

# In Service

FREE Digital Voice Recorder  
Page 8.

ALSO IN THIS ISSUE:

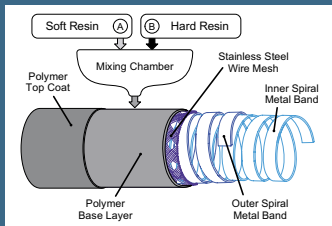
**The Midas Touch**

Equipment should have the right "feel." Page 3.



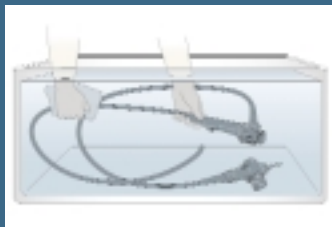
**Skin Deep**

A look at the outer layer of an Olympus insertion tube. Page 4.



**Avoiding Fluid Invasion**

Proper leakage testing protocols in review. Page 6.



## X-RAY VISION

### Looking under the skin of an insertion tube

More than 20% of the endoscopes sent to Olympus for repair have evidence of third party modifications. The third most common modification on a flexible Olympus endoscope is the replacement of the original manufacturer's insertion tube with a third party part.

Since the internal structure of an insertion tube is not visible, many users of Olympus equipment may not be aware when this vital part of their instrument has been modified. If you or your staff experience any changes in procedural performance of an endoscope

after repair (such as increased rigidity or floppiness), the scope may have been modified by a third party vendor.

*"It is, without question, the mechanical characteristics of the insertion tube that have the greatest impact on the speed and ease with which an endoscopist can insert a colonoscope."*

David E. Barlow, Ph.D.  
Director — Technology Assessment  
Olympus America Inc.

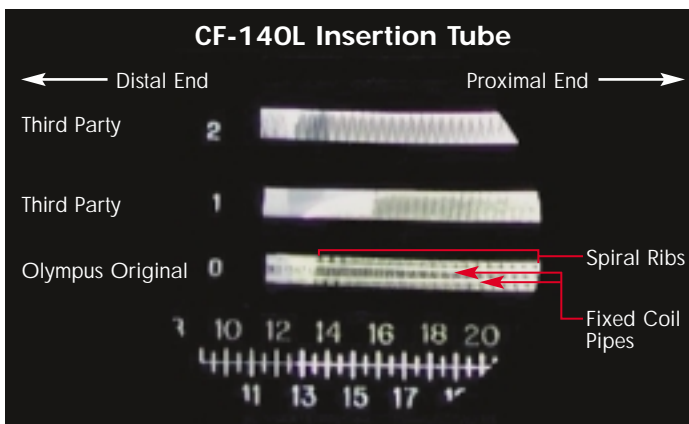
To fully comprehend the impact third party tubes have on scope performance, it's helpful to understand the

architecture of an Olympus insertion tube. As the world leader in endoscopy, Olympus has spent an enormous amount of effort developing the optimal insertion tube—one that minimizes outer diameter while providing adequate space inside for the endoscope's delicate components to move freely past each other without damage during angulation. The Olympus design achieves these notable features while maintaining the mechanical characteristics so critical to good performance.

CONTINUED ON PAGE 2...

### The Difference in Black & White

While not visible from the outside, it is simple enough to see the internal structural differences between a third party replacement insertion tube and an Olympus original by taking an x-ray of the two side by side:



### Sample Comparison

**Third Party:** One size fits all (100, 130, 140 and even the "T" scope). No fixed coil pipes. Allows internal elements to rub together.

**Olympus:** Structure (spiral ribs) increases in density from distal end to proximal end. Fixed coil pipes house the angulation cables to prevent damage from elements rubbing together.

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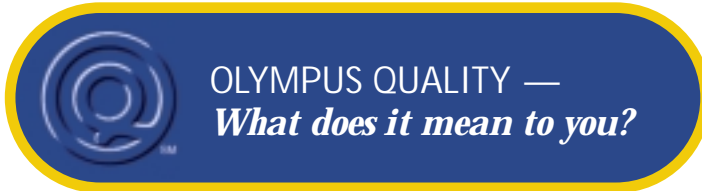
See details on page 8.

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The Quality inside Olympus.  
THE Q INSIDE THE O<sup>SM</sup>



OLYMPUS QUALITY —  
*What does it mean to you?*

**At Olympus, quality means always keeping patient safety in mind, whether we're developing innovative solutions, delivering superior customer service or performing certified repairs. What does it mean to you?**

### Realizing full integration for best of breed solutions...

"The collective efforts of all the Olympus engineers, research and development, sales, marketing and education sectors responsible for making the Integrated EndoLab™ a reality have given us physicians the best platforms to make new medical breakthroughs for the sake of our patients."



