Bronchoscope Side Channel Instruments

PILLING FLEXIBLE ENDOSCOPIC FORCEPS

The Pilling Flexible Forceps were designed for use with Pilling Laser and Standard Bronchoscopes. They easily pass through the instrument/fiber channel for the purpose of biopsy, foreign body retrieval, and removal of char from laser ablation. These forceps are available in 1 mm and 2 mm sizes.

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>DESCRIPTION</th>
<th>LENGTH</th>
<th>FOR USE THRU SCOPES</th>
</tr>
</thead>
<tbody>
<tr>
<td>505670</td>
<td>1 mm Alligator Grasping Fcps.</td>
<td>35 cm</td>
<td>3.5 x 20, 4.0 x 25</td>
</tr>
<tr>
<td>505674</td>
<td>1 mm Oval Cup Biopsy Fcps.</td>
<td>35 cm</td>
<td>3.5 x 20, 4.0 x 25</td>
</tr>
<tr>
<td>505680</td>
<td>2 mm Alligator Grasping Fcps., flexible</td>
<td>40 cm</td>
<td>5.0 x 30, 6.0 x 35</td>
</tr>
<tr>
<td>505682</td>
<td>2 mm Fenestrated Grasping Fcps., flexible</td>
<td>40 cm</td>
<td>5.0 x 30, 6.0 x 35</td>
</tr>
<tr>
<td>505684</td>
<td>2 mm Circular Cup Biopsy Fcps., flexible</td>
<td>40 cm</td>
<td>5.0 x 30, 6.0 x 35</td>
</tr>
<tr>
<td>505686</td>
<td>2 mm Alligator Grasping Fcps., flexible</td>
<td>50 cm</td>
<td>7.0 x 40, 8.0 x 40, 9.0 x 40</td>
</tr>
<tr>
<td>505688</td>
<td>2 mm Fenestrated Grasping Fcps.</td>
<td>50 cm</td>
<td>7.0 x 40, 8.0 x 40, 9.0 x 40</td>
</tr>
<tr>
<td>505690</td>
<td>2 mm Circular Cup Biopsy Fcps.</td>
<td>50 cm</td>
<td>7.0 x 40, 8.0 x 40, 9.0 x 40</td>
</tr>
</tbody>
</table>

Bronchial Instrument Accessories

FLUVOG VENTILATION ATTACHMENT

For use on bronchoscopes with the 15 mm proximal extension. Provides “closed system” bronchoscopy with the use of instrumentation. Tapered fit for easy attachment or removal.

502540

FLUVOG TRANSPARENT SLIDES

502541 For 502540
Pilling Bronchoscopes have been designed in conjunction with Dr. Paul Holinger and Dr. C.L. Jackson for ease in examination and performance of surgical procedures in the lung and bronchi. These instruments utilize fiberoptics to give cool, constant illumination and nearly full lumen view. Each type of scope has channels for ventilation of the patient during the procedure.

Refer to Scope Measurement Chart for definition of provided Scope Dimensions on pages 416, 417 and 418.

Bronchoscope and Laser Bronchoscope
PATIENT SIZE LISTING

NEONATE/INFANT
BRONCHOSCOPE
522575 Holinger ................................. 79
522576 Holinger ................................. 79
522550 Pilling Improved Holinger ............ 80
522552 Pilling Improved Holinger ............ 80

LASER BRONCHOSCOPE
523100P Pilling CO₂ .............................. 82

CHILD/PEDIATRIC
BRONCHOSCOPE
522554 Pilling Improved Holinger ............ 80
522556 Pilling Improved Holinger ............ 80
522576 Holinger ................................. 79
522577 Holinger ................................. 79
522578 Holinger ................................. 79

LASER BRONCHOSCOPE
523110P Pilling CO₂ .............................. 82

ADOLESCENT
BRONCHOSCOPE
522558 Pilling Improved Holinger ............ 80
522579 Holinger ................................. 79
522580 Holinger ................................. 79
522581 Holinger ................................. 79
522582 Holinger ................................. 79
522583 Holinger ................................. 79

