

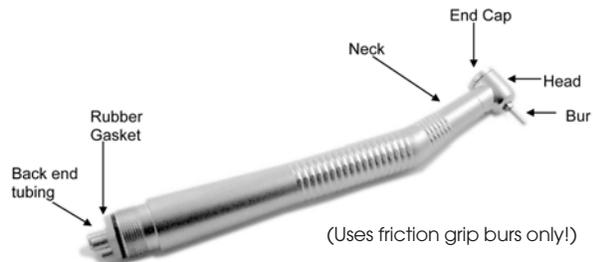
# Johnson-Promident University High Speed Handpieces 101 Overview



## What is a High Speed Handpiece?

A hand held drill, usually air-driven (can also be electric), that spins cutting burs at approximately 400,000 RPM.

- Used for cavity preparation, removal of tooth structure and margin creation.



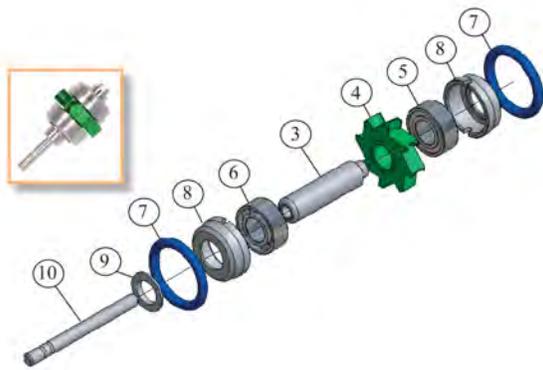
## How Does a High Speed Handpiece Work?

- Air turns a turbine located in the head (front) of the handpiece.



Turbine or Rotor

- The turbine consists of two miniature bearings, an impeller, and a spindle/chuck assembly that holds the bur.



- Air is introduced into the handpiece via the chair unit foot pedal, goes through the airline attached to the back end of the handpiece, up through the handpiece shell, and into the handpiece head where it is forced over the impeller of the turbine, causing the turbine to spin.
- After the air moves around the turbine impeller, it is then forced out of the head and moves back down through the shell of the handpiece and out through the handpiece's back end exhaust port.

## How Fast Does the Handpiece Run?

- The speed depends on the pressure (PSI) of the air supply, the size of the turbine assembly and the configuration of the turbine components (i.e., bearings, impeller, and spindle).
- An average sized turbine (such as a Midwest Tradition) running at 38 PSI should spin at approximately 400,000 RPM.
- Larger sized turbines (such as a KaVo Super Torque) running at 38 PSI should spin at approximately 325,000 RPM but will achieve the same torque as smaller turbines due to their mass.



## Does Head Size Matter?

- Most brands of handpieces offer small (miniature) and large head versions, and different brands vary (KaVo tends to have larger heads and Star has smaller heads).
- Smaller heads have advantages for providing better visibility and easier access (especially with children).
- Larger heads have the advantage of much higher torque and cutting power.

## How Long Will a Handpiece Turbine Last?

- The average life span of a handpiece turbine ranges from six to twelve months, depending on the level of use and maintenance procedures. The most common cause of premature failures is infield conditions.

## Top 3 Mistakes

1. Use of disinfectants to clean or wipe off handpieces
2. Lack of lubrication or improper lubrication
3. Use of too much air pressure



See Page 5 for maintenance tips.

# High Speed Handpieces 101

## Handpiece Tubing Compatibility

### What Are the Types of Tubing Connections?

#### 2 Hole (Borden Connection)

- Usually the standard in developing countries (e.g., all of Latin America).
- Has one large hole, which is air intake to drive the turbine to spin, and a small hole for water to cool the bur/tooth.
- No air exhaust, so the exhaust just blows right out of the handpiece, making it much louder.
- Also, no chip air, so the water comes out more as a stream than as a fine mist.
- A 2/4 adapter can be used to fit this kind of handpiece onto 4 hole tubing, but the handpiece will still not have the chip air or exhaust air features.



#### 3 Hole

- Used very little. In fact, we may be one of the last manufacturers still to offer this style!
- Has the same handpiece thread design as 2 hole, but with the addition of one extra small tube for the chip air line to allow the water to come out as a fine mist.
- Can be converted to 2 hole by simply removing the chip air tube.

#### 4 Hole (Midwest Connection)

- The standard in the U.S. and Europe.
- Has two large air holes (the smaller of the two is air in and the larger is air exhaust out).
- Also has two small holes, a water tube and a chip air tube (which brings air to the head where it either mixes with or hits the water to make a fine mist) to cool the bur/tooth and clear debris.
- A 4/2 adapter can be used to fit this kind of handpiece onto 2 hole tubing, but the handpiece will lose the exhaust and chip air feature.



*Tubing connections meet international standards, so any handpiece with a certain tubing configuration will always fit that type of tubing...but cannot fit a different tubing configuration unless a special adapter is used.*

#### 5 Hole

- Has the same handpiece thread design as 4 hole, but with the addition of a fiber optic rod which transmits light through the handpiece and illuminates the bur and tooth area for better visibility.
- Has all the other features of 4 hole as well.
- A 5 hole handpiece can be used on 4 hole tubing, but the light feature will not function.



#### Quick Disconnect Coupler Connections

- Couplers can be 2 hole, 4 hole, and fiber optic (2 types).
- 5 hole fiber optic couplers have an internal glass rod that goes onto tubing that has a light source (bulb) either in the tubing or on the dental control unit.
- 6 pin couplers (with 4 holes like a normal 4 hole handpiece plus 2 metal pins to provide electricity) have the light bulb in the coupler itself.



*Turn the tubing connector, not the handpiece, to screw the tubing on/off the handpiece.*

# Johnson-Promident University

## High Speed Handpieces 101

### High Speed Connections

#### What Are the Different Types of High Speed Handpiece Connections?

- Handpieces can come with either a **fixed back end** or a **quick disconnect swivel** style.
- Both types of back ends can come with 5 different tubing connection configurations (i.e. 2 hole, 4 hole).

#### Fixed Back

- Does not have a swivel coupler; must be screwed on/off tubing for cleaning and does not swivel.
- Connections are internationally standardized and universal (ISO) so that any brand of handpiece will fit the same tubing connection configuration.



#### Quick Disconnect

- The handpiece has a hollow back end that can be snapped onto a coupler.
- The coupler is screwed onto the tubing, allowing the handpiece to be quickly attached and removed for cleaning.



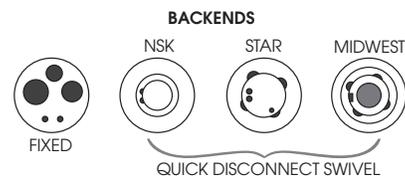
#### What are the Benefits of Quick Disconnect Couplers?

- Easy and fast removal of the handpiece from the tubing.
- Increased dentist comfort, because the swivel reduces the drag of the tubing.

#### What are the Disadvantages of Quick Disconnect Couplers?

Every major brand of handpiece has its own proprietary connection between the handpiece and the swivel, so handpieces and swivels from different brands are not compatible.

Many manufacturers are beginning to offer handpieces that will fit other brands of couplers, but it appears to us that the KaVo MULTiflex style coupling is winning the battle to become the universal quick connect style.



## Chucking Mechanisms

#### What is a Chucking Mechanism?

The mechanism that allows the handpiece to hold a bur.

#### What are the Different Types of Chucking Mechanisms?

##### 1. Standard Screw-Type (bur tool-type)

- The spindle and chuck (the parts of the turbine that hold the bur) are separate.
- A bur tool is required to insert and remove the bur; it screws the chuck down into the spindle causing the chuck to tighten around the bur.
- Screw-type chucks can be replaced in repair.



##### 2. Push Button-Type

- The spindle and chuck are a single assembly.
- The push button cap on the handpiece presses on the actuator on the top of the spindle which engages an internal spring component to open or close the chucking mechanism.
- Bur shank size is important – burs with shanks under .0626 or over .0630 cannot be used.



#### Benefits of Push Button Chucks

- Easy insertion and removal of burs.

#### Disadvantages of Push Button Chucks

- Do not provide as strong a grip on the bur as screw-type chucks.
- Heavy use can cause the chuck to strip, which will result in poor bur retention.
- Higher cost to purchase.
- Once the chuck fails the whole turbine must be replaced instead of just the chuck.



# High Speed Handpieces 101

## Handpiece Maintenance Tips

### Debris

- Introduced into the handpiece through dirty air and water every time air pressure is released.
- The best way to remove it is to flush the handpiece between patients using a handpiece cleaner and lubricant.



Same turbine  
but different  
maintenance

- Blow out the handpiece using compressed air to remove loose debris, cleaner, and lubricant before sterilization (a handpiece should never be run without a bur!).



### Air Pressure

- Excessive air pressure (exceeding 40 PSI) could cause damage to turbine bearings, reducing the performance of the turbine.
- When handpiece performance is reduced at 35 PSI the turbine should be rebuilt or replaced.

### Sterilization Tips

- Never exceed 275°F (135°C) during the sterilization cycle; use the lowest temperature possible while still achieving proper sterilization of instruments.
- Subjecting bearings to higher temperatures can cause the materials to break down and crack.
- Handpieces should only be used at room temperature, not hot.
- Never cool handpieces under cold running water; quick cool downs are bad for turbine components.
- If sterilizers are not maintained properly, excessive debris will bake onto the turbine and result in premature failure.
- Never use a dry heat sterilizer; the excessive heat will damage bearings.

### Air and Water Supplies

- Must remain free of debris.
- Filters should be used and checked often.
- Compressor oils and carbons must be filtered from the air supply.
- An air dryer should also be used and maintained as required.

### Push button Spindle Maintenance

- Push button spindles are made of metal components and require small amounts of lubricant and periodic flushing for an extended life span.
- Use a handpiece cleaner or combination cleaner/lubricant (lubricating alone is not enough).
- Spray handpiece cleaner and lubricant up into the front of the spindle; an adapter may be required.



- Then flush the handpiece to remove debris from the handpiece head that has been introduced from flushing the spindle.
- Doing this will help remove debris from within the spindle assembly, which will prevent the spindle from sticking open or falling.

### Lube Free or Maintenance Free Turbines (Beware)

- Only the bearings are maintenance free!
- The bearings are pre-greased at the factory and shielded to help protect them from debris and the removal of lubricants during use.
- Other turbine components still need to be maintained; O-rings will dry out without lubricants and push button spindles require lubrication and flushing.

### Ask the Doctor:

1. *When was the last time you changed your filters?*
2. *What do you use to clean your handpieces?* (Disinfectants are not allowed, dry heat sterilizers are bad too.)
3. *Where do you spray lubricant?* (Offices often are lubricating wrong holes, so no lube is getting where it needs to be.)
4. *How often do you use a handpiece cleaner in the chuck?* (Probably never.)
5. *At what air pressure do you run your handpieces?* (Many dentists believe more pressure means faster preps, but it is not true.)
6. *Do you elongate the bur, i.e., not put the bur all the way in the chuck to get deeper access?* (Sell them surgical length burs or they will be replacing turbines often.)

*Did you know that  
Johnson-Promident has been  
repairing handpieces for  
over 30 years? Give us a try!*

# Johnson-Promident University

## High Speed Handpieces 101

### Handpiece Maintenance

#### Instructions for operation and maintenance:

In order to always provide the handpiece with clean air, water accumulated in the compressor must be drained out ONCE A DAY. DAILY LUBRICATION IS ABSOLUTELY ESSENTIAL.

Operate the handpiece at pressures of 25 to 30 pounds per square inch. The handpiece is engineered to attain speeds of 350,000 RPM at 25 pounds and 400,000 RPM at 30 pounds.

Use the brush to remove foreign particles. A fine wire is provided for cleaning the water spray hole and to prevent clogging. Particles can be dislodged by blowing air backward from the contra angle head. NOTE: DO NOT attempt to blow particles from the rear end of the handpiece, as larger particles will be blocked in the water tube.

#### Sterilization Procedures: (Autoclave and Chemiclave Only)

**Clean External Surface:** Remove bur from handpiece and scrub with a toothbrush or 2" x 2" gauze using warm tap water. DO NOT IMMERSE HANDPIECE.

