

# *Safety Instructions & Operator's Manual for* **SNAPPER®**

## **PRO GEAR MID-SIZE WALK BEHIND MOWERS SERIES 0**



### **MOWER UNIT**

#### **MODELS**

**SP320**

**SP360**

**SP480**

**SPA360**

**SPA480**

### **POWER UNIT**

#### **MODELS**

**SPP90KW**

**SPL1250KW**

**SPP1250KW**

**SPL140KW**

**SPP140KW**

**SPL140KH**

**SPP140KH**

Thank you for buying a SNAPPER Commercial product! Before operating your Commercial 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®** McDonough, GA., 30253 U.S.A.

MANUAL No. 4-3798 (I.R. 9/96)

# IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** This powerful machine is capable of amputating hands and feet and can throw objects that can cause injury and damage! 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 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, McDonough, Georgia, 30253. Phone: (770) 954-2500.

## PROTECTION FOR CHILDREN

1. DO NOT allow children in area when mower is being operated.
2. DO NOT allow pre-teenage children to operate mower.
3. Allow only responsible teenagers or adults with mature judgment to operate mower and only under close supervision.
4. 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. Be thoroughly familiar with the controls and proper use of the equipment. This product is designed for Professional Commercial users. Special training is required.
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 fuel tank before starting engine. Use approved fuel container. DO NOT smoke near open fuel container. DO NOT fill fuel tank indoors or when engine is running. Allow engine to cool for at least ten minutes before refilling. Wipe off any spilled fuel before starting engine. DO NOT run engine indoors.
5. Before starting or stopping engine, set parking brake, stop blades and shift transmission into neutral.
6. Never attempt to make a wheel or 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 wet 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/or discharge chute in place.

## OPERATION

1. DO NOT change engine governor settings or over speed engine.

## OPERATION

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 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 catcher bag and/or clearing discharge chute 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.
9. When parking mower, set park brake, stop the blades, shift transmission into neutral and stop engine. Never park mower on slopes.
10. DO NOT use rider attachment (sulky) on slopes.
11. DO NOT operate mower without entire grass catcher or guard in place.

## 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 fuel 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, spilled fuel 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.



# INTRODUCTION

This manual has been prepared for the operator's of the **SNAPPER** Commercial Pro Series.

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 page 3 for the Power Unit and Mower Attachments before operating the machine.

This manual should be considered a permanent part of your machine and should remain with the machine when you sell it.

Right-hand (RH) and left-hand (LH) sides are determined from operator's position which is facing in the direction of forward travel.

Write identification numbers in spaces provided below. Accurately record all the numbers to help in tracing the machine should it be stolen. Your dealer also needs these numbers when you order parts. If this manual is kept on the machine, also file the identification numbers in a secure place off the machine.

## POWER UNIT

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

## MOWER ATTACHMENT

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

## ENGINE

Brand \_\_\_\_\_

Model Number \_\_\_\_\_

Type Number \_\_\_\_\_

Date of purchase \_\_\_\_\_

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# FAMILIARIZATION

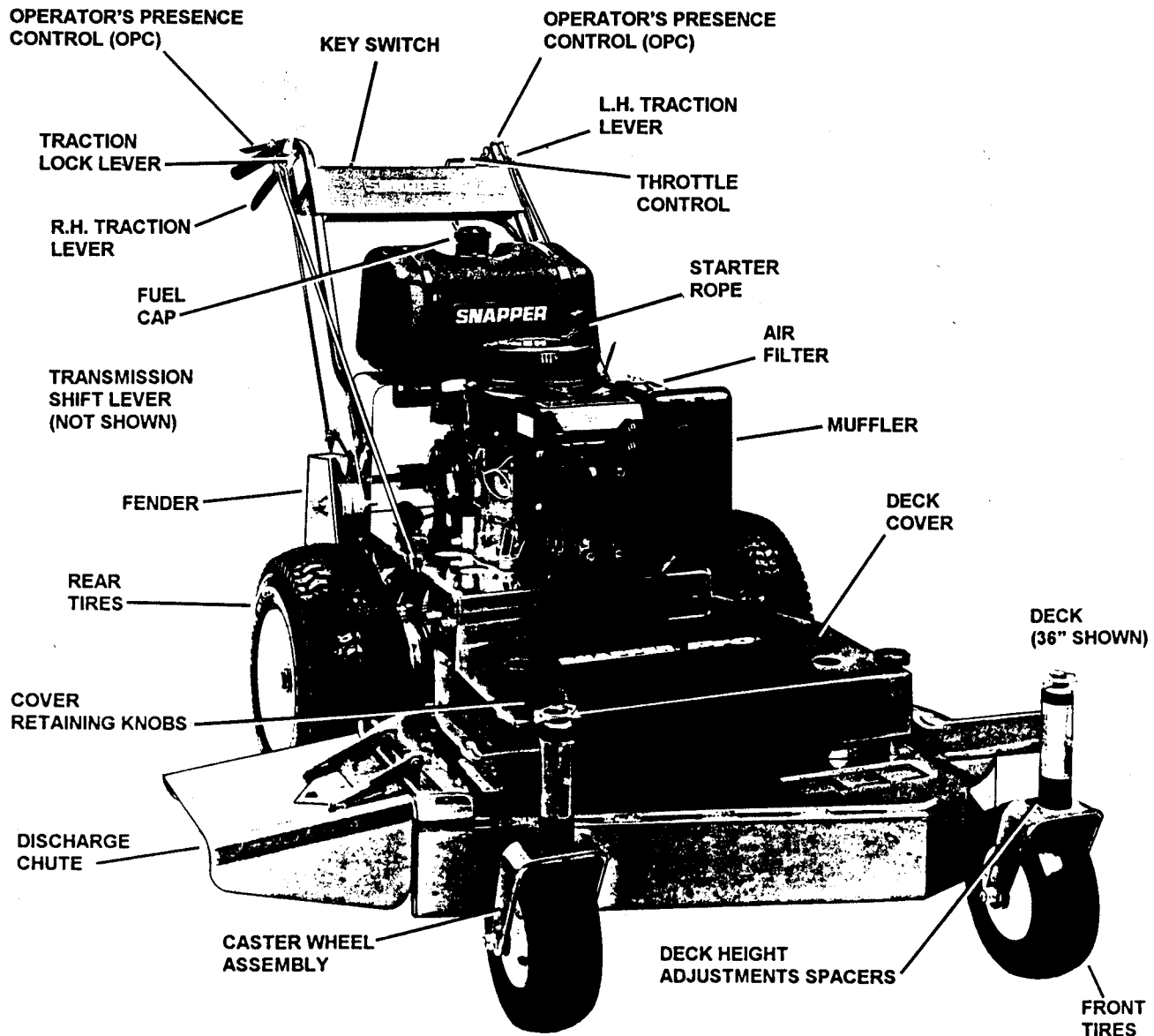


FIGURE 1

## NOMENCLATURE

The nomenclature drawing above (Figure 1) shows the essential parts of the SNAPPER Commercial Pro Series.

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 Mower and keep both handy for future reference.

## IMPORTANT

**Before Starting or Stopping Engine, set Traction Lock Lever, Disengage the blades and shift transmission into Neutral. Remove Ignition Key when it becomes necessary to leave the machine unattended.**

This mower features 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!**

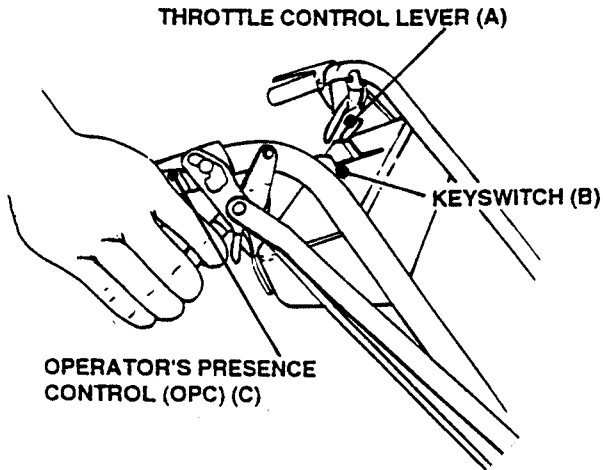
As an additional safety factor, This mower is equipped with an "OPERATOR'S PRESENCE SYSTEM". This is an Electrical Interlock System which is activated by depressing the OPERATOR'S PRESENCE CONTROL (OPC) against the handlebar. Releasing the OPERATOR'S PRESENCE CONTROL (OPC), while Transmission is in **GEAR** or Blades **ON**, will break the electrical circuit and cause the Engine to **STOP**, allowing the mower to travel only a few feet before coming to a complete stop.

# CONTROLS

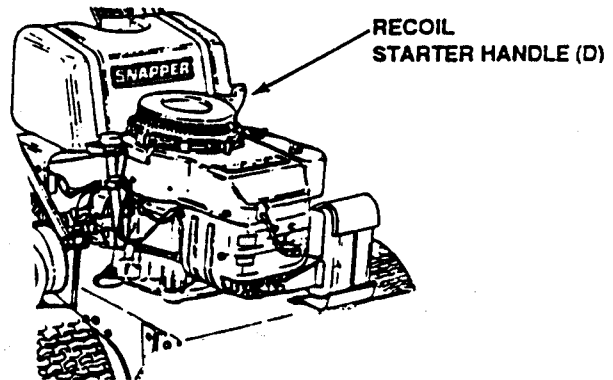
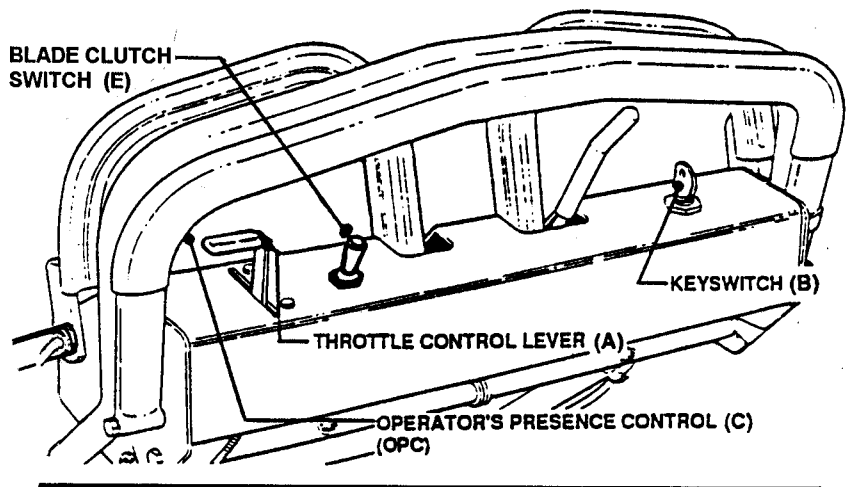
## ENGINE CONTROLS

- A. Throttle/Choke Lever
- B. Key Switch
- C. Operator's Presence Control (OPC)
- D. Engine Recoil Starter Handle
- E. Blade Clutch Switch

## PISTOL GRIP UNITS

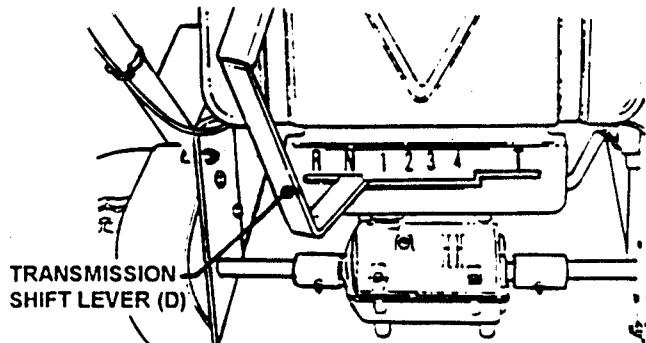
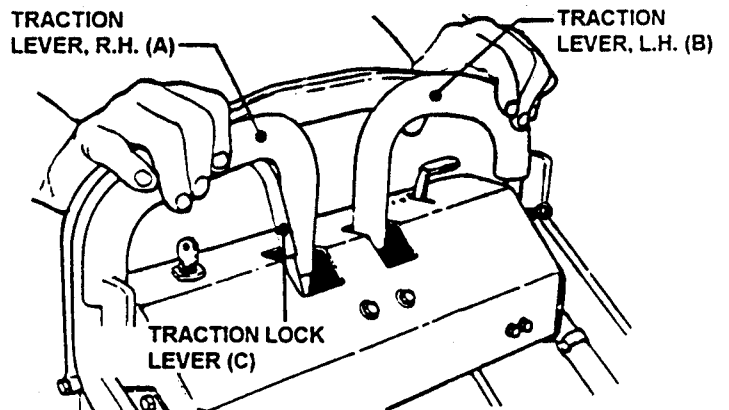
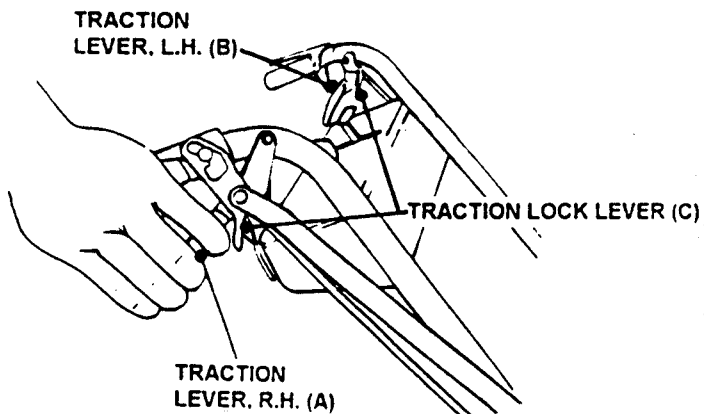


## LOOP HANDLE UNITS



## BLADE AND TRACTION CONTROLS

- A. Traction Lever, R.H.
- B. Traction Lever, L.H.
- C. Traction Lock Lever
- D. Transmission Shift Lever



# 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 Traction Wheel Drives, Mower Blades and Engine in preparation for possible emergencies.

