



**Omega**<sup>TM</sup>  
Precision Instruments

**AO**  
AMERICAN  
ORTHODONTICS



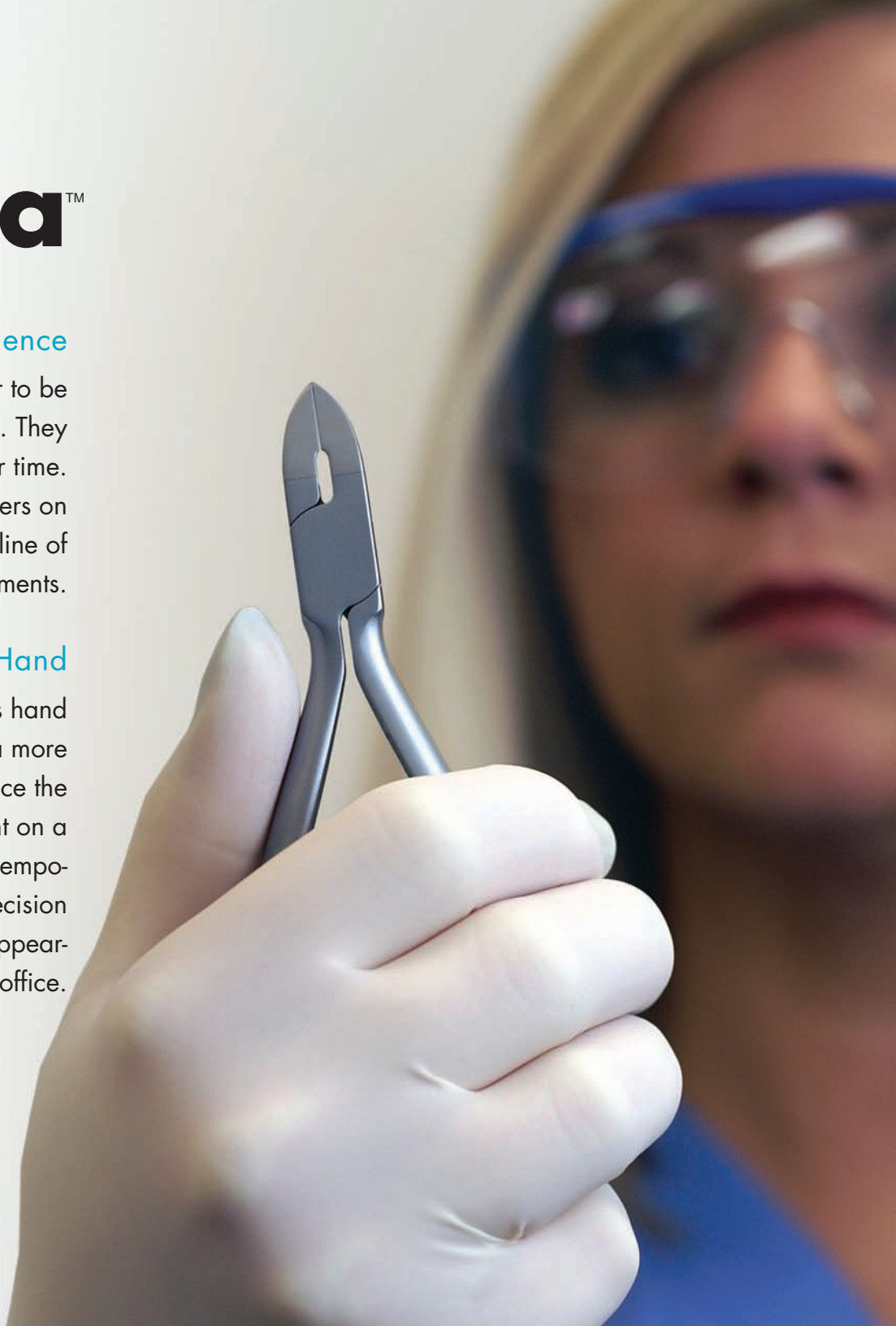
## Enduring Excellence

It is not enough for a cutter to be sharp or a bender to form wire. They must function consistently over time.