**Dry:** Thoroughly dry handpiece using gauze, paper towel or air syringe.

**Clean/Lubricate Internal Surface:** Using a combination cleaner/lubricant or DCL 90, spray handpiece in drive air hole and in chuck.

**Expel Cleaner/Lubricant:** Reinsert bur into handpiece head, connect handpiece to tubing and run for 5 seconds to thoroughly expel debris and excess lubricant.

THE HANDPIECE MUST BE OPERATED ONLY WITH A BUR OR BUR BLANK. DO NOT OPERATE EMPTY.

**Clean Fiberoptic Bundle:** Using a cotton swab with isopropyl alcohol, wipe the surface on both ends of handpiece.

**Bag and Cycle in Autoclave:** Place handpiece into autoclave bag or pouch. Cycle as per autoclave/chemiclave manufacturer's instructions. DO NOT EXCEED 275° F (135° C).

**Cool Down and Lubricate:** Allow handpiece to return to room temperature. Lubricate handpiece as per instructions listed above. Expel excess lubricant as per previous instructions.

#### DO

- ▲ Use warm tap water to scrub the exterior of handpiece.
- ▲ Expel excess lubricant from handpiece by running it for 5 seconds after cleaning and lubricating.
- ▲ Use separate cans of lubricant before and after sterilization to prevent contamination.
- ▲ Clean both ends of fiberoptic bundle with a cotton swab dipped in isopropyl alcohol.
- ▲ Use autoclave bags and pouches with indicators to protect handpiece.

#### DON'T

- ▼ DON'T immerse handpiece in water or chemical disinfectants/sterilants.
- ▼ DON'T use any type of disinfectant on handpiece.
- ▼ DON'T sterilize handpiece with bur inserted.
- ▼ DON'T exceed 275° F (135° C) in autoclave or chemiclave.
- ▼ DON'T dry heat or heat transfer sterilize.
- ▼ DON'T operate handpiece without bur inserted in chuck.

#### Do-It-Yourself Handpiece Repair (Simple Stuff)

- A. Handpiece has low torque or power (could be lack of lubrication or too much debris)
  1. Try heavily spraying "correct" drive air tube with a combination cleaner/lubricant like DCL-90 and run handpiece for a minute.
  2. Remove turbine and clean out head, lubricate turbine directly, and spin bearings with fingers. Blow compressed air in head of handpiece to clear air tube. Return turbine to handpiece and run.
  3. Check air pressure on dental unit.
- B. Burs are sticking inside of turbine or falling out
  1. Flush the spindle with a handpiece cleaner where the bur would normally be inserted.
  2. Ensure that burs are not less than .0625" or greater than .0630" in diameter or are worn, which can damage spindle.
- C. Water spray is weak or completely stopped
  1. Insert small wire into water tube from head of handpiece to remove debris.
  2. Use our Smart Cleaner to clear clogged tube.

If these simple solutions fail, more serious problems are likely affecting the handpiece which should be sent to a reputable repair service provider.



# High Speed Handpieces

Johnson-Promident offers 4 complete handpiece families providing optimal solutions for every practice.



## Challenger – Truly Unbeatable Value

- Efficient design provides solid performance
- Durable components designed for long lasting performance with repeated sterilization
- Standard or push button on fixed back or swivel connection
- *Absolutely the lowest cost of ownership*



## Classic – Reliable Powerful Workhorse

- Reputation for durability with over 15 years and 200,000 units in service
- Functional design provides smooth & consistent operation
- Chairside replaceable canister-style turbines
- *Less expensive to buy & less expensive to operate*



## Whispair – Precision High Performance

- Whisper quiet operation
- Universal compatibility (KaVo, Midwest, Star, NSK, Bien Air)
- Three port water delivery system
- *Competes with the industry leaders at a fraction of the cost*



## Gemini – Same Design and Performance as the Originals for a Fraction of the Price

- State-of-the-Art glass fiber optics
- Smooth push button chuck
- 3 port water spray
- *Complete interchangeability with original handpieces, turbines, and components*



## Choosing a High Speed Handpiece

To help narrow down your selection, first answer the following 3 questions.

### Do you want a handpiece that:

1. Is Fixed Back or Quick Disconnect?

- If Quick Disconnect, does it need to connect with another manufacturer's coupler?
- If so, whose?



2. Has a Standard Chuck or a Push Button Chuck?



3. Is Fiber Optic or Non-Fiber Optic?



Then use the chart on the following page to find a handpiece that has those features, as well as any additional features you want.

# High Speed Handpieces

Fixed Back Handpieces			
Description	J-P Part #	Other Features	Replaces
<b>Standard Head</b>	<b>Non-Fiber Optic</b>		
Challenger Standard (2 or 4 hole)	CH-SHS2 or 4	Chairside Replacement Turbine	Schein Master #100-2231
Challenger Miniature Standard (4 hole)	CH-MHS	Chairside Replacement Turbine · Mini Head	Schein Master #100-7111
Classic Standard (2, 3, or 4 hole)	CL-SHS 2,3, or 4	Chairside Replacement Turbine	Schein Master #100-2231
<b>Standard Head</b>	<b>Fiber Optic</b>		
Challenger Fiber Optic Standard	CH-FOHS	Chairside Replacement Turbine · Bright Optics	Schein Masterlight #100-9970
<b>Push Button Head</b>	<b>Non-Fiber Optic</b>		
Challenger Push Button (2 or 4 hole)	CH-PBHS2 or 4	Chairside Replacement Turbine	Schein Master PB #100-8267
Challenger Miniature Push Button (4 hole only)	CH-MPBHS	Chairside Replacement Turbine	
Classic Push Button (2,3, or 4 hole)	CL-PBHS2,3 or 4	Chairside Replacement Turbine	Schein Master PB #100-8367
Whispair Fixed Back Push Button (4 hole only)	W-FBPB	3 Port Water Spray · Strong Torque	KaVo 625CD/MW Tradition Dentsply #780044, 790044
Whispair Fixed Back Miniature Push Button (4 hole only)	W-FBMPB	3 Port Water Spray · Mini Head · Quiet Operation	KaVo 634PB/636CP
<b>Push Button Head</b>	<b>Fiber Optic</b>		
Challenger Fiber Optic Push Button	CH-PBFOHS	Chairside Replacement Turbine · Bright Optics	Schein Masterlight PB #101-0223
Whispair Fixed Back Fiber Optic Push Button (4 hole only)	W-FBFOPB	3 Port Water Spray · Bright Optics · Strong Torque	MW Tradition Fiber Optic Dentsply #780045, 790045
Quick Disconnect Handpieces			
<b>Standard Head</b>	<b>Non-Fiber Optic</b>		
Challenger Quick Disconnect Standard Handpiece Only	CH-SQDHP	Chairside Replacement Turbine Fits Schein and Benco Push & Swivel	
<b>Push Button Head</b>	<b>Non-Fiber Optic</b>		
Challenger Quick Disconnect Push Button Handpiece Only	CH-PBQDHP	Chairside Replacement Turbine Fits Schein and Benco Push & Swivel	Schein Master Swivel #101-8028
Whispair NSK QD Handpiece Only	W-NPB	3 Port Water Spray · Fits NSK	
Whispair Star QD Handpiece Only	W-SPB	3 Port Water Spray · Fits Star	Star 430 Star #264993,62696,62057
Whispair Midwest/BA QD Handpiece Only	W-MWPB	3 Port Water Spray · Fits Midwest Stylus and Bien Air	MW Stylus Dentsply #790300, 791300
Whispair KaVo QD Handpiece Only	W-KPB	3 Port Water Spray · Fits KaVo	KaVo 632, 642, 643
Whispair KaVo Mini Head QD Handpiece	W-KMPB	3 Port Water Spray · Fits KaVo · Mini Head	KaVo 642C
<b>Push Button Head</b>	<b>Fiber Optic</b>		
Whispair NSK Fiber Optic QD Handpiece	W-NFOPB	3 Port Water Spray · Fits NSK · Bright Optics	
Whispair Star Fiber Optic QD Handpiece	W-SFOPB	3 Port Water Spray · Fits Star · Bright Optics	Star 430 #64450, 64451
Whispair Midwest/BA Fiber Optic QD Handpiece	W-MWFOPB	3 Port Water Spray · Fits MW Stylus and Bien Air · Bright Optics	MW Stylus Dentsply #790300, 791300
Whispair KaVo Fiber Optic QD Handpiece	W-KFOPB	3 Port Water Spray · Fits KaVo · Bright Optics	KaVo 647B/649B/659B and 6000B/6500B
Whispair KaVo Mini Head Fiber Optic QD Handpiece	W-KMFOPB	3 Port Water Spray · Mini Head · Fits KaVo · Bright Optics	KaVo 635B
Gemini KaVo Bella Torque Fiber Optic Handpiece	G-KBTFOPB	3 Port Water Spray · Mini Head · KaVo interchangeable components · Bright Optics	KaVo 632/642/643
Gemini KaVo Super Torque Fiber Optic Handpiece	G-KSTFOPB	3 Port Water Spray · Strong torque · KaVo Interchangeable Components · Bright Optics	KaVo 625/636/640
Gemini NSK Alpha Air/Kinetic Viper Mini Fiber Optic Handpiece	G-VMFOPB	3 Port Water Spray · Mini Head · Bright Optics · Interchangeable with Kinetic/NSK	
Gemini NSK Alpha Air/Kinetic Viper Standard Fiber Optic Handpiece	G-VSFOPB	3 Port Water Spray · Bright Optics · Interchangeable with Kinetic/NSK	
Gemini NSK Alpha Air/Kinetic Viper Torque Fiber Optic Handpiece	G-VTFOPB	3 Port Water Spray · High Torque · Bright Optics · Interchangeable with Kinetic/NSK	
Gemini Star Swivel Fiber Optic Handpiece	G-SFOPB	3 Port Water Spray · Small Head · Bright Optics · Interchangeable with Star	Star 430 #64450,6445
Gemini Midwest Tradition Fiber Optic Handpiece	G-MWTFOPB	1 Port Water Spray · Bright Optics · Interchangeable with Midwest Tradition	MW Tradition 780045,790045

# High Speed Handpieces

## CHALLENGER SERIES



*Now you don't have to choose between quality and price.*

### CHALLENGER SERIES Choices

#### In office replacement cartridge

- Reduces repair cost and downtime
- Factory balanced turbine for excellent concentricity



Standard Head (*bur tool type*)



CH-SHS4



CH-SHS2

#### Quick bur changes

- Convenient push button chuck
- Improved chuck locking system for long lasting retention



Push Button Head



CH-PBHS4



CH-PBHS2

#### Small profile

- Provides great access
- Better visibility



Miniature Standard Head (*bur tool type*)



CH-MHS

Miniature Push Button Head



CH-MPBHS

#### Bright optics

- Dual fiber optics shine light directly on preparation
- Reduces operator stress and fatigue



Fiber Optic Standard Head



CH-FOHS

Fiber Optic Push Button Head



CH-PBFOHS

#### Quick Disconnect Coupling

- Smooth swiveling to reduce fatigue
- Quick click for easy use and cleaning
- Compatible with Push & Swivel, Shein Master Swivel and NSK QD-J style handpieces



Quick Disconnect Standard Handpiece Only

CH-SQDHP

Quick Disconnect Push Button Handpiece Only

CH-PBQDHP

Quick Disconnect Swivel 4 or 2

CH-QDSW4or2

**Quality at an amazing price**

# High Speed Handpieces

## CLASSIC SERIES



*Reliability and value  
make the Classic the  
industry standard.*

*Over 200,000  
units in service*

### In office replacement cartridge

- Reduces repair cost and downtime
- Factory balanced turbine for excellent concentricity



### Quick bur changes

- Convenient push button chuck
- Improved chuck locking system for long lasting retention



### Ergonomic design and surface

- Enhanced grip for better control



### Industry leading bearings

- Leading ABEC7 bearings with unique cage and lubricant materials provide long-lasting consistent performance with repeated sterilization



### Super strong push button chuck system

- Enhanced bur retention and long-lasting reliability



## CLASSIC SERIES

## Choices

Standard Head (*bur tool type*)



