

# **Operator Manual**

Manufactured by:



800 rue Rossiter, Saint-Jean-sur-Richelieu (QC) Canada J3B 8J1 www.landisinternational.ca info@landisinternational.ca T.(450)359-8800 TF. 1-800-634-0806 F. (450) 359-9619



# Introduction

The MOLEVSP2 is a compact, durable machine designed for fast, complete carving work. It will deliver efficient, dependable service when used correctly and with care. As with any piece of specialized equipment, for best performance the manufacturer's instructions must be followed.



# THESE INSTRUCTIONS SHOULD BE READ AND UNDERSTOOD BY ALL USERS PRIOR TO INSTALLATION OR USE OF THE MOLEVSP2 CARVERS.

#### **GENERAL MACHINERY SAFETY WARNINGS**

- 1. MISUSE of this machine can cause injury.
- 2. READ, UNDERSTAND AND FOLLOW all instructions shipped with your machine.
- 3. ALWAYS WEAR SAFETY GLASSES when operating machinery. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses
- 4. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewellery which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
- 5. TO MAINTAIN PROPER FOOTING, never operate machinery when floor is damp or wet. Wear soft soled footwear on a clean dry floor for safest operation.
- 6. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
- 7. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
- 8. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- 9. USE ONLY RECOMMENDED ACCESSORIES. Properly install and maintain accessories.
- 10. DO NOT USE EXTENSION CORD.

#### **MOLEVSP2 CARVER USE SAFETY WARNINGS**

- 1. ALWAYS WEAR safety glasses when using the MOLEVSP2 carvers.
- 2. ALWAYS HELD work pieces firmly with both hands.
- 3. ALWAYS AVOID PLACING EXCESS PRESSURE on the work piece or tool.
- 4. ALWAYS AVOID loose articles on the work piece.

- 11.
- 12. DON'T OVERREACH. Keep proper footing and balance at all times. Be alert when using machinery and keep hands clear of moving parts.
- 13. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 14. DISCONNECT POWER SOURCE before performing any service to the machine. Be sure the machine is in the OFF position before reconnecting any power when changing accessories.
- 15. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in OFF position before plugging in.
- 16. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
- 17. ALWAYS PROPERLY SECURE machinery to floor or bench as instructed.
- 18. MAINTAIN A CLEAN, dry, well lit, and clutter free work area.
- 19. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.
- 20. NEVER MODIFY THE MACHINE. Modifications may cause safety hazards and will void the warranty.
- 5. CARE MUST BE TAKEN TO KEEP the work piece clear of any attachment such as a dust collection shield.
- 6. OPERATORS MUST BE ALERT and avoid all personal contact with the tool or spinning shaft.
- 7. USE OF A dusk mask or an external vacuum system is recommended to avoid breathing airborne dust particles.



#### **RISK OF INJURY**



- DISCONNECT TOOLS BEFORE SERVICING AND LOCK THE SWITCHES.
- EYE PROTECTION SHOULD ALWAYS BE WORN BY THE OPERATOR AND OTHERS IN THE WORK AREA WHEN THE CARVER IS IN USE.
- EYE PROTECTION IS REQUIRED FOR PROTECTION FROM FLYING DEBRIS AND DUST, WHICH COULD CAUSE EYE INJURY.
- AVOID KICK BACK BY SANDING IN ACCORDANCE WITH THE DIRECTIONAL ARROWS.

### **GROUNDING INSTRUCTIONS**

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided -- if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to alive terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding plugs, **A**, and 3-pole receptacles that accept the tool's plug.



Repair or replace damaged or worn cord immediately.

Make sure the tool is connected to an outlet having the same configuration as the plug. No adapter is available or should be used with this tool. If the tool must be reconnected for use on a different type of electric circuit, the reconnection should be made by qualified service personnel; and after reconnection, the tool should comply with all local codes and ordinances.



### LOCKOUT PROCEDURES

#### PREPARATION

1. Notify all affected workers that a lockout is required and the reason for the lockout of the machine.

#### MACHINE OR EQUIPMENT SHUTDOWN AND ISOLATION

- 1. If the equipment is operating, shut it down by the normal stopping procedure (turn off the switch).
- 2. Disconnect the electrical plug from the electrical source.



### GENERAL SPECIFICATIONS

The MOLEVSP2 floor carver comes equipped with a durable brushless motor with built in thermal protectors. The motor is available in single speed, dual speed and variable speed. The floor models have both height and tilt adjustment with position locks. The tool shaft extension is 14" (355mm).

