JANUARY 2011 VOLUME 9 NO 3

The Leader in Replacement Parts for Healthcare Equipment Since 1972

RPI IS YOUR BEST SOURCE FOR PARTS TO FIT TABLE TOP STERILIZERS WITH 28 PM KITS NOW AVAILABLE

Don't simply put in a new Door Gasket when you can replace the other critical PM parts as well.

n December 2010, RPI introduced another set of PM kits to fit table top sterilizers, adding to the large offering of PM kits that we already offer to fit Midmark, Pelton & Crane, and SciCan sterilizers. The new additions include kits with parts to fit the full line of Tuttnauer sterilizers, along with new kits for the Amsco Eagle 10 and Midmark M7 sterilizers.

All of the RPI sterilizer PM Kits combine parts to make it more convenient for you to service these machines with one, easy to use package that includes all of the basic parts in these machines that should be changed on a regular basis. Replacing the parts included in the RPI PM Kits at the same time helps to ensure the sterilizer continues to perform at its optimal level, and also prevents you from potentially costly second service calls. The kits include a Checklist for doing a basic PM on the sterilizer, including the proper installation of each part. And, the RPI PM Kits provide you with savings over purchasing each of the parts individually.

The kits for the Tuttnauer sterilizers include the door gasket, mesh filter, door bellows, door switch boot, and air jet valve. As needed for certain machines, the kits also include the Hepa Filter (RPI Par #RPF644). The PM Kit for the Amsco Eagle 10 sterilizer includes the door gasket,

continued on page 7



WIDWARK	KPI PAKI #
M7 & 7	MIK134
M9 & M9D	MIK072
M11 & M11D	MIK080
PELTON & CRANE	RPI PART #
Delta AE8, XL8 & Q8	PCK231
Delta AF10, XL10 & Q10	PCK232
Magnaclave	PCK216
OCM	PCK218
OCR & OCR Plus	PCK219
Sentry	PCK217
Validator 8 (AB)	PCK220
Validator 10 (AA)	PCK221
Validator Plus 8 (AC)	PCK222
Validator Plus 10 (AD)	PCK223
SCICAN	RPI PART #
Statim 2000	SCK035
Statim 5000	SCK036
TUTTNAUER	RPI PART #
1730 E/M	TUK121
1730 EK/MK/MKV	TUK122
2340 M (S/N 8805 and below)	TUK123
2340 E/M (S/N 8806 and above)	TUK124
2340 EA & EZ9	TUK125
2340 EK/MK	TUK126
2340 EKA	TUK127
2540 E/M	TUK128
2540 EA/EKA/EHS, EZ10 & EZ10k	TUK129
2540 EK/MK	TUK130
3870 E/M	TUK131
3870 EA/EHS	TUK132



When the Light Sockets that fit the LF Dental Lights Failed, RPI Fixed the Problem

By Ray Martinez, RPI Quality Control

Near the end of 2008, GE discontinued production of their light sockets to fit the Pelton & Crane LFI, LFII and LFIII dental lights (RPI Part #'s PCS605 and PCS607) so we were forced to purchase similar sockets from Sylvania.

We were always very pleased with the quality of the GE sockets, but were confident in the quality of the Sylvania sockets as well, as the OEM and others in the industry had been using the Sylvania sockets for some time.

Then earlier this year, we started to receive some complaints about the Sylvania sockets. The complaints centered on the wire breaking off the contact of the Light Socket. This in turn immediately prompted an RPI Quality Control investigation into the cause of these light socket failures.

A close analysis at the point of failure (ie. the wire entry into the terminal) clearly revealed that at the time of the terminal being crimped, the wire was also being crimped, causing 3-4 strands of wire to be cut next to the terminal.

The crimp is hidden from visual inspection because of its location inside the socket and the connection will not fail during an initial load test at

Continued on page 3



Ira Lapides CEO & President Replacement Parts Industries, Inc.

LOOKING BACK AT 2010!

