

# SMALL BONE POWER SYSTEM



# **Instructions for Use**



RX ONLY



BRASSELER USA\* SURGICAL INSTRUMENTATION

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Thank you for choosing Brasseler USA® Surgical Instrumentation as supplier of your small bone power system.

The information and procedures described in this manual are intended to assist healthcare professionals in the safe and effective use, care, cleaning, sterilization and long-term maintenance of BSPMICRO<sup>™</sup> Small Bone Power System.

### **INTENDED USE**

The BSPMICRO™ Small Bone Power System handpieces consist of two drills, a high speed drill and medium speed drill, three saws, a sagittal saw, oscillating saw and a reciprocating saw and a wiredriver. The system also includes three bur guards, dual air/nitrogen hoses, and a wiredriver 5/32 in Jacobs Chuck<sup>®</sup>.

Applications: Neurosurgical, Orthopaedic, Oral/Maxillofacial and Plastic Reconstructive.

### **GENERAL INSTRUCTIONS, CAUTIONS**

- Only medical professionals who are thoroughly familiar with the handpiece's function, application and instructions for use should operate any Brasseler USA® Surgical Instrumentation powered surgical handpiece.
- · BSPMICRO<sup>™</sup> handpieces are recommended to be powered by medical grade air or nitrogen.
- Always use the recommended operating pressure and verify it at the regulator pressure gauge. The recommended operating pressure setting for optimum performance is 90 110 psi (6.3 7.7 kg/cm<sup>2</sup>; 6.2 7.6 Bar). Lower settings can be used for slower speed requirements, if necessary. Do not exceed 110 psi (7.7 kg/cm<sup>2</sup>; 7.6 Bar) operating pressure for BSPMICRO<sup>™</sup> handpieces. Failure to follow these parameters may result in tissue or bone necrosis, patient/user injury, surgical delays, and prolonged or additional anesthesia exposure.

Note: For optimum performance, when using a dual air/nitrogen hose longer than 10 feet (3 m), increase pressure by 1 psi for each additional foot of hose. Failure to do so may result in surgical delays and prolonged or additional anesthesia exposure.

- · Use of eye, face protection device(s) recommended while operating powered handpieces.
- When handpiece is connected to air/nitrogen supply and not being used, or loading cutting accessories (burs, saw blades/rasps, K-Wires, Steinmann Pins and twist drills) into the handpiece, the throttle/trigger or activation / directional lever must be in the SAFE position to avoid unintended activation of the handpiece which may result in patient/user injury, surgical delays, and prolonged or additional anesthesia exposure
- Handpieces are factory sealed. Do not disassemble or lubricate handpieces, as this may void warranty. Lubrication may result in a potential allergic reaction to the patient. There are no service requirements expected of the medical or bio-med staff.
- · Application of excessive force to handpiece may cause damage to handpiece and/or cutting and may result in patient/user injury, accessory breakage, and excessive heat.
- · Use new cutting accessories for every procedure to prevent tissue or bone necrosis. Check cutting accessories for damage before and during use.
- · If cutting accessory seems to be damaged, discontinue its use.
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- · Verify the diameter of the cutting accessory intended for use does not exceed the chuck capacity to prevent surgical delays and prolonged or additional anesthesia exposure.
- Test the handpiece before each use. With face protected and appropriate cutting accessory fully inserted and locked into the handpiece, activate the handpiece for 30 seconds. Check for rapid temperature rise, unusual noise(s) and other visible malfunctions. In case of unexpected product anomaly, it is recommended to have back-up consumable accessories to reduce any surgical delays and to prevent prolonged or additional anesthesia exposure.

Note: Always have proper bur guard installed for testing drills.

- · Never use a malfunctioning, damaged or suspected-to- be-damaged handpiece. Return it to Brasseler U.S.A. Medical, LLC for prompt service.
- · Do not drop, throw or hit handpiece against any surface.
- · Do not immerse handpiece. Never clean a powered handpiece in an automated disinfecting washer or an ultrasonic cleaner.
- Do not start a surgical procedure if the nitrogen tank pressure is less than 500 psi (35.2 kg/cm<sup>2</sup>; 34.5 Bar). Ensure the nitrogen regulator is functioning properly and fully opened prior to use to prevent surgical delays and prolonged or additional anesthesia exposure.
- · Do not pinch, clamp or crimp the dual air/nitrogen hose to prevent surgical delays and prolonged or additional anesthesia exposure.
- · To assure safety and optimum results, use only Brasseler USA® Surgical Instrumentation handpieces, attachments, accessories, and cutting accessories.

WARNING: Overheating may occur if the bearing in the tip of the bur guard is worn, or contaminated, possibly causing tissue or bone necrosis. Irrigation is recommended during use as necessary to prevent tissue or bone necrosis.

- · Do not lubricate BSPMICRO<sup>™</sup> handpieces, attachments or accessories.
- Under certain classifications of risk, the World Health Organization (WHO), or local regulatory authorities recommend special CJD (Creutzfeldt-Jakob Disease) inactivation processing
  procedures. Consult WHO and local regulations for further information.

Note: Consider potential patient reactions to contact with a particular metal to avoid possible allergic reaction to the patient.

WARNING: Failure to follow proper cleaning instructions and recommended preventive maintenance intervals may result in fading of laser marked symbols and warnings resulting in user inconvenience.

### **CLEANING RECOMMENDATIONS**

WARNING: Failure to follow the cleaning and sterilization instructions provided may result in potential toxicological or allergic reaction from cleaning agents and/or debris.

Leave dual air/nitrogen hose attached or insert the cleaning plug/cap into the hose connector of the handpiece. Failure to do so may result in surgical delays, prolonged or additional anesthesia exposure, infection, and allergy symptoms. Remove attachments (bur guards and wiredriver chuck), accessory (wire guard) and cutting accessories (burs, saw blades/ rasps, K-Wires, Steinmann Pins and twist drills) prior to cleaning.

- 1. Scrub, using a nylon brush, the handpieces, attachments (bur guards and wiredriver chuck) and accessories thoroughly with neutral pH detergent and warm water. Remove all traces of blood and debris.
  - A. While rinsing the bur guard, insert a bur into the tip of the guard and rotate the bur to aid in the cleaning of the bearing in the tip of the guard.
  - B. Check the bearings in the bur guard by inserting a bur into the guard and spinning the bur. If the bur does not spin freely, DO NOT USE. The bur guard must be sent immediately for repair.
- Wiredriver Cannulation Cleaning Insert the Wire end of the wiredriver cleaning brush (Brasseler USA<sup>®</sup> Surgical Instrumentation catalog #PM-M11-202) through the back of handpiece (Page 35 / Figure 1). Pull the brush through the handpiece. Repeat the process until all debris is removed (Page 35 / Figure 1).

