



The Alternative Source

SEPTEMBER 2012
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The Leader in Replacement Parts for Healthcare Equipment Since 1972

Introducing "A Must Have" When Cleaning Sterilizers...

It's the RPI Sterilizer Cleaning Kit!

If you service sterilizers, the RPI Sterilizer Cleaning Kit (RPI Part #RPK791) is a "must have"!

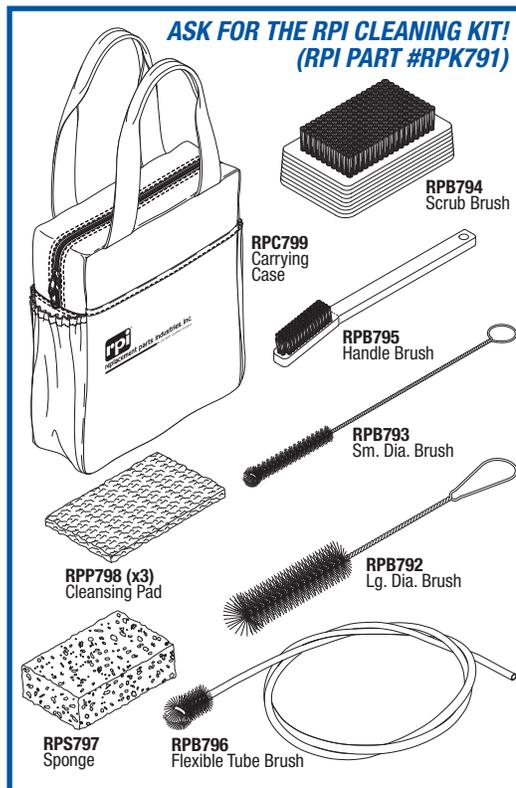
Each item in the Kit was carefully selected for a specific job in cleaning various areas of a sterilizer – from the outside casing to small valves inside the device. Items come in a sturdy, black canvas Carrying Case (RPI Part #RPC799) with inside slots for each tool and side pockets designed to fit RPI Sterilizer Cleaners (16 oz. bottles) for easy transport.

Starting with the **Flexible Tube Brush (RPI Part #RPB796)** (41" long with a 7/8" dia. x 1-1/8" lg. Nylon® bristle head), this brush can maneuver the tight spaces and corners that are found in condensers, manifolds, traps, valves and plumbing.

The **Large Diameter Brush (RPI Part #RPB792)** (11-1/2" long with a 1-3/4" x 4-1/2" lg. bristle head with radial tip) is ideal for cleaning water reservoirs, bellows housings, and large port valve assemblies.

And the **Small Diameter Brush (RPI Part #RPB793)** (8" long with a 3/8" dia. x 1-3/4" lg. radial brush head) works well when cleaning door bellows housings, solenoid valve bonnets and small valves.

Also included is a set of three light duty **Cleansing Pads (RPI Part #RPP798)** (6" x 9") made from non-woven fiber that is ideal for cleaning stainless steel, chrome, copper, porcelain and ceramic



surfaces. And, the hand-held **Scrub Brush (RPI Part #RPB794)** (2-1/2" x 4-1/4") is great for cleaning door covers, instrument trays/racks, cassettes, reservoir surfaces and sterilizer casings/base platforms.

For those hard to clean U-Channels, V-Channels, and threads, the **Handle Brush (RPI Part #RPB795)** (6-5/8" long with 1-3/4" lg. Nylon® bristles) is also included with a set of three cellulose **Sponges (RPI Part #RPS797)** (4-14" x 6" x 1-5/8" thk.).

All parts are also sold separately. It's the **RPI Advantage!** and another exclusive from RPI.



IT'S READY TO USE!

**RPI SHOPPING CART ON
WWW.RPIPARTS.COM**

It's the RPI Shopping Cart and it's now available and ready to use!

Simply go to the RPI website and look for the bright yellow and blue RPI Shopping Cart icon – it's located in the upper right hand corner of each website page. Then login and begin your shopping with ease.

Once you have completed your login, you will note that at the bottom of each part's page, you can view pricing for each quantity break RPI offers, and then add the part directly to your cart. At any time you would like to view your cart items, just click the Shopping Cart icon.

When you are ready to check-out, you can even attach a document to your order if necessary. Now that's a great feature especially for our customers who drop ship orders.

