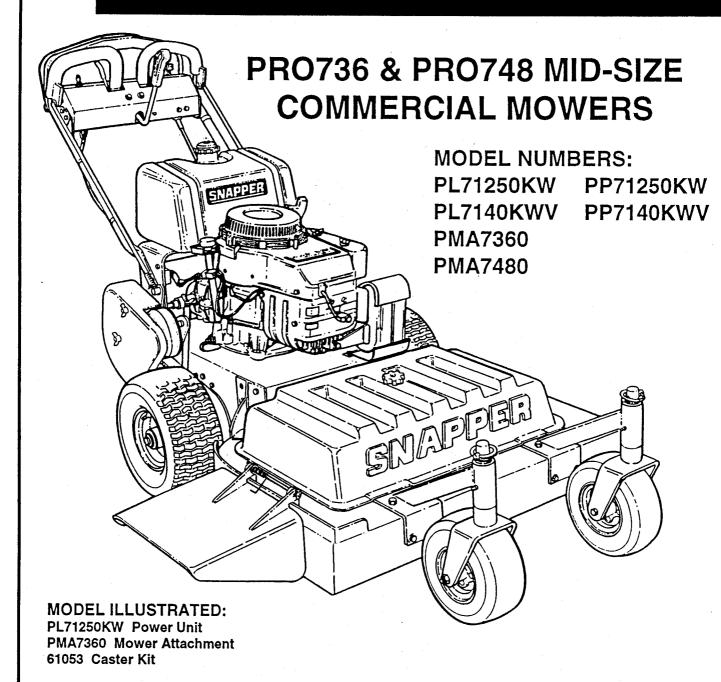
Safety Instructions, Service & Operator's Manual for

SNAPPER®



Thank you for buying a **SNAPPER** Commercial product! Before operating your Commercial Mid-Size 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.

IMPORTANT SAFETY INSTRUCTIONS

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

TRAINING

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

PREPARATION

- 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.
- Always wear relatively tight and belted clothing to avoid tanglement in moving parts. Wear sturdy rough soled work shoes and protective equipment for eyes, hands, hearing, and head.
- 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.
- Before starting or stopping engine, set park brake, stop the blades and shift transmission into neutral.
- 6. Never attempt to make a wheel height adjustment while engine is running.
- 7. When moving over rough ground or in tall grass, mover must be set in highest cutting position.
- 8. Mow only in daylight or in good artifical light.
- Never operate mower in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk never run.

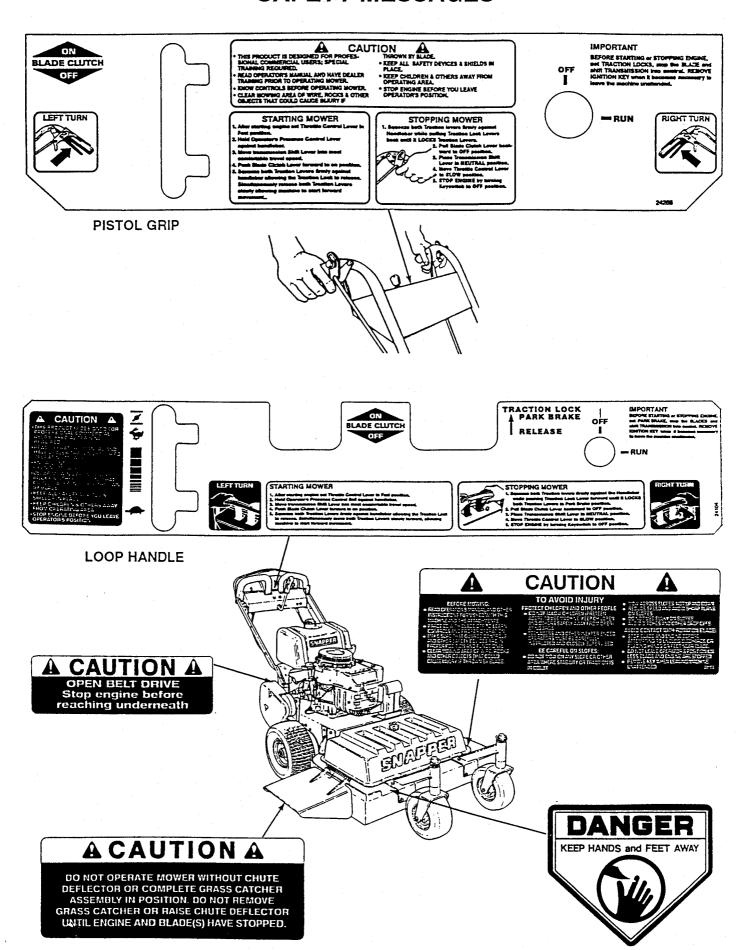
OPERATION

- 1. Do not change engine governor setting or overspeed engine.
- 2. Do not put hands or feet near or under rotating parts. Keep clear of discharge area while engine is running.
- Disengage blade drive when crossing gravel drives, walks, or roads and under any conditions where thrown objects might be a hazard.
- 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.
- 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 blades comes to complete stop before removing grass catcher and/or unclogging discharge chute.
- Mow across slopes, never up-and-down. Exercise
 caution when changing directions on slopes. When
 turning mower on hillsides, always turn toward the up
 hill side of mower for better control and balance. Do
 not mow steep slopes.
- When parking mower, set park, 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. Insure that either the discharge chute or complete grass catcher attachment is installed.

MAINTENANCE AND STORAGE

- Keep all nuts, bolts and screws tight to be sure mower is in safe operating condition.
- 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. Close fuel shut-off valve.
- 3. To reduce fire hazard, keep mower free of grass, leaves, or excessive grease.
- Check grass catcher assembly frequently for wear or deterioration. Replace with new bag if loose seams or tears are evident.
- 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.

SAFETY MESSAGES



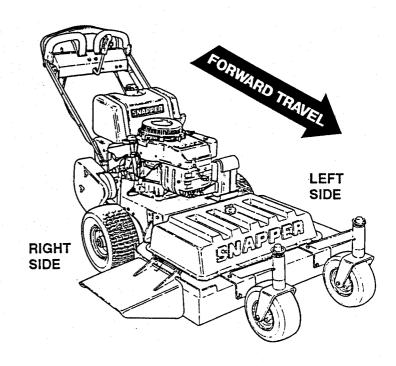
INTRODUCTION

This manual has been prepared for the operators of the Snapper Commercial PRO736 and PRO748 Mid-Size mowers.

Its purpose, aside from recommending operating and routine service requirements, is to promote safety through the use of accepted operating practices. READ, UNDERSTAND AND FOLLOW the safety precautions on page 2 of this manual and all safety messages on page 3 for the Power Unit and Mower Attachments before operating the machine.

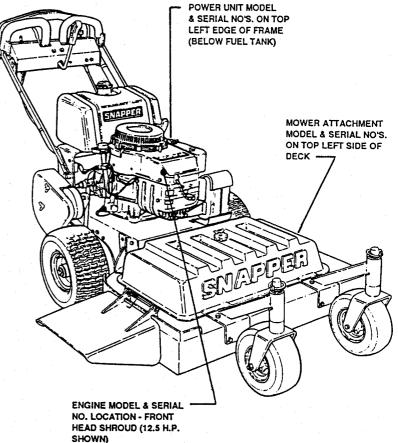
This manual should be considered a permanent part of your machine and should remain with the machine when you sell it.

Right-hand (RH) and left-hand (LH) sides are determined by 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