### FLOOR MODEL SPECIFICATIONS

Description	Variable speed	
Model	60 Hz	50 Hz
Power Rating	1 Ph, 115V, 60 Hz	1 Ph, 230 V, 50 Hz
Motor Speed (RPM)	3.2 0-3450	1.6 0-2860
Motor HP (Max)	1 HP	
Shaft Length	14 in. (355 mm)	
Shaft Thread	1/2-13 UNC	
Working Ht	26 in 56 in. (660 mm - 1422 mm)	
Overall Ht	63 in. (1600 mm)	
Space Requirement	24 in. x 48 in. (609 mm x 1219 mm)	
Weight	130 lbs (60 kg)	
Crated Wt	241 lbs (109 kg)	

Note: Specifications subject to change without notice.



# START-UP



EYE PROTECTION SHOULD ALWAYS BE WORN BY THE OPERATOR AND OTHERS IN THE WORK AREA WHEN SETTING UP THE MACHINE. EYE PROTECTION IS REQUIRED FOR PROTECTION FROM FLYING DEBRIS AND DUST, WHICH COULD CAUSE EYE INJURY.

Before shipment, the MOLEVSP2 was checked at the factory for proper adjustment and operation. However, due to the possibility of jarring or damage during handling and shipping, it is necessary to check that the machine is in proper working order before use.

The MOLEVSP2 should be located on a flat, firm surface, in an area free of obstructions that could interfere with the safe operation of the equipment. The MOLEVSP2 should be bolted to the floor using four anchor bolts.



ALL ELECTRICAL WORK MUST BE PERFORMED BY A QUALIFIED ELECTRICIAN AND MUST CONFORM TO ALL STATE AND LOCAL ORDINANCES.

DO NOT, UNDER ANY CIRCUMSTANCE, TAMPER WITH, MODIFY, OR ADAPT THE ELECTRICAL PLUG AND CORD PROVIDED WITH THIS MACHINE.

### **UNCRATING & SET-UP INSTRUCTIONS**

- 1. The MOLEVSP2 floor carvers are shipped fully assembled in a wooden or cardboard crate. The floor carver should be uncrated in the vertical position. Place the entire crate near the installation location and disassemble entire crate to expose floor carver. Positioning the carver in the final is a two person job. If shipped in a box rather than a wooden crate follow uncrating process and carefully disassemble box to expose floor carver. If a sharp tool is used care should be taken not to damage the carver.
- 2. The MOLEVSP2 floor carver should be bolted to the floor using four anchor bolts.
- 3. Installation should be in a well lit, adequately ventilated, uncluttered location with convenient access to proper electrical receptacles.
- 4. The MOLEVSP2 floor carver should be grounded in accordance with local codes and ordinances. A qualified electrician should be consulted if electrical work is required. Grounding the carver will prevent electrical shock. The carver should never be used with extension cords or ungrounded receptacles.



5. The MOLEVSP2 floor carver comes with a standard US plug or custom plug as specified at the time of purchase. A plug should never be forced into a receptacle. If the plug is not compatible with your receptacle please consult a qualified electrician or contact Landis International for assistance.

## FLOOR CARVER USE

### **BEFORE CONNECTION TO AN ELECTRICAL POWER SUPPLY:**

1. Check that the switches are off.



AS W OPER

AS WITH ANY PIECE OF ELECTRICAL EQUIPMENT, THERE IS AN EVER PRESENT HAZARD OF ELECTRICAL SHOCK WHEN OPERATING OR TOUCHING THE MOLEVSP2. ENSURE THE MACHINE IS PROPERLY GROUNDED AT ALL TIMES.

DO NOT FORCE THE EQUIPMENT. IT WILL DO THE JOB BETTER AND SAFER AT THE RATE FOR WHICH IT WAS DESIGNED.

