# Safety Instructions & Operator's Manual for

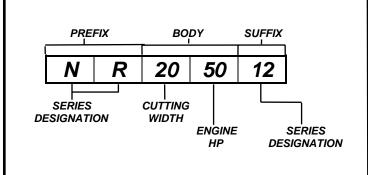
# SNAPPER



**WALK MOWERS** SERIES 12

> **MODELS** R205012 NR205012

## MODEL NUMBER EXPLANATION



PREFIX EXPLANATION						
R - Recycling Mower						
N - California Model						
BODY EXPLANATION						
20 - 20" Cutting Width	50 - 5.0 HP Engine					
SUFFIX EXPLANATION						
12 - Series Designation						
_						

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

### 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

- DO NOT allow children in area when mower is being operated.
- 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**

- 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.
- 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.
- 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. Make sure that the wheel drive clutch control is disengaged before starting engine.
- 6. Never attempt to make a cutting height adjustment while the engine is running.
- 7. When mowing over rough ground or in tall grass, mower must be set at highest cutting position.
- 8. Mow only in daylight or in good artificial light.
- 9. Never operate mower in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk; never run!
- DO NOT operate mower without the grass bag (and adapter), side chute, mulch cover or adapter plug in place.

### **OPERATION**

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

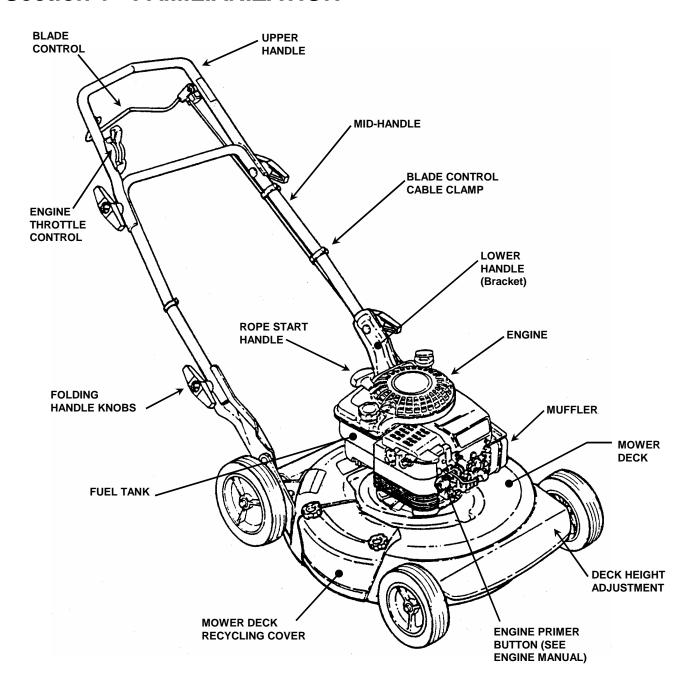
### MAINTENANCE AND STORAGE

- 1. Keep all nuts, bolts, and screws tight to be sure mower is in safe operating condition.
- 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.
- 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.
- 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.

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## **Section 1 - FAMILIARIZATION**



#### INTRODUCTION

This manual has been prepared for the operators of the SNAPPER Series 12, 20" WALK BEHIND MOWERS. Its purpose, aside from recommending operating and routine service requirements, is to promote safety through the use of accepted operating practices. *Read, Understand and Follow* the "IMPORTANT SAFETY INSTRUCTIONS" on Page 2 of this manual and all safety messages on the mower, engine and attachments before operating the machine.

### **NOMENCLATURE**

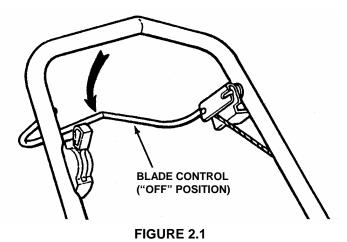
The nomenclature drawing above, shows the essential parts of the SNAPPER Series 12, 20" WALK BEHIND MOWERS. It is recommended that all operators of the mower become thoroughly familiar with the controls, parts and operation of the mower before operating. Specific details involving the engine are found in the separate Engine Owner's Manual. Study these manuals before operating and keep both handy for future reference.