Note: The cannulation of both the Wiredriver and Wiredriver Guard must be cleaned after each use to ensure proper functioning of the Wiredriver.

3. With the dual air/nitrogen hose or cleaning plug/cap still attached, rinse all traces of contaminants and detergent under warm running water.

DO NOT IMMERSE. If accidental immersion of the handpiece occurs please refer to section: Accidental Immersion.

4. Disconnect the dual air/nitrogen hose or remove the cleaning plug/cap. Shake the handpiece and any attachment free of excess water. Wipe the surfaces with a clean lint-free towel.

#### Note: The PM-M09 and PM-M10 series drills cannot be operated without inserting proper bur guard and locking a bur into the collet.

- 5. Drills and Saws Move throttle control safety slide to SAFE (full forward) position (Page 11 / Figure 1). Connect dual air/nitrogen hose to medical grade air or nitrogen supply (regulated to 90 110 psi; or 6.3 7.7 kg/cm<sup>2</sup>; 6.2 7.6 Bar). Move throttle safety slide to ON position (full backward), activate handpiece for 30 seconds (Page 11 / Figure 2). Check for rapid temperature rise, unusual noise(s) and other visible malfunctions.
- 6. Wiredriver Move lever to SAFE (center) position (Page 17 / Figure 1). Connect dual air/nitrogen hose to medical grade air or nitrogen supply (regulated to 90 110 psi or 6.3 7.7 kg/cm<sup>2</sup>; 6.2 7.6 Bar). Move lever to FORWARD position (left), activate handpiece for 5-10 seconds. Repeat with lever in REVERSE.
- 7. Move throttle/lever to the SAFE position, and disconnect dual air/nitrogen hose from handpiece.
- 8. Do not lubricate handpieces. Lubrication may result in a potential allergic reaction to the patient.

Note: Remove attachments (bur guard and wiredriver chuck) and accessories (dual air/nitrogen hose or cleaning plug/cap) prior to sterilization.



# **EXPLANATION OF SYMBOLS**

Catalog number

#### Caution

- Date of manufacture
- Do not discard. Dispose of product or recycle in accordance with local laws and regulations.
- Do not immerse
- Indicates product should not be oiled or lubricated
- Manufacturer
- SN Serial Number
- Steam sterilizable

### **POWER SOURCE AND REGULATOR INSTALLATION AND OPERATION**

BSPMICRO<sup>™</sup> handpieces are recommended to be powered by compressed medical grade air or nitrogen.

**CAUTION:** Do not exceed 110 psi (7.7 kg/cm<sup>2</sup>; 7.6 Bar) operating pressure unless a dual air/nitrogen hose longer than the standard 10 ft. dual air/nitrogen hose or single air/ nitrogen extension hose is used. Add an additional 1 psi for every extra foot of air/nitrogen hose.

The BSPMICRO<sup>™</sup> handpieces should be operated at 90 - 110 psi (6.3 - 7.7 kg/cm<sup>2</sup>; 6.2 - 7.6 Bar) for maximum operating efficiency. Pressure must be set while handpiece is running. Frequent monitoring of the pressure gauge of the regulator will ensure proper operating pressure is maintained through the procedure. Lower pressure setting can be set for lower speed and torque requirements.

Never start a procedure if the operating pressure gauge indicates less than 500 psi (35.2 kg/cm<sup>2</sup>; 34.5 Bar) in the tank. Never run the tank pressure below 200 psi (14.1 kg/cm<sup>2</sup>; 13.8 Bar).

The tank should be thoroughly wiped off with disinfectant and draped prior to placement in the operating room. Always have the tank securely fastened to a stable object.

Procedures:

- 1. Before setting up the BSPMICRO<sup>™</sup> Small Bone Power System in the surgical suite, slowly open the tank valve turning it counterclockwise until sufficient gas has escaped and blown out any existing debris in the valve. During this procedure, stay away from valve opening of the tank. Tighten valve to the closed/off position.
- 2. Using a 1 1/8 in. or adjustable wrench, install the nitrogen regulator (Figure 1).

Note: The threaded portion of the nitrogen regulator is designed for nitrogen fittings only.

- After installing the nitrogen regulator to the tank, turn the regulator control valve counterclockwise to the closed/off position. Damage to the regulator could result with sudden pressure (Figure 2).
- Slowly turn the nitrogen tank valve counterclockwise to the fully open/on position. This will allow pressurization of the regulator (Figure 3).

Note: Not opening the tank valve fully may result in an inadequate flow of nitrogen to the handpiece.



5. Insert the male Schrader end of the dual air/nitrogen hose into the female Schrader on the nitrogen regulator with force (Figure 4) or thread on DISS female connector to DISS male fitting on the regulator (Figure 5).

Connect a handpiece with the throttle slide to the SAFE position.

- 6. Slowly turn the regulator control valve clockwise. Set the desired pressure on the operating pressure gauge while running a handpiece (Figure 6).
- 7. Before removing the dual air/nitrogen hose from the regulator (Figure 7):
  - a) Close the tank valve by turning clockwise.
  - b) Operate a handpiece to relieve the residual pressure in the dual air/nitrogen hose.
  - c) Disengage the male Schrader adaptor from the female Schrader adaptor by rotating the outer sleeve on the female Schrader fitting clockwise.
  - d) Remove the dual air/nitrogen hose male Schrader end from the female Schrader connector on the nitrogen regulator.
- 8. To release the DISS connector, follow steps 7a and 7b:
  - a) Unscrew the DISS connector from the regulator by rotating the male DISS knob counter clockwise.
  - b) Remove the dual air/nitrogen hose from the DISS connector by rotating the female Schrader connector.



### **HIGH SPEED DRILL PM-M09 SERIES**

TECHNICAL DESCRIPTION:

- · Speed Range: 0 95,000 rpm
- · Torque: 1.75 in-oz (1.24 N-cm)
- · Operating Pressure: 90 110 psi (6.3 7.7 kg/cm<sup>2</sup>; 6.2 7.6 Bar)
- · Size (L x W x H): 6.63 x 0.70 x 1.0 in (168.4 x 17.8 x 25.4 mm)
- $\cdot$  Weight: 0.45 lb (0.2 kg)



The BSPMICRO<sup>™</sup> PM-M09 Series High Speed Drill operates at throttle controlled speeds with ample power for cutting and sculpting bone and enamel.

