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.
- 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.
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.

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.

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.

Turn the tubing connector, not the handpiece, to screw the tubing on/off the handpiece.
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 hand piece 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.
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.
- Blow out the handpiece using compressed air to remove loose debris, cleaner, and lubricant before sterilization (a handpiece should never be run without a burr).

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 failing.

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!
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.

1. Is Fixed Back or Quick Disconnect?
   1a. If Quick Disconnect, does it need to connect with another manufacturer’s coupler?
   1b. 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.

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?

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.
## Fixed Back Handpieces

<table>
<thead>
<tr>
<th>Description</th>
<th>J-P Part #</th>
<th>Other Features</th>
<th>Replaces</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard Head</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenger Standard (2 or 4 hole)</td>
<td>CH-SHS2 or 4</td>
<td>Chairside Replacement Turbine</td>
<td>Schein Master #100-2231</td>
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<tr>
<td>Challenger Miniature Standard (4 hole)</td>
<td>CH-MHS</td>
<td>Chairside Replacement Turbine · Mini Head</td>
<td>Schein Master #100-7111</td>
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<tr>
<td>Classic Standard (2, 3, or 4 hole)</td>
<td>CL-SHS 2,3, or 4</td>
<td>Chairside Replacement Turbine</td>
<td>Schein Master #100-2231</td>
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<tr>
<td><strong>Standard Head</strong></td>
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<tr>
<td>Challenger Fiber Optic Standard</td>
<td>CH-FOHS</td>
<td>Chairside Replacement Turbine · Bright Optics</td>
<td>Schein Masterlight #100-9970</td>
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<tr>
<td><strong>Push Button Head</strong></td>
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</tr>
<tr>
<td>Challenger Push Button (2 or 4 hole)</td>
<td>CH-PBHS2 or 4</td>
<td>Chairside Replacement Turbine</td>
<td>Schein Master PB #100-8267</td>
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<tr>
<td>Challenger Miniature Push Button (4 hole only)</td>
<td>CH-MPBHS</td>
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<tr>
<td>Classic Push Button (2, 3, or 4 hole)</td>
<td>CL-PBHS2,3, or 4</td>
<td>Chairside Replacement Turbine</td>
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<tr>
<td>Whispair Fixed Back Push Button (4 hole only)</td>
<td>WFBPB</td>
<td>3 Port Water Spray · Strong Torque</td>
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<td>Whispair Fixed Back Miniature Push Button (4 hole only)</td>
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<td>3 Port Water Spray · Mini Head · Quiet Operation</td>
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<td><strong>Push Button Head</strong></td>
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<td>Challenger Fiber Optic Push Button</td>
<td>CH-FBOPHS</td>
<td>Chairside Replacement Turbine · Bright Optics</td>
<td>Schein Masterlight PB #101-0223</td>
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<tr>
<td><strong>Quick Disconnect Handpieces</strong></td>
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<tr>
<td><strong>Standard Head</strong></td>
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<td>Challenger Quick Disconnect Standard Handpiece</td>
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<td>Chairside Replacement Turbine</td>
<td>Fits Schein and Benco Push &amp; Swivel</td>
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<tr>
<td><strong>Push Button Head</strong></td>
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<td>Challenger Quick Disconnect Push Button Handpiece</td>
<td>CH-PBQDHP</td>
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<td>W-NPB</td>
<td>3 Port Water Spray · Fits NSK</td>
<td>Star 430</td>
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<td>Whispair Star QD Handpiece Only</td>
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<td>3 Port Water Spray · Fits Star</td>
<td>Star 430 Star #262993, 62696, 62057</td>
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<td>3 Port Water Spray · Fits KaVo · Mini Head</td>
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<td><strong>Push Button Head</strong></td>
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<td>Whispair NSK Fiber Optic QD Handpiece</td>
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<td>3 Port Water Spray · Fits NSK · Bright Optics</td>
<td>Star 430</td>
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<td>Whispair Star Fiber Optic QD Handpiece</td>
<td>W-SPFOPB</td>
<td>3 Port Water Spray · Fits Star · Bright Optics</td>
<td>Star 430</td>
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<tr>
<td>Whispair Midwest/BA Fiber Optic QD Handpiece</td>
<td>W-MWFOPB</td>
<td>3 Port Water Spray · Fits MW Stylus and Bien Air · Bright Optics</td>
<td>MW Stylus</td>
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<td>W-KFOPB</td>
<td>3 Port Water Spray · Fits KaVo · Bright Optics</td>
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<td>3 Port Water Spray · Mini Head · Fits KaVo · Bright Optics</td>
<td>KoVo 635B</td>
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<td>Gemini KaVo Bella Torque Fiber Optic Handpiece</td>
<td>G-XBTOPB</td>
<td>3 Port Water Spray · Mini Head · KaVo · Bright Optics</td>
<td>KoVo 632/642/643</td>
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<td>3 Port Water Spray · Strong Torque · KaVo · Bright Optics</td>
<td>KoVo 625/636/640</td>
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<td>Gemini KaVo Alpha Air/Kinetic Viper Mini Fiber Optic Handpiece</td>
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<td>3 Port Water Spray · Mini Head · Bright Optics · Interchangeable with Kinetic/NSK</td>
<td>KoVo 625/636/640</td>
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<td>Gemini KaVo Alpha Air/Kinetic Viper Standard Fiber Optic Handpiece</td>
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<td>3 Port Water Spray · Bright Optics · Interchangeable with Kinetic/NSK</td>
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<td>Gemini KaVo Alpha Air/Kinetic Viper Torque Fiber Optic Handpiece</td>
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<td>3 Port Water Spray · High Torque · Bright Optics · Interchangeable with Kinetic/NSK</td>
<td>KoVo 625/636/640</td>
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<td>3 Port Water Spray · Small Head · Bright Optics · Interchangeable with Star</td>
<td>Star 430</td>
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<td>Gemini Midwest Tradition Fiber Optic Handpiece</td>
<td>G-MWFOPB</td>
<td>1 Port Water Spray · Bright Optics · Interchangeable with Midwest Tradition</td>
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</tr>
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</table>
High Speed Handpieces

