The following dental items are also available from Jorgensen Laboratories:

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>J0452d4</td>
<td>Portable Water Tank</td>
</tr>
<tr>
<td>J0452d1</td>
<td>Ultrasonic Insert #1</td>
</tr>
<tr>
<td>J0452d2</td>
<td>Ultrasonic Insert #4</td>
</tr>
<tr>
<td>J0452d5</td>
<td>Polishing Paste (100 cups)</td>
</tr>
<tr>
<td>J0452d3</td>
<td>Metal Prophy Angle</td>
</tr>
<tr>
<td>J0452d6</td>
<td>Rubber Prophy Cups (100)</td>
</tr>
<tr>
<td>J0452d7</td>
<td>Diamond Cutting Disc</td>
</tr>
<tr>
<td>J0452d8M</td>
<td>Diamond Dental Burs (7)</td>
</tr>
<tr>
<td>J0452d9</td>
<td>Contra Angle</td>
</tr>
<tr>
<td>J0452d10</td>
<td>Straight Hand Piece</td>
</tr>
<tr>
<td>J0452d11</td>
<td>Saddle Valve</td>
</tr>
<tr>
<td>J0452d13</td>
<td>Disposable Prophy Heads (6-pack)</td>
</tr>
</tbody>
</table>

Before using the Polisher Unit, please carefully read this User Manual. The manual contains installation procedures and operational tips.

**Important Notes!**

AC power cord must be grounded with this equipment. This unit should be powered from a separate wall outlet with grounding point.

**Attention!**

Avoid use of this machine around Pacemakers. It has been shown that electronic appliances including razors, hair dryers, microwave ovens, TV receptors, and some electronic medical equipment may interfere with the normal operations of pacemakers. For further readings on the subject, please refer to:

- “Electromagnetic Radiation Interference with Cardiac Pacemaker”, U. S. Department of Health, Education and Welfare
NOTE BEFORE USING:

• The power cord must be grounded. If this requirement is not met, damage could occur to the polishing unit and/or the user.

• The unit should be placed on a steady and stabled platform or table. Placing the machine on an unstable or tilted table may degrade the performance and/or may cause damage to the system.

• Do not dismantle the machine on your own or by uncertified technicians. Violation of the requirement may cause harm to the user and/or damage the machine. This will also void the warranty.

• For electrical safety, the power cord should not be placed under heavy objects, and should also avoid high temperature heat sources.

• If you have any problems while the machine is in use, unplug the power cord for safety.

TO POLISH AFTER CLEANING AND SCALING:

• Flip ON/OFF toggle switch.

• Push the power switch so that the LED is lit.

• Check that your foot switch is connected. Make sure the cord does not twist where it connects to the foot pedal. Twisting of the electrical cord may cause the foot pedal to stick on open.

• Place a rubber cup on the prophy angle and then place a little prophy paste in the cup. Adjust the speed control to a low speed. Depress the foot switch and begin polishing each tooth surface. Add prophy paste as needed. NOTE: You may operate the unit without using the foot switch by depressing the “manual operation control” located on the front panel of the unit.

The unit and hand piece should be cleaned after use with a damp cloth. Lubricate the shaft of the prophy angle with one drop of oil and put one drop of oil in the hand piece opening. Do not over oil.
**INSTALLATION GUIDE**

1. Unpacking
   When unpacking the box, check this unit for any damage. If damaged, please contact Jorgensen Laboratories immediately.

   Enter the unit serial number on your warranty card and mail it within 10 days of receiving your unit.

A. Environment:
   The unit should be stored in a clean, dry environment. The following environmental limitations apply to both storage and shipping:
   - Temperature: 35°F - 85°F
   - Humidity: 10%-90%

B. Labels:
   The meaning of labels printed on the outside of the box are listed below:
   - **KEEP AWAY FROM WATER**
   - **THIS SIDE UP**

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**PROPHY HEAD MAINTENANCE**

The prophy head needs lubrication and regular cleaning:

1) Remove rubber cup.

2) Remove cup holder with pliers by turning raised, knurled area. Wash out debris from inside; then put one drop of oil onto the gears. (This is a lightweight 3 in 1 oil commonly used in sewing machines and available at hardware stores.)

3) Smart lube is included for this application.

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**FIG. #1**

**Prophy Head**
Applies only to silver metal prophy

**Straight Hand Piece**
open here for lubrication

**Micromotor**
locking ring
1. Check the JorVet J453 and make sure the both POWER and DIGIT DISPLAY are off when the switch is off.

2. Plug the unit into a grounded outlet.

3. Connect the micro-motor.

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**POLISHING TIPS**

The concept of polishing has changed over the years. It is now suggested that only the area with heavy plaque or stain accumulation be polished. These are called plaque retentive areas. Other areas that do not accumulate plaque can be affected deleteriously by unnecessary heavy polishing. The polishing paste is abrasive and actually creates plaque retentive areas on smooth enamel. The polishing paste should be wiped clean with a wet towel after use.

The polishing speed should be below 2500 RPM. At higher speeds the tooth can be over-heated and damaged. The prophy angle can get hot, especially at higher speeds. It is also normal for the entire prophy head and straight hand piece to spin together when not being held in the hand.

When polishing, it is not unusual to wrap hair, especially on breeds like Schnauzers. When this happens, the motor direction should be reversed by flipping the red switch marked “forward and reverse” (this is located on the back of the unit) to reverse. This will allow the hair to become untangled.