## EMERGENCY STOP - LOOP HANDLE

1. Squeeze both Traction Levers firmly against the Handle to **STOP** forward or reverse motion. Using your right hand thumb, push the Traction Lock Lever full forward into Park Brake position. See Figure 2.
2. Pull Blade Clutch Switch backward to the **OFF** position. See Figure 2.
3. Move Throttle Control Lever to **SLOW** (turtle) position. See Figure 5.
4. **STOP Engine** by turning Key Switch to **OFF** position. See Figure 2.

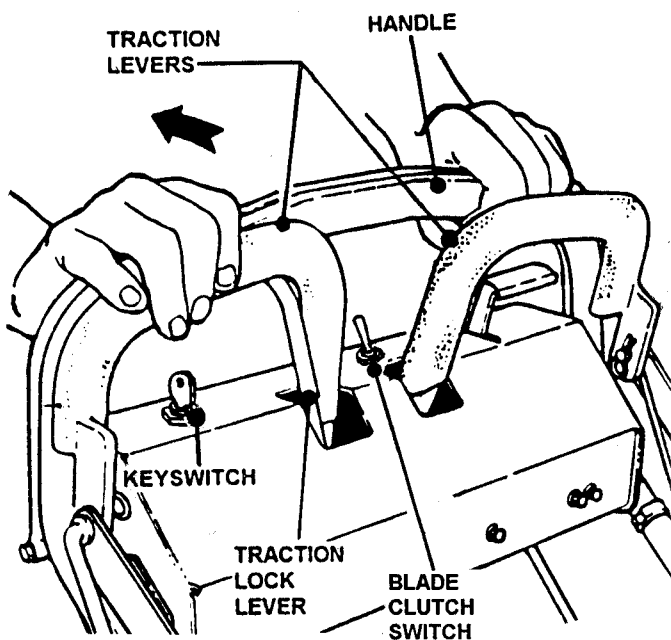


FIGURE 2

## EMERGENCY STOP - PISTOL GRIP

1. Firmly squeeze both Traction Levers towards the handle to **STOP** forward or reverse motion. Using your index finger, pull Traction Lock Lever until it locks in Park Brake position. See Figure 3.
2. Pull Blade Clutch Switch backward to the **OFF** position. See Figure 3.
3. Move Throttle Control Lever to **SLOW** (turtle) position. See Figure 5.
4. **STOP ENGINE** by turning Key Switch to **OFF** position. See Figure 3.

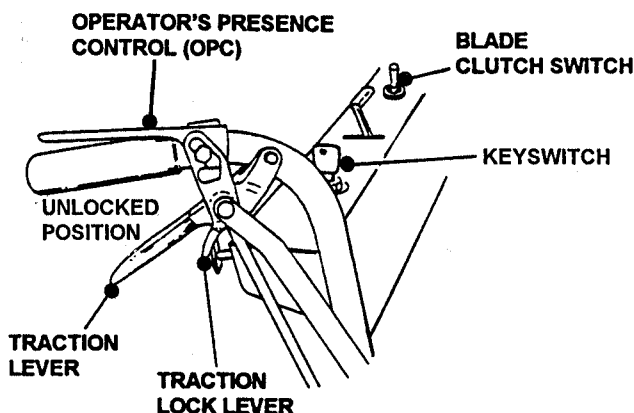
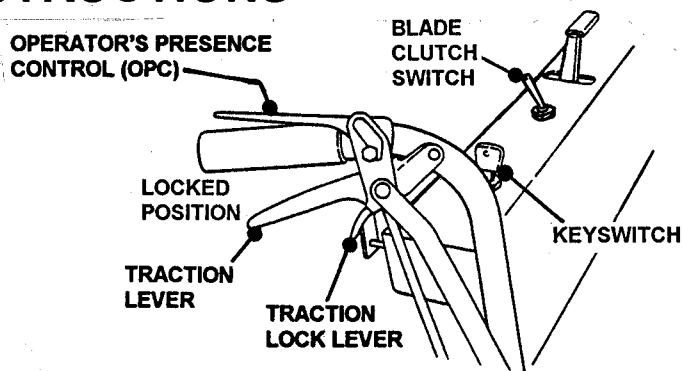


FIGURE 3

## NORMAL OPERATING STOP - LOOP HANDLE

1. Pull both **TRACTION LEVERS** toward the Handle to **STOP** forward or reverse motion, while pushing the Traction Lock Lever full forward until it locks both Traction Levers in Park Brake position. See Figure 2.

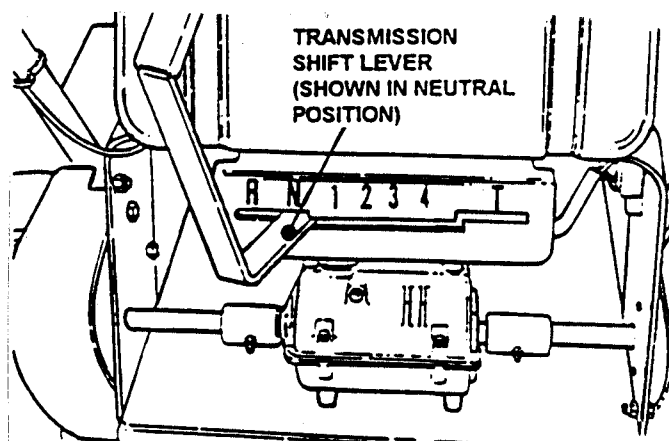


FIGURE 4

2. Pull the Blade Clutch Switch backward to the **OFF** position. See Figure 2.
3. Place Transmission Shift Lever in **NEUTRAL(N)** position. See Figure 4.
4. Move Throttle Control Lever to **SLOW** (turtle) position. See Figure 5.
5. **STOP ENGINE** by turning Key Switch to **OFF** position.



# OPERATING INSTRUCTIONS

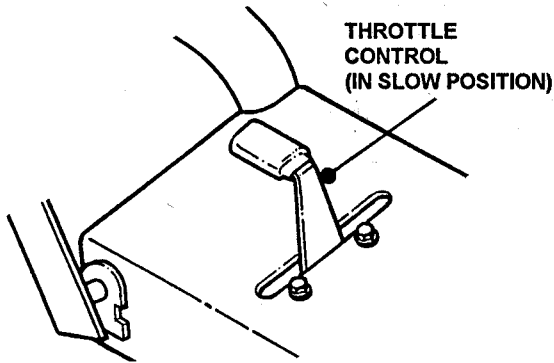


FIGURE 5

## NORMAL OPERATING STOP - PISTOL GRIP

1. Pull both Traction Levers towards the handle to stop forward or reverse motion while pulling the Traction Lock Lever rearward until it locks the Traction Lever in Park Brake position. See Figure 3.
2. Pull the Blade Clutch Switch backward to the OFF position. Refer to Figure 3.
3. Place Transmission Shift Lever in **NEUTRAL(N)** position. See Figure 4.
4. Move Throttle Control Lever to **SLOW** (turtle) position. See Figure 5.
5. **STOP ENGINE** by turning Key Switch to **OFF**.

**NOTE:** Close Fuel Shut-Off Valve at the end of each mowing operation.

## PRE-START CHECK LIST

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

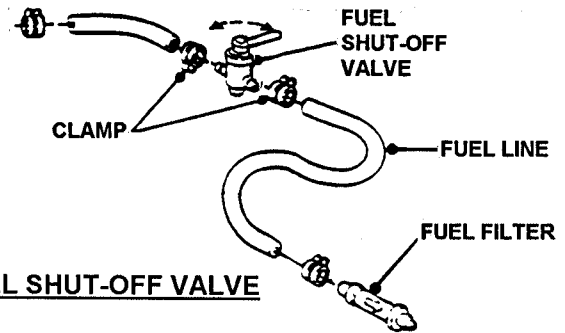
1. If required, make cutting height adjustments. Refer to Adjusting Cutting Height.
2. Check tires and add air as needed to bring pressure to 25 psi in front and 12-15 psi in rear tires.
3. Check Guards, Deflector, and Belt Covers to make sure all are in place and secure.
4. Check Condition of Cutter Deck Belt(s). If damaged, replace with original part. Refer to Cutter Deck Belt Removal.
5. Clean Interior and 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.
6. 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).
7. Add Fuel to tank after pushing the Mower outside where **fumes** can be dissipated. Make sure Fuel Tank Cap is tightened after refueling. (Refer to Engine manual for fuel specifications).

**NOTE:** DO NOT add fuel while engine is running. 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**. See the Following illustration.



FUEL SHUT-OFF VALVE

- 2a. Pull both Traction Levers toward the Handle while pushing Traction Lock Levers forward until it **Locks** the Traction Lock Lever in Park Brake Position. Refer to Figure 2.
- 2b. Pull both Traction Levers toward the Handle while pulling the Traction Lock Lever rearward with index finger until it **Locks** the Traction Lock Lever in Park Brake Position. See Figure 3.
3. Place Transmission Shift Lever in **NEUTRAL(N)** position. See Figure 6.

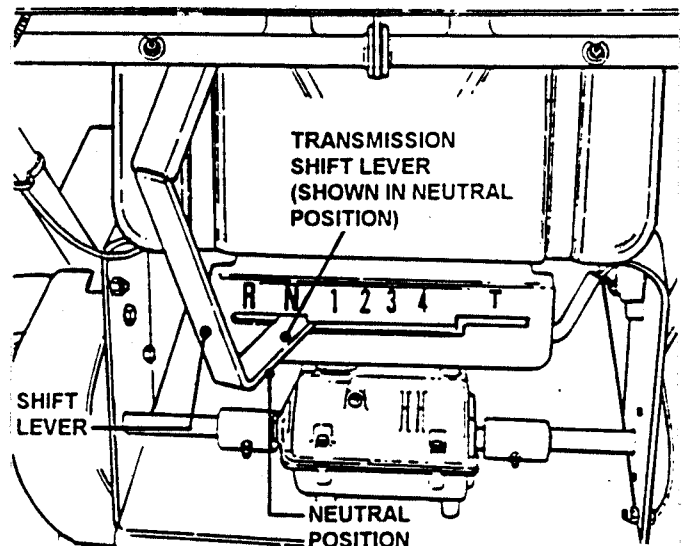


FIGURE 6

- 4a. **LOOP HANDLE** - Pull Blade Clutch Switch backward (toward operator) to the **OFF** position. See Figure 7.

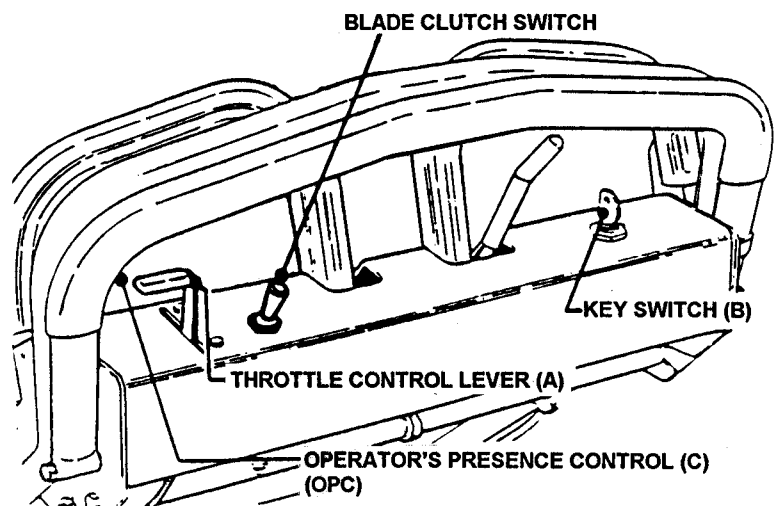


FIGURE 7

# OPERATING INSTRUCTIONS

- 4b. **PISTOL GRIP** - Pull Blade Clutch Switch backward to the OFF position. See Figure 8.

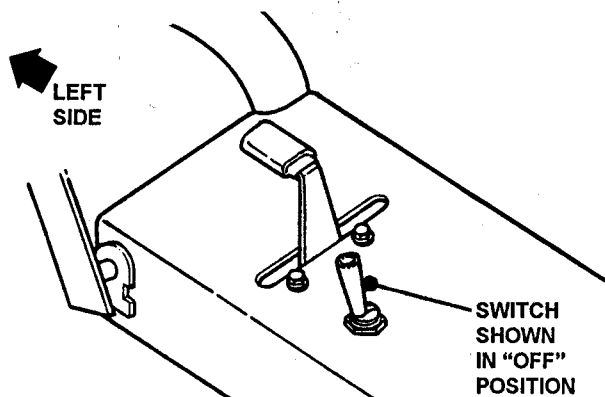


FIGURE 8

5. Move Throttle Control Lever to **CHOKE** position. See Figure 9. **NOTE:** Briggs Engines have a remote choke located on the left side of tank bracket. Choke is NOT part of Throttle Control Lever.
6. Turn Key Switch to **RUN** position.

