# BROUWER

## **OWNER/OPERATOR'S MANUAL**

## **MODEL:**

5990236 ROLLMATE SOD LAYER 30" ROM2430
7990236 ROLLMATE SOD LAYER 30" ROM2430



WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.

		; )
		1 )



#### **IMPORTANT**

Your new **ROLLMATE SOD LAYER** has been designed and built to give many years of outstanding performance. The service and reliability you receive from this product will be affected by the proper maintenance and operation of the machine.

It is important the operator of the machine follows all recommended operating procedures and service schedules, to ensure the safety of the machine, themselves and any bystanders.

It is not possible to list all situations that may effect the safety of the machine or the operators, therefore Brouwer cannot identify all precautions that may possibly prevent accidents.

The owner/operator must assume responsibility for their own safety, the safety of others and of the machine.

#### BE A QUALIFIED OPERATOR BY;

- Reading and obeying the instructions in this manual and on the safety decals on the machine.
- Receiving training on the correct operation of the machine.
- Asking your supervisor or equipment dealer to explain anything you do not understand.
- Explaining the instructions in the operator's manual and safety decals to user/operators who cannot read or understand them.

#### IF YOU DO NOT UNDERSTAND .... ASK

Use only genuine Brouwer replacement parts. Parts not supplied by Brouwer may not meet factory specifications or standards of manufacture. The use of non-approved parts may result in component failure and result in an accident to the operator or bystanders.

The Brouwer **ROLLMATE SOD LAYER** must not be used for any purpose other than that for which they are designed.

Prior to shipping from the manufacturer the machines are inspected to insure that all safety guards, shields and warning/safety/operating decals are correctly positioned and secure.

The machine must not be used if any of the above items are missing or damaged.

CONTENTS			
Introduction Specifications Safety Decals Pre-Start Instructions Operation Service Hydraulic Schematic		2 3 4/5 6/9 10 11/12 13/18	

#### DESCRIPTION

The ROLLMATE ROM 2430 Sod Layer is the ideal sod layer for sod growers, landscapers, rental outlets, and other contractors. The 24 or 30 inch wide, 4 foot diameter, 1900 pound roll capacity, along with the exceptional maneuverability, make the ROM 2430 an ideal choice for most sod laying applications.

A reliable Briggs & Stratton 10.5 HP (Serial No. 1001 - 1033) or a Honda 11.0 HP (Serial No. 1034 and up) Industrial / Commercial engine drives through a field-proven clutchless hydrostatic drive transmission that shifts effortlessly from forward to reverse with a single lever control mounted on the steering handle.

The sod roll can be lifted by inserting the adjustable mandrel in the sod roll and mounting it onto the lift arms.

The Brouwer ROLLMATE Sod Layer is an outstanding machine for operating on slopes, highly maneuverable and easy to operate.



SPECIFICATIONS				
Dimensions	•			
Wheelbase	58"			
Overall width				
Overall height				
Weight				
Ground Clearance				
Maximum Grade	30 degrees (58% grade)			
Sod Roll Capacity				
Width				
Diameter				
Weight	1900 lbs.			
	and the second of the second o			
Engine				
SN 1001 - 1033:				
10.5 HP Briggs & Stratton, I/C vertical shaft				
SN 1034 and up:				
11.0 HP Honda, I/C vertical shaft				
Drive Train	Infinitely Variable. 0 –2.85 mph.			
	•			
Transaxle				
Eaton 851 hydrostatic w/integral parking brake				
Drive				
Chain reduction to both front wheels				
Steering				
Adjustable lever on pivoting rear tire				
	•			
Hydraulic Lift				
2 cylinders				
Hydraulic oil capacity	9 quarts			
Controls				
Cable to axle & lift valve				
Fuel Tank				
Capacity	4.25 gallon			
	es.			
Tires				
Front (drive)	24 X 12.00-12 Super Turf			
Rear (steering)	20 X 10.00-8 Turf Tread			
•				

#### -₩ARNING

Unauthorized modifications may result in **extreme** safety hazards to operators and bystanders, and could result in damage to the machine.