### **OPERATION & ADJUSTMENT**

- 1. The variable speed floor carver is operated by an ON/OFF and START/STOP switch located on the control panel. ON supplies power to the unit and START rotates the shaft to the speed selected on the SPEED control knob. Variable speed is accomplished by turning the SPEED control knob with 100% speed resulting in the maximum rpm from the motor.
- 2. The floor carver are equipped with a thermal overload trip (TOL) device which will cut electrical power to the motor in the event of overheating. This device will reset once the motor cools to a safe level. In the event of a TOL trip the ON/OFF button should be turned off. Caution should be taken while attempting to restart as damage could occur if the unit is not properly cooled.
- 3. Operation should be from the side of the carver which has rotation toward (across the top of the shaft/tool) the operator.
- 4. The work piece should be held firmly while avoiding excess pressure on the work tool.
- 5. The working height of the floor carver can be adjusted by turning the height adjustment lever to release the position lock (located in the back of the post). Set to desired height and tighten the lever securely to hold in place.
- 6. Positioning for tilt can be done by releasing the tilt adjustment lever (located in the back of the motor). Set to desired position and tighten the lever securely.





FAILURE TO PROPERLY MOUNT THE ADAPTOR WILL RESULT IN FLYING APART AND POSSIBLE INJURY TO THE OPERATOR AND OTHERS IN THE WORK AREA.

THESE QUICK CHANGE ACCESSORIES SHOULD BE PROPERLY ENGAGED ON THE SHAFT TO ENSURE SAFE OPERATION. MAKE SURE PIN ON SHAFT ENGAGES THE ADAPTOR CORRECTLY.

#### RECOMMENDED MATERIALS, ADAPTERS AND ACCESSORIES

- 1. The floor carver is designed for use with MOLEVSP2 sand cones, sand drums, felt arbors, polishing arbors, cutters, grinding rasps and drill attachments.
- 2. The floor carver can be used to shape plastic, lamination, carbon, wood, leather, rubber, crepe and foams. Caution should be used with any material until operator is familiar with its characteristic.
- 3. Use with a MOLEVSP2 rasp, cutter, drill attachment or other sharp tool requires precaution. Applying too much pressure might cause vibration. Discontinue use if excessive vibration occurs.
- 4. All tools should be tightened up to the shoulder on the carver shaft. Never use tools with loose or damaged threads. Discontinue use of the carver if its threads should become damaged.



EYE PROTECTION SHOULD ALWAYS BE WORN BY THE OPERATOR AND OTHERS IN THE WORK AREA WHEN USING THE ACCESSORIES WITH THE MOLEVSP2. EYE PROTECTION IS REQUIRED FOR PROTECTION FROM FLYING DEBRIS AND DUST, WHICH COULD CAUSE EYE INJURY.



### MAINTENANCE

A properly maintained machine will give you years of satisfactory service, whereas an abused machine will not. We strongly recommend that you observe the following procedures for your own benefit and safety.



ALWAYS DISCONNECT THE MACHINE'S POWER SOURCE BEFORE PERFORMING ANY MAINTENANCE. NEVER DISASSEMBLE THE MACHINE OR EXPOSE WIRING WITHOUT DISCONNECTING THE ELECTRICAL POWER.

#### DAILY AND WEEKLY MAINTENANCE

1. Clean your MOLEVSP2 daily.



- 2. All required lubrication of internal parts is performed at the factory and no additional lubrication is required.
- 3. As required, the machines should be cleaned of dust and debris using compressed air or a soft dry cloth.
- 4. Periodic cleaning of external surfaces is suggested if build-up of dust and debris occurs. After cleaning, lubricate unpainted external surfaces with a light coating of oil for rust prevention.



## TROUBLE SHOOTING

This chart provides possible causes and solutions for common problems. It is meant to be a guide and no guarantee is made about its application or fitness for use. Please contac Landis International with all Troubleshooting and Repair inquiries. Detailed repair instructions can be obtained upon request.

Problem	Possible Cause(s)	Possible Solution
The carver will not start and there is no sound coming from the motor.	<ol> <li>Unit is not connected to the power source</li> <li>Circuit breaker is tripped</li> <li>Damaged cord</li> <li>Defective switch</li> <li>Defective motor</li> </ol>	<ol> <li>Check plug</li> <li>Reset circuit breaker</li> <li>Replace cord</li> <li>Replace switch</li> <li>Replace/repair motor</li> </ol>
The carver will not start but there is sound coming from the motor.	<ol> <li>If shaft will not turn by hand bearings may be defective</li> <li>If shaft will turn by hand but will not start, the start motor switch may be defective</li> </ol>	<ol> <li>Replace bearings</li> <li>Replace switch/motor</li> </ol>
The shaft vibrates when the motor is running.	<ol> <li>The motor housing bolts may be loose</li> <li>Coupling connecting motor to shaft is worn</li> <li>Bearings may be worn</li> <li>Shaft may be worn</li> </ol>	<ol> <li>Tighten bolts</li> <li>Replace coupling</li> <li>Replace bearings</li> <li>Replace shaft</li> </ol>
Adapter will not thread onto shaft.	<ol> <li>Adapter thread might be wrong</li> <li>Adapter thread damaged</li> <li>Shaft thread damaged</li> <li>Adapter might contain debris</li> </ol>	<ol> <li>Confirm 1/2-13 thread with adapter mfg</li> <li>Discard damaged adapter</li> <li>Replace shaft</li> <li>Clean out debris</li> </ol>