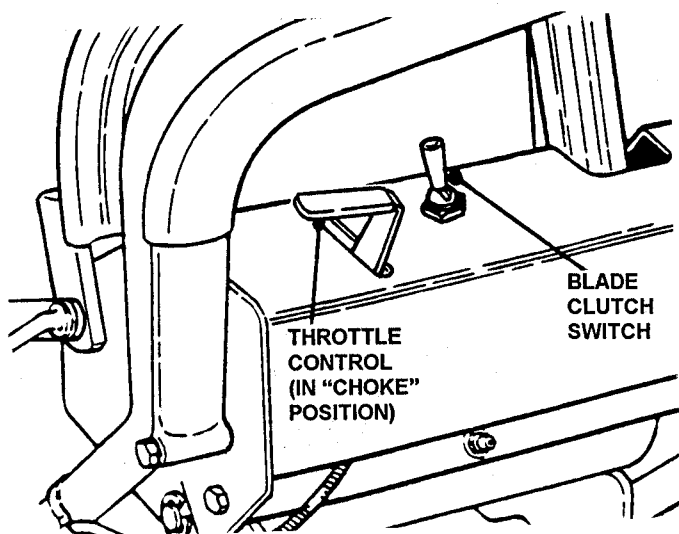


FIGURE 9

**IMPORTANT:** DO NOT jerk the engine recoil starter handle or allow it to snap back.

**NOTE:** Engine will not start unless the transmission is in **NEUTRAL** position and Blade Clutch Switch is in **OFF** position.

7. Pull Engine Recoil Starter Handle until you hear the first firing sound. Move Throttle Control Lever to the **FAST** (rabbit) position. Pull Recoil Starter Handle and Engine should start.
- 8a. **LOOP HANDLE** - Depress Operator's Presence Control (OPC) against handle. See Figure 10.

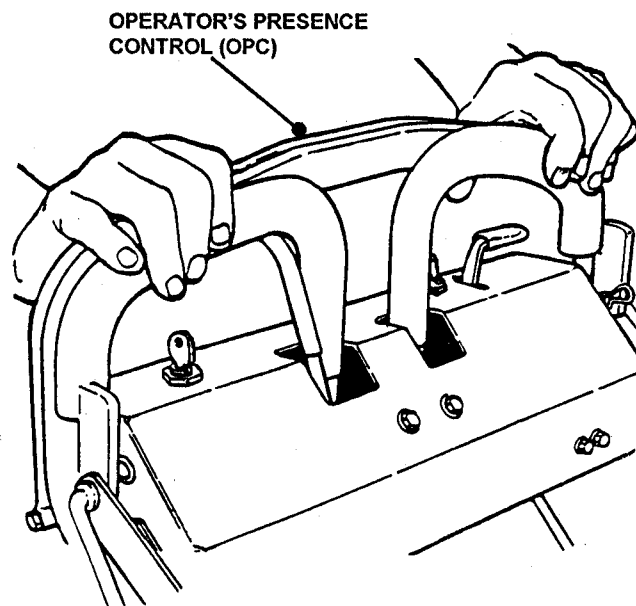


FIGURE 10

- 8b. **PISTOL GRIP** - See Figure 11.

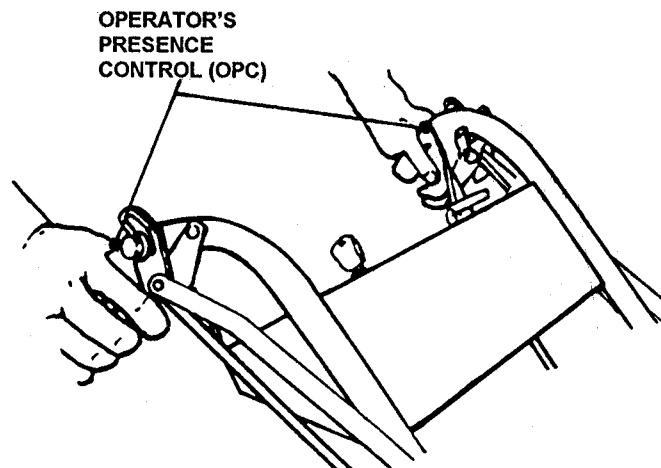


FIGURE 11

9. Place Transmission Shift Lever in No. 1 position (first gear). See Figure 7.
- 10a. **LOOP HANDLE** - Push Blade Clutch Switch to **ON** position. See Figure 7.
- 10b. **PISTOL GRIP** - SEE Figure 8.

**NOTE:** Releasing the Operator's Presence Control (OPC) while Transmission is in **GEAR** and/or Blades **ON**, will Ground the Ignition Circuit and cause the Engine to **STOP**, allowing the Mower to travel only a few feet before coming to a complete **STOP**.



## WARNING



Start mowing with a slow ground speed and gradually increase speed to determine the most comfortable travel speed.

# OPERATING INSTRUCTIONS

11. To **START MOWER MOVEMENT**, squeeze both Traction Levers firmly against the handlebar allowing the Traction Lock Lever to release. Simultaneously move both Traction Levers forward slowly, allowing machine to start forward movement.

**WARNING**

During initial training time with mower, it is advised that the operator(s) practice all mower movements while operating the mower with the transmission shift lever in no. 1 (first gear) travel speed position and blade clutch switch in off position.

**WARNING**

The SNAPPER PRO GEAR mowers are equipped with a **transport** position on the shift selector panel. **Transport** position allows the mower to travel forward up to 6 mph - **it is not to be used while walking nor mowing** - it is only to be used when a rider attachment (sully) is provided for use behind the mower! **NEVER make sharp turns at high speeds!**

12. The mower is **TURNED** by declutching wheel drive belts while engaging wheel brakes - turn left by squeezing the left hand traction lever or turn right by squeezing the right hand traction lever. See figure 12 looped handle, or figure 13 pistol grip. The more pressure applied while squeezing the traction lever, the sharper the mower will turn.

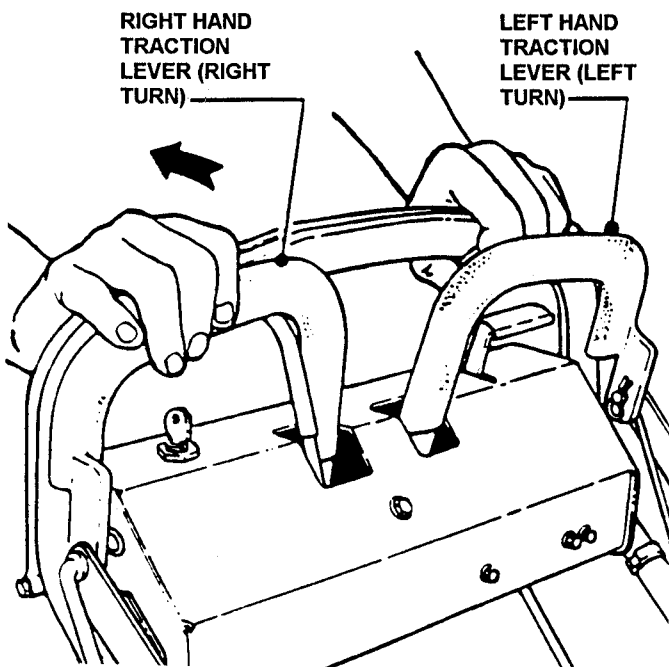


FIGURE 12

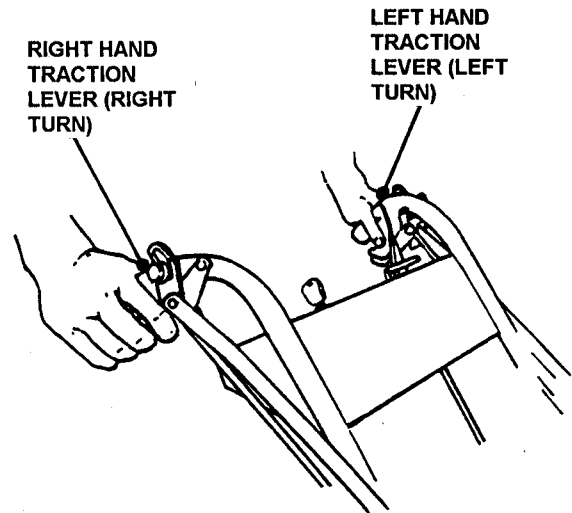


FIGURE 13

- 13.a. **LOOP HANDLE: TO STOP MOWER**, simultaneously squeeze both Traction Levers firmly against the handlebar while pushing the Traction Lock Lever forward, until latched. See Figure 14.

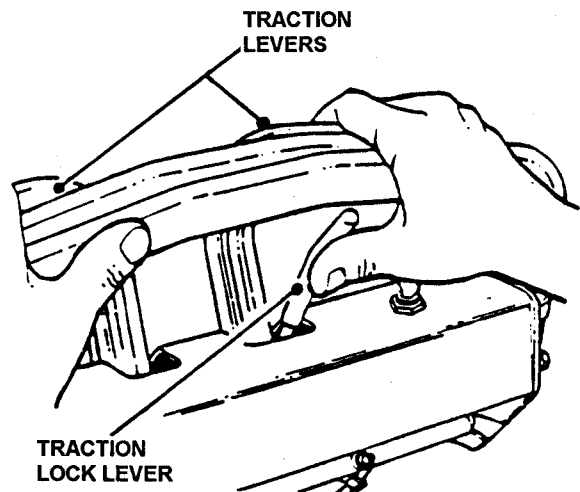


FIGURE 14

- 13.a. **PISTOL GRIP - TO STOP MOWER**, simultaneously squeeze both Traction Levers firmly against the handle while pulling the Traction Lock Levers rearward with index finger until latched.
- b. Pull the Blade Clutch Switch backward to the **OFF** position. See Figure 15.

# OPERATING INSTRUCTIONS

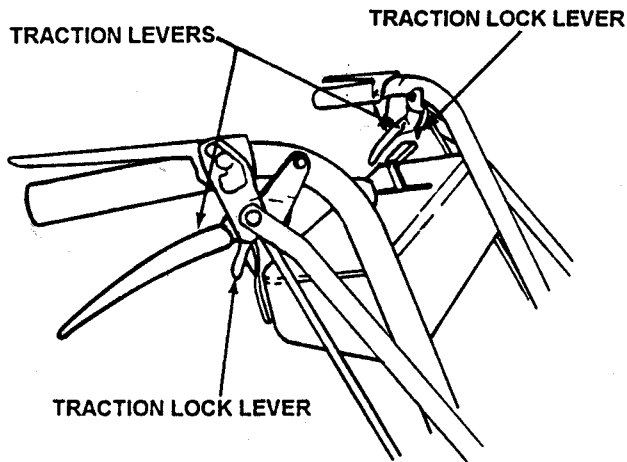


FIGURE 15

- c. Place the Transmission Shift Lever into the **NEUTRAL (N)** position.
- d. Release the Operator's Presence Control. This procedure allows the Engine to continue running with the Mower in a **PARKED** position without the operator holding the controls.

## REVERSE OPERATION

**WARNING**

**STOP ENGINE BEFORE LEAVING OPERATOR'S POSITION. NEVER PARK MOWER ON SLOPES.** SNAPPER PRO GEAR MOWERS are manufactured to intentionally reduce engine speed when shifted into reverse. Be sure engine speed is at or slightly above idle before releasing Traction Levers. **LOSS OF CONTROL COULD RESULT FROM HIGH SPEED OPERATION. NOTE: THROTTLE LEVER MUST BE MOVED TO IDLE POSITION BEFORE SHIFTING TO REVERSE OR THE ENGINE WILL STOP.**

1. To **REVERSE DIRECTION OF MOWER**, STOP Mower and latch Traction Lock Lever(s).
2. Pull Blade Clutch Switch backward to the **OFF** position. Move Engine Throttle Control Lever to **IDLE**.
3. Move Transmission Shift Lever to **REVERSE (R)** position.
4. Hold Operator's Presence Control (OPC) against handlebar.
5. To **START MOWER MOVEMENT**, simultaneously squeeze both Traction Levers firmly against the handle allowing the Traction Lock Lever to release.
6. Simultaneously release both Traction Levers **slowly**, allowing machine to start rearward movement.
- 7a. **LOOP HANDLE - TO STOP MOWER**, simultaneously squeeze both Traction levers firmly against the handle while pushing the Traction Lock Lever full forward, until latched. See Figure 14.
- 7b. **PISTOL GRIP - TO STOP MOWER**, simultaneously squeeze both Traction Levers firmly against the handle while pulling the Traction Lock Lever rearward with index finger until latched. See Figure 15

## TRACTION LOCK LEVER

When Traction Lock Lever is placed in **PARK** position, both Traction Wheel Drives are disengaged and wheel brakes are set, allowing the operator to **PARK THE MOWER ON LEVEL GROUND OR WHEN TRANSPORTED IN TRUCK OR TRAILER**. See Figures 16 & 17.



## WARNING



Traction wheel brakes may need additional adjustments to allow **PARK BRAKE** to hold mower in some conditions.

## TRACTION LOCK OPERATION - LOOP HANDLE

When the Traction Lock Lever is latched (the "Park Brake" position), the Traction Wheel Drives are disengaged and the wheel brakes are set.

1. Simultaneously squeeze both Traction Levers toward the handle, to **stop mower movement**.
2. Using thumb, push Traction Lock Lever forward until it latches both Traction Levers in **Park Brake** position.
3. To **release** Traction Lock, squeeze both Traction Levers firmly against the handlebar allowing Traction Lock to release. Simultaneously move both Traction Levers **slowly** forward, allowing machine to start forward movement. See Figure 16.

## ● TRACTION LOCK LEVER POSITION

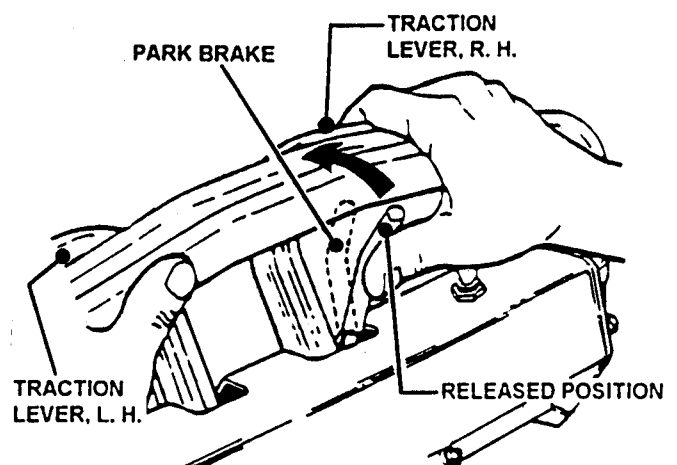


FIGURE 16

# OPERATING INSTRUCTIONS

## TRACTION LOCK OPERATION - PISTOL GRIP

1. Simultaneously squeeze both Traction Levers toward the handle, to **stop** mower movement.
2. Using index finger, pull Traction Lock Lever rearward until it latches Traction Levers in **Park Brake** position.
3. To **release** Traction Lock, squeeze both Traction Levers firmly against the handle. Using index finger, push Traction Lock Lever forward. Simultaneously release both Traction Levers slowly, allowing machine to start forward movement. See Figure 17.