Brouwer Turf Ltd. warns against and strongly rejects and disclaims against any modifications, add-on accesories or product modifications that are not designed, developed, tested, and approved by Brouwer Engineering Department.

Any Brouwer product that is altered or modified in anyway that is not authorized, after original manufacture, including after market accessories or component parts that are not approved by Brouwer, will result in the machine warranty be voided.

All liability for personal injury and/or property damage caused by any unauthorized modifications, add-on accessories or products not approved by Brouwer will be considered the responsibility of the individual(s) or company designing and/or making such changes.

Brouwer Turf Ltd. will vigorously pursue full indemnification and costs from any party responsible for unauthorized post-manufacture modifications and/or accessories should personal injury and/or property damage result.



## This symbol means: ATTENTION! BECOME ALERT!

Your safety and the safety of others is involved.

#### Signal word definitions:

The signal words below are used to identify levels of hazard seriousness. These words appear in this manual and on the safety labels attached to Brouwer machines. For your safety and the safety of others, read and follow the information given with these signal words and/or the symbol shown above.

## ADANGER

**DANGER** indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

## **WARNING**

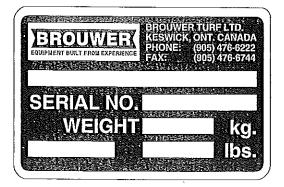
WARNING indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

## **ACAUTION**

**CAUTION** indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices or property damage.

## CAUTION

**CAUTION** used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided. **MAY** result in property damage



#### MODEL NUMBER:

This number appears on sales literature, technical manuals and price lists.

#### **SERIAL NUMBER:**

This number appears applies only to the machine to which it is allocated.

The Serial Number must be quoted when ordering parts or calling for service or warranty advice.

#### **GENERAL SAFETY**

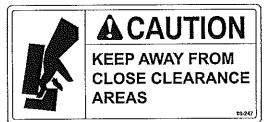
- 1. Read and understand the Owner's Manual before attempting to operate this machine.
- 2. Operate all controls from the operator's area. NO RIDERS.
- 3. Keep all shields in place and safety switches adjusted properly.
- 4. Do not leave equipment unattended. STOP the engine, remove the key and set the park brake.
- 5. Do not allow minors or the inexperienced to operate this machine.

#### **OPERATING SAFETY**

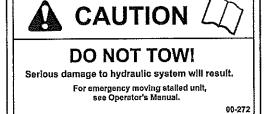
- 1. **DO NOT** attempt to work on unit with the engine running. Lower the lift arms if loaded with sod roll, set park brake and **STOP ENGINE!**
- 2. Never fill the fuel tank with engine running or hot! Do not smoke while filling the fuel tank.
- 3. Do not operate sod layer unless all shields are in place.
- 4. If a malfunction occurs, cease operation, STOP the engine and set park brake.



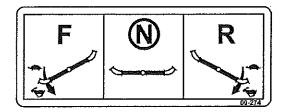
Location: Control handle



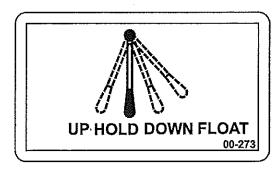
Location: Both sides of lift arms



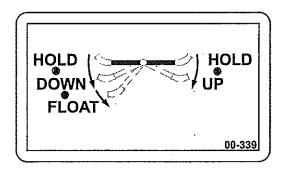
Location: Rear of frame

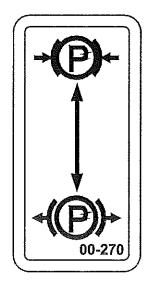


Location: Steering control handle

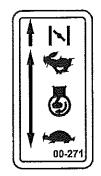


Location: Steering control handle

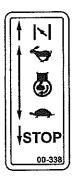




Location: Main frame



Serial No. 1001 - 1033 Location: Control handle



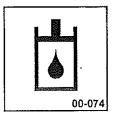
Serial No. 1034 & Up Location: Control handle



