Laryngoscope Range

A superior range of laryngoscopes to meet all your needs - Quality and Performance for life†

- Diamond Fibrelight System
- Premier Fibrelight and Conventional Systems
- McCoy Range
- Plastic Laryngoscopes
- Single Use Products
  - Crystal™ Disposable Blade
  - LaryGard™ Blade Sheath

Excellence and Innovation
Penlon Laryngoscopes
Six decades of innovation and world-class products

1943 The Macintosh Laryngoscope was a revolutionary design invented by the late Sir Robert Macintosh, Professor of Anaesthetics at Oxford University, working with engineers at Penlon.

1952 Six different laryngoscope blades are listed in the Penlon sales catalogue and Penlon is the first manufacturer to use stainless steel for all parts of the blade.

1968 Penlon launched the world’s first Plastic Laryngoscope.

1972 Penlon designed the world’s first Fibrelight Laryngoscope range.

1988 The innovative Patil-Syracuse Adjustable Handle was produced.

1993 The world’s first levering laryngoscope, the Penlon McCoy was introduced, providing a revolutionary solution for difficult intubations.

2002 Crystal™ Single Use Laryngoscope, the first one-piece disposable laryngoscope blade is launched by Penlon.
Systems Guide and Contents

Fibrelight & Conventional Ranges
including McCoy

Diamond Fibrelight Laryngoscopes and Sets
ISO ‘Green’ System
Bulb is located in the handle.
Handles and blades are interchangeable with other
ISO 7376/3 ‘Green’ System fibrelight components
Page 4

Premier Fibrelight Laryngoscopes and Sets
ISO ‘Red’ System
Bulb is located in the handle.
Handles and blades are interchangeable only with
other ISO ‘Red’ System fibrelight components
Page 6

Premier Conventional Laryngoscopes and Sets
‘Hook-on’ System
Bulb is located in the handle.
Handles and blades are interchangeable only with
other ‘Hook-on’ standards compliant components
Page 7

McCoy Laryngoscopes
ISO ‘Green’, ISO ‘Red’ and ‘Hook-on’ Systems
The original levering laryngoscope for difficult
intubation
Page 8

Plastic Laryngoscopes
Bulb is located in the blade.
Handle and blade are not detachable.
The reusable plastic laryngoscope is
ideal for emergency and military use
Page 7

Single Use Range

Crystal™ Disposable Blade
Penlon Crystal™ Disposable Blades are compatible with handles that conform
to ISO ‘Green’ System requirements (ISO 7376/3)
Page 10

LaryGard™ Blade Sheath
LaryGard™ Sheath fits European
pattern Macintosh blades sizes 2, 3 & 4
(Conventional and Fibrelight)
Page 11
Diamond Laryngoscope Range
Fibrelight Laryngoscopes
(ISO ‘Green’ System, ISO 7376-3)

Brighter light, Premium Quality and Performance for Life†

The Diamond Range is a fully interchangeable, internationally compatible laryngoscope system that sets the standards by which all others are judged

◆ Excellent fibreoptics and gold switch contacts - able to withstand repeated autoclave treatment
◆ Five year guarantee on light guide, and lifetime guarantee† on all blades and handles
◆ Removable light guide design - extends blade life, and allows easier cleaning and polishing
◆ Quality you can trust
◆ Superior polished finish - easy to clean and sterilise
◆ Xenon lamp mounted in handle - no problems with electrical contacts between blade and handle
◆ Cool, bright light - No chance of tissue burns from hot lamps during lengthy intubations
◆ Convenient single size standard Penlon lamp for all handle sizes

MRI Applications
◆ Standard Handle only (plus any blade)
◆ Important - use a paper covered 3 volt lithium battery and non-magnetic spacer to hold the single battery in place

• Battery spacer 52083

NOTE - Penlon does not supply batteries for MRI applications
Diamond Fibrelight Sets
Penlon Laryngoscope Sets provide the clinician with a complete intubation solution in an attractive, protective case

- Miller 3, Miller 2, Seward 1 and Standard Handle in a case 50374
- Macintosh 3, Macintosh 4, Seward 1 and Standard Handle in a case 50375
- Macintosh 1, 2, 3, 4 and Standard Handle in a case 50376