### ● TRACTION LOCK LEVER POSITION

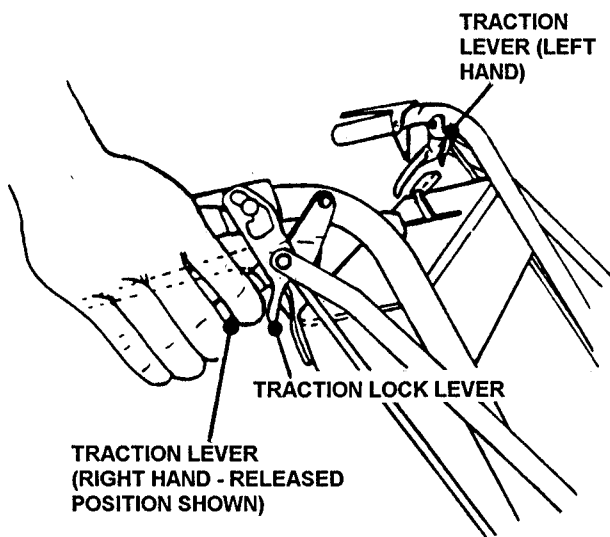


FIGURE 17

### ● TRACTION (DRIVE) LEVER POSITION

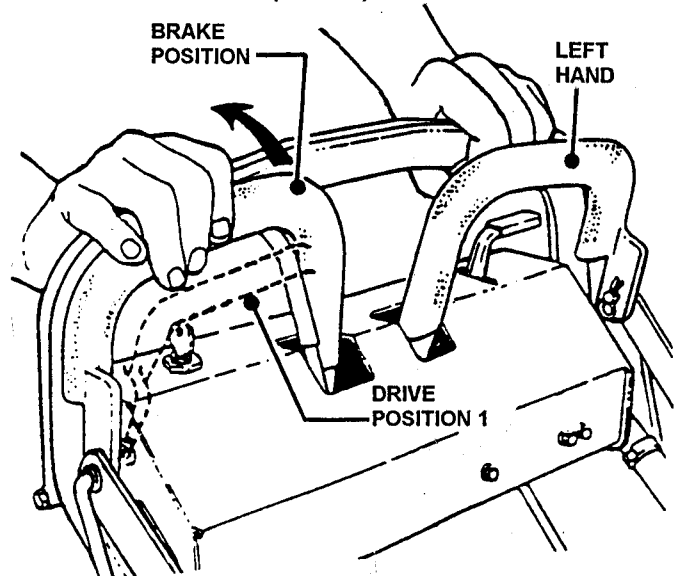


FIGURE 18

### ● TRACTION LEVER POSITION

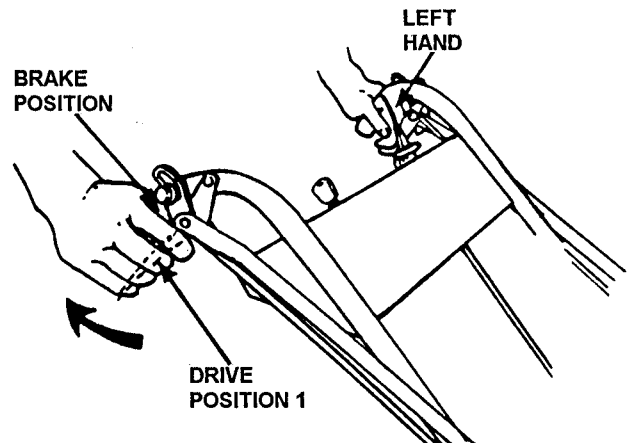


FIGURE 19

## TURNING MOWER

### GRADUAL RIGHT TURN

1. Release left Traction Lever to fully engage left wheel.
2. Hold right Traction Lever in intermediate position. Refer to Figures 18 & 19 to disengage right wheel drive and apply brake lightly!

### TIGHT RIGHT TURN

1. Release left Traction Lever to fully engage left wheel.
2. Hold right Traction Lever in Brake position. Refer to Figures 18 & 19 to disengage right wheel drive and apply brake hard!

**LEFT TURN:** Operate Traction Levers opposite to **RIGHT TURN** procedure.

## MOWING AND TURNING ON HILLSIDES

1. Always mow hillsides starting at bottom of hill. Mow across slopes, never up and down. Exercise caution when changing directions on slopes. **DO NOT** mow steep slopes!

	<b>CAUTION</b>	
<b>DO NOT</b> use rider attachment (sully) on slopes! <b>Never</b> park mower on slopes!		

1. Hillside mowing is accomplished by squeezing Traction Lever on the **UPHILL SIDE** of machine. This helps prevent side slipping of mower.
2. When turning mower on hillsides, always turn toward the **UPHILL SIDE** of mower for better control and balance.

# OPERATING INSTRUCTIONS

## ADJUSTING CUTTING HEIGHT (Fixed Decks)

Mower has three methods of adjusting cutting height:

1. Moving position of BLADE on cutter spindle shaft.
2. Moving position of CASTER WHEEL on support.
3. Moving position of MOWER DECK on power unit.



### WARNING



Before making any cutting height adjustments, turn engine off, remove switch key, close fuel shut-off valve and disconnect spark plug wire(s).

## ADJUSTING CASTER WHEELS

The Caster Wheel Assembly has four (4) 1/2" and one (1) 1/4" thick spacer. When placed above or below Caster Support Tube, they raise or lower cutting height in 1/2" increments, thus providing a "Quick-Adjust" method. The deck mounting has to be changed to correspond to the caster repositioning as described in **ADJUSTING MOWER DECK ATTACHMENT** on page 15.

1. Remove Retainer Pin from Caster Shaft. See Figure 20.

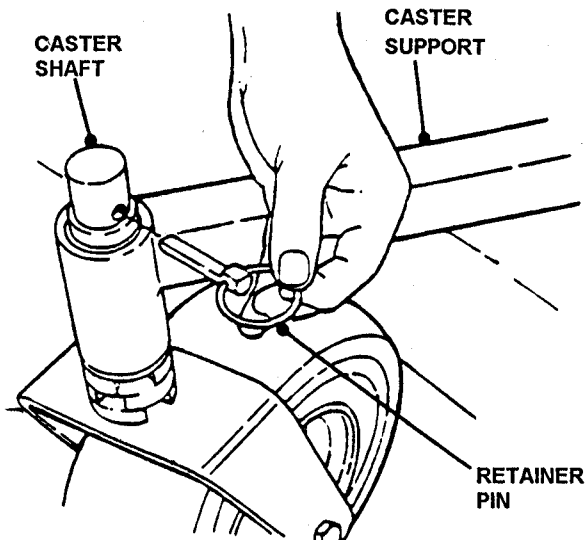


FIGURE 20

2. Lift Caster Support while adding or removing bottom spacer. See Figure 21.

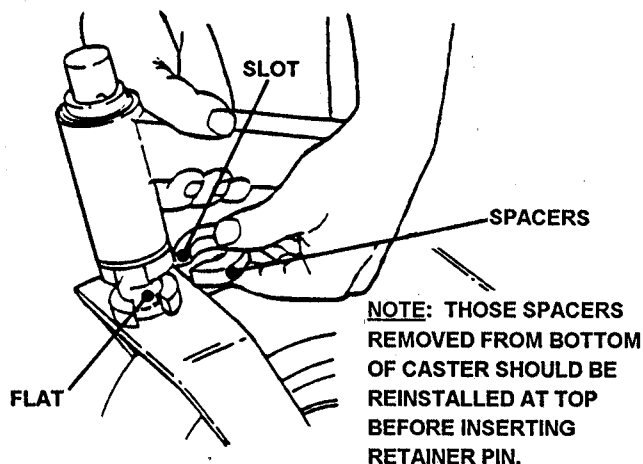


FIGURE 21

**NOTE:** Remove (or add) spacers by rotating slots to align with flat area on caster shaft.

## ADJUSTING BLADE ON CUTTER SPINDLE

To change cutting height of Blades, move the Spacers from under the Cutter Housing to above the Cutter Housing Pulley. Each Spacer moved above the Cutter Housing Pulley will provide an additional 1/4" of cutting height. **Never** put any Spacers below Blade. See Figure 33.

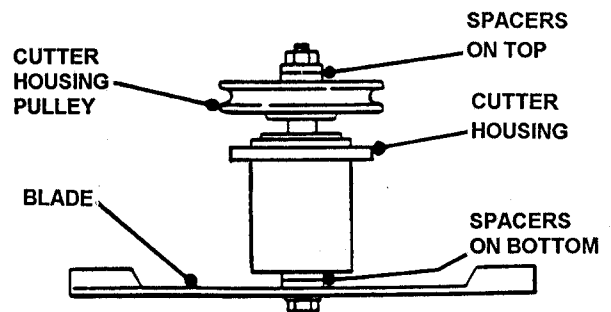
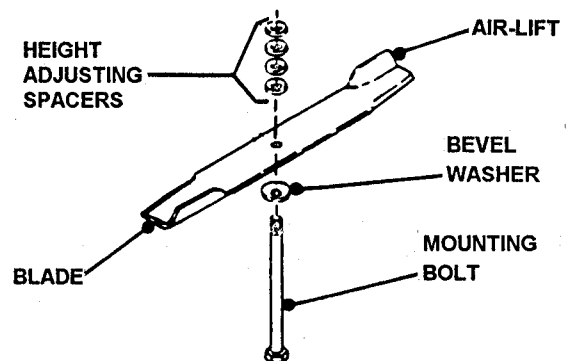


FIGURE 22

**NOTE:** Changing cutting height of blades does not change the deck ground clearance. If an undesirable cutting pattern results, then cutting height adjustment must be made by adjusting mower deck height and caster wheels.

Install Blades (Air Lift Up) with retaining hardware as shown below and tighten to 60 to 75 ft.-lbs. See Figure 23.



TIGHTEN TO 60 TO 75 FOOT POUNDS

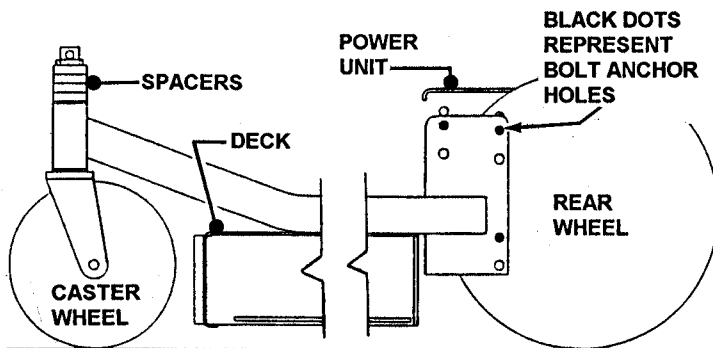
FIGURE 23

# OPERATING INSTRUCTIONS

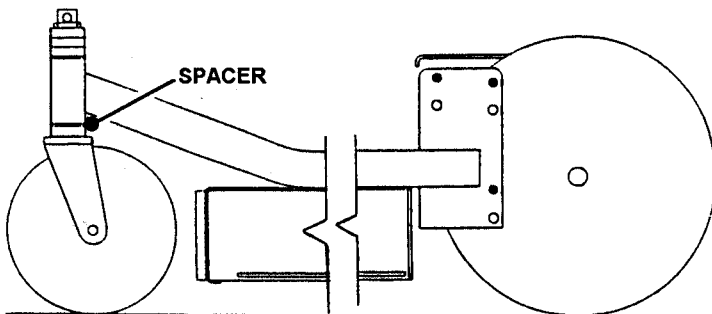
## ADJUSTING FIXED DECK ATTACHMENT

The mower deck has four different positions for attaching it to the power unit. The lowest setting provides a cutting height range of 1-1/2" to 2-1/2", the middle low cut is 2-1/4" to 3-1/4", the middle high cut is 3" to 4", and highest cut is 3-3/4" to 4-3/4". Make sure the spacers on the caster wheels are moved up or down as shown to correspond with the bolt positions to keep deck level. Once a desired cutting height is reached, attach the mower deck to the power unit by installing 3 bolts on each side in selected height of cut holes. Tighten bolts to 70 to 80 foot pounds torque. See Figure

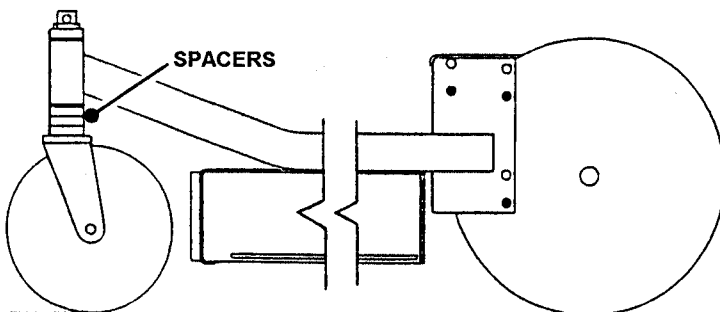
### SIDE PROFILE OF UNIT



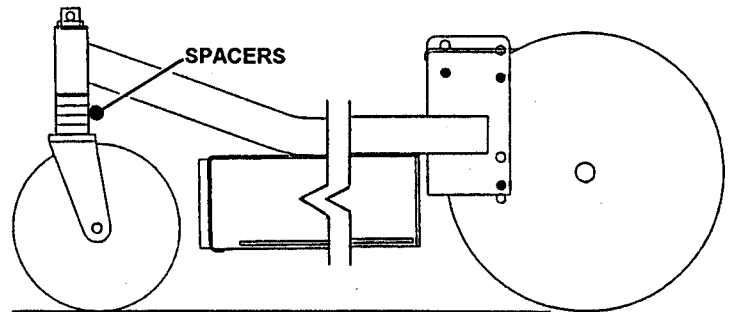
LOW CUT 1-1/2" to 2-1/2"



MIDDLE LOW CUT 2-1/4 to 3-1/4"



MIDDLE HIGH CUT 3 to 4"



HIGH CUT 3-3/4 to 4-3/4"

## CUTTING HEIGHT ADJUSTMENT FOR ADJUSTABLE DECK ATTACHMENTS

1. The mower deck should be mounted in the lowest holes (low cut) on the power unit.
2. To adjust height of cut, rotate both cranks located on each side of deck. Observe the height of cut decal located on the side of the mounting plates and place the pointer in the same desired position on both sides.
3. If pointers are in the correct position and you still have an uneven cut, follow these instructions to correct the problem:
  - A. Rotate outer blades to point toward the sides of the deck.
  - B. Measure the distance from blade tip to the ground. Measure both outside blades. This measurement should be the same as what the pointer reads on both sides.
  - C. If measurement is not the same, then bend both pointers up or down to read the same as blade tip measurements.