CL-SHS4

4 Hole



CL-SHS2

2 Hole

Push Button Head



CL-PBHS4

4 Hole



CL-PBHS2

2 Hole

## Reliable and practical

# High Speed Handpieces

## WHISPAIR SIGNATURE SERIES



*High performance and universal compatibility without a high price.*

### Universal compatibility with existing couplers (KaVo, Midwest, Star, NSK, Bien Air)

• Whispair handpieces fit your current handpiece couplers

- Replacement coupler for KaVo MULTiflex 457
- Replacement coupler for KaVo MULTiflex 1390



- Replacement coupler for KaVo MULTiflex 465LRN



- Replacement coupler for NSK FlexiQuik Coupling (non F/O)



- Replacement coupler for NSK FlexiQuik Coupling F/O



### Premium precision turbine

- More powerful performance
- Incredibly smooth and quiet



### 3-port water spray

- Excellent bur cooling for more efficient cutting



### Bright optics

- Shines light directly on preparation
- Reduces operator stress and fatigue



## WHISPAIR SIGNATURE SERIES

## Choices

### QD Handpieces (Only Push Button Types)

For KaVo, QD HP Only	W-KPB
QD Mini Head HP Only	W-KMPB
QD 4 Hole Swivel	W-KQDS
For KaVo, QD Fiber Optic HP Only	W-KFOPB
QD Mini Head Fiber Optic HP Only	W-KMFOPB
QD Fiber Optic 5 Hole Swivel	W-KFOQDS
QD Fiber Optic 6 Pin Swivel with Bulb	W-K6PQDS

For Star, QD HP Only	W-SPB
For Star, QD Fiber Optic HP Only	W-SFOPB

For NSK, QD HP Only	W-NPB
QD Swivel	W-NQDS

For NSK, QD Fiber Optic HP Only	W-NFOPB
QD Fiber Optic Swivel	W-NFOQDS

For Midwest/Bien Air, QD HP Only	W-MWPB
For Midwest/BA, QD Fiber Optic HP Only	W-MWFOPB

### Fixed Back Handpieces

Push Button Head	 4 Hole	W-FBPB
Miniature Push Button Head	 4 Hole	W-FBMPB
Fiber Optic Push Button Head	 5 Hole	W-FBFOPB

**Leading technology at lower prices**

# High Speed Handpieces

## GEMINI SERIES



*Offering exactly the same design and performance of the originals for a fraction of the price!*

### GEMINI SERIES Choices

**Perfect compatibility**

- Use the turbine from the Gemini for KaVo Bella Torque in a KaVo Bella Torque handpiece or use the KaVo original turbine in the Gemini (same for NSK, Star, and Midwest versions)
- Parts like end caps and O-Rings are interchangeable as well
- Glass fiber optic rods just like KaVo



**Interchangeable with originals**

- No worries about adding couplers or additional handpieces to offices with existing equipment (guaranteed to fit and perform just like the original)



**Same performance and user experiences**

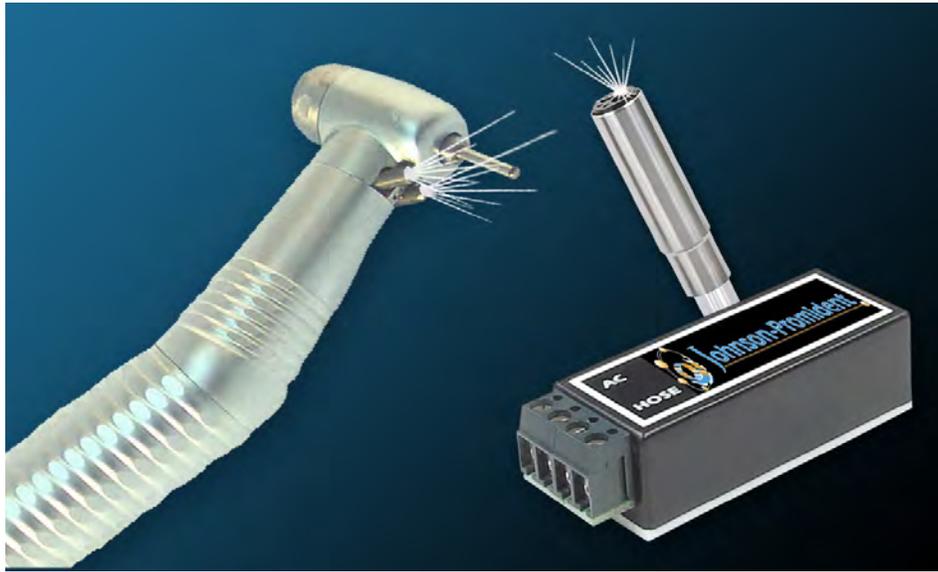
- Get the same head size, torque, grip, and sound of your customer's favorite handpieces

**Available Soon**

Fiber Optic Handpiece for KaVo Super Torque 625/630/640 (large head)	G-KSTFOPB
Fiber Optic Handpiece for KaVo Bella Torque 632/642/643 (small head)	G-KBTFOPB
QD MULTIflex-type 4 Hole Swivel	W-KQDS
QD MULTIflex-type Fiber Optic 5 Hole Swivel	W-KFOQDS
QD MULTIflex-type Fiber Optic 6 Pin Swivel	W-K6PQDS
NSK AlphaAir/Kinetic Viper Mini Fiber Optic Handpiece	G-VMFOPB
NSK AlphaAir/Kinetic Viper Standard Fiber Optic Handpiece	G-VSFOPB
NSK AlphaAir/Kinetic Viper Torque Fiber Optic Handpiece	G-VTFOPB
Star 430 Swivel Fiber Optic Handpiece	G-SFOPB
Midwest Tradition Fiber Optic Handpiece	G-MWTFOPB

Compare and Save

# High Speed Handpieces Fiber Optic System



## Fiber Optics Can Dramatically Change the Way Dentistry is Done

- Shines light directly on the preparation, improving visibility tremendously.
- Reduces operator stress and fatigue.
- Results in better dentistry for the patient.

## Dare to Compare the Challenger Fiber Optic System to Other Leading Brands!

### HIGH QUALITY HANDPIECE OPTICS

- Uses state-of-the-art ultra high pressure (UHP) Krypton-Halogen bulbs to ensure the highest light output and longest life.
- Extraordinary brilliance results in maximum light transmission to the clinical working area.

Complete Light Source Kit

FOLS-1HP

Standard Fiber Optic  
Operatory Package  
(3 handpieces and light)

CH-LS3XPKG

Push Button Fiber Optic  
Operatory Package  
(3 handpieces and light)

CHPB-LS3XPKG

Challenger Bulb Module

W-CHB

*Think of our Challenger  
Fiber Optic System as an  
Upgrade to Fiber Optics  
at No Cost!*

### CONVENIENT FIBER OPTIC LIGHT SOURCE UNIT

- Comes complete – no other parts needed.
- Has a convenient external connection that does not require internal access and uses existing tubing. You can even turn 2-hole tubing into a fiber optic setup.
- Just plug it in - no tools or technician required! Fiber optics in less than 5 minutes!
- Slim, lightweight design.
- Mounts on any flat surface.
- Light source unit comes complete with fiber optic tubing, power source, transformer, air switch, and bulb module.



# Low Speed Handpieces 101

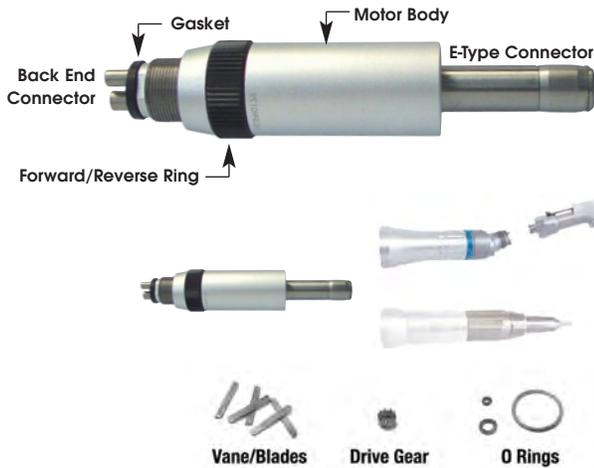
## Overview

### What is a Low (Slow) Speed Handpiece?

- A hand held motor, usually air-driven (can also be electric), that spins a cutting bur or prophy cup at 50,000 RPM or less.
- Used for removal of caries, refining a cavity preparation, performing prophylaxis, and other endodontic and implant procedures.
- Straight attachments that use handpiece burs are generally used for trimming prosthetics.

### How Does a Low Speed Handpiece Work?

- An airline is attached to the back end of the handpiece, similar to a high speed handpiece.
- When air is introduced into the handpiece (via the chair unit foot pedal), air is forced over the vanes of the rotor (consisting of vanes or blades), which causes it to spin.
- After the air moves around the rotor, it is forced out through the handpiece's back end exhaust port.



## Features and Functions

### How Fast Does a Low Speed Handpiece Run?

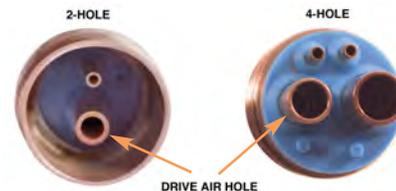
- The speed depends upon the pressure (PSI) of the air supply, the configuration of the rotor components, and the gears inside the motor.
- Low speed handpieces are designed to handle much more air pressure than high speed handpieces.
- Typical low speed motors, without gear reductions, running at 40 PSI should spin at approximately 20,000 rpm.
- Speed reducing gears allow the handpiece to generate significantly more torque.
- Hygienist handpieces and low speeds used for prophylaxis generally operate at 5,000 RPM.
- Endodontic and implant procedures use attachments to reduce the speed to 1,500 rpm or less and generate very high levels of torque for optimal control.

### What Type of Handpiece Connections and Tubing Compatibility Does a Low Speed Handpiece Have?

- Similar to high speed handpieces, low speed handpieces can be either fixed back or quick disconnect style, with 2 different tubing configurations: 2 hole and 4 hole.
- Because low speed handpieces operate at significantly lower speeds than high speed handpieces, there is less need for cooling the tooth with air and water spray.
- Therefore, most low speed motors are configured so that no water is transferred through the water tubes; however, low speed handpieces still maintain the international standard backends that high speed handpieces have, for the sake of compatibility with tubing.

### How Long Will a Low Speed Handpiece Last?

- Slow speed handpieces can have long life spans due to the low operating speeds and design differences (compared with high speed handpieces.)
- The handpieces can be repeatedly overhauled but should have professional maintenance conducted every 6-12 months.



# Johnson-Promident University Low Speed Handpieces 101 E-Type and Doriot

## E-Type Low Speed Handpieces

- Multi-piece handpieces consisting of a motor and various attachments (the motor cannot be used without an attachment).



- E-Type is an international standard for how attachments are placed on a motor; most E-Type motors and attachments are interchangeable, like KaVo, NSK, W&H, and Bien Air. However, Midwest and Star brands have proprietary designs.
- 2 primary types of attachments:

### NOSE CONE/STRAIGHT ATTACHMENT



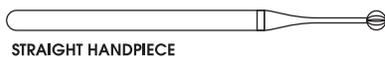
- Can accept straight handpiece burs, mandrels, proph angles, and doriot/U-Type contra angles.
- Come either as a 1:1 transmission, which maintains the motor speed, or as a 4:1 gear reduction, primarily used with prophies to reduce the handpiece speed to a rate that reduces the splatter of paste and the potential to burn a patient.

### CONTRA ANGLE



- Generally accepts either a bur or a proph cup.
- Has 2 components: a sheath and a head.
  - Sheath attaches to the E-Motor and can have gear reduction characteristics.
  - Head comes in a wide range of options and has the mechanism to hold a bur or proph cup.
  - Head screws onto the sheath and can easily be exchanged for other options.

## Matching Bur Types with Handpieces



- For use in straight attachments/nose cones and Doriot-type low speed handpieces.



- For use in latch-type contra angle heads in low speed handpieces.



- For use in high speed handpieces and friction grip low speed contra angle heads.

## Doriot Low Speed Handpieces

### Hygienist Handpiece:



- One-piece slow speed handpieces consisting of a motor combined with a nose cone-type front end.
- Does not require an additional attachment to perform certain procedures since it can generally accept a straight handpiece bur, mandrel, proph angle, and doriot/U-type contra angles.

