OPERATING INSTRUCTIONS FOR MILLING HANDPIECE

CE 2797

Manufactured By

BRASSELER
USA® SURGICAL INSTRUMENTATION

EC REP

Emergo Europe
Prinsessegracht 20
2514 AP The Hague
The Netherlands

Distributed by: zimmer

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MILLING HANDPIECE

Technical Description
Speed: 21,000 rpm
Stall Torque: 21 in-oz (12.7 N-cm)
Operating Pressure: 90 - 110 psi
(6.2 - 7.6 kg/cm2)

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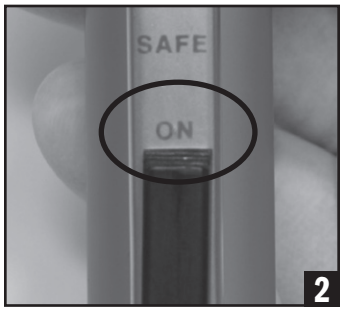

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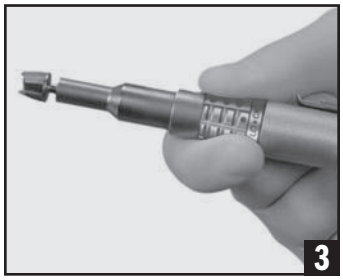
OPERATING PROCEDURE

When instrument is not in use but connected to medical grade air or nitrogen supply, the throttle safety slide must be placed in the SAFE position (fully forward) to avoid accidental activation of instrument (Figure1).

1. Safety On: Move the throttle safety slide to the SAFE position (fully forward).
2. System Set Up: Connect the instrument to the air/nitrogen supply hose. Confirm by checking the regulator pressure gauge that operating pressure does not exceed 110 psi (7.6 kg/cm2). Move throttle safety slide to the ON position (fully backward) to activate instrument (*Figure 2*).
3. Open Collet: Unlock the bur locking mechanism by rotating the locking collar into the "Open" position (a click can be felt as the collet fully opens).
4. Installation of Bur, 00-5927-050-00: (*See Figure 3*)
   Insert bur fully into collet. Ensure the laser etched line is not visible.
5. Lock Collet: Rotate the locking collar into the "Lock" position (a click can be felt when fully secure).
6. Tug slightly on bur to be sure that it is fully locked in place.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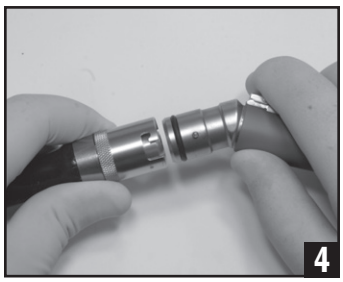
CAUTION: The Milling Handpiece may heat up rapidly if the locking collar is not fully rotated into the "lock" position. Instrument damage, injury to patient and/or operator may result.

The speed of the instrument is controlled by the throttle lever and the operating air/nitrogen pressure.
Do not exceed the recommended maximum operating pressure of 110 psi (7.6 kg/cm2). Sudden activation of the instrument throttle lever will start the instrument immediately at high speed. For this reason, a careful, slow activation of the throttle lever is recommended.

AIR/NITROGEN HOSE

OPERATING PROCEDURE

1. Supply Side Connection: Connect the male Schrader connector on the end of hose by pushing it into the female Schrader connector fitting of the regulator or the regulated air/nitrogen source.
2. Connecting Instrument: Hold securely in one hand the hose connector end of the instrument. Hold firmly in the other hand the connector of the hose and align the pins on the connector with the bayonet slots in the hose connector of the instrument (*Figure 4*). Push both together and twist the connector so the pins slide into the bayonet slots and seat in the detents for positive locking. Release hose, it will stay attached to the instrument if connection is correct.
3. Operation: Turn on supply valve and adjust operating pressure from 90 to 110 psi (6.2 to 7.6 kg/cm2). The hose is operational at this time.
   Note: For optimum performance, when using a hose longer than 10 feet (3 m), increase pressure by 1psi for each additional 1-foot length of hose.
4. Disconnecting Hose From Supply Source: Release the hose from the supply source by firmly holding the hose connector, and then twist or push the supply source Schrader connector sleeve.
5. Disconnecting Hose From the Instrument: Hold instrument hose connector end and connector on hose firmly and push them slightly together to remove the pins from the detents of the bayonet slots. After twisting the hose connector, slowly move it away from the instrument.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TROUBLE SHOOTING

