

## LIMITED WARRANTY INFORMATION

Lares Research warrants that the **ValueTorque** Low Speed handpieces are of the highest quality material and workmanship. Your **ValueTorque** Low Speed motors, straight handpieces and swivel adapter are fully warranted against defective material and workmanship for one (1) year from date of purchase. The **ValueTorque** Low Speed straight attachments, contra angles and heads are fully warranted against defective material and workmanship for ninety (90) days from date of purchase. *Lares Research's* liability and the customer's sole remedy in the event of any claimed defect shall be limited to repair or replacement of the merchandise, or at *Lares Research's* option, refund of the purchase price.

## ADDITIONAL CONDITIONS OF WARRANTY:

- 1) Warranty registration is automatic through our computer as of the shipping date. Warranty registration is not necessary.
- 2) The low speed handpiece system must be operated and maintained in accordance with the procedures outlined in this instruction booklet.
- 3) The low speed handpiece system must not be subjected to abuse or neglect.
- 4) The low speed handpiece must not have been repaired or disassembled by anyone other than Lares Research.

LOW SPEEDS & ACCESSORIES		
Item#	Description	Operating RPM Range
10530	ValueTorque 5K Straight Handpiece, Lube Free, Swivel (Adapter not included)	0-5,000 RPM
10531	ValueTorque 5K Straight Handpiece, 4 Hole, (Lube Required)	0-5,000 RPM
10532	ValueTorque 20K Motor, Lube Free, Swivel (Adapter not included)	0-20,000 RPM
10533	ValueTorque 20K Motor, 4 Hole, (Lube Required)	0-20,000 RPM
10534	ValueTorque 4 Hole Swivel Adapter	N/A
10535	ValueTorque 1:1 Contra Angle	0-20,000 RPM
10536	ValueTorque 4:1 Reduction Contra Angle	0-5,000 RPM
10537	ValueTorque 1:1 Straight Nose Cone	0-20,000 RPM
10538	ValueTorque 4:1 Reduction Contra Angle	0-5,000 RPM
10539	ValueTorque Latch Head	0-20,000 RPM
10540	ValueTorque Propy Head, Screw Type	0-5,000 RPM
10083	Lares Handpiece Conditioner	N/A
10361	Lowspeed Lube Nozzle, (Motors, Handpieces & Heads)	N/A
10084	Lowspeed Lube Nozzle, (Attachments)	N/A



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Non Toll-Free Worldwide: (530) 345-1767  
Internet & Online Ordering: [www.laresdental.com](http://www.laresdental.com)

*Health & Safety Note: In the interest of the health and well-being of both your staff and ours, we seek your cooperation in ensuring that any items returned for repair and servicing are first properly cleaned and sterilized appropriately before dispatch, ideally by autoclave. Thank you!*

# ValueTorque Lowspeeds

## Instructions for Use



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## GENERAL INFORMATION

**ValueTorque** Low Speed handpieces are designed to minimize patient discomfort while eliminating arm and hand fatigue. Features include light weight, balanced profile, and smooth swivel action (Lube free models only) to offset the torque created by connecting air and water lines. The motor's vane type power system is quiet and virtually vibration-free. And it's versatile! Coupled with any of the straight nosecones or contra attachments, the **ValueTorque** Low Speed handpieces become a valuable instrument for both laboratory and operatory use. For professional use only.

**WARNING:** This product is intended for use by dental professionals only. Before operating handpiece, carefully read and follow these instructions and save them for future reference. Observe all cautions and warnings.

## OPERATING RECOMMENDATIONS

### AIR PRESSURE:

The dental unit air pressure should be adjusted between 35 and 50 psi.

### AIR SUPPLY:

Moist or dirty air from the compressor can damage the **ValueTorque** Low Speed handpieces. Check the filters often. If dirt or moisture is present, replace the filter and bleed the system.

### EMPTY OPERATION:

The **ValueTorque** Low Speed handpiece will not operate unless the chucking system is fully engaged. This minimizes risk of damage to the chuck.