It was quite an eventful year at RPI, and, for many of you, I expect your 2010 was quite a year as well. I know that for many, 2010 was not an easy year, as the economy continued to remain slow. Many of you that I spoke with near the end of the year commented that it seemed like business was picking up, and I hope that trend continues for everyone.

As I look back, it's amazing what RPI experienced and accomplished. We started the year with a bang, introducing more new parts at the same time than we ever had in the past – over 200 new parts! These included parts to fit Midmark, SciCan, Tuttnauer sterilizers, Stryker cast cutters, Getinge/Castle bulk sterilizers, Midmark exam tables and chairs, and a variety of dental compressors. Plus, we took on the distribution of the OEM parts for the Prestige/KavoClave line of sterilizers.

We followed up all of that with our third sterilizer calibration kit, this one for the Tuttnauer E series sterilizers, and then introduced more parts to fit the Steris/Amsco line of Century sterilizers. We complimented our line of patient cables and lead-wires with a few more cables and leadwire sets, along with disposable leadwire sets as well as sets designed for use in veterinary applications. We added more parts to fit Pelton & Crane dental chairs, and recently more for the A-dec line of dental chairs. And, we finally completed our offering of PM kits for table top sterilizers, including kits for the entire line of Tuttnauer table top sterilizers.

This January, we will add even more to that line of parts, as well as more to fit the old reliable Pelton & Crane Magnaclave sterilizer. And, in between all of that, we started a PC Board Refurbishing Program for boards to fit Midmark M9 & M11 Ultraclave sterilizers.

This was also the year of the audit at RPI. We started the year with our triennial ISO9000 certification audit, and then in June we were inspected by the State of California Department of Public Health, and in September, the FDA conducted an inspection of RPI. We passed all three audits with flying colors – no non-conformances or even observations. The FDA and the state inspect RPI because of the items that we sell that require FDA 510k clearance: the skin temperature probes, heating elements, and phototherapy bulbs for infant warmers and incubators, and our line of patient cables and leadwires.

We also expanded our facilities, taking the third and final unit in our building, going from 13,000 square feet to over 20,000. Amazingly, we've actually been in this same building for most of the past 36 years, and the space that we originally occupied in 1974 is now our lunchroom!

This expansion was important, allowing us to expand our laboratory and engineer-

continued on the back page

THE RPI FAMILY

Hi. My name is Marion Hoffman.

I started at RPI in September of 2007. I currently work in the Warehouse department and enjoy my job very much.

I was born in Germany in a small town named Schwann which is located south-west of Frankfurt. My family moved to the United States when I was four years old and settled in Michigan for six years. We then moved to Culver City, California. I graduated from Culver High School.

After high school, I moved to the San Fernando Valley and worked for a company for several years. The company moved to Moorpark, California in 1998 and I moved too. We fell in love with the city and bought a home there. We enjoy hiking the rolling hills of Ventura County with our dog Sam. In 2007, when the company moved to Arizona, I stayed and I was hired by RPI.

Every year we take our vacation at Big Bear Lake which is located east of Los Angeles and takes about two to three

hours to get to from our home.

At the lake we usually rent a cabin, go fishing and hiking. We also enjoy kicking back and relax-



Marion Hoffman Warehouse Department

ing on the lake aboard our boat with Sam who likes to bark at the wildlife every once in while.

I enjoy spending time with my family and friends on the weekends and holidays. I also like a challenging game of golf.

I hope to spend many years growing with RPI.

IMPORTANT NOTICE! Output Drive Assembly (RPI Part #STA040) Fits Stryker 940/941 Cast Cutter The Assembly is shipped ungreased.

To avoid jams, it must be lubricated with the entire package of Grease provided. Read the instructions included with the Assembly.

RPI TO THE RESCUE ... ONCE AGAIN

(Continued from page 1)

Receiving Inspection. The failure will occur during normal operating conditions, after repeated heating and cooling cycles. This problem did not occur on all inventory, but enough to catch our attention.