## ENGINE TROUBLESHOOTING

SYMPTOM	PROBLEM	SOLUTION	PAGE
Engine does not start..	Key OFF.	Turn Key to Run.	7
	Fuel Tank empty.	Fill Fuel Tank.	9
	Fuel Shut-Off Closed.	Open Fuel Shut-Off.	7
	Engine Throttle Control not at FAST (Rabbit) position.	Put Engine Throttle Control to FAST (Rabbit) position.	7, 8, 9, 10
	Choke NOT closed.	Put Throttle Control in CHOKE IOI position.	7, 9
		Check adjustment.	(See Engine Manual)
	Spark Plug Wire loose or disconnected.	Connect Spark Plug Wire.	(See Engine Manual)
	Operator Presence Control (OPC) Switch out of adjustment.	Adjust Switch	26
	Blade Clutch Switch in ON position.	Pull Blade Clutch Lever to OFF position.	7, 9, 10
	Spark Plug bad.	Install new Spark Plug.	(See Engine Manual)
	Dirty Air Filter.	Clean Air Filter.	(See Engine Manual)
	Transmission not in NEUTRAL.	Shift Transmission Lever to NEUTRAL.	7, 8, 9, 10
Engine Starts Hard or Loses Power.	Dirt or water Fuel Tank.	Drain and clean Fuel Tank. Fill with fresh Fuel.	6, 7, 8, 9
	Vent in Gas Cap plugged.	Clean Vent or install new Gas Cap.	6, 7, 9
	Air Filter dirty.	Clean or install new Air Filter.	(See Engine Manual)
	Spark Plug not gapped correctly.	Check and set Spark Plug gap.	(See Engine Manual)
	Spark Plug bad.	Install new Spark Plug.	(See Engine Manual)
Engine Runs Erratically.	Spark Plug bad.	Install new Spark Plug.	(See Engine Manual)
	Spark Plug not gapped correctly.	Clean and set Spark Plug gap.	(See Engine Manual)
	Fuel Filter plugged or dirty.	Replace Fuel Filter.	7, 18
Engine Idles Poorly.	Dirty Air Filter.	Clean or replace Filter.	(See Engine Manual)
	Fuel Filter plugged	Replace Fuel Filter.	7, 18
Engine Overheats.	Engine Oil low in Crankcase.	Add Oil.	(See Engine Manual)
Machine Vibrates Excessive.	Blade Mounting Bolts loose.	Tighten Blade Mounting Bolts.	15, 26
	Blade out of balance.	Sharpen and balance Blade.	26
	Engine Mounting Bolts loose.	Tighten Mounting Bolts.	(See Engine Manual)
Engine Dies.	Mowing grass too tall.	Adjust cutting height.	14, 15
	Mowing too fast.	Reduce travel speed.	2, 3

## MOWER TROUBLESHOOTING

SYMPTOM	PROBLEM	SOLUTION	PAGE
Mower does not move when Traction Levers released.	Transmission in neutral.	Select Gear	7, 8, 9, 10
	Traction Control Rod adjustment.	Adjust Rod	19
Mower does not track straight.	Slipping or broken Traction Belt.	Adjust or replace Belt.	19, 24
	Tire pressure in both Traction Wheels not the same.	Adjust air pressure.	6
Blades DO NOT engage.	Belt slipping or broken.	Replace or adjust Belt.	20, 21
	Clutch does not engage	Check cable connections	
Mower mows unevenly.	Travel speed too fast.	Reduce travel speed.	2, 3
	Operator making mower turn corner too fast.	Reduce travel speed.	2, 3, 10
	Rough terrain.	Change mowing pattern.	14, 15
	Unequal number of Blade Spacers on Cutter Shafts or Caster Wheels.	Install equal number of Spacers.	14, 15



## MOWER TROUBLESHOOTING (Continued)

SYMPTOM PROBLEM		SOLUTION	PAGE
Mower not cutting full width.	Broken or slipping Blade Belt.	Replace or adjust Belt.	20, 21
Discharge Chute plugs.	Grass wet. Mower too low. Engine overloaded.	Let Grass dry. Raise cutting height Run Engine at full Throttle and reduce travel speed.	2, 3 14, 15 7, 8, 9

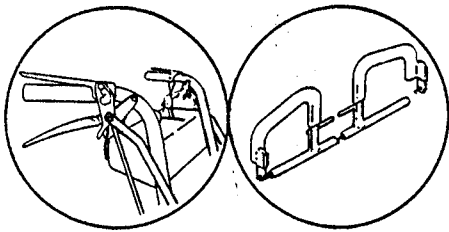
## TRANSMISSION TROUBLESHOOTING

SYMPTOM PROBLEM		SOLUTION	PAGE
Unit is Noisy.	Gearing is overly noisy - chatter, etc. Worn Gears. Worn Bearings - mainly input Shaft Ball Bearing.	Check Oil level. Remove and Replace with New Gears.  Replace Bearing.	23(Refer to Dealer) (Refer to Dealer)  (Refer to Dealer)
Unit Jumps Out of Gear.	Teeth of Gears are worn beyond tolerances. Spring in Shifter Fork weak or broken.	Replace Worn Gears. Replace Spring.	(Refer to Dealer) (Refer to Dealer)

## SERVICE & LUBRICATION

HOURS	PROCEDURE	COMMENTS	PAGE
BREAK-IN	Check all Grease Points and add if necessary Check all Fasteners for proper tightness. Change Engine Oil and Filter at 5 hours.	(Check Grease Schedule for Locations)  (See Engine Manual)	6  (See Engine Manual)
DAILY	Check Engine Oil. Clean Air Filter. Clean Air Intake Screen. Remove Debris from under Belt Cover. Sharpen Cutter Blades. Grease Cutter Spindle Bearings. Grease Transmission Couplings.	Change Oil if extreme dusty conditions. More often if needed. More often if needed. More often if needed. Tighten to 60-75 Ft.-Lbs. Use Chevron SRI Grease or equal. One Shot General Purpose Grease.	(See Engine Manual) (See Engine Manual) (See Engine Manual) 6 26 18 18
WEEKLY	Check Tire Pressure. Check Safety Interlock System. Lube Traction (Drive) Levers. Inspect Traction Lock for Wear. Change Engine Oil and Filter. Replace Air Filter. Grease Caster Wheel Bearings. Grease Caster Support Arms. Grease Traction Wheels. Grease Idler Arm Pivots on Cutter Deck. Fuel Filter.	Add or Adjust as required. Inspect OPC Switch for proper Operation. One Shot General Purpose Grease. Replace if Worn. More often if needed. More often if needed. General Purpose Grease. General Purpose Grease. General Purpose Grease. General Purpose Grease. Replace with SNAPPER P.N. 1-4359	18 26 18 6, 7, 12, 13, 18 (See Engine Manual) (See Engine Manual) 18 18 18 18 7
MONTHLY	Clean and Adjust Spark Plugs. Lube Controls and Linkages.	(See Engine Manual) Use Medium Duty Oil.	(See Engine Manual) 18

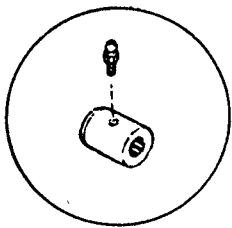
# SERVICE & LUBRICATION CHART



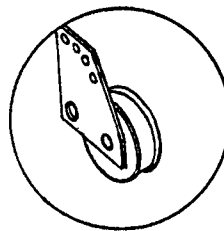
- **TRACTION LOCK**  
INSPECT EVERY  
40 HRS. FOR WEAR

- **INTERLOCK SWITCHES**  
INSPECT DAILY  
DO NOT LUBRICATE

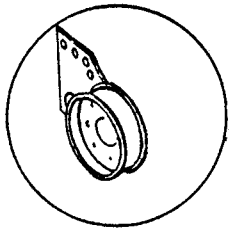
- **ENGINE**  
SEE ENGINE  
MANUAL



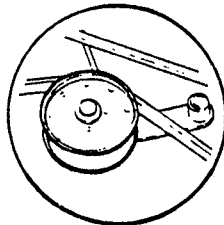
- **REAR TIRE**  
PRESSURE  
12-15 PSI
- **TRACTION TIRE**  
GREASE 100 HRS.



- **FUEL FILTER**  
REPLACE EVERY  
100 HRS.

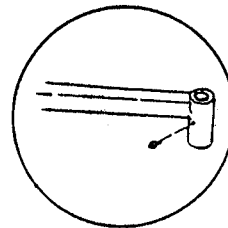


- **FRONT TIRE**  
PRESSURE  
25 PSI



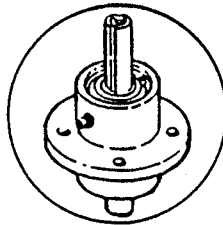
- **CUTTER**  
DECK  
IDLER

- **MOWER BLADES**  
SERVICE DAILY



- **CLEAN CUTTER**  
DECK DAILY

- **CASTER BEARINGS**  
GREASE 100 HRS.



- **DRIVE BELTS**  
INSPECT EVERY  
200 HRS.

# ADJUSTMENTS

## STEERING/BRAKES

If machine is not as responsive as desired when either Traction lever is squeezed, one or both brakes should be adjusted as follows:

1. Operate mower on level terrain with Transmission Shift Lever in No. 1 position. Determine which brake requires adjustment.
2. Stop engine, remove the key from switch and disconnect spark plug wire from spark plug. Secure wire away from plug.
3. Remove hairpin from brake rod adjusting block.
4. Pull adjusting block from brake arm and rotate counter-clockwise for more tension or clockwise for less tension. See Figure 24.

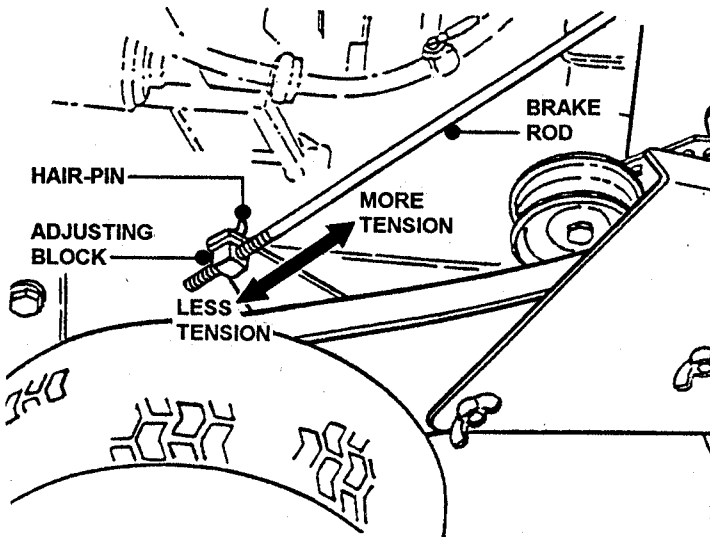


FIGURE 24

5. Install adjusting block into brake arm and install hairpin.
6. Place spark plug wire onto spark plug. Start engine and operate mower with transmission in the No. 1 position to check for proper adjustment. If further adjustment is required, follow all steps above.

## TRACTION LEVERS/RODS

If the Traction Wheel Drive Belts become slack or new belts have been installed, it will be necessary to adjust the Traction Levers as follows:

1. Move the mower to a smooth, level surface and turn the engine OFF. Release the traction locks. Disconnect the Brake Rods from the Brake Arms keeping the hairpins in the adjuster blocks.
2. Remove the key from the switch, remove the spark plug wire from the spark plug and secure it away from the plug.
3. Shift the transmission to No. 1 position.

**PISTOL GRIP:** Pull rearward hard on the handles. The space used to lock the traction lock lever should not bottom in the slot. Set the Traction Lock Levers into the Park Brake positions. The Idler Pulleys, Upper and Lower should have "slacked" the belt completely. Release the traction locks and adjust as required.

**LOOP HANDLE:** There should be about 1" gap between the dash panel and the Traction Control Lever. Push forward hard on the lever. The Traction Control Lever should not bottom against the panel. Set the Traction Lock in the Park Brake position. Push the mower forward and rearward. There should be very little drag if the rods are adjusted correctly. The Idler Pulleys, Upper and Lower should have "slacked" the belt completely. Release the traction lock and adjust as required.