The compact and lightweight design allows access to the smallest of surgical sites.

The bur collet accepts a wide range of medium, long and extra-long burs with shank diameters of 0.0919 in to 0.0929 in (2.33 to 2.36 mm). Bur guards are available and must be used with the appropriate medium, long, and extra long burs (See page 15/Figure 1). Failure to use the appropriate bur guard with the selected bur may result in patient/user injury, surgical delays, prolonged or additional anesthesia exposure, and debris remaining in the surgical site. Operating Procedure When handpiece 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 handpiece (Figure 1).

- 1. Safety On: Move the throttle safety slide to the SAFE position (fully forward).
- System Set Up: Connect the handpiece to the dual air/nitrogen hose. Confirm by checking the regulator pressure gauge that operating pressure does not exceed 110 psi (7.7 kg/cm<sup>2</sup>; 7.6 Bar) Install proper bur guard and bur.
- 3. Bur Guard Use: In general the bur head should extend no more than 1 in (2.5 cm) from the end of the bur guard. Select the proper bur guard for length of the bur to be used (Page 15 / Figure 1) (for medium burs Brasseler USA® Surgical Instrumentation catalog # PM-M10-901, for long burs Brasseler USA® Surgical Instrumentation catalog # PM-M10-902, for extra-long burs Brasseler USA® Surgical Instrumentation catalog # PM-M10-903). Fully seat the bur guard onto nose of drill (Figure 3).
- Open Bur 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).
- 5. Insert Bur: Insert the bur into the bur guard and seat it fully into the locking mechanism. The fully inserted bur should not extend more than 1 in (2.5 cm) from the tip of the bur guard.

Note: Do not use burs without bur guard for medium, long and extra-long burs.

**CAUTION:** THE BSPMICRO<sup>™</sup> PM-M09 SERIES HIGH SPEED DRILL MAY HEAT UP RAPIDLY IF THE LOCKING COLLAR IS NOT FULLY ROTATED INTO THE "LOCK" POSITION. EXCESSIVE HEAT MAY RESULT IN DAMAGE TO HANDPIECE, PATIENT/USER INJURY, USER DISCOMFORT, SURGICAL DELAYS, AND PROLONGED OR ADDITONAL ANESTHESIA EXPOSURE.

- 6. Lock Bur: Lock the bur by twisting the bur lock clockwise until indicator dots are aligned (a click can be felt when fully secure). Tug on the bur to ensure it is fully locked in place and to prevent surgical delays and prolonged or additional anesthesia exposure.
- 7. Move throttle safety slide to the ON position (fully backward) to activate handpiece (Page 11 / Figure 2). Your BSPMICRO<sup>™</sup> High Speed Drill is ready for use.







8. Operate Handpiece: Operate the handpiece for at least 30 seconds. Stop the handpiece and carefully feel the tip end of the bur guard for overheating. If overheating is noticed, do not use guard and return the guard for service.

**CAUTION:** The BSPMICRO<sup>™</sup> PM-M09 series High Speed Drill should not be operated unless the proper bur guard is installed and a bur is fully inserted and the locking collar is in the locked position.

WARNING: Overheating may occur if the bearing in the tip of the bur guard is worn or contaminated, possibly causing serious burning of the patient's tissue.

Check the bearings in the bur guard prior to surgery to reduce the risk of injury. This is done without the bur guard being attached to the drill. Insert bur into bur guard and spin the bur. If the bur does not spin freely, DO NOT USE. The bur guard must be sent immediately for repair.

The speed of the handpiece is controlled by the throttle lever and will depend on the operating air or nitrogen pressure. Do not exceed the recommended maximum operating pressure of 110 psi (7.6 kg/cm<sup>2</sup>). Lower pressure setting will achieve lower maximum speed.

### **MEDIUM SPEED DRILL PM-M10 SERIES**

TECHNICAL DESCRIPTION:

- · Speed Range: 0 25,000 rpm
- · Torque: 6.0 in-oz (4.24 N-cm)
- · Operating Pressure: 90 110 psi (6.3 7.7 kg/cm<sup>2</sup>; 6.2 7.6 Bar)
- · Size (L x W x H): 6.63 x 0.70 x 1.0 in (168.4 x 17.8 x 25.4 mm)
- · Weight: 0.45 lb (0.2 kg)



The BSPMICRO<sup>™</sup> PM-M10 Series Medium Speed Drill operates at throttle controlled speeds with ample power for cutting and sculpting bone and enamel.

The compact and lightweight design allows access to the smallest of surgical sites.

The bur collet accepts a wide range of medium, long and extra-long burs with shank diameters of 0.0919 in to 0.0929 in (2.33 to 2.36 mm).

Bur guards are available and must be used with medium, long and extra-long burs (Page 15 / Figure 1).

#### **Operating Procedure**

When handpiece 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 handpiece (Page 11 / Figure 1).

- 1. Safety On: Move the throttle safety slide to the SAFE position (fully forward).
- 2. System Set Up: Connect the handpiece to the dual air/nitrogen hose. Confirm by checking the regulator pressure gauge that operating pressure does not exceed 110 psi (7.7 kg/cm<sup>2</sup>; 6.2 7.6 Bar). Install proper bur guard and bur.
- 3. Bur Guard Use: In general the bur head should extend no more than 1 in (2.5 cm) from the end of the bur guard. Select the proper bur guard for length of the bur to be used (Page 15 / Figure 1) (for medium burs Brasseler USA® Surgical Instrumentation catalog # PM-M10-901, for long burs Brasseler USA® Surgical Instrumentation catalog # PM-M10-903). Fully seat the bur guard onto nose of drill (Page 11 / Figure 3).
- 4. Open Bur 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).
- 5. Insert Bur: Insert the bur into the bur guard and seat it fully into the locking mechanism. The fully inserted bur should not extend more than 1 in (2.5 cm) from the tip of the bur guard.

Note: Do not use burs without bur guard for medium, long and extra-long burs.

CAUTION: THE BSPMICRO<sup>™</sup> PM-M10 SERIES MEDIUM SPEED DRILL MAY HEAT UP RAPIDLY IF THE LOCKING COLLAR IS NOT FULLY ROTATED INTO THE "LOCK" POSITION.

EXCESSIVE HEAT MAY RESULT IN DAMAGE TO HANDPIECE OR INJURY TO THE PATIENT AND OR OPERATOR.