The Quality Control Manager and Quality Engineer at the manufacturer were contacted and defective samples sent for their evaluation. Their investigation confirmed our finding of the failure and they soon discovered the root cause of the failures, a combination of problems that were easily fixed.

First, the operator hand-held the socket during the crimping operation, causing an uneven contact between the terminal and the crimping tool. This was remedied by making a fixture to hold the socket in a well and mounting the crimping tool in close contact with the terminal. This setup allowed the crimping tool to be held at a constant 90 degree to the terminal, eliminating the operator error.

Second, it was determined that too much of the wire insulation was being removed prior to crimping allowing a portion of bare wire between the insulation and the terminal. This exposed the wire to potential damage during the crimping operation. This problem was corrected by adjusting the stripping of the insulation so that no bare wire was exposed during the crimping operation.

All operators were retrained in these new procedures and a Quality Inspector will inspect and verify a sample of all crimps prior to daily production runs. Both the manufacturer and RPI feel that this corrective action should go a long way to enhancing the quality and reliability of both of these parts and greatly reducing failures in the field.



By Neil Blagman RPI Product Development

Your Guide to Patient Cables

RPI offers a great selection of quality patient cables, leadwires, and telemetry cables, plus veterinary wires with attached alligator clips.

So in the crazy world of part numbers associate with patient cables, RPI has made it easy to find the the cables you need. Just follow these 3 steps.

1) Start at www.rpiparts.com. Search by the make and model of the monitor for which you need a cable.

2) Once you've found the appropriate cables then look at the individual listings for each cable that fits your monitor: a) the number of leadwires such as 3, 5, 7 or 10; b) the style of the lead wires such as shielded or unshielded; and, c) the color system used for the cable (American or international). The individual listing will also indicate whether the lead wires are permanently attached or are sold separately.

3) If your search has lead to a cable that takes replaceable leadwires you have one more decision to make – Do you want lead wires with snap connections or pinch connections at the patient end. The choice of connections at the patient end could be based on end user preferences, the types of electrodes used and the department using the monitor.

It's just that simple to find what you need on the RPI website.

And, if you already have the cable and you prefer a more visual technique to identify the correct part, RPI offers a FREE guide that has color drawings of all our cables and lead wires as well as a listing of part numbers for each OEM. You can download it from our website at the "Technical Assistance Center" under At-A-Glance Cross Reference Tables.



By Jim Wisniewski Manager, RPI Product Development

M9/11 PC Boards What to Check

First off, thank you for participating in our Refurbishing Program for the PC boards that fit the Midmark M9/M11. The program continues to be a great success! So keep sending us your boards so we can keep the PC Board Exchange program going strong for you.

Second, there are just a couple of things you need to check before and/or when you replace a PC board.

1) <u>Check the Pulse Solenoid Ohms</u>. If the Ohms are much lower than ~14.6 on the M9 (Blue coil) or ~11.6 Ohms on the M11 (Black coil) then the Pulse Solenoid is bad and will damage the PC Board.

2) <u>Check for a bad ground connection at</u> <u>the PC Board or a missing/loose screw</u> <u>that is used to mount the PC Board to the</u> <u>mounting plate</u>. Either of these conditions can cause the fill solenoid valve to continually fill the chamber with water thus staying in the fill mode and not going into the sterilize mode.

3) <u>Check the Water Level Sensor</u>. A bad Water Level Sensor will do the same thing as a bad ground connection. Keep in mind that if the sensor is not tight, the insulated inserts can take on water and fail to insulate thus causing the PC Board to "think" that the chamber is full of water. In this case, the sterilizer will overheat resulting in a 001 Error Code.

4) <u>Check the Heater Elements</u>. The M9 and M11 heater elements should read ~10 Ohms. And from ground to one tab of the heater should read OPEN. If the heater is shorted, it will cause damage to the PC Board.

Any questions, please feel free to contact Tech Support at (800) 221-9723 ext 135, or e-mail to techsupport@rpiparts.com. We can help.

WHAT'S NEW The following new parts are now in stock,

CAPACITOR KIT

DENTAL CHAIