

*QC 700*

*AIR DRIVEN HANDPIECE 30,000 RPM*

## Owner & Operator's Manual

**Model No**

7201326

7201325

**Product Name**

Handpiece Only

Complete System

<b>Description</b>	<b>Page</b>
Safety .....	2
Setup .....	3
Maintenance .....	5
Operating Instructions .....	7
Troubleshooting .....	8
Specifications .....	9
Accessories .....	10
Product Service .....	11
Warranty .....	Back

## **SAFETY**

- **Wear eye protection when operating a handpiece.**
- **Use cutting tools rated at 50,000 RPM or higher.**
- **Operate handpiece with tool in chuck.**
- **Use tubing with pressure ratings equal to or higher than your compressed air supply.**
- **Read the filter regulator / lubricator instructions and warning, prior to use.**

## **FEATURES**

- **Heavy Duty High Torque Design.**
- **High Speed Operation: 30,000 RPM**
- **Ultra Smooth Operation**

## SETUP

### UNPACKING

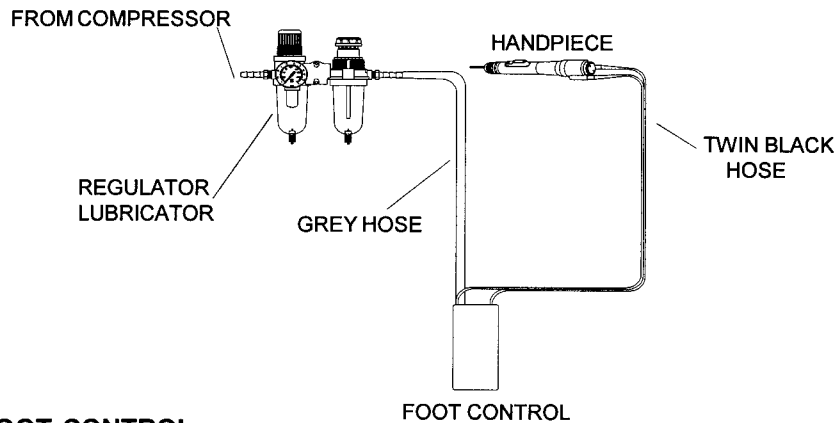
Carefully unpack and remove the QC 700 from its shipping carton. Save the carton and other packing material for future use in transporting the handpiece.

**Shipping damage should be reported to the carrier as soon as detected.**

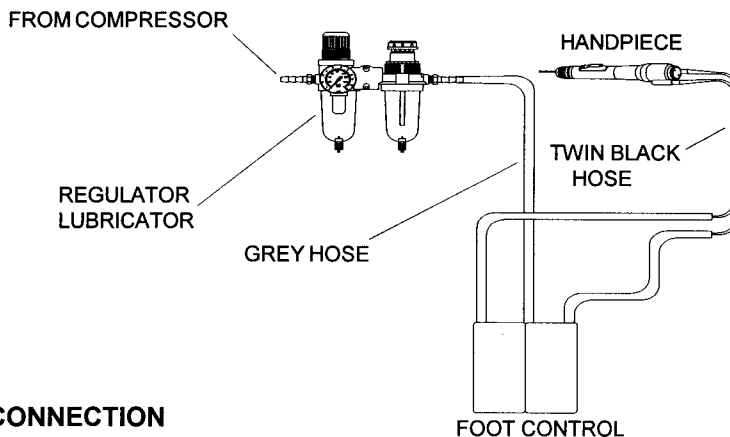
The QC 700 shipping carton contains the following:

- One QC 700 handpiece
- Owner & Operator's Manual (this document) and M.S.D.S.
- Spindle Holding Tool
- (complete system only)
- Foot valve and tubing
- Filter/Regulator/Oiler Assembly
- Hose Ring Clamps and Tie Downs
- Small Sample Bottle of Handpiece Oil - 2 oz.

### SINGLE FOOT CONTROL



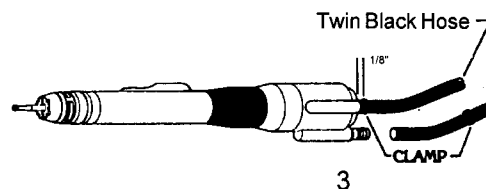
### DOUBLE FOOT CONTROL



### HOSE CONNECTION

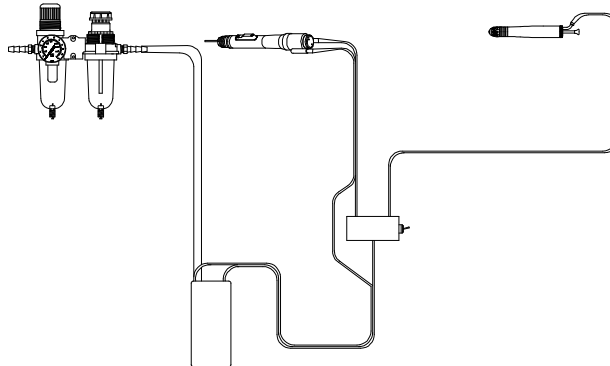
1. Slide clamps on hose.
2. Connect hoses to handpiece.
3. Slide clamps until 1/8" from end of hose.