Location: Main frame near muffler



Location: Main frame near engine (SN 1001 - 1033)



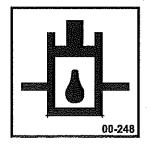
Location: Hydraulic oil tank

## NOT A STEP...

Location: Main frame both sides



Location: Main frame both sides



Location: Hydraulic oil tank

#### SPECIFICATIONS FOR FUELS AND OILS

#### **ENGINE OIL**

Fill the crankcase with the recommended oil. Do not mix brands or grades of oil. Recommended weight for general all temperature use is **SAE 10W-30**. Refer to the engine manufacturer's owner's manual for detailed maintenance instructions and lubrication specifications, including oil specifications.

#### FUEL

Use clean, fresh, regular or unleaded fuel. Use of unleaded fuel results in less maintenance.

#### HYDRAULIC OIL

Check that the hydraulic oil reservoir is filled to the correct level. Use only approved hydraulic oil. Do not use transmission fluid, engine oil, or any other type of hydraulic oil.

#### — IMPORTANT –

Refer to the chart on page 13 for the recommended ; hydraulic oil specifications

#### **BEFORE STARTING:**

## **A**CAUTION

BEFORE STARTING THE ENGINE, ENSURE THAT THE HYDROSTATIC DRIVE FORWARD/REVERSE SHIFT LEVER IS IN THE NEUTRAL POSITION AND THE PARK BRAKE IS IN THE ENGAGED POSITION. FAILURE TO OBSERVE THIS PRECAUTION COULD RESULT IN SERIOUS PERSONAL INJURY AND/OR MACHINE DAMAGE.

- 1. READ SAFETY DECALS.
- 2. Check the engine crankcase and the hydraulic reservoir oil levels. Refill as required.
- 3. Visually check for loose or missing parts or bolts. Replace as required.
- 4. Fill the fuel tank with clean, fresh regular or unleaded fuel. Use of unleaded fuel results in less maintenance.
- 5. Familiarize yourself with the location and proper operation of all the controls prior to starting the engine.

## ADANGER

NEVER FILL THE FUEL TANK WITH THE ENGINE RUNNING OR HOT! DO NOT SMOKE WHILE FILLING THE FUEL TANK. DO NOT FILL THE FUEL TANK INDOORS OR WHERE THERE MAY BE AN OPEN FLAME OR SPARK.

#### **OPERATING INSTRUCTIONS**

#### Location of controls

Refer to photos to determine the location of equipment controls, engine stop E, steering handlebar F, hydraulic reservoir G. Refer to the engine manufacturer owner's manual to determine the location of engine controls. To reduce the risk of injury, the operator must be thoroughly familiar with the location and proper operation of all controls prior to starting the engine or operating the equipment.

#### **Engine**

The Brouwer ROLLMATE Sod Layer is equipped with a 10.5 HP Briggs & Stratton vertical shaft engine on models Serial no. 1001 - 1033, or an 11.0 HP Honda vertical shaft engine on models Serial No. 1034 and up. For detailed engine starting and operating instructions, refer to the engine manufacturer owner's manual supplied with the unit.

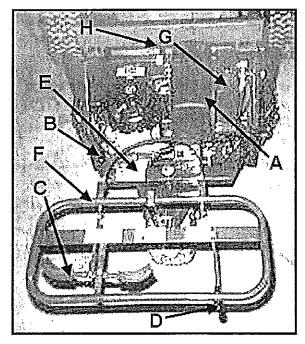
#### Starting the engine

- 1. Position the machine on a level surface and ensure that the park brake H is engaged.
- Turn the fuel flow valve, below the fuel tank A, to the "OPEN" position.
- 3. Place the throttle lever B to the "CHOKE" position.

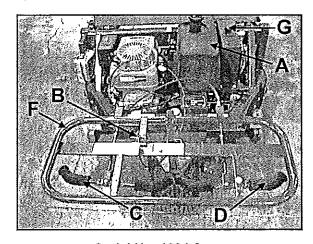
**NOTE:** The choke may not be needed if the engine is warm.

