# Husqvarna

# **Operators manual**

Please read these instructions carefully and make sure you understand them before using the machine.

Models: SC18/968981201 SC18/968999352

MANUAL NO. 540200156 REV. 01 (12/01/05)

# CONTENTS

# Index

# **Operator's Guide Page**

Specifications	2
Features and Controls	
General Operating Instructions	
Warnings	
5	

# **Operating Instructions Page**

Operator's Tips	4
Operating on Hills	
Before You Start	
Transporting	5
Sod Cutting	

# Maintenance and Service Instructions Page

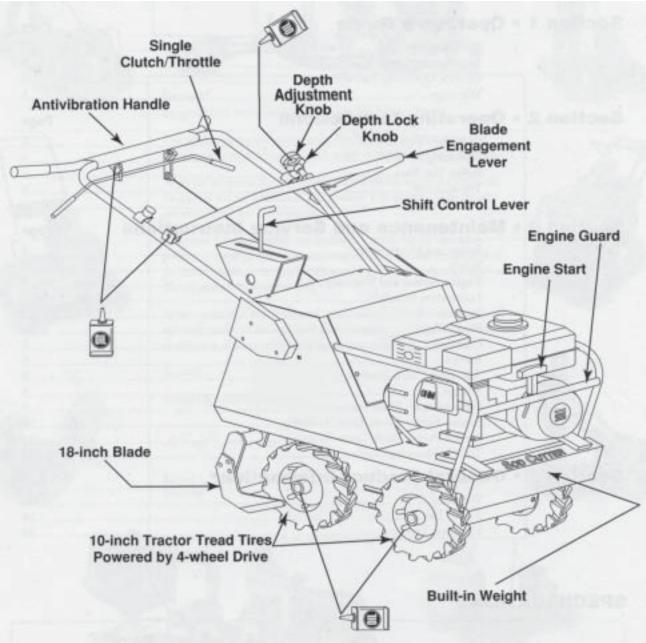
Safety and Maintenance Safety	6 6
Engine Service and Warranty	6
Lubrication Schedule	6
Inspection Schedule	6
Blade Wear	7
Cleaning	7
Service	
Adjusting Chain Tension	7
Storage	
5	
Trouble Shooting Guide	
Sound Test	
Vibration Test	

# WARNING: Engine exhaust, some of it's constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

# **SPECIFICATIONS**

	U.S.	Metric
Engine - Honda:	5.5 hp	3.8 kw
Net Weight:	328 lbs	149 kg
Shipping Weight:	360 lbs	164 kg
Width:	24 in	61 cm
Height:	36 in	91 cm
Length:	54 in	137 cm
Cutting Depth (max):	2.5 in	6.3 cm
Cutting Width:	18 in	46 cm

# FEATURES AND CONTROLS



- **Oil used in the engine (gray cap)** 1. Refer to your engine manual for oil type, viscosity, weight and capacity.
  - 1. Refer to your engine manual for oil type, viscosity, weight and capacity. Reducer (yellow cap)
  - 1. You should not need to service the transmission. Call Tecumseh or your servicing dealer if needed.
  - 2. Transmission is located directly behind the front axle underneath the engine.
  - 3. There is no dipstick for transmission.
  - 4. Tecumseh Bentonite Grease part #788067B or equivalent.

Oil used in the Clutch/Gear Box

Transmission grease used

3

# **OPERATING INSTRUCTIONS**

#### **GENERAL INFORMATION**

This manual will assist you in the safe operation and proper maintenance of your Husqvarna equipment. Read it thoroughly before attempting to operate the machine. Do not hesitate to call your dealer or Husqvarna if additional information is required.

The following safety symbols are used throughout the manual to alert you to information about unsafe actions or situations:

DANGER: indicates immediate hazards that may result in severe injury or death.

**WARNING:** indicates unsafe actions or situations that may cause severe injury, death and or major equipment or property damage.

**CAUTION:** indicates unsafe actions or situations that may cause injury and/or minor equipment or property damage.

This equipment should not be modified without the manufacturer's prior written authorization. Doing so without our written permission may not only affect the equipments performance and durability, but also create safety hazards for the operator and the surroundings. Warranty will be void if changes are made to the equipment without the manufacturer's prior written authorization.