4. Remove the hairpins from the traction rod adjustment blocks and remove the adjustment blocks from the traction links on each side of the mower. See Figure 25.

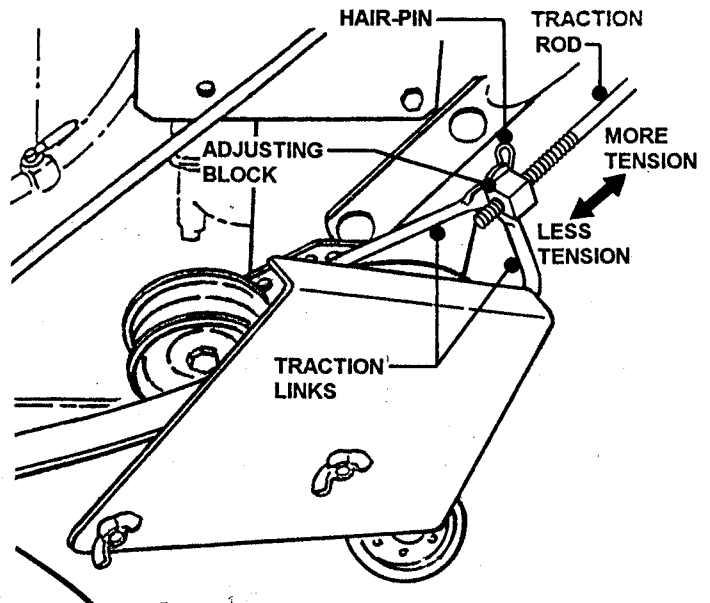


FIGURE 25

5. Rotate the traction rod adjustment block as required, down the rod for more belt tension and greater gap at the levers, up the rod for less drag and for full "slack" in Park.
6. Reinstall the adjustment blocks and the hairpins. Check the settings as described above. Repeat as necessary.
7. Re-assemble the Brake Rods to the Brake Arms with the hairpins removed earlier.
8. Replace the Spark Plug Wire onto the Spark Plug. Start the mower according to the Safety Instructions and operate it to check the adjustments.

**NOTE:** It may be necessary to adjust the Traction Brakes after adjustment of the Traction Belts is complete.

# ADJUSTMENTS

## TRACTION PULLEY SCRAPER

The traction pulley scraper should point toward the ground at a 45 degree angle. Should it become necessary to adjust the traction pulley scraper, use the following instructions:

1. Stop engine and remove key from switch. Remove spark plug wire from spark plug and secure wire away from plug.
2. Loosen scraper mounting nut located on the under side of the power unit. See Figure 26.
3. Rotate the scraper until it is at 45 degree angle. Tighten mounting nut securely.

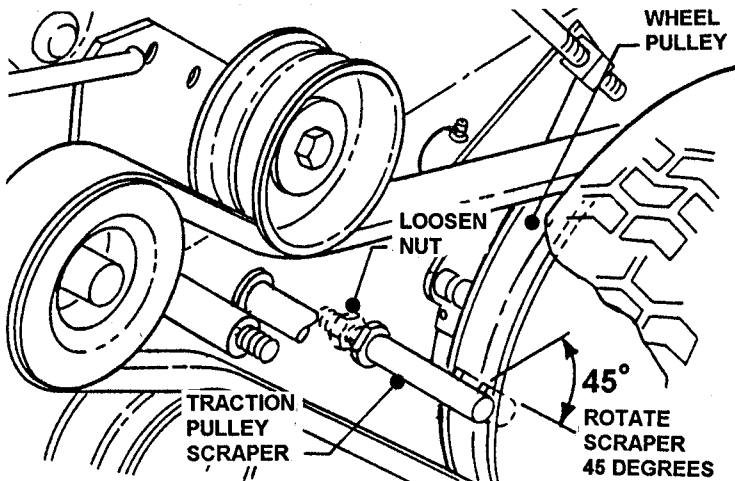


FIGURE 26

**TRANSMISSION DRIVE BELT** When properly adjusted, the transmission drive belt should deflect no less than 3/16" with 5 lbs. pressure applied to the belt between the transmission pulley and the engine pulley. Use the following steps to adjust the transmission drive belt:

1. Turn engine OFF and remove key. Disconnect spark plug wire from spark plug and secure wire away from plug.
2. Loosen the transmission belt idler mounting nut.
3. Slide idler towards belt to increase tension or away from belt to decrease tension. See Figure 27.

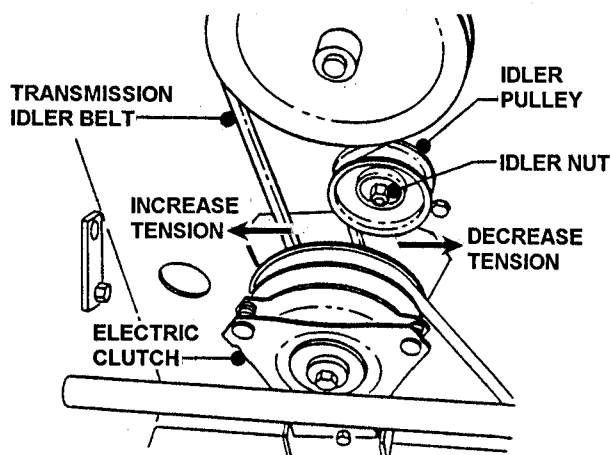


FIGURE 27

4. Tighten idler mounting nut and re-test belt tension. Continue adjustment of transmission drive belt until proper tension is achieved.

**WARNING**

Do not over tension transmission drive belt.

## HANDLE HEIGHT

The operator handle can be adjusted for operator comfort as follows:

1. Loosen the upper carriage bolt and nut on both sides of handlebar.
2. Remove lower carriage bolt and nut on both sides of handlebar.
3. Raise or lower handlebar to desired height.
4. Install the carriage bolt and nut in the lower hole in handlebar and securely tighten nut. See Figure 28.

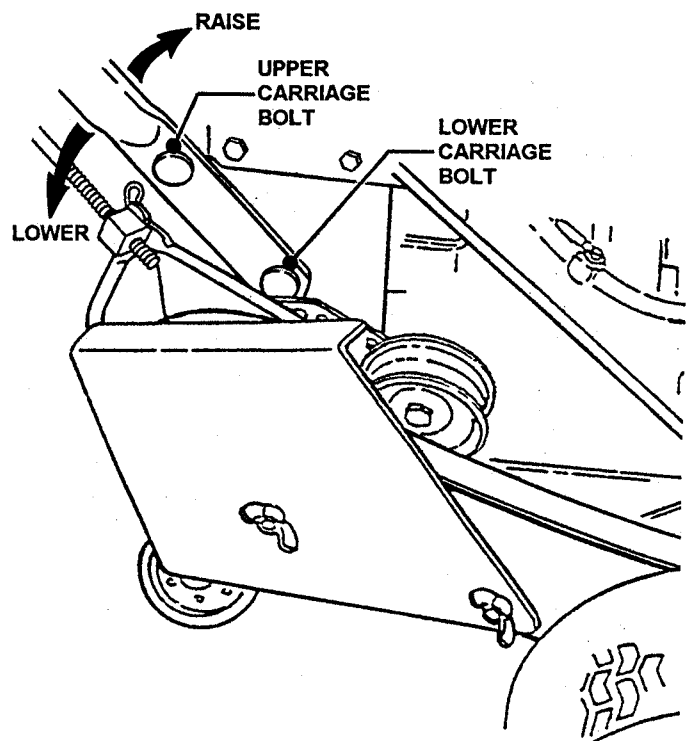
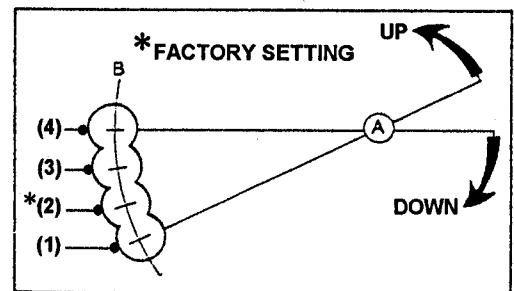


FIGURE 28

# ADJUSTMENTS

5. Securely tighten the upper carriage bolt and nut.
6. After adjusting the handle height, reposition the traction links as shown in HANDLEBAR/TRACTION LINK CHARTS and also Figure 29.

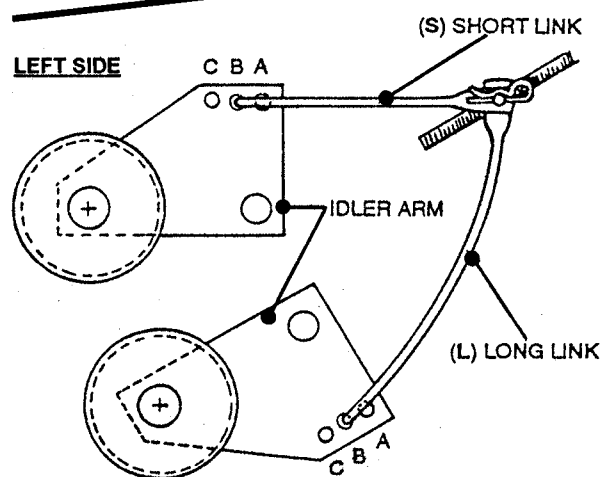
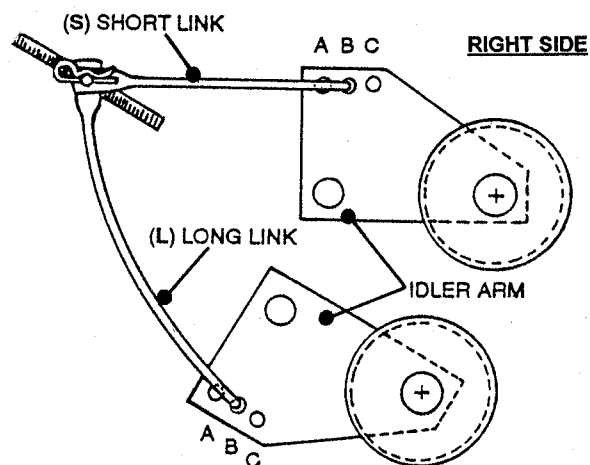
**HANDLEBAR/TRACTION LINK CHART**  
(All Models Except SPP90KW)

HANDLEBAR STYLE	HANDLEBAR POSITION	SHORT LINK	LONG LINK
LOOP	1 (Highest)	C	C
PISTOL	1 (Highest)	C	C
LOOP	2	C	C
PISTOL	2	B	C
LOOP	3	C	C
PISTOL	3	B	B
LOOP	4 (Lowest)	C	C
PISTOL	4 (Lowest)	B	C

**HANDLE/TRACTION LINK CHART**  
(Model SPP90KW Only!)

STYLE	POSITION	SHORT LINK	LONG LINK
PISTOL	1 (Highest)	B	B
PISTOL	2	B	B
PISTOL	3	B	B
PISTOL	4 (Lowest)	B	B

7. Adjust the traction rods and brake rods. Refer to the table of contents on page 5 for location of adjustment instructions.



**FIGURE 29**

# POWER UNIT SERVICE

## REPLACEMENT PARTS

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 mower, always mention Model and Serial Number (see page 4) of Power Unit and Mower Attachment. 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 parts and service, look for Tecumseh Engines & Transmission under Engines-Gasoline.



## WARNING



Before performing service on mower, turn engine OFF, close fuel shut-off valve, and allow engine to cool. Disconnect spark plug(s) if mower is to be raised or tilted, making sure to secure mower in place to prevent it from falling.

**NOTE:** All mid-size mowers should be tilted with engine carburetor side UP.

## TRANSMISSION PARTS & SERVICE

For the nearest Peerless Transmission Dealer, check the Yellow Pages under heading, Engine-Gasoline. Look for Tecumseh Engine and Transmission under Engine-Gasoline.

## GENERAL TRANSMISSION SERVICING

### 1. GENERAL TRANSMISSION SERVICING

#### Introduction:

The following service procedures should be understood and practiced whenever service must be performed on a Peerless 700 Series Transmission.

2. Before removing transmission from mower, make sure another part of machine is not causing problem, look for:
  - a. Loose drive belt.
  - b. Improperly adjusted or bad idler pulley.
  - c. Loose or lost setscrews and/or sheared keys in pulleys.
  - d. Oil saturated drive belts.
  - e. Shaft coupling worn.
  - f. Transmission shift lever secure.

## TRANSMISSION

The Peerless 700 Series Transmission requires no routine maintenance. However, the following items should be checked regularly (See Figure 30):

1. Transmission Shift Lever Nut - Torque to 10 ft.-lbs.
2. Transmission Couplings - Lubricate and inspect for wear.
3. **Noisy:** If transmission becomes noisy, see TRANSMISSION TROUBLESHOOTING on page 17.

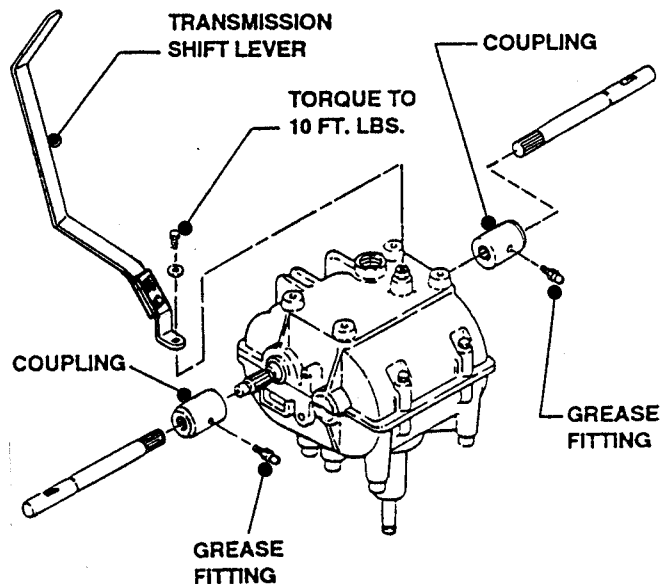


FIGURE 30

## TRANSMISSION LUBE

Should the transmission ever require lubrication, fill to proper level with Bentonite Grease. The case holds 12 ounces maximum. Add lubricant as follows:

1. Remove transmission switch wire plug and remove the transmission interlock switch.
2. Remove the fiber washer seated on switch and fill transmission to proper level. See Figure 31.
3. Install new fiber washer, part number 2-9662, onto switch. Install switch into transmission and tighten securely. Attach wire plug onto switch.

