

WORKMASTER 1000

(SKU: GPDUAL & GP220)

ORTHO SANDER



Operator Manual

Manufactured by



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INTRODUCTION

The Landis Grind Pro Dual Sander is a compact, durable machine designed for fast, complete finishing 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.

BEFORE USING THE LANDIS MACHINES, READ OPERATING INSTRUCTIONS MANUAL:

1. KEEP GUARDS IN PLACE and in working order.
2. Always DISCONNECT ELECTRICAL SOURCE before adjustments or servicing the machine.
3. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
4. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
5. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations or expose them to rain. Keep work area well lighted.
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 RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
10. DO NOT USE EXTENSION CORD.
11. 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.
12. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
13. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
14. Make sure machine is PROPERLY GROUNDED.
15. DON'T OVERREACH. Keep proper footing and balance at all times.
16. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
17. DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, and the like.
18. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in off position before plugging in.
19. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
20. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
21. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function -- check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
22. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
23. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.
24. Dust generated is FLAMMABLE – DO NOT SMOKE when using Landis Machine.
25. Keep generators and covers IN PLACE and in proper working order.
26. OBSERVE all SAFETY WARNINGS on the machine and in this manual.

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 SANDER IS IN USE.**
- **EYE PROTECTION IS REQUIRED FOR PROTECTION FROM FLYING DEBRIS AND DUST, WHICH COULD CAUSE EYE INJURY.**

INSTALLATION

The Landis Sander 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 Sander should be positioned and leveled with the 4 white plastic legs to obtain quiet operation with a minimum of vibration.



- **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.**

ELECTRICAL CONNECTIONS

Electrical connection may be made by either plugging the provided electrical cord into an appropriately wired electrical socket, or by wiring the machine directly into an electrical disconnect box. The customer must ensure that the voltage is 230 V.



- **IF THE ELECTRICAL CORD, PLUG OR WIRING SHOULD BECOME FRAYED OR DAMAGED, REPLACE IT AT ONCE. DO NOT ATTEMPT TO OPERATE THE MACHINE WITH FAULTY WIRING AS IT COULD RESULT IN SEVERE INJURY OR DEATH.**

NOTE: REFER TO THE MACHINERY IDENTIFICATION PLATE TO DETERMINE THE ELECTRICAL SPECIFICATIONS OF THIS MACHINE IN RESPECT TO VOLTAGE, PHASE AND AMPERAGE REQUIREMENTS.

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). We recommend to install a padlock to the Electrical control panel.
2. Disconnect the electrical plug from the electrical source.

APPLICATION OF LOCKOUT / TAGOUT

1. Lock out and tag the switch with an assigned, individual lock. A worker will not be protected unless he/she uses his/her own padlock.
2. If more than one worker is working on the same piece of equipment at the same time, each one should lock out the equipment, by placing a personal lock and tag on the group lockout device when he/she begins work and should remove those devices when he/she stops working on the machine or equipment.
3. Locks and tags should clearly show the name of the person who applied the device, the date, and the reason for the lockout. This identifies who is servicing the machinery or equipment. In a multiple lockout/tagout situation, it will also identify any worker(s) who may not have finished working.
4. Locks and tags must be durable enough to withstand the environment in which they are to

be used. Information on the locks and tags should remain legible.

5. Locks must be substantial enough to prevent removal without the use of excessive force. Tags must be substantial enough to prevent accidental or inadvertent removal.
6. Both locks and tags are to be standardized by color, shape, or size. Tags should be easily recognized and provide appropriate information about the lockout.

RELEASE FROM LOCKOUT / TAGOUT

1. Before locks and tags are removed and electricity is restored to the machine, inspect the work area to ensure that non-essential items have been removed and that machine components are operationally intact.
2. Ensure workers are a safe distance from any potential hazard.
3. The lock and tag should be removed from each energy-isolating device by the worker who applied the lock and tag.
4. Notify affected workers that locks and tags have been removed.

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.**



Main Switch
OFF



Main Switch
ON



Start/Stop
Switch



Emergency
Button

To activate:

Push the button to stop the machine immediately.

To deactivate:

Turn the knob in the direction of the arrows indicated.

Before shipment, your Landis Sander 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.