# SAFETY PROCEDURES

DO:

- Only start with shift lever in neutral.
- Read all maintenance and service instructions before attempting work.
- Follow engine manufacturer operating and maintenance instructions.
- Inspect area to be cut and remove rocks, wire, string and other objects that might present hazard before starting.
- Identify and mark all in ground objects to be avoided, such as sprinkler heads, stakes, water valves, clothes line anchors, etc.
- This machine was designed for sod cutting only. It is not intended for any other use.

# DO NOT:

- Do not start in gear.
- Do not cut at high transport speeds.
- Do not use on any surface other than grass.
- Do not operate on slopes exceeding 35% grade.
- Do not place hands or feet near moving or rotating parts.
- Do not run engine in an unventilated area.
- Do not shift with throttle engaged.
- Do not run engine while servicing. Remove spark plug wire before servicing.
- Do not remove guards when operating.
- Do not lift this 330 lb. machine.

# **OPERATOR'S TIPS**

- To engage reverse gear you may have to push the machine back and forth while pulling the shift lever.
- Stop before shifting gears.
- Cut going down hill on unlevel ground.
- End cuts by pushing the blade engagement lever forward while still holding the throttle to cut the end of the sod strip as the blade rises.
- Soil conditions will effect cutting depth Readjusting the blade depth may be required as you move from hard soil to soft or moist soil conditions.

# **OPERATING INSTRUCTIONS**

- Do not attempt sharp turns while cutting.
- Should I water before cutting?

It is usually not necessary to water before cutting. In extreme conditions, such as clay soil that is very compacted, a simple test as follows will determine if you need to water before cutting. Use a garden hand spade, weed tool, or even a large screwdriver to test the ground's hardness. You should be able to push the tool into the ground 2 to 3 inches with little effort.

If you are unable to do so, then watering may be advisable. Watering the day before should give sufficient time for the soil to absorb the moisture. Use your hand tool to gauge the effectiveness of your watering. Allow the grass to dry before cutting to provide adequate traction for sod cutting.

# **OPERATING ON HILLS**

**WARNING - DO NOT** operate on hills exceeding 35% grade to prevent machine from rolling over. Please be aware that when operating on hills, you may experience:

- The need to exert greater effort to steer and maintain the balance of the machine.
- Uneven cutting depth, when operating across a hill. The shifted center of gravity may cause the downhill side of the blade to penetrate to the maximum depth, while the uphill side may not.

With these factors in mind, you may find it more effective to:

- Operate the machine cutting down rather than across hills. You will achieve even cutting depth, and enhance stability.
- Avoid hill side turns. Back up hills in reverse gear, then cut, going down.

# **BEFORE YOU START**

- Read and understand this manual.
- Be sure engine oil is at engine manufacturer's recommended level. (Refer to engine manufacturer's manual.)
- Put the sod cutter into neutral before starting.
- Place blade in transport position before starting.

# TRANSPORTING

- Push the blade engagement lever forward to raise the blade.
- Select the desired gear (slow-fast-reverse).
- Pull the throttle while maintaining a firm grip on the handlebar.
- To make turns, push down on the handlebar to do "a wheelie," then turn.
- Load into truck or trailer by driving up ramps in low gear. DO NOT LIFT! This 330lb machine is not intended to be lifted by hand.

# SOD CUTTING See Figure - Page 3

- 1. Position the sod cutter at your starting point with the blade out of the ground.
- 2. Pull the blade engagement lever toward you with one hand while lifting the handlebar with the other hand.
- 3. Place the shift lever in slow gear (turtle icon).
- 4. Pull the throttle while maintaining a slight down pressure on the handlebar and cut a short distance, then stop. Put shift lever in neutral.
- 5. Lift the edge of the sod to check the cut depth.
- 6. To change the depth, push the blade engagement lever forward, unlock the depth lock knob (red knob), and turn the depth adjustment knob clockwise for less depth, or counterclockwise for more depth; then lock the depth lock knob.
- 7. Repeat steps 2 through 6 as necessary to set depth of cut.
- 8. End cuts by pushing the blade engagement lever forward while holding the throttle to cut the end of the sod strip as the blade exits the ground.