CHALLENGER SERIES

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

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

Small profile
- Provides great access
- Better visibility

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

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

Choices

<table>
<thead>
<tr>
<th>CHALLENGER SERIES</th>
<th>In office replacement cartridge</th>
<th>Quick bur changes</th>
<th>Small profile</th>
<th>Bright optics</th>
<th>Quick Disconnect Coupling</th>
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<tr>
<td></td>
<td>Standard Head (bur tool type)</td>
<td>Push Button Head</td>
<td>Miniature Standard Head</td>
<td>Fiber Optic Standard Head</td>
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<td>CH-MHS</td>
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<td>CH-SQDHP</td>
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<td>4 Hole</td>
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<td>4 Hole</td>
<td>5 Hole</td>
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<td>CH-PBHS2</td>
<td>CH-MPBHS</td>
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<td>2 Hole</td>
<td></td>
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</tbody>
</table>

Quality at an amazing price
Reliability and value make the Classic the industry standard.

High Speed Handpieces
Classic Series

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) |

Over 200,000 units in service

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
- QD Mini Head HP Only
- QD 4 Hole Swivel
- QD 4 Hole Fiber Optic HP Only
- QD Fiber Optic 5 Hole Swivel
- QD Fiber Optic 6 Pin Swivel with Bulb

For KaVo, QD Fiber Optic HP Only
- W-KPB
- W-KMPB
- W-KQDS
- W-KFOPB
- W-KMFOPB
- W-KFOQDS
- W-K6PQDS

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

For Star, QD Fiber Optic HP Only
- W-NPB
- W-NQDS
- W-NFOPB
- W-NFOQDS

For NSK, QD HP Only
- W-NPB
- W-NQDS
- W-NFOPB
- W-NFOQDS

For NSK, QD Fiber Optic HP Only
- W-MWPB
- W-MWFOPB

Fixed Back Handpieces

Push Button Head
- W-FBPB

Miniature Push Button Head
- W-FBMPB

Fiber Optic Push Button Head
- W-FBFOPB

Leading technology at lower prices
High Speed Handpieces

Gemini Series

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

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

GEMINI SERIES Choices

- 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-KFQDS
- 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
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.

<table>
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<th>Complete Light Source Kit</th>
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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.

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 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.

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.

Features and Functions

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.
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, prophy 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 prophy 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 prophy cup.
  - Head screws onto the sheath and can easily be exchanged for other options.

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, prophy 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 prophy 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.