### Section 2 - OPERATING INSTRUCTIONS

### 2.1 PRE-START CHECK LIST

Make the following checks and perform the service required before each start-up.

- **2.1.1.** Check guards, deflectors, grass bag, adapter and covers to make sure all are in place and securely tightened.
- **2.1.2.** Check blade control to insure it works freely. See Figure 2.1.



**2.1.3.** Check cutting height. Adjust to desired height. **2.1.4.** Check engine oil and add oil as needed to bring level up to the full mark. Refer to Engine Owner's Manual for oil specifications. See Figure 2.2.

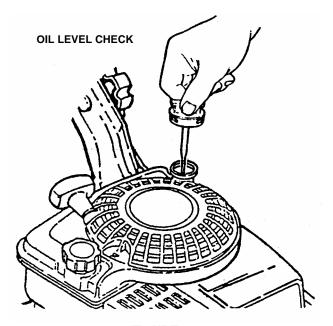


FIGURE 2.2

**2.1.5.** Add fuel to tank after pushing the mower outside where fumes can safely dissipate. Make sure cap is tightened after refueling. Refer to Engine Owners Manual for specifications.

**2.1.6.** Clean exterior surfaces of cutting deck and engine of any accumulation of spilled fuel, dirt, grass, oil, etc. Keep engine air intake screen and cooling fins clear at all times.

### 2.2 STARTING & OPERATION 2.2.1. ENGINE & BLADE (Primer Models)

- **1.** Move engine speed control to the "Fast" (Rabbit) position. See Figure 2.3.
- **2.** Push primer button three times to start a cold engine. **NOTE**: Do not use primer button to start warm engine.
- 3. Pull blade control against handle.
- **4.** Pull rope start handle to crank engine.
- **5.** After engine starts, allow a brief warm-up until engine runs smooth.

**NOTE:** Stop the engine (and blade) by releasing the blade control.

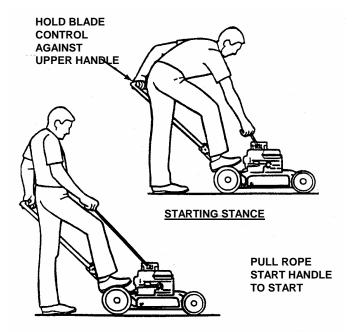


FIGURE 2.3

### Section 2 - OPERATING INSTRUCTIONS

### 2.3 STOPPING

Stop engine and blade by releasing the blade control.



### **WARNING**



Stop engine and mower blade by releasing the blade control before adjusting cutting height.

### 2.4 CUTTING HEIGHT ADJUSTMENT

Positioning the axles in the lowest of the four adjustment positions in the wheel brackets raises the cutting deck to the highest cutting height which is 2-1/2 inches. The top position provides the lowest cut of 1/2 inch. See Figure 2.4.



### WARNING



STOP engine and blade BEFORE attempting any adjustments, maintenance, service or repairs. Remove spark plug wire from spark plug and secure spark plug wire away from spark plug. Never attempt to adjust the cutting height while the engine is running.

#### 2.5 ADJUSTING FRONT & REAR AXLES

1. Reposition the front axle by raising the front wheels off the ground, then pull in on one of the spring loaded bushings until it clears the bracket. Move to the desired height of cut position (four positions are provided) and release the bushing. Repeat the same procedure on opposite end of axle. See Figure 2.4.

FRONT AXLE SHOWN

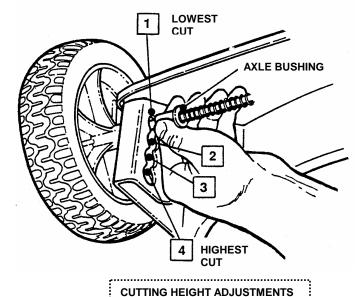


FIGURE 2.4

2. Reposition the rear axle by raising the rear wheels off the ground, then pull in on one of the spring loaded bushings until it clears the bracket. Move to the desired height of cut position (four positions are provided) and release the bushing. Repeat the same procedure on opposite end of axle. NOTE: Position rear axle bushings in the same corresponding position as the front axle to keep deck level. Refer to Figure 2.4.