# SAFTEY AND MAINTENANCE

# CAUTION

Any modifications or additions to this equipment without written authorization from the manufacturer will void all manufacturer's warranties.

Do not operate this machine without first reading owners manual.

# CAUTION

Husqvarna parts have been designed and specified to meet commercial operating standards for strength and durability. For reliability and preservation of design safety standards, replacements should only be made with genuine Husqvarna parts or material of equivalent type and strength.

#### **TWO MINUTE WARNING**

Sod Cutters may be tipped on their engine guard for cleaning and access for **no more than 2 minutes.** Engine damage may result from gasoline draining into the crankcase if prolonged. See engine manufacturer's operating and maintenance instructions.

#### **ENGINE SERVICE AND WARRANTY**

Contact your nearest engine manufacturers authorized servicing dealer for engine service and warranty questions. Follow the engine manufacturers maintenance instructions. Should any malfunction occur with the engine during the warranty period, take it to an Authorized Service Dealer. DO NOT tear down the engine, as this may void the Engine Manufacturer's Warranty.

# PREVENTATIVE MAINTENANCE SCHEDULE

#### A) Inspection Schedule

-----

.

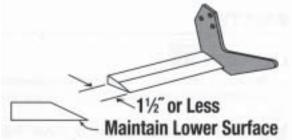
Each Use	Everv 20 hrs	
X		
Х		
Х		
Х		
Х		
	Х	
Х		
	Х	
	Х	
Х		
Х		
Х		
	X X X X X	X X X X X X X X X X X X X

B) Lubric	ation Schedule				
ltem	Lubricant	Every 20 hrs	Every 60 hrs	As Required	Storage
<ul> <li>Engine</li> </ul>	Oil, see engine		Х	Х	Х
	owner's manual				
<ul> <li>Chain</li> </ul>	30W Motor oil or	Х	Х	Х	Х
	Chain lubricant				
<ul> <li>Linkage</li> </ul>	30W oil	Х			
Grease	depth	Х		Х	
adjust so	crew				

# SERVICE AND MAINTENANCE

# **BLADE WEAR**

Sod cutter blades may wear quickly depending on soil condition. Replace blade when worn to 1 1/2" (3.8cm) or less. Maintain lower blade surface.



#### **CLEANING AND WASHING**

Regular cleaning and washing will prolong the service of your machine.

Note: Use care with power washers to avoid damage to Warning Decals, Operator Instruction Labels, Bearings, Chain and Engine. Avoid direct spray on these items. DO NOT EXCEED 1000 PSI WATER PRESSURE FOR CLEANING.

# ADJUSTING CHAIN TENSION

Upper Chain

• No adjustment is required

#### Lower Chain

- Remove chain guard
- Tilt the sod cutter forward onto the front weight.
- Tighten the 1/2" lock nut on the chain idler until the #40 chain flexes approximately 1/4" (6mm) at mid span.
- Install chain guard.
- Set sod cutter back to level.

# STORAGE

- 1. Refer to engine manufacturer's instructions for engine storage information.
- 2. Clean machine.
- 3. Cover all scratches with touch up paint.
- 4. Lubricate according to Lubrication Schedule (see page 6).
- 5. Lightly oil or mil board paint blade to inhibit rust.
- 6. Covered or indoor storage is recommended.

PROBLEM

# TROUBLESHOOTING ANSWER/COMMENT

Transmission shaft broke	2.	Ensure debris is not caught in the Transmission Chain or wrapped around the transmission output shaft. Ensure the unit has a Skid Pan installed. Contact your servicing dealer.
Drive wheels won't engage	2. 3. 4.	Ensure the Drive Chain is on all sprockets. Ensure the Transmission Chain is on all sprockets. Ensure the Chain Idler Spring is attached. Check for side play in the Transmission Output Drive Sprocket (If there is side play, the transmission could be damaged). Verifiy the Shift Linkage is attached at the Shift Lever and at the Bell Crank and Rod End is attached at Bell Crank and Transmission Arm. Check sprockets for proper alignment.
Unit jumps out of gear	1.	Adjust Shift linkage. Tighten Shift Lever Pivot Bolt to hold shift lever in place.
Bushings on depth control assemblare wearing quickly.	2. 3.	The bushings are wearable items. Grease (polyurethane compatible) ID and OD of bushings before installing. Ensure that proper Blade Lift Springs are installed. (Springs have 1.5-inch OD.) Be sure the maximum RPM is set correctly at 3000. See Technical Bulletin Throttle Cable Adjustment. Be sure red bushings are installed.
Bushings "ooze out" when installed	1.	This is normal. Trim with knife if desired.
Right Angle T-drive leaking	1.	Contact your local Tecumseh dealer or servicing dealer.
What RPM should my engine be set to?	1.	3000 RPM maximum. See Technical Bulletin "Throttle Cable Adjustment."
Chain (Transmission) wearing prematurely or coming off		Transmission Input Sprocket (fixed) Idler Sprocket position is adjusted by adding or subtracting washers between the sprocket and the idler arm.