Matching Bur Types with Handpieces

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

- **LATCH CONTRA-ANGLE**
  
  - For use in latch-type contra angle heads in low speed handpieces.

- **FRICITION GRIP (STANDARD LENGTH)**

- **FRICITION GRIP SHORT SHANK**

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

- Designed for two primary uses:
  1) To accept burs to remove caries and for cavity preparation.
  2) To take prophy 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.
  - 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.
  - We believe that spring latch heads provide the ease of push button but the reliability of swing latch.
- Spring Latch
- Push Button 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 prophy 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.
When choosing a low speed handpiece and attachments, follow the questions in the chart below:
Low Speed Handpieces

E-Type Motor Combinations

Classic E-Motor
20,000 RPM durable, efficient operation

Kool Torque III E-Motor
Deluxe 20,000 RPM lube-free performance

E-Type Heads
For NSK Titan
Latch Type
20K, 30K, 40K

For Star
Spring Type
30K, 40K

Push Button Type
30K, 40K

Mini Latch Type
30K

Push Button Friction Grip Type
40K

Friction Grip (Tool Type)
30K

Snap-On Prophy "Sealed"

Screw-Type Prophy "Sealed"

10:1 Gear Reduction

Endodontic
1/4 Turn

All Doriot-Type Contra and Prophy angles

MW

For Midwest Shorty/Rhino

MW

MW

MW

MW

MW

MW

MW

MW

MW
Low Speed Handpieces

Hygienist Handpieces

**Short Gripper II (6K)**
- 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
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

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 prophy nose cone

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 Latch Type EL30
Ball Bearing 40K Latch Type EL40
Deluxe E-Snap-On Sealed Prophy EPK1
Endodontic 1⁄4 Turn E-ENDO

30K Friction Grip Type (Tool Type) EFG
30K Push Button Latch Type ELPB30
Ball Bearing 40K Push Button Latch Type ELPB40
Deluxe E-Screw-Type Sealed Prophy EPS1
10:1 Gear Reduction E10:1

Ball Bearing 40K Latch Type EFGPB
Ball Bearing 40K Spring Type EL30S
Ball Bearing 40K Spring Type EL40S
Ball Bearing 40K Mini Latch Type EL30M
Low Speed Handpieces

Doriot/Hygienist 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 handpiece 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

**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

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 Black Demon BD-4**

- Disposable Prophy Only
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

4:1 Nose Cone
ESGN4:1

20K Standard Latch Angle
R20U

30K Friction Grip Angle (tool type)
FG30U

20K Standard Latch Angle
R30U

Ball Bearing 40K Push Button Friction Grip Angle
FGPB40U

30K Deluxe Sectional Latch Angle
S30U

Ball Bearing 40K Deluxe Sectional Latch Angle
BB40U

30K Spring Latch Angle
S30US

Ball Bearing 40K Spring Latch Angle
BB40US

30K Push Button Latch Angle
S30UPB

Ball Bearing 40K Push Button Latch Angle
BB40UPB

30K Mini Latch Angle
M30U

Ball Bearing 40K Mini Latch Angle
BB40M

Endodontic 1/4 Turn Angle
S-ENDO

10:1 Gear Reduction Angle
S10:1

Standard Snap-On Prophy
PK-2

Deluxe Sealed Snap-On Prophy Angle
SPK-2

Standard Screw-Type Prophy
PS-1

Deluxe Sealed Screw-Type Prophy Angle
SPS-1
Low Speed Handpieces
Attachments & Heads for Midwest Systems

- Contra Angle Sheath for Midwest
  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 Prophy
  MW2
  DENTSPLY #720446

- Deluxe Sealed Snap-On Prophy
  MW3

- 30K Latch Type
  MW1

- 30K Push Button Latch Type
  MWPB30
  DENTSPLY #720485

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

- Ball Bearing
  40K Latch Type
  MW4

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

- Contra Angle for Trutorq
  MWTT1
  DENTSPLY #770071

- 30K Friction Grip Type
  (Tool Type)
  MWFG

- Deluxe Sealed Snap-On Prophy
  MW3

- 30K Spring Type
  MW1S

- Ball Bearing
  40K Spring Type
  MW4S

- Friction Grip Push Button
  MWFGBP
  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.
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.