### USE:

The **ValueTorque** Attachments accept **ValueTorque** accessory heads only. The **ValueTorque** Attachments are designed to be used with the **ValueTorque** Motors, but can be powered by any 20,000 rpm E-type motor. Speed should not exceed 20,000 rpm.

## INSTALLATION INSTRUCTIONS

- 1) This product is not sterile. Clean, lubricate and sterilize before its first use. Follow sterilization and maintenance 1 – 8.
- 2) Check the air line filter in the control cabinet. If dirt or moisture is present, bleed the system and replace filter.
- 3) Preset the air pressure between 35 and 50 psi.
- 4) Screw the **ValueTorque** Low Speed handpiece to the connector collar, making sure contact between the handpiece and gasket is flush.
- 5) Secure the Handpiece Bur or Doriot Attachment, if applicable, to the **ValueTorque** Low Speed handpiece, using directions found below.
- 6) Set the forward/reverse speed adjustment ring to any position other than neutral.
- 7) Depress the foot control fully and adjust the forward/reverse speed adjustment ring to the desired speed and direction.

**NOTE:** **ValueTorque** Low Speed handpiece will operate only when the nosecone chuck is in the closed position.

## PLACING & REMOVING H.P. BURS OR DORIOT ATTACHMENTS & HEADS

- 1) Holding the handpiece in your left hand, depress the chuck housing ring toward the body of the handpiece while twisting 1/4-turn clockwise to open the chuck.
- 2) Insert bur or Doriot attachment fully into the chuck housing or pull out the bur or Doriot attachment to remove from chuck. Align Dorit slot with pin on housing.
- 3) Return the ring to its original "locked" position by twisting 1/4-turn counter clockwise.
- 4) Double check to be sure bur / attachment is securely locked in place.

## FORWARD/REVERSE SPEED DIRECTION RING

The speed-direction ring can be rotated either clockwise for forward direction, or counter-clockwise for reverse. The more the ring is turned away from the mid-position, the faster the operating speed. If the ring is in mid-position, the handpiece will not operate.

## SWIVEL COUPLER INSTALLATION & MAINTENANCE INSTRUCTIONS

To attach the swivel coupler to the dental delivery tubing, grasp the swivel coupler by the “snout” sticking out of the front of the swivel coupler, align the drive air and exhaust tubes with the correct outlets in the delivery tube receptacle and thread the tubing nut onto the swivel coupler. Hand tighten the delivery tubing nut onto the swivel coupler body.

To attach the swivel coupler to the motor, pull back on the release collar and insert the swivel firmly into the motor connector. Release the collar. Assure that the collar returns to its normal position and is up against the motor body. There must not be a gap between the motor and the release collar.

To remove the motor from the swivel coupler, pull back on the release collar until the swivel pulls out of the motor connector.

The swivel coupler o-rings and the motor swivel ring should be lubricated daily with Lares Handpiece Conditioner. For the motor swivel ring, the lubricant should be applied to the joint between the swivel ring and the motor. Detach handpiece / motor from the swivel coupler at the end of each day and prior to other extended periods of non-use.

The swivel coupler can be sterilized in a bag at the same temperatures as the other **ValueTorque** Low Speed components. Allow to cool down after sterilization and prior to use.

## CAUTIONS

- Use only concentric, handpiece burs in the **ValueTorque** Low Speeds. Do not use oversized, bent, grooved, off-centered burs or diamond instruments.
- Never attempt to force a bur or Doriot attachment into the **ValueTorque** Low Speed chucking system. If the shank does not enter the handpiece easily, it is oversized and should not be used.
- The bur or attachment must be fully inserted in the **ValueTorque** Low Speed before operation.
- Do not extend burs from handpieces, attachments or heads.
- Never operate handpiece after head change or bur change without double checking that the head and bur are securely retained.
- Never operate motors or handpieces at air pressure in excess of recommended maximum setting.
- Never operate the handpiece without the chuck in the closed position.
- Never submerge components in any cleaning solutions.
- Do not use ultrasonic cleaners.
- Do not sterilize for extended periods (such as overnight).
- Do not leave handpiece components in sterilizer after cycle is completed.
- Do not use this handpiece without heat sterilizing between patients to prevent cross contamination which could result in serious illness or even death from infectious organisms such as HIV or Hepatitis B.