- 4. Pull the start rope. When engine starts, move the throttle lever from choke position to a midpoint position, and set desired engine speed.
- For smooth operation adjust the travel speed of the unit with the F-R lever C and maintain a constant engine speed.
- 6. Use the lift lever **D** to position lift arms.

**NOTE:** The float position does not have a detent. It must be held in position if needed.



Serial No. 1001 - 1033



Serial No. 1034 & up

## **A**CAUTION

TO MAINTAIN CONTROL OF THE MACHINE, USE ONLY A LOW SPEED WHEN TURNING OR WHEN OPERATING ON A SLOPE.

DO NOT OPERATE ON SLOPES GREATER THAN 30 DEGREES. CARRY THE LOAD LOW TO REDUCE THE POSSIBILITY OF THE MACHINE TIPPING OVER.

#### LOADING A SOD ROLL

- 1. Rolls of sod must be fitted with 6 inch I.D. core tubes. Core tubes are required for the mandrel to be fitted to each new roll of sod.
- Insert the mandrel into the core tube of the roll.
   For 24 inch rolls position the flange stop on the
   mandrel and lock in place with the clip pins
   before inserting into the roll.
- 3. Determine the direction of the sod flap and the orientation of the roll in relation to the direction of travel for unrolling the sod.
- If operating on a side slope place the mandrel into the roll so that the roll will be on the upper side of the unit while the sod is being unrolled.
- 5. Drive the unit into position wth the roll and engage the mandrel in the lift arms.
- 6. Lock the mandrel in place and slowly lift the arms for transport. Carry the load low.

#### LAYING A SOD ROLL

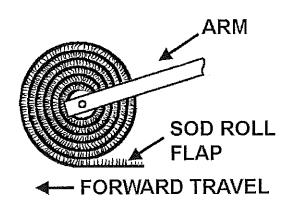
Determine whether forward travel or rearward travel will be used to lay the sod roll. The sod roll flap must be oriented accordingly when the sod roll is loaded on the lift arms as shown in drawing.

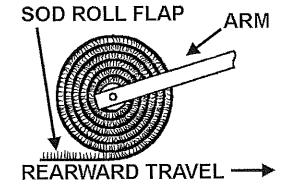
NOTE: Rolls of sod must be fitted with 6 inch I.D. core tubes. Core tubes are required for the mandrel to be fitted to each new roll of sod.

When working on slopes, load the roll so it will be on the upper side of machine while unrolling the sod.

- Rearward travel is recommended for efficient sod laying.
- 2. If the sod roll flap is oriented to be laid using forward travel, move the unit forward until the sod roll flap is positioned at the bottom of the roll, contacting the ground as shown in drawing. If the sod roll flap is oriented to be laid using rearward travel, move the unit rearward until the sod roll flap is positioned at the bottom of the roll, in contact with the ground as shown in drawing.

- Lower the roll to the ground, being aware that is is best to carry the weight of the roll on the lift arms rather than lowering it all the way to the ground. This is necessary to give the drive wheels traction, especially on slopes.
- 4. Begin either forward travel or rearward travel in accordance with the sod roll flap orientation as shown in drawing.





## **A** CAUTION

DO NOT use down pressure on the lift arms when unrolling sod. It is possible for the unit to roll freely if the drive wheels are not on the ground thus creating a potential danger of a runaway condition on a slope.

Be careful when moving rolls. Sod rolls are very heavy and should only be handled with the proper equipment. Personal injury can result from attempting to move rolls by hand.

Use extreme care when working on slopes.

#### **LUBRICATION SCHEDULE**

#### Lubricant or Procedure Interval Apply SAE 30 motor oil to Daily drive wheel chains Apply grease to lift arm pivot Daily pins and cylinder grease fittings Grease the drive axle bearings, rear sprocket Weekly bearings, and rear steering wheel. Change hydraulic oil and After the first 8 hrs. of operation, then filter

every 6 months.

