SCHWEICKHARDT inserted pliers

- More precise handling of wire. High precision beaks guarantee perfect holding, bending and cutting results.
- Longer lasting working ends through especially hard inserts.
- High corrosion resistance without chrome plating—zero risk of plating peeling off.
- Better guidance of working ends. High precision box joint ensure a precise and smooth action over a long time.
- Special manufacturing process brazes the inserts to the beaks. The results are very precise and reliable.
- Safety and comfort are assured by careful chamfering of all edges.
- Easier instrument care: All standard U.S. hygienic procedures are applicable, especially ultrasonic cleaning and hot air sterilization up to 390° F.

SCHWEICKHARDT non-inserted pliers

- More precise handling of wire. High precision beaks guarantee perfect holding, bending and cutting results.
- Longer lasting working ends due to a special tungsten carbide coating.
- Better guidance of working ends. High precision box joint ensure a precise and smooth action over a long time.
- Handle shape designed for comfort and ease of use.
- Safety and comfort are assured by careful chamfering of all edges.
- Easier instrument care: All standard U.S. hygienic procedures are applicable, especially ultrasonic cleaning and hot air sterilization up to 390° F.
Band Adapter (RMO®)
- Durable plastic bite block and RMO® tempered stainless steel band seating pin
- For bite or hand rocking bands
- White plastic handle
- Serrated pin
- Replacement bite block (can be installed at chairside)
- Cold sterilize

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00064</td>
<td>1</td>
</tr>
<tr>
<td>i00065</td>
<td>2</td>
</tr>
</tbody>
</table>

Replacement bite block

Band Pusher
- Serrated stainless steel tip, non-removable
- Stainless steel handle – square with chamfered corners
- Tip end has square serrations

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00300</td>
<td>1</td>
</tr>
</tbody>
</table>

Band Seater (RMO®)
- Spring actuated thrust insures proper band seating
- Plastic handle with stainless steel barrel and tempered steel removable tip

with offset tip
replacement offset tip

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00580</td>
<td>1</td>
</tr>
<tr>
<td>i00581</td>
<td>1</td>
</tr>
</tbody>
</table>

with straight tip
replacement straight tip

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00600</td>
<td>1</td>
</tr>
<tr>
<td>i00601</td>
<td>1</td>
</tr>
</tbody>
</table>

with narrow straight tip (Gaston)
replacement narrow straight tip

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00610</td>
<td>1</td>
</tr>
<tr>
<td>i00611</td>
<td>1</td>
</tr>
</tbody>
</table>
## Contouring Pliers

### Contouring Plier (Johnson)
- Concave and convex tips for contouring bands
- Stainless steel

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00114</td>
<td>1</td>
</tr>
</tbody>
</table>

### Contouring Plier (Gordon)
- For bands and anterior stainless steel crowns
- Stainless steel
- Box joint

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00137</td>
<td>1</td>
</tr>
</tbody>
</table>
## SCHWEICKHARDT UTILITY PLIERS

### How Plier Straight
- Extra hard stainless steel
- Good all around utility plier has long slender lip-safe beaks
- Tips are serrated and hard carbide coated for additional grip
- Lip-safe edges at box and beaks
- Tips are precisely adjusted
- Box joint

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00110</td>
<td>1</td>
</tr>
</tbody>
</table>

### How Plier Curved
- Same as i00110 only with curved beaks
- Curved beaks increase efficiency in posterior area
- Box joint

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00111</td>
<td>1</td>
</tr>
</tbody>
</table>

### Utility Plier (Weingart Style)
- Stainless steel
- Tips are delicate and meet precisely so that even small attachments can be firmly held
- General purpose utility plier with curved beaks
- Inserted tempered tips for longer life
- Serrated and lip safe
- Tip width 8mm / Tip length 10mm
- Up to .020" (.508mm) wire

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00556</td>
<td>1</td>
</tr>
</tbody>
</table>