Samples of disposable prophy angles are included. These can be used in emergency cases where the metal prophy head is not working. Additional disposable heads can be purchased by calling 1-800-525-5614.
MAINTENANCE

The polisher unit does not need special maintenance but it does need to be regularly and thoroughly cleaned.

Daily start-up
When starting the unit at the beginning of the day: ‘Push the MAIN POWER SWITCH.

Note: If DIGITAL DISPLAY does not light, please contact Jorgensen Laboratories.

Daily shut-off
When stopping the unit at the end of the day: Push the POWER SWITCH to turn the unit off.

The following suggestions are also useful in extending the product life of the unit.

A. Place the Main Unit in an open area where air can flow freely around it.
B. When moving the Main Unit, handle with care.
C. Before leaving the room, make sure the AC power is turned off.

USE OF DIAMOND BURRS OR CUTTING DISCS

The Polisher/Micromotor can be modified to allow placement of diamond burrs or cutting discs.

Diamond Burrs (J0452D8M):
These require replacement of the prophy angle head with a contra angle head (J0452D9). The contra angle is placed on the straight hand piece just like the prophy head. The burrs are inserted into the contra angle as outlined in their instructions.

Cutting Discs (J0452D7):
The prophy head is removed and the diamond cutting disc is inserted directly into the straight hand piece and locked in place.

Both the burrs and discs should run at higher RPMs to work effectively. Use caution and work slowly when operating cutting instruments.

WARRANTY

Please be sure to complete and mail your card as soon as you receive the unit. Each Pro Scale unit is warranted for a period of 12 months against manufacturing or material defects. All accessories are warranted for a period of 90 days. If you choose to use our free loaner service, please note that you will be charged for shipping to and from your location. We do not issue call tags.

For customer service, please call Jorgensen Laboratories at 1-800-525-5614 or 970-669-2500.
The J0453” unit is designed and manufactured to meet the most demanding environment. Specifications are listed below.

- **Classifications**
  - Type of protection against electric shock: Class I
  - Degree of protection against electric shock: Type BF
  - Degree of protection against the harmful ingress of water IP40
  - Mode of operation: Continuous

- **Complies to following Directive/Standards**
  - ISO13485 - Medical devices - Quality Management Systems- requirements for regulatory purposes
  - EN60601-1: Medical Electrical Equipment, General Requirement for Safety
  - EN60601-1-2: Medical Electrical Equipment, Electromagnetic Compatibility - Requirements and Tests

- **Power supply**

  115V±5% 230V±5% ~50/60Hz  160VA 160VA

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**TROUBLE SHOOTING**

1) No power.
   a) Check all plugs for proper connection.

2) Foot switch sticks open.
   a) Hold in hand and toggle back and forth to loosen the spring.
   b) Make sure the cord does not twist where it connects to the foot pedal. Twisting of electrical cord may cause the foot pedal to stick on open.

3) Prophy head will not turn when Micromotor spins.
   a) The locking ring is not closed.
   b) Lubrication or cleaning is needed.
   c) Prophy angle needs replaced
**FIRST TIME SET-UP**

- Connect the power cord to the unit. Plug the cord into an electrical outlet.
- Connect the foot switch to the back of the unit into the receptacle. Place the pedal on the floor.
- Connect the Micromotor to the back of the unit into receptacle on the far left hand side of the unit. Lock the connector in place.

**The Polisher is Assembled as Follows:**

1. The straight hand piece is pushed onto the rod above Micromotor. It will snap into place.
2. The prophy angle is next; attach on top of the straight hand piece.
   a) The locking ring on the straight hand piece needs to be in the open position. It is pushed down and to the right.
   b) The prophy angle is placed on the straight hand with cut out portion placed over the raised bubble on the straight hand piece.
   c) The locking ring is moved left (counter-clockwise) so that the two depressed dots are in alignment. If the locking ring is not engaged, the prophy angle will not spin.
   d) To remove the prophy, simply reverse the above procedure.

**DESCRIPTION OF CONTROL PANELS**

**FRONT**
- Push the Select button to turn the micromotor on/off.
- LED display - x100 RPM Indicates micromotor is running and at what speed.
- Micromotor outlet to connect micromotor cord.
- Speed control– turn right to increase, left to decrease.

**BACK**
- Forward/Reverse switch for micromotor
- On/Off switch (-) is on
- AC input
- Foot pedal outlet
- Fuse box
Thank you for purchasing the Pro Scale Polisher/ Variable Speed Micromotor. This unit is designed for years of trouble free use—with proper maintenance.

PLEASE READ THIS ENTIRE INSTRUCTION MANUAL CAREFULLY BEFORE OPERATION OF YOUR PRO SCALE UNIT.

You will find the following items when you unpack the Pro Scale Polisher/ Variable Speed Micromotor:

• Polisher base unit
• Foot control pedal
• Power cord
• Variable speed micromotor
• Straight hand piece
• Metal prophy angle / 3 disposable prophy angles
• 10 rubber prophy cups
• 10 cups prophy paste
• Micromotor rest stand
• Warranty card

**GETTING STARTED**

On the front panel of the Pro Scale Polisher you will find the following switches or dials which control the unit:

• Power switch with LED indicator. Controls the power source, i.e. remote foot pedal.
• ON/OFF switch on top of the left side.
• Speed Control: controls the RPM of the Micromotor. Speeds may be set from 300 to 30,000 RPM. Lower speeds up to 3000 RPM should be used for polishing. Higher speeds should be used for cutting or drilling.

NOTE: The red switch on the back of the unit controls the forward/ reverse direction of the Micromotor.