## MAINTENANCE - LUBE FREE MODELS

The **ValueTorque** Low Speed lube free swivel motor and swivel straight handpieces are designed to operate without the need for repeated lubrication. However, over time a build-up of debris inside the motor may affect its performance. Should that happen, apply Lares Handpiece conditioner to the drive air inlet tube and run the handpiece for 8-10 seconds to flush the debris out of the motor. Like new performance should then be restored.

Wipe the **ValueTorque** Low Speed handpiece with a clean, dry cloth or gauze to remove excess oil.

## STERILIZATION & MAINTENANCE

If sterilized according to the following instructions, these handpieces will withstand a minimum of 1500 sterilization cycles to an average of 3000 sterilization cycles prior to general overhaul and cleaning to be performed by the manufacturer.

- 1) Prepare **ValueTorque** Low Speed handpieces and attachments for sterilization by carefully scrubbing with a soft brush and hot water to remove debris and particles. Remove moisture with a towel or using air from a syringe.
- 2) Prior to sterilization, lubricate the lube required motor, lube required straight handpiece, attachments and heads using Lares Handpiece Conditioner as follows:
  - **MOTORS & HANDPIECES:** Spray lubricant into the drive air outlet (next-to-largest hole) using nozzle (10361) until lube is visible at the other end with out bur installed.
  - **ATTACHMENTS:** Remove attachment from motor and lubricate thoroughly using nozzle (10084) until lube is visible at the other end with out bur installed.
  - **HEADS:** Remove gear shaft; lubricate shaft and head thoroughly using nozzle (10361) for one second.
- 3) After lubricating items, assemble and operate for 10 seconds to expel excess lubricant.
- 4) Wipe with clean, dry cloth or gauze to remove excess oil.
- 5) Seal items in separate sterilization bags. Make sure to remove bur from handpiece prior to sealing.
- 6) Sterilize in steam autoclave as follows:
  - Place handpiece(s) in sterilizer tray(s).
  - Sterilize at a temperature of 275° F (135° C) for at least 20 minutes.
  - **NOTE:** Temperature should not drop below 275° F (135° C) and should not exceed 285° F (140° C). This range of temperature will assure your handpiece sterility and provide you with handpiece longevity.
- 7) After sterilization cycle is completed, allow to cool down and lubricate attachments per step 2-4 above.
- 8) After lubricating items, insert bur into handpieces and operate for a few seconds to expel excess lubricant.

**The Food and Drug Administration strongly recommends that handpieces be sterilized after each patient use.**

## TROUBLESHOOTING

Problem	Cause	Solution
Handpiece Stalls	No/Low Air Pressure	Check the air line to be sure that air is turned on and line is unobstructed.
	Speed/Direction ring out of position	Move ring to either forward or reverse position.
	Chuck Housing open	Close the chuck housing by turning ring 1/4-turn counter-clockwise.
	Air line improperly seated	Reconnect air line to handpiece making sure the gasket is fully contacted.
	Internal oil; too much or too little	See lubrication instructions.
Chuck Difficult to open/close	Chuck housing screw missing	Replace chuck housing screw.
	Improper lubrication	See lubrication instructions.
Speed/Direction ring difficult to turn	Improper lubrication	See lubrication instructions.
	Moisture in air line	See lubrication instructions.

## REPAIR SERVICE

For authorized repair, send your handpiece directly to Lares Research (in U.S.A. only), shipping pre-paid. For repair outside the U.S.A. send your handpiece to your authorized Lares distributor.