Custom Sets
Any handle and two to four blades

Diamond Handles
- The Standard Handle is suitable for MRI applications (use appropriate batteries, see page 4)
- The Penlight Handle gives improved balance with smaller blades
- The Stubby Handle is designed to facilitate difficult intubation on a short neck or a barrel-chested patient

Blades
Macintosh Fibrelight
Size 1 Infant 50530
95 x 42 mm
Size 2 Child 50531
107 x 42 mm
Size 3 Adult 50532
130 x 42 mm
Size 4 Large 50533
150 x 42 mm

Miller Fibrelight
Size 0 Neonate 50534
76 x 35 mm
Size 1 Infant/Child 50535
102 x 35 mm
Size 2 Child/Adult 50536
152 x 37 mm
Size 3 Large 50537
192 x 37 mm

Seward Fibrelight
Size 1 Infant 50538
110 x 37 mm
Size 2 Child 50539
130 x 42 mm

Robertshaw Fibrelight
Size 0 Neonate 50540
96 x 38 mm
Size 1 Infant 50541
112 x 40 mm

Handles
Penlight 50526
Standard 50525
Stubby 50527
Premier Laryngoscope Range
Fibrelight Laryngoscopes
(ISO ‘Red’ System, ISO 7376/1)

Brighter light, Premium Quality and Performance for Life†

- Manufactured to ISO 9001 and EN 46001
- CE marked
- ‘Lifetime Guarantee’†
- Fast delivery from stock
- Excellent fibreoptics and gold switch contacts designed to withstand repeated autoclaving

Premier Fibrelight Sets
Penlon Laryngoscope Sets provide the clinician with a complete intubation solution in an attractive, protective case

- Miller 3, Miller 2, Seward 1 and Standard Handle in a case
- Macintosh 4, Macintosh 3, Seward 1 and Standard Handle in a case
- Macintosh 4, 3, 2, 1 and Standard Handle in a case

Custom Sets
Any handle and two to four blades

Premier Fibrelight Handles
- The Penlight Handle gives improved balance with smaller blades
- The Stubby Handle is designed to facilitate difficult intubation on a short neck or a barrel-chested patient

Blades
- Macintosh Fibrelight
  - Size 1 Infant 50395
  - Size 2 Child 50396
  - Size 3 Adult 50381
  - Size 4 Large 50384
  - Size 5 150 x 36 mm

- Miller Fibrelight
  - Size 0 Neonate 50388
  - Size 1 Infant/Child 50389
  - Size 2 Child/Adult 50386
  - Size 3 Large 50387
  - Size 4 191 x 26 mm

- Seward Fibrelight
  - Size 1 Infant 50383
  - Size 2 Child 50414
  - Size 3 Adult 50386

- Robertshaw Fibrelight
  - Size 0 Neonate 50415
  - Size 1 Infant 50416

Handles
- Penlight 50378
- Standard 50380
- Stubby 50377
Conventional Laryngoscopes

'Hook-on' System
- Manufactured to ISO 9001 and EN 46001
- CE marked
- Lifetime Guarantee
- Fast delivery from stock
- Standard Handle is waterproof for easy sterilisation

Blades

Macintosh Conventional
- Size 1 Infant: 95 x 37 mm
- Size 2 Child: 101 x 37 mm
- Size 3 Adult: 130 x 38 mm
- Size 4 Large: 151 x 39 mm

Miller Conventional
- Size 0 Neonate: 78 x 27 mm
- Size 1 Infant/Child: 102 x 27 mm
- Size 2 Child/Adult: 151 x 27 mm
- Size 3 Large: 195 x 29 mm

Seward Conventional
- Size 1 Infant: 107 x 25 mm
- Size 2 Child: 130 x 31 mm

Robertshaw Conventional
- Size 0 Neonate: 96 x 29 mm
- Size 1 Infant: 113 x 29 mm

Wisconsin Conventional
- Size 0 Neonate: 79 x 28 mm
- Size 1 Infant: 102 x 29 mm
- Size 2 Child: 132 x 34 mm
- Size 3 Adult: 160 x 32 mm