6. Lock Bur: Lock the bur by twisting the bur lock clockwise until indicator dots are aligned (a click can be felt when fully secure). Tug on bur to ensure it is fully locked in place.

7. Move throttle safety slide to the ON position (fully backward) to activate handpiece (Page 11/Figure 2). Your BSPMICRO<sup>™</sup> Medium Speed Drill is ready for use.

8. Operate Handpiece: Operate the handpiece for at least 30 seconds. Stop the handpiece and carefully feel the tip end of the bur guard for overheating. If overheating is noticed, do not use guard and return the guard for service.

CAUTION: The BSPMICRO<sup>™</sup> PM-M10 series Medium Speed Drill should not be operated unless the proper bur guard is installed and a bur is fully inserted and the locking collar is in the locked position.

WARNING: Overheating may occur if the bearing in the tip of the bur guard is worn or contaminated, possibly causing serious burning of the patient's tissue.

Check the bearings in the bur guard prior to surgery to reduce the risk of injury. This is done without the bur guard being attached to the drill. Insert bur into bur guard and spin the bur. If the bur does not spin freely, DO NOT USE. The bur guard must be sent immediately for repair.

The speed of the handpiece is controlled by the throttle lever and will depend on the operating air or nitrogen pressure. Do not exceed the recommended maximum operating pressure of 110 psi (7.6 kg/cm<sup>2</sup>). Lower pressure setting will achieve lower maximum speed.

# ATTACHMENTS-BUR GUARDS

PM-M10-901 Medium Brasseler USA® Surgical Instrumentation Bur Catalog Series 03\*, 04, 06, 07 & 08 Recommended Bur Length: 44.5 - 69 mm

#### PM-M10-902

Long Brasseler USA® Surgical Instrumentation Bur Catalog Series 09, 10 & 11 Recommended Bur Length: 70 - 94 mm

PM-M10-903 Extra-Long Brasseler USA® Surgical Instrumentation Bur Catalog Series 12 Recommended Bur Length: 95 - 112 mm







\*Do not use the dermabrader bur with high speed drill.

#### WIREDRIVER PM-M11-200

TECHNICAL DESCRIPTION:

- · Speed Range: 0 2,100 rpm
- · Torque: 56 in-oz (39.5 N-cm)
- · Operating Pressure: 90 110 psi (6.3 7.7 kg/cm<sup>2</sup>; 6.2 7.6 Bar)
- · Wire/Pin: Diameter Range: 0.028 0.078 in (0.7 2.0 mm)
- Size (L x W x H): 5.5 x 1.0 x 5.5 in (139.7 x 25.4 x 139.7 mm)
- · Weight: 1.43 lb (0.65 kg)

The BSPMICRO<sup>™</sup> PM-M11-200 Wiredriver, with its ergonomically designed pistol-grip handle, operates at throttle controlled speeds with ample power for small bone fixation. The compact and lightweight design allows access to the smallest of surgical sites.

The Wiredriver collet accepts both smooth/plain and threaded K-Wires and Steinmann Pins in a wide range of diameter sizes.

Note: Brasseler USA® Surgical Instrumentation K-Wire Catalog Series KM172 & 173; Brasseler USA® Surgical Instrumentation Steinmann Pin 2.0mm Catalog Series KM168 & KM169.



**Operating Procedure** 

When handpiece is not in use but connected to medical grade air or nitrogen supply, the activation/directional lever must be placed in the SAFE position (center) to avoid accidental activation of handpiece (Figure 1).

- 1. Safety On: Move the activation/directional lever to the SAFE position (center).
- System Set Up: Connect the handpiece to the dual air/nitrogen hose. Confirm by checking the regulator pressure gauge that operating
  pressure does not exceed 110 psi (7.7 kg/cm<sup>2</sup>; 7.6 Bar). Assure the activation/directional lever on the handpiece is in the SAFE position.
  Your BSPMICRO<sup>™</sup> Wiredriver is ready for use.
- 3. Insert Wire: Insert the wire six inches or Longer (152.4mm / 15.2cm) either through the front or back of the cannulated handpiece (Figure 2). If inserting a wire through the front of the wiredriver, care must be taken to align the wire with the collet opening to avoid jamming in the collet. Wires shorter than six inches must be loaded through the front of the handpiece. Insert the wire until the desired length is protruding from the collet/nose of the handpiece. The inserted wire should protrude approximately 1/2 in (13 mm) from the tip of the collet/nose (Figure 3). The cannulated wiredriver guard (Brasseler USA® Surgical Instrumentation catalog #PM-M11-201) may be used to prevent bending of longer wires. Attach the wiredriver guard by threading the guard into the back of the handpiece (Page 18 / Figure 4).

WARNING: Working exposed length amount varies with bone density and wire diameter. If exposed length is too long, the wire/pin may collapse, bend, or break and may result in surgical delays, prolonged or additional anesthesia exposure, patient injury, and wire/pin fragment left in the bone.

Note: The wiredriver guard (PM-M11-201) should be attached to the rear of the handpiece to prevent long wires from bending and exposing the user to sharp spinning wires/pins that may result in user injury, surgical delays, and prolonged or additional anesthesia exposure. Simply thread the wiredriver guard into the threaded receptacle on the back of the handpiece.







- 4. Clamp Wire: For wires greater than 6" long always insert from the rear of the handpiece. For shorter wires, or wires that are being removed, place the wiredriver valve in the safe position and pull the trigger which will cause the clamping shaft (the external shaft with the gold tip) to move into the handpiece closing the jaws of the internal collet. While in this clamped position insert the wire or pin into the drill until it stops (the tip of the internal collet has a concave conical surface on the tip of the collet allowing the wire to be centered) then release the trigger which allows insertion of the wire straight or centered into the collet jaws.
- 5. Drive Wire: To advance the wire, the collet end of the handpiece should be at least 1/4 to 1/2 in (6 to 13 mm) away from the bone. Ensure the activation/directional lever is set in the appropriate position (FORWARD or REVERSE) prior to engaging the trigger to prevent patient injury, surgical delays, and prolonged or additional anesthesia exposure. To expose more wire, completely release the trigger and pull the handpiece back along the wire. Slightly depress the trigger again to lock the collet. Depress the trigger to activate the handpiece for further insertion of the wire.

CAUTION: The handpiece must be in the REVERSE position to remove threaded wires and pins.

Handpiece Speed: The variable speed of the handpiece is controlled by the handpiece trigger and depends on the operating air or nitrogen pressure. Do not exceed the recommended maximum operating pressure of 110 psi (7.7 kg/cm<sup>2</sup>; 7.6 Bar).