Motor to Angle Adapter

Motor #264073, #263943

Straight Nose Cone

TITNC
Star #257506, #263942
Accepts all Doriot/U-Type Contra Angles
(see page 21)

20K Latch Angle
TIT1

30K Latch Angle
TIT4

Ball Bearing
40K Latch Angle
TIT5
Star #262738, Star #259005
Star #263948, Star #263947

Deluxe Sealed Screw-Type Prophy
TIT2
Star #263240, #263946

Endodontic 1/2 Turn Angle
TIT-ENDO
Star #262671

30K Mini Latch Angle
TIT4M

30K Push Button Latch Angle
TITPB30

Ball Bearing
40K Push Button Latch Angle
TITPB40
Star #262737, Star #263950
Star #261335, Star #263949

Deluxe Sealed Snap-On Prophy
TIT3
Star #263240, #263946

Ball Bearing
40K Spring Latch Angle
TIT5S

10:1 Gear Reduction Angle
TIT-10:1
Star #258985, #263951

40K RPM Push Button Friction Grip Type
TITFGPB
Star #262739, Star #263954
Star #264149, Star #263953

30K Spring Latch Angle
TIT4S

30K Friction Grip Angle
(Tool Type)
TITEFG
Star #263952, Star #263955
Star #258965, Star #262734

20K Motor
TCL-4
Star #262262, 263941

20K Motor
TCL-2

5K Motor
TCL5K-4
Star #262261, 263940

5K Motor
TCL5K-2

Star E-Dapter E-DAPT-S

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.
**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 prophy heads

  REPLACES 14K – ENCP

**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
**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 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
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

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 Handpiece System
- 2/3 Hole Handpiece to 4 Hole Tubing Adapter
  3/4ADAPT
- 4 Hole Handpiece to 2/3 Hole Tubing Adapter
  4/2ADAPT
- 2/3 Hole Tubing Connector
  CON-3H
- 4 Hole Tubing Connector
  CON-4H
- Syringe Tubing
  2TUBE
- 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

Disposible Prophy 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, Duriot (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

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

Johnson-Promident Instruments & Equipment
TEL 800-210-8945  FAX 800-922-4898
www.johnsonpromident.com
Laboratory Handpieces and Dowel Pins

**Low Speed Handpieces**

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

- 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)**

- 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”*

### Hygienist Handpieces

**High Speed Handpieces**

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

- 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)

- 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
Max-Sonics Air Scalers

- 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

Universal Tip SS-MAX-UNIV
Perio Tip SS-MAX-PERI
Sickle Tip SS-MAX-SI
Tip Wrench SS-MAXWRCH

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 Star # 263401

Universal Tip SS-UNIV Star # 261668
Perio Tip SS-PERI Star # 261669
Sickle Tip SS-SI Star # 261667
Tip Wrench SS-WRCH

Compatible with Schein and Rand sonic scalers

Ultrasonic Inserts for Cavition 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:

<table>
<thead>
<tr>
<th>Johnson Promident Number</th>
<th>Dentsply Number</th>
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<tbody>
<tr>
<td>TFI-3 Thin Beavertail 25K, 30K</td>
<td>6121702, 6374102</td>
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<tr>
<td>UI-T325, UI-T330</td>
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<tr>
<td>TFI-10 Straight 25K, 30K</td>
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<td>TFI-1000 Triple Bend 25K, 30K</td>
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<tr>
<td>FSI-100 25K, 30K</td>
<td>80795, 80798</td>
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<tr>
<td>P-10 Metal Univ. 25K, 30K</td>
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<tr>
<td>SLI 10S Straight 25K, 30K</td>
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<tr>
<td>SLI 10R Right 25K, 30K</td>
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<tr>
<td>SLI 10L Left 25K, 30K</td>
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<td>UI-SL10L25, UI-SL10L30</td>
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O RINGS FOR RESIN ULTRASONIC INSERT (ALL BRANDS)