American Orthodontics delivers on this promise with its premium line of Omega Precision Instruments.

## Pleasing to the Eye and Hand

Every Omega instrument is hand polished to a satin finish for a more comfortable grip and to reduce the eye strain from reflected light on a shiny metal surface. The contemporary, sleek look of Omega Precision instruments compliments the appearance of any modern office.



## Ten Year Warranty

A warranty this strong comes from a commitment to craftsmanship, which begins with quality materials and ends with precision manufacturing. Omega Instruments are guaranteed to resist corrosion and breakage for 10 years. Every Omega instrument is made from our uniquely formed DuraSteel™ forgings, providing excellence that endures the harsh environment of cleaning and sterilization. Each instrument is designed for a particular purpose, so Omega forging alloys are blended for that purpose. For example, cutters are designed to flex in the handle more than benders to provide a more comfortable shock absorber effect.

## Precision Manufacturing

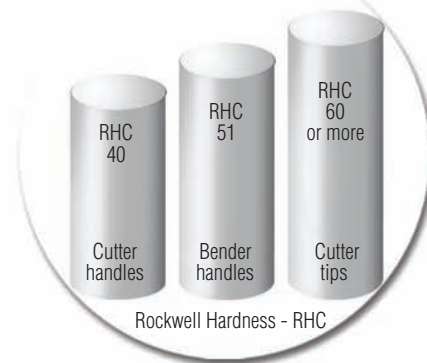
Precision manufacturing can only be appreciated when handling different styles of Omega Instruments. Consistency in the functioning of the instrument as well as its fit and feel in the hand are what separates precision instruments from the rest of the field. Instead of spending time to find your favorite instrument, you can pick the one closest to you and feel confident that it fits your hand just the way you like it.

*The inserts for Omega cutters integrate seamlessly into the head of the cutter, repelling corroding elements and offering the perfect balance between sharpness and durability.*



*All Omega Precision Instruments are laser marked for part identification and maximum wire capacity.*

*Choosing the right steel*  
Omega benders benefit from a slightly harder DuraSteel™ forging than Omega cutters. A harder handle offers firmer control and less flex than Omega cutters while a softer handle allows for more shock absorption when cutting wire. Omega cutters have proprietary high-grade stainless steel inserts for the cutting tips. These tips hold an excellent cutting edge and have superior corrosion resistance. The harder material also increases the endurance of the pliers' wire contacting areas.



# Distal End Cutters

001-016E

Distal End Cutter

Safely cuts and securely holds distal ends of arch wire. Precise cutting edges and tip angle allow arch wires to be cut close to the distal end of buccal tubes. Hardened inserted tips provide longer wear. Maximum cutting capacity is .021 x .025 wire.

001-016LE

Distal End Cutter with long handle

Provides extended reach to the posterior regions of the mouth. Maximum cutting capacity is .021 x .025 wire.

001-016ME

Distal End Cutter with slim head

Long, slim beaks make precise cutting and holding of arch wires effortless, even in hard to reach areas. Maximum cutting capacity is .021 x .025 wire. Standard handle length.

001-016MLE

Distal End Cutter with slim head and long handle

Features a long, slim beak for precision cutting and holding of arch wires as well as an extended reach to the posterior regions. Maximum cutting capacity is .021 x .025 wire.

001-016LE

001-016ME  
001-016MLE

001-016E



*Handle comparison:  
Long handle option makes hard  
to reach areas more accessible.*

# Pin and Ligature Cutters

001-001E

Pin and Ligature Cutter

Super sharp, diamond-honed edges cut cleanly, leaving no ragged edges. The workhorse of pin and ligature cutters. Maximum cutting capacity is .015 soft wire.

001-002E

Mini Pin and Ligature Cutter

Finer tips than model 001-001E, for easier access to tight areas. Cuts even the smallest soft wire, ligatures, pins, and elastomerics. Maximum cutting capacity is .012 soft wire.

001-003E

Micro Pin and Ligature Cutter

The finest tips available for cutting ligature wire, elastomerics, and other soft wire auxiliaries where access is at a premium. Maximum cutting capacity is .012 soft wire.