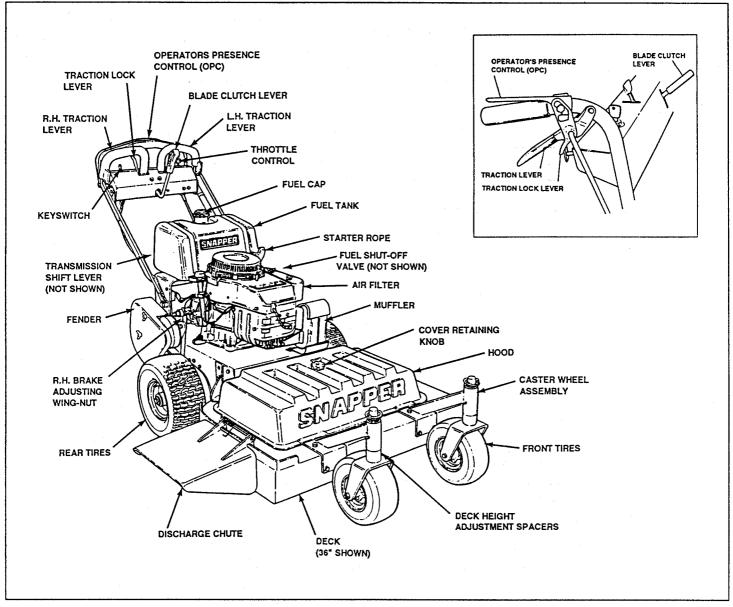


FIGURE 1

NOMENCLATURE

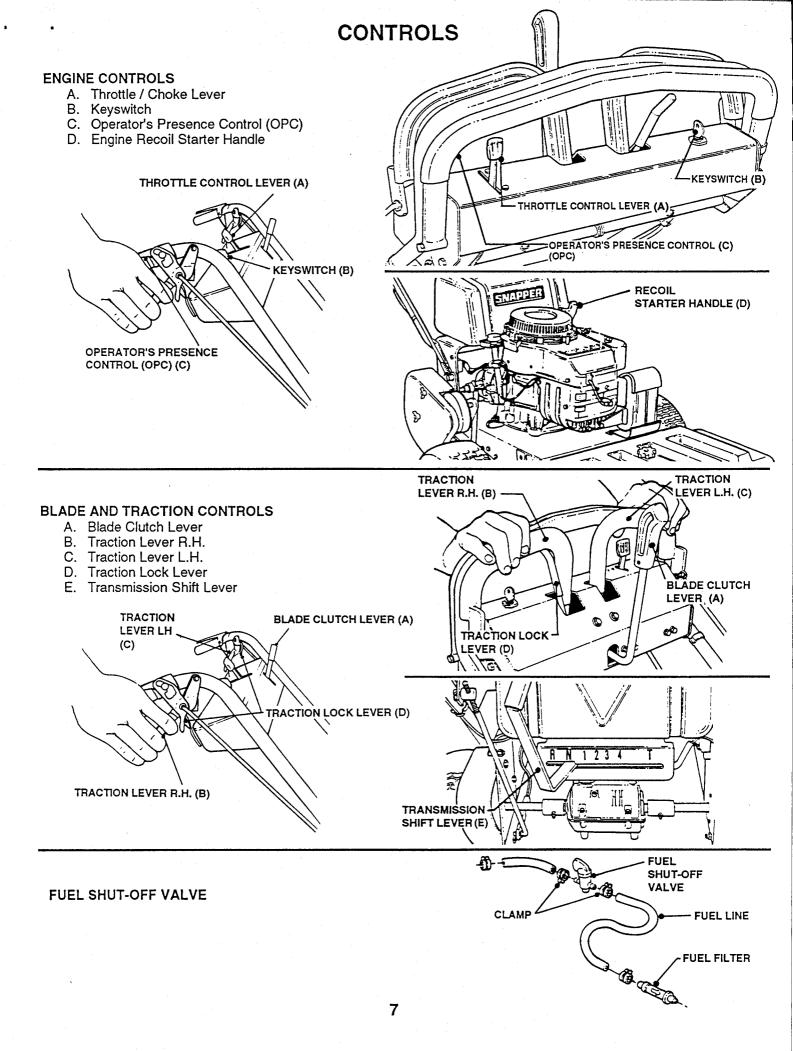
The nomenclature drawing above (Figure 1) shows the essential parts of the SNAPPER Commercial PRO736 & PRO748 Mid-Size Mowers.

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 Owners 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 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, 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.



To EMERGENCY STOP ALWAYS set Traction Lock Lever, disengage Blades, move Throttle Control Lever to SLOW (Turtle) position and stop Engine with Keyswitch, before releasing Operator's Presence Control (OPC).

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

- Squeeze both Traction Levers firmly against the Handlebar to stop forward or reverse motion.
 Using your right hand thumb, push the Traction Lock Lever in Park Brake position. See Figure 2.
- 2. Pull Blade Clutch Lever backward (toward handlebar) to the OFF position. See Figure 2.
- 3. Move Throttle Control Lever to SLOW (turtle) position. See Figure 5.
- 4. **STOP ENGINE** by turning Keyswitch to **OFF.** See Figure 2.

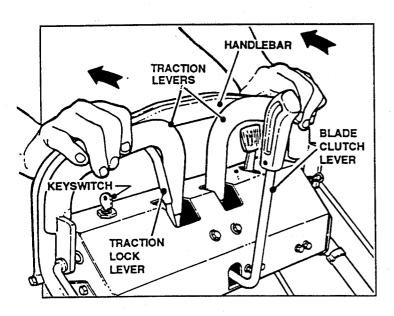


FIGURE 2

EMERGENCY STOP - PISTOL GRIP

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

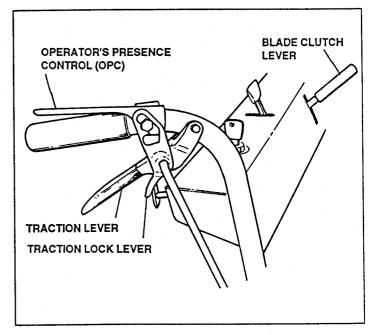


FIGURE 3

NORMAL OPERATING STOP - LOOP HANDLE

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

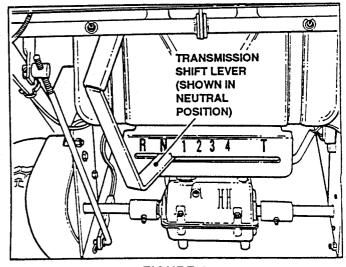


FIGURE 4

- Pull the Blade Clutch Lever 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 Keyswitch to OFF.

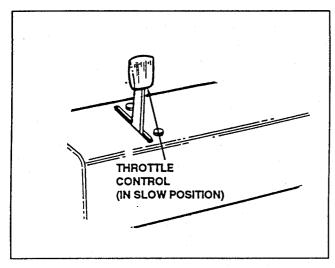


FIGURE 5

NORMAL OPERATING STOP - PISTOL GRIP

 Pull both Traction Levers towards the handlebar 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

NOTE

CLOSE FUEL SHUT-OFF VALVE AT 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 50 psi (max) in front and 28 psi (max) in rear tires.
- 3. Check Guards, Deflector and Belt Covers to make sure all are in place and secure.
- 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

1. DO NOT ADD FUEL WHILE ENGINE IS RUNNING.

2. 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.
- 2a. Pull both Traction Levers toward the Handlebar while pushing Traction Lock Levers forward until it **locks** both Traction Levers in Park Brake position. See Figure 2.
- 2b. Pull both Traction Levers toward the Handlebar 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.

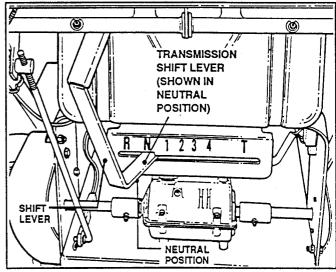


FIGURE 6

 LOOP HANDLE - Pull Blade Clutch Lever backward (toward handlebar) to the OFF position. See Figure 7.

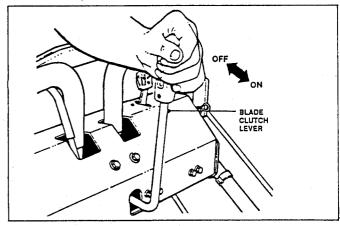


FIGURE 7

4b. PISTOL GRIP - Pull Blade Clutch Lever backward See Figure 8.

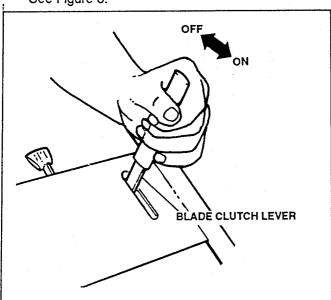


FIGURE 8

- 5. Move Throttle Control Lever to CHOKE IØI position. See Figure 9.
- 6. Turn Keyswitch to RUN position.

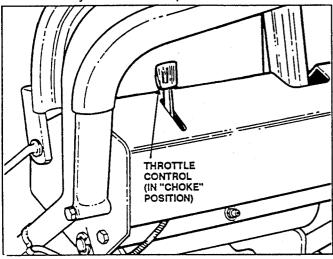


FIGURE 9

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 Lever is in OFF position.

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

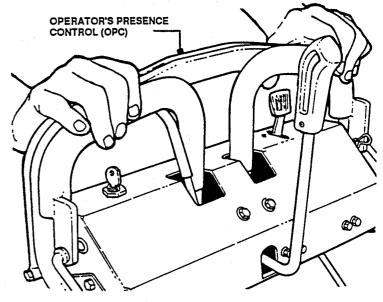


FIGURE 10

8b. PISTOL GRIP - See Figure 11.

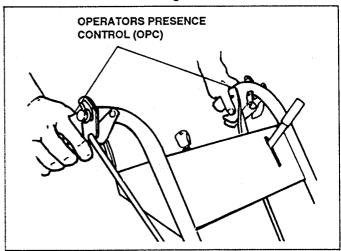


FIGURE 11

- Place Transmission Shift Lever in No. 1 position (first gear) See Figure 6.
- 10a. LOOP HANDLE Push Blade ClutchLever 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 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.

CAUTION

START MOWING WITH A SLOW GROUND SPEED AND GRADUALLY INCREASE SPEED TO DETERMINE THE MOST COMFORTABLE TRAVEL SPEED.

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.

CAUTION

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 LEVER IN OFF POSITION.

WARNING

THE SNAPPER PRO736 & PRO748 MOWERS ARE EQUIPPED WITH A TRANSPORT POSITION ON THE SHIFT SELECTOR PANEL. TRANSPORT POSITION ALLOWS THE MOWER TO TRAVEL FORWARD AT 6 MPH - IT IS NOT TO BE USED WHILE WALKING! - ONLY WHEN A RIDER ATTACHMENT (SULKY) IS PROVIDED FOR USE BEHIND 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.

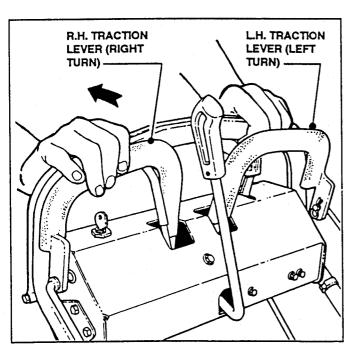


FIGURE 12

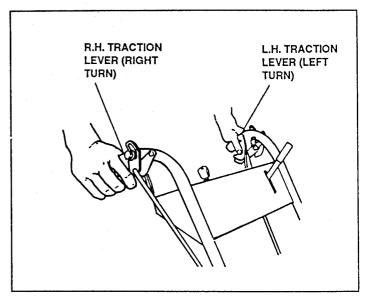


FIGURE 13

 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.