NOTE: Refer to the engine manufacturer's owner's manual for detailed maintenance instructions and lubrication schedule for the engine.

#### PERIODIC MAINTENANCE

#### **LUBRICATION**

- Apply SAE 30 motor oil to the drive chains daily.
- Apply grease to lift arm pivot pin grease fittings daily.
- Apply grease to front drive wheel bearings, rear sprocket shaft bearings, and rear steering wheel weekly.
- Refer to the engine manufacturer's owner's manual for the maintenance and lubrication schedule for the engine.

#### HYDROSTATIC DRIVE

Check the hydraulic oil level in the reservoir level sight glass. Add approved oil as needed but do not over-fill. Refer to the chart below.

- To add oil, remove the breather cap from the reservoir, fill to the correct level, and replace the breather cap.
   Use only the recommended oil. Do not use transmission fluid, engine oil, or any other hydraulic oil.
- The Hydrostatic Drive must be drained and refilled with fresh and approved oil, and the filter replaced, after the first 8 hours of operation. Failure to do this may result in damage to the transmission.
- After the initial oil change, change the oil and filter every 100 hours of operation or every 6 months, whichever occurs first, for units operating in favorable conditions.
- In severe operating conditions, such as rapid increase and decrease in the ambient temperature, or in damp, dusty conditions, it is recommended that the oil is changed at intervals of one to three months.

The oil used must conform to International Standard ISO.G344.HV Grade.

AMBIENT	Standard Range	High Range
TEMPERATURE	-10 deg. to 35 deg. C	0 deg. to 45 deg. C
	+14 deg. to 95 deg. F	32 deg. to 113 deg. F
1		

Castrol : Hyspin	AWH 46	AWH 68
B. P. Bartran	HV 46	HV 68
Esso : Univis	N 46	N 68
Mobil	15 M	16 M
Shell : Tellus Oil	T 46	T 68
Техасо	HDZ 46	HDZ 60

#### **ADJUSTMENTS**

#### **ENGINE**

The Brouwer ROLLMATE Sod Layer is equipped with a 10.5 HP Briggs and Stratton vertical shaft engine on models Serial no. 1001 - 1033, or an 11.0 HP Honda vertical shaft engine on models Serial no. 1034 and up. For detailed engine adjustment and maintenance procedures, refer to the engine manufacturer's owner's manual supplied with the unit.

#### DRIVE CHAIN ADJUSTMENT

After each 100 hours of operation, check the drive chain tension. When properly adjusted, the drive chain should have 1/8 to 1/4 inch deflection.

To adjust the drive chain tension, remove the access cover on the side frame. Loosen the idler mounting bolt and adjust the take-up adjuster until the chain exhibits 1/8 to 1/4 inch deflection. Tighten the idler mounting bolt and replace the access cover mounting bolts.

#### **STORAGE**

#### DAILY/SHORT-TERM STORAGE

- Position the machine on a level surface.
- Place the park brake in the ENGAGED position.
- Turn the fuel flow valve to the CLOSED position.
- Check the engine crankcase oil level as recommended in the engine manufacturer's owner's manual. Refill engine oil as required with the recommended oil. Do not mix brands or grades of oil. Recommended weight for general all temperature use is SAE 10W-30. Refer to the engine manufacturer's owner's manual for detailed maintenance instructions and lubrication specifications, including oil specifications.

- Check the engine air filter element as recommended in the engine manufacturer's owner's manual. Clean or replace the air filter element as required. Refer to the engine manufacturer's owner's manual for detailed maintenance instructions, including air filter element cleaning and replacement.
- Clean the machine.