- **BEFORE INITIAL START-UP, TURN SANDING SHAFT BY HAND TO ENSURE THAT ALL PARTS ARE FREE.**

BEFORE CONNECTION TO AN ELECTRICAL POWER SUPPLY:

1. Check that the main switch is off.
2. Rotate the sanding shaft to see that all parts are free and not binding. You can tell that one complete revolution has been made when the joint of the sanding belt has gone by the sanding wheels twice.
3. Rotate the Naumkeag by hand to see that the sanding pad is not damaged and the shaft not bent. (optional accessory)



- **AS WITH ANY PIECE OF ELECTRICAL EQUIPMENT, THERE IS AN EVER PRESENT HAZARD OF ELECTRICAL SHOCK WHEN OPERATING OR TOUCHING THE SANDER. 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.**

SANDPAPER REPLACEMENT



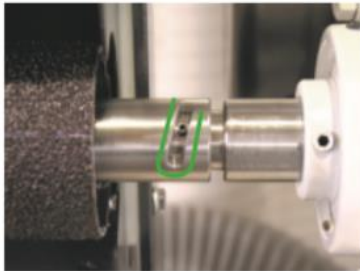
- EYE PROTECTION SHOULD ALWAYS BE WORN BY THE OPERATOR AND OTHERS IN THE WORK AREA WHEN CHANGING SANDPAPER. EYE PROTECTION IS REQUIRED FOR PROTECTION FROM FLYING DEBRIS AND DUST, WHICH COULD CAUSE EYE INJURY.
- NEVER LEAVE MACHINE RUNNING WHILE UNATTENDED. TURN IT OFF.

FOR YOUR SAFETY, NEVER INTERCHANGE THE BAYONETS.



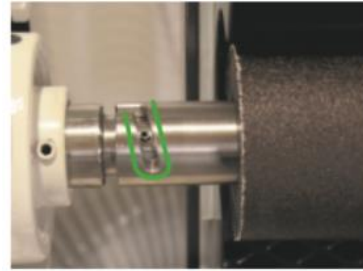
- FAILURE TO PROPERLY MOUNT THE ADAPTOR WILL RESULT IN FLYING APART AND POSSIBLE INJURY TO THE OPERATOR AND OTHERS IN THE WORK AREA.
- THESE QUICK CHANGE ACCESSORIES SHOULD BE PROPERLY ENGAGED ON THE SHAFT TO ENSURE SAFE OPERATION. MAKE SURE PIN ON SHAFT ENGAGES THE ADAPTOR CORRECTLY.

LEFT BAYONET CORRECTLY INSTALLED



THE GROOVE MUST BE DOWN.

RIGHT BAYONET CORRECTLY INSTALLED



THE GROOVE MUST BE DOWN.



FOR WORKMASTER 1000 (SKU: GPDUAL):

- It is not necessary to remove the bayonet to slide the new sand paper on the rubber wheel.
- Slide and turn down the sandpaper to remove it. It is easier to put a new sandpaper on the rubber wheel if you remove it from the bayonet. Slide the new sandpaper on the rubber wheel and replace it on the bayonet.

Sandpaper can be obtained in various grit to suit your needs and are easily changed.

- Sandpaper, 24 grit, SKU: 27877824
- Sandpaper, 40 grit, SKU: 27877840
- Sandpaper, 60 grit, SKU: 27877860
- Sandpaper, 80 grit, SKU: 27877880
- Sandpaper, 100 grit, SKU: 278778100

FOR WORKMASTER 1000 (SKU: GP220):



- **SOME SANDPAPER ARE CONSTRUCTED TO ROTATE IN ONE DIRECTION ONLY. CHECK ARROW INSIDE SANDPAPER FOR ROTATION. INCORRECT INSTALLATION CAN CAUSE SUDDEN BELT FAILURE RESULTING IN SERIOUS INJURY TO OPERATOR AND OTHERS IN THE WORK AREA. (GP220 ONLY)**



Result: 6'' x 4''left expanding wheel on bayonet

1. For replace the sandpaper, make sure the grooves are at the same side of the pictures above. It is not necessary to remove the bayonet to slide the new sand paper on the expanding wheel.
2. For help the installation of the new sandpaper, slide and turn it at the same direction of the grooves.

The sand paper can be obtained in various grit to suit your needs and are easily changed.

NAUMKEAG (in option)

It is possible to adjust the blasting angle using the handle on the right of the motor.

SAND PAPER REPLACEMENT

The sand paper can be obtained in various grit to suit your needs and are easily changed.