*Kenneth Chang, MD, Executive Director, Comprehensive Digestive Disease Center, Associate Professor of Medicine, University of California, Irvine, CA*

### Having one less thing to worry about when illness gets personal...

"My grandmother died of colorectal cancer, so when I noticed a few disconcerting symptoms in my own body at age 45, I knew I had to act. Immediately. I contacted one of my Olympus colleagues for a referral to a highly respected gastroenterologist using all state-of-the-art Olympus equipment. I was admittedly afraid, but only of the results. With 28 years working at Olympus, I had the utmost confidence in our equipment. The result? Stage three colorectal cancer. The good news is I'm going on two years cancer free and feeling very lucky. Lucky to be alive and grateful to work for a company focused on partnering with the endoscopic community to find ever better ways to prevent this deadly disease and promote public awareness."



*Deborah Deery, Manager—Meetings & Exhibits, Olympus Medical System Group, Melville, NY*

**For more information about "The Q inside the O" and our promise to never compromise on quality, select [A] on page 8.**

"X-RAY" CONTINUED FROM PAGE 1...

The tube itself must be both flexible and highly elastic. Flexibility in the distal end provides easy and safe navigation through the internal anatomy. On the other hand, the insertion tube also requires sufficient elasticity to allow intestinal loops to pop out easily when the endoscope is pulled back and adequate column strength to prevent buckling of the insertion tube and the reformation of loops as the instrument is advanced.

The combination of flexibility and elasticity has been perfected by Olympus through two mechanisms: the internal architecture of the tube itself and the polymer layer that covers its exterior. The design of the polymer layer is explored further on page 4 (see "Eddie's Corner"), so we'll confine our discussion here to the interior architecture of the tube.

The skeleton or underlying structure of an Olympus insertion tube varies depending on the intended use of the endoscope. The interior design of an Olympus scope for use inside the lower G.I. tract is comprised of two interlocking crisscross patterned coils, designed to stand up to the frequent torque the endoscopist applies to the instrument as he inserts it. For the less tortuous upper G.I. tract, Olympus insertion tubes are designed with a unidirectional coil with no crisscross pattern. Third party repair companies may substitute a type of unidirectional coil in their replacement insertion tubes for colonoscopes as well, which does not provide a reliable structure for these lower G.I. instruments.

CONTINUED ON PAGE 6...



IN PURSUIT OF QUALITY

# THE MIDAS TOUCH

*There is nothing like being at the top of your game, whether it's in the endoscopy suite or out on the green.*

*But it is hard to achieve the Midas touch when your equipment just doesn't have the right feel.*

While we can't claim to help your golf score, we can keep your Olympus endoscopy equipment performing up to par.

Safety, reliability and functionality. Those are the key

components that go into the design of every Olympus endoscopy part. It's technology that has been perfected over a 30-year history.

Make sure to choose Olympus repair service and avoid the hazards of third party stop-gap modifications.

No third party repair vendor has authorized access to our proprietary tools and test

fixtures, our patented lubricants and lenses, our certified parts and technical expertise. If you value the qualities that an Olympus scope delivers and you wish to maintain them, we urge you to closely assess how your scopes are being repaired and by whom.

Olympus quality: Original parts. Certified technicians. Proven processes. Only Olympus can bring your endoscopes back to original performance specifications.

Sound good? Register to receive updates on Olympus repair service. You'll also get a chance to win one of 10 Olympus W-10 Digital Voice Recorders. See page 8 for details. **[S]**

**FREE DIGITAL VOICE RECORDER!**  
(See page 8.)



*“Endoscopists and endoscopy unit managers should be aware of the differences in regulatory oversight, certification, and parts and materials sources when considering endoscope repair options. They should also acknowledge the potential for suboptimal endoscope repair to affect endoscope performance, durability, overall costs, and patient safety. Incidents that impact patient safety attributed to suboptimal repair should prompt MDR submission to the FDA’s Office of Surveillance and Biometrics.”*

Ginsberg GG, Barkun AN, Bosco JJ, Burdick JS, Isenberg GA, Nakao NL, Petersen BT, Silverman WB, Slivka A, Kelsey PB. Technology Status Evaluation Report; Endoscope Repair by Original Equipment Manufacturers and Independent Service Organizations, January 2003; Gastrointestinal Endoscopy 2003;57:6, pp. 639-642.