### Hygienist Handpieces



- A special kind of doriot handpiece, designed just for prophylaxis with a compact, light design and a swivel nose.
- Has an internal gear reduction and operates at 5,000 RPM.
- Many hygiene handpieces have special friction grip-type chucking mechanisms that will only accept disposable proph angles.

### Advantages of Doriot-type Handpieces

- Shorter than E-Type motor/nose cone combinations.
- Can duplicate any E-Type/attachment combination without additional attachments required.

### Disadvantages of Doriot-type Handpieces



- When used with doriot/U-Type contra angles, the handpiece can get very long, making it awkward for the dentist.



# Johnson-Promident University

## Low Speed Handpieces 101

### Attachments and Angles

#### Contra Angle Heads

- Designed for two primary uses:
  - 1) To accept burs to remove caries and for cavity preparation.
  - 2) To take prophyl cups for prophylaxis.

#### 1) FOR BURS

- Designed to take Latch Type (RA) burs (most common for low speed handpieces) or Friction Grip (FG) burs (similar to high speed handpieces).

Latch type heads have three different mechanisms for holding the bur:

- Swing Latch**

  - No technical advantage of one over another.
- Spring Latch**

  - Push button heads are considered more convenient for bur changes, but they are generally much more expensive and have more mechanical parts that can fail.
- Push Button Latch**

  - We believe that spring latch heads provide the ease of push button but the reliability of swing latch.

Friction Grip Type Heads have two mechanisms for holding the bur (similar to high speeds):

- Bur Tool Type**

  - Push button heads provide the convenience of quick and easy bur changes but cost significantly more and fail more quickly than bur tool types.
- Push Button Type**


#### 2) FOR PROPHY HEADS

- There are two primary designs for attaching the prophyl cup to the head: snap-on and screw-type.



#### Quality Ratings of Contra Angle Heads

- Heads are rated on capability: 20K, 30K, 40K.
- 20K, 30K, 40K heads all perform the same function; the primary difference between heads of different ratings is the longevity of the head.
- **40K RPM** (highest rating): internal components include a ball bearing cartridge which extends the life of the head under normal operating conditions.
  - 40K RPM rating means that the head can handle the stresses of this speed (although most slow speed motors do not exceed 20,000 RPM).*
- **30K RPM** (middle range rating): has an oil-impregnated brass bushing to reduce friction and improve longevity.
- **20K RPM** (lowest range rating): does not contain any special friction-reducing components and therefore has the shortest operating life.
  - However, a 20K RPM head is still adequate for all low speed motor applications, and with proper maintenance should provide a dentist with a useful life and great value.*
- Choices should be made based upon frequency and type of use.

#### Other/Specialty Types of Contra Angle Heads

- 10:1 Gear Reduction (very slow and high-torque).
- Endodontic ¼ Turn (the bur does not spin but rotates back and forth).
- Mini (small head for better access).

#### Doriot/U-Type Contra Angles

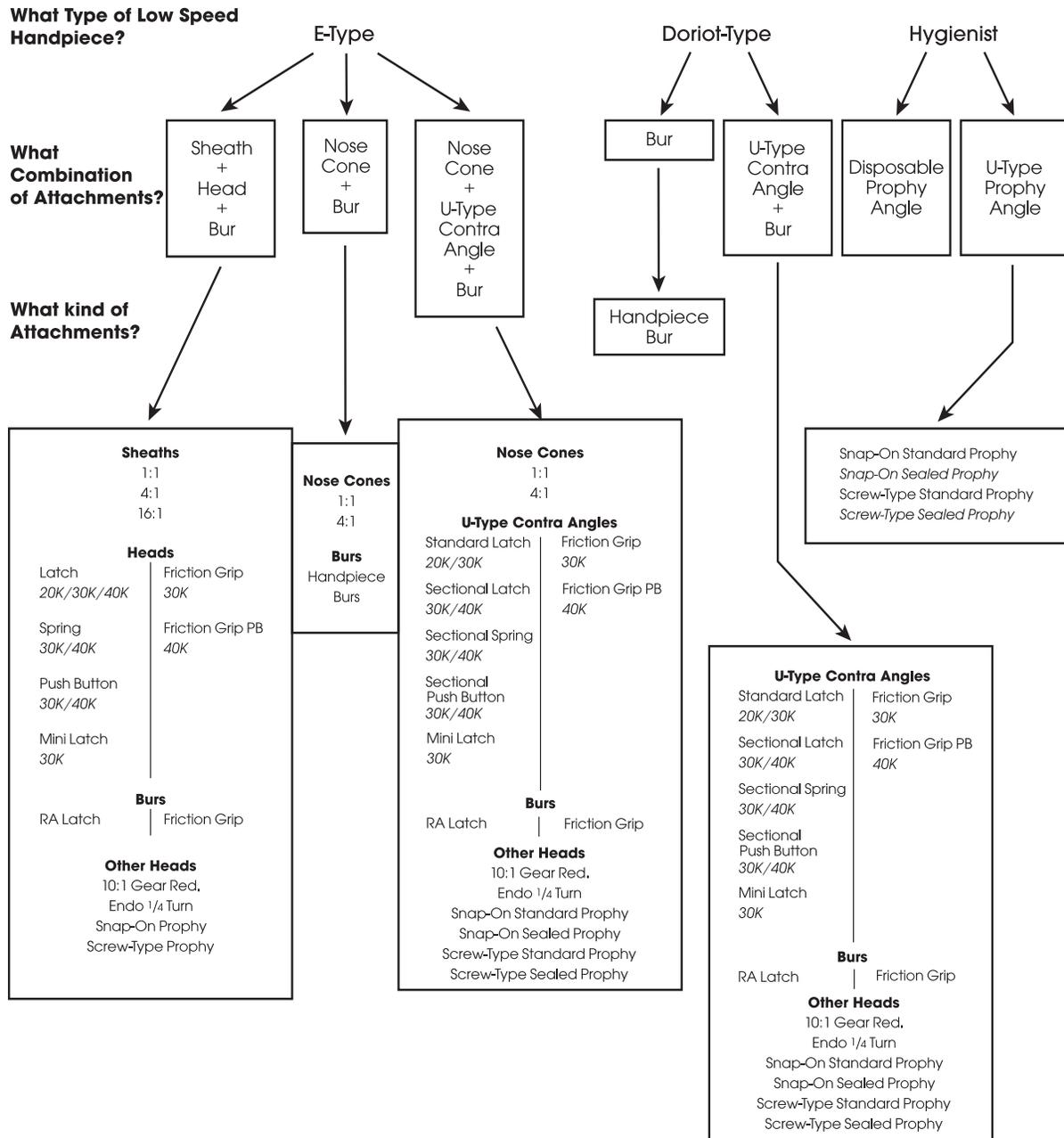
All the same configurations, rating, and options available for heads are also available in U-Type contra angles, either for a doriot-type handpiece or a nose cone/straight attachment.



# Low Speed Handpieces

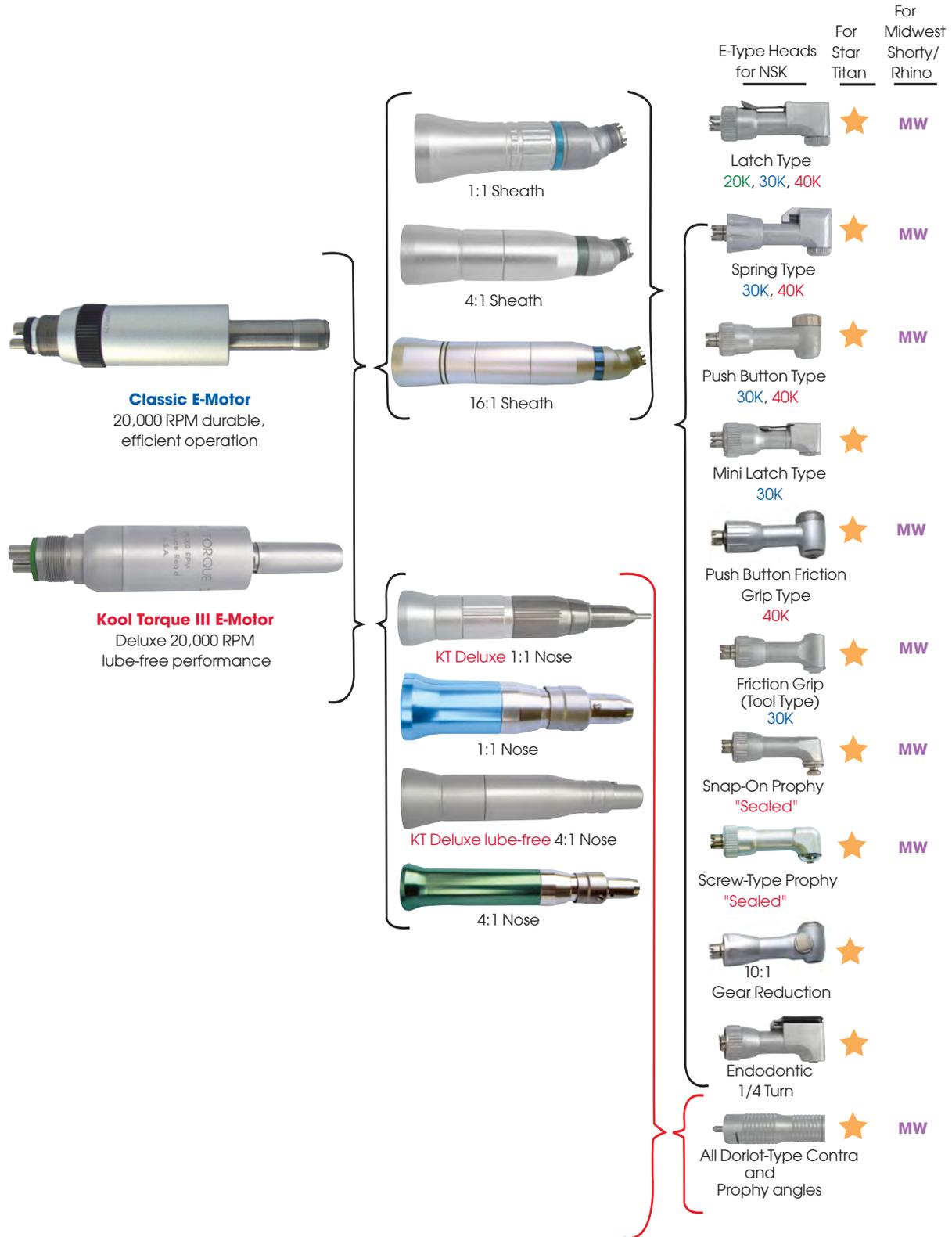
## Tips on Choosing

*When choosing a low speed handpiece and attachments, follow the questions in the chart below:*



# Low Speed Handpieces

## E-Type Motor Combinations



# Low Speed Handpieces

## Hygienist & Doriot Handpiece Combinations

### Hygienist Handpieces



**Short Gripper II (5K)**

- 5,000 RPM compact, well-balanced and lightweight
- Accepts standard contra angles and disposable prophy angles



**Hygienist Plus**

- 5,000 RPM ergonomically designed for effortless operation
- Specifically designed for disposable prophies



**Micromite "Hawk"**

- 5,500 RPM ultra high torque at low speeds
- Accepts standard straight handpieces burs, contra angles, and disposable prophy angles

### "Doriot" Handpieces



**Short Gripper II (20K)**

- 20,000 RPM ultra high torque at low speeds
- Accepts standard straight handpiece burs and contra angles



**Micromite "Black Demon"**

- 25,000 RPM ultra high torque durable workhorse
- Dual capability: low speed contra angle and lab applications
- Accepts standard straight handpiece burs and contra angles

Disposable Prophy Only

Doriot/ U-Type Contra Angles



Snap-On Prophy Standard



Snap-On Prophy "Sealed"



Screw-Type Prophy Standard



Screw-Type Prophy "Sealed"



Standard Latch Type 20k, 30k



Sectional Latch Type 30k, 40k



Spring Type 30k, 40k



Push Button Type 30k, 40k



Mini Latch Type 30k



Push Button Friction Grip Type 40k



Friction Grip Type 30K (Tool Turn)



