Beta

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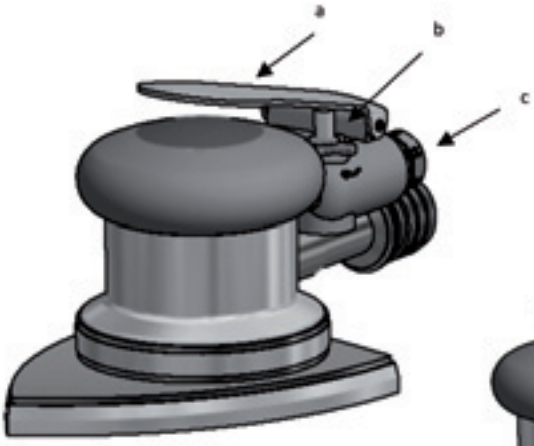
Operation manual and instructions



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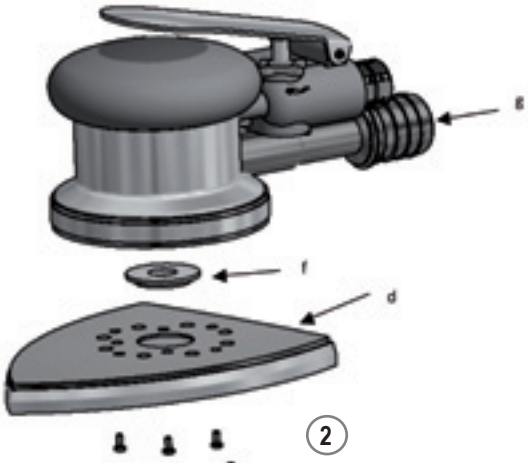

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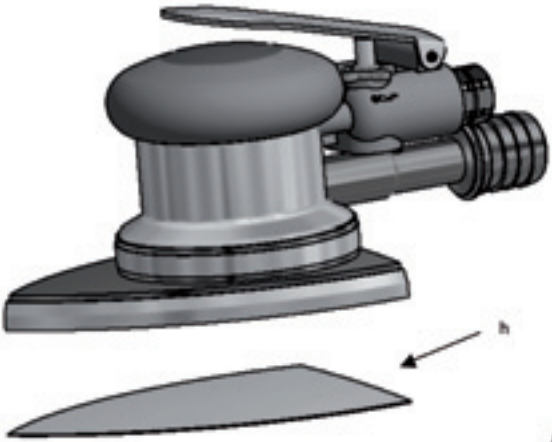

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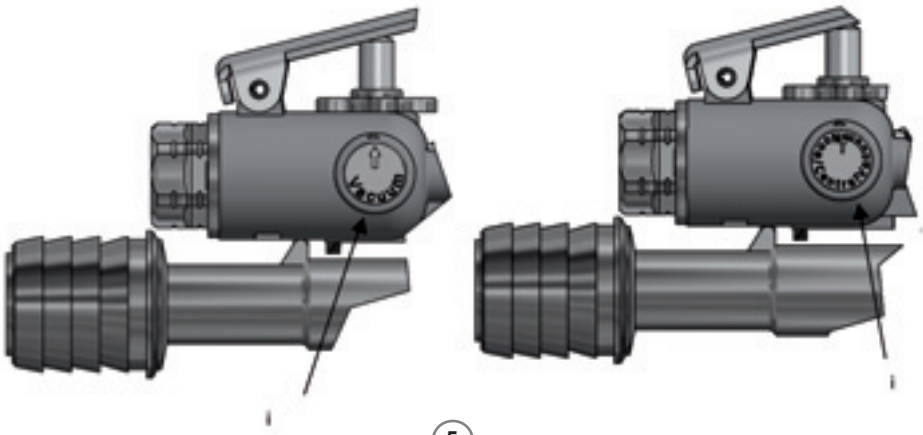

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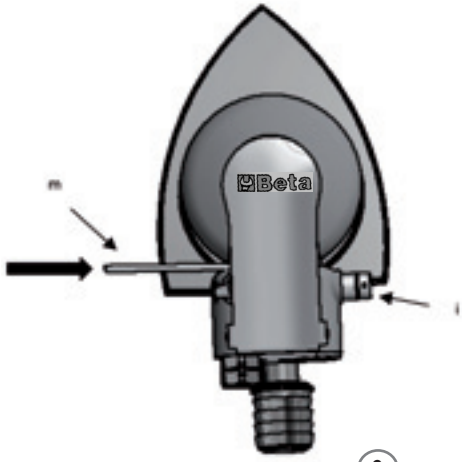

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OPERATION MANUAL AND INSTRUCTIONS EN

OPERATION MANUAL AND INSTRUCTIONS FOR ORBITAL PALM SANDER MANUFACTURED BY:

BETA UTENSILI
S.P.A.