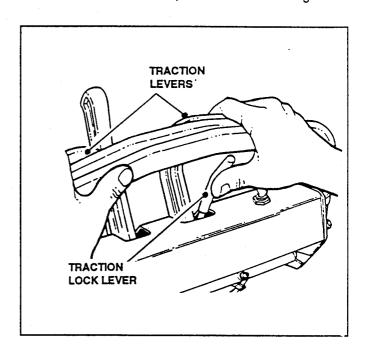


FIGURE 14

a. PISTOL GRIP - TO STOP MOWER, simultaneously squeeze both Traction Levers firm'ly against the handlebar while pulling the Traction Lock Lever rearward with index finger until latched. b. Pull the Blade Clutch Lever backward to the OFF position. See Figure 15.

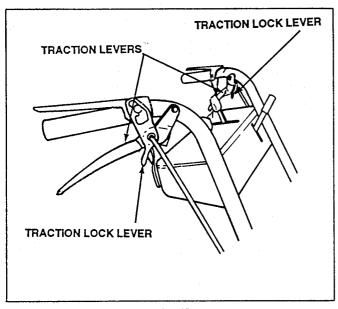


FIGURE 15

- c. Place the Transmission Shift Lever in 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.

STOP ENGINE BEFORE LEAVING OPERATOR'S POSITION. NEVER PARK MOWER ON SLOPES.

REVERSE OPERATION

- 1. To REVERSE DIRECTION OF MOWER, stop Mower and latch Traction Lock Lever (S).
- Pull Blade Clutch Lever backward to the OFF position.
- 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 handlebar 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 handlebar while pushing the Traction Lock Lever forward, until latched. See Figure 14.
- 7b. PISTOL GRIP TO STOP MOWER, simultaneously squeeze both Traction Levers firmly against the handlebar 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. See Figures 16 & 17. When hauling mower, you have two options for parking mower.

- 1. Set Park Brake.
- Engage both Traction Wheel Drives and Shift
 Transmission Lever into No. 1 position (first gear).
 It is recommended that the front of mower be
 placed against object to prevent forward
 movement. When parking mower by using this
 method.

WARNING

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

TRACTION LOCK OPERATION - LOOP HANDLE

- 1. Simultaneously squeeze both Traction Levers toward the handlebar, 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.

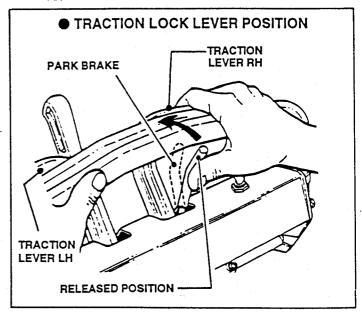


FIGURE 16

TRACTION LOCK OPERATION - PISTOL GRIP

- 1. Simultaneously squeeze both Traction Levers toward the handlebar, to **stop mower movement**.
- 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 handlebar. Using index finger, push Traction Lock Lever forward. Simultaneously release both Traction Levers slowly, allowing machine to start forward movement. See figure 17.

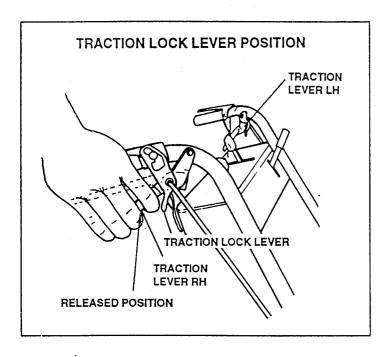


FIGURE 17

TURNING MOWER

DRIVE position BRAKE position

Wheel fully engaged Wheel disengaged and

brake applied

GRADUAL RIGHT TURN

- 1. Release left Traction Lever
- Hold right Traction Lever in intermediate position. See Figures 18 & 19.

TIGHT RIGHT TURN

- 1. Release left Traction Lever
- 2. Hold Right Traction Lever in BRAKE position. See Figures 18 & 19.

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

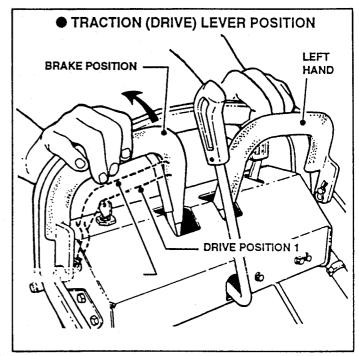


FIGURE 18

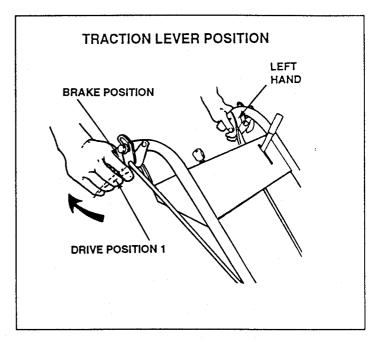


FIGURE 19

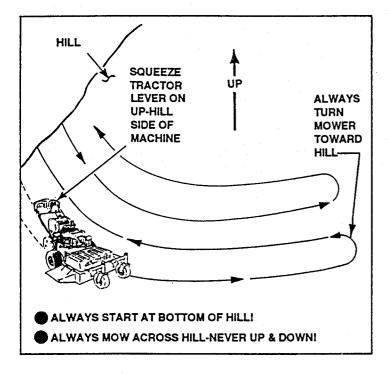
MOWING AND TURNING ON HILLSIDES

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.

CAUTION! DO NOT USE RIDER ATTACHMENT (SULKY) ON SLOPES

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

CAUTION! NEVER PARK MOWER ON SLOPES



ADJUSTING CUTTING HEIGHT

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 three (3) 1/2" and one (1) 1/4" thick spacer. When placed above or below Caster Support Tube, they raise or lower cutting height in 1/4" increments thus providing a "Quick-Adjust" method.

 Remove Retainer Pin from Caster Shaft. See Figure 20.

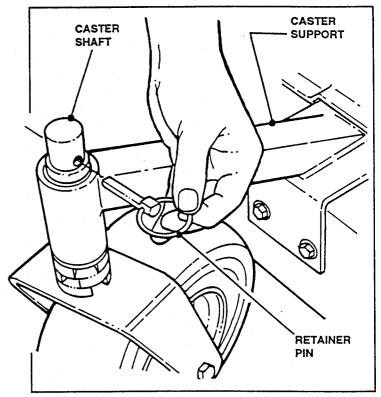


FIGURE 20

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

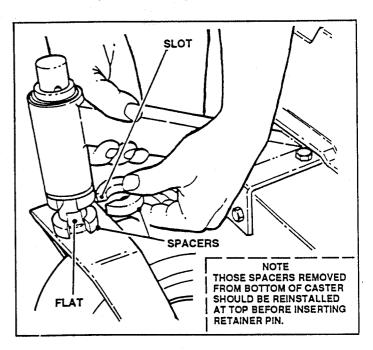


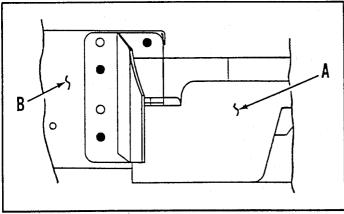
FIGURE 21

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

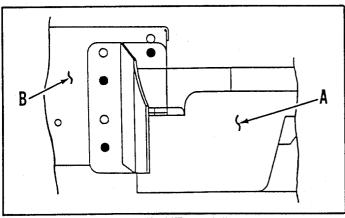
ADJUSTING MOWER (DECK) ATTACHMENT

The Mower Deck has three different positions for attaching it to the Power Unit. The lowest setting provides a cutting height range of 1" to 2-1/2", the middle setting provides a cutting height range of 1-7/8" to 3-3/8", while the highest position provides a cutting height range of 3" to 4-1/2".

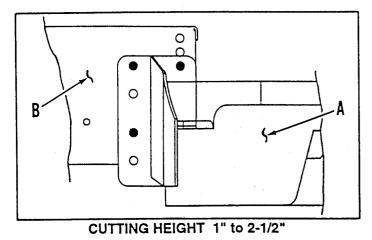
Mower Attachment (A) must be attached to Power Unit (B) with bolts and Nuts provided. Insert Bolts through shaded holes illustrated on drawings below. Tighten six (6) Bolts and Nuts to 80 ft-lbs.



CUTTING HEIGHT 3" to 4-1/2"



CUTTING HEIGHT 1-7/8" to 3-3/8"



When adjusting Mower Attachment for a cutting height range of 1" to 2-1/2", the cutter deck belt must be repositioned to bottom of engine pulley.

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 22

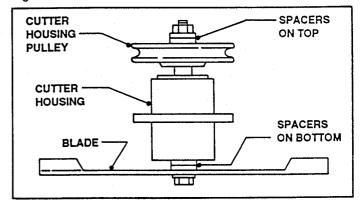


FIGURE 22

NOTE

CHANGING CUTTING HEIGHT OF BLADES DOES NOT CHANGE THE DECK GROUND CLEARANCE. IF AN UNDISIRABLE 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 40-50 ft.-lbs. See Figure 23.