- Sandpaper 80 grit, SKU: PN80
- Sandpaper 100 grit, SKU: P100
- Sandpaper 120 grit, SKU: PN120

TO REPLACE THE SAND PAPER

1. Unscrew the nut.
2. Move up the washer and change de sand paper.
3. If necessary, it is possible to change the pad according to its wear. Repeat the procedure for changing paper.



DUST BAG

Dust composed of leather, rubber and plastic is combustible and can readily be set on fire by a lighted cigarette or sparks. This can occur whether the dust is in the dust bag or the machine duck work leading to the dust bag. **Do not sand or grind metal with the sander.**

The cleaner you keep the dust bag, the less likely you are to burn a hole in it. Failure to shake the dust bag daily will not only increase this likelihood, but will also cause a significant loss of dust extraction from the sanding areas.

- ✓ *Maintenance is important, see our recommendations page 12.*



ACCESSORIES

ACCESSORIES ON QUICK CHANGE BAYONET FITTING

Both ends of the sanding shaft are machined to accommodate bayonet fitting (quick change). Extra tools and sanding wheels are available on request. (see accessories page 25-26)

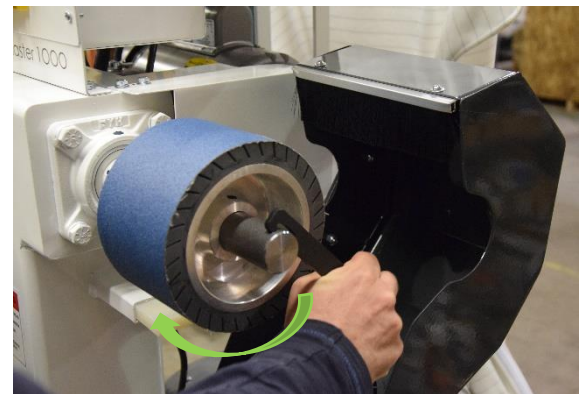
When removing the quick change fittings, use the special black **spanner wrench** (SKU: CCL) supplied with the machine. **Check that the main switch is off.** To remove, engage the spanner in the hole near the end of the bayonet fitting and apply a sharp rap downward.

Before putting on a fitting be sure the opening ends are cleaned. Hand tightening is sufficient to hold the fitting in proper position.

N.B. When properly mounted, the bayonet fitting will tighten itself by rotating it in the socket in the opposite direction of the sanding belt rotation.



To remove the quick change fitting. Help you and hold the other bayonet with your hand.



To fix the quick change fitting.



- **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.**

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.



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

DAILY AND WEEKLY MAINTENANCE

1. Clean your Landis Sander daily.
2. Shake dust bag daily. Empty it weekly. (Optional dust collector system)
3. After cleaning the machine, turn dust extraction motor off. While the motor is coasting to a stop, shake bag vigorously.

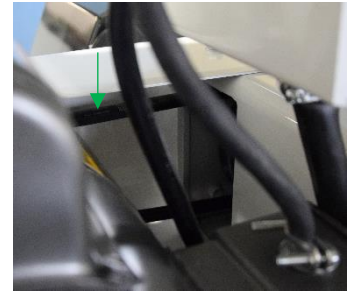
The cleaner you keep the dust bag, the less likely you are to burn a hole in it.



- **DUST FROM SANDER IS COMBUSTIBLE. DO NOT SMOKE WHILE CLEANING THE MACHINE AND DUST COLLECTOR.**
- **DAMAGED DUST BAG WILL ALLOW THE ESCAPE OF COMBUSTIBLE MATERIALS CAUSING A FIRE HAZARD AROUND THE MACHINE.**
- **CHECK DAMAGED PARTS. BEFORE FURTHER USE OF A TOOL, GUARD OR OTHER PART THAT IS DAMAGED, CHECK CAREFULLY TO DETERMINE THAT IT WILL OPERATE PROPERLY AND PERFORM ITS INTENDED FUNCTION. CHECK FOR MOUNTING OR ANY OTHER CONDITION THAT MAY AFFECT ITS OPERATION. A TOOL, GUARD OR OTHER PART THAT IS HARMFULLY DAMAGED SHOULD BE PROPERLY REPAIRED OR REPLACED.**
- **IF THE ELECTRICAL CORD, PLUG OR WIRING SHOULD BECOME FRAYED OR DAMAGED, REPLACE IT AT ONCE.**
- **DO NOT OPERATE MACHINE WITHOUT HOODS PROPERLY INSTALLED.**
- **AFTER MAKING ADJUSTMENTS, REMOVE ALL WRENCHES AND OTHER TOOLS BEFORE OPERATING THE SANDER.**
- **USE EXTRA CAUTION WHEN STARTING THE SANDER FOR THE FIRST TIME AFTER INSTALLING A NEW TOOL OR PART.**

MONTHLY MAINTENANCE

1. V-Belt – Check tension and adjust if necessary.



V-BELT ADJUSTMENT AND REMOVAL

The V-Belt on the Landis Sander should be checked monthly for proper tension and general condition. Loose V-Belt will decrease the power available to the various tools and lower the efficiency of your Sander.