If the handpiece lever is in FORWARD or REVERSE position, the handpiece will start at maximum speed if the trigger is depressed fully. A slow activation of the handpiece trigger is recommended.



Wiredriver Accessories

PM-M11-201\* Wiredriver Guard

PM-M11-202\* Wiredriver Cleaning Brush

\*Included with handpiece or can be purchased separately

#### ATTACHMENT - 5/32 IN JACOBS CHUCK° WITH KEY PM-M11-935

Note: Not compatible with Hall® Wiredriver 5053-013



TECHNICAL DESCRIPTION:

- · Chuck Capacity: 0 .157 in (0 4.0 mm)
- Chuck Size (L x W): 2.5 x 0.9 diameter (64mm x 22mm diameter)
- · Chuck Weight: 0.15 lb (0.08 kg)

The BSPMICRO<sup>™</sup> PM-M11-935 5/32 in Jacobs Chuck<sup>®</sup> w/Key is intended for use with the BSPMICRO<sup>™</sup> Wiredriver PM-M11-200 and is designed for drilling.

WARNING: The chuck is not intended for tapping, driving or removing screws.

The 5/32 in Jacobs Chuck\* w/Key accepts both smooth shank drills and A0\* shank drills.

Attachment - 5/32 in Jacobs Chuck® Installation:

- $\cdot$  Move the wiredriver activation / direction lever to the SAFE position (center).
- $\cdot$  Attach 5/32 in Jacobs Chuck\* to the wiredriver by sliding fully onto the collet/nose.

Note: Partially depressing the wiredriver trigger without causing chuck rotation, locks the 5/32 in Jacobs Chuck\* in place.

Attachment - 5/32 in Jacobs Chuck® Removal:

- $\cdot$  Move the wiredriver activation / direction lever to the SAFE position (center).
- $\cdot$  Remove 5/32 in Jacobs Chuck<sup>®</sup> from the wiredriver by sliding the chuck off the collet / nose.

Drilling Cutting Accessory - Insertion & Removal

Drilling Cutting Accessory - Insertion

- $\cdot\,$  Open fully the chuck jaws by turning counter clockwise.
- $\cdot$  Insert the cutting accessory into the center of the open jaws.
- $\cdot\,$  Close and tighten the chuck jaws by turning the chuck key clockwise.
- $\cdot$  Tug firmly on the cutting accessory to ensure it is installed securely.

**CAUTION:** Be certain the cutting accessory is centered between the 3-chuck jaws prior to final tightening. Do not chuck on flat surfaces of the cutting accessory. Failure to follow these instructions may result in patient/ user injury surgical delays and prolonged or additional anesthesia exposure."

Note: Installation of cutting accessory should be done prior to installing on wiredriver.



Drilling Cutting Accessory - Removal

- · Remove chuck with cutting accessory from wiredriver.
- $\cdot$  Open the chuck jaws by turning the chuck key counter clockwise and remove cutting accessory.

Warning: Remove chuck key from attachment prior to activation of handpiece.

Note: Placing the chuck key into one or both of the remaining key holes and applying additional securing force will help ensure cutting accessory is secured in place.

Caution: The maximum drill diameter that can be used will depend on the bone density and drilling depth to be determined by the end user.

# SAGITTAL SAW PM-M12 SERIES

TECHNICAL DESCRIPTION:

Speed Range: 0 - 18,000 cpm
Blade Travel: 4° arc
Operating
Pressure: 90 - 110 psi (6.3 - 7.7 kg/cm<sup>2</sup>; 6.2 - 7.6 Bar)
Size (L x W x H): 6.75 x 0.7 x 1.0 in (171.5 x 17.8 x 25.4 mm)
Weight: 0.42 lb (0.19 kg)



The BSPMICRO<sup>™</sup> PM-M12 Series Sagittal Saw has the power and precision needed for cutting both wedge and transverse osteotomies while allowing excellent visibility to the surgical site. Smooth cutting and easy to control, the handpiece's saw blade may be positioned anywhere within a 180° arc as saw blade holes are not used with our device.

The saw blade collet accepts a wide variety of 0.010 in (0.25 mm) and 0.025 in (0.6 mm) thick Brasseler USA® Surgical Instrumentation straight and graft harvesting sagittal saw blades.

Note: Brasseler USA® Surgical Instrumentation Sagittal Saw Blade Catalog Series KM-3100, KM-3200 and KM-3400.

When handpiece 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 handpiece (Page 11 / Figure 1).

- 1. Safety On: Move the throttle safety slide to the SAFE position (fully forward).
- System Set Up: Connect the handpiece to the dual air/nitrogen hose. Confirm by checking the regulator pressure gauge that operating pressure does not exceed 110 psi (7.7 kg/cm<sup>2</sup>; 7.6 Bar).
- Open Saw Blade Collet: Open/loosen the saw blade locking screw with the blade wrench only as far as to accept the saw blade thickness (Brasseler USA<sup>®</sup> Surgical Instrumentation catalog # PM-M12-001) by turning it counterclockwise (Figure 1).

**Caution:** only open the saw blade collet enough to accept the saw blade. If the saw blade collet is opened fully a thin saw blade may be inserted beyond the proper seating surface which may cause damage to the saw blade as well as inadequately securing the saw blade.

4. Insert Saw Blade: Insert the saw blade between the two washers, forming a slot. The saw blade must be fully inserted for proper engagement. Lock/tighten the saw blade locking screw hand-tight with the blade wrench by turning it clockwise (Figure 1). The saw blade may be positioned anywhere within a 180° arc. Confirm that the saw blade is secure by tugging slightly. Activate the handpiece briefly, and then re-tighten the saw blade locking screw to ensure saw blade is fully locked in place. Failure to do so may result in surgical delays and prolonged or additional anesthesia exposure. The speed of

the handpiece is controlled by the throttle lever and will depend on the operating air or nitrogen pressure. Do not exceed the recommended maximum operating pressure of 110 psi (7.6 kg/cm<sup>2</sup>). Lower pressure setting will achieve lower maximum speed.

 Move throttle safety slide to the ON position (fully backward) to activate handpiece (Page 11 / Figure 2). Your BSPMICRO<sup>™</sup> Sagittal Saw is ready for use.

#### BLADE WRENCH PM-M12-001\*



Saw Blade Installation

\*Included with handpiece or can be purchased separately



Note: Inspect the locking screw and blade wrench for excessive wear that may not allow proper lock down during use to prevent surgical delays and prolonged or additional anesthesia exposure.