### **WARNING**



Before attempting any adjustments to the cutting height or front baffle, STOP the engine, remove the spark plug wire from the spark plug and secure wire away from plug. DO NOT make any adjustments with engine or blade running. Be extremely careful when performing adjustments around engine. Engine is extremely hot and can cause severe burns. Wear heavy leather gloves when handling or working around cutting blades. Blades are extremely sharp and can cause severe injury.

#### 2.6 RECYCLING OPERATION

**NOTE:** For best recycling results, cut up to a maximum of 1" from grass and recycle ONLY when grass is dry.

- 1. Set all wheels in the highest cutting position.
- **2.** Move engine speed control to "FAST" (Rabbit) position.
- **3.** Proceed mowing slowly. If grass is very dense, lower each rear wheel bushing one notch lower than the front wheel bushings to improve recycling performance.

## **Section 3 - MAINTENANCE**

### 3.1 INTRODUCTION

To retain the quality of the mower, use genuine SNAPPER replacement parts only. Contact a local SNAPPER dealer for parts and service assistance. For the correct part or information for a particular mower, always mention model and serial number.

# 3.2 SERVICE - AFTER FIRST 5 HOURS 3.2.1. CHANGE ENGINE OIL



### **WARNING**



Before attempting any adjustments or repairs, STOP the engine, remove the spark plug wire from the spark plug and secure wire away from plug. Engine oil is extremely hot and can cause severe burns. Allow engine oil to cool before draining to prevent injury.

- **1.** Disconnect spark plug wire and secure end away from plug. The items needed to perform oil change are: (2) cloth rags, (1) 3/8" drive ratchet with a short extension and (1) shallow pan.
- **2.** Tilt mower up on its rear wheels for access to the oil drain plug located underneath the mower deck. Do not tilt mower with spark plug or carburetor down. See Figure 3.1.

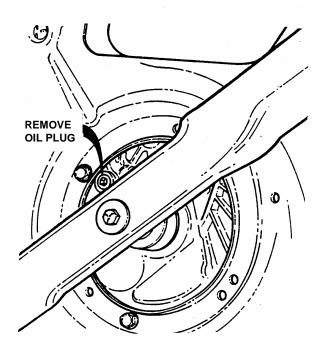


FIGURE 3.1

- **3.** Place shallow pan underneath the approximate center of the oil drain plug.
- **4.** Loosen with ratchet and short extension, but do not remove oil drain plug. Loosen plug until you can turn it with your fingers.
- **5.** Lower the mower down and place the piece of wood under left rear wheel. Reach back under mower and remove drain plug and allow oil to drain out completely in pan. Some oil will spill onto hands, immediately wipe hands clean with cloth rags.
- **6.** Tilt mower back up and replace drain plug. Tighten securely but do not over tighten.
- **7.** Fill engine with oil as specified in Engine Owner's Manual. Thereafter, change oil after each 25 hours of use.

### 3.3 ANNUALLY (END OF EACH SEASON)

Perform all maintenance as described in the maintenance schedule.

### 3.3.1. Engine

Service engine according to engine owner's manual.

#### 3.3.2. Air Filter

Refer to engine owner's manual for service instructions.

### 3.3.3. Engine Oil

Refer to engine owner's manual for service instructions.

### 3.4 STORAGE PROCEDURE

Refer to the Engine Owner's Manual for directions regarding engine storage preparations. Prepare the mower for "end of season" storage as follows:

- 1. Drain fuel from fuel tank and let engine run until all fuel is out of the carburetor.
- 2. Disconnect and remove the spark plug wire away from spark plug before any other preparations are made!
- **3.** Tape all openings closed to prevent spraying water into exhaust or air intakes during washing.
- **4.** Tilt mower up on its rear wheels and thoroughly clean the underside of the deck. Do not tilt mower with spark plug or carburetor down. Scrape away any accumulation of grass with a putty knife and or wire brush.
- **5.** Lubricate all exposed metal with a light coating of oil to prevent corrosion.
- **6.** Loosen handle knobs. Carefully fold the handles forward, "flexing" the control cables to prevent cable damage.
- **7.** Store the mower in a shed or other dry area, protected from weather.