**NOTE:** To reverse rotation of handpiece reverse hose connections (single foot control only).



## SINGLE FOOT CONTROL

1. Cut the side of the black hose that is installed above the grey hose on the foot control, 4 feet from the foot control. Position small clamp 1/8" from end of hose, then push hose over the inlet tube.

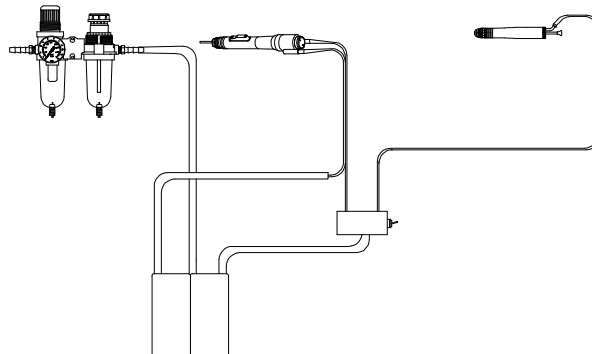


2. Position large clamp 1/8" from the end of hose, then push hose over the large outlet tube.
3. Position small clamp 1/8" from end of the single tube black hose (provided with selector valve), then push hose over small outlet tube.
4. Connect other end of the single tube black hose to the turbo handpiece by the same method.
5. Mount the selector valve in a convenient location using the screws provided. It can be mounted in any position.
6. You are now ready to operate either handpiece by simply switching the selector valve up or down (on or off).

## DOUBLE FOOT CONTROL

**NOTE:** Right hand pedal of foot control operates the turbo handpiece.

1. Trace the grey hose from the right hand side of the foot control to the coupling. Remove coupling by cutting the hose on each side of the coupling. Push grey hose over the inlet tube of the selector valve.

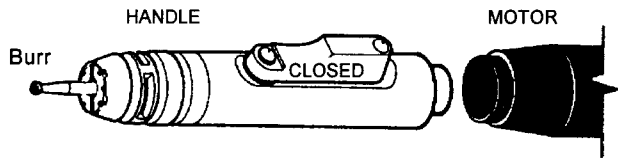


2. Position large clamp 1/8" from the end of hose, then push hose over the large outlet tube.
3. Position small clamp 1/8" from end of the single tube black hose (provided with selector valve), then push hose over small outlet tube.
4. Connect other end of the single tube black hose to the turbo handpiece by the same method.
5. Mount the selector valve in a convenient location using the screws provided. It can be mounted in any position.
6. You are now ready to operate either handpiece by simply pushing the selector valve in or out.

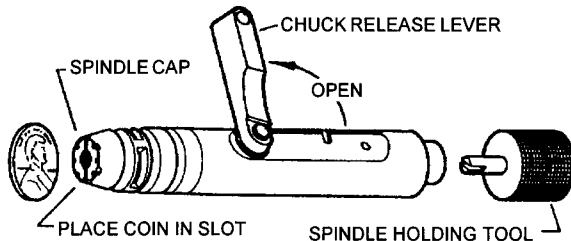
## MAINTENANCE

### CHUCK CLEANING/REPLACEMENT

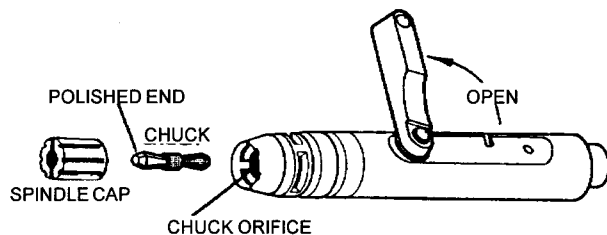
1. Unscrew handle from motor.



2. Remove burr, open chuck release lever. Unscrew slotted spindle cap by using coin, while keeping spindle from turning (use spindle holding tool provided.)



3. Chuck can now be removed for cleaning or replacing.



A cotton swab or pipe cleaner should be used to remove foreign materials from inside the handpiece tip and chuck orifice. If foreign materials are still visible inside the chuck orifice. Use a wood tooth pick or other nonmetal object to dislodge this material then reclean with a cotton swab or pipe cleaner.

4. Clean chuck and spindle cap in alcohol. Dry with compressed air.
5. Apply a light film of white lithium grease to chuck ends and spindle cap threads before reassembly. Insert chuck with polished end toward spindle cap.
6. DO NOT CLOSE CHUCK LEVER WITHOUT INSERTING BURR INTO CHUCK.
7. Reassemble the handle and motor using caution to avoid cross threading or jamming the threads.