10:1 Gear Reduction



Endodontic 1/4 Turn

# Low Speed Handpieces

## E-Type Motors

### Classic E-Type Air Motor (20,000 RPM) or (5,000 RPM)

- Designed for durable and reliable performance
- Excellent combination of price and performance
- Perfectly balanced lightweight design
- Compatible with all standard "E" type attachments
- Smooth and quiet operation
- Equal Speeds forward and reverse



Classic E-Motor 20K



ECL-4

Classic E-Motor 20K



ECL-2

Classic E-Motor 5K



ECL5K-4

Classic E-Motor 5K



ECL5K-2

### Kool Torque III Deluxe E-Type Motor (20,000 RPM)

- Premium lube-free motor in a class by itself
- Advanced engineering for long-term precision performance
- Smooth vibration-free operation
- Accepts all E-type attachments
- Incredible torque and sensitivity at all speeds
- Also available with a no-maintenance 4:1 disposable prophylaxis nose cone



Kool Torque III E-Motor



KTIIE

Compare to KaVo 181K

## E-Type Sheaths and Heads

*Fits any "E-type" or NSK coupling attachment*



1:1 Sheath  
ESH1:1



4:1 Sheath  
ESH4:1



16:1 Sheath  
ESH16:1



20K Latch Type  
EL20



30K Friction Grip Type  
(Tool Type)  
EFG



Ball Bearing 40K  
Push Button Friction Grip Type  
EFGPB



30K Latch Type  
EL30



30K Push Button  
Latch Type  
ELPB30



30K Spring Type  
EL30S



Ball Bearing 40K Latch Type  
EL40



Ball Bearing 40K Push Button  
Latch Type  
ELPB40



Ball Bearing 40K Spring Type  
EL40S



Deluxe E-Snap-On  
Sealed Prophylaxis  
EPK1



Deluxe E-Screw-Type  
Sealed Prophylaxis  
EPS1



30K Mini Latch Type  
EL30M



Endodontic 1/4 Turn  
E-ENDO



10:1 Gear Reduction  
E10:1

# Low Speed Handpieces

## Doriot/Hygienist Handpieces

### Doriot Handpieces

#### Short Gripper II (20,000 RPM)



- Compact, well balanced and light weight, providing precise control
- No separate attachments needed – one piece assembly
- Chuck accepts all standard contra angles and hand-piece burs
- Quick chuck release – 1/4 turn “open-close”
- Low noise and low air consumption
- Variable speed up to 20,000 RPM with equal speeds forward and reverse

#### Micromite “Black Demon” (25,000 RPM)



- Ultra high torque durable workhorse designed with dual capability
  - Low speed contra angle applications
  - Laboratory straight handpiece
- Smooth and quiet operation
- Accepts all standard contra angles
- Accepts standard straight handpiece burs and mandrels
- Quick release chuck – 1/4 turn “open-close”
- Forward and reverse rotational control
- 360° swivel feature prevents tube twisting and back end drag

### Hygienist Handpieces

#### Short Gripper II (5,000 RPM)



- Compact, well balanced, light weight and fully autoclavable
- Low noise and low air consumption
- Quick chuck release – 1/4 turn “open-close”
- No separate attachments needed – one piece assembly
- Equal speeds forward and reverse
- Chuck accepts all standard contra angles and disposable prophy angles

#### Hygienist Plus (5,500 RPM)



- Specially designed for prophies, accepts disposable prophy angles ONLY
- Ergonomically designed for effortless operation
- Lightweight and with a 360° swivel nose
- Simple push/pull friction grip chuck system, fully autoclavable
- Quiet sleek design

#### Micromite “Hawk” (5,500 RPM)



- With over 25 years of service, it sets the industry standard for reliability
- Designed to provide ultra high torque at slow speed
- No separate attachments needed – one piece assembly
- Ideal for prophy applications
- Forward and reverse rotational control
- Quick release chuck – 1/4 turn “open-close”
- Accepts all standard prophy angles and disposable prophies, contra angles, and straight handpiece burs
- 360° swivel feature prevents tube twisting and back end drag

# Low Speed Handpieces

## Doriot/U-Type Contra Angles & Nose Cones

*Nose Cones fit any "E-type" or NSK coupling*

*Use with U-type contra angles or straight handpiece burs*



1:1 Nose Cone  
**ESGN1:1**



KT Deluxe 1:1 Nose Cone  
**ENC**



KT Deluxe 4:1 Prophy Nose  
Disposable Prophy Only  
**ENCP**



20K Standard Latch Angle  
**R20U**



30K Friction Grip Angle (tool type)  
**FG30U**



4:1 Nose Cone  
**ESGN4:1**



30K Standard Latch Angle  
**R30U**



Ball Bearing 40K  
Push Button Friction Grip Angle  
**FGPB40U**



Standard Snap-On Prophy  
**PK-2**



30K Deluxe Sectional  
Latch Angle  
**S30U**



Ball Bearing 40K Deluxe Sectional  
Latch Angle  
**BB40U**



Deluxe Sealed Snap-On  
Prophy Angle  
**SPK-2**



30K Spring Latch Angle  
**S30US**



Ball Bearing  
40K Spring Latch Angle  
**BB40US**



Standard  
Screw-Type Prophy  
**PS-1**



30K Push Button Latch Angle  
**S30UPB**



Ball Bearing 40K  
Push Button Latch Angle  
**BB40UPB**



Deluxe Sealed Screw-Type  
Prophy Angle  
**SPS-1**



30K Mini Latch Angle  
**M30U**



10:1 Gear Reduction Angle  
**S10:1**



Endodontic 1/4 Turn Angle  
**S-ENDO**

# Low Speed Handpieces Attachments & Heads for **Midwest Systems**



Contra Angle Sheath  
for **Midwest**  
**MWSH**  
DENTSPLY #710074



Straight Nose Cone  
for **Midwest**  
**MWNC**  
Accepts all Doriot/U-Type Contra Angles  
(see page 21)  
DENTSPLY #720005



20K Latch Type  
**MW1A**



Deluxe Sealed  
Screw-Type Proply  
**MW2**  
DENTSPLY #720446



Deluxe Sealed  
Snap-On Proply  
**MW3**



30K Latch Type  
**MW1**



30K Push Button Latch Type  
**MWPB30**  
DENTSPLY #720485



30K Spring Type  
**MW1S**



Ball Bearing  
40K Latch Type  
**MW4**



Ball Bearing  
40K Push Button Latch Type  
**MWPB40**  
DENTSPLY #720485



Ball Bearing  
40K Spring Type  
**MW4S**



Contra Angle for Trutorq  
**MWTT1**  
DENTSPLY #710071



30K Friction Grip Type  
(Tool Type)  
**MWFG**



Friction Grip Push Button  
**MWFGPB**  
DENTSPLY #720475

## E-Dapter for MIDWEST

Transform a Shorty/Rhino into a Universal E-motor.

- Share attachments between different brands of handpieces within an office, easing product transitions.
- Use more common, broader ranging and less expensive E-Type attachments.



Midwest E-Dapter  
**E-DAPT M**

# Low Speed Handpieces

## Motor & Attachments for **Star Titan Systems**

### Replacement Motor for Star Titan



- 5,000 and 20,000 RPM low speed motor
- Fully interchangeable and compatible with Star Titan low speed systems
- Johnson-Promident now offers the complete line of Star Titan low speed products...for a fraction of the price.

20K Motor		TCL-4	Star # 262262, 263941
20K Motor		TCL-2	
5K Motor		TCL5K-4	Star # 262261, 263940
5K Motor		TCL5K-2	



 20K Latch Angle <b>TIT1</b>	 Endodontic 1/4 Turn Angle <b>TIT-ENDO</b> Star #262571	 30K Mini Latch Angle <b>TIT4M</b>
 30K Latch Angle <b>TIT4</b>	 30K Push Button Latch Angle <b>TITPB30</b>	 30K Spring Latch Angle <b>TIT4S</b>
 Ball Bearing 40K Latch Angle <b>TIT5</b> Star #262738    Star #259005 Star #263948    Star #263947	 Ball Bearing 40K Push Button Latch Angle <b>TITPB40</b> Star #262737    Star #261335 Star #263950    Star #263949	 Ball Bearing 40K Spring Latch Angle <b>TIT5S</b>
 Deluxe Sealed Screw-Type Proply <b>TIT2</b> Star #263240, #263946	 Deluxe Sealed Snap-On Proply <b>TIT3</b> Star #263240, #263946	 10:1 Gear Reduction Angle <b>TIT-10:1</b> Star #258985, #263951
	 40K RPM Push Button Friction Grip Type <b>TITFGPB</b> Star #262739    Star #264149 Star #263954    Star #263953	 30K Friction Grip Angle (Tool Type) <b>TITFG</b> Star #263952    Star #258965 Star #263955    Star #262740

### E-Dapter for Star

- Transform a Star Titan into a Universal E-Motor.
- Share attachments between different brands of handpieces within an office, easing product transitions.
  - Use more common, broader ranging and less expensive E-Type attachments.



# Low Speed Handpieces Attachment & Heads for **KaVo Systems**

## INTRAmatic Attachments



- 1:1 Transmission
- Speed range up to 20,000 rpm
- Push button for latch burs

**REPLACES 68LH – KL68**



- 2:1 speed reduction
- Speed range up to 10,000 RPM
- Push button for latch burs

**REPLACES 67LH – KL67**



- 1:1 Transmission Straight Attachment
- Speed range up to 20,000 rpm
- Internal air/water coolant

**REPLACES 10K, 10CH – KE10**



- 4:1 Transmission Straight Attachment
- Speed range up to 5,000 rpm
- Designed for disposable prophylaxis heads

**REPLACES 14K – ENCP**



- 1:1 Transmission Contra Angle
- Speed range up to 20,000 rpm
- Internal air/water coolant

**REPLACES 20K, 20CH – KSH20**



- 1:1 Transmission Contra Angle
- Speed range up to 20,000 rpm
- Internal air/water coolant
- Cellular optics

**REPLACES 20LP – KFOSH20**

## Low Speed Motor



- Smooth vibration free operation
- Speed range up to 20,000 rpm
- Lube-free motor, 4 hole connection
- Accepts all E-type attachments

**REPLACES 181K – KTIIE**

# Instruments & Equipment

## TURBO Handpiece Control System

### TURBO Handpiece Control System

- Completely self contained handpiece control unit with clean water system – no installation requirements, just connect tube to air supply
- Compact table top system – only 6" x 5"
- Sleek contemporary design enables easy cleaning

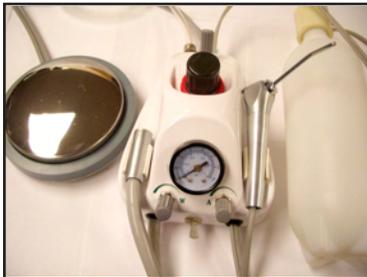
### WHY?