O RINGS FOR METAL ULTRASONIC INSERT (ALL BRANDS)
# Carbide Burs

## Features and Benefits of Johnson-Promident Carbide Burs

### FEATURES

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<thead>
<tr>
<th align="left"><strong>HIGH QUALITY</strong></th>
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<tr>
<td align="left">JP carbide burs feature high quality tungsten carbide tips that are brazed onto the neck of a stainless steel shank.</td>
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<thead>
<tr>
<th align="left"><strong>HIGH CONCENTRICITY</strong></th>
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<tr>
<td align="left">This increased strength and high concentricity of the shank ensures an even tooth preparation.</td>
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<tr>
<th align="left"><strong>CAREFUL DESIGN</strong></th>
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<tr>
<td align="left">JP carbide burs are designed to cut sharper angles with a greater blade contact on the tooth surface.</td>
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<tr>
<th align="left"><strong>MADE TO STRICT TOLERANCES</strong></th>
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<td align="left">Complying with international standards, JP burs are manufactured to strict tolerances, eliminating any defects.</td>
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<tr>
<th align="left"><strong>HARD WEARING</strong></th>
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<tr>
<td align="left">JP burs are made from high grade, fine grain tungsten carbide, crafted to resist wear, chipping and breakage.</td>
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<tr>
<th align="left"><strong>WIDE RANGE</strong></th>
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<td align="left">The wide range of JP carbide burs accommodate individual preferences and cover a multitude of applications.</td>
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### BENEFITS

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<tr>
<th align="left"><strong>STRONGER</strong></th>
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<td align="left">This exceeds the international standard required for load bearing, maximizing the strength of the burs and reducing the risk of breakage.</td>
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<tr>
<th align="left"><strong>MORE EFFICIENT</strong></th>
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<tr>
<td align="left">And also means the cut is more efficient, causing less trauma to the tooth and less stress for the patient.</td>
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<tr>
<th align="left"><strong>IMPROVED PERFORMANCE</strong></th>
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<td align="left">This gives a fast, smooth, vibration free performance, reducing patient discomfort as well as operative time.</td>
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<tr>
<th align="left"><strong>IMPROVES LIFE OF HANDPIECES</strong></th>
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<tr>
<td align="left">This places less stress on the handpiece and reduces the risk of early chuck failure.</td>
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<tr>
<th align="left"><strong>LONG LASTING VALUE FOR MONEY</strong></th>
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<tbody>
<tr>
<td align="left">This produces a longer lasting, durable bur, which is cost effective and value for money.</td>
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<tr>
<th align="left"><strong>ONE STOP SHOP</strong></th>
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<tbody>
<tr>
<td align="left">This enables you to buy all your requirements from one source.</td>
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</table>

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

### Carbide Burs

<table>
<thead>
<tr>
<th>Carbide Burs</th>
<th>TEL 800-210-8945  FAX 800-922-4898</th>
<th><a href="http://www.johnsonpromident.com">www.johnsonpromident.com</a></th>
</tr>
</thead>
</table>

XXFG-10 or XXFG-100   Friction Grip 10 pack/100 pack
XXFGSURG-10 or XXFGSURG-100   Friction Grip Surgical 10 pack/100 pack
XXRA-10 or XXRA-100   RA Latch 10 pack
XXRASURG-10   RA Latch Surgical 10 pack
JPXX-10 or JPXX-100 Metal Cutting Friction Grip 10 Pack/100 pack
XXHP-5 Handpiece 5 pack
XXTF-5 Trimming/Finishing (12 bladed) 5 pack
XXFF-5 Fine/Finishing (30 bladed) 5 pack
XXFF-5 Orthodontic (18 bladed – 118/218) 5 pack
EFX-5 or OFX-5 Esthetic Finishing (EF/OF) 5 pack

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<tr>
<th>EF SERIES</th>
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<td>EF3</td>
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<td>EF6</td>
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<td>EF9</td>
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### Carbide Burs Diagrams

#### Carbide Bur Categories
- **Friction Grip**
- **Right Angle**
- **Short Shank**
- **Hand Piece**
- **Surgical**

#### Carbide Bur Tables

<table>
<thead>
<tr>
<th>Carbide Burs</th>
<th>FG</th>
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#### Carbide Bur Shapes

- **Round**
- **Inverted Cone**
- **Flat Fissure**
- **Orthodontic**
- **Handpiece**
- **Trimming/Finishing**
- **Fine/Finishing**
- **Orthodontic Finishing**
- **Esthetic Finishing**

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Johnson-Promident  Carbide Burs  www.johnsonpromident.com

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</table>
| FG: Friction Grip  RA: Right Angle  SS: Short Shank  HP: Hand Piece  SRG: Surgical
Clear Blue LED Curing Light
Product Features and Benefits:
• High power 1,200 mW/cm² for fast cures
• Emits light in the most relevant spectrum of 430-480 nm 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