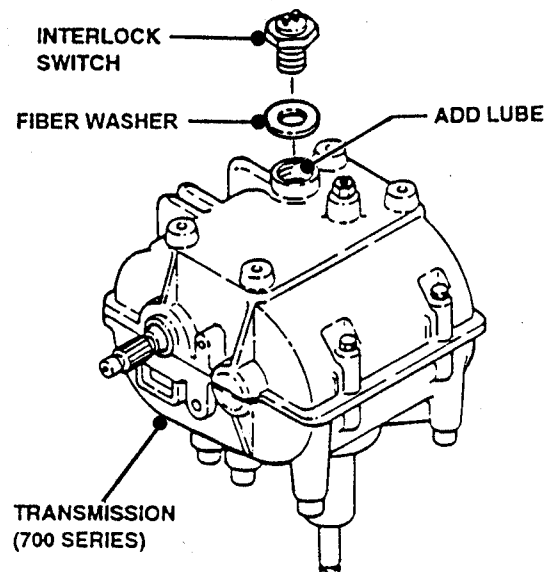


FIGURE 31

# MOWER ATTACHMENT SERVICE

## TRANSMISSION BELT REMOVAL/REPLACEMENT

Should it become necessary to replace the transmission drive belt, contact an authorized SNAPPER Dealer for service.



### WARNING



The Transmission Drive Belt must be replaced only by an authorized SNAPPER Dealer. The owner and or operators should never attempt replacement of the Transmission Drive Belt.

## TRACTION BELT REMOVAL

1. **STOP ENGINE!** Remove two wing-nuts retaining fender. Remove fender. See Figure 32.
2. Remove Traction Belt from Wheel Pulley first by running Belt off as Wheel is turned. Remove from Transmission output Pulley next.
3. Lay Traction Belt flat on ground (around tire) and roll Mower Wheel over Traction Belt, removing Traction Belt from machine.

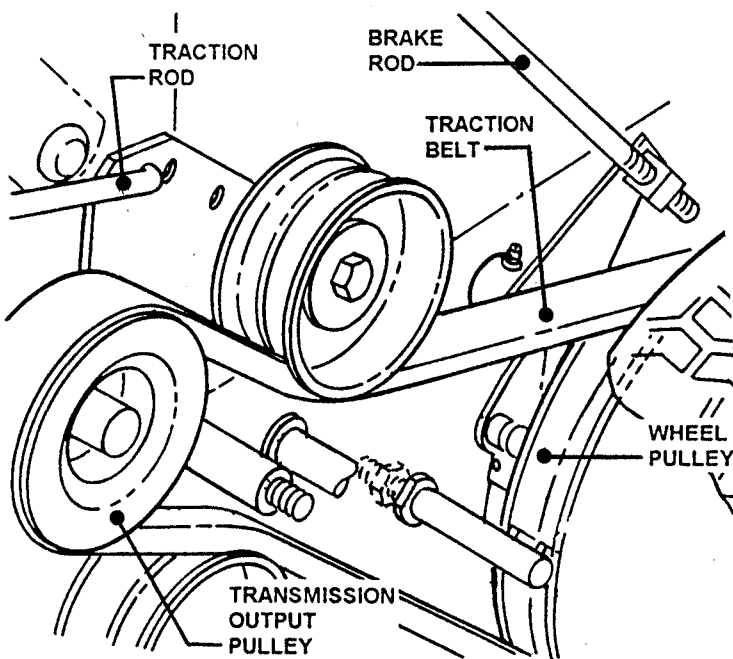


FIGURE 32

## TRACTION BELT INSTALLATION

1. **STOP ENGINE!** Lay Traction Belt flat on ground in front of Traction Wheel, roll Traction Wheel over Traction Belt until wheel is in middle of belt.
2. Place Traction Belt on Wheel Pulley followed by Transmission Output Pulley. Refer to Figure 32.
3. Reinstall Fender and tighten two wing-nuts.
4. Adjust Traction Rod and Brake Rod as necessary. See **ADJUSTMENTS - STEERING/BRAKES** and **TRACTION LEVERS/RODS**. Refer to Page 19.

## CUTTER DECK BELT REMOVAL

1. Place mower on a smooth level surface. Turn engine **OFF**, remove key, disconnect spark plug wire and secure wire away from plug.
2. Remove mower deck belt cover.
3. Remove idler spring and swing idler away from belt.
4. Remove old belt from spindle pulleys and electric clutch pulley (Mechanical Clutch on 32" Deck).

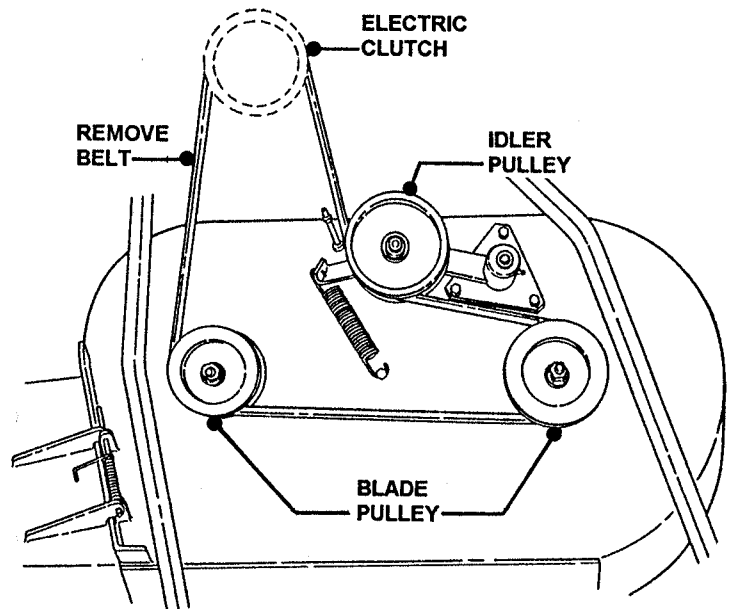


FIGURE 33

## CUTTER DECK BELT REPLACEMENT - 32" & 36"

1. Route new belt, part number 2-9255, to electric clutch pulley (Mechanical clutch on 32" Deck).
2. Route new belt around spindle pulleys. See Figure 33.
3. Move idler to belt and re-attach tension spring.

# MOWER ATTACHMENT SERVICE

## CUTTER DECK BELT REMOVAL - 48" DECKS

1. Place mower on a smooth level surface. Turn engine **OFF**, remove key, disconnect spark plug wire and secure wire away from plug.
2. Remove mower deck belt cover.
3. Remove Idler Spring and swing Idler away from belt. See Figure 34.

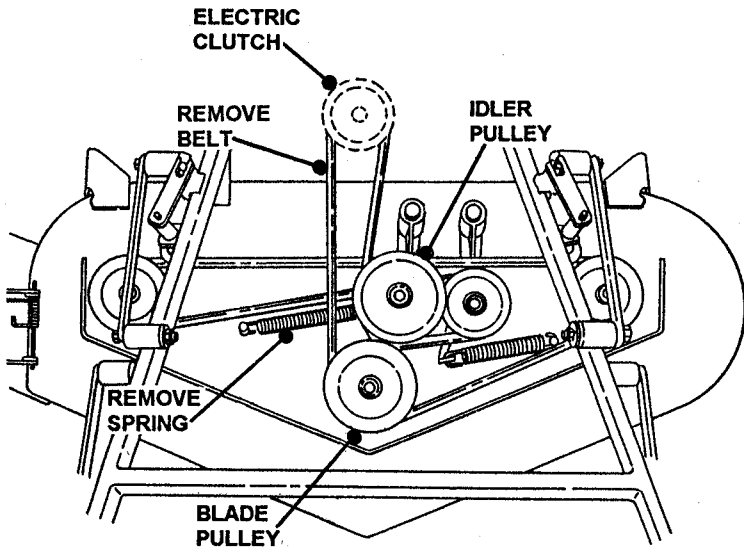


FIGURE 34

## CUTTER DECK BELT REPLACEMENT 48" DECKS

1. Route new Belt, part number 2-9262 for 48" Decks, to Electric Clutch Pulley.
2. Route new Belt around center and right hand spindle pulleys. Refer to Figure 34.
3. Move Idler to Belt and re-attach Spring.

## SPINDLE TO SPINDLE DECK BELT REMOVAL - 48" DECKS

1. Place mower on a smooth level surface. Turn engine **OFF**, remove key, disconnect spark plug wire and secure wire away from plug.
2. Remove mower deck belt cover.
3. Remove right hand idler spring and swing idler away from belt.
4. Remove old belt from center and right hand spindle pulleys. Refer to Figure 34.
5. Remove left hand idler spring and swing idler away from belt.
6. Remove old belt from right hand spindle pulley and center pulley bottom groove. See Figure 35.

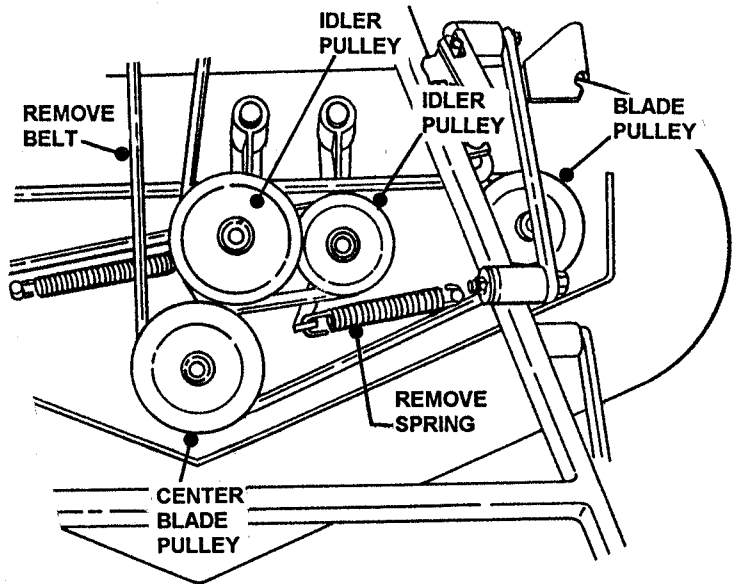


FIGURE 35

## SPINDLE TO SPINDLE DECK BELT REPLACEMENT - 48" DECKS

1. Route new Belt, part number 2-9261 for 48" decks, onto bottom groove of center Pulley and right hand Pulley. Refer to Figure 35.
2. Place Idler Adjusting Rod through hole and install Spring. Refer to Figure 35.
3. Install cutter deck belt according to CUTTER DECK BELT REPLACEMENT.
4. Adjust tension of both belts. Refer to page 20.

## CUTTING BLADE SERVICE

Check blades after each use for signs of excessive wear and damage. See Figure 36 for blade wear limits.

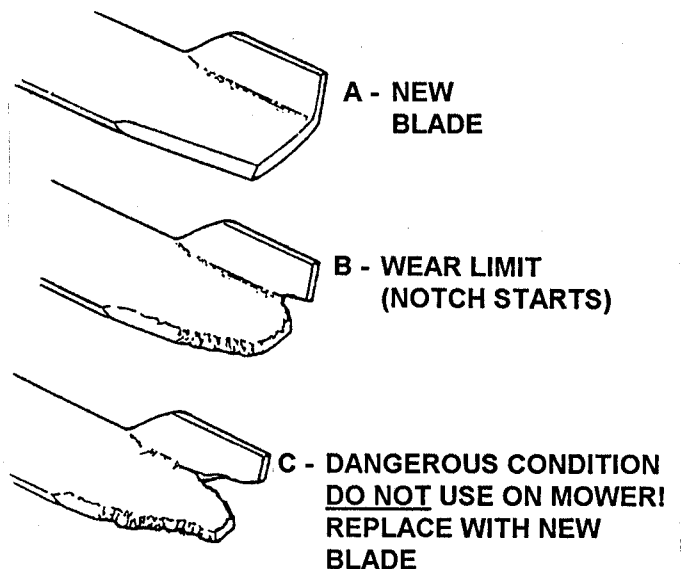


FIGURE 36



# MOWER ATTACHMENT SERVICE

1. Use the following chart for ordering replacement Blades for the 32", 36" and 48" Mowing Decks.

## STANDARD REPLACEMENT BLADES

32" DECK	36" DECK	48" DECK
2-9247	2-9246	2-9247

## BLADE REMOVAL AND SHARPENING

1. Place the mower on a smooth level surface, turn engine **OFF**, remove key, disconnect Spark Plug Wire from Spark Plug and secure Wire away from Plug.
2. Remove blades.



## WARNING



Take **NOTE** of the number of blade spacers that are under the Blade Mounting Nuts and on the Spindle side of the Blade.

3. Clean and inspect each Blade for excessive wear and damage. Refer to Figure 36 for Blade wear limits.
4. Refer to the STANDARD REPLACEMENT BLADE chart above for correct SNAPPER Replacement Blades.
5. Should Blades be in acceptable condition, sharpen at 25 degrees. See Figure 37.