- Alternative to wall mounted or cart controls, fits in any setting
- Multiple uses: Laboratory or in-office setup
- Portable or temporary set up needs
- Emergency backup
- Handpiece cleaning/purge and testing station
- Repair facility



### Two Great Options!

#### Turbo 1



- Handpiece and Syringe System

#### Features

- Single handpiece control with coolant
- 3 way syringe with quick change autoclavable tip
- Individual handpiece air pressure adjustments
- Water coolant flow control and on/off bottle pressure release
- Integrated clean water system w/ 1 liter bottle
- Easy to read pressure gauge
- Integrated high pressure regulator
- Variable speed disc-type foot control
- Asepsis European style tubing

#### Turbo 1

#### Turbo 2



- 2 Handpiece System

#### Features

- Two handpiece control with coolant
- Individual handpiece air pressure adjustments
- Water coolant flow control and on/off bottle pressure release
- Integrated clean water system w/ 1 liter bottle
- Easy to read pressure gauge
- Integrated high pressure regulator
- Twin-pedal heavy duty independent handpiece foot control
- Asepsis European style tubing

#### Turbo 2

# Instruments & Equipment

## Air/Water Syringe



- Well balanced design, and smooth styling for comfortable use
- Easy release for a speedy exchange of tips
- Fully autoclavable tips

**SYR** AIR/WATER SYRINGE  
**SYR-TIP** REPLACEMENT TIP

## Crown & Bridge Remover



- Eliminates noise and pulling sensation of other C&B removers
- Prevents damage to restorations with 3 impact control settings

**CB1** C&B REMOVER W/2 TIPS  
**CB-A** BLUNT TIP A  
**CB-B** SICKLE TIP B

## Amalgam Packer Kit



- Kit comes with amalgam packer angle and 14 different points

**AMKIT14** PACKER KIT W/14 PTS  
**AMP1...AMP14** POINTS 1-14

## Porta-Lite Illuminated Mirror



- Portable battery-operated mirror with light for greater visibility

**PLITE**

## Universal Quick Disconnect Vacuum Valve



- Single piece anodized aluminum body
- Easy removal lever and spool valve assembly
- Lightweight 360° quick disconnect swivel
- Autoclavable

**HVE-QD**

## Deluxe Quick Disconnect Saliva Ejector Valve



- Single piece anodized aluminum body
- Easy removal lever and spool valve assembly
- Lightweight 360° quick disconnect swivel
- Autoclavable

**DSE-QD**

## Air Regulator



**REG**

## Air Pressure Test Gauge



- Ensures proper air pressure is used to maximize handpiece performance and prevent damage

**TEST-GAG**

# Instruments & Equipment Accessories



2/3 Hole Handpiece to  
4 Hole Tubing Adapter  
**3/4ADAPT**



2/3 Hole Tubing Connector  
**CON-3H**



Syringe Tubing  
**2TUBE**



4 Hole Handpiece to  
2/3 Hole Tubing Adapter  
**4/2ADAPT**



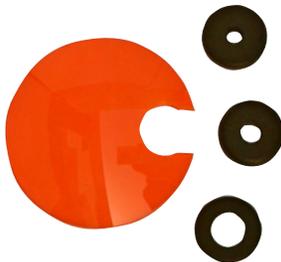
4 Hole Tubing Connector  
**CON-4H**



4 Hole Standard Tubing  
**4TUBE**



Lab Braided Standard Tubing  
**BRTUBE**



## Light Shield•

Maximum protection shield  
fits most curing light wands  
and guns (includes 3 sizes  
of grommets)

**LS**

## Disposable Systems

### Dart Disposable Handpiece System

- High speed 4 hole 400,000 RPM handpiece with disposable head/turbine
- Smooth efficient concentric cutting
- Maintenance free operation, fully autoclavable handle



### FOR WHEN YOU DON'T WANT TO USE YOUR "FAVORITE HANDPIECE":

- Avoid damaging torque and chattering when cutting out old amalgams or removing metal crowns
- Serve an infectious patient or one you may have concerns about
- Eliminate patient concern by using a single use product to be discarded after procedure
- Emergency use when sterilization is not available



**DART DISPOSABLE SYSTEM** (1 handle/13 heads) **DDS-91**  
**DART HANDLES** (3) **DDS-35**  
**DART DISPOSABLE HEADS** (12 pack) **DDS-25**

### Disposable Propphy Angles



- Webbed cups that prevent splattering available in soft and firm varieties
- Smooth, quiet performance
- Economical, individually wrapped angles
- Designed to fit all low speed, Doriot (straight nose cone) style handpieces
- Latex free and odor free, eliminates allergies and sensitivity

**FIRM BOX OF 144** **PPA-FIRM**  
**SOFT BOX OF 144** **PPA-SOFT**

# Laboratory Handpieces and Dowel Pins

## Low Speed Handpieces

### 30,000 RPM 3 Ball Bearing Doriot Laboratory Handpiece



BB-30D Doriot Lab Handpiece

- Specially designed for Laboratory use, the handpiece is engineered to sustain hours of continuous use.
- High precision concentricity of spindle ensures precise performance.
- Dust protective seal assures long handpiece life.
- Permanently lubricated, shielded, and sealed spindle bearings for maintenance free long lasting performance.

### 50,000 RPM 5 Ball Bearing Laboratory Handpiece



5HDL Heavy Duty Lab Handpiece

- Specially engineered for heavy duty cutting and grinding operations.
- Precision heavy duty collet chuck enhances retention of bur under sustained intense operation.
- Dust protective seal assures long handpiece life.
- Permanently lubricated, shielded, and sealed spindle bearings for maintenance free long lasting performance.
- Vibration free with no spindle end play and true concentric running.

### Kool-Torque (55,000 RPM)



- KT-GL Kool Torque w/Foot Control
- KT Kool Torque Handpiece Only
- FC-S Foot Control w/Tubing
- FIL-REG Regulator/Filter/Lubricator Assembly
- REG Air Regulator
- GAG Air Gauge

- Versatile heavy duty air driven handpiece operates at variable speeds with foot control from low speed to 55,000 RPM at 60 psi.
- Heavy Duty vane air motor is renowned for its exceptional durability.
- Ultra torque generating 1/4 horsepower at pressures above 40 psi.
- Unique motor stays cool even at speeds of 55,000 RPM with muffled air exhaust.
- Vibration free due to special 3-jawed lathe collet chuck and two main sealed support bearings resulting in increased comfort and more accurate cutting.
- Quick disconnect feature for convenient portability from station to station.

*“Also see the Micromite Black Demon for Lab Use”  
Page 20*

## Hygienist Handpieces



## High Speed Handpieces

### Straight Laboratory Handpiece (320,000 RPM)



HS-SL HS Straight Lab Handpiece  
FC-S Foot Control w/Tubing

- Significant torque (1.5 times the torque of a conventional type).
- Fast efficient cutting at 40-45 psi of air pressure.
- Simple field replaceable canister type turbine.
- Uniquely designed to drastically reduce the noise of exhaust air.
- Push button mounting system for simple and correct bur changes.

### Industrial High Speed Handpiece (350,000 RPM)



HS-IND Industrial Handpiece w/Barb  
HS-IND4 Industrial Handpiece 4 Hole  
HS-IND2 Industrial Handpiece 2 Hole  
FC-S Foot Control w/Tubing

- Uses an industrial grade turbine which loves air - 50 psi for maximum cutting efficiency.
- Designed for rugged use on porcelain and industrial applications.
- Requires no lubrication.
- Industrial turbine fits most high speed canister type handpieces and is easy to change.

## Precision Tolerance Dowel Pins

- Standard Brass Dowel Pins  
#1 (Small), #2 (Medium), #3 (Large)
- No Knurl Dowel Pins #2
- Nickel Plated Dowel Pins #2
- Dual/Twin Dowel Pins with Sleeve & Die Guard
- Two-Step Pin Setting Drills for Pindex System

- DP-1M #1 Dowel Pin 1000 pc
- DP-2M #2 Dowel Pin 1000 pc
- DP-3M #3 Dowel Pin 1000 pc
- DP-2NK No Knurl Dowel Pin 1000 pc
- DP-2MP Nickel Plated #2 Dowel Pin 1000 pc
- DP-Dual Dual/Twin Dowel Pin 1000 pc
- D-PS Two Step Drills 3 pc

# Sonic/Ultrasonic Scaling

## Sonic Air Scalers

### Max-Sonics Air Scaler



- Safe, efficient, and gentle air driven scaler.
- Convenient size and low air consumption.
- Connects to existing handpiece tubing, 3 tips included, completely autoclavable.

4 Hole Air Scaler w/3 Tips SCALER-M4  
 2 Hole Air Scaler w/3 Tips SCALER-M2  
 Compare to Schein Sonic Scaler 900-4012



### Deluxe Sonic Air Scaler (Star Titan Compatible)



- Effective removal of hard calculus deposits and stains, gently and quietly.
- Connects to existing handpiece tubing and fits with many popular tips comes with universal tip and wrench.
- Orbital water spray, completely autoclavable.

4 Hole Scaler SCALER  
 Star # 263401



Compatible with Schein and Rand sonic scalers

## Ultrasonic Inserts for Cavitron Units



- Longer plates fit 25K scalers
- Shorter plates fit 30K scalers

← Resin (plastic) handles have water spray that comes from inside of tip  
 ← Metal handles have external water spray

### Relacement for:

	Johnson Promident Number	Dentsply Number
<b>TFI-3 Thin Beavertail 25K, 30K</b> <i>Ideal for gross scaling</i>	UI-T325, UI-T330	6121702, 6374102
<b>TFI-10 Straight 25K, 30K</b> <i>Ideal for gross scaling</i>	UI-T1025, UI-T1030	6121708, 6374106
<b>TFI-1000 Triple Bend 25K, 30K</b> <i>Ideal for interproximal access</i>	UI-T100025, UI-T100030	6122001, 6374110
<b>FSI-100 25K, 30K</b> <i>Ultrathin tips for subgingival access (Use on lower power only)</i>	UI-FS10025, UI-FS10030	80795, 80798
<b>P-10 Metal Univ. 25K, 30K</b> <i>Ideal for gross scaling</i>	UI-P1025, UIP1030	6120108, NA
<b>SLI 10S Straight 25K, 30K</b> <i>Ultrathin tips for subgingival access (Use on lower power only)</i>	UI-SL10S25, UI-SL10S30	79290, 79611
<b>SLI 10R Right 25K, 30K</b> <i>Ultrathin tips for subgingival access (Use on lower power only)</i>	UI-SL10R25, UI-SL10R30	79291, 79612
<b>SLI 10L Left 25K, 30K</b> <i>Ultrathin tips for subgingival access (Use on lower power only)</i>	UI-SL10L25, UI-SL10L30	79292, 79613

**O RINGS FOR RESIN ULTRASONIC INSERT (ALL BRANDS)**  
 UIORING

**O RINGS FOR METAL ULTRASONIC INSERT (ALL BRANDS)**  
 UIMORING

## Features and Benefits of Johnson-Promident Carbide Burs

### FEATURES

#### HIGH QUALITY

*JP carbide burs feature high quality tungsten carbide tips that are brazed onto the neck of a stainless steel shank.*

#### HIGH CONCENTRICITY

*This increased strength and high concentricity of the shank ensures an even tooth preparation.*

#### CAREFUL DESIGN

*JP carbide burs are designed to cut sharper angles with a greater blade contact on the tooth surface.*

#### MADE TO STRICT TOLERANCES

*Complying with international standards, JP burs are manufactured to strict tolerances, eliminating any defects.*

#### HARD WEARING

*JP burs are made from high grade, fine grain tungsten carbide, crafted to resist wear, chipping and breakage.*

#### WIDE RANGE

*The wide range of JP carbide burs accommodate individual preferences and cover a multitude of applications.*

### BENEFITS

#### STRONGER

*This exceeds the international standard required for load bearing, maximizing the strength of the burs and reducing the risk of breakage.*

#### MORE EFFICIENT

*And also means the cut is more efficient, causing less trauma to the tooth and less stress for the patient.*

#### IMPROVED PERFORMANCE

*This gives a fast, smooth, vibration free performance, reducing patient discomfort as well as operative time.*

#### IMPROVES LIFE OF HANDPIECES

*This places less stress on the handpiece and reduces the risk of early chuck failure.*

#### LONG LASTING VALUE FOR MONEY

*This produces a longer lasting, durable bur, which is cost effective and value for money.*

#### ONE STOP SHOP

*This enables you to buy all your requirements from one source.*

Johnson-Promident burs are manufactured under a Quality Assurance system complying with BS EN ISO 9001, BS EN 46001 and the European Directive 93/42/EEC concerning medical devices.