#### **EXTENDED STORAGE (more than 30 days)**

- Drain all fuel from the fuel tank and fuel lines. Use a hose or fuel line attached to the fuel flow valve to drain the fuel into a suitable container.
- Start the engine and run the engine until all fuel is used.
- Prepare the engine for storage in accordance with the recommendations of the engine manufacturer's owner's manual.
- Thoroughly clean the machine of all dirt, grass, and other debris.
- Lubricate in accordance with the maintenance procedures and lubrication schedule.
- Position the machine on a level surface.
- Place the park brake in the ENGAGED position.
- Turn the fuel flow valve to the CLOSED position.
- Whenever possible, store the unit in a suitable enclosure or cover with a tarp.

#### RETURNING TO SERVICE

- Remove the tarp, if installed.
- Fill the fuel tank with clean, fresh regular or unleaded fuel. Use of unleaded fuel results in less maintenance.
- Check the engine crankcase oil level as recommended in the engine manufacturer's owner's manual. Refill engine oil as required with the recommended oil. Do not mix brands or grades of oil. Recommended weight for general all temperature use is SAE 10W-30. Refer to the engine manufacturer's owner's manual for detailed maintenance instructions and lubrication specifications, including oil specifications.
- Check the hydraulic reservoir oil level.
   Make sure the oil is at the correct level as indicated by appearing midway in the sight glass. Add approved oil as required.
- Check for fuel and oil leaks. Repair as required.
- Lubricate in accordance with the maintenance procedures and lubrication schedule.

#### **TRANSPORT INSTRUCTIONS**

- Load on a low bed trailer using shallow angle ramps. Rubber/corrugated ramp surfaces are recommended.
- Drive the machine onto the trailer.
- Place the park brake in the ENGAGED position.
- Stop engine.

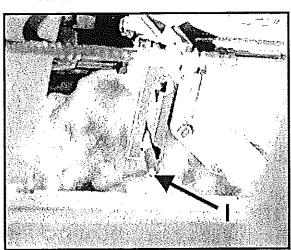
- Turn the fuel flow valve to the CLOSED position.
- Securely block the tires to prevent the machine from moving.
- Use tie-down straps or chains to prevent the machine from moving.

## TOWING OR EMERGENCY MOVING INSTRUCTIONS

- Locate the bypass release lever I on the transaxle as shown.
- Move lever into the notch for moving or towing.

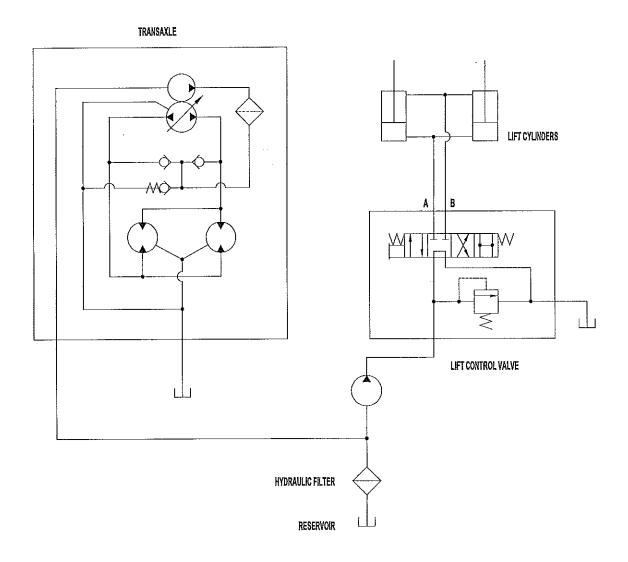
**NOTE:** This is for moving a short distance only, to load on a trailer, or move from a high traffic area.

 DO NOT TOW BEHIND A VEHICLE TO TRANSPORT FROM SITE TO SITE!



## **A** CAUTION

Do not tow or move the unit more than the necessary distance to move a stalled unit off a high way or to load on a trailer for service. Use this tow valve only in an emergency. High speed towing or towing an extended distance will damage the transaxle.



í <sup>'</sup> )			
•			

BROUWER TURF LTD.

23324 Woodbine Avenue, Keswick, Ont. Canada L4P 3E9.
Tel. (905) 476 – 6222.
Web. www.Kesmac.com
Fax. (905) 476 – 6744.
email. info@kesmac.com