**For a reprint of this report, please select [B] on page 8.**

**BEWARE OF THE ENDOSCOPE THAT “JUST DOESN'T FEEL RIGHT.”**

If it doesn't, it might be because of the inevitable results of short-term compromises due to third party repairs. No matter what anyone tells you, only Olympus authorized technicians have certified replacement parts. Only Olympus can return your scope to its original certified condition. Only Olympus can give you that “feel.” Only Olympus.

Never compromise on things that could affect patient safety.

THE QUALITY INSIDE OLYMPUS. THE Q INSIDE THE Q™



For a complete list of Olympus repair facilities, visit [olympus.com](http://olympus.com)



**OLYMPUS**

# EDDIE'S CORNER

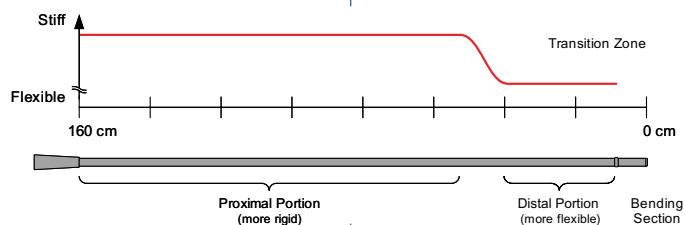


*With 29 years at Olympus, Eddie Garcés, our Executive Director of Endoscopy Service, is the resident guru on all facets of endoscopic repair.*

## Sometimes Beauty is Skin Deep

In this issue's cover story (X-Ray Vision, page 1), we explore how the internal architecture of third party insertion tubes differs significantly from Olympus originals. The same holds true for the

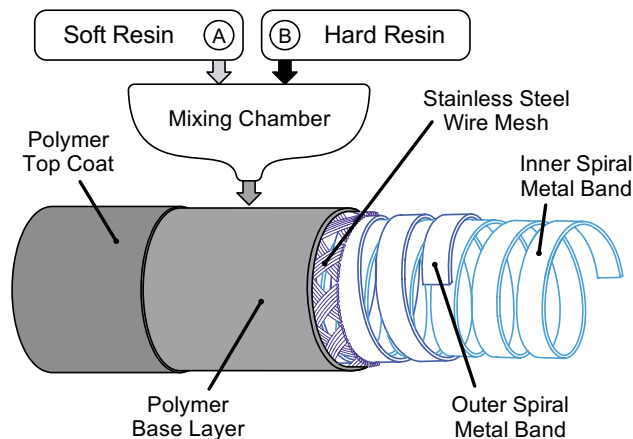
proximal end. This proprietary polymer mix is designed to work with the Olympus insertion tube's underlying architecture. The softer distal portion allows atraumatic navigation of the colon while the increasingly stiffer proximal end provides maximum



exterior, or skin if you will, of the insertion tube. The flexibility of the outer-most layer of an Olympus insertion tube is varied throughout its length, with the distal end being significantly more flexible than the proximal portion of the tube, providing the endoscopist with optimal levels of both flexibility and control.

To create this variation, the formulation of the tube's outer polymer layer is changed as it is extruded over the wire mesh during manufacturing. A softer resin is applied to the distal end and gradually mixed with increasing amounts of a harder resin toward the

control—control necessary for guiding the instrument and preventing intestinal loops from reforming during a procedure.



Without this variation in stiffness, procedural performance is greatly compromised. Olympus endoscopes that have been modified with third party insertion tubes often feel either overly rigid—like steering a car with a wide turning radius—or so floppy they behave like a wet noodle. The beauty of the Olympus design is that it gives the endoscopist the best of both worlds with no compromise to the safety, reliability or performance of the instrument.

Unlike generic third party insertion tubes, our design represents more than 30 years of innovative Olympus engineering built on insight from the world's leading gastroenterologists. Olympus insertion tubes used in our repair processes are exactly the same as the originals—built by the Olympus factory to conform to precise equipment specifications. It's the quality inside Olympus. Accept no substitutions!

*Eddie*

by THE WAY...