### Utility Plier (Weingart Style – Mini)
- Stainless steel
- Tips are delicate and meet precisely so that even small attachments can be firmly held
- General purpose utility plier with curved beaks
- Tempered tips for longer life
- Serrated and lip safe
- Tip width 6mm

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00586</td>
<td>1</td>
</tr>
</tbody>
</table>
### Loop Plier (Tweed)
- Extra hard stainless steel
- Tips precision milled
- Three step loop former .049” (1.25mm), .065” (1.65mm), .085” (2.15mm)
- Grooved and serrated opposing tip for very small loops
- For up to .022” x .028” (0.559mm x 0.711mm) wire
- Non-removable tip
- Box joint

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00350</td>
<td>1</td>
</tr>
</tbody>
</table>

### Loop Forming Plier (Optical Type)
- Extra hard stainless steel
- Cone and concave beaks for round wires
- Concave beak is contoured to ensure more uniform loops
- Round beak is precision ground to .047” at tip
- For working round wires at tip up to .020” (0.508mm)

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00351</td>
<td>1</td>
</tr>
</tbody>
</table>

### Loop Plier (Tweed)
- Includes one extra replacement tip
- Hard tool steel inserts
- Round beak is heat-treated. It has two sections of .047” (1.2mm), .059” (1.5mm)
- Concave beak prevents wire nicking and ensures more uniform loops; for making Omega loops
- Up to .020” (0.508mm) wire

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00548</td>
<td>1</td>
</tr>
</tbody>
</table>

### Replacement tips
- i00549 2

### Wire Bending Plier (Angle) Bird Beak Type
- Extra hard steel
- Tips meet very precisely
- Cone and pyramid shaped tips
- Carbide coated tips for better grip of wire and longer lifetime
- Round beak is precision ground to .039” (1.0mm) at tip
- Box joint
- Bends wire up to .022” x .025” (0.559mm x 0.635mm) and round up to .028” (0.711mm)

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00139</td>
<td>1</td>
</tr>
</tbody>
</table>
### Light Wire Plier
- Longer, more gradually tapered beaks than the Bird Beak plier
- For working light round wires up to .020” (0.508mm)
- Longer beaks make it easier to bend small diameter loops
- Box joint

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00140</td>
<td>1</td>
</tr>
</tbody>
</table>

### Lingual Arch Forming Plier
- Designed to form double back and triple back bends in either .030” (0.762mm) or .036” (0.914mm) wire for inserting in lingual sheaths
- Double back groove is close to the plier joint to assure adequate forming
- Recommended for use with 3D® FIXED/REMOVABLE™ (Wilson®) for palatal activation appliances

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00420</td>
<td>1</td>
</tr>
</tbody>
</table>

### Closing Loop Plier (Nance)
- Extra hard stainless steel
- Four step loop forming beaks precision milled
- Radiused edges prevent wire damage
- Box joint
- Up to .028” (0.711mm) wire

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00001</td>
<td>1</td>
</tr>
</tbody>
</table>

### Closing Loop Plier (Standard)
- Same use and same characteristics as the Nance i00001, but permits uniform vertical bendings
- Permits the simultaneous forming of two right angled bends
- Box joint
- Up to .028” (0.711mm) wire

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00101</td>
<td>1</td>
</tr>
</tbody>
</table>

### NiTi Crimping Plier
- Forms a smooth bend or crimp without nicking Nickel Titanium wire
- Used on .012 to .028 (.305mm to .711mm) wire

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00161</td>
<td>1</td>
</tr>
</tbody>
</table>
SCHWEICKHARDT WIRE BENDING PLIERS

Three Jaw Clasp Adjusting Plier (Aderer Type)
- Tips for rounded or dimensional wire up to .040” (1.016mm)
- Box joint
- Exact shape and position of beaks will avoid squeezing and marking of wire
- Made from extra hard stainless steel

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00200</td>
<td>1</td>
</tr>
<tr>
<td>i00201</td>
<td>1</td>
</tr>
</tbody>
</table>