*Did you know that  
Johnson-Promident carries over 300  
different types of burs?*

# Carbide Burs



ROUND						
	FG	FG SS	FG SRG	HP	RA	RA SRG
1/4	•			•	•	
1/2	•	•		•	•	
1	•		•	•	•	
2	•	•	•	•	•	•
3	•		•	•	•	
4	•	•	•	•	•	•
5	•		•	•	•	
6	•	•	•	•	•	•
8	•		•	•	•	

WHEEL	
	FG
14	•

INVERTED CONE				
	FG	FG SS	HP	RA
33 1/2	•	•		•
34	•	•	•	•
35	•	•		•
36	•		•	•
37	•		•	•
39	•			•

FLAT FISSURE		
	FG	FG SS
56	•	•
57	•	•
58	•	•

ORTHO	
	FG
118L	•
118S	•
218	•

TAPER FISSURE		
	FG	HP
169	•	
169L	•	
170	•	•
170L	•	
171	•	
171L	•	



AMALGAM PREP		
	FG	FGSS
245	•	•
246	•	•



PEAR		
	FG	SS
329	•	
330	•	•
331	•	•
331L	•	
332	•	



FLAT FISSURE CROSS CUT						
	FG	FG SS	FG SRG	HP	RA	RA SRG
556	•	•				
557	•	•	•		•	•
557L	•					
558	•		•	•		•
558L	•					

TAPER FISSURE CROSS CUT				
	FG	FG SS	FG SRG	HP
699	•	•		•
699L	•			
700	•	•		•
700L	•			
701	•		•	•
701L	•			
702	•		•	•
703	•			•

END CUTTING	
	FG
957	•



ALL PURPOSE	
	FG
256	•



DOMED TAPER FISSURE CROSS CUT	
	FG
1700	•
1701	•
1702	•



DOMED FISSURE CROSS CUT			
	FG	FG SRG	HP
1556	•		•
1557	•	•	•
1558	•		•



TRIMMING AND FINISHING								
T&F ROUND	T&F FLAME	T&F CONE	T&F INVERT TAPER	T&F EGG	T&F TAPER POINTED	T&F EX. LONG TAPER	T&F BULLET	T&F NEEDLE
7004	7104	7204	7303	7404	7114	7642	7801	7901
7006	7106	7205		7406	7214	7664	7802	7902
7008	7108	7206		7408	7611		7803	7903
	48L				7612			
					7613			
					7714			



30-BLADED FINE FINISHING						
FF ROUND	FF TAPER POINT	FF EGG	FF EXTRA LONG TAPER	FF TAPER	FF BULLET	FF NEEDLE
9006	9214	9406	9642	9713	9803	9903
9008	9714					9904

ESTHETIC FINISHING	
EF SERIES	OF SERIES
EF3	OF1
EF4	OF2
EF6	OF3
EF9	

METAL CUTTING	
JP1	
JP2	
JP577/2057	

FG: Friction Grip RA: Right Angle  
SS: Short Shank HP: Hand Piece  
SRG: Surgical

XXFG-10 or XXFG-100  
XXFGSURG-10 or XXFGSURG-100  
XXRA-10 or XXRA-100  
XXRASURG-10  
JPXX-10 or JPXX-100  
XXHP-5  
XXTF-5  
XXFF-5  
XXFG-5  
EFX-5 or OFX-5

Friction Grip 10 pack/100 pack  
Friction Grip Surgical 10 pack/100 pack  
RA Latch 10 pack/100 pack  
RA Latch Surgical 10 pack  
Metal Cutting Friction Grip 10 Pack/100 pack  
Handpiece 5 pack  
Trimming/Finishing (12 bladed) 5 pack  
Fine/Finishing (30 bladed) 5 pack  
Orthodontic (18 bladed - 118/218) 5 pack  
Esthetic Finishing (EF/OF) 5 pack

# Curing Lights

*Latest Generation, High Performance LED  
Portable, Powerful, and Practical*

## Clear Blue LED Curing Light

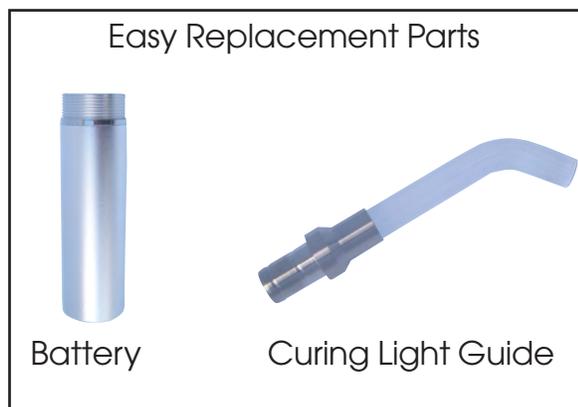
Product Features and Benefits:

- High power 1,200 mW/cm<sup>2</sup> for fast cures
- Emits light in the most relevant spectrum of 430-480nm wavelength to efficiently solidify any brand of resin
- Three working modes and exposure times for any clinical protocol
- Super-compact, lightweight, and cordless for the ultimate in convenience
- Cool and silent; no fan necessary as with halogen lamps
- Li-Ion battery with super capacity and no memory effect

## Orthodontic Specialty Light also available:

- Cures all orthodontic adhesives with 5, 10, and 25 second full high power curing modes.
- Unit beeps every 5 seconds to alert user to move to the next curing position

CLEAR BLUE LED HIGH POWER CURING LIGHT	CLRBLU-SYS
CLEAR BLUE LED ORTHODONTIC CURING LIGHT	CLRBLU-ORTHO
CLEAR BLUE REPLACEMENT LIGHT GUIDE ROD	CLR-LG
CLEAR BLUE REPLACEMENT BATTERY	CLR-BAT
UNIVERSAL LIGHT SHIELD	LS



# Endodontic Products

## Posts

### Parallel-Sided Posts (Whaledent-Type)

- Internationally accepted post technique for core build-ups and casting techniques
- Serrated, vented posts permit maximum retention with easy insertion and positive seating without stress or trauma
- Chairside kit contains seven standardized sizes ranging from 0.36" / 0.9mm to 0.70" / 1.75mm providing flexibility for all post placement requirements
- Color-coded posts and corresponding safety drills

Stainless Steel Posts (sizes: 3,4,4.5,5,5.5,6,7) – 10 pieces  
 Stainless Steel Posts (sizes: 3,4,4.5,5,5.5,6,7) – 25 pieces  
 Stainless Steel Posts (sizes: 3,4,4.5,5,5.5,6,7) – 100 pieces  
 Stainless Steel Chairside Post Kit (3 posts +1 drill each size)  
 Titanium Posts (sizes: 3,4,4.5,5,5.5,6,7) – 10 pieces  
 Titanium Posts (sizes: 3,4,4.5,5,5.5,6,7) – 25 pieces  
 Titanium Posts (sizes: 3,4,4.5,5,5.5,6,7) – 100 pieces  
 Titanium Chairside Post Kit (3 posts +1 drill each size)  
 Posts Drills (sizes: 3,4,4.5,5,5.5,6,7) – 2 pieces

S3-10, S4-10...  
 S3-25, S4-25...  
 S3-100, S4-100...  
 KIT-SS  
 T3-10, T4-10...  
 T3-25, T4-25...  
 T3-100, T4-100...  
 KIT-TIT  
 D3-2, D4-2...

*Did you know that  
 Johnson-Promident has sold  
 over 2 million endo posts?*



### Screw Posts (Dentatus-Type)

- Anatomically-shaped tip design
- Square cross-cut head provides maximum material retention
- Available in 4 length (7.8mm - 14.2mm) and 6 diameter (1.05mm-1.80mm)
- Corresponding reamers match exact diameter and taper of posts

Gold Posts (sizes: S1-6, M1-6, L1-6, XL4,6) – 12 pieces  
 Gold Post Kits (5 & 20 Dozen)  
 Titanium Posts (sizes: S1-6, M1-6, L1-6, XL4,6) – 6 pieces  
 Titanium Post Kits (5 & 20 Dozen)  
 Reamers (Sizes Short or Long 1-6) - 3 pieces  
 Reamer Assorted Kit (Long or Short)  
 Screw Post Keys

DG-S1, DG-M2...  
 DG-K60, DG-K240  
 DT-S1, DT-M2...  
 DT-K60, DT-K240  
 DR-1S, DR-2L...  
 DR-L, DR-s  
 DW



## Handpiece Attachments



16:1 Sheath  
**ESH16:1**



Endodontic 1/4 Turn U-Type  
 Contra Angle  
**S-ENDO**



Endodontic 1/4 Turn E-Type Head  
**E-ENDO**



Endodontic 1/4 Turn Contra  
 Angle for Star Titan  
**TIT-ENDO**

# Handpiece Parts & Accessories

## Midwest

### TURBINES

		C-Code	DENTSPLY #
	Tradition Screw Type	C-MWT	750118
	Tradition Push Button/Lever	C-MWTPB	780118
	Quiet Air Screw Type	C-MWQA	464299/464300
	Quiet Air Push Button/Lever	C-MWQAPB	484300
	Stylus Push Button	C-MWSPB	790310
	XGT Push Button	C-MWXGTPB	790118
	8000 Screw Type	C-MW8	N/A

### FIBER OPTIC LIGHT SOURCE BULBS

		W-Code	DENTSPLY #
	Bulb for Power Optic Quick Connect Hose - 2/pkg	W-MWBOSEB	650064
	Bulb for Power Optic Swivel and non-swivel connector - 3/pkg	W-MWSWB	650197
	Bulb for XGT/Stylus 5 Hole Power Optic and 6 Pin Coupler	W-MWXGTB	790257
	Lamp for In-Sight 1/pkg	W-MWETJ	490874

### CHUCKS

	Tradition Standard Chuck	MWTRAD-CHK	753244
	Quiet Air Standard Chuck	MWQA-CHK	463075

### BUR TOOLS

	Tradition Bur Tool	BT-TRAD	750119
	Quiet Air Bur Tool	BT-QA	463102

### END CAPS AND WRENCHES

	Tradition Standard	MWTRADEC	751231
	Quiet Air Standard	MWQAEC	464126
	Tradition Lever	MWTRADPBEC	780002
	Quiet Air Push Button	MWQAPBEC	484301
	XGT/Tradition Push Button	MWXGTPBEC	790122
	Tradition Standard/8000	MWTR-WRCHEC	753060
	Quiet Air Standard	MWQA-WRCHEC	290974
	Lever/Push Button Wrench	MW-WRCHEC	753333

### GASKETS

	2/3 Hole Gasket	GAS-3H	713134,773015
	4 Hole Gasket	GAS-4H	773002
	5 Hole Gasket	GAS-5H	753342,773018
	6 Hole Gasket	GAS-6H	

# Handpiece Parts & Accessories

## for Star Titan and KaVo

### STAR TURBINES

	Vista 430/Solara Push Button	C-S430PB	260296 263739 263968
	Vista 430 Screw Type	C-S430	258661
	Vista Futura I & II	C-SF1	
	Vista Concentrix	C-SCX	

### CHUCKS

	Star Square Chuck	STAR-CHK SQ	
	Star Hexagonal Chuck	STAR-CHK H	258659

### BUR TOOLS

	For Star Square Chuck	BT-STARSQ	257629
	For Star Hexagon Chuck	BT-STAR	203108

### END CAPS AND WRENCHES

	For Star Push Button	STARPBEC	
	Star Standard End Cap	STAREC	
	Star Push Button End Cap Wrench	STPB-WRCHEC	203048

### GASKETS

	2/3 Hole Gasket	GAS-3H	203103
	4 Hole Gasket	GAS-4H	202897
	5 Hole Gasket	GAS-5H	202897
	6 Hole Gasket	GAS-6H	262520

### O-RINGS

	O-Ring for Star Coupler set of 4/pkg	STAR-CORG	259884
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### KAVO TURBINES

	Contact Air 632/633/645 Push Button		C-K632PB
	Bella Torque 639/642/643		C-K632FG
	Contact Air 632 Friction Grip		C-K635BPB
	Bella Torque 642/643		C-K6000BPB
	635B/637B Push Button		C-K625CDPB
	6000/7000B Push Button		C-K634PB
	625 CD Push Button		C-K625PB
	634 P4 Companion Push Button		C-K625FG
	Super Torque 625/630/640 PB		C-K647PB
	Super Torque 625/630/640 FG		C-K650PB
	647 B/649 B Push Button		C-KMAG
	650 B Push Button		C-K6500BPB
	Magno 634 Super Torque		C-K636PB
	KaVo 6500B Push Button		C-K655PB
	KaVo 636/646 Push Button		
	KaVo 655C Push Button		

### END CAPS AND WRENCHES

	632/633/634/639/642/643/645		KAVO642EC
	625/630/640		KAVO630EC
	635/637		KAVO635EC
	647/649/650		KAVO647EC
	KaVo 6000/7000 PB End Cap		KAVO 6000EC
	625/630/632/634/640		KAVO-WRCHEC
	635/647/649/650/6000		KAVO-WRCHSPEC

### GASKETS

	4 Hole Gasket		GAS-4H
	5 Hole Gasket		GAS-5H
	6 Hole Gasket (Coupler)		GAS-6H

### O-RINGS

	O-Rings High Speed - 10/pkg		KAVO-HSORG
	O-Rings MULTiflex Coupler set of 5/pkg		KAVO-CORG
	KaVo Low Speed Motor O-Ring 4/pkg		NSKSOR-KAV

### FIBER OPTIC LIGHT SOURCE BULBS

	KaVo Lux Coupler Bulb 2/pkg		W-KB
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# Handpiece Parts & Accessories

## Johnson-Promident and Other Brands

### TURBINES

#### Canister-Type

Fits all canister handpieces including Johnson-Promident, ScheinMaster, Athena/Champion, Patterson, Medidenta, True Speed and more...