Polio Macintosh Conventional
- Size 3 Adult: 150 x 48 mm

Left Handed Macintosh
- Size 3 Adult: 134 x 38 mm

Handles
- Penlight: 52145
- Standard: 52089
- Stubby: 52087

Special Applications

Adjustable Handle
- Stubby design for use with any Premier Conventional 'Hook-on' blade
- Four locked positions
- Ideally suited for obstetric and other difficult intubations
- Adjustable Handle: 52093

Plastic Laryngoscope
- Ideally suited for intubation training, ambulance and emergency services, field hospitals and doctors’ surgeries
- MRI (Magnetic Resonance Imaging) compatible
- One piece, robust construction
- Lightweight and easy to use
- Adult - Standard type handle with Macintosh pattern blade, extended at the heel to combine sizes 3 & 4
- Infant - Penlight type handle with Seward pattern blade, suitable for neonates and infants
- Plastic Laryngoscope, Adult: 52082
- Plastic Laryngoscope, Infant: 52081

MRI Applications
- Important - use a paper-covered 3 volt lithium battery and a non-magnetic spacer to hold the single battery in place
- Battery spacer, Adult: 52083
- Battery spacer, Infant: 52084

NOTE - Penlon does not supply batteries for MRI applications
McCoy Laryngoscope Range
The World Leader for Difficult Intubation

Over ten years of refinement and experience guarantees performance you can trust

- Unique, high quality levering tip
- Elevation of the epiglottis with less overall movement

The McCoy provides the clinician with greater flexibility and improved control in a wide selection of difficult intubation cases such as:

- Forward displacement of the Larynx
- Forward or prominent upper teeth
- Backward displacement of the tongue
- Decreased neck movement
- Cervical spine injuries
- Decreased mouth opening
- Recessive mandible
**Lifetime Guarantee**
**All size 1 & 2 blades are Seward style**
**All size 3 & 4 blades are Macintosh style**
**All McCoy blades come in an attractive presentation case (pictured)**

**System Features and Benefits**
Diamond Range - see pages 4 & 5
Premier Range - see pages 6 & 7

<table>
<thead>
<tr>
<th>Diamond Fibrelight McCoy</th>
<th>ISO ‘Green’ System</th>
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<tbody>
<tr>
<td>Macintosh Fibrelight</td>
<td></td>
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<tr>
<td>Size 3 Adult</td>
<td>50657</td>
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<td>Size 4 Large</td>
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<td>Size 3 Adult and Standard Handle</td>
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<td>Size 4 Large and Standard Handle</td>
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<th>Premier Fibrelight McCoy</th>
<th>ISO ‘Red’ System</th>
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<td>Size 1 Infant</td>
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<td>Size 2 Child</td>
<td>50466</td>
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<td>Size 1 Infant and Penlight Handle</td>
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<td>Size 2 Child and Standard Handle</td>
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<td>Macintosh Fibrelight</td>
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<tr>
<td>Size 3 Adult</td>
<td>50468</td>
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<tr>
<td>Size 4 Large</td>
<td>50470</td>
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<tr>
<td>Size 3 Adult and Standard Handle</td>
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<td>Size 4 Large and Standard Handle</td>
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<table>
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<th>Premier Conventional McCoy</th>
<th>‘Hook-on’ System</th>
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<td>Size 1 Infant</td>
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<td>Size 2 Child</td>
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<td>Size 1 Infant and Penlight Handle</td>
<td>50455</td>
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<td>Size 2 Child and Standard Handle</td>
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<tr>
<td>Macintosh Conventional</td>
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<td>Size 3 Adult</td>
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<td>Size 4 Large</td>
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<tr>
<td>Size 3 Adult and Standard Handle</td>
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<tr>
<td>Size 4 Large and Standard Handle</td>
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Lifetime Guarantee†

All size 1 & 2 blades are Seward style
All size 3 & 4 blades are Macintosh style
All McCoy blades come in an attractive presentation case (pictured)