PROBLEM	ANSWER/COMMENT
Chain (Drive) is coming off, drive sprocket wearing Sprockets	<ul> <li>The Transmission Output Sprocket is a fixed (non adjustable) sprocket which is splined and snap-ringed in place.</li> <li>Align the Axle Sprockets (double set screws) to the Transmission Output Sprocket. Position the Axle the same distance from the chassis wall.</li> <li>Replace the Tensioner Sprocket if it has a bent or twisted bracket or bent teeth.</li> <li>Check chain tension between Axle Sprockets (1/4" - 3/8" deflection at mid-span).</li> </ul>
Pulleys not staying tight or coming off.	<ol> <li>Inspect shaft, pulleys and keys for damage. Note:Gear box pulley has double set screws.</li> <li>Replace any damaged parts.</li> <li>Use blue loctite on the set screws.</li> </ol>
Blade Replacement	<ol> <li>Replace when worn to 1 1/2" from the cutting edge to the back edge.</li> <li>Sharpen blade from top only. Maintain a flat lower surface.</li> <li>Sharpen sides of blades from outside only.</li> </ol>
Blade doesn't move or stops cutting	<ol> <li>If the operator tries to cut deeper than 2 1/2", pivoting the machine back on its rear wheels while cutting can cause machine to cut too deeply.</li> <li>Make sure the blade is sharp.</li> <li>Moisture, oil or grease on the belt will cause it to slip. Replace with a Husqvarna belt.</li> <li>Tension can be increased by tightening the Cable Tension Nut. If additional adjustment is not available, add a 1/2" stack of washers between Tension Nut and Cable Bracket.</li> <li>IMPORTANT: Engine must be off before checking clearance of pulleys. Adjust tap bolt for 1/8" to 1/4" clearance between all pulleys, Belt Idler Pulley, Engine Pulley, Right Angle Drive Pulley, with the belt removed. adjustment with jam nut.</li> </ol>
Blade not cutting full depth or inconsistent depth	<ol> <li>Replace the Depth Control Bushings when worn.</li> <li>Be sure the Depth Control Rod is installed properly. See Technical Bulletin "Installation of Depth Adjuster Assembly Control.</li> <li>If blade is dull or improperly sharpened, sharpen it from top only (see page 7) or replace.</li> <li>Check to see if the cutting surface is uneven</li> <li>Replace the Blade Lift Springs when worn or broken.</li> </ol>