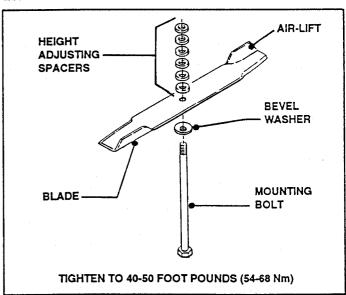


FIGURE 23

ENGINE TROUBLESHOOTING

SYMPTOM	PROBLEM	SOLUTION	PAGE
Engine does not	Key OFF	Turn key to Run.	
start.	Fuel tank empty.	Fill fuel tank.	7
	Fuel shut-off closed	Open fuel shut-off.	9
	Engine throttle control not	Put engine throttle control	7
	at FAST (Rabbit) position	to FAST (Rabbit) position	7,8,9,10
	Choke not closed	Put throttle control in CHOKE INI position. Check Adjustment.	7, 9 See engine manual
	Spark plug wire loose or disconnected.	Connect spark plug wire	See engine manual
	Safety interlock switches out of adjustment.	Adjust switches.	32,33
	Operator presence control switch out of adjustment.	Adjust switches.	32,33
	Blade Clutch Lever 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 in 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.	Clean and set spark plug gap.	See engine manual
	Spark plug bad.	Install new spark plug.	See engine manual
Engine Runs	Spark plug bad.	Install new spark plug.	See engine manual
Erratically.	Spark plug not gapped	Check and gap spark plug gap.	See engine manual
	correctly.	Sap apant plug gap.	occ chighie manual
	Fuel filter plugged or dirty.	Replace fuel filter.	7,19
Engine Idles Poorly.	Diety die filta-		
Engine idles Poorty.	Dirty air filter.	Clean or replace filter.	See engine manual
	Fuel filter plugged.	Replace fuel filter.	7,19
Engine Overheats.	Engine oil low in crankcase.	Add oil.	See engine manual
Machine Vibrates	Blade mounting bolt loose.	Tighten blade mounting bolt.	15,31,32
Excessive	Blade out of balance.	Sharpen and Balance Blade.	31,32
	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
		, -p	-, -

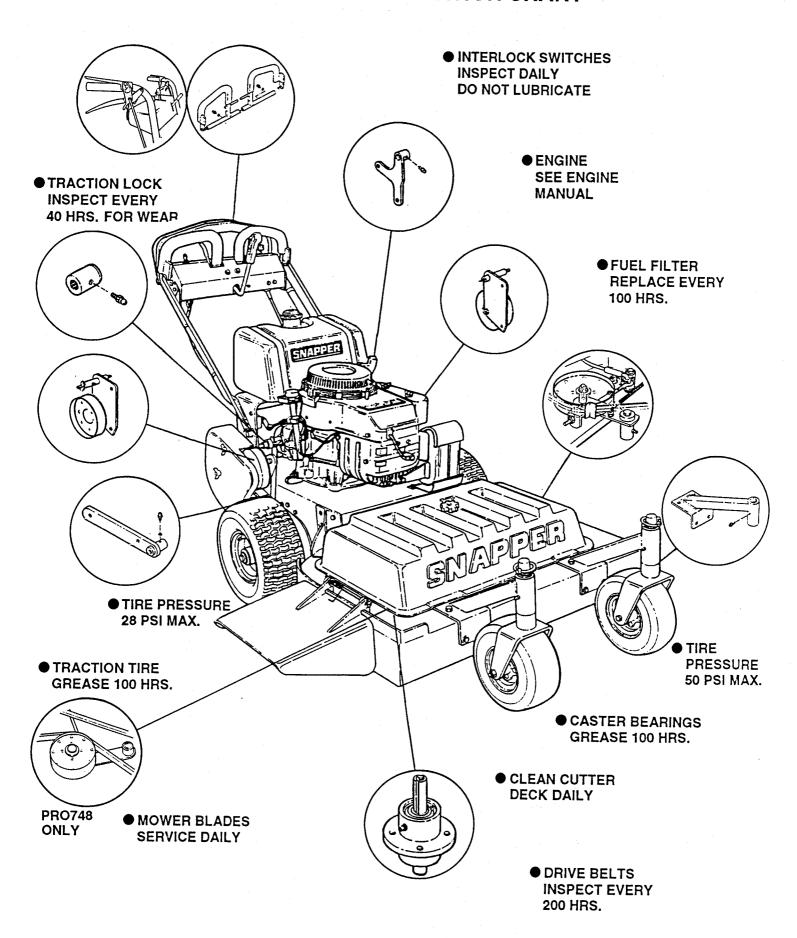
MOWER TROUBLESHOOTING

SYMPTOM	PROBLEM	SOLUTION	PAGE
Mower does not move	Transmission in neutral	Select gear	7,8,9,10
when traction levers released.	Traction control rod adjustment	Adjust rod	20
Mower does not track	Slipping or broken traction belt	Replace or adjust belt	28,29
straight	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	21 - 25, 29 - 31
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 egual number of spacers	14,15
Mower not cutting full width.	Broken or slipping blade belt	Replace or adjust belt	21 - 25, 29 - 31
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
Blades don't stop in 7 sec's. after Disengaged.	ldler Return Spring broken	Replace Idler Return Spring	21,22
	Brake/Belt Guide Spring broken	Replace Brake/Belt Guide Spring	22
	Blade Brake out of adjustment	Adjust Blade Brake Carriage Bolt	22

TRANSMISSION TROUBLESHOOTING

SYMPTOM	PROBLEM	SOLUTION	PAGE
Unit Is Noisy	Gearing is overly noisy - chatter, etc.	Check Oil Level	27, Refer to dealer
	Worn Gears	Remove and Replace with New Gears.	27, Refer to dealer
	Worn Bearings - mainly input shaft ball bearing.	Replace Bearing.	27, Refer to dealer
Unit Jumps Out Of Gear	Teeth of gears are worn beyond tolerances.	Replace Worn Gears.	27, Refer to dealer
	Spring in shifter fork weak or broken.	Replace Spring	27, Refer to dealer
	Attaching screws for shifter lever and housing assembly not properly torqued.	Torque screws to 10 ftlbs.	27

SERVICE & LUBRICATION CHART



SERVICE & LUBRICATION

HOURS	PROCEDURE	COMMENTS	PAGE	
BREAK-IN	Check all fasteners for proper tightness.		6	
	Change Engine Oil and Filter at 5 hours	See engine manual	See engine manual	
8 HOURS (Daily)	Check / Change Engine Oil	Change Oil if extreme dusty conditions	See engine manual	
	Clean Air Filter	More often if needed	See engine manual	
	Clean Blower Screen	More often if needed	See engine manual	
	Remove Debris from under Belt Cover	More often if needed	6	
	Sharpen Cutter Blades	Tighten Cap Screw to 40-50 ft-lbs	31	
	Grease Cutter Spindle Bearings	Use Chevron SRI Grease or equal	18	
	Grease Transmission Couplings	One Shot General Purpose Grease	27	
40 HOURS	Check Tire Pressure	Add or Adjust as Required	18	
(Weekly)	Check Safety Interlock System	Inspect Switches for ease of Operation	32	
	Lube Traction (Drive) Levers	One Shot General Purpose Grease	18	
	Inspect Traction Lock for Wear	Replace if Worn	6,7,12,13,18	
100 HOURS	Change Engine Oil	More often if needed	See engine manual	
(Biweekly)	Replace Air Filter	More often if needed	See engine manual	
	Grease Caster Wheel Bearings	General Purpose Grease	18	
	Grease Caster Wheel Pivot	General Purpose Grease	18	
	Grease Traction Wheels	General Purpose Grease	18	
	Grease Idler Arm Pivots	General Purpose Grease	18	
	Fuel Filter	Replace with Snapper P/N 1-4359	7	
200 HOURS	Check all fasteners for proper tightness	See Torque Specifications	26	
(Monthly)	Change Engine Oil Filter	See engine manual	See engine manual	
• • •	Clean and Adjust Spark Plugs	See engine manual	See engine manual	
	Check Belt Tension	Coc engine mandai	28 - 31	
	Lube Controls and Linkages	Use Medium Duty Oil	18	
	Eddo Oomtolo and Ellinages	COC Mediani Daty Oil	10	

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:

- Operate mower on lever terrain with Transmission Shift Lever in No.1 position and Blade Clutch Lever in OFF position. Determine which brake requires adjustment.
- 2. STOP MOWER and place both Traction Drives in PARK BRAKE position.
- 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 24.

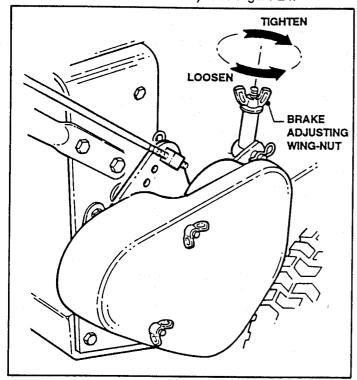


FIGURE 24

TRACTION LEVERS / RODS

If the Traction Wheel Drive Belts become slack or if new Belts have been installed, the Traction Levers should be adjusted as follows:

LOOP HANDLE

- Turn Engine OFF
- 2. Remove Hair Pin from Traction Rod.
- 3. Remove Rod from Traction Lever.
- 4. Shift Transmission into No. 1 gear and pull back on machine to set Traction Belts.
- Push forward on Traction Lever while adjusting Rod until it is 3/16" longer than hole position in Traction Lever. Insert Traction Rod into Traction Lever and secure with hair pin. Repeat for both Traction Rods.

6. Traction Wheel Brakes may need to be adjusted after Traction Rods. See Steering / Brake section above and Figure 25.

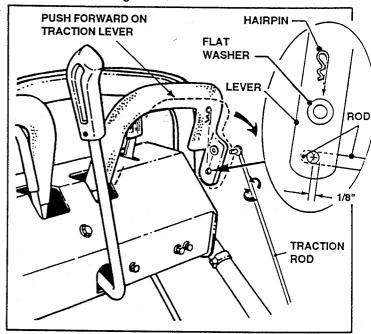


FIGURE 25

PISTOL GRIP

- Turn Engine OFF
- 2. Remove Hair Pin from lower end of Traction Rod.
- 3. Remove Swivel from Traction Rod.
- 4. Adjust swivel to place upper end of Traction Rod .12/.18" from slot end in Traction Lock.
- 5. Insert Swivel into Traction Arm and secure with Hair Pin. Repeat for both sides. Traction Wheel Brakes may need to be readjusted after Traction Rod adjustment. See Figure 26.