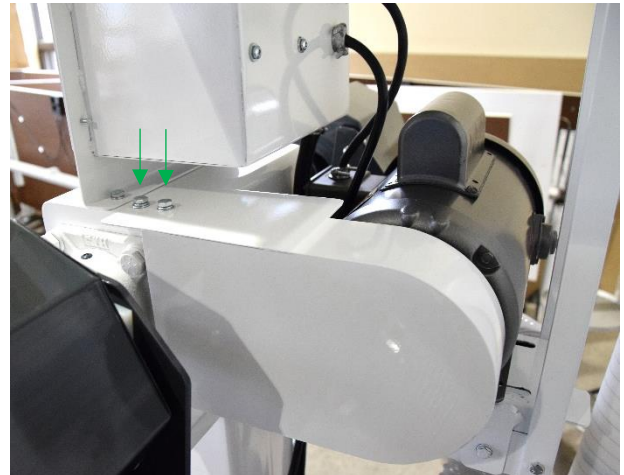
If you discover a worn or frayed belt, replace it now so it won't break at an inconvenient time.



- **DISCONNECT ELECTRICAL POWER SUPPLY BEFORE WORKING ON THE MACHINE.**

TO CHECK V-BELT TENSION

1. Disconnect the electrical power supply.
2. Remove the 2 bolts of the white guard box beside the motor. You will access to the V-Belt.
3. Check the tension of the V-belt running to the motor; it should depress approximately 12 mm (½") when pressed in the middle with moderate force.
4. Rotate the V-belt by hand, visually inspecting the belt for damage.
5. If tensions or conditions are bad, adjust tension or replace V-belt.
6. After making adjustments, remove all wrenches and other tools before operating the Sander.



- **DO NOT OVER TIGHTEN V-BELT, AS TO DO SO WILL CAUSE RAPID BELT WEAR AND PREMATURE BEARING FAILURE.**
- **AFTER MAKING ADJUSTMENTS, REMOVE ALL WRENCHES AND OTHER TOOLS BEFORE OPERATING THE SANDER.**

LUBRICATION

Your Landis Sander is equipped with sealed bearings throughout, which should be replaced if they ever wear out.

Other parts should not require any lubrication, only cleaning the parts is required.

Lubrication will only attract dust and would be more harmful than helpful.

MOTOR REPLACEMENT



- **MOTOR REPLACEMENT REQUIRES WORKING WITH ELECTRICAL WIRING AND CAN BE HAZARDOUS. IF YOU ARE NOT FAMILIAR WITH ELECTRICAL PROCEDURES, PLEASE CALL A QUALIFIED ELECTRICIAN.**

If you believe that the motor presents an anomaly, please contact Landis customer service at 1 800 634-0806.

TROUBLE SHOOTING

MOTOR STOPS WITH SWITCH ON

CAUTION! TURN SWITCH OFF IMMEDIATELY

1. Too much equipment operated on same circuit on which Landis machine is connected. Check circuit breaker or fuse box.
2. **Refer to the lockout procedures before the next step (page 4).**
3. An overload may have caused the thermal overload protector in motor to shut off current. Be sure sander is off, then find and eliminate cause for overload.

Some motors are equipped with manual Re-Set thermal overload protector wait at least 30 minutes, then firmly press Re-Set button on motor with eraser end of pencil or a small blunt dowel. After approximately 30 minutes you should be able to hear or feel overload protector click in when pushed to reset. After Re-Set clicks in, turn the main switch ON and start (Stop/Start switch) the machine.

Sanding Motor

Re-Set button
in front of the
motor



After this procedure, the motor should run normally. If the motor has no Re-Set button, wait 30 minutes that the engine would shrink. After this time, the engine should reset itself.

If you believe that the motor presents an anomaly, please contact Landis customer service at 1 800 634-0806.