### FOOT CONTROL MUFFLER MAINTENANCE

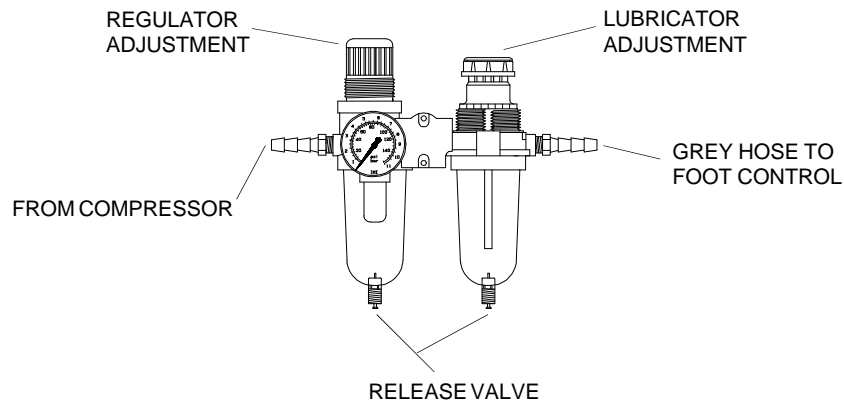
1. Raise foot control pedals and remove foam through slot in muffler
2. Compress foam to remove oil
3. Reassemble

**NOTE:** Replacement muffler foam part no. 7200242

### **FILTER - REGULATOR - LUBRICATOR**

1. Fill lubricator to full mark with oil provided by unscrewing bowl from position.
2. Set regulator to 40 - 50 psi by turning black knob/red lock. Ring must be up to adjust / down to lock knob.
3. Lubricator should need a refill every 4 to 6 weeks under continued use and 10 to 12 weeks with intermittent use. Drip rate is preset at the factory, but may be changed if necessary to meet the above schedule. Do not attempt to refill lubricator bowl while unit is pressurized; adjust regulator to 0 pressure and use the 2 oz. oil bottle with the tapered spout to fill the lubricator. Replace the plastic regulator and/or lubricator bowl if any sign of crazing, cracking or other damage exist.
4. Keep filter bowl drained of water by pushing release valve on bottom of bowl. A clean, dry air supply is recommended for longer tool life.

**NOTE:** DO NOT EXCEED 50 PSI OUTLET REGULATOR SETTING



**NOTE:** Use only Ney® oil, as this oil was designed to be used with the bearings in this handpiece.

### **MAINTENANCE TIPS**

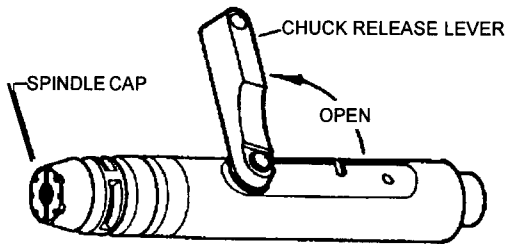
- Depending on use, check to be sure the chuck of the handpiece isn't blocked by dust or grinding, once a week.
- Moist air can be harmful to your handpiece. Discoloration of Ney® oil in the lubricator bowl may indicate excessively moist air from your air supply. Change the oil in the lubricator bowl if discolors. An additional air dryer will be required at your air supply to eliminate excessive moisture.

## OPERATING INSTRUCTIONS

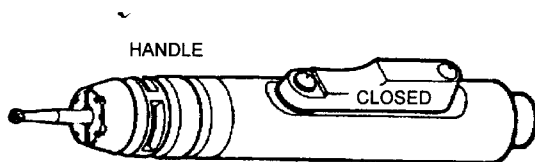
1. To remove burr, open chuck release lever and remove burr. Push new burr into chuck until it bottoms out. Close chuck release lever.

**WARNING:** DO NOT CLOSE CHUCK LEVER WITHOUT BURR IN PLACE. DO NOT USE LEVER AS A BRAKE. OPEN LEVER ONLY WHEN HANDPIECE IS NO LONGER IN MOTION.

OPEN:



CLOSE:



2. Use cutting tools rated for 50,000 RPM.
3. When cutting with this tool, use very light pressure as efficiency is increased at high RPM.
4. Lubricator (Filter/Regulator) may need refilling every 4 to 6 weeks under continued use and 10 to 12 weeks with intermittent use. Drip rate is factory preset at 3 to 4 drops per minute.

## TROUBLESHOOTING

- **Handpiece not rotating at high rpm:**

Check air pressure at regulator is at 40 - 50 psi (2.7 - 3.4 Bar).  
If air pressure is less than 40 psi (2.7 Bar), adjust to 45 psi (3 Bar).  
If still slow call for technical assistance.