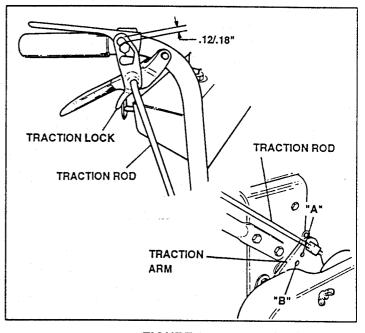


FIGURE 26

LOOP HANDLE AND PISTOL GRIP

If operation requires a traction neutral position between engaged and brake for maneuvering the machine in tight areas, additional Traction Rod adjustments are available.

Connecting the Lower Traction Rod Swivel into holes (A or B) in Figures 25 or 26 will provide some neutral band (A) or a wide neutral band (B). Hand force required on the Traction Lever will increase substantially. The Traction Rod length does not need changing; however, the Steering Brakes will require adjustment for best performance.

TRACTION PULLEY SCRAPER

When properly adjusted, Scraper should point toward ground at approximately 45 degree angle. To adjust, proceed as follows:

- 1. Loosen Scraper nut located on inside of rear deck.
- 2. Adjust Scraper to proper degree. Retighten nut. See Figure 27.

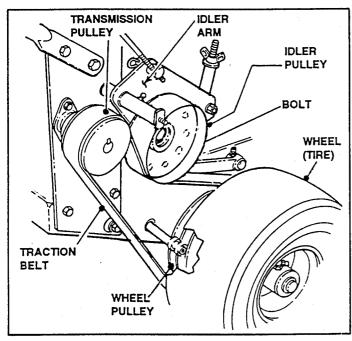


FIGURE 27

CUTTER DECK BELT - PRO 736 and PRO 748

- 1. **STOP ENGINE!** Remove Hood Knob(s) and Hood.
- Check clearance between Blade Clutch Lever and Control Console with Blade Clutch Lever in the OFF and ON position. There should be a 1/16" minimum at bottom of slot (ON position) and top of slot (OFF position). Adjust if necessary per procedure BLADE CLUTCH LEVER. See Figure 28.

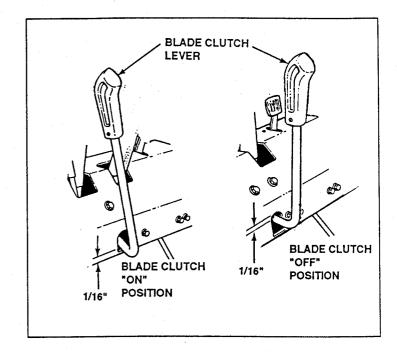


FIGURE 28

3. Pull Blade Clutch Lever rearward to the **ON** position and check for proper Cutter Deck Belt tension.

PRO 736: With 10 pounds of pressure being applied between the right and left pulleys, the Belt should move 1/2". DO NOT OVER TENSION BELT! See Figure 29.

PRO 748: With 10 pounds of pressure being applied between the center and left pulleys, the Belt should move 1/2". DO NOTOVER TENSION BELT! See Figure 29.

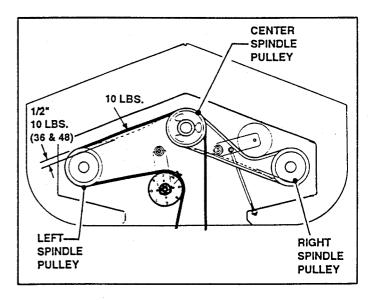


FIGURE 29

4. Cutter Deck Belt adjustment is made by loosening (turning counter-clockwise) Jam-nut (A) and Idler Return Nut (C) then tightening/loosening Nut (B) until proper belt tension is achieved (see item No.1). After proper belt tension is achieved, tighten (turning clockwise) Idler Return Nut (c) until it is tight against Idler Angle Bracket (D). See Figure 30.

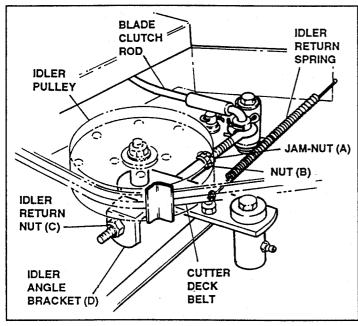
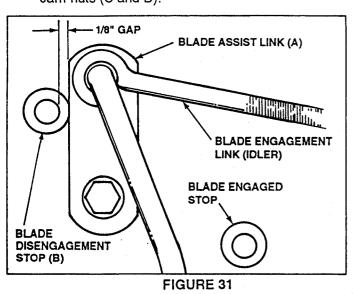


FIGURE 30

5. Check Blade Brake Adjustment (PRO 736) by pulling Blade Clutch Lever rearward to the OFF position. See Figure 7.. Check to see if there is a 1/8" gap between Blade Assist Link (A) and Blade Disengagement Stop (B). See Figure 31. If the gap is greater or less than 1/8", then adjust Brake Arm Carriage Bolt (E) as follows: Loosen Jam-nut (C) and loosen/tighten Brake Arm Carriage Bolt (E) (See Figure 32.) until a 1/8" gap is achieved between the Blade Assist Link and Blade Disengagement Stop (See Figure 31.) Tighten Jam-nuts (C and D).



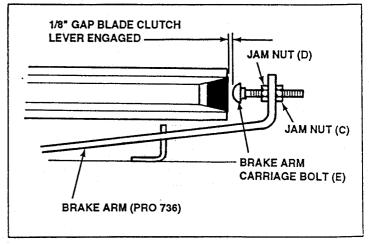


FIGURE 32

Check Blade Brake Adjustment (PRO 748) by pulling Blade Clutch Lever rearward to the OFF position. See Figure 7.. Check to see if there is a 1/8" gap between Blade Assist Link (A) and Blade Disengagement Stop (B). See Figure 31. If the gap is greater or less than 1/8", then adjust Brake Arm Carriage Bolt (G) as follows: Loosen Jam-nut (F) and loosen/tighten Brake Arm Carriage Bolt (G) (See Figure 33.) until a 1/8" gap is achieved between the Blade Assist Link and Blade Disengagement Stop (See Figure 31.) Tighten Jam-nut (F).

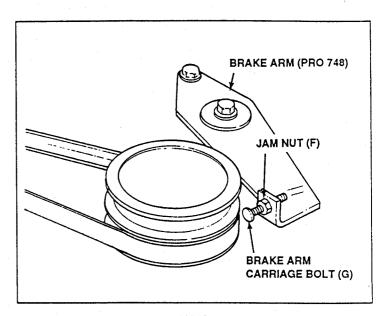


FIGURE 33

6. After all adjustments have been accomplished, Run mower and cycle the Blade Clutch Lever from OFF to ON position and then back to OFF position. If the Spindle Pulleys DO NOT STOP COMPLETELY IN 7 SECONDS or less, STOP ENGINE and recheck adjustments as per procedure No. 5 (above), then repeat procedure No. 6.

NOTE

Check and adjust, if necessary, the Blade Brake Arm Carriage Bolt every time the Blade Belt is adjusted.

CUTTER SPINDLE PULLEY HEIGHT - PRO 736 and PRO 748

- STOP ENGINE! Push Brake Clutch Lever forward to ON position.
- 2. Remove Hood Knob(s) and Hood(s).
- 3. Check Spindle Pulley height by measuring the height from the top of the deck to the top of the Cutter Deck Belt. See Figure 34.

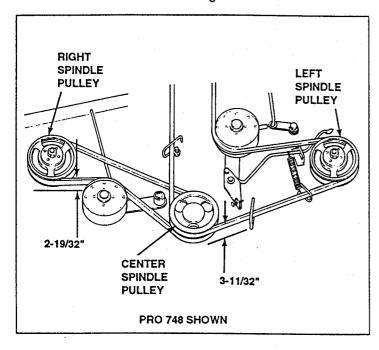


FIGURE 34

NOTE!

When checking height of Spindle Pulley, measure height as close to Spindle as possible

Spindle Pulley		ulley Height PRO 748
Right	3-11/32"	3-11/32"
Center	N/A	3-11/32"
Left	3-11/32"	2-19/32"

- 4. Adjust Spindle Pulley height if necessary.
- 5. Pull Brake Clutch Lever rearward to OFF position.

ENGINE BELT GUIDE - PRO 748

- 1. **STOP ENGINE!** Push Brake Clutch Lever forward to **ON** position
- Check clearance between Cutter Deck Belt (A) and Belt Support (B), if the clearance is greater or less than 3/16" adjust Belt Support (B). Belt Support (B) is positioned beneath Cutter Deck Belt (A). See Figure 35.

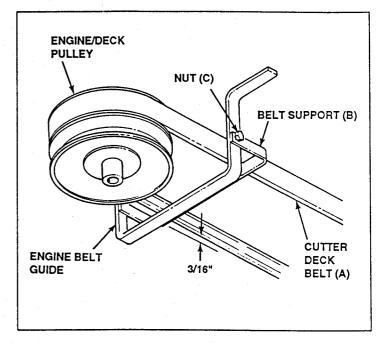


FIGURE 35

- To adjust Belt Support (B), loosen both Nuts (C) then move Belt Support (B) up or down until there is 3/16" clearance between Cutter Deck Belt (A) and Belt Support (B). See Figure 35.
- 4. Pull Brake Clutch Lever rearward to OFF position.