### **OSCILLATING SAW PM-M13 SERIES**

TECHNICAL DESCRIPTION:

- · Speed Range: 0 22,000 cpm
- Blade Travel: 7° arc
- · Operating Pressure: 90 110 psi (6.3 7.7 kg/cm<sup>2</sup>; 6.2 7.6 Bar)
- · Size (L x W x H): 7.5 x 0.7 x 1.38 in (190.5 x 17.8 x 35.0 mm)
- · Weight: 0.49 lb (0.22 kg)



The BSPMICRO<sup>™</sup> PM-M13 Series Oscillating Saw has a long, narrow nose design for accessing restricted areas and to provide excellent visibility of the surgical site. The saw delivers the power necessary for accurate cutting of both curved and straight osteotomies. The handpiece's saw blade may be positioned anywhere within a 360° arc.

The saw blade collet accepts a wide selection of the Brasseler USA® Surgical Instrumentation straight and crescentic oscillating saw blades.

Note: Brasseler USA® Surgical Instrumentation Oscillating Saw Blade Catalog Series KM-3000 and KM-3170.

#### **Operating Procedure**

When handpiece 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 handpiece (Page 11 / Figure 1).

- 1. Safety On: Move the throttle safety slide to the SAFE position (fully forward).
- System Set Up: Connect the handpiece to the dual air/nitrogen hose. Confirm by checking the regulator pressure gauge that operating pressure does not exceed 110 psi (7.7 kg/cm<sup>2</sup>; 7.6 Bar).
- Open Saw Blade Collet: Open/loosen the saw blade locking screw with the blade wrench (Brasseler USA<sup>®</sup> Surgical Instrumentation catalog # PM-M12-001) by turning it counterclockwise (Figure 1).
- 4. Insert Saw Blade: Insert the saw blade between the compression washer. and handpiece shoulder. The saw blade must be fully inserted for proper engagement. Lock/tighten the saw blade locking screw hand-tight with the blade wrench by turning it clockwise (Figure 1). The saw blade may be positioned anywhere within a 360° arc. Confirm that the saw blade is secure by tugging slightly on the saw blade. Activate the

Saw Blade Installation



handpiece briefly, and then retighten the saw blade locking screw to ensure that the saw blade is fully locked in place.

**Caution:** Do not place the saw blade between the washer and head of the screw or the saw blade may vibrate loose.

 Move throttle safety slide to the ON position (fully backward) to activate handpiece (Page 11 / Figure 2). Your BSPMICRO<sup>™</sup> Oscillating Saw is ready for use.

The speed of the handpiece is controlled by the throttle lever and will depend on the operating air or nitrogen pressure. Do not exceed the recommended maximum operating pressure of 110 psi (7.7 kg/cm<sup>2</sup>; 7.6 Bar). Lower pressure setting will achieve lower maximum speed.

Inspect the locking screw and blade wrench for excessive wear that may not allow proper lock down during use to prevent surgical delays and prolonged or additional anesthesia exposure.

#### **BLADE WRENCH**

#### PM-M12-001\*

\*Included with handpiece or can be purchased separately



### **RECIPROCATING SAW PM-M14 SERIES**

TECHNICAL DESCRIPTION:

- · Speed Range: 0 18,000 cpm
- · Blade Travel: 0.100 in (2.54 mm)
- · Operating Pressure: 90 110 psi (6.3 7.7 kg/cm<sup>2</sup>; 6.2 7.6 Bar)
- Size (L x W x H): 7.25 x 0.7 x 1.0 in (184.2 x 17.78 x 25.4 mm)
- · Weight: 0.43 lb (0.2 kg)



The BSPMICRO<sup>™</sup> PM-M14 Series Reciprocating Saw is an extremely versatile handpiece and an outstanding performer for many of the deep-access osteotomies. Rasps are available for shaping and contouring bone.

The sawblade/rasp collet accepts flat shank saw blades from 0.014 in to 0.020 in (0.35 mm to 0.51 mm) thick, as well as reciprocating rasps and reciprocating round shank saw blades with standard diameters of 0.125 in (3.18 mm).

Note: Brasseler USA® Surgical Instrumentation Reciprocating Saw Blade/Rasp Catalog Series KM-50, KM-80, KM-060 and KM-070.

#### **Operating Procedure**

When handpiece 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 handpiece (Page 11 / Figure 1).

- 1. Safety On: Move the throttle safety slide to SAFE position (fully forward).
- System Set Up: Connect the handpiece to the dual air/nitrogen hose. Confirm by checking the regulator pressure gauge that operating pressure does not exceed 110 psi (7.7 kg/cm<sup>2</sup>; 7.6 Bar).
- 3. Open Saw Blade/Rasp Collet: Open/loosen the blade/rasp locking nut by turning it counterclockwise (Figure 1). Do not remove the locking nut from the tip.
- 4. Insert Saw Blade/Rasp: Insert the saw blade/rasp fully into the locking mechanism. The saw blade/rasp must be fully inserted for proper engagement. Lock/tighten the saw blade/rasp locking nut finger-tight by turning it clockwise (Figure 1). Confirm that the saw blade/rasp is secure by tugging slightly on the saw blade/rasp. Activate the handpiece briefly, and then re-tighten the saw blade/rasp locking nut to ensure saw blade/rasp is fully locked in place.
- 5. Move throttle safety slide to the ON position (fully backward) to activate the handpiece (Page 11 / Figure 2). Your BSPMICRO<sup>™</sup> Reciprocating Saw is ready for use.

The speed of the handpiece is controlled by the throttle lever and will depend on the operating air or nitrogen pressure. Do not exceed the recommended maximum operating pressure of 110 psi (7.7 kg/cm<sup>2</sup>; 7.6 Bar). Lower pressure setting will achieve lower maximum speed.

Saw Blade Installation



### DUAL AIR / NITROGEN HOSE KM-A90-200 SERIES

**Operating Procedure** 

1. Supply Side Connection: Connect the male Schrader connector on the end of the dual air/nitrogen hose by pushing it into the female Schrader connector fitting of the regulator or the regulated air/nitrogen source.

Note: A DISS to Schrader Adapter (Brasseler USA® Surgical Instrumentation MI-121-001) is available when a female DISS connector is required at the regulator or the regulated air or nitrogen supply source.

Note: For optimum performance, when using a dual air/nitrogen hose longer than 10 feet (3 m), increase pressure by 1 psi for each additional foot of hose.