### **Section 4 - REPAIR & ADJUSTMENTS**



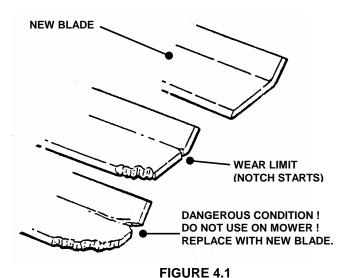
### WARNING



Before attempting any adjustments or repairs, STOP the engine, remove the spark plug wire from the spark plug and secure wire away from plug. Wear heavy leather gloves when handling or working around cutting blades. Blades are extremely sharp and can cause severe injury.

# 4.1 MOWER BLADE REPAIR/REPLACEMENT 4.1.1. STANDARD BLADE WEAR LIMIT

**1.** Inspect blade frequently for signs of excessive wear or damage. See Figure 4.1.



**2.** Replace the blade if it is badly chipped, bent, noticeably out of balance or has cracks or notch in either tip. See Figure 4.1. Replace with new blade Part No. 2-6407.



### WARNING



Never use a cutting blade that shows signs of excessive wear or damage. Refer to Section on MOWER BLADE REPAIR/REPLACEMENT for proper blade inspection and service procedures.

### 4.1.2. BLADE SHARPENING

- **1.** Disconnect spark plug wire and secure end away from plug.
- **2.** Tilt mower up on its rear wheels. Do not tilt mower with spark plug or carburetor down.
- 3. Remove blade. See Figure 4.2.

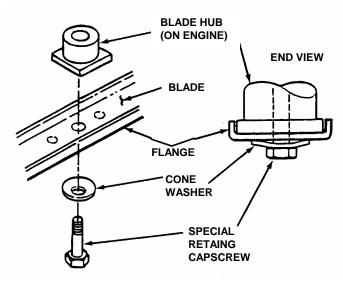


FIGURE 4.2

**4.** Sharpen blade on a grinding wheel at an angle of 22 to 28 degrees. The cutting surface should extend inward about 3-1/2" from the tip. See Figure 4.3.

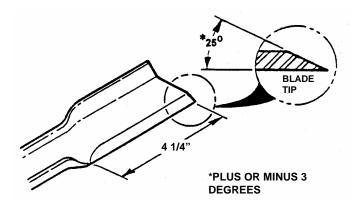


FIGURE 4.3

- **5.** Check blade for balance. If necessary, correct balance by grinding heavy end of blade.
- **6.** Reinstall blade. Refer to Figure 4.1. Check torque of blade retaining cap screw. Recommended torque should be 30 to 40 ft. lbs.