Within minutes of submitting your order, you will receive a confirmation email. And by next business day, you can view all of the details about your order including the tracking number.

One of the best features of our Shopping Cart is that you can review all your orders at anytime by going to "My Account" from the login page. Simply click the "Orders" tab.

We hope you enjoy the cart, and look forward to hearing from you about our newest website feature.



*Ira Lapidès
CEO & President
Replacement Parts Industries, Inc.*

FROM THE DESK OF THE PRESIDENT

One of the primary tenants of ISO9001, the international standard for quality management systems, is continuous improvement. This concept requires the certified company to put in place processes that allow the company to always be looking for ways to improve itself, be it in service, products, internal processes, or any other aspect of the business.

RPI has been ISO9001 certified since the year 2000, but I think we have always had a philosophy of continuous improvement. My parents, who founded the company more than 40 years ago, have had since the beginning an appreciation for learning and curiosity, and looked to hire individuals that had this same trait. This mindset of questioning, searching for answers and better ways of doing things was instilled in the company's value system, and has helped RPI to continue to grow throughout our history.

That is why you see us trying new things, updating our website, and making improvements in our products and services. We do our best to listen to our customers, who have so many great ideas, and, if we can implement those ideas, be it new parts, marketing concepts (or corrections), or whatever else it might be, we will do it.

An example of a process set up to allow a focus on continuous improvement is our RGA process. We know that we are not perfect, and we do our best to catch everything possible in our QC department, but every so often a defective part is shipped to a customer. When a customer needs to return a defective part, we direct the call to one of the engineers in our Tech Support Department, because those same individuals are also the ones who do the engineering of the parts. This gives us a direct feedback loop, helping us to catch potential issues and improve upon our parts.

Another aspect of continuous improvement is simply in our operations. We are constantly looking for ways to do things better and to be more productive, allowing us to keep our costs down, and as a result, provide competitive pricing on our parts.

Achieving continuous improvement is a challenge for every company. Many businesses and their staff get to a comfort level with their products, services, and processes, and don't want to exert the energy required to look for ways to improve. Overcoming the inertia of being settled can be difficult, so if nothing else, becoming ISO9001 certified helps to push the organization a bit harder.

Of course, we will continue to look for ways to improve upon everything that we do, so please keep your suggestions coming. It's always helpful, and always good to hear.

THE RPI FAMILY

Hi! My name is Anthony Thompson.

I am the newest member of the Warehouse and Shipping Team here at RPI. I was born and raised in the great state of Indiana. After graduating high school, I moved to Kansas City for several



years. It is from there that I received technical training in audio engineering and computer hardware from Kansas City Community College.

I have worked in all aspects of warehousing for twelve years. And, I sometimes build computers and work with recording engineers on the side.

I moved to California a few years ago following the hard-hitting job recession in the Midwest. I started working for RPI that same year. I enjoy working in a place where your hard efforts create much needed high quality American manufactured products. This company really cares about our customers and everyone here works together to give them great service and premium parts.

In my spare time I like to skateboard, play frisbee golf, and homebrew beer. I am a member of the Maltose Falcons homebrew society which is America's oldest homebrew group. They have competitions, festivals and keep its member up-to-date on the latest news about homebrewing.

Perhaps what I am most proud of is my beautiful six year old daughter, named Leota. She has a sense of humor, and really likes to sing and dance. I think the acting bug bit her because she's always acting out scenes from her books and movies. She is the love of my life and a very special person.

By Phil Goldstein
RPI Product Development

Offered by ASME/ANSI PTC25.3 USA Standards are the definitions below in generic terms to describe pressure relieving valves.

Pressure Relief Valve. A spring loaded valve designed to open quickly to relieve excessive pressure (overpressure) and to reclose under normal operating pressure to prevent further flow of liquid.

Safety Valve. A pressure relieving valve actuated quickly by inlet static overpressure.

Relief Valve. A pressure relief device actuated gradually by inlet static pressure proportional to the increase of pressure.