Insert the male Schrader connector on the dual air/nitrogen hose into the female Schrader connector on the Adapter, and then attach the female DISS connector on the Adapter to the male DISS connector at the regulator or regulated air or nitrogen source.

2. Connecting handpiece: Hold securely in one hand the hose connector end of the handpiece. Hold firmly in the other hand the connector of the dual air/nitrogen hose and align the pins on the handpiece hose connector with the slots in the dual air/ nitrogen hose connector (Figure 1). Push both together and twist the connector so the pins slide into the slots and seat in the detents for positive locking. Release the dual air/nitrogen hose, it will stay attached to the handpiece if connection is correct.

#### Connecting Hose to Handpiece



- 3. Operation: Turn on supply valve and adjust operating pressure from 90 to 110 psi; or 6.3 7.7 kg/cm<sup>2</sup>; 6.2 7.6 Bar). The dual air/nitrogen hose is operational at this time.
- 4. Disconnecting Dual Air/Nitrogen Hose From Supply Source: Release the hose from the supply source by firmly holding the dual air/nitrogen hose connector, and then twist the supply source Schrader connector sleeve.

Note: To prevent sudden ejection of dual air/nitrogen hose from the supply source, hold the hose connector firmly.

5. Disconnecting Dual Air/Nitrogen Hose From the Handpiece: Hold handpiece dual air/nitrogen hose connector end and connector on dual air/nitrogen hose firmly and push them slightly together to remove the pins from the detents of the slots. After twisting the dual air/nitrogen hose connector, slowly move it away from the handpiece.

# TROUBLESHOOTING

Symptom	Potential Cause (All Handpieces)	Solution
Handpiece lacks power or does not operate.	Internal Malfunction.	Send handpiece to Brasseler U.S.A. Medical, LLC, for service.
	Incorrect operating pressure.	Set pressure to correct operating pressure for length of air/nitrogen hose - See instructions on page 7.
	Tank pressure low - below 500 psi.	Replace tank before using handpieces.
	Throttle safety slide/directional lever is in safe position.	Ensure throttle safety slide/directional lever is in operating position.
	Dual air/nitrogen hose not installed properly.	Check all dual air/nitrogen hose connections for proper installation.
	Tank valve not opened fully.	Completely open tank valve.
	Regulator malfunction.	Replace regulator and retest handpiece. If symptom continues, send handpiece to Brasseler U.S.A. Medical, LLC, for service.
	Dual air/nitrogen hose pinched.	Inspect dual air/nitrogen hose and remove restriction.

Symptom	Potential Cause (Drills)	Solution
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 - See instructions on pages 11 and 14.
	Wrong style bur.	Use only round standard bur shanks 2.35 mm (0.092").
	Bur guard bearings worn.	Send bur guard to Brasseler U.S.A. Medical, LLC, for service.
Colle	Collet not fully closed.	Ensure locking ring is in the lock position.
	Internal malfunction.	Send handpiece to Brasseler U.S.A. Medical, LLC, for service.
	Incorrect operating pressure.	Set pressure to correct operating pressure for length of air/nitrogen hose - See instructions on page 7.
	No bur in collet.	Install proper bur and proper bur guard.

Symptom	Potential Cause (Saws)	Solution
Saw blade vibrates loose.	Saw Blade is not fully seated.	Ensure saw blade is fully secured in handpiece collet.
	Saw blade is not locked in collet.	Make sure saw blade is properly inserted between the clamping surfaces and retighten saw blade. Briefly activate handpiece and retighten saw blade locking screw / nut.
	Saw blade not seated between handpiece and washer.	Reposition saw blade and tighten screw.
	Saw blade locking screw is worn.	Send handpiece to Brasseler U.S.A. Medical, LLC, for service.
	Blade wrench is worn.	Replace.
	Potential Cause (Wiredriver)	
Wire will not insert into collet.	Wire / pin not in size range of collet.	Check size to ensure it is between 0.028 in and 0.078 in.
	Wire / pin not being inserted straight.	Take care to assure wire / pin is inserted centered into collet.
	Potential Cause (Wiredriver Chuck)	
	Debris inside receptacle.	See cleaning recommendations.
Attachment will not install onto wiredriver.	Drive pin damaged or damaged handpiece.	Send attachment and or handpiece to Brasseler U.S.A. Medical, LLC, for service.

Symptom	Potential Cause (Wiredriver Chuck cont.)	Solution
Attachment will not accept cutting accessory.	Debris inside attachment.	See Cleaning recommendations.
	Attachment damaged.	Send attachment to Brasseler U.S.A. Medical, LLC, for service.
	Cutting accessory damaged.	Replace cutting accessory.
Cutting accessory slips in attachment.	Re-secure using chuck key.	See drilling cutting accessory insertion and removal.
	Worn or damaged attachment.	Send attachment to Brasseler U.S.A. Medical, LLC, for service.
	Damaged or worn cutting accessory.	Replace cutting accessory.
Attachment falls off of handpiece.	Damaged attachment.	Send attachment to Brasseler U.S.A. Medical, LLC, for service.

### **ACCIDENTAL IMMERSION**

If accidental immersion of the handpiece occurs, please follow these recommended procedures:

- 1. Immediately wash, rinse handpiece under warm running water.
- 2. Immerse handpiece 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 handpiece to medical grade air or nitrogen (Page 35 / #5) and operate the handpiece for a minimum of 30 seconds.
- 4. Autoclave and dry handpiece within 30 minutes of cleaning and running.

WARNING: Failure to follow the cleaning and sterilization instructions provided may result in potential toxicological or allergic reaction from cleaning agents and/or debris.

Steam sterilization has been found both safe and effective for the sterilization of BSPMICRO<sup>™</sup> Small Bone Power System. The handpieces are capable of withstanding the recommended exposure times and temperatures of steam sterilization.

- Do not sterilize handpieces or dual air/nitrogen hoses in: Ethylene Oxide, Sterrad<sup>®</sup> System, Steris<sup>®</sup> System or comparable systems. Do not use Cidex<sup>®</sup> to sterilize handpieces or dual air/nitrogen hoses.
- $\cdot$  Do not place handpieces in a peel pouch for sterilization.
- $\cdot$  Dual air/nitrogen hose or cleaning plug/cap must be removed from handpiece.
- · Handpieces require being individually wrapped. Two double thick #140 thread count wrappers (or equivalent) should be utilized.