RIGHT CUTTER DECK BELT - PRO748

- STOP ENGINE! Cutter Deck Belt should move 1/2" with 10 pounds of pressure applied to Belt between Center and Right Spindle Pulleys. DO NOT OVER TENSION BELT! See Figure 36.
- 2. Belt adjustment is made by tightening/loosening nut (A) on Idler Linkage. See Figure 36.

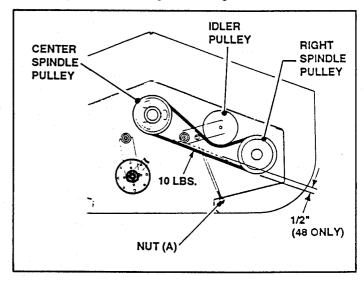


FIGURE 36

BLADE CLUTCH LEVER

 STOP ENGINE! Engage Blade Clutch Lever and check for proper Blade Clutch Lever position. The Blade Clutch Lever position can be adjusted for operator comfort by turning swivel (A) up or down on Blade Clutch Rod for desired setting. See Figure 37.

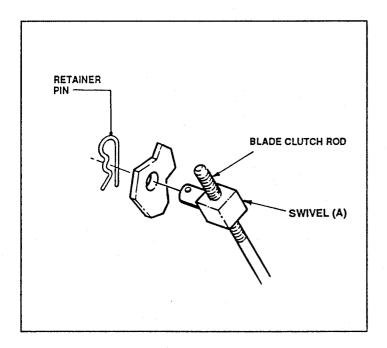


FIGURE 37

 After adjusting Blade Clutch Lever check clearance between Blade Clutch Lever and Control Console with Blade Clutch lever in the OFF and ON position. There should be 1/16" minimum at bottom of slot (ON position) and top of slot (OFF position). Readjust if necessary. See Figure 28.

TRANSMISSION DRIVE BELT

- STOP ENGINE! Transmission Belt should move 3/16" with five pounds of pressure applied to the Belt between Engine and Transmission pulleys. DO NOT OVER TENSION BELT! See Figure 38.
- Belt adjustment is made by loosening nut on Idler Pulley mounting bolt and sliding Idler Pulley to tighten or loosen Belt. Tighten nut to secure Idler Pulley in new position.

HANDLE HEIGHT

For operator comfort, the Mower Handle is adjustable to four different heights. The Mower Handle is assembled in second hole from bottom at the factory. If Handle position is not comfortable to the operator, adjustment can be made as follows:

- 1. STOP ENGINE! Pull Blade Clutch Lever backwards (toward handlebar) to the OFF position.
- Squeeze both Traction Levers firmly against handlebar, allowing the Traction Lock to release. Simultaneously move both Traction Levers forward, allowing tension to be removed from Traction Rods. See Figures 39 and 40.

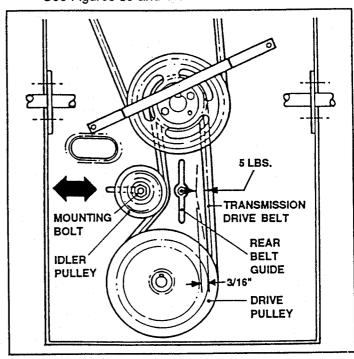


FIGURE 38

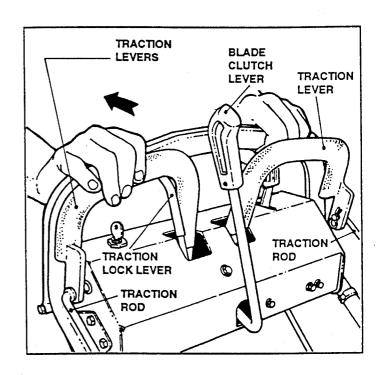
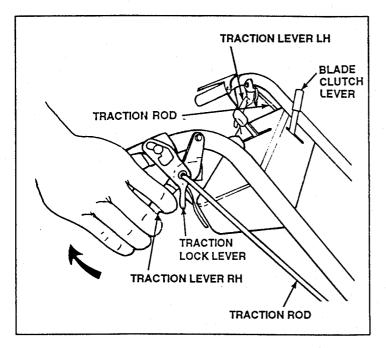


FIGURE 39



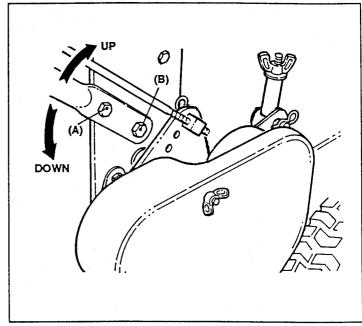


FIGURE 40

3. Loosen Upper Bolt and Nut (A) on both sides. Remove Bolt and Nut (B) on both sides. Pivot Handle up or down while placing bolt into selected hole position. Secure Bolts and Nuts. See Figure 41.

FIGURE 41

4. Traction Rods, Brakes and Blade Clutch lever must be adjusted. For instructions on making these control adjustments, refer to table of contents listed under adjustments.

THROTTLE CONTROL

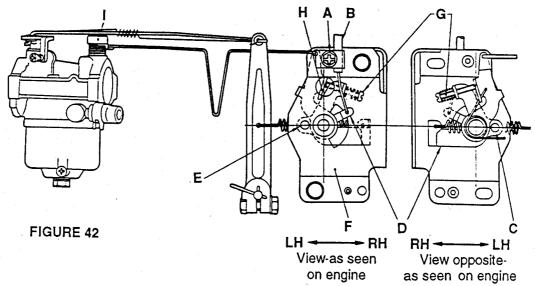
Engine Speed on the Kawasaki Engine can be adjusted as follows:

- 1. SET PARK BRAKE, STOP BLADES AND ENGINE! Place Throttle Control Lever in FAST detent (RABBIT) position. Loosen screw (A).
- 2. Adjust cable (B) until a 15/64" drill bit can be placed into hole (C) of lever (D) and into hole (E) of control plate (F).
- 3. Check that Throttle Control Lever is in FAST detent (RABBIT) position.
- 4. Tighten screw (A). See Figure 42.

CHOKE

Engine Choke on the Kawasaki Engine can be adjusted as follows:

- 1. Place Throttle Control Lever in CHOKE 101 position.
- 2. Place 15/64" drill bit through both holes (C & E).
- 3. Turn screw (G) counterclockwise with screwdriver until screw clears Choke Lever (H).
- 4. Turn screw (G) clockwise until it just touches Choke Lever (H). Be sure choke valve (I) is completely closed when Throttle Control Lever is in Choke position.



FASTENER TORQUE RECOMMENDATIONS (English)

	ws, Nuts and Faster into Cast Iron or Ste			Grade 2 or 5 Fasteners into	
				Aluminum	
	Grade 2	Grade 5	Grade 8	Aluminum	Plastic
Tightening	Torque: in.lbs. (N	·m) + or - 20%			
Size 8-32	20 (0.0)	05 (0.0)			
0-32 10-24	20 (2.3) 32 (3.6)	25 (2.8)		20 (2.3)	
12-14	32 (3.0)	40 (4.5)		32 (3.6)	05 40 0
1/4-20	70 (7.9)	115 (13.0)	165 (18.7)	70 (7.0)	25 (2.8)
1/4-28	85 (9.6)	140 (5.8)	200 (22.6)	70 (7.9)	
5/16-18	150 (17.0)	250 (28.3)	350 (39.6)	150 (17.0)	
Tightening	Torque: ft.lbs. (N	m) + or - 20%		***************************************	
Size	·	•			
3/8-16		35 (47.5)	50 (67.8)		
3/8-24	55 (57 5)	40 (54.2)	60 (81.4)		
1/2-13	50 (67.8)	80 (108.5)	115 (155.9)		
5/8-18	140 (189.8)	230 (311.9)	330 (447.5)		

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. MAKE 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 Enginegasoline.

GENERAL TRANSMISSION SERVICING

- 1. 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 set screws and/or sheared keys in pulleys.
 - d. Oil saturated drive belts.
 - e. Shaft coupling worn.
 - Transmission shift lever secure.

TRANSMISSION

The Peerless 700 Series Transmission requires no routine maintenance. However, the following items should be checked regularly: See Figure 44.

- 1. Transmission Shift Lever Bolt Torque to 10 ft.-lbs.
- 2. Transmission Couplings Lubricate and inspect for
- 3. Noisy if transmission becomes noisy, see transmission troubleshooting on page 17.

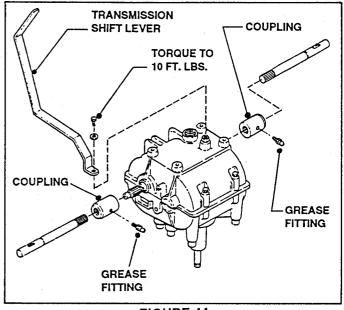


FIGURE 44

TRANSMISSION LUBE

Should the Transmission ever become noisy due to needing lube, use Bentonite Grease, 12 ounces maximum. To add transmission lube, remove interlock switch from transmission and squeeze lube through switch mounting hole. See Figure 45.

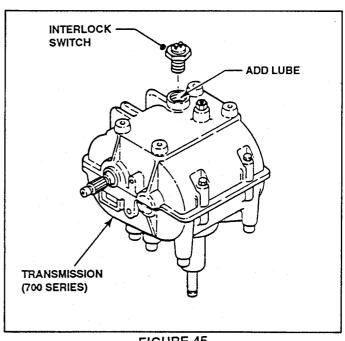


FIGURE 45

POWER UNIT SERVICE

TRANSMISSION BELT REMOVAL

- STOP ENGINE! Loosen nut on Idler Mounting Bolt and slide Idler Pulley away from Belt.
- Loosen nut on Belt Guide at rear of Engine Pulley and remove cutter belt from engine pulley.
- 3. Remove Transmission Belt. See Figure 46.