LASER BRONCHOSCOPE
523120P Pilling CO₂ .............................. 82
523130P Pilling CO₂ .............................. 82
523176 Pilling YAG .............................. 84

ADULT
BRONCHOSCOPE
522584 Holinger ................................. 79
522585 Holinger ................................. 79
522586 Holinger ................................. 79
522587 Holinger ................................. 79

LASER BRONCHOSCOPE
523140P Pilling CO₂ .............................. 82
523150P Pilling CO₂ .............................. 82
523160P Pilling CO₂ .............................. 82
523178P Pilling YAG .............................. 84
523180P Pilling YAG .............................. 84
523182 Pilling YAG .............................. 84
HOLINGER VENTILATING FIBEROPTIC BRONCHOSCOPE

Designed by Dr. Paul Holinger, these fiberoptic bronchoscopes provide a nearly full view of the lumen with constant, cool illumination. Special features include:

- 15 mm sidearm for direct attachment of ventilation and anesthesia apparatus
- Large fiber bundle for increased distal illumination
- Oval fiberoptic light carrier, which allows more viewing and instrumentation room in main tube
- 15 mm diameter proximal end for attachment of accessories (window plug, Sanders Venturi, etc…)
- Smooth distal tip
- Shortened proximal flare

Each Holinger Bronchoscope is supplied with one light carrier and one window plug (522595).

Dimensions without window plug.

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>APPRX. SIZE</th>
<th>APPROX. LENGTH</th>
<th>MIN. I.D.</th>
<th>NOMINAL PROXIMAL I.D.</th>
<th>MAX. O.D.</th>
<th>REPLACE. CARRIER</th>
</tr>
</thead>
<tbody>
<tr>
<td>522575</td>
<td>3 x 20</td>
<td>203 mm</td>
<td>2.5 mm</td>
<td>12.0 mm</td>
<td>9.4 mm</td>
<td>527500</td>
</tr>
<tr>
<td>522576</td>
<td>3.5 x 25</td>
<td>254 mm</td>
<td>3.4 mm</td>
<td>12.0 mm</td>
<td>12.0 mm</td>
<td>527505</td>
</tr>
<tr>
<td>522577</td>
<td>3.5 x 30</td>
<td>305 mm</td>
<td>3.4 mm</td>
<td>12.0 mm</td>
<td>12.0 mm</td>
<td>527510</td>
</tr>
<tr>
<td>522578</td>
<td>4 x 30</td>
<td>305 mm</td>
<td>3.7 mm</td>
<td>12.0 mm</td>
<td>12.0 mm</td>
<td>527510</td>
</tr>
<tr>
<td>522579</td>
<td>5 x 30</td>
<td>305 mm</td>
<td>4.9 mm</td>
<td>12.0 mm</td>
<td>12.5 mm</td>
<td>527510</td>
</tr>
<tr>
<td>522580</td>
<td>5 x 35</td>
<td>364 mm</td>
<td>4.8 mm</td>
<td>12.0 mm</td>
<td>12.5 mm</td>
<td>527515</td>
</tr>
<tr>
<td>522581</td>
<td>5 x 40</td>
<td>400 mm</td>
<td>4.8 mm</td>
<td>12.0 mm</td>
<td>12.5 mm</td>
<td>527520</td>
</tr>
<tr>
<td>522582</td>
<td>5 x 45</td>
<td>451 mm</td>
<td>4.9 mm</td>
<td>12.0 mm</td>
<td>12.0 mm</td>
<td>527525</td>
</tr>
<tr>
<td>522583</td>
<td>6 x 35</td>
<td>369 mm</td>
<td>5.6 mm</td>
<td>12.0 mm</td>
<td>12.0 mm</td>
<td>527555</td>
</tr>
<tr>
<td>522584</td>
<td>6 x 40</td>
<td>400 mm</td>
<td>5.6 mm</td>
<td>12.0 mm</td>
<td>13.0 mm</td>
<td>527560</td>
</tr>
<tr>
<td>522585</td>
<td>7 x 40</td>
<td>400 mm</td>
<td>6.8 mm</td>
<td>12.0 mm</td>
<td>15.3 mm</td>
<td>527560</td>
</tr>
<tr>
<td>522586</td>
<td>8 x 40</td>
<td>400 mm</td>
<td>7.6 mm</td>
<td>13.0 mm</td>
<td>15.4 mm</td>
<td>527580</td>
</tr>
<tr>
<td>522587</td>
<td>9 x 40</td>
<td>400 mm</td>
<td>8.5 mm</td>
<td>12.0 mm</td>
<td>16.4 mm</td>
<td>527580</td>
</tr>
</tbody>
</table>

Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE.
The photo below shows a working combination of the following instruments:

- 524018  Telescope 2.7 mm, 0˚
- 524036  Telescope Guide 2.7 mm
- 522552  Improved Holinger Bronchoscope 3.5 x 20
- 505670  Flexible 1 mm Alligator Forceps

**Pediatric Bronchoscopes**

**PILLING IMPROVED HOLINGER VENTILATING FIBEROPTIC BRONCHOSCOPES**

Our most popular bronchoscope, the Holinger, has been modified for pediatric foreign body removal and features the following:

- Small distal tip. The original Holinger tip has been cut down to correspond with tube size, while still retaining smoothness
- Built-in instrument channel for introduction of flexible forceps or disposable suction
- Full lumen view. The oval fiberoptic light carrier has been raised slightly to provide a full lumen and give more room for instrumentation and a larger viewing area
- 15 mm sidearm attachment allows direct attachment of ventilation and anesthesia apparatus

Each Pilling Improved Holinger Bronchoscope is supplied with one light carrier, one window plug (522595) and instrument guide rubber cap.

**INSTRUMENT GUIDE RUBBER CAPS**

For Improved Holinger bronchoscopes.

- 524042  5 per pack
**BRONCHOSCOPES**

Bronchoscope and Esophagoscope Accessories and Adapters

**WINDOW PLUG**
Fits 15 mm proximal extension of Holinger and Jackson Bronchoscopes and Esophagoscopes. Provides a “closed system” for anesthesia in bronchoscopy or inflation during esophagoscopy.

522595

**REPLACEMENT LENS**
522596 For 522595 window plug

**ADAPTER**
Converts Jackson Bronchoscope 11 mm oxygen connector to standard 15 mm anesthesia and positive pressure connector.

522590

---

Pilling  Phone Toll Free: 800-523-6507  Fax: 800-332-2308
BRONCHOSCOPES

Laser Bronchoscopes

PILLING CO₂ BRONCHOSCOPE SYSTEM

- Pilling, Holinger-type bronchoscope, with window plug
- Standard 15 mm anesthesia ventilating arm
- Dedicated, distally-delivered YAG or suction channel
- Dedicated, distally-opened smoke evacuation channel
- Enlarged, oval fiberoptic, distal light carrier
  One supplied with each scope
- Seven sizes of CO₂ bronchoscopes available

<table>
<thead>
<tr>
<th>NOMINAL CATALOG</th>
<th>APPROX. SIZE</th>
<th>OVERALL LENGTH</th>
<th>MIN. I.D.</th>
<th>NOMINAL PROXIMAL I.D.</th>
<th>MAX. O.D.</th>
<th>REPLACE. CARRIER</th>
</tr>
</thead>
<tbody>
<tr>
<td>523100P</td>
<td>3.5 x 20</td>
<td>220 mm</td>
<td>3.5 mm</td>
<td>11.3 mm</td>
<td>11.3 mm</td>
<td>523101</td>
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<tr>
<td>523110P</td>
<td>4.0 x 25</td>
<td>265 mm</td>
<td>4.0 mm</td>
<td>11.9 mm</td>
<td>11.9 mm</td>
<td>523111</td>
</tr>
<tr>
<td>523120P</td>
<td>5.0 x 30</td>
<td>315 mm</td>
<td>5.1 mm</td>
<td>13.0 mm</td>
<td>13.0 mm</td>
<td>527550</td>
</tr>
<tr>
<td>523130P</td>
<td>6.0 x 35</td>
<td>365 mm</td>
<td>6.0 mm</td>
<td>13.3 mm</td>
<td>13.3 mm</td>
<td>523131</td>
</tr>
<tr>
<td>523140P</td>
<td>7.0 x 40</td>
<td>420 mm</td>
<td>7.0 mm</td>
<td>13.3 mm</td>
<td>13.3 mm</td>
<td>527580</td>
</tr>
<tr>
<td>523150P</td>
<td>8.0 x 40</td>
<td>415 mm</td>
<td>8.0 mm</td>
<td>15.3 mm</td>
<td>15.3 mm</td>
<td>527580</td>
</tr>
<tr>
<td>523160P</td>
<td>9.0 x 40</td>
<td>415 mm</td>
<td>9.0 mm</td>
<td>16.2 mm</td>
<td>16.2 mm</td>
<td>527580</td>
</tr>
</tbody>
</table>