Arch Forming Plier (Angle)
- For bending, holding or torquing dimensional wires
- Stainless steel with hard carbide coated tip surfaces
- Box joint
- Offering maximum resistance against wear by torquing
- Up to .021” x .028” (0.534mm x 0.711mm)

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00442</td>
<td>1</td>
</tr>
</tbody>
</table>
Distal End Cutter, Safety Hold
- Shear cuts hard wire and then safety holds the loose distal end to prevent wire from going into tissue
- Hard tool steel insert
- Cut wire up to .021 x .025 (0.534mm x 0.635mm) and .026 (.66mm) round
- Designed for intraoral cutting and lip safety
- Made from selected surgical stainless steel to provide lasting beauty and durability
- Not recommended for braided wire

| Regular beak | i00550 | 1 |
| Small beak* | i00554 | 1 |

*Reaches the molar area easier, due to the small beak

Flush Distal End Cutter with O-Ring
- Hardened insert
- Elastomeric o-ring
- Wire up to .022” x .028” (0.559mm x 0.711mm) and up to .026” (0.660mm) round
- Due to the o-ring, the cutting edges do not have direct contact which ensures longer sharpness of the cutting edges

| short | i00567 | 1 |
| long | i00568 | 1 |
| replacement o-ring | i00569 | 10 |

Distal End Cutter Flush V Design
- Assures arch wire is cut flush with the end of a tube
- Safety hold is ideal for intraoral cutting and lip safety
- Cuts Elgiloy, S.S. and Niti .016” (0.406mm) to .018” x .022” (0.457mm x 0.559mm)
- Braided Wire .0175” (0.445mm)
- Box Joint
- Carbide insert

| i00560 | 1 |

Distal End Cutter Flush
- Assures arch wire is cut flush with the end of a tube
- Safety hold is ideal for intraoral cutting and lip safety
- Cuts Elgiloy, S.S. and Niti .014” (0.356mm) to .018” x .022” (0.457mm x 0.559mm)
- Braided Wire .0175” (0.445mm)
- Box Joint
- 420SS insert
- Should not be autoclaved

<p>| i00566 | 1 |</p>
<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00553</td>
<td>Ligature and Hard Wire Cutter</td>
</tr>
<tr>
<td></td>
<td>• Stainless steel</td>
</tr>
<tr>
<td></td>
<td>• Pliers are designed for cutting wires with minimum force</td>
</tr>
<tr>
<td></td>
<td>• Cuts to maximum of .022” x .028” (0.559mm x 0.711mm)</td>
</tr>
<tr>
<td></td>
<td>• Hard tool steel inserts</td>
</tr>
<tr>
<td>i00552</td>
<td>Ligature Cutter</td>
</tr>
<tr>
<td></td>
<td>• Stainless steel</td>
</tr>
<tr>
<td></td>
<td>• Soft ligature wire only – up to .020” (0.508mm)</td>
</tr>
<tr>
<td></td>
<td>• All edges of lock are lip safe for intraoral use</td>
</tr>
<tr>
<td></td>
<td>• Fine tips for easy intraoral access</td>
</tr>
<tr>
<td></td>
<td>• Pliers will cut wires up to the very tip</td>
</tr>
<tr>
<td></td>
<td>• Hard tool steel inserts diamond honed</td>
</tr>
<tr>
<td>i00551</td>
<td>Miniature Cutter</td>
</tr>
<tr>
<td></td>
<td>• Stainless steel</td>
</tr>
<tr>
<td></td>
<td>• Soft ligature wire only – up to .012” (0.305mm)</td>
</tr>
<tr>
<td></td>
<td>• Hard tool steel inserts diamond honed</td>
</tr>
<tr>
<td>i00265</td>
<td>Heavy Wire Cutter</td>
</tr>
<tr>
<td></td>
<td>• Hard tool steel insert</td>
</tr>
<tr>
<td></td>
<td>• Cutting capacity up to .040” (1.016mm) in the rear area, .024&quot; (0.610mm) in front</td>
</tr>
<tr>
<td></td>
<td>• Hard tool steel inserts</td>
</tr>
</tbody>
</table>
**SCHWEICKHARDT LIGATION PLIERS AND INSTRUMENTS**

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
</table>

### Ligature Tying Plier (Coon)
- Semi-automatic
- Locking channel is chamfered and burr-free to allow wire to slide before locking without being cut
- Tips are thin allowing close contact to bracket
- Up to .012” (0.305mm) soft wire

**i00153** 1

### Module Placing Plier
- For initial placing of force modules
- Ideal for placing ligatures and separators
- Easy access to difficult areas (posterior)
- Reduces module breakage
- Patient safe, easy spring-back action

**i00810** 1

### Ligature Tucker and Tier (Broussard™)
- Stainless steel
- One end twists steel ligature into a ‘tie’
- The other ‘tucks’ twisted wire

**i00274** 1

### Ligature Tucker
- Straight notched tip at one end for anterior brackets
- Angled notched tip at other end for posterior brackets
- Slot in tips is chamfered to avoid breakage of ligature wires
- Tips are smoothed to avoid hurting tissue

**i00273** 1
SCHWEICKHARDT LIGATION PLIERS AND INSTRUMENTS

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00028</td>
<td>1</td>
</tr>
</tbody>
</table>

**Needle Holder Small Narrow Tip (Mathieu)**
- Precision made ligating instrument tips – safe beaks
- Ratchet lock handle
- Tips are serrated and carbide coated for positive gripping of ligature wires and modules, and to reduce wear
- Hook tip style for easy placement of elastic modules and gripping
- 5.4" (13.7cm) long
- Ligature wire up to .016" (0.406mm)
- Box Joint

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00030</td>
<td>1</td>
</tr>
</tbody>
</table>

**Needle Holder Small (Mathieu)**
- Precision made ligating instrument tips – safe beaks
- With ratchet lock handle
- Free sliding inner spring opens beaks when lock is released
- Tips are serrated and carbide coated for positive gripping of ligature wires and modules, and to reduce wear
- 5.25" (13cm) long
- Ligature wire up to .016" (0.406mm)
- Box Joint

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00124</td>
<td>1</td>
</tr>
</tbody>
</table>

**Mosquito Hemostat**
- 4.75" (12cm) long
- With locking handle
- Serrated tips for positive gripping
### Posterior Band Removing Plier
- Long chisel tip with carbide insert
- Facilitates removal of posterior bands
- With replaceable occlusal nylon pads
- Stainless steel
- Will stay sharp
- Box joint

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00347</td>
<td>1</td>
</tr>
<tr>
<td>i00357</td>
<td>10</td>
</tr>
</tbody>
</table>

### Direct Bond Removing Plier
- Wedges between both edges of the base and the tooth surface and lifts off with virtually no stress
- Grips firmly for occlusal-gingival or mesial-distal use
- Hard tool steel insert

<table>
<thead>
<tr>
<th>Narrow</th>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00545</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Wide</td>
<td>i00546</td>
<td>1</td>
</tr>
</tbody>
</table>

### Utility Scaling, Ligature Remover and Band Seating Instrument (Schure)
- Extra hard stainless steel
- Precision knurled handle
- Sharp scaling shape on one end and serrated band seating tip on the other
- Tips are heat-treated to maintain sharp edge for extended use
- New narrower scaler tip

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00349</td>
<td>1</td>
</tr>
</tbody>
</table>

### Band Pusher/Scaler (Guequierre)
- Extra hard stainless steel
- Dual scaling surface
- One end has sharp curved scaling head with serrated tip on the other

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Package Contains</th>
</tr>
</thead>
<tbody>
<tr>
<td>i00358</td>
<td>1</td>
</tr>
</tbody>
</table>
**Cap Removal Plier**

- This precision stainless steel instrument uses joint plier transfer to shear off convertible caps effortlessly with one fluid motion
- The slender rail design allows doctors to easily access the buccal region with little obstruction
- The blade tips feature a filleted design allowing for an easy, low-force cap removal
- Can be used on any convertible buccal tubes as well as convertible brackets
- Each packaged instrument will include two replacement blades