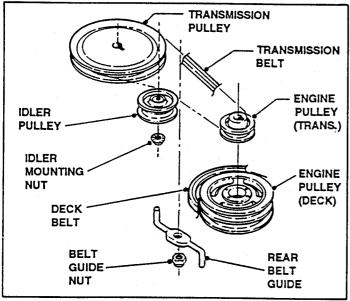


FIGURE 46

TRANSMISSION BELT INSTALLATION

- 1. **STOP ENGINE!** Place Transmission Belt on Engine and Transmission Pullevs.
- Slide Idler Pulley toward backside of Belt until Belt moves 3/16" with five pounds of pressure applied to Belt between Engine and Transmission Pulleys. Tighten nut to secure Idler Pulley. See Figure 47.
- 3. Place Cutter Deck Belt on Engine Pulley.
- Tighten nut on Belt Guide at rear of Engine Pulley. See Figures 46 & 47.

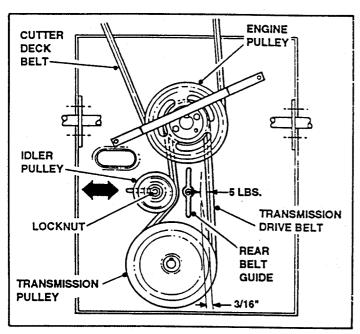


FIGURE 47

TRACTION BELT REMOVAL

- STOP ENGINE! Remove two wing-nuts retaining fender. Remove fender. See Figure 48
- 2. Remove Traction Idler Pulley from Idler Arm.
- 3. Remove Traction Belt from Transmission Output Pulley.
- 4. Lay Traction Belt flat on ground (around tire) and roll Mower Wheel over Traction Belt, removing Traction Belt from machine.

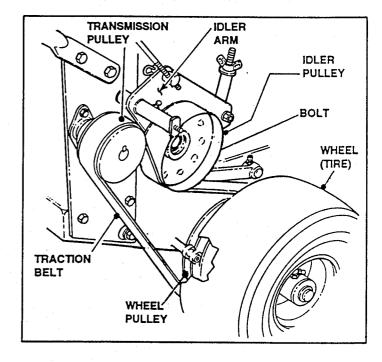


FIGURE 48

TRACTION BELT INSTALLATION

- STOP ENGINE! Lay Traction Belt flat on ground in front of Traction Wheel, roll Traction Wheel over Traction Belt. See Figure 49.
- 2. Place Traction Belt on Wheel Pulley followed by Transmission Output Pulley.
- 3. Reinstall Traction Idler Pulley with Traction Belt under Idler Pulley, tighten retaining Bolt and Nut
- 4. Reinstall Fender and tighten two wing-nuts.
- Adjust Traction Rod and Brake Rod as necessary. See ADJUSTMENTS STEERING / BRAKES and TRACTION LEVERS / RODS Figures 24, 25,or, 26.

MOWER ATTACHMENT SERVICE

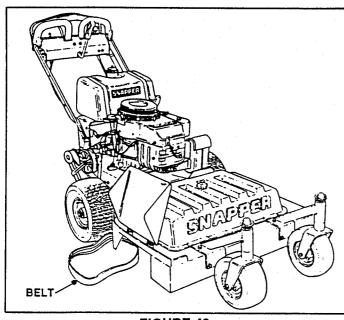


FIGURE 49

CUTTER DECK BELT REMOVAL - PRO 736

- 1. STOP ENGINE! Pull Brake Clutch Lever rearward to OFF position.
- 2. Remove Hood Knob and Hood.
- 3. Loosen Nut (A) retaining Belt Keeper (B) at rear of Engine/Deck Pulley and remove Cutter Deck Belt from Engine/Deck Pulley. See Figure 50.

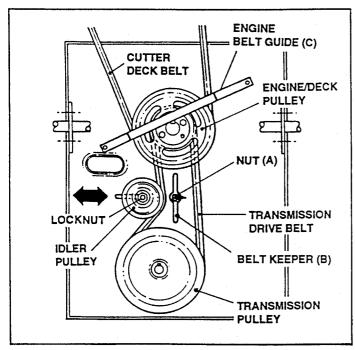


FIGURE 50

- 4. Pivot Brake/Belt Guide (A) away from left Spindle Pulley, while removing Cutter Deck Belt from left Spindle Pulley. See Figure 51.
- Pull Brake Arm (B) outward off right Spindle Pulley, while removing Cutter Deck Belt from right Spindle Pulley. See Figure 51.

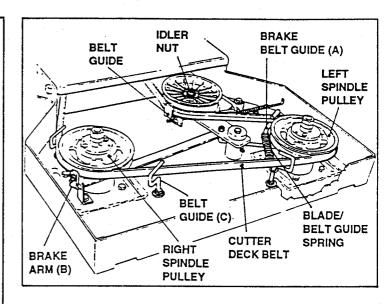


FIGURE 51

CUTTER DECK BELT INSTALLATION - PRO 736

 STOP ENGINE! From front of Cutter Deck, slide Cutter Deck Belt thru Engine Belt Guide (C) toward Engine/Deck Pulley. Place Cutter Deck Belt around Engine/Deck Pulley. See Figure 50.

NOTE

For cutting height range of 1" to 2-1/2", the Cutter Deck Belt must be installed on bottom groove of Engine/Deck pulley.

2. Tighten Nut (A) on Belt Keeper (B) at rear of Engine/Deck Pulley. See Figure 52.

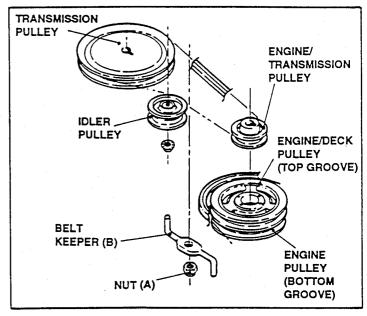


FIGURE 52

MOWER ATTACHMENT SERVICE

- 3. Pull Brake Arm (B) outward off right Spindle Pulley, while installing Cutter Deck Belt on right Spindle Pulley. See Figure 51.
- 4. Pivot Brake/Belt Guide (A) away from left Spindle Pulley, while installing Cutter Deck Belt on left Spindle Pulley. Make sure Cutter Deck Belt is placed in loop of Belt Guide (C), DO NOT allow Cutter Deck Belt to contact Belt Guides (C) when Belt is turning. See Figure 51.
- Adjust Cutter Deck Belt tension. See Figures 29 & 30.
- 6. Adjust Blade Brake. See Figures 31 & 32.
- 7. Reinstall Hood and Hood Knobs and tighten Hood Knobs.

CUTTER DECK BELT REMOVAL - PRO 748

- STOP ENGINE! Pull Brake Clutch Lever rearward to OFF position.
- 2. Remove Hood Knobs and Hood
- 3. Loosen Nut (A) retaining Belt Keeper (B) at rear of Engine/Deck Pulley and remove Cutter Deck Belt from Engine/Deck Pulley. See Figure 50.
- 4. Pivot Brake/Belt Guide (C) away from left Spindle Pulley, while removing Cutter Deck Belt from left Spindle Pulley (F). See Figure 53.

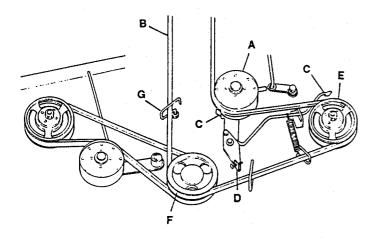


FIGURE 53

 Pull Brake Arm (D) outward off center Spindle Pulley, while removing Cutter Deck Belt from center Spindle Pulley (F). See Figure 53.

CUTTER DECK BELT INSTALLATION - PRO 748

 STOP ENGINE! From front of Cutter Deck, slide Cutter Deck Belt thru Engine Belt Guide (C) toward Engine/Deck Pulley, and place Cutter Deck Belt around Engine/Deck Pulley. See Figure 50.

NOTE

For cutting height range of 1" to 2-1/2", the Cutter Deck Belt must be installed on bottom groove of Engine/Deck pulley. See Figure 52. Also reset adjustment of Engine Belt Guide. See ADJUSTMENTS: ENGINE BELT GUIDE (PRO 748).

- 2. Tighten Nut (A) on Belt Keeper (B) at rear of Engine/Deck Pulley. See Figure 52.
- 3. Pull Brake Arm (D) outward off Spindle Pulley, while installing Cutter Deck on center Spindle Pulley (F). See Figure 53.
- 4. Pivot Brake/Belt Guide (C) away from left Spindle Pulley, while installing Cutter Deck Belt on left Spindle Pulley. Make sure Cutter Deck Belt is placed in loop of Belt Guide (G), DO NOT allow Cutter Deck Belt to contact Belt Guides (G) when Belt is turning. See Figure 53.
- 5. Adjust Cutter Deck Belt tension. See Figures 29 & 30.
- 6. Adjust Blade Brake . See Figures 31 & 32.
- 7. Reinstall Hood and Hood Knobs and tighten Hood Knobs.

SPINDLE TO SPINDLE BELT REMOVAL - PRO 748

- STOP ENGINE! Pull Brake Clutch Lever rearward to OFF position.
- 2. Remove Hood Knobs and Hood.
- 3. Pull Brake Arm (D) outward off center Spindle Pulley, while removing Cutter Deck Belt from center Spindle Pulley (F). See Figure 53.
- 4. Loosen Nut (J) on Belt Adjusting Rod (H) until Belt (G) can be removed from center and fight Spindle Pulleys (F and I). See Figure 54.

