Micro PHP

A Pro-Dex Company

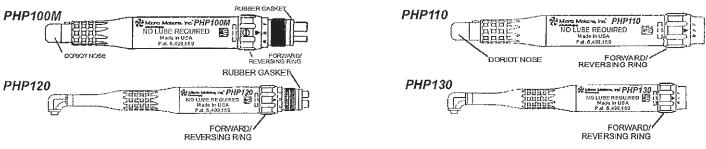
OPERATION AND MAINTENANCE INSTRUCTIONS

The PHP series handpieces are designed for use with disposable or autoclavable prophy angles with standard Doriot style attachment or "TS2 Triple Seal" prophy cups from Young Dental (PHP120 and PHP130).

CAUTION: Do not use non-sealed re-usable prophy angles.

You will receive maximum use and value from your PHP100 handpiece if you first familiarize yourself with, and thereafter follow, these operation and maintenance instructions.

These handpiece instructions may be different from other air driven motors you have used, especially the unique PUSH ON/PULL OFF collet and the NO LUBRICATION feature. Please read and follow these simple instructions so that you enjoy years of dependable service.



CLEANING AND STERILIZATION

Pro-Dex, Inc. recommends that reusable handpieces be cleaned and heat sterilized between patients. **CAUTION:**

- Do not exceed 275 degrees F (135 degrees C).
- Do not submerge in any solution.
- Do not use ultrasonic cleaners.
- Do not use surface disinfectants.
- Proper maintenance of and periodic validation of sterilizer function and temperature is important for proper maintenance of the PHP and other dental handpieces.
- Failure to follow these precautionary measures may cause handpiece failure or patient injury, and may void warranty.
- Failure to follow these instructions can result in hazard of infection.
- Failure to follow proper infection control guidelines, manufacturer's guidelines or both when disposing of accessory items or cleaning materials
 may result in hazard to environment.

Note: Periodically remove nosepiece assembly and rinse with warm water to remove debris. Dry, re-assemble and autoclave per instructions. Swivel Connector:

The following cleaning procedure is recommended on a weekly basis or whenever accumulation of paste and debris is noticed.

- · Remove the swivel connector from the tubing set. If necessary, use the small wrench provided.
- Clean the exterior with a damp cloth to remove debris and paste.
- . Clean the thread with a soft brush and mild detergent or a few drops of air motor cleaner.

To Sterilize:

Ensure that the prophy head or prophy cup has been removed.

Clean the exterior of the handpiece with a damp towelette or lavage to remove any debris or paste.

Place handpiece in appropriate sterilization bag as recommended by sterilizer manufacturer. Sterilize by steam autoclave at 275 degrees F (135 degrees C) for 25 minutes. Remove the sterilization bag from the sterilizer immediately after the cycle is complete and allow the components to cool in the bag. Store the components in the sealed sterilization bag until ready for use.

MAINTENANCE

Under most operating conditions the PHP handpieces require NO LUBRICATION. However, it is not unusual for particulate matter from the air supply to accumulate in the motor after long usage. To prevent this problem, we recommend that you perform this cleaning procedure routinely on a monthly basis, or if the motor becomes sluggish.

- 1. Disconnect the air tubing connector.
- 2. Apply 3 or 4 drops of Air Motor Cleaner (MM 001) into the small inlet tube on the handpiece connector.
- 3. Reconnect the air tubing connector and run the motor in forward and reverse for approximately 10 seconds or until the motor runs smoothly.
- Repeat if necessary.

NOTE: Angle heads are permanently attached and do not need lubrication. Do not attempt to remove or lubricate angle heads (PHP120 and PHP130),

INSTALLATION

The PHP100 handpiece series is designed to attach to standard dental tubing with ISO-Standard 4-hole connectors, with or without coolant or chip air holes.

Be sure the rubber (sterilizable) gasket on the connector of the motor is in place. Attach and finger tighten the tubing connector securely. DO NOT USE A WRENCH.

Swivel Connector:

Handpleces with a swivel connector between the handplece and the tubing set ensure that the handplece can always be installed and removed quickly and easily. Swivel connectors also ensure smooth rotation to prevent twisting the tubing.

- Attach and tighten the swivel connector to the tubing set,
- Install handpieces onto Swivel Connectors by pushing it on the Swivel Connector while rotating it slightly in either direction. Disconnect in the same manner.

STANDARD
TUBING
CONNECTOR
INLET
TUBE

Note: A small wrench is supplied, with units that have swivel connectors, for use when tightening or removing the swivel connector from the tubing set.