Original documentation drawn up in ITALIAN.

⚠ CAUTION	
	IMPORTANT! READ THIS MANUAL THOROUGHLY BEFORE USING THE PNEUMATIC TOOL. FAILURE TO COMPLY WITH THE SAFETY STANDARDS AND OPERATING INSTRUCTIONS MAY RESULT IN SERIOUS INJURY.

Store the safety instructions with care and hand them over to the users.

PURPOSE OF USE

- **The pneumatic tool can be used for the following purposes:**
  - Sanding surfaces.
  - The product can also be used in open places exposed to water and air.

- **The pneumatic tool must not be used for the following operations:**
  - No grinding wheels, cutting discs or mills may be used.
  - The pneumatic tool must not be used in environments containing potentially explosive atmospheres.
  - The trigger must not be locked with adhesive tape or clamps.
  - The pneumatic tool must not be used for any applications other than stated ones.

WORK AREA SAFETY

- Beware of both surfaces that may become slippery due to the use of the machine and the danger of tripping over the air hose.
- While using the pneumatic tool for jobs performed high from the ground, take all necessary precautions, to eliminate or minimize risk to other workers, following the accidental falling of any tools (for example, isolation of the work area and proper signs).

⚠ Do not operate the pneumatic tool in environments containing potentially explosive atmospheres, because sparks may be generated, which can ignite the dust, fumes or gases.

⚠ Avoid contact with live equipment: the pneumatic tool is not insulated, and contact with live parts can cause electric shocks.

⚠ To find any hidden power supply lines, use suitable search tools or contact the local power supply company. Contact with electric lines can cause fires and electric shocks. Damaging gas lines causes the risk of explosion. Penetrating a water pipe will result in severe material damage.

⚠ Keep children and bystanders away from your workplace while operating the pneumatic tool. Distractions from other people can cause you to lose control over the pneumatic tool.

PNEUMATIC TOOL SAFETY

- Do not point the air flow to yourself or other people. Compressed air can cause serious injury.
- Check the connections and the air supply lines. All units, couplers and hoses should conform to the product specifications in terms of pressure and air volume. Too low pressure impairs the function of the pneumatic tool; too high pressure can cause damage and/or injury.
- Do not bend or tighten any hoses; avoid using solvents and sharp edges. Keep the hoses away from heat, oil and rotating parts. Immediately replace any damaged hose. A defective feed pipe may cause uncontrolled movements of the compressed air pipe. Raised dust or chips may cause eye injury. Make sure that the hose clamps are always secured firmly.

PERSONNEL SAFETY

- Stay alert; watch what you are doing. Do not use the pneumatic tool while tired or under the influence of drugs, alcohol, or medication.

- **Always use the following personal protective equipment:**
  - Eye protection
  - Safety shoes

- Hearing protection
- Protective gloves against physical agents
- Anti-vibration gloves, to be worn following a specially conducted survey of the daily exposure of the hand-arm system to vibration
- Protective mask against physical agents according to the values found in the environmental/industrial hygiene survey

- Make sure you are in a safe position, keeping proper balance at all times. A safe working position and a proper body posture enable better control of the pneumatic tool in unexpected situations.
- Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothing, jewellery, and long hair can get caught in moving parts.
- Do not directly inhale the exhaust air, and prevent it from getting into your eyes. The exhaust air of the pneumatic tool can contain water, oil, metal particles and impurities, which may cause hazards.
- Do not place the sander before the pad has stopped completely.