## ACCESSORIES

# **Carvers Accessories**



**TRR7123** Rubber sanding tube 7" x 3"

27877824 Sanding tube 24 grits

27877840 Sanding tube 40 grits

278778100 Sanding tube 100 grits



Sandpaper for cone See p. 2 for all sandpaper available for RCS, RCM and RCL

A162

A163

Grenade Bedding rubber cone

Sandpaper for Grenade See p. 2 for all sandpaper available for Grenade

Scotch brite polishing cone 4" x 1"

Tapered rubber sanding cone

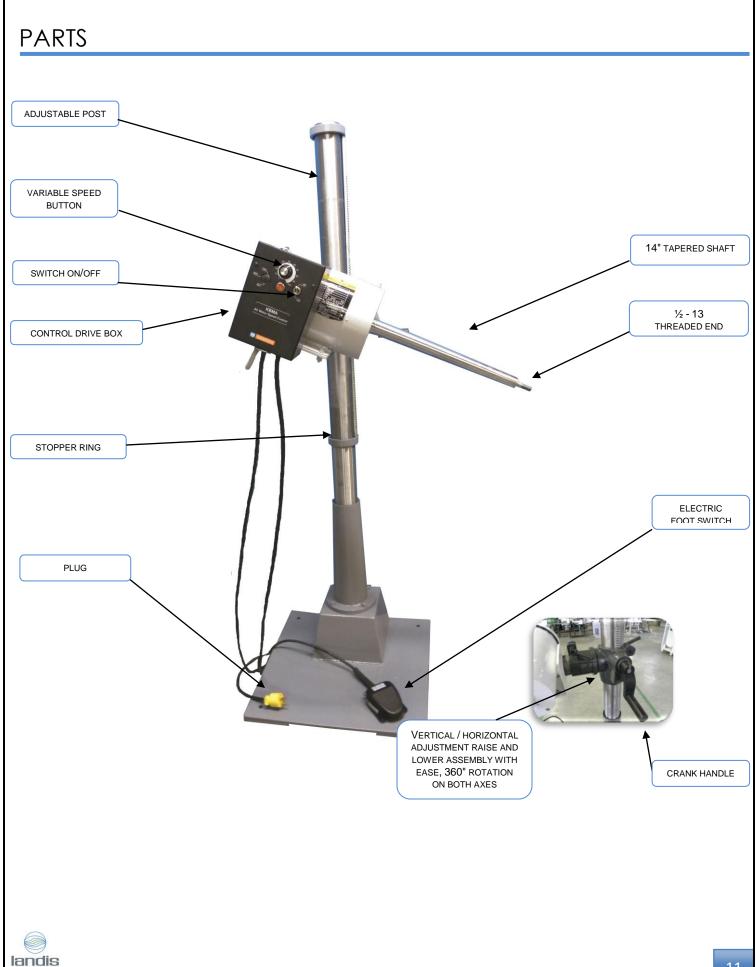
RCS / RCM / RCL





**MOLEAFS2** Suction funnel swivel/adjustable





### PARTS LIST

PART

#### DESCRIPTION

KILANDIS2011 893100000 1W513 12972M10 CA532 MOTOR KIT VARIABLE SPEED WITH SHAFT 2011 FOOTSWITCH MOLE WIRE & PLUG MOULDED 9' 16/3 HANDLE WITH 10MM FILET ALLEN KEY 5/32"



### PARTS VIEW





### WARRANTY INFORMATION

#### **MOLEVSP2 EQUIPMENT WARRANTY**

MOLEVSP2 Equipment and Equipment accessories are warranted for manufacturing defects for 12 months from the date of shipment from the Landis International warehouse or from an authorized distributor. Items will be replaced or repaired at Landis International discretion at no charge to the customer (See MOLEVSP2 Warranty Repair/Replacement Procedure and Agreement). The warranty will be void if the item has been modified, abused, or used outside of Landis International recommendations.