TROUBLESHOOTING

PR	ORI	FN	Λ

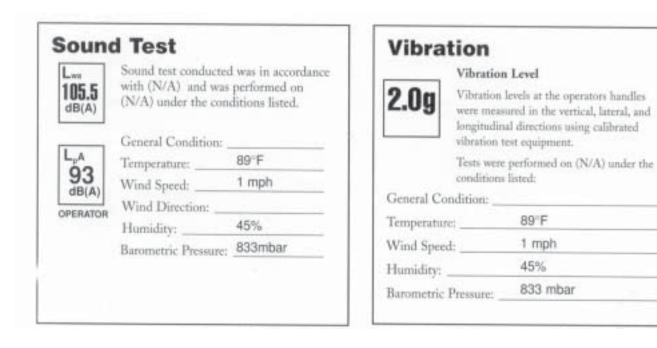
# TROUBLESHOOTING

**ANSWER/COMMENT** 

# Blade not disengaging New Unit or New Belt: 1. Run the machine with the blade engaged until the belt stretches. Used Unit or Old Belt: 1. Adjust the Belt Keeper so each leg touches when idler pulley is not engaged and so idler pulley clears Belt Keeper when engaged. 2. Be sure the correct Husgvarna belt is being used. If not, replace with a Husqvarna belt. 3. Belt Idler Pivot Bolt may be too tight or need lubrication. 4. Belt Idler Return Spring may be broken or came off anchors. Reattach or replace as necessary. 5. Check to see if the Tension Cable is out of pulley. Install cable in pulley and squeeze bracket sides to minimize the gap to pulley. Belt coming off 1. RPM may be too high. Set to 3000 RPM See Technical Bulletin "Throttle Cable Adjustment." 2. Align pulleys. See Technical Bulletin "Inspection Procedure for Belt Tension ". 3. Replace the Belt Idler Pulley Arm if it is bent. Belt glazed or slipping 1. Limit maximum depth of cut to 2 1/2". 2. Be sure the updated Blade Lift Springs are installed. (Springs have 1.5 inch OD.) 3. If the Blade Lift Springs are worn they will allow the blade to cut too deeply, which causes the belt to slip. Replace if necessarv. 4. Be sure the maximum RPM is set at 3000. See Technical Bulletin "Throttle Cable Adjustment." 5. Be sure the correct Husqvarna belt is being used. If not, replace with a Husqvarna belt. 6. Check if belt is being stretched by comparing with a new belt. 7. Check to see if the Tension Cable is out of pulley. Install cable in pulley and squeeze bracket sides to minimize the gap to pulley. 8. If the Gear Box Pulley or the Engine Pulley is wet, oily, or damaged, clean or replace. 9. Belt tension can be increased by tightening the Cable Tension nut. If additional adjustment is unavailable, add a 1/2" stack of washers between Tension Nut and Cable Bracket.

#### TROUBLESHOOTING PROBLEM **ANSWER/COMMENT** Belt glazed or slipping 10. Be sure the Belt Idler Assembly is adjusted correctly. See Technical Bulletin "Inspection Procedure for Belt Tension." 11. Important: Engine must be off before checking clearance of pulleys. Adjust tap bolt for 1/8" to 1/4" clearance between all pulleys, Belt Idler Pulley, Engine Pulley, Right Angle Drive Pulley with belt removed. Lock adjustment with jam nut. 1. Contact Action Center to order Depth Control Rod Depth Control Rod broke Assembly and two red bushings. Depth Control Rod 1. Steam cleaning machines without lubricating threads will not turn (frozen) afterwards will cause rust resulting in locked threads. 2. Note that the Rod End is a left-handed thread. 3. Flood frozen joints with penetrating oil. Unit is creeping The transmission contains a centrifugal clutch and may creep if left in gear. Some creeping is normal because of the lubricant resistance between the clutch plates. Also, too heavy a lubricate in Gear Reducer can cause creeping. 1. Put in neutral - unit will not creep. 2. RPM at idle should be 1,400 (+200/-150). Clutch will en gage at 1,800 RPMs. A high idle RPM may cause creeping. 3. If unit continues to creep, contact your local Honda dealer or servicing dealer. Handle Stand Off Kit -1. Remove rubber bushings. how to tighten bolts 2. Remove bolt. 3. Apply blue loctite. 4. Hold stand off with pliers, vice-grips, etc. and tighten bolt. Bolts breaking 1. The vibration of the machine may cause bolts to come loose. Check and tighten all bolts periodically. 2. Use Grade 8 bolts with lock nuts to bolt wheels to axle. Tires wearing too guickly 1. Only cut in first or second gear. 2. Tire wear is normal and to be expected. Running the machine on excessively hard or abrasive surfaces can increase wear.

# SOUND AND VIBRATION STATMENT



This page left black intentionally

# Husqvarna

Technical assistance: For technical assistance please contact your Local Dealer. Free Manuals Download Website <u>http://myh66.com</u> <u>http://usermanuals.us</u> <u>http://www.somanuals.com</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.com</u> <u>http://www.404manual.com</u> <u>http://www.luxmanual.com</u> <u>http://aubethermostatmanual.com</u> Golf course search by state

http://golfingnear.com Email search by domain

http://emailbydomain.com Auto manuals search

http://auto.somanuals.com TV manuals search

http://tv.somanuals.com