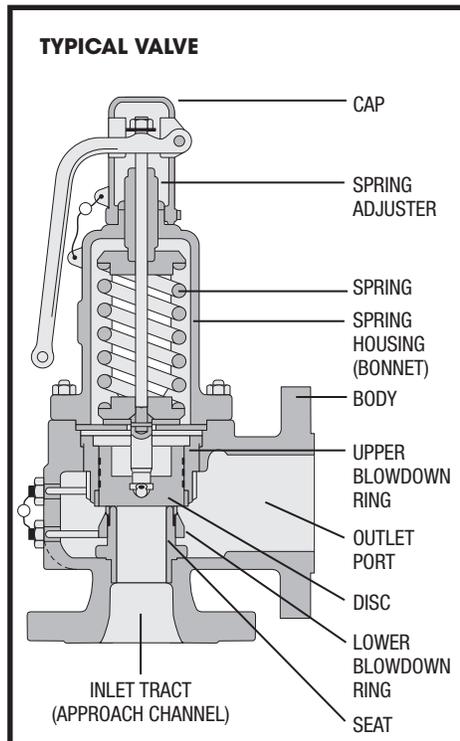
Safety Relief Valve. A pressure relief valve with rapid release action proportional to the increase in overpressure. Generally, the safety relief valve performs as a safety valve when used in a compressible gas system, but will open proportionally to overpressure in a liquid system.

Many of us have used these terms interchangeably when referring to devices including steam sterilizers, boilers and steam generators. Even though their outside appearances can differ greatly, their internal construction is basically the same.

The valves have an inlet port leading to the inlet tract. The inlet tract is sealed by a piston or disc that is spring loaded. This seal keeps the outlet port closed until an over-pressure situation occurs when the pressure on the spring loaded piston or disc becomes greater than the spring force, the inlet seal opens to the outlet port and exhausts.

The pressure or force inside the pressurized chamber reduces to an

Valves ... What A Relief They Are!



operating level and the spring loaded seal returns to the closed position.

The mechanical spring is probably the most common type of device used to regulate pressure within the valve. By changing the mechanical values of the spring such as wire diameter, coil diameter, length and material, the manufacture can control when the spring moves and how far. Other methods such as a bellows, breaking pin and differential pressure are also used.

Some of the more elaborate devices are electronically controlled by temperature and pressure.

Regardless of their design and construction, all pressure relieving devices are used with the safety of people and property in mind.

Testing Safety Relief Valves during scheduled Preventive Maintenance or during a repair process is simple, prudent and offers peace of mind.

DID YOU KNOW???

Here Are Some Interesting Facts About Lead Wires That You Just Might Want to Know

By Neil Blagman
RPI Product Development

There are many different styles of patient lead wires including reusable and disposable versions with both snap and pinch clips attached to the patient end – and each style offers something unique and different.

For example, lead wires with snaps attached offer better holding power for ambulatory patients while Pinch clips are easier to apply to delicate patients who could not tolerate the pressure necessary to attach a snap.

Reusable lead wires are made extra sturdy to hold up to multiple uses and cleanings while disposable lead wires are designed for single patient use to help with infection control within the medical environment.

There are also lead wires that are made exclusively for use by veterinarians where these lead wires have fully insulated alligator clips used to ensure solid contact without having to extensively shave their animal patients.

RPI offers a great selection of the most commonly used patient cables and lead wires including reusable and disposable versions with both snap and pinch clips as well as veterinary lead wires.

To view all of the patient cables and lead wires that RPI offers, please take a moment to visit the RPI website – simply click the "Patients Cables & Lead Wires" icon on the left side of the Homepage. It's all there!



Midmark M9 & M11 Control PC Boards ... Three Things to Know To Help Make Your Job Easier!

By Mark Micucci, RPI Product Development

After taking numerous calls from our customers about the Midmark Control PC Boards, I found that there are three things that are at the center of all these calls.

So with this Service Tip, I give you information that should help make your job easier – from how to ground the PC board, to a discussion about DIP switches and rounding it all out with a brief explanation about why one should never interchange an M9 board with an M11 board.

#1 - Grounding the Midmark Control PC Board. When replacing the Midmark M9 or M11 Control PCB's (RPI Part #'s MIB130 and MIB131), it is very important to make sure the replacement Control PCB is properly grounded. A poorly grounded or "Lost Ground" Control PCB can cause the machine to malfunction in many different ways, mimicking other part malfunctions and causing the technician many hours of troubleshooting frustration.

It is advisable to check all grounding points before mounting the Control PCB onto the metal bracket; and below I discuss how to do this.

First remove the metal bracket from the machine by removing the two screws and nuts that hold the mounting legs of the metal bracket to the bottom of the machine. These screws will be removed from the underside of the sterilizer. Look at the bottom of the mounting legs and if there is any rust on them or the sterilizer base, remove it by using a wire brush or sand paper.