Other Olympus News

## Instant Gratification

**The Olympus School of Digital Photography is Coming to a City Near You**

Digital technology has changed the way we capture and view the world. Instantly. Now you can learn from the experts how to use this new technology to the best advantage through the Olympus School of Digital Photography. We'll cover the entire digital photo process—from pixels to printing—in one fun, educational class. From beginner to professional, PC user to Mac, or Olympus camera owner to non-Olympus camera owner (and even if you don't own a digital camera at all), these classes are sure to pique your interest and become your most important digital accessory yet. So, broaden



your digital horizons and register for a class near you... no camera required. Visit [www.olympusphotoschool.com](http://www.olympusphotoschool.com). While you're online, don't forget to check out all of our other digital learning resources. This is one course that's guaranteed to provide instant gratification. IS

## Olympus Partners with *America 24/7*, the Largest Photography Project in History

By Chris Sluka

Olympus reunited with Rick Smolan and David Elliot Cohen, original creators of the highly acclaimed *Day in the Life* series of photography books, for *America 24/7*, the largest collaborative photography event in history.



John Isaac captures a portrait of third-generation coal miner David Bruce Cox in Williamsburg, Kentucky, May 16, 2003.

The project involved 1,000 of the world's most talented photojournalists—equipped with state-of-the-art Olympus C-5050 Zoom 5.0 megapixel digital cameras and Lexar high speed digital memory—along with an army of participating amateurs from the American public. During an epic one-week shoot in May 2003, these photographers used digital photography to document American life in the new millennium.

“Olympus is demonstrating its commitment to digital photography and all that it envelops by helping to bring the ‘digital experience’ to consumers in a very approachable way,” said Mark Gumz, President and COO, Olympus America Inc. “Introducing Americans from coast-to-coast to the thrill, excitement and possibilities of digital photography is what this project is all about.”

The best imagery from this event will be produced in *America 24/7*—a spectacular 320-page, large-format book scheduled for publication by Dorling Kindersley in November 2003. In addition, 52 large-format illustrated volumes will be published in November 2004, celebrating each individual U.S. state, with special volumes devoted to New York City and Washington, D.C.

“*America 24/7* is designed to be a landmark series in documentary photography and the watershed event of the new digital photography age,” commented Rick Smolan, a former *Time* and *National Geographic* photographer. “Since the book will use digital images exclusively, it was important for us to partner with a company that



Eli Reed photographs Manzanare's sax player stage-side in Santa Fe, New Mexico, May 17, 2003.

shared our vision about the importance of digital photography in all of our futures. Having worked with Olympus before, we knew they were the company that most closely aligned with our vision for this book: that digital photography is changing the photographic experience, and that the technology is now accessible enough for everyone to use,” explained Smolan. **IS**



## EDUCATION

### Online Courses Now Available!

Olympus University is now offering a variety of online courses that allow you to earn up to 10.3 O.R. contact hours and up to 11.6 G.I. contact hours. These modules are also available on CD-ROM. Visit the university website or call our hotline for more details.

### Campus Highlights

#### G.I. & O.R. Strategies for 2003

*Solutions for the Practicing Professional*

8 contact hours (5 G.I. specific contact hours available).

Upcoming dates:

Aug. 21, Seattle, WA  
Oct. 2, Philadelphia, PA  
Nov. 7, Green Bay, WI



For current Olympus course information and details: [www.olympusuniversity.com](http://www.olympusuniversity.com)  
800-645-8100 ext. 6200

### Maximizing Your Endoscope Image & Performance

5 contact hours.

Upcoming dates:

Aug. 14, Denver, CO  
Aug. 15, Omaha, NE  
Aug. 20, Nashville, TN  
Aug. 21, Chattanooga, TN  
Sept. 4, Las Vegas, NV  
Sept. 16, Winston-Salem, NC  
Sept. 17, Raleigh, NC  
Sept. 18, Charlotte, NC  
Sept. 18, Rochester, NY  
Oct. 3, Chicago, IL  
Oct. 7, Jacksonville, FL  
Oct. 9, Oakland, CA  
Oct. 9, Cincinnati, OH  
Oct. 10, Tampa, FL  
Nov. 4, Trenton, NJ  
Nov. 18, Miami, FL  
Nov. 20, Melbourne, FL  
Dec. 9, Atlanta, GA

### EUS Workshops for Nurses

#### Indiana University, IN

12.4 continuing education hours, \$150.00

Sept. 11–12

More Information:

Edith Collins, RN, EdD

Ph: 317-278-8223

e-mail: [edicolli@iupui.edu](mailto:edicolli@iupui.edu)

#### Medical University of South Carolina (MUSC), Charleston

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Tracy Farber

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e-mail: [farber@muscd.edu](mailto:farber@muscd.edu)

## REPROCESSING *tips*



### Leakage Testing

Perform leakage testing prior to reprocessing each scope. Omitting this step or performing it improperly can lead to fluid invasion—turning a minor repair into a major one. It can also create an infection control hazard by allowing microbes to pass in or out of the scope through an undiscovered tear. Every original equipment manufacturer has different protocols for leakage testing. Post the leakage testing protocols in your reprocessing area, and make sure you and your staff are familiar with them.