PNEUMATIC TOOL USE AND CARE

- Use clamping devices or a vice to secure and support the workpiece. Holding the workpiece by hand or against your body will not allow for safe operation of the pneumatic tool.
- Do not overload the pneumatic tool. Use the pneumatic tool intended for your work only.
- Always check that the machine is free from defects. Do not use a pneumatic tool that has a defective On/Off switch. A pneumatic tool that can no longer be stopped or started is dangerous and must be repaired.
- Disconnect the air supply before making adjustments, changing accessories, or placing the pneumatic tool aside. This safety measure prevents accidental starting of the pneumatic tool.
- Before using the pneumatic tool remove the adjusting tools, since these may be projected at high speed.
- Store idle pneumatic tools out of the reach of children. Do not allow persons unfamiliar with these instructions to operate the pneumatic tool.
- Maintain the pneumatic tool with care. Check for misalignment or binding of moving parts, breakage or damage of parts and any other condition that may affect the operation of the pneumatic tool. Have damaged parts repaired before using the pneumatic tool.
- Check that the sander is in good condition. Check that the pad has not been damaged.
- Before each use, make sure that the pad has not been damaged and is fit for the required job.
- Check that the number of revolutions of the pad to mount exceeds the rated speed of the sander.
- Make sure that no other people are near the tool.
- When the sander stops, place it in a firm and safe position. The pad will stop after approximately 10 seconds.
- Only use accessories suitable for the required job, like:
  - Velcro-backed abrasive sheets for sanding surfaces (e.g. on car bodies).
- Do not modify the pneumatic sander. This can reduce the effectiveness of safety measures and increase operator risk.
- Have the pneumatic tool repaired only through a trained repair person. Only use original replacement parts.

PNEUMATIC TOOL SAFETY

- Make sure that the nameplate is readable; get a replacement nameplate from the manufacturer, if need be.
- The pneumatic tool may stop if:
  - it is overloaded.
- If the pad gets jammed, stop the sander immediately, keeping it idle until the pad is fully released. Before resuming work, make sure that the pad has been fixed properly and has not been damaged.
- If the pad or the workpiece should break, loose parts may be thrown at high speed.
- Pay attention to grinding sparks, which may be potential hazards to exposed things and people. They may set clothes on fire and cause burns.
- Operators and maintenance personnel should be physically able to handle the weight and power of the pneumatic tool.
- It is important to be prepared for unexpected movements of the pneumatic tool resulting from a jammed or broken accessory
- Maintain a firm grip on the tool and position your body and arms to allow you to resist such movements.
- Keep your hands away from the pad: you may hurt yourself.
- Periodically check that the speed of the pneumatic tool does not exceed the stated speed.
- Stop the tool in case of air supply failure or low operating pressure. Check the operating pressure; start the tool again when optimal operating pressure is resumed.
- When using the pneumatic tool, the operator may experience discomfort in the hands, arms, shoulders, or neck area. Adopting a comfortable posture and changing posture may help avoid discomfort and fatigue.

Caution: If the pneumatic tool is used over a protracted period of time, part of the tool and the accessory may become hot. Wear suitable protective gloves against physical agents.

Dust and fumes hazards: Depending on the type of material being worked, the fumes generated while operating the pneumatic tool can cause diseases in humans. An appropriate environmental hygiene survey is required to determine the type and degree of protection of the personal protective equipment to use for the respiratory tract.

⚠ Using the pneumatic tool on the workpiece generates noise, which may prove harmful to the exposed personnel. A proper phonometric survey is required to determine the personal hearing protective equipment (hearing protection) to use.

⚠ If a specially conducted survey suggests that the daily exposure to vibration generated from the pneumatic tool exceeds the limit value under the regulations in force in the respective country, anti-vibration gloves must be worn.

- If you notice that the skin of your fingers becomes numb, turns white, tingles or hurts, stop working with the pneumatic tool, inform your employer and seek medical advice.
- Do not make the pneumatic tool jump on the workpiece: this may result in significantly increased vibration.
- Hold the pneumatic tool with a not too firm yet secure grip, compliant with the required hand reaction forces.
- Never carry the pneumatic tool by the hose.

PERSONAL PROTECTIVE EQUIPMENT TO WEAR WHILE OPERATING PNEUMATIC TOOL

⚠ **Failure to observe the following warnings may result in physical injury and/or disease.**

	ALWAYS WEAR HEARING PROTECTION WHILE OPERATING PNEUMATIC TOOL
	ALWAYS WEAR EYE PROTECTION WHILE OPERATING PNEUMATIC TOOL OR PERFORMING MAINTENANCE JOBS
	ALWAYS WEAR PROTECTIVE GLOVES AGAINST PHYSICAL AGENTS WHILE OPERATING PNEUMATIC TOOL
	ALWAYS WEAR SAFETY SHOES

⚠ **Additional personal protective equipment to wear according to the values found in the environmental hygiene/risk analysis survey if the values exceed the limits under current regulations.**

	WEAR ANTI-VIBRATION GLOVES WHILE OPERATING PNEUMATIC TOOL FOLLOWING A SPECIALLY CONDUCTED SURVEY OF LEVEL OF DAILY EXPOSURE OF HAND-ARM SYSTEM TO VIBRATION
	WEAR PROTECTIVE MASK AGAINST PHYSICAL AGENTS ACCORDING TO THE VALUES FOUND IN THE ENVIRONMENTAL/INDUSTRIAL HYGIENE SURVEY
	WEAR PROTECTIVE HELMET