Next examine the front and back of the metal bracket looking at the lower corner where the grounding screw will

be installed. If there is any rust on the metal bracket, remove and clean, to ensure a solid contact area.

Next, reinstall the metal bracket and then mount the replacement Control PCB. The grounding screw is installed at the bottom right corner of the Control PCB. This grounding screw needs to be installed tightly with the captive lock-washer nut, removed earlier, to ensure a solid ground contact.

Once the Control PCB ground points have been cleaned and reestablished, many of the intermittent errors your customers report should disappear.

#2 - DIP switches? Where are they, how do you set them and why? Originally the Drying Cycle of the Midmark M9 and M11 sterilizers were controlled by a program included in the software on the Control PCB. What Midmark originally did was to turn the heaters on for ~30 to 45 seconds and then off for 2 minutes and repeat for the duration of the 30 minute Drying Cycle.

To overcome a problem where some the sterilizers were overheating during the drying cycle, a series of DIP switches were added to the Control PCB to allow the technician to adjust the "Dry Cycle Heating Duration".

The DIP switch block is located at the upper center or right of the Control PCB. It's a small red or blue box with 4 white toggle switches.

The switches are counted #1 at the top to #4 on the bottom and should be clearly marked on the switch housing. The "OFF" setting being to the left side of the DIP switch for the slide

Continued on the back page

A-DEC CENTURY PLUS CONTROL SYSTEM CARTRIDGE VALVES ... COMMON CAUSES FOR LEAKS

By Jim Wisniewski - "The Dental Guy"
Manager, RPI Product Development

The A-dec Century Plus control system has three cartridge valves and all three of these can cause some type of water leak.

When Replacing The Control System

Cartridge Valves: Always inspect and clean the control block ports. Look for debris like small pieces of sheared o-ring, material build-up or blockage. Always lightly lubricate the cartridge valve o-rings at install.

Leaking Water From the Vent Hole at the

Top Cover: Replace the Water Valve Cartridge (RPI Part #ADV163) red top valve. Also check and tighten the Tie Bolts.

Leaking Water from the Handpiece:

Replace the Water Valve Cartridge (RPI Part #ADV163) red top valve and/or the (duckbill) Check Valve Cartridge (RPI Part #ADV161) blue top valve and/or the Air Bleed Valve Cartridge (RPI Part #ADV162) brass top valve.

Note that the (duckbill) Check Valve Cartridge will not function correctly if the outer body of the duckbill is undersized; with age rubber can shrink and harden. The duckbill will no longer have its sealing capabilities causing water to leak at the handpiece. A new check valve cartridge must fit snugly.

No Water to the Handpiece: Replace the Water Valve Cartridge (RPI Part #ADV163) red top valve and/or the Diaphragm (RPI Part #ADD160).

Keep in mind that one problem you may encounter with the Water Valve Cartridge would be that the inner spring loaded stem becomes either jammed open or jammed closed, causing either no water or continuous water flow at the handpiece.

When looking at the top cover Diaphragm, it must maintain its elasticity in order to properly press down on the Water Valve Cartridge tip. A weak or over stretched Diaphragm will not work properly.

Air Bleed Valve Failure. The main cause of failure is when the very small hole through the tip becomes clogged with debris and causes continuous water flow at the handpiece. You can flush out the hole using orthodontic wire and retest.



*Sherry Lapidès
Vice President, Customer Relations
Replacement Parts Industries, Inc.*

**8 to 4
NO MORE**

Special anniversaries and birthdays often are a time for reflection and RPI's 40th anniversary is no exception. The years have a way of passing without our even realizing it. Forty-one years ago there was no RPI in our lives, just the germ of an idea. I was a housewife living in a suburb of Los Angeles and raising three children, with a husband in the defense industry. About the only thing that hasn't changed is our house -- we've been in it for 46 years.

Our children are all married, with children of their own. One is even a grandfather. They were all in grade school when RPI was started and remember sitting in the family room watching TV and getting paid a penny per envelope stuffing and sealing our first mailers containing 19 parts. Now we have around 3000 parts and are still adding to our inventory

Much of the success of RPI is due to the wonderful people we work with. Over one third of the people who work at RPI have been here 11 years or more. Phil Goldstein, who really started our Product Development Department, has been with us almost 32 years. We have all shared many happy and sad events over the 40 years -- courtships, weddings, anniversaries, births and deaths. I am grateful that we have been able to offer a feeling of security and belonging to so many for so long.