#### For Olympus scopes, follow these protocols:

- Perform leakage testing prior to reprocessing
- Check performance of leakage tester and air supply
- Ensure water resistant cap on videoscope is dry and functioning properly
- Turn on MU-1 or air supply
- Connect scope to leakage tester unit
- Pressurize scope
- Immerse entire scope in clean water
- Perform a visual inspection for leaks

- Manipulate angulation controls and switches
- Remove scope from water and turn off MU-1 or air supply
- Disconnect leakage tester from air supply to depressurize scope

#### Common leakage testing errors:

- Using incorrect type of leakage tester unit
- Using detergent solution instead of clean water
- Not checking integrity of the water cap
- Using a wet water resistant cap
- Not fully pressurizing the scope prior to immersion
- Not completely immersing the scope
- Using a sink that is too small
- Failing to angulate knobs in all directions or manipulate switches
- Not completely depressurizing the scope
- Improperly sequencing the leakage testing steps

#### Checking the leakage tester unit:

Inspect the air supply tube for:


- Cracks
- Missing or worn o-rings
- Missing or worn pins

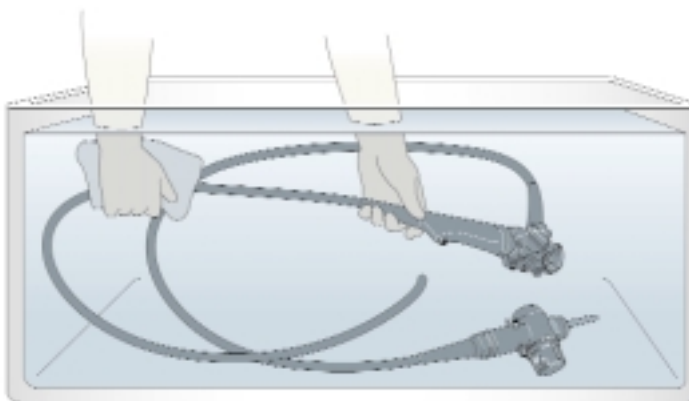
Check the air supply source to ensure:

- Water resistant cap is correctly and tightly connected to the scope's electrical connector
- The leakage tester connector cap is tightly connected to the water resistant cap

#### Areas where leaks can occur with water resistant caps:

- Cracks
- Seals and areas where glue has deteriorated
- Missing screws
- Missing or loose leakage tester port pins

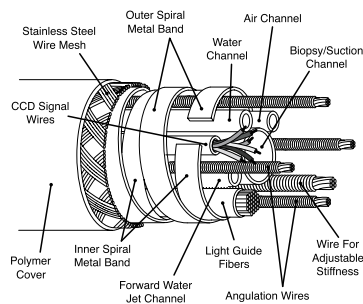
If you discover a leak in your endoscope, **LEAVE THE LEAKAGE TESTER "ON"** and follow Olympus instructions for proper handling and shipping. Endoscopes must be reprocessed prior to returning them for repair. 




"X-RAY" CONTINUED FROM PAGE 2...

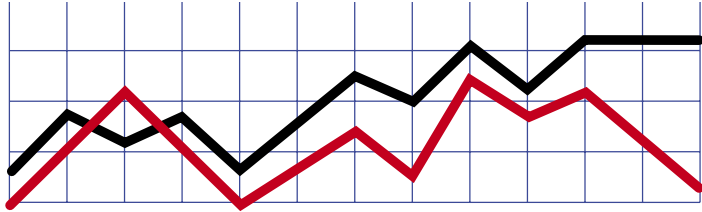
In an Olympus insertion tube, an inner spiral metal band serves as the tube's structural ribs, with these ribs increasing in density from the distal to the proximal ends. This metal band is covered by a stainless steel wire mesh onto which is extruded a proprietary polymer layer.

As discussed on page 4, this polymer layer also has a graduated rigidity along its length. The end result is an insertion tube that delivers optimal levels of graduated rigidity and flexibility while protecting the endoscope's internal components.



Replacement of an Olympus insertion tube with a third party part can have considerable impact on endoscope function as well as patient safety and comfort.