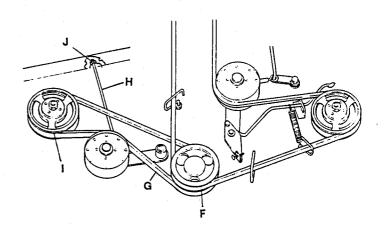


FIGURE 54

MOWER ATTACHMENT SERVICE

SPINDLE TO SPINDLE BELT INSTALLATION - PRO 748

- 1. STOP ENGINE! Pull Brake Clutch Lever rearward to OFF position.
- 2. Place Belt (G) on right center Spindle Pulleys (F and I).
- 3. Tighten Nut (J) on Adjusting Rod (H) to tension Belt (G). See ADJUSTMENTS: RIGHT CUTTER DECK BELT procedures, Figure 35.
- 4. Pull Brake Arm (D) outward off center Spindle Pulley, while installing Cutter Deck Belt on center Spindle Pulley (F). See Figure 53.
- Reinstall Hood and Hood Knobs and tighten Hood Knobs.

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 55.

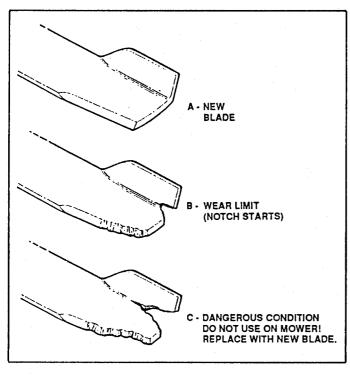


FIGURE 55

REMOVE AND SHARPEN BLADES

CAUTION! Stop Engine, Disconnect Spark Plug(s) and Remove Ignition Key.

- 1. Using two 15/16" box end wrenches (one on each end of spindle), remove Blade Bolt and Blade.
- 2. Inspect Blade. If it is cracked, bent or badly worn, replace it with a new blade. See Figure 56.

WARNING! "Universal" Blades may adversely affect mower performance and/or safety.

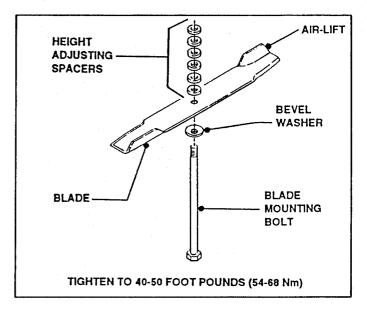


FIGURE 56

If Blades are in good condition, sharpen at an angle of 22-28 degrees in about 2-1/2 " from tip. See Figure 57. Leave a 1/64" dull tip on cutting edge. A razor sharp edge will chip easily and dull quickly.

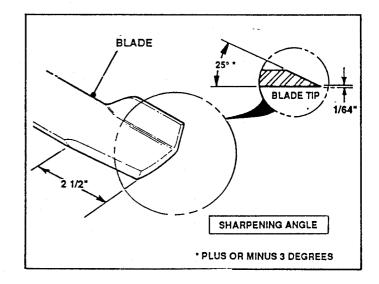


FIGURE 57

CAUTION! Balance Blade after it is sharpened.

- 1. Clean Blade.
- 2. Put Nail (A) in Vice (B). See Figure 58.
- 3. Set Blade (C) on Nail.
- 4. Remove material from heavy end of Blade until it balances.
- 5. Install Blade with retaining hardware and tighten bolt to 40-50 ft.-lbs. See Figures 56 & 57.

ELECTRICAL

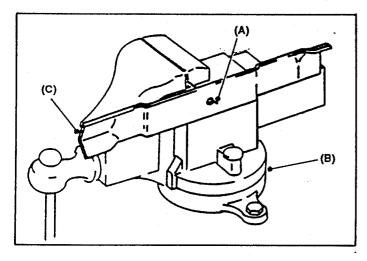


FIGURE 58

OPERATOR'S PRESENCE CONTROL (OPC) SWITCH ADJUSTMENT

When properly adjusted, the OPC Switch should cause Engine to STOP when Operator's Presence Control is released if Transmission is in Forward/Reverse Gear or Blade Clutch Lever is in **ON** Position. To adjust, proceed as follows:

LOOP HANDLE

- Inspect OPC Bail tab and Switch for proper adjustment. When OPC Bail is released, the OPC Bail tab should clear Switch button.
- To adjust OPC Bail Switch, loosen screw (A) and slide Switch to proper position. Clearance between tab and Switch button when OPC Bail is released should be 1/32" to 1/16")
- 3. OPC Bail travel can be adjusted by loosening mounting bolts (B) and moving Bail pivot forward/backward. See Figure 59.

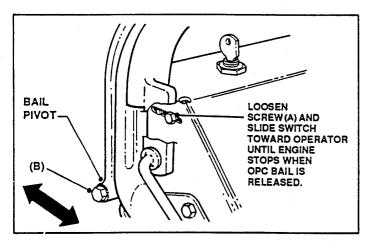


FIGURE 59

- 4. Set Park Brake, STOP Blades and Shift Transmission into NEUTRAL Start Engine.
- 5. Hold OPC Bail against handlebar.

- 6. Shift Transmission Shift Lever to first (No. 1) gear. Engine should continue to run, if not, readjust OPC Bail Switch and/or inspect Transmission Switch.
- With Transmission in first gear, release OPC Bail. Engine should start to die, if not, inspect Transmission Interlock Switch and/or readjust OPC Bail Switch.
- 8. Hold OPC Bail against handlebar.
- With Transmission Lever in Neutral position, push Blade Clutch Lever to ON position. Release OPC Bail. Engine should start to die, if not, adjust Blade Clutch Lever Switch and/or OPC Bail Switch. See Figure 60.
- 10. If interlock system switches are adjusted properly, Engine should continue to run, if OPC Bail is depressed while Transmission is in gear and Blade Lever is in the ON position. Releasing OPC Bail should cause Engine to die when Transmission is in gear and Blade Lever is in the ON position.

PISTOL GRIP

No adjustment is required on Operator Presence Controls (OPC).

- 1. Hold OPC against handlebar.
- Shift Transmission Shift Lever to first (NO. 1) gear. Engine should continue to run, if not, inspect and/or replace OPC Switchs and Transmission Switch.
- With #2, release of OPC should cause Engine to die, if not, inspect/replace OPC Transmission Switches.
- 4. Place Transmission in NEUTRAL, engage mower. With OPC engaged engine should run.
- 5. Same as #4 with OPC released, engine should die.

BLADE CLUTCH LEVER SWITCH

The Blade Clutch Lever Switch is an integral part of the OPC system. When the Blade Clutch Lever is pulled backward to OFF position, the Interlock Switch is fully engaged. When the Blade Clutch Lever is pushed forward, to the ON position, the Interlock Switch button is fully released. Adjust as follows:

- 1. **STOP ENGINE!** Push the Blade Clutch Lever forward to **ON** position.
- 2. Check to see that Switch button is not touching bellcrank.
- 3. If switch button is touching bellcrank, adjust switch.
- Pull Blade Clutch Lever rearward to the OFF
 position, loosen the Blade Switch mounting screws
 (underneath deck) and adjust switch until bellcrank
 pushes switch button without hitting body of switch.
- 5. Push Blade Lever forward to the **ON** position. Bellcrank should clear switch button.
- Test switch with a test light. Connect test light to switch terminals, move Blade Clutch Lever to ON and OFF positions. Test light should be ON when Blade Clutch Lever is in OFF position and OFF when Blade Clutch Lever is in ON position.

ELECTRICAL

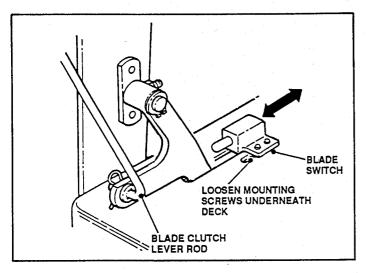
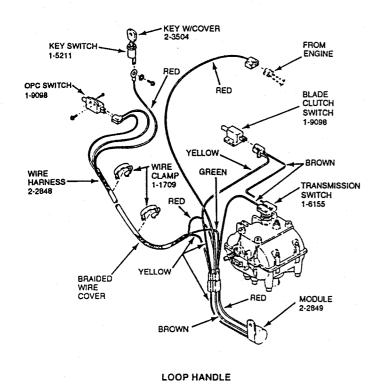
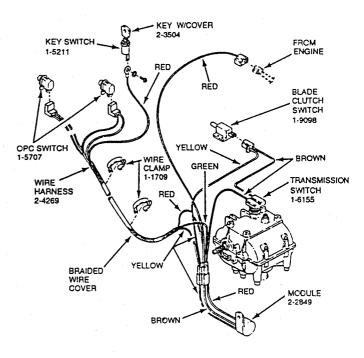


FIGURE 60

WARNING! DO NOT CONTINUE RUNNING MACHINE IF OPERATOR'S PRESENCE CONTROL SYSTEM (OPC) IS NOT FUNCTIONING PROPERLY. IF AFTER MAKING ADJUSTMENTS AND/OR REPLACING SWITCHES AND/OR MODULE, THE SYSTEM CONTINUES NOT TO FUNCTION PROPERLY, CALL SNAPPER CUSTOMER SERVICE DEPARTMENT.





PISTOL GRIP HANDLE

ELECTRICAL/WIRING



MANUFACTURER'S ONE YEAR LIMITED WARRANTY

For one year from purchase date for the original purchaser's commercial, rental, or other non-residental 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 any and all implied warranties are excluded. This is the exclusive remedy. Liabilities for consequential damages, under any and all warranties are excluded.

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

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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

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