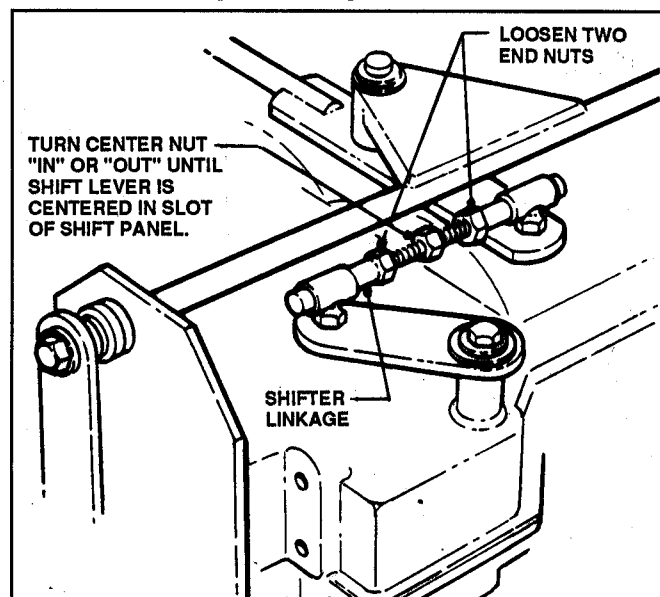


FIGURE 38

- B. Turn center nut "IN" or "OUT" until Shift Lever is centered in slot of shift panel.

- C. Retighten the two end nuts.

## ADJUSTING OPERATOR'S PRESENCE CONTROL (OPC)

1. Park the mower on a flat, level surface.
2. Place the TRANSMISSION SHIFT LEVER in NEUTRAL ("N"), make sure BLADE CLUTCH SWITCH is "OFF" and the PARK BRAKE is released.
3. Pull both TRACTION LEVERS firmly back against the handlebar and lock in place with the NEUTRAL LATCH LEVER.
4. Start engine.
5. Grasp the OPC bail and squeeze both TRACTION LEVERS to release the NEUTRAL LATCH LEVER.
6. Release OPC bail. If the OPC bail does not kill the engine, the OPC switch needs adjustment.

- A. Loosen the switch retaining screws.

- B. Grasp OPC bail and allow bail to travel to rear until engine stops.

- C. Retighten switch retaining screws. See Figure 39.

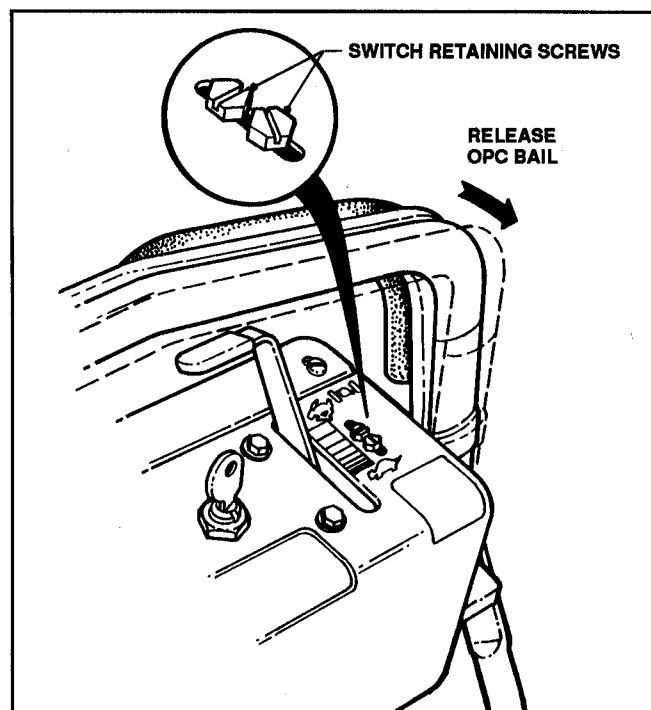


FIGURE 39

# ADJUSTMENTS

## ADJUSTING TRACTION SWITCHES

If engine fails to start, and all systems and controls check out O.K., then check the adjustment of both TRACTION SWITCHES - THEY MUST BE ADJUSTED ALL THE WAY DOWN TO THE BOTTOM OF THE SLOTS. See Figure 40.

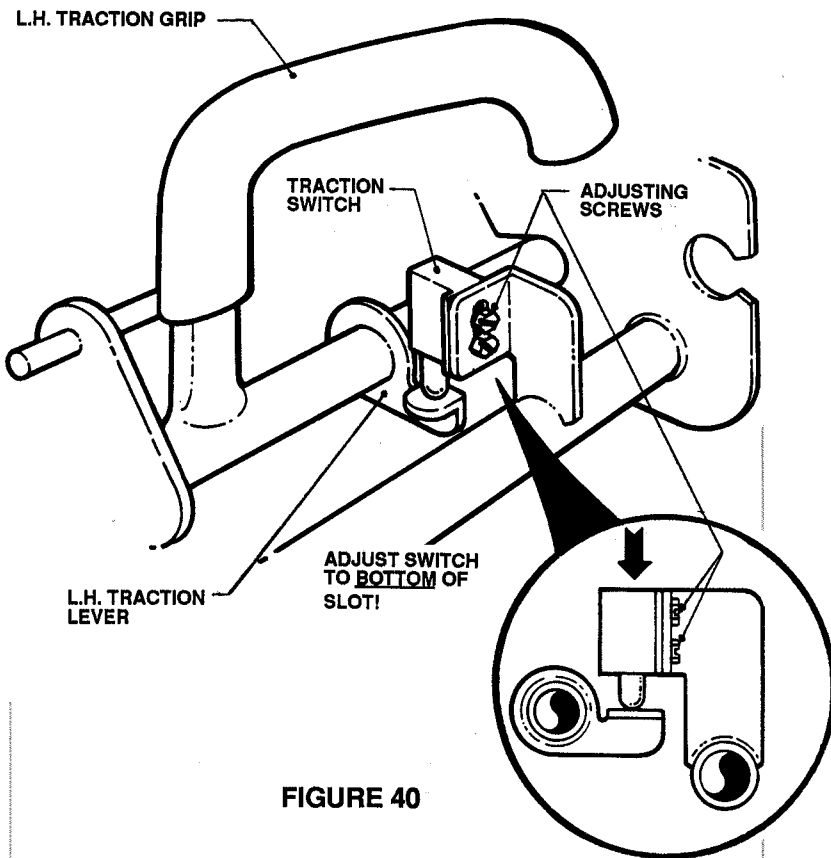


FIGURE 40



# **SNAPPER**<sup>®</sup>

## **36", 48", 52" & 61" PRO MID-SIZE MOWERS**

### **MANUFACTURER'S ONE YEAR LIMITED WARRANTY**

For one year from purchase date for the original purchaser's commercial, rental, or other non-residential use, SNAPPER POWER EQUIPMENT, 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 cost incurred by the purchaser in submitting material to a SNAPPER dealer for replacement under this warranty must be borne by the purchaser.

This warranty does not apply to engines and their components, as these items are warranted separately by their manufacturers, and does not apply to batteries which are covered separately. 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 one year from purchase date for the original purchaser's commercial, rental or other non-residential use, and to the extent permitted by law 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 POWER EQUIPMENT, McDONOUGH, GEORGIA 30253

**SNAPPER POWER EQUIPMENT**  
McDonough, GA., 30253 U.S.A.