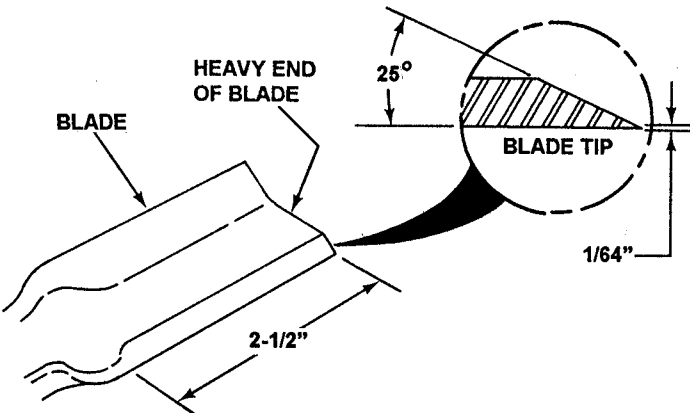
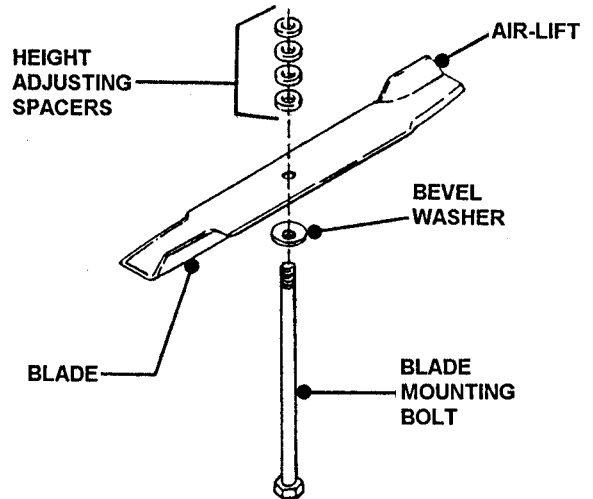


FIGURE 37

**NOTE:** When sharpening Blades, leave 1/64" untouched. Razor sharp Blades dull quicker and damage easier. Commercial balancers are available and should be used in accordance with the manufacturers instructions.

6. Balance each Blade after sharpening by grinding metal from the heavy end of the Blade.
7. Place the Blade mounting bolt into Blade and place Blade Spacers over Bolt. Make certain each Blade is installed with the same amount of Spacers removed.
8. Install Blade Mounting Bolt with spacers and Blade into spindle.
9. Install an equal amount of Blade Spacers onto each blade mounting bolt.

10. Install the Blade Mounting Nut on each Blade Mounting Bolt. See Figure 38.
11. Torque each Blade Mounting Bolt and Nut to 60 to 75 ft. lbs of torque.



**TIGHTEN TO 60-75 FOOT POUNDS**

FIGURE 38

## OPERATOR PRESENCE CONTROL (OPC) SWITCH LOOP HANDLE MODELS ONLY

When adjusted properly, the OPC Switch will cause the engine to stop if the power unit is in any forward gear, Reverse and/or the Blade Switch is left in the ON position when the operator releases the OPC bail. Adjust as follows:



## CAUTION



If the OPC switch is not operating properly, **DO NOT CONTINUE** using the machine until the OPC switch has been adjusted or replaced.

1. Loosen the OPC Switch mounting screw.
2. Slide the OPC Switch as described in Figure 39. Tighten screw.

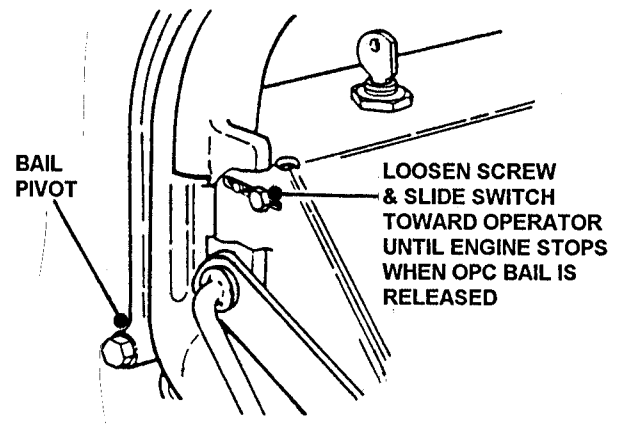
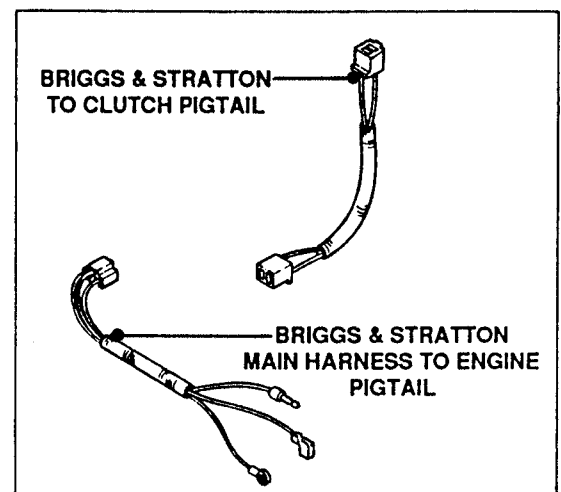
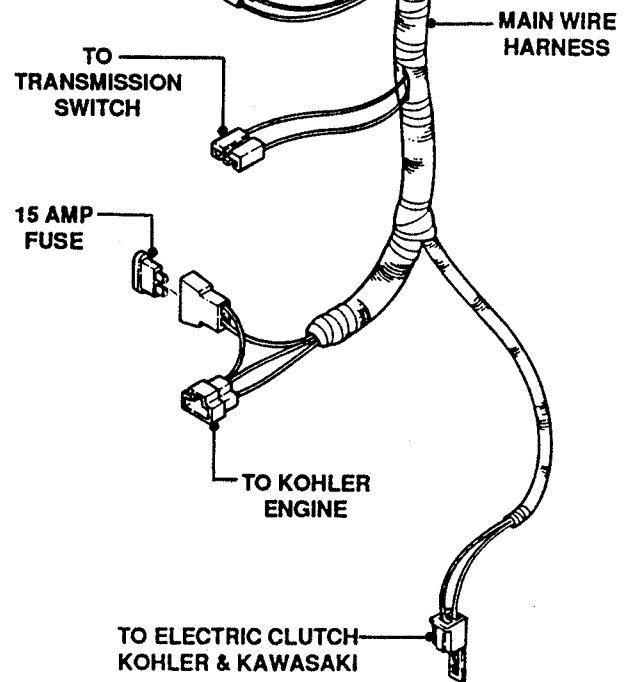
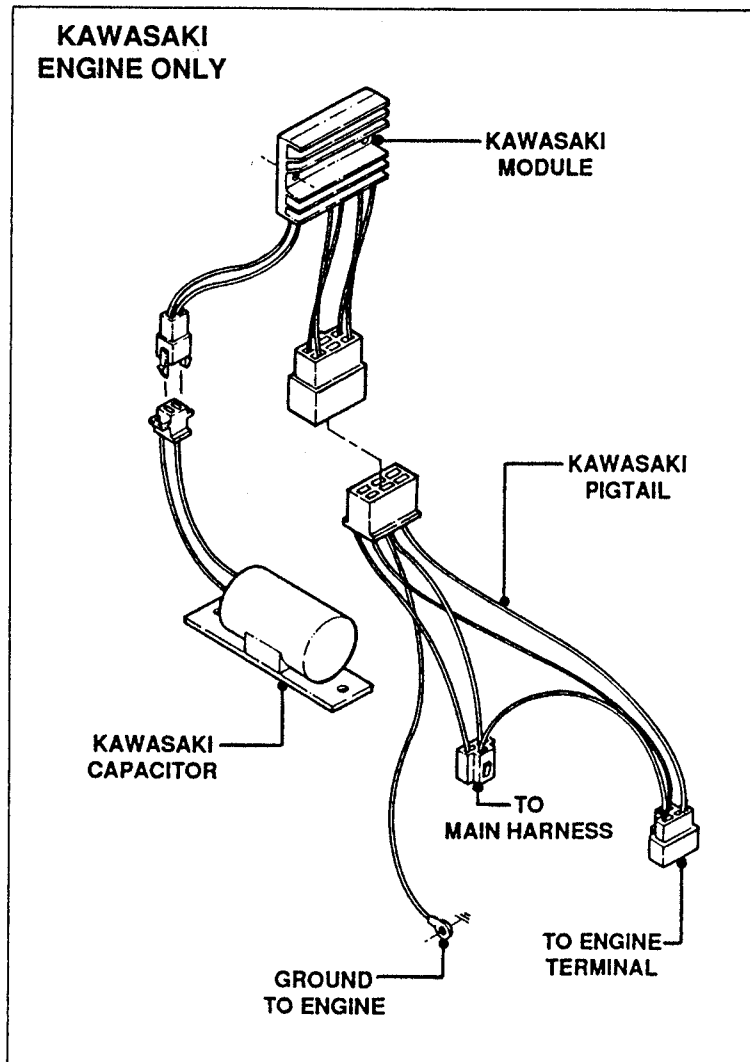
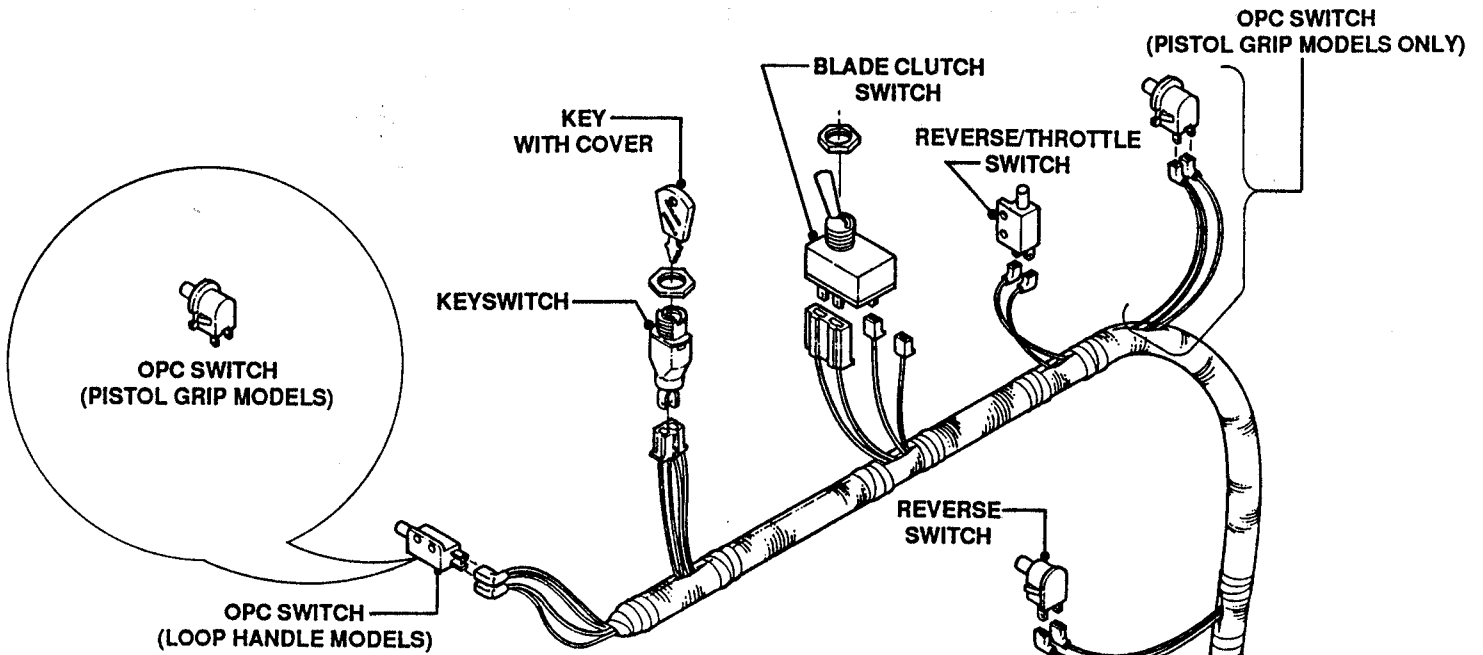


FIGURE 39

# ELECTRICAL



# **SNAPPER**

## **1 YEAR COMMERCIAL LIMITED WARRANTY**

For one (1) year from purchase date for the original purchaser's commercial or other non-residential use, and ninety (90) days for rental use, **SNAPPER**, through any **SNAPPER** dealer will replace, free of charge (except for taxes where applicable), 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 under this warranty must be paid by the purchaser.

This warranty does not apply to engines and their components, hydro transmissions, and batteries, as these items are warranted separately. Peerless transmissions will be covered for the first ninety (90) days through Peerless and from ninety-one (91) days and up to one (1) year through **SNAPPER**. Peerless transmissions on rental units will be covered for ninety (90) days through Peerless. There will be no extended warranty through **SNAPPER**.

This warranty does not cover any mower or component part that has been damaged as a result of accident, alteration, abuse, improper lubrication, normal wear, or any other cause beyond our control. This warranty does not cover any mower or component part that has been altered or modified changing safety, performance, or durability.

There is no other express warranty.

### **DISCLAIMER OF WARRANTY**

Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to one (1) year from purchase date for the original purchaser's commercial or other non-residential use, and ninety (90) days rental use, and up 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, P.O. Box 777, McDONOUGH, GEORGIA 30253.**

*Safety Instructions & Operator's Manual for*

# **SNAPPER®**

## **PRO GEAR MID-SIZE WALK BEHIND MOWERS SERIES 0**

**MOWER UNIT MODELS:** SP320,  
SP360, SP480, SPA360, SPA480

**POWER UNIT MODELS:** SPP90KW,  
SPL1250KW, SPP1250KW, SPL140KW,  
SPP140KW, SPL140KH, SPP140KH

**⚠ WARNING:** The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

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