Cap removal Plier, 2 Replacement Blades
- **Order Number**: i01200
- **Package Contains**: 1

Replacement Blades
- **Order Number**: i01201
- **Package Contains**: 5 each

**Cap Removal Instrument (RMO®)**

- To remove caps from convertible tubes
- Replaceable blade provides leverage when removing cap
- Tip of blade fits securely in arch slot of tube
- With 10 blades
- Stainless steel handle and blade

Replacement blades
- **Order Number**: i00557
- **Package Contains**: 1

**Modular Omega Plier (RMO®)**

- For adjusting the expansion or contraction of the Omega loop on the Bimetric Distalizing Arch (Wilson)
- Hook on round end to hold Omega loop

Replacement tips
- **Order Number**: i00548 W
- **Package Contains**: 1

- **Order Number**: i00549 W
- **Package Contains**: 2

**Crimpable Hook Plier**

- For attaching crimpable hooks securely to arch wires with minimum pressure
- Stainless steel

- **Order Number**: i00129
- **Package Contains**: 1

**Direct Bonding Tweezer, Self-Locking w/Thin Tips**

- Self-locking action
- Ideal for posterior bracket placement
- Thin tips fit between bracket wings and base
- Recommended for use with the RMO® Bondable Lingual Retainer

- **Order Number**: i01102
- **Package Contains**: 1
**FLI SL Instrument**
- Tactically designed specifically for activating FLI SL’s unique rotating clip
- Tip only engages one way in the mouth, minimizing guess work and chair time
- Seats large rectangular wires into the slot to minimize obstruction during open-close: .017” x .025”, .018” x .025”, .019” x .025”
  - **Order Number**: i00040
  - **Package Contains**: 1

**Hex Wrench**
- Stainless steel with hard steel tip
- For use with RM® Lock and Liberty Bielle®
  - **Order Number**: i00034
  - **Package Contains**: 1

**Fitzgerald X-Ray Holding Unit Rubber Bite Block**
- Large
  - **Order Number**: i00364
  - **Package Contains**: 2
- Small
  - **Order Number**: i00365
  - **Package Contains**: 2

**Golden Divider (Ricketts®)**
- Describes harmonious relations in the face, hand, tissue and dentition
- Stainless steel, can be sterilized
  - **Order Number**: i00394
  - **Package Contains**: 1
  - (Instructions by request)

**Ortho/Trace – Cephalometric Tracing Acetate**
- Smooth matte transparent surface – .003” (0.076mm)
- Gives sharp lines when tracing study radiographs
- Dimensionally stable, remains flat
- Rounded corners match standard 8” x 10” (20.32 x 25.4cm) rounded corner radiographs
  - **Order Number**: J00086
  - **Package Contains**: 100 sheet
Order Number | Package Contains | Instrument Rack
---|---|---
i00042 | 1 |

Cephalometric Tracing Template
The Rickett’s Tracing Template has been designed to provide the most anatomically correct presentation of typical teeth. Features include: prediction table, frontal and lateral views of most teeth, pterygoid and condyln tracing shapes, metric scales, protractor and relationship guides. Fits approximately 80% of the teeth without compensation, yet can also adjust to fit individual teeth.
i00512 | 1 pkg |
Penta-Morphic® Arch Selector
8” x 10” Vinylite
i00509 | 1 |

3D® Lingual Arch Selector
i00505 | 1 |

3D® Bimetric Arch Selector
i00506 | 1 |

3D® Maxillary Bimetric Distalizing Arch Selector
i00507 | 1 |

Distalizing Arch Selector
G00360 | 1 |

Hawley Arch Selector
i00513 | 1 |

RMO®’s Instrument Lubricant
- Technical grade white oil that can be applied after drying and prior to sterilization
- Improves the life of the instrument
- Provides a fast and economical solution for preventing rust and protecting cutting edges
- Regular treatment reduces the chance or potential of oxidation
J00201 | 1 |
SCHWEICKHARDT/RMO® instruments are 100% German-made by expert craftsmen using selected high-grade materials. These high-quality, precision instruments ensure routine orthodontic procedures are more efficient. An investment in quality Schweickhardt instruments will provide many years of reliable service.