007-001E

Hard Wire Cutter

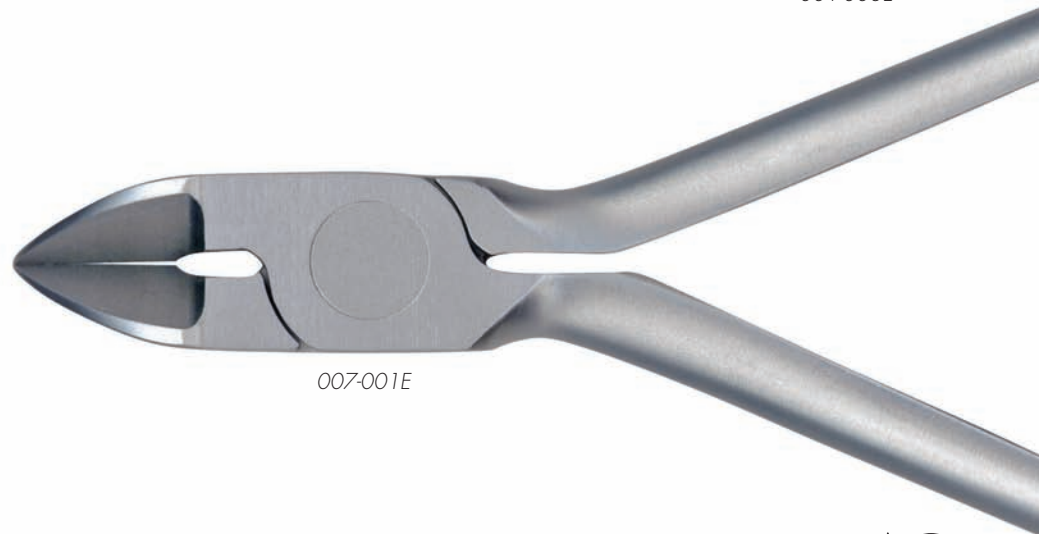
Capable of cutting any size pin, ligature, or wire up to .022 x .028. The most durable cutter available.



001-001E

001-002E

001-003E



007-001E



# Wire Bending Pliers

001-300E

NiTi Tie Back Pliers

Revolutionary pliers tie back NiTi wire intraorally with no heat. The precision tips also allow for other types of bends previously only possible in stainless steel. Maximum wire capacity is .021 x .025.

001-139E

Bird Beak Pliers

Features a cone shaped beak opposed by a pyramid shaped beak. Tips are angled and all working edges are beveled to prevent scoring or nicking of the wire. Designed to work with round wire up to .030 diameter.

001-142E

Tapered Bird Beak Pliers

Offers both the strength and durability of a traditional bird beak as well as the flexibility to manipulate bends to light wires. Designed to work with wire up to .030 diameter.



001-300E



001-139E



001-142E

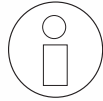


# Wire Bending Pliers

001-140E

Light Wire Pliers

Longer, more gradually tapered beaks than bird beak pliers. A round beak with a cone tip of .025" and a pyramid tip with 9° angle ground on the sides to allow for wire springback. Slender beaks make it easier to bend small diameter loops. The working edges are carefully beveled to prevent wire scoring. Maximum wire capacity is .020.

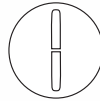


001-140E

001-810SE

Tweed Style Rectangular Arch Bending Pliers

Ideal for bending square and rectangular wire. Edges are radiused and hardened to prevent wire scoring and to preserve a smooth contact area with the wire. Maximum wire capacity is .0215 x .028.



001-810SE

001-200E

Three Jaw Pliers

Features precision-aligned tips for consistent bends and gradual taper for delicate bends. One piece construction of the double tip ensures strength and eliminates flaring. Maximum wire capacity is .030.



001-200E

001-201E

Three Jaw NiTi Pliers

Gradual tapering for delicate bends. One piece construction of double tip for strength. Uniquely designed to form and contour nickel titanium wire, overcoming its shape memory at the point of contact. Maximum wire capacity is .020.



001-201E

# Utility Pliers

General utility pliers provide easy access to lingual and posterior areas. Carefully tapered and serrated beaks fit easily between brackets and are slightly rounded for safety and comfort.