Premier Fibrelight McCoy
ISO ‘Red’ System

Premier Conventional McCoy
‘Hook-on’ System
Single Use Products for intubation
Crystal™ and LaryGard™

Increasing evidence indicates that laryngoscope cleaning and disinfection procedures are not 100% effective against bacteria, viruses and prions originating in the mouth*

Crystal™ Disposable Blade and LaryGard™ Blade Sheath are low cost, superior solutions designed to prevent cross-infection without affecting the clinician’s intubation technique

Crystal™ Disposable Laryngoscope Blade
◆ Strong polycarbonate alternative to metal blades
◆ High specific and general illumination
◆ Smooth, clear, light-transmitting blade
◆ Superb visualisation through revolutionary ‘Crystal’ technology
◆ Fits all European ISO ‘Green’ System handles
◆ Available sizes: Macintosh 2, 3, 4
               Miller 0, 1, 2, 3

MRI Applications
◆ Standard Handle only (plus any blade)
◆ Important - use a paper covered 3 volt lithium battery and non-magnetic spacer to hold the single battery in place

• Battery spacer 52083

NOTE - Penlon does not supply batteries for MRI applications

Crystal™ Macintosh
(Box of 20)
Size 2 Child 50552
Size 3 Adult 50553
Size 4 Large 50554

Crystal™ Miller
(Box of 20)
Size 0 Neonate 50550
Size 1 Infant/child 50551
Size 2 Child/adult 50555
Size 3 Large 50556

*REFERENCES
JR Hall. ‘Blood contamination of equipment...’ Anaesthesia and Analgesia. 1994; 78:1136-9
LaryGard™ Laryngoscope Blade Sheath

- High quality sheath made from medical grade PVC
- Minimum light reduction and maximum sensitivity
- Fits all European type Macintosh 2, 3 & 4 (Conventional and Fibrelight) blades
- Low cost, easy to use
- Infection control requiring no change in technique
- Fits securely over your existing metal laryngoscope blade
  - Easy to fit
  - Ready to use in seconds
  - Secure during use
  - Easy to remove

LaryGard™ - Easy to Use
1. Prepare the laryngoscope for use
2. Fit the LaryGard™ fully over the blade and use the laryngoscope in the normal manner
3. Remove from blade
4. Dispose of in accordance with your local and national procedures

Fitting Procedure

LaryGard™ Macintosh
(Box of 50)

<table>
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<tr>
<th>Size</th>
<th>Code</th>
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<tbody>
<tr>
<td>2 Child</td>
<td>50509</td>
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<tr>
<td>3 Adult</td>
<td>50500</td>
</tr>
<tr>
<td>4 Large</td>
<td>50515</td>
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</tbody>
</table>

# LaryGard not for sale in the USA. Trademark registration applied for.
Laryngoscope Maintenance

Sterilisation
Blades and handles can be sterilised by autoclave at 134°C, or soaking. Always refer to the relevant User Instruction leaflet supplied with the laryngoscope

Spares and Repairs
 Blades and Handles - Please contact the Service department for details

Replacement Bulbs

Conventional Bulbs
55091 Pack of five
55092 Pack of five (Miller/Wisconsin blades sizes 0 & 1)

Fibrelight Bulbs
55094 Pack of five (Fibrelight ‘Red’ handles only)
50542 Pack of five (Diamond ‘Green’ handles only)

Batteries
To ensure optimum performance use Alkaline Manganese batteries. Penlon does not supply replacement batteries

Penlight Handle - 2 x LR6
Standard Handle - 2 x LR14
Stubby Handle - 2 x LR6

†

Lifetime Guarantee
Penlon Laryngoscopes are guaranteed throughout their normal useful life against mechanical failure due to defects in design, materials or workmanship. The guarantee does not apply to lamps, batteries or plastic laryngoscopes.

Fibrelight guides are guaranteed against total light failure within a period of five years. However note that after many sterilisations the light output of the fibre bundle may decrease.

Information contained in this leaflet is correct at the date of publication. The policy of Penlon Ltd is one of continued improvement to its products. Because of this policy Penlon Ltd reserves the right to make any changes, which may affect the information in this leaflet without giving prior notice.