	Standard Canister Screw Type	CART-AC
	Standard Canister Push Button	CART-PBA
	Mini Canister Screw Type	CART-MINI
	Mini Canister Push Button	CART-MINIPB
	Industrial Canister Screw Type	CART-IND
	High Speed Straight Lab Can.	CART-LAB

#### For Dabi Alante

	MS-350 Push Button	C-DAMSPB
	RS-350 Push Button	C-DARSPB

#### For Impact Air

	Impact Push Button	C-IMPACT
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#### For Bien Air

	Black Pearl Push Button	C-BABPPB
	Black Pearl Friction Grip	C-BABPFG
	Bora Push Button	C-BABPB
	Ondine Push Button	C-BAOPB
	Ondine Friction Grip	C-BAOFG
	Prestige Push Button	C-BAPPB
	Bien Air Lab	C-BLAB

#### For Lares

	557/557 Euro Push Button	C-L557PB
	757 Push Button (Not for Euro/Ultralite)	C-L757PB
	330 E Screw Type	C-L330

### For Micro Motors

	LHS 730 Mini Push Button	C-MM730PB
	LHS 700 Standard Push Button	C-MM700PB

### For NSK

	NL65 Mach Life Std. PB	C-NSK65MCSTD
	NL65 Mach Life Mini PB	C-NSK65MINIPB
	NL65 Mach Life Torque PB	C-NSK65MCTORQ
	Safco Excel Push Button	C-NSKEXCELPB
	Safco Excel Screw Type	C-NSKEXCEL
	NL 75/85 Mach Life Mini PB/Ti-Max 200 Series	C-NSK75MPB
	NL 75/85 Mach Life Std. PB/Kinetic Quantum/Ti-Max 300 Series	C-NSK75PB
	NL 75/85 Mach Life Torque PB/Ti-Max 400 Series	C-NSK75TPB
	NL 95 Triple Port Mini PB/Ti-Max 500 Series	C-NSK95MPB
	NL 95 Triple Port Std. PB/Ti-Max 600 Series	C-NSK95PB
	NL 95 Triple Port Torque PB/Ti-Max 700 Series	C-NSK95TPB
	Kinetic Viper Small PB/AlphaLite Mini	C-NSKVIPREDPB
	Kinetic Viper Std. PB/AlphaLite Std	C-NSKVIPBLUPB
	Kinetic Viper Torque PB/AlphaLite Torque	C-NSKVIPBLAPB
	Super Grade Push Button	C-SGPB
	Super Grade Screw Type	C-SG
	Healthco Push and Swivel	C-NSKPUSHSWL
	NSK Pana Air 2000 Standard PB	C-NSKPA2000SPB
	NSK Pana Air 2000 Mini PB	C-NSKPA2000MPB
	NSK 9000 Torque PB	C-NSK9000TPB
	NSK 9000 Standard PB	C-NSK9000SPB
<b>For Microtech/Dentex</b>		
	M3-M Mini Push Button	C-M3MINIPB
	M3-S Push Button	C-M3SPB
	M3-MC Mini Screw Type	C-M3MINI
	M3-SC Screw Type	C-M3SC

# Handpiece Parts & Accessories

## Johnson-Promident and Other Brands

### TURBINES

#### For Siemens/Sirona

	Sirona T2/T3 Mini Push Button	C-T2MPB
	Sirona T2/T3 Racer Push Button	C-T2RCR
	Sirona T1 Control Push Button	C-T1CPB
	TM1 Push Button	C-TM1PB
	TS1 Push Button	C-TS1PB

#### For W&H/Adec

	Sabra Small Push Button	C-WHSABSM
	Synea TA-96 Mini Push Button	C-WHSYNM
	Synea TA-98 Large Push Button/ Allegra TE95/TE98	C-WHSYNPB
	196/896 Top Air Push Button	C-WH196
	Sabra 395/397 Top Air PB	C-WHSABTA
	Top Air 198/898 Push Button	C-WH198
	Sabra Trend Push Button	C-WHSABT

#### Johnson-Promident Whipair

	Whipair Standard Push Button	C-JPWAPB
	Whipair Mini Push Button	C-JPMWAPB
	Gemini for KaVo Bella Torque	C-K632PB
	Gemini for KaVo Super Torque	C-K625PB

### CHUCKS

	Chuck for Doriot Handpiece	DOR-CH
	High Speed Handpiece Chuck	HS-CHK
	High Speed Mini Chuck	HS-CHK MIN
	High Speed Industrial Chuck	HS-CHK IND

### BUR TOOLS

	Universal Bur Tool	BT-MET
	Miniature Bur Tool	BT-MIN
	Friction Grip Bur Tool	BT-FG

### END CAPS AND WRENCHES

	High Speed Handpiece End Cap	HS-EC
	High Speed Handpiece Push Button Cap	HS-ECPB
	Standard End Cap Wrench	HS-WRCHEC
	Classic Push Button End Cap Wrench	HS-WRCHECPB
	Whispair Standard PB End Cap	W-SPBEC
	Whispair Mini PB End Cap	W-MPBEC
	Whispair End Cap Wrench	W-WRCHEC
	Lares 557 PB End Cap	LRS557EC
	Lares 757 PB End Cap	LRS757EC
	NSK AlphaLite/Viper End Cap Wrench	W-KINWRCHEC

### GASKETS

	2/3 Hole Gasket	GAS-3H
	4 Hole Gasket	GAS-4H
	5 Hole Gasket	GAS-5H
	6 Hole Gasket	GAS-6H

### FIBER OPTIC LIGHT SOURCE BULBS

	Challenger Bulb Module	W-CHB
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# Handpiece Parts & Accessories

## Lubricants & Cleaners



### DCL 90 Lubricator/Cleaner

- All-in-One degreaser, cleaner and lubricating conditioner.
- Unique formula contains high temperature silicon to prevent damage to bearings during autoclaving.

8 oz. Spray Can L-DCL



### Pen Oiler

- Convenient and neat autoclavable lubricating oil.

1/4 oz. Pen L-PP



### European Lubricant

- Handpiece spray lubricant for KaVo and other European handpieces.
- Designed to fit KaVo adapters.
- Same performance with economical price.

11.7 oz. Spray Can L-EL



### Handpiece Lubricant

- Economical Squeeze dropper autoclavable handpiece lubricating oil.

2 oz. Bottle L-AC



### Pro Handpiece Lubricant Refill

- Handpiece lubricant refill for automated handpiece maintenance systems like Assistina.

16 oz. Bottle L-PL



### Premium Spray for KaVo

- Exact same formula as KaVo Spray.
- Advanced Cleaner and Lubricant.
- Accepts all KaVo nozzles.

L-K



### Pro Handpiece Cleaner Refill

- Handpiece cleaner refill for automated handpiece maintenance systems like Assistina.

16 oz. Bottle L-PC



### Nozzle for All KaVo Quick Disconnect

L-KNQD



### Nozzle for KaVo Fixed Back and Slow Speed

L-KNSTD

### Smart Cleaner



- Removes blockages and cleans waterlines of handpieces and couplers.
- Prevents residue and biofilm build up that can lead to blockages.
- Easy to use and powerful tool for all offices and repair shops.

Smart Cleaner 2 or 4 hole

SMART 2 OR 4

# Terms and Conditions & Repair Support

## Terms & Conditions

**Returns:** Before opening a sealed handpiece box or carton, please examine the label to ensure you have received the correct item (including the correct back end configuration). If the box seal is broken, the handpiece will only be repaired or replaced in accordance with the warranty. Only unopened handpieces will be exchanged. This policy is for your protection and is final.

Prior approval must be obtained from Johnson-Promident before merchandise may be returned for credit. Only standard merchandise of current stock, less than six months from date of original shipping date and accompanied by the original invoice will be accepted for credit. Shipment of returned merchandise must be prepaid. Items returned for repair work only, may be returned without prior approval.

**Restocking fee:** Merchandise approved and returned in the original unopened container and accompanied by the invoice, will be charged a 20% restocking fee.

**Conditions:** Purchasing of Johnson-Promident products from this list is open to recognized accounts and/or dealers of Johnson-Promident. Possession of a dealer's price list does not constitute an offer to sell. Johnson-Promident reserves the right to make changes in product design without any obligation to accept previously manufactured products for alteration, exchange or credit. Payment terms are net 30 days. A late payment fee of 1 1/2% will be assessed monthly on the total invoice past due.

**Claims:** Shortage claims must be made within 48 hours from receipt of the goods. Damaged goods must be reported to the carrier within 24 hours and damage claims must be filed by the consignee.

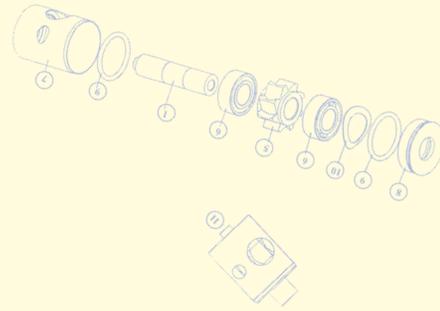
**Warranty:** Johnson-Promident warrants its products to the original purchaser against defective workmanship and materials under normal procedures of installation, use and service within the dental profession, for six months from the date of sale for all Slow Speed and Whipair handpieces, Kool Torque and Shortgripper attachments, Curing Lights, Deluxe Scaler and Replacement Turbines installed by Johnson Promident. All other products have a three month warranty. All handpiece shells carry a one year warranty.

**Disclaimer:** No implication is made that any of the registered trade names mentioned in this catalog are original factory products or that any of these companies endorse any of our products. These trade names include: KaVo, Dentatus, Whaledent, Midwest, Rhino, Shorty, Quiet Air Lever, Tradition Lever, XGT, Stylus, Bien Air, Black Pearl, Ondine, Star, Titan, Vista 430, KaVo Contact Air, Super Torque, Lares, NSK Push & Swivel, NSK Phatelus, NSK Super Grade, Kinetic Viper, W&H, Sabra, Synea, Siemens.

## Wholesale Repair Support Program

Johnson-Promident understands that product support through parts and service has become increasingly important to a dealer or repair facility's ability to attract and retain customers. We can help you broaden your services and improve turnaround time to your customers.

- **Outsource repair work:** We can be your in-house service technician for any handpiece products or instruments your customers need repaired.
- **Wholesale repair prices:** Johnson-Promident's wholesale repair prices make it an easy and profitable extension to your existing business.
- **Repair and replacement parts:** We have a full stock of parts for most brands providing you "just-in time" delivery to meet your customers needs.



## The Advantage for Your Customers:

**TIME:** Quick 24 hour turnaround on most repairs to reduce equipment downtime.

**MONEY:** Your repairs are 30-40% less expensive to the customer than sending them to the manufacturer, and we offer no obligation free estimates.

**SECURITY:** Quality repairs provided with a warranty of up to 180 days (depending on type of repair) which is twice the industry average.

**KNOWLEDGE:** Toll-free helpline staffed by expert technicians available to answer any handpiece operational or maintenance questions.

*Repair expertise for all makes and models of high and low speed handpieces.*

# Did you know that we offer over 600 products?

Over the past three decades, Johnson-Promident has been serving the needs of dental and lab equipment dealers and repair facilities as the trusted source for handpieces, replacement parts and accessories. We set high standards for ourselves and our suppliers. That translates into excellent service levels, wide ranging product availability and products that provide superior value.

Johnson-Promident has focused primarily on the handpiece category since its inception enabling us to assemble the broadest product line in the U.S. Our prices will allow you to offer the lowest prices to your customers and at the same time achieve higher margins on every Johnson-Promident handpiece and accessory sold...

## ...but what really sets us apart...

**SUPERIOR PERSONALIZED SERVICE.** We are committed to working with you and your business to enhance the attractiveness of your product offering, capture more of the market and boost your profitability.