Prophy Tool Selection:

CAUTION:

Use only genuine "TS2 Triple Seal" prophy cups, polishers and brushes manufactured by Young Dental. Other brands will not properly seal the head, which may allow prophy paste to leak into the head or lubricant to leak out of the head, and will void the warranty.

Do not re-use prophy cups, polishers or brushes. This may compromise asepsis. Used cups, polishers or brushes may deteriorate or fail during use.

Prophy brushes do not seal the head and should be used for special applications only.

Routine use of prophy brushes may damage the head and will void the warranty.

To Install Cups:

Unscrew the cup into the head with light finger pressure only. Do not force. If cup does not start threading easily, remove the cup and try again. Tighten the cup until it is snug. When property tightened, you should be able to see the seal contacting the head.

To Remove Cups:

Do not remove cup until the area around the cup has been cleaned. See "Cleaning and Sterilization".

After the head has been cleaned, simply unscrew the cup. If it is too tight, hold cup with fingers while slowly running the handpiece in reverse.

Prophy Angle Attachment:

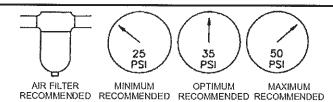
The PHP100 and PHP110 are designed to accept any standard Doriot style disposable angle or standard autoclavable prophy angle.

To attach the prophy angle, simply align the slot on the angle with the alignment pin on the handpiece and push until the attachment is touching the shoulder of the handpiece. The collet mechanism will hold the attachment in place until manually removed. To remove the attachment, pull off handpiece with slight force.

CAUTION: The PHP100 and PHP110 will accept regular Doriot style latch angles and straight burs. However, the shaft will spin in the collet if excessive torque is applied. THEIR USE IS NOT RECOMMENDED WITH THIS HANDPIECE.

AIR SUPPLY REQUIREMENTS

Clean, filtered air is essential for long, trouble-free life. An air filter NO LARGER THAN 50 MICRONS (µm) is recommended to be installed in the supply line. Recommended air pressure for optimum performance is 35 psi (241 kPa), measured at handpiece tubing end. Maximum speed is approximately 4,000 RPM.

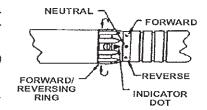


OPERATION

Both the speed and the direction of the motor are controlled by the forward/reversing ring located at the rear of the motor. Turn the ring clockwise (towards the "F") for "forward" rotation or counter-clockwise (towards the "R") for "reverse" rotation. Aligning the arrow on the ring with the "O" in the center will stop the motor completely.

To operate the motor at the intermediate speed, adjust the indicating arrow between the "O" position and the "F" (full on) position. Set the speed for your personal preference.

Note: Motor speed may be varied during a procedure by use of either the forward/reversing ring or by the foot control. However, reducing the speed will also reduce the torque output of the motor.



TROUBLESHOOTING

PROBLEM

Motor sluggish. Low speed or low power. Will not start at low air pressure.

Motor will not turn on.

Air leak at connector.

Motor runs but prophy cup does not rotate.

Angle vibrates excessively.

Cup will not go into head.

SOLUTION

Check air pressure. Ensure gasket is in place. Check forward/reverse ring for "on" position. Clean per cleaning instructions. Repeat up to 3 times if necessary. Re-new O-rings on swivel connector.

Check air pressure. Ensure gasket is in place. Check forward/reverse ring for "on" position. With angle installed, try to turn the prophy cup with your fingers. If it will not turn, the motor has been "jammed" by a foreign particle from the airline. Return for service.

Tighten tubing connector. Check for faulty or missing gasket. Re-new o-rings on swivel connector.

Faulty angle. Try a new one. Only use standard prophy angles with standard size shafts (2.35mm).

Faulty angle. Try a new one or another brand.

Wrong cup. Ensure cup is a genuine TS2 Triple Seal Prophy Cup from Young Dental.

Note: If problems still occur after following these instructions or replacement parts are needed, contact Pro-Dex, Inc. at (949) 769-3200.

PRODUCT WARRANTY

The PHP100 series Prophy Handpiece is warranted to be free from defects in material and workmanship for a period of two (2) years from the date of purchase. This warranty applies only if the product has been maintained per these instructions. The warranty will not apply if the product has been subject to misuse or abuse. Sole liability under this warranty is limited to the repair or replacement, at our option, of the defective product. No other warranties are expressed or implied. Any defective product must be returned to the address below with proof of purchase (copy of dealer invoice) and transportation prepaid.

PRO-DEX, INC. * Attention: Returns Department 2361 McGaw Avenue * Irvine, CA 92614 USA

U.S. PATIENT NO. 5,498,159 and D372,979

Manufactured by: Pro-Dex, Inc.

Caution: Federal law (USA) restricts this device to sale or on order of a dentist.