**Warranty**

- All SCHWEICKHARDT/RMO instruments are fully guaranteed against corrosion and separation of inserts for five years from the purchase date.
- All SCHWEICKHARDT/RMO instruments are fully guaranteed for the life of the instrument to be free of defects in materials and workmanship.
- All SCHWEICKHARDT/RMO instruments, if misused, abused or failure to properly maintain or care for the instruments will void all warranty claims.

**Return**

- All RMO® instruments, which are unopened and in the original package, may be returned for full credit of the purchase price within 90 days of invoice.
- All RMO instruments, if defective, not misused, or tampered with in any manner, are returnable to RMO for repair, replacement or refund at RMO’s option.

**Repair**

For SCHWEICKHARDT/RMO instruments outside the warranty, call RMO customer service or your sales representative for recommendation for repair.

RMO customer service number is 1-800-525-6375.

**Recommendation for Care and Maintenance of Schweickhardt/RMO® Instruments**

These instruments are designed to provide long and faithful service. To protect your investment and ensure reliable service, please follow these recommendations for maintenance and care.

New instruments should be brushed (using a non-metal brush) with soap and water, rinsed, dried and sterilized prior to first use.

**Disinfecting and Cleaning**

- Scrub, clean and disinfect immediately after being used to remove debris, cement, adhesives and blood, to avoid drying of contaminants on instruments.
- Chemical disinfection is the method of choice using an alkaline product (rust inhibitor). The solution must be prepared fresh daily, with the same concentration. Dip instrument into solution. Scrub the tips with a plastic brush. Do not soak the instrument for an extended period of time, and do not heat above room temperature.
- Ultrasonically clean 5-8 minutes. Use a high-quality, non-aggressive solution with rust inhibitors which have a neutral pH. Extended cleaning time with acidic chemicals will damage the instruments, especially chemicals designed to remove cements.
- Rinse the instruments with distilled or deionized water immediately after disinfecting and cleaning. Dry with a towel, forced warm air (portable 800 Watt hair dryer) or compressed air to avoid water staining.
- H₂O - Something as simple as water is one of the most important factors in the safe and effective cleaning and sterilization of your valuable instrument investment. Water in many municipal supplies can contain high levels of chlorine, chloramines, iron, and sulfur, plus other trace elements that can be damaging to your pliers. Tap water used to dilute cleaning solutions and for rinsing pliers prior to sterilization can cause severe damage. Chemicals in tap water can also neutralize rust inhibitors causing a corrosive effect on plier tips even when you are spending the time and money to use the right materials. We highly recommend that your office use distilled, R/O, or filtered water for mixing your cleaning solutions, combined with a no-rinse formula for cleaning solutions.
- If these steps are not followed, instruments may corrode or discolor during sterilization.

**Sterilization**

- Acceptable up to 185°C (395°F). Higher temperatures may cause discoloration of instrument.
- Do not heat sterilize instruments with plastic or rubber components, as it will tend to distort and discolor.
- Sterilize instruments in open position using the instructions for your unit.
- Make sure no moisture is sealed in the bag.

**Dry Heat**

- No chemical required.
- No corrosion problems when properly dried before process.

Because of the non-stainless characteristics of a vast majority of orthodontic plier tip materials, Rapid Dry Heat Sterilization, became the most widely used method of infection control in this dental specialty. Between rapid cycle turn-around and large load capacity, it was the logical choice for practitioners seeking to protect their substantial instrument investment. Even with advances in materials technology, Dry Heat remains as one of today’s most sensible choices for safety and efficacy in the busy orthodontic practice.