001-158E

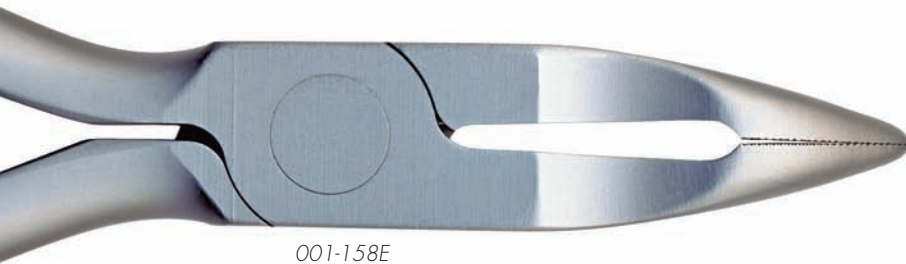
Weingart Pliers

001-158LE

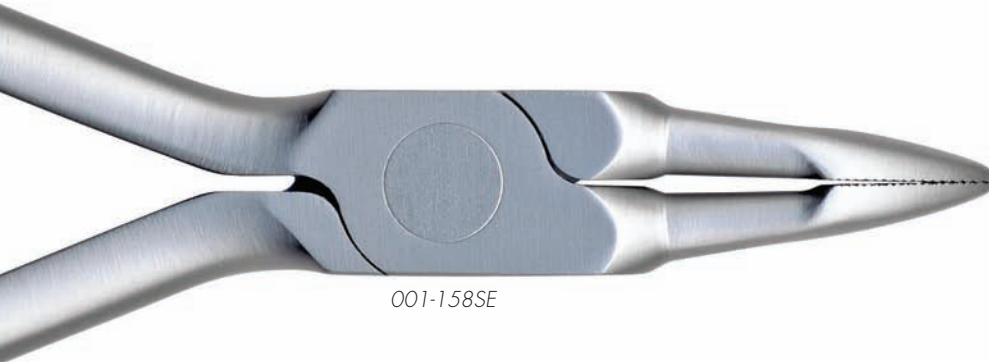
Weingart Pliers with long handle

001-158SE

Weingart Pliers with slim beaks and standard length handle.



001-158E



001-158SE

001-158LE



001-158E

001-158LE

*Handle comparison:*

*Long handle option makes hard-to-reach areas more accessible.*

# Debonding Pliers

001-301E

## Ceramic Bracket Debonding Pliers

Also known as Sushi pliers, this unique debonding instrument is specially designed for removing ceramic brackets. Only one edge of each blade is sharpened to ensure optimal fit along the enamel/bracket interface. Opposing surfaces are parallel when the debonding instrument is open 3 mm, which is the average width of a ceramic bracket. After removing adhesive flash from the mesial and distal edges of a ceramic bracket, place the two debonding blades along the enamel/bracket interface and squeeze slowly until bracket releases from the tooth.



*Debonding blades are parallel when placed along mesial and distal sides of ceramic brackets, ensuring consistent debonding.*

001-301E



*Place tips mesial/distal along interface between tooth and bracket base after removing flash and squeeze slowly.*

001-346E

## Direct Bond Bracket Remover

These pliers are specially designed for quick and comfortable removal of direct bond brackets. Dual chisel tips wedge between bracket base and tooth. May be used mesial-distally or occlusal-gingivally.

001-347LE

## Posterior Band Remover with long beaks

Ideal for posterior band removal. The padded tip rests on the occlusal of the molar cusp. Designed for better accessibility to distal area. 3/16" diameter heat sterilizable pad comes standard with the instrument.

012-076 3/16" Replacement pads (Qty. 2)

001-346E



001-347LE



# Debonding Pliers

Debonding pliers provide easy access to lingual and posterior areas.

001-302

Lingual Debonding Pliers

Designed to remove lingual bonds such as lingual brackets and bite blocks. The unique design allows for easy and comfortable debonding.

001-344RTE

Adhesive Removing Pliers

Designed to easily remove adhesive remnants after debonding appliances. The stainless steel tip glides across the surface of the tooth using the counterforce of the interchangeable plastic pad to safely remove excess bonding material from enamel. 1/4" diameter heat sterilizable pad comes standard with instrument.