It has been wonderful to meet many of our customers and establish friendships over the phone as well as in person all over the world and all across the United States. A number of our current customers started with RPI back in 1972, so we have seen their growth within the last 40 years, too. It's a very good feeling to know that we have helped contribute to the success of so many of them.

Our thanks go to all of you who have helped RPI to grow and become an active contributor to the healthcare industry. Without you none of this could have happened.



*Al Lapidès
CEO Emeritus & Chairman of the Board
Replacement Parts Industries, Inc.*

Al "just horsing around" with his new friend Quincy!

AL'S VIEW

In the last issue of "The Alternate Source", we celebrated RPI's 40th or 10th anniversary depending on how you count.

Since we legally started on 29 February 1972, you might be right in counting last February's celebration as our 10th actual celebration. However, we really started well before then.

We had formulated a business model for developing after-market parts and during much of 1971 investigated some 25 industries to see if the model applied. It was only in November when we met with Cliff Hudson and Bryan Statter of Medi-Call, a California independent service company, that we zeroed in on biomedical equipment. It took almost 4 months to test the business model to see if it would work. We decided "yes" and incorporated on 29 February. We started with only 19 parts and have now developed and added around 3,000 parts.

Medi-Call placed their first order with us in October 1972. Today, there are six very active customers who started with us in 1972. How wonderful. These customers have their 40th anniversaries also. Next year there will be even more.

We started very small and had very little in the way of products to attract customers. It took until October to have those first 19 parts developed and our first catalog mailed. Yet we gained seven customers that year, six of whom are still with us. Our 40 year anniversary is now theirs also.

We owe much of this growth to you, our very loyal customers. In a very strong sense, we need and are good for each other.

We are increasing the number of parts that we are developing. We will continue to let you know as soon as each of them is available. We pledge to continue our levels of quality and support.



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START SPREADING THE NEWS!

The RPI PM Poster is here and it's all about GASKETS!

Yes, that's right! The RPI PM poster is here and it's full of just about everything you ever wanted to know about **STERILIZER GASKETS!**

"Finish First with RPI Sterilizer Gaskets" is the theme of this year's poster with service tips and valuable information about sterilizer gaskets. It's all there in one colorful poster.



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Midmark M9 & M11's ... Three Things To Know

(Continued from page 4)

switch version, or rocker down for rocker switch version and reverse for the "ON" setting (switch ON-OFF position should also be clearly marked on the switch housing).

CAUTION: When adjusting any of the DIP Switches always unplug the unit prior to repositioning the switches.

Switch #1 Selects either English or Metric display (OFF = English; ON = Metric)

Switch #2 Selects either 120 or 230VAC operation (OFF = 120V; ON = 230V) This switch should always remain in the "OFF" position (120VAC Operation).

Note that the RPI Control Boards (MIB130 and MIB131) can only be used in a 120VAC application, and cannot be used in 230VAC mode by switching DIP Switch to 230V! Damage will occur if this is attempted and the PC Board will no longer be useable.

Switches marked 3 and 4 are used for the "Dry Cycle Heating Duration". RPI sets these DIP switches to the coolest setting (referred to in the OEM Manual as setting #1) and should not be changed. Changing this setting could result in an overheat condition (ERROR E-001) and can be

accompanied by burnt instrument packs. If your Drying Cycle is inadequate, contact RPI's Technical Support Department.

RPI's default switch settings:

- Switch #1 = OFF
- Switch #2 = OFF
- Switch #3 = ON
- Switch #4 = ON

#3 - Can I use a Midmark M9 Control PCB in an M11?

The short answer to this question is No! And the reason has to do with the size difference of the chambers in the M9 vs. M11. Both M9 and M11 Control PCB's have software programs that check certain pressure and temperature readings at various times during the cycle and those readings need to match the stored program which is based on chamber size.

If the incorrect Control PC Board has been installed more than likely one of any number of error codes will be displayed (making troubleshooting very difficult, if not impossible).

A quick check to verify which version Control PC Board is installed could save you a lot of time. Always be sure you are installing the correct Control PC Board for your sterilizer.

Well there you have it - the three things to help make your job easier when servicing the M9 and M11's. Please contact us if you have any questions.

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