# **TROUBLESHOOTING**

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION			
Engine Will Not Start	1. Fuel tank empty.	1. Fill fuel tank with fresh fuel.			
Using Recoil Starter	2. Engine needs priming.	Push primer bulb three times.			
	Spark plug wire disconnected.	3. Place spark plug wire onto spark plug.			
Engine Stalls or Stops		Blade control should be held securely against			
After Running	against handle.	handle at all times during operation of mower.			
	2. Fuel tank empty.	2. Fill with fuel to proper level.			
	3. Engine air pre-cleaner and or air cleaner dirty.	3. Clean free of all debris.			
	Spark plug defective or gap set improperly.	4. Service spark plug.			
	5. Water, debris or stale fuel in fuel system.	5. Drain and clean fuel system.			
Engine Loses Power	Engine air pre-cleaner or air cleaner dirty	Clean or replace filters.			
	Spark plug faulty.	Service spark plug.			
	3. Water, debris or stale fuel in fuel system.	3. Drain and clean fuel system.			
Engine Backfires When Turned To "STOP"	Throttle control set too "FAST".	1. Set throttle control to "SLOW" and allow engine to idle.			
Excessive Vibration	Damaged, out of balance or bent mower blade.	Service mower blade.			
	Loose blade components.	Service and tighten loose parts.			
Cutting Grass	Cutting height too low or high.	Adjust cutting height.			
Improperly	2. Engine speed too slow.	2. Move engine speed control to "FAST" position.			
	4. Terraced cut, side to side.	4. Adjust height of cut.			
	5. Excessive deck pitch, front to rear.	5. Adjust height of cut.			
	6. Cutting blade dull or damaged.	6. Sharpen cutting edges or replace blade.			
Poor Grass Discharge	1. Engine speed too slow.	1. Move engine speed control to "FAST" position.			
	2. Forward speed too fast.	2. Move ground speed control to a slower speed.			
	3. Grass is wet.	3. Mow when grass is dry.			
	4. Excessively worn or damaged blade.	4. Service mower blade.			
	5. Build up of grass clippings and debris under deck.	5. Clean deck.			
	6. Improper blade installed on deck.	6. Install proper SNAPPER blade.			
	7. Blade installed improperly on deck.	7. Install blades properly.			
Oil Leaking	1. Leaking engine case.	<ol> <li>Contact authorized SNAPPER dealer.</li> <li>Check and tighten drain plug.</li> <li>Make sure dip stick or oil filler cap is securely in place.</li> </ol>			

# **SERVICE SCHEDULE**

ITEM	SERVICE PERFORMED	REF.	EACH USE	5 HRS	25 HRS	50 HRS	100 HRS	EACH SEASON
Engine Oil	Check Oil Level	Page 8	Х					
	Initial Oil Change	Page 8		Х				
	Periodic Oil Change	Page 8			Х*			
Air Pre-Cleaner	Clean Sponge Element	Engine Manual & Page 9.			X**			
Air Cleaner	Clean or Replace	Engine Manual.			X**			
Spark Plug	Replace	Engine Manual.					Х	
Engine Cooling System	Clean Shroud & Fins	Engine Manual & Page 9					X**	
Mower Blade	Check For Wear, Damage & Replacement	Page 10	Х					
Mower Deck	Clean Debris Accumulation	Page 9	Х					

<sup>\*</sup> Change oil every 25 hours when operating under heavy load or high temperatures.
\*\*Clean more often under dusty conditions or when air debris is present



### 10 - 5 - 2 YEAR LIMITED WARRANTY

### TRANSMISSION GEAR BOX and MOWER DECK - 10 YEARS

For ten (10) years from purchase date for the original purchaser's residential non-commercial\* use, **SNAPPER**, through any Snapper dealer, will replace or repair free of charge, the mower deck or transmission gear box if found upon examination by the factory to be defective in material or workmanship or both.

### **COMPONENTS PARTS - 5 YEARS**

For five (5) years from purchase date for original purchaser's residential non-commercial\* use, **Snapper**, through any Snapper dealer will replace free of charge any part or parts found upon examination by the factory to be defective in material or workmanship or both.

#### **ENGINE - 2 YEARS**

The engine on this product is warranted by the engine manufacturer for two (2) years for the original purchaser's non-commercial\* use. (See engine manufacturer's warranty statement for details.)

#### BATTERIES

Batteries are warranted separately and have one (1) year prorated warranty with a ninety (90) day free replacement period.

#### **DISCLAIMER OF WARRANTIES**

Implied warranties including those of merchantability and fitness for a particular purpose, are limited to five (5) years from purchase date for the original purchaser's residential, non-commercial use, for ninety (90) days 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.

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

This warranty does no apply to parts that have been damaged by accident, alteration, abuse, improper lubrication, normal wear (things such as belts, blades, driven disc or any other normal wear item). This warranty does not cover tune-ups or other adjustments required in the normal use of the product.

There is no other express warranty.

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**, 535 Macon Rd., McDonough, Ga. 30253

<sup>\*</sup>Any use other than on the purchaser's residential lawn constitutes commercial use.

# Safety Instructions & Operator's Manual for

# SNAPPER®

20" STEEL DECK WALK MOWERS SERIES 12
Models: R205012 & NR205012

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