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TECHNICAL DATA

TRIANGULAR PAD	125 x 95 mm
RECTANGULAR PAD	100 x 110 mm
ORBIT DIAMETER	5 mm
FREE SPEED	10000 rpm
AIR INLET	1/4" GAS
MAXIMUM PRESSURE	6.2 bar
MINIMUM INTERNAL HOSE SIZE (ø)	10 mm
MEAN AIR CONSUMPTION	180 l/min
WEIGHT	0.860 kg
LENGTH	200 mm
NOISE (ISO 15744)	
SOUND POWER LEVEL	LwA = 95.1 dB
SOUND PRESSURE LEVEL	LpA = 84.1 dB
VIBRATIONS (ISO 28927)	
VIBRATION LEVEL	12.36 m/s^2
UNCERTAINTY	K=1.72 m/s^2

KEY TO SYMBOLS

a: Sander trigger
b: Speed adjusting wheel
c: Air inlet 1/4" GAS
d: Pad
e: Pad screws
f: Centring ring
g: Suction system connection
h: Velcro-backed abrasive sheet
i: Suction system disconnection valve
m: Nylon pin

USE

Air supply connection

For correct use of the pneumatic tool, always keep to a maximum pressure of 6.2 bar, as measured at the tool inlet. Feed the pneumatic tool with clean, condensate-free air (picture 1). Excessively high pressure or humidity in supply air results in shorter life for the mechanical parts and may damage the tool.

Start / Stop

To start the sander, press the trigger (picture 1a). Keep it pressed during the job to be performed. Releasing the lever will cause the pneumatic tool to stop after approximately 10 sec.
The sander is fitted with a rear air outlet.
The sander has been designed to be connected to suction systems; use the most appropriate available fitting (picture 2g).
When the sander stops, place it in a firm and safe position: the pad will not stop immediately.

Pad installation/replacement

The sander is supplied with two pads – triangular and rectangular (picture 4).
Install/replace the pad on the sander (picture 2) as follows:
- Fully unscrew all the eight screws under the pad; remove the pad and the centring ring.
- Fit the centring ring into the new pad; place the pad on the sander and fit all the screws, locking them manually.
- Make sure that the pad has been fixed correctly.
- Place the Velcro-backed abrasive sheets on the pad, and start sanding.

Sander speed regulation

- Use the adjusting wheel under the trigger (picture 1) to adjust minimum or maximum speed.

Suction system disconnection

The suction system can be disconnected by removing the valve and reinstalling it, after turning it 180 degrees, so that the words "Central Vacuum Note" can be seen (picture 5). To remove the valve, use the nylon pin (picture 6) supplied with the sander, by pushing it from the back (picture 6). When reinstalling it, make sure that the ball is always facing upwards.

Always disconnect the air supply before making adjustments or fitting in the pad. This precaution will prevent the pneumatic tool from being accidentally started.

Lubrication/Greasing
The pneumatic tool must be connected to a filter-lubricator unit provided with an air-oil microfog mixer (we recommend Beta item 1919F1/2), set at two drops per minute. This will result in a high-performing tool and wear-resistant mechanical parts.
If lubrication is not provided to the line, oil ISO 32 must be periodically poured into the pneumatic tool, through either the air supply hole or the screw (pictures 4-f, 5-f).

MAINTENANCE
Maintenance and repair jobs must be carried out by trained personnel only. For such jobs, you can contact Beta Utensili S.P.A.'s repair centre through your Beta dealer.

DISPOSAL
The pneumatic tool, accessories and packaging should be sent to a waste disposal centre, in accordance with the laws in force in your country.

WARRANTY
This tool is manufactured and tested in accordance with current EU regulations, and is covered by a 12-month warranty for professional use or a 24-month warranty for nonprofessional use.
We will repair any breakdowns caused by material or manufacturing defects by fixing the defective pieces or replacing them at our discretion.
Should assistance be required once or several times during the warranty period, the expiry date of this warranty will remain unchanged.
This warranty will not cover defects due to wear, misuse or breakdowns caused by blows and/or falls. In addition, this warranty will no longer be valid if any changes are made, or if the pneumatic tool is forced or sent to the customer service in pieces.
This warranty explicitly excludes any damage to people and/or things, whether direct or consequential.

DECLARATION OF CONFORMITY CE

We hereby declare, assuming full responsibility, that the described product complies with all the relevant provisions of Machine Directive 2006/42/EC and amendments thereto, as well as with the following standard:
• EN ISO 11148-8