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

Parameters for sterilizing BSPMICRO <sup>™</sup> Handpieces, Attachments and Accessories.			
Steam Sterilization Type	Minimum Temperature	Minimum Exposure Time	Minimum Dry Time
Gravity(wrapped)	270° F/ 132°C	35 Minutes	30 Minutes
Pre-Vacuum(wrapped)	270° F/ 132°C	4 Minutes	30 Minutes
Pre-Vacuum(wrapped)	273° F/ 134°C	3 Minutes	30 Minutes

#### **REPAIR SERVICE**

Brasseler USA® Surgical Instrumentation, recommends that all BSPMICRO<sup>™</sup> handpieces and accessories (excluding dual air/nitrogen hoses) be returned to Brasseler U.S.A. Medical, LLC, Service Department for routine preventive maintenance every twelve (12) months. BSPMICRO<sup>™</sup> attachments and dual air/nitrogen hoses are recommended to be returned to Brasseler U.S.A. Medical, LLC, Service Department for routine preventive maintenance every six (6) months. Follow a regular care regimen that includes routine cleaning after each use, strict adherence to sterilization recommendations and a thorough inspection for damage of all devices after each use. Routine preventive maintenance performed by the Brasseler U.S.A. Medical, LLC, Service Department can increase the reliability and extend the life of your BSPMICRO<sup>™</sup> Small Bone Power System, prevent patient/user injury, tissue or bone necrosis, device failure during use, surgical delays, and prolonged or additional anesthesia exposure.

Brasseler USA® Surgical Instrumentation, warrants any service or repair work performed will be free from defects in material or workmanship for the period of ninety (90) days from date of service or repair. This warranty applies to the actual work performed.

Products must be decontaminated and sterilized before returning.

Note: It is unlawful to ship contaminated non-sterilized products.

Contact a Customer Service Representative at Brasseler USA® Surgical Instrumentation

at 877.834.7133 to request repair, preventive maintenance, or a loaner instrument. If available, loaner instruments will be supplied in accordance with the Brasseler USA® Surgical Instrumentation, Loaner Program.

Please include the following information with the returned product(s):

- · Indicate on the paperwork or the box the designated call ID number.
- · Catalog number, serial number and lot number (if applicable) of device.
- · Customer name, address and account number.
- · Itemized packing list.

· Brief statement describing reason for product repair or requesting preventive maintenance.

Return to: Brasseler U.S.A. Medical, LLC 4837 McGrath Street Ventura, CA 93003

#### **BSPMICRO™**

Brasseler USA® Surgical Instrumentation warrants all BSPMICRO<sup>™</sup> Handpieces and Accessories (cleaning plug/cap, adapter - DISS to Schrader, wiredriver guard, wiredriver cleaning brush, blade wrench and 5/32 in Jacobs Chuck<sup>®</sup> Key) to be free from defects in material and workmanship for a period of one (1) year from the invoice date. Brasseler USA® Surgical Instrumentation warrants all BSPMICRO<sup>™</sup> Attachments (bur guards and 5/32 in Jacobs Chuck<sup>®</sup>) and dual air/nitrogen hoses to be free from defects in material and workmanship for a period of six (6) months from the invoice date. The warranty is limited to the repair of the product without charge. This warranty is nontransferable. In addition, this warranty is void in the event of any of the following: abuse, misuse, neglect 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 provided by Brasseler USA® Surgical Instrumentation.

#### **RETURN GOODS POLICY**

If product needs to be returned, the following applies:

Consumable / Disposable Product:

Any unused consumable/disposable product may be returned for credit within ninety (90) days of invoice date if it qualifies for resale (unopened and unmarked package). Products may be subject to a restocking fee. Credit will not be issued for products that do not qualify for resale.

Capital Equipment:

Any unused capital equipment may be returned for credit within thirty (30) days of invoice date if it qualifies for resale (unopened and unmarked package). Products may be subject to a restocking fee. Credit will not be issued for products that do not qualify for resale.

Packaging and Shipping:

Returned items should be packaged in original packaging. Credit will not be issued for items damaged in return shipment due to packaging inadequacy.

Note: It is unlawful to ship contaminated non-sterilized products.

Contact a Brasseler USA<sup>®</sup> Surgical Instrumentation Customer Service Representative at 800.535.6638 to obtain a "Return Merchandise Authorization" (RMA) number. Please include the following information with the returned product(s):

- · Catalog number, serial number and lot number (if applicable) of device.
- · Return Merchandise Authorization (RMA) number noted with the return.
- · Original invoice number or copy of original invoice.
- · Original invoice date.
- · Customer name, address and account number.
- · Itemized packing list.
- · Brief statement describing reason for product return.

Return to: Brasseler U.S.A. Medical, LLC 4837 McGrath Street Ventura, CA 93003

## **PRODUCT DISPOSAL**

Dispose of product or recycle in accordance with local laws and regulations.

### **PRODUCT ORDERING INFORMATION**

HANDPIECES		
PM-M09-200	High Speed Drill for Hall® Hose Connection	
PM-M10-200	Medium Speed Drill for Hall* Hose Connection	
PM-M11-200	Wiredriver for Hall* Hose Connection	
PM-M12-200	Sagittal Saw for Hall <sup>®</sup> Hose Connection	
PM-M13-200	Oscillating Saw for Hall® Hose Connection	
PM-M14-200	Reciprocating Saw for Hall <sup>®</sup> Hose Connection	

ATTACHMENTS		
PM-M10-901	Bur Guard - Medium	
PM-M10-902	Bur Guard - Long	
PM-M10-903	Bur Guard - Extra-Long	
PM-M11-935	5/32 in Jacobs Chuck <sup>®</sup> with Key	

ACCESSORIES		
KM-A90-200	Dual Air/Nitrogen Hose for Hall <sup>®</sup> Hose Connection - 10 Ft.	
KM-A90-200-15	Dual Air/Nitrogen Hose for Hall <sup>®</sup> Hose Connection - 15 Ft.	
KM-A90-201	Cleaning Plug/Cap for Hall* Hose Connection	
MI-121-001	Adapter - DISS to Schrader	
PM-M11-201	Wiredriver Guard	
PM-M11-202	Wiredriver Cleaning Brush	
PM-M12-001	Blade Wrench	
PM-X08-001	5/32 in Jacobs Chuck <sup>®</sup> Key	

Brasseler USA® Surgical Instrumentation, offers a complete line of BSPMICRO<sup>™</sup> cutting accessories (burs, saw blades/rasps, K-Wires, Steinmann Pins and twist drills).



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