Symptom	Potential Cause	Solution
Handpiece lacks power or does not operate.	Internal Malfunction.	Return for handpiece for service.
	Incorrect Operating Pressure.	Set pressure to correct operating pressure for length of hose.
	Tank pressure low - below 500 psi.	Replace tank before using handpieces.
	Throttle safety slide is partially in safe position.	Ensure throttle safety slide is in operating position.
	Hose not installed properly.	Check all hose connections for proper installation.
	Tank valve not opened fully.	Completely open tank valve.
	Regulator malfunction.	Replace regulator and retest handpiece. If symptom continues return handpiece for service.
	Hose Pinched.	Inspect hose and remove restriction.
Bur is not retained in handpiece. Handpiece overheats.	Bur is not locked in handpiece.	Ensure locking ring is in the lock position.
	Bur is not fully inserted into collet.	Insert bur completely into collet and lock collet.
	Collet bearings worn.	Return handpiece for service.
	Collet not fully closed.	Ensure locking ring is in the lock position.
Handpiece overheats	Internal malfunction.	Return handpiece for service.
	Incorrect operating pressure.	Set pressure to correct operating pressure - See instructions Air/Nitrogen Hose operating procedure.
	No bur in collet	Install bur.

CLEANING PROCEDURE

1. Leave hose attached or insert the cleaning cap (optional) into the hose connector of the instrument. Remove bur prior to cleaning.
2. Scrub, using a nylon brush, the instrument thoroughly with mild soap and water. Remove all traces of blood and debris.
3. With the air/nitrogen hose or cleaning cap(optional) still attached, rinse all traces of contaminants and detergent under running water.
   Do NOT immerse. If accidental immersion occurs please see Accidental Immersion.
4. Disconnect the air/nitrogen hose or remove the cleaning cap (optional). Shake the instrument free of excess water.
5. Move throttle safety slide to SAFE (fully forward) position. Connect air/nitrogen hose to medical grade air or nitrogen supply (regulated to 90 - 110 psi or 6.2 - 7.6 kg/cm2). Move throttle safety slide to ON position (fully backward), activate instrument for 5 - 10 seconds (See pg. 2 / Figure 2).
6. Move throttle safety slide to the SAFE position, and disconnect air/nitrogen hose from instrument.
7. Do not lubricate instruments.

ACCIDENTAL IMMERSION

If accidental immersion occurs, please follow these recommended procedures:

1. Immediately wash, rinse instrument under running water.
2. Immerse instrument in clean rinse water (preferably de-ionized or distilled) for 1 - 3 minutes. The goal is to rinse away any corrosive fluids and precipitates.
3. Attach the instrument to medical grade air or nitrogen(see #5 in cleaning procedure) and operate the instrument for a minimum of 30 seconds.

RECOMMENDED STERILIZATION PROCEDURES

Steam sterilization has been found both safe and effective for the sterilization of Milling Handpiece instruments. Do not sterilize instruments or hoses in: Ethylene Oxide, Sterrad® System, Steris® System or comparable systems. Do not use Cidex® to sterilize instruments or hoses. Do not place instruments in a peel pouch for sterilization.

- Remove hose, cleaning cap and/or bur prior to sterilization.
- If instruments require being wrapped, two double thick #140 thread count wrappers (or equivalent) should be used.

Note: The sterilizer manufacturer's written instruction for cycle parameters and load configuration and AAMI guidelines for Steam Sterilization should be followed.

STERILIZATION GUIDELINES

Steam Sterilization	Recommended Temperature	Recommended Minimum Exposure Time	Recommended Minimum Dry Time
Pre-Vacuum	270° - 279°F 132° - 137°C	4 Minutes	8 Minutes
	273° - 279°F 134° - 137°C	3 Minutes	8 Minutes

PREVENTATIVE MAINTENANCE & REPAIR SERVICE

Brasseler USA recommends that all powered devices and accessories be returned for preventative maintenance every one (1) year. Brasseler USA warrants any service or repair work performed will be free from defects in material or workmanship for the period of six (6) months from date of service or repair. This warranty applies to the actual work performed. Contact a Customer Service Representative at Brasseler USA Headquarters at 800-841-4522 (ext: 1203) or email Repairs@BrasselerUSA.com to report a repair. Upon request, loaner instruments can be supplied, depending on availability of stock.

Return to:
Brasseler USA Repairs
620 S Placentia Avenue
Placentia, CA 92870
Please include the following information with product(s) to be repaired:

- Model & Serial number(s) of instrument(s)
- Customer name, address and account number
- A packing list itemizing each product to be repaired.
- Enclose a brief statement describing for product repair.
- International Zimmer accounts are to include a commercial invoice for customs purposes

WARRANTY

Brasseler USA Surgical Power & Accessories warrants all instruments (handpieces) to be free from defects in material and workmanship for a period of one (1) year from the date of distribution. The warranty is limited to the repair of the product without charge. This warranty is void in the event of any of the following: abuse, misuse or use in other than normal surgery environment, disassembly, alteration or unauthorized repair, or in the event that the product has not been used in reasonable manner and in compliance with the written instructions furnished by Brasseler USA. Must follow all cleaning and maintenance guidelines properly.

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