012-077 1/4" Replacement pads (Qty. 2)

001-407 Replacement metal tip insert (Qty. 1 with wrench)



001-302

*Example of easy removal  
of lingual bite blocks.*

001-344RTE



## Omega instrument care and repair

It is important to follow strict procedures in the care and maintenance of your instruments. To assure the longevity and corrosion resistance of your investment, follow one of these sterilization methods. NOTE: Be sure to read your sterilization unit's instruction manual for proper set-up and to adjust for local water conditions. Always follow your unit's sterilization parameters.

### Dry Heat Sterilization:

1. Remove any debris from instruments using a brush or towel.
2. Perform an ultrasonic cleaning using a general purpose cleaner.
3. Dry thoroughly with oil/water-free compressed air or towel.
4. Place instruments on racks and sterilize following parameters given by sterilization unit manufacturer.
5. Lubricate with a silicone-based lubricant after sterilization cycle..

### Autoclaving:

1. Remove any debris from instruments using a brush or towel.
2. Perform an ultrasonic cleaning using a general purpose cleaner.
3. Dry thoroughly with oil/water-free compressed air or towel.
4. Place instruments on autoclave tray with jaws open.
5. Sterilize following parameters given by sterilization unit manufacturer.
6. Allow instruments to cool after sterilization cycle.
7. Remove instruments and ensure instruments are free of moisture by towel drying.
8. Lubricate immediately with a silicone-based lubricant.

### Chemclaving (unsaturated chemical vapor):

1. Remove any debris from instruments using a brush or towel.
2. Perform an ultrasonic cleaning using a general purpose cleaner.
3. Dry thoroughly with oil/water-free compressed air or towel.
4. Place instruments on chemclave tray with jaws open. Place layer of paper toweling between instruments.
5. Sterilize following parameters given by sterilization unit manufacturer.
6. Depressurize the equipment and allow instruments to cool after sterilization cycle.
7. Remove instruments and ensure instruments are free of moisture by towel drying.
8. Lubricate immediately with a silicone-based lubricant.

### Cold Sterilization (disinfection):

1. Remove any debris from instruments using a brush or towel.
2. Perform an ultrasonic cleaning using a general purpose cleaner.
3. Dry thoroughly with oil/water-free compressed air or towel.
4. Immerse instruments in a 2% glutaraldehyde sterilizing solution.
5. Remove the instruments from the sterilizing solution, rinse in water, and towel dry to ensure instrument is free of moisture.
6. Lubricate immediately with a silicone-based lubricant.

**Helpful Hint:** Dipping instruments in a water-based surgical milk prior to ultrasonic cleaning reduces the incidence of spots, stains, and corrosion. Surgical milk is an interface surface corrosion inhibitor and lubricant that helps to ensure proper movement of hinges and provides a protective barrier that arrests discoloration and corrosion during sterilization.

## Preventing Corrosion

Corrosion can attack any stainless steel instrument from any manufacturer. A little effort to ensure the cleanliness of the part during sterilization goes a long way. Stainless steel surfaces require access to oxygen to form a protective chromium oxide layer. This chromium oxide layer (passive layer) is what gives stainless steel its corrosion resistance.

What prevents oxygen from contacting stainless steel? Moisture, dirt, and cement left on the instrument are typical causes that prevent oxygen from contacting stainless steel during the sterilization process. Instruments should be *thoroughly* brushed clean before sterilization. All instruments should be sterilized in the open position and then *thoroughly* dried after sterilization, taking special care in the joint areas and crevices.





## Instrument Warranty

American Orthodontics warrants its Omega Precision Instruments to be free of defects in material and workmanship for ten years. Misuse, abuse, or failure to properly maintain or care for the instrument will void warranty. Cutting instruments should be reconditioned every 6-12 months. Warranty does not cover routine maintenance, sharpening, or reconditioning.



A M E R I C A N  
O R T H O D O N T I C S

1714 Cambridge Avenue Sheboygan, WI USA 53081  
(920) 457-5051 [www.americanortho.com](http://www.americanortho.com)