Easy Replacement Parts
Battery
Curing Light Guide
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

<table>
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<tr>
<th>Post Material</th>
<th>Sizes</th>
<th>Quantity</th>
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<tr>
<td>Stainless Steel</td>
<td>0.36”/0.9mm to 0.70”/1.75mm</td>
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<tr>
<td>Titanium</td>
<td>0.36”/0.9mm to 0.70”/1.75mm</td>
<td>1-7 pieces</td>
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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

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<tr>
<th>Post Material</th>
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Did you know that Johnson-Promident has sold over 2 million endo posts?
Handpiece Parts & Accessories
Midwest

<table>
<thead>
<tr>
<th>TURBINES</th>
<th>DENTSPLY #</th>
<th>FIBER OPTIC LIGHT SOURCE BULBS</th>
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<tr>
<td>Tradition Screw Type</td>
<td>C-MWT 750118</td>
<td>Bulb for Power Optic W-MWHOSEB 650064</td>
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<tr>
<td>Tradition Push Button/Lever</td>
<td>C-MWT PB 780118</td>
<td>Quick Connect Hose – 2/pkg</td>
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<tr>
<td>Quiet Air Screw Type</td>
<td>C-MWQA 464299/464300</td>
<td>Bulb for Power Optic W-MWSWB 650197</td>
</tr>
<tr>
<td>Quiet Air Push Button/Lever</td>
<td>C-MWQAPB 484300</td>
<td>Swivel and non-swivel connector - 3/pkg</td>
</tr>
<tr>
<td>Stylus Push Button</td>
<td>C-MWSPB 790310</td>
<td>Bulb for XGT/Stylus 5 Hole Power Optic and 6 Pin Coupler W-MWXGTB 790257</td>
</tr>
<tr>
<td>XGT Push Button</td>
<td>C-MWXGTPB 790118</td>
<td>Lamp for In-Sight 1/pkg W-MWETJ 490674</td>
</tr>
<tr>
<td>8000 Screw Type</td>
<td>C-MW8 N/A</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHUCKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tradition Standard Chuck</td>
</tr>
<tr>
<td>Quiet Air Standard Chuck</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BUR TOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tradition Bur Tool</td>
</tr>
<tr>
<td>Quiet Air Bur Tool</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>END CAPS AND WRENCHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tradition Standard</td>
</tr>
<tr>
<td>Quiet Air Standard</td>
</tr>
<tr>
<td>Tradition Lever</td>
</tr>
<tr>
<td>Quiet Air Push Button</td>
</tr>
<tr>
<td>XGT/Tradition Push Button</td>
</tr>
<tr>
<td>Tradition Standard/8000</td>
</tr>
<tr>
<td>Quiet Air Standard</td>
</tr>
<tr>
<td>Lever/Push Button Wrench</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GASKETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/3 Hole Gasket</td>
</tr>
<tr>
<td>4 Hole Gasket</td>
</tr>
<tr>
<td>5 Hole Gasket</td>
</tr>
<tr>
<td>6 Hole Gasket</td>
</tr>
</tbody>
</table>
## Handpiece Parts & Accessories

### for Star Titan and KaVo

<table>
<thead>
<tr>
<th><strong>STAR</strong></th>
<th><strong>#</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TURBINES</strong></td>
<td></td>
</tr>
<tr>
<td>Vista 430/Solar Push Button</td>
<td>C-S430PB 262296 263799 263986</td>
</tr>
<tr>
<td>Vista 430 Screw Type</td>
<td>C-S430 258661</td>
</tr>
<tr>
<td>Vista Futura I &amp; II</td>
<td>C-SF1</td>
</tr>
<tr>
<td>Vista Concentrix</td>
<td>C-SCX</td>
</tr>
</tbody>
</table>

| **CHUCKS** |     |
| Star Square Chuck | STAR-CHK SQ 257629 |
| Star Hexagonal Chuck | STAR-CHK H 258659 |

| **BUR TOOLS** |     |
| For Star Square Chuck | BT-STARSQ 203108 |
| For Star Hexagon Chuck | BT-STAR 203188 |