524042 Replaceable rubber cap for Forceps/Suction Channel
523210P Moisture Barrier

Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE.
Laser Bronchoscopes (continued)

**CO₂ COUPLER-MANIPULATOR**
- Light weight
- Easy-off disconnect from the Pilling laser bronchoscope
- Non-explosive, reusable Mucous Barrier Windows 523210P, one supplied
- Operator’s lens, offers 4 times power
- Joystick has tighten down collar for beam placement and control
- Galilean focusing lens permits adjustment of beam spot size
- Standard articulating arm connection fits: Sharplan, Weck, Endolase, Surgilase, and American Surgical Laser CO₂ machines
- Other articulating arm adapters available
  523200P

**Adapter Ordering Information**
- 523242P Merrimac CO₂ Adapter
- 523244 Xanar CO₂ Adapter
- 523246 Coherent CO₂ Adapter*
- 523248 Inframed TF25 CO₂ Adapter
- 523250 Inframed 80 CO₂ Adapter
- 523252 Cooper 250Z and 500Z CO₂ Adapter
- 523254 Sharplan Quick Disconnect CO₂ Adapter
- 523256 Sharplan Model 1040 Adapter

*May also use 523244 or 523242P

**Care and Cleaning of CO₂ Coupler**
- Wipe outside surfaces with a germicidal solution
- DON’T allow moisture to enter the inside of the coupler
- DON’T soak, gas or steam sterilize
- Store in a clean, dry, dust-free environment

**Suggested Pilling CO₂ Laser Bronchoscope Package**
- One CO₂ Coupler Manipulator 523200P with Mucous Barrier Window 523210P
- Articulating Arm Adapter 523230P (if needed)
- Four Laser Bronchoscopes (choice of seven sizes)
- One Fiberoptic Light Cable 521160
Laser Bronchoscopes (continued)

PILLING ND: YAG LASER BRONCHOSCOPE SYSTEM

- Pilling, Holinger-Type Bronchoscope with window plug
- Standard 15 mm anesthesia ventilating arm
- Distal ventilating ports, for upper lobe ventilation
- Dedicated, distally-delivered YAG or suction channel
- Dedicated, distally-opened smoke evacuation channel
- Enlarged, oval fiberoptic, distal light carrier, one supplied with each scope
- Four sizes of YAG Bronchoscopes available

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>NOMINAL SIZE</th>
<th>APPROX. LENGTH</th>
<th>MIN. I.D.</th>
<th>NOMINAL PROXIMAL I.D.</th>
<th>MAX. O.D.</th>
<th>REPLACE. CARRIER</th>
</tr>
</thead>
<tbody>
<tr>
<td>523176</td>
<td>6.0 x 35</td>
<td>365 mm</td>
<td>6.0 mm</td>
<td>12.0 mm</td>
<td>16.0 mm</td>
<td>523131</td>
</tr>
<tr>
<td>523178P</td>
<td>7.0 x 40</td>
<td>415 mm</td>
<td>6.7 mm</td>
<td>12.0 mm</td>
<td>16.3 mm</td>
<td>527580</td>
</tr>
<tr>
<td>523180P</td>
<td>8.0 x 40</td>
<td>415 mm</td>
<td>7.0 mm</td>
<td>12.0 mm</td>
<td>16.0 mm</td>
<td>527580</td>
</tr>
<tr>
<td>523182</td>
<td>9.0 x 40</td>
<td>420 mm</td>
<td>9.0 mm</td>
<td>12.0 mm</td>
<td>17.0 mm</td>
<td>527580</td>
</tr>
<tr>
<td>524042</td>
<td>Replacement rubber cap for YAG Fiber Channel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TELESCOPES