**Make sure you know who is performing the repairs on your endoscope and insist on keeping your Olympus equipment 100% Olympus.** 



# COST CONTAINMENT *Strategies*

*Reducing annual costs  
through long- and short-term  
projects while maintaining  
quality patient care*



## Explore Service Agreement Options for Annual Cost Savings on Endoscopy Equipment

Endoscopes are complex medical devices that can represent a significant capital investment. Proper maintenance and repair of these delicate instruments is essential to ensure their ongoing reliability and precision performance. As part of your purchase decision, make sure to carefully consider the repair service options available through the original equipment manufacturer. For Olympus endoscopy equipment, there are a variety of service protection plans which can be tailored to fit your needs and budget.

### Why Choose an Olympus Service Plan?

An Olympus service program ensures that all repairs performed on your equipment are completed to factory specifications and that there is no disruption to your warranty coverage. It also saves your facility money over the long-haul by protecting the usable life of the equipment and reducing your incidence of repeat repairs.

Moreover, since a service plan incorporates repair authorization, it eliminates the hassle of getting approval for every repair expenditure, which means faster repair turnaround. All Olympus plans are designed to eliminate the risk of excessive repair expenses and downtime through preventive maintenance and training.

### Don't Forget the Hidden Costs

"Cheaper" third party repairs can end up costing more over the life of the equipment. They also can tax your internal resources. Often third party repairs result in increased incidence of repairs, which means more downtime for the equipment, more staff resources dedicated to the repair process and more hassles relative to patient/physician scheduling.

### Figuring Out Which Plan is Right for You

To help you determine what service protection plan is best for your facility, an Olympus sales and lab efficiency consultant will first visit your facility to assess equipment utilization rates, asset management plans and anticipated procedural growth as well as other cost factors and potential savings opportunities. From an annual cost containment and budgeting standpoint, two of the most attractive options from Olympus are the Full Service Plan and Cost Per Procedure<sup>®</sup> financing for new equipment.


### The Olympus Full Service Plan

The Full Service Plan is a comprehensive maintenance and repair program for Olympus endoscopy equipment. Besides the wealth of services associated with this plan, it is an excellent vehicle for your cost containment efforts. With no annual cap on service and repair coverage, this plan ensures you'll have no unanticipated cost overruns for repair services during your contract period. As further protection, this plan extends the warranty period for repairs.

### Olympus Cost Per Procedure<sup>®</sup> (CPP) Financing

The Olympus CPP program is a usage-based financing arrangement for acquiring new equipment. A nice feature of the CPP program is that service coverage can also be

calculated into the cost-per-use fee. This program is particularly attractive for hospitals, ambulatory surgery centers and physician practices that wish to match revenues and expenses on a procedural basis. CPP financing makes it easier to control cash flow and address reimbursement pressures. Payments are made while you generate income, facilitating positive cash flow and enabling you to maintain a predictable margin. Furthermore, with CPP you can add equipment and change your monthly CPP fee to grow as you go.

For more information about the service options available through Olympus, visit [www.olympusamerica.com](http://www.olympusamerica.com) or contact your sales representative to discuss your specific requirements. 



## Olympus Endoscopy Request Form

### Mail:

Customer Relations  
Olympus Endoscopy Service  
2400 Ringwood Avenue  
San Jose, CA 95131-1700

### Fax: (now toll free)

800.878.3691

### E-mail:

in-service@olympus.com

### Phone:

800.645.8100 ext. 6331  
(Leave a detailed request and mailing/contact information.)

### Olympus Customer Care: Endoscopy Medical Products

800.848.9024  
Fax: 800.228.4963

### Surgical Medical Products

800.548.5515  
Fax: 800.833.1482

Original parts. Certified technicians. Proven processes.  
Only Olympus can bring your endoscopes back to original performance specifications. Quality counts.



Register online by August 31, 2003, to receive updates on Olympus repair services.

You'll also get a chance to win one of 10 Olympus W-10 Digital Voice Recorders, featuring up to 3 hours of audio and the ability to visually document your files and connect to your PC via USB.



Free Digital Voice Recorder!



Check the boxes below for the information you are requesting:

- A The Olympus Quality Commitment
- B Technology Status Evaluation Report; Endoscope Repair by Original Equipment Manufacturers and Independent Service Organizations. Reprint from *Gastrointestinal Endoscopy* 2003.

Sound good? Log on at:  
[www.olympusamerica.com/qualitypromo](http://www.olympusamerica.com/qualitypromo)

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