| **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 |

| **KAVO** |     |
| **TURBINES** |     |
| Contact Air 632/633/645 Push Button | C-K632PB |
| Bella Torque 639/642/643 | C-K633PB |
| Friction Grip | C-K652FG |
| 635B/637B Push Button | C-K635BPB |
| 6000/7000B Push Button | C-K6000BPB |
| 625 CD Push Button | C-K625CDPB |
| 634 P4 Companion Push Button | C-K634PB |
| Super Torque 625/630/640 PB | C-K625PB |
| Super Torque 625/630/640 FG | C-K625FG |
| 647 B/649 B Push Button | C-K647PB |
| 650 B Push Button | C-K650PB |
| Magneto 634 Super Torque | C-KMAG |
| KaVo 6500B Push Button | C-K6500BPB |
| KaVo 636/646 Push Button | C-K656PB |
| KaVo 655C Push Button | C-K655PB |

| **END CAPS AND WRENCHES** |     |
| 632/633/634/639/642/643/645 | KAVO-642EC |
| 625/630/640 | KAVO-630EC |
| 635/637 | KAVO-635EC |
| 647/649/650 | KAVO-647EC |
| KaVo 6000/7000 PB End Cap | KAVO-6000EC |
| 625/630/632/634/640 | KAVO-WRCHEC |
| 635/647/649/650/650 | 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-HSOR |
| O-Rings Multiflex Coupler set of 5/pkg | KAVO-CORG |
| KaVo Low Speed Motor O-Ring4/pkg | NSKOR-KAV |

| **FIBER OPTIC LIGHT SOURCE BULBS** |     |
| KaVo Lux Coupler Bulb 2/pkg | W-KB |
## TURBINES

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Canister Screw Type</td>
<td>CART-AC</td>
</tr>
<tr>
<td>Standard Canister Push Button</td>
<td>CART-PBA</td>
</tr>
<tr>
<td>Mini Canister Screw Type</td>
<td>CART-MINI</td>
</tr>
<tr>
<td>Mini Canister Push Button</td>
<td>CART-MINIPB</td>
</tr>
<tr>
<td>Industrial Canister Screw Type</td>
<td>CART-HND</td>
</tr>
<tr>
<td>High Speed Straight Lab Con.</td>
<td>CART-LAB</td>
</tr>
</tbody>
</table>

### For Dabi Alante

<table>
<thead>
<tr>
<th>Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS-350 Push Button</td>
<td>C-DAMSPB</td>
</tr>
<tr>
<td>RS-350 Push Button</td>
<td>C-DARSPB</td>
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### For Impact Air

<table>
<thead>
<tr>
<th>Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Push Button</td>
<td>C-IMPACT</td>
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</table>

### For Bien Air

<table>
<thead>
<tr>
<th>Type</th>
<th>Code</th>
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<tbody>
<tr>
<td>Black Pearl Push Button</td>
<td>C-BABPBP</td>
</tr>
<tr>
<td>Black Pearl Friction Grip</td>
<td>C-BABPF</td>
</tr>
<tr>
<td>Bora Push Button</td>
<td>C-BABPB</td>
</tr>
<tr>
<td>Ondine Push Button</td>
<td>C-BAOEPB</td>
</tr>
<tr>
<td>Ondine Friction Grip</td>
<td>C-BAOF</td>
</tr>
<tr>
<td>Prestige Push Button</td>
<td>C-BAPPB</td>
</tr>
<tr>
<td>Bien Air Lab</td>
<td>C-BLAB</td>
</tr>
</tbody>
</table>

### For Lares

<table>
<thead>
<tr>
<th>Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>557/557 Euro Push Button</td>
<td>C-L557PB</td>
</tr>
<tr>
<td>757 Push Button (Not for Euro/Ultralite)</td>
<td>C-L757PB</td>
</tr>
<tr>
<td>330 E Screw Type</td>
<td>C-L330</td>
</tr>
</tbody>
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### For Micro Motors

<table>
<thead>
<tr>
<th>Type</th>
<th>Code</th>
</tr>
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<tbody>
<tr>
<td>LHS 730 Mini Push Button</td>
<td>C-MM730PB</td>
</tr>
<tr>
<td>LHS 700 Standard Push Button</td>
<td>C-MM700PB</td>
</tr>
</tbody>
</table>