- Clean in an ultrasonic unit for 10 minutes, with a no-rinse general purpose solution with an included rust inhibitor. Keep tips open during cleaning.
- Dry instruments with a compressed air blast, towel, or allow to drain for five minutes if using a no-rinse solution.
- Place pliers on rack or cassette and load sterilizer according to manufacturer's instructions. Loading method should allow plier tips to remain open during sterilize cycle.
- After sterilization cycle is complete, lubricate pliers with a silicon (non-petroleum) lubricant or RMO® Instrument Lubricant J00201. DO NOT use tap water during any sterilization process and always dry instruments whenever they are rinsed.
Chemiclave (chemical vapor)

- Has low heat and very low water vapor content as well as a short cycle time.
- A special chemical solution must be used in a properly ventilated area.

Chemiclave – (Unsaturated Chemical Vapor)

- Clean in an ultrasonic unit for 10 minutes with a no-rinse general purpose solution with an included rust inhibitor. Keep tips open during cleaning.
- Dry instruments with a compressed air blast, towel, or allow to drain for five minutes if using a no-rinse solution.
- Load pliers on tray placing layers of paper towels between instruments. Loading method should allow plier tips to remain open during sterilize cycle.
- Sterilize according to manufacturer’s instructions.
- After sterilization cycle is complete, depressurize equipment and allow pliers to cool.
- Remove instruments and make sure they are dry prior to storage.
- Lubricate pliers with a silicon lubricant or RMO® Instrument Lubricant J00201. DO NOT use tap water during any sterilization process and always dry instruments whenever they are rinsed.

Autoclave (steam under pressure)

- Good penetration
- Possibility of rust and corrosion if instruments remain wet after processing

Because of the high levels of moisture in the autoclave process, this method can be damaging to ferrous plier tips and is not generally recommended unless instruments are 100% stainless steel or tungsten carbide inserted.

- Clean in an ultrasonic unit for 10 minutes with a no-rinse general purpose solution with an included rust inhibitor. Keep tips open during cleaning.
- Dry or drain instruments and dip in instrument milk.
- Load pliers on tray. Loading method should allow plier tips to remain open during sterilize cycle.
- Sterilize according to manufacturer’s instructions.
- After sterilization cycle is complete, depressurize equipment and allow pliers to cool.
- Remove instruments and make sure they are dry prior to storage.
- Lubricate pliers with a silicon lubricant or RMO® Instrument Lubricant J00201. DO NOT use tap water during any sterilization process and always dry instruments whenever they are rinsed.

Cold sterilization (Glutaraldehyde)

- Must remain in solution a minimum of 10 hours.
- Useful for sterilization of heat sensitive instruments with plastic or rubber.

CDC and ADA guidelines federally mandate the use of heat sterilization for instruments used in dental care. Many professional offices use cold sterilization/ high level disinfectants for holding solutions and processing of heat sensitive items. If your office uses these types of products, here are some recommendations for avoiding damage to your pliers:

- Always ultrasonically clean prior to immersion in high level disinfectants and cold sterile solutions using the same guidelines as specified in heat sterilization methods.
- If using glutaraldehyde solutions, use only those that are non-acidic in composition and include a rust inhibitor.
- Avoid contact with quarternary ammonium compounds and iodophors.
- Keep plier tips open in liquid. Avoid immersion overnight in these chemical solutions.
- If solutions require dilution, do not use tap water. Use distilled, RO, or filtered water free from errant chemicals.
- Dry instruments immediately after rinsing.
- Lubricate frequently with a silicon-based lubricant or RMO® Instrument Lubricant J00201.

Maintenance

- Corroded instruments should be discarded.
- Corrosion can be transferred during sterilization. Joints, inserts and ratchets have to be treated with paraffin or lubricant. RMO® Instrument Lubricant J00201.

Hints

- Apply a light coat of silicone spray or RMO® instrument Lubricant J00201 every week, or as needed depending on use.
- Do not dry-heat sterilize instruments with plastic handles.
- Ultrasonic cleaning may loosen inserts and dull sharp edges.
- All cutters should be resharpened every 6-9 months, or as necessary.
- Warranty does not cover routine maintainence, sharpening or reconditioning.