- Required for visualization of placement of YAG fibers and probes
- Pilling Rod Lens Telescopes give superior optics, distal lighting, variety of lengths, sizes and degrees
- Telescopes guides for telescope placement

Telescopes to use with YAG Bronchoscopes

<table>
<thead>
<tr>
<th>YAG BRONCHOSCOPES</th>
<th>TELESCOPES</th>
<th>TELESCOPE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>523176</td>
<td>524014</td>
<td>4.0 mm, 60°, 39 cm</td>
</tr>
<tr>
<td></td>
<td>524037</td>
<td>4.0 mm, Telescope Guide</td>
</tr>
<tr>
<td>523178P</td>
<td>524030</td>
<td>5.5 mm, 60°, 49 cm</td>
</tr>
<tr>
<td>523180P</td>
<td>524000</td>
<td>5.5 mm, 60°, 49 cm</td>
</tr>
<tr>
<td>523182</td>
<td>524010</td>
<td>5.5 mm, 90°, 49 cm</td>
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<tr>
<td></td>
<td>524038</td>
<td>5.5 mm, Telescope Guide</td>
</tr>
<tr>
<td></td>
<td>524050</td>
<td>4.0 mm, 0°, 45 cm</td>
</tr>
</tbody>
</table>

TELESCOPE LOCKING DEVICES

Designed to hold telescopes at a maximum desired depth against our telescope guide, or to lock telescope into a competitive telescope bridge system. The serrated knob is tightened to hold the telescope.

- 524043 2.7 mm
- 524044 4.0 mm
- 524045 5.5 mm
Safety Precautions During Laser Bronchoscopy:
1. As with all laser surgical procedures, protective eyewear must be worn during Laser Bronchoscopy.
2. The CO2 Coupler-Manipulator should be connected to the articulating arm of the CO2 machine prior to the onset of the procedure.
3. The alignment arm of the CO2 machine should be checked prior to the procedure.
4. When attaching the CO2 Coupler-Manipulator to the bronchoscope, check for a snug fitting of the coupler and the bronchoscope.
5. Do not turn on the CO2 machine until the surgeon is ready and directs it to be turned on.

OTHER LASER PRODUCTS AVAILABLE FROM PILLING
- 523230P Articulating Arm Alignment Device
- 523232P Laser Centering Device
- 523234P Far Field Alignment Indicator

TELESCOPE GUIDES
Fits the proximal end of bronchoscopes and esophagoscopes to hold telescope in place. Not supplied with bronchoscope or esophagoscope.
- 524036 For 2.7 mm telescopes, fits 15 mm proximal end of bronchoscopes or esophagoscopes
- 524037 For 4.0 mm telescopes, fits 15 mm proximal end of bronchoscopes or Jackson Esophagoscope
- 524038 For 5.5 mm telescopes, fits 15 mm proximal end of bronchoscopes or esophagoscopes

REPLACEMENT TELESCOPE GUIDE RUBBER CAPS
- 524039 For 2.7 mm telescope, 524036, 5 per pack
- 524040 For 4.0 mm telescope, 524037, 5 per pack
- 524041 For 5.5 mm telescope, 524038, 5 per pack

FLUVOG VENTILATION ATTACHMENT
For use on bronchoscopes with the 15 mm proximal extension. Provides “closed system” bronchoscopes with the use of instrumentation. Tapered fit for easy attachment or removal.
- 502540

FLUVOG TRANSPARENT SLIDES
- 502541 For 502540

INSTRUMENT GUIDE RUBBER CAPS
For Improved Holinger Bronchoscopes or Laser Bronchoscopes Instrument Channel.
- 524042 5 per pack