### For NSK

<table>
<thead>
<tr>
<th>Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>NL 65 Mach Lite Std. PB</td>
<td>C-NSK65MCSTD</td>
</tr>
<tr>
<td>NL 65 Mach Lite Mini PB</td>
<td>C-NSK65MINPB</td>
</tr>
<tr>
<td>NL 65 Mach Lite Torque PB</td>
<td>C-NSK65MCTORQ</td>
</tr>
<tr>
<td>Safco Excel Push Button</td>
<td>C-NSKECEL</td>
</tr>
<tr>
<td>Safco Excel Screw Type</td>
<td>C-NSKECELS</td>
</tr>
<tr>
<td>NL 75/85 Mach Lite Mini PB/Tr-Max 200 Series</td>
<td>C-NSK75MPB</td>
</tr>
<tr>
<td>NL 75/85 Mach Lite Torque PB/Tr-Max 300 Series</td>
<td>C-NSK75TPB</td>
</tr>
<tr>
<td>NL 75/85 Mach Lite Torque PB/Tr-Max 400 Series</td>
<td>C-NSK95TPB</td>
</tr>
<tr>
<td>NL 95 Triple Port Std. PB/Tr-Max 600 Series</td>
<td>C-NSK95TPB</td>
</tr>
<tr>
<td>NL 95 Triple Port Std. PB/Tr-Max 700 Series</td>
<td>C-NSK95TPB</td>
</tr>
<tr>
<td>Kinetic Viper Small PB/AlphaLite Mini</td>
<td>C-NSKVIPREDPB</td>
</tr>
<tr>
<td>Kinetic Viper Std. PB/AlphaLite Std</td>
<td>C-NSKVIPBLUPB</td>
</tr>
<tr>
<td>Kinetic Viper Torque PB/AlphaLite Torque</td>
<td>C-NSKVIPBLAPB</td>
</tr>
<tr>
<td>Super Grade Push Button</td>
<td>C-SGPBP</td>
</tr>
<tr>
<td>Super Grade Screw Type</td>
<td>C-SG</td>
</tr>
<tr>
<td>Healthco Push and Swivel</td>
<td>C-NSKPUSH5WL</td>
</tr>
<tr>
<td>NSK Pana Air 2000 Standard PB</td>
<td>C-NSKPA2000SPB</td>
</tr>
<tr>
<td>NSK Pana Air 2000 Mini PB</td>
<td>C-NSKPA2000MPB</td>
</tr>
<tr>
<td>NSK 9000 Torque PB</td>
<td>C-NSKR000TPB</td>
</tr>
<tr>
<td>NSK 9000 Standard PB</td>
<td>C-NSKR000SPB</td>
</tr>
</tbody>
</table>

### For Microtech/Dentex

<table>
<thead>
<tr>
<th>Type</th>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>M3-M Mini Push Button</td>
<td>C-M3MINIPB</td>
</tr>
<tr>
<td>M3-S Push Button</td>
<td>C-M3SPB</td>
</tr>
<tr>
<td>M3-MC Mini Screw Type</td>
<td>C-M3MIN</td>
</tr>
<tr>
<td>M3-SC Screw Type</td>
<td>C-M3SC</td>
</tr>
</tbody>
</table>
### 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-95 Large Push Button/ Altegra TE95/TE198: 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 Whispair**
  - Whispair Standard Push Button: C-JPWAPB
  - Whispair 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
- Lores 557 PB End Cap: LRS557EC
- Lores 757 PB End Cap: LRS757EC
- NSK Alphalite/Viper End Cap Wrench: WH-NWRCHEC

**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
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

**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

**Pro Handpiece Lubricant Refill**
- Handpiece lubricant refill for automated handpiece maintenance systems like Assistina.
- 16 oz. Bottle L-PL

**Pro Handpiece Cleaner Refill**
- Handpiece cleaner refill for automated handpiece maintenance systems like Assistina.
- 16 oz. Bottle L-PC

**Pen Oiler**
- Convenient and neat autoclavable lubricating oil.
- 1/4 oz. Pen L-PP

**Handpiece Lubricant**
- Economical Squeeze dropper autoclavable handpiece lubricating oil.
- 2 oz. Bottle L-AC

**Premium Spray for KaVo**
- Exact same formula as KaVo Spray.
- Advanced Cleaner and Lubricant.
- Accepts all KaVo nozzles.
- L-K

**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 & 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 Whispair 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, 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.