- **Air pressure to handpiece will not regulate:**

Disassemble regulator and inspect diaphragm for holes or cracks.  
If holes or cracks are observed, replace regulator.  
If no holes or cracks are observed, reassemble and check regulation.  
If not able to regulate, replace regulator.

- **Water spraying/dripping from handpiece:**

Verify filter bowl is drained of water.  
If water is observed on bottom of bowl,  
then push release valve on bottom of bowl.  
Check air dryer for proper operation



## SPECIFICATIONS

### OPERATIONAL:

Maximum Operating Pressure: 3.4 Bar (50 psi)  
No Load Speed Range: 30,000 RPM  
Burr Diameter: 3/32" Friction Grip  
Airflow: 1.8 CFM @ 45 psi

### ENVIRONMENTAL:

Ambient Operating Temperature: 40 - 105°F (5 - 40°C)  
Relative Humidity: Maximum 80%, non-condensing

**Handpiece Weight:** 6.5 oz (181 grams)  
**Handpiece Only Shipping Weight:** 1 lb (0.45 Kg)  
**System Shipping Weight:** 4 lbs (1.8 Kg)

## ACCESSORIES & PARTS

<u>Description</u>		<u>NUMBER</u>
<u>NEY Handpiece Oil</u>		
For air powered handpieces. Formulated	2 oz.	7200034
for performance and protection	8 oz.	7200035
<u>Selector Valve</u>		7200019
<u>Dual Foot Control</u>		7200020
<u>Replacement Chuck</u>	3/32"	7200714
<u>FRL Replacement</u>		7200021
(FRL: Filter, Regulator and Lubricator)		

## PRODUCT REPAIR

BEFORE RETURNING THE HANDPIECE, DO THE FOLLOWING:

1. Remove the hose from the handpiece. ALWAYS ship handpieces with a burr installed. If the filter regulator is being returned remove the oil.
2. Pack the handpiece or system in the original packing material. Contact DENTSPLY NeyTech for replacement packing if necessary.
3. Call DENTSPLY NeyTech for a RMA number (Return Material Authorization). This is used to track and identify your handpiece or system. Material received without this number may not be identifiable.
4. Mark the RMA number clearly on the outside of the packaging.
5. Equipment damaged in shipment as the result of improper packing may not be paid by the carrier. DENTSPLY NeyTech will not be responsible for damages resulting from improper packing.

Ship Prepaid To:  
DENTSPLY NeyTech  
RMA Number \_\_\_\_\_  
13553 Calimesa Blvd.  
Yucaipa, CA 92399-2303 USA  
909.795.2461  
FAX 909.795.5268

## WARRANTY

**WARRANTY:** Except with respect to those component parts and uses which are herein-after described, DENTSPLY NeyTech warrants this handpiece to be free from defects in material and workmanship for a period of 12 months from the date of sale. DENTSPLY NeyTech's liability under this warranty is limited solely to repairing or, at DENTSPLY NeyTech's option, replacing those products included within the warranty which are returned to DENTSPLY NeyTech within the applicable warranty period (with shipping charges pre-paid), and which are determined by DENTSPLY NeyTech to be defective. This warranty shall not apply to any product which has been subject to misuse; negligence; or accident; or misapplied; or modified; or repaired by unauthorized persons; or improperly installed. Do not disassemble handpiece or components as this voids warranty.

**INSPECTION:** Buyer shall inspect the product upon receipt. The buyer shall notify DENTSPLY NeyTech in writing of any claims of defects in material and workmanship within thirty days after the buyer discovers or should have discovered the facts upon which such a claim is based. Failure of the buyer to give written notice of such a claim within this time period shall be deemed to be a waiver of such claim.

**DISCLAIMER:** The provisions herein stated DENTSPLY NeyTech sole obligation and exclude all other remedies or warranties, expressed or implied, including those related to *MERCHANTABILITY* and *FITNESS FOR A PARTICULAR PURPOSE*.

**LIMITATION OF LIABILITY:** Under no circumstances shall DENTSPLY NeyTech be liable to the buyer for any incidental, consequential or special damages, losses or expenses.

**LIMITATION OF ACTIONS:** The buyer must initiate any action with respect to claims under the warranty described in the first paragraph within one year after the cause of action has accrued.



Six Terri Lane, Suite 100  
Burlington, NJ 08016 USA  
800-487-0100 • 609-386-8900  
Fax: 609-386-8282  
[www.dentsply.com](http://www.dentsply.com)

**Product Repair Center**  
DENTSPLY NeyTech  
13553 Calimesa Blvd.  
Yucaipa, CA 92399-2303 USA  
909-795-2461 • Fax: 909-795-5268

PC 7201323  
rvE  
0404

© 2004 DENTSPLY Ceramco  
All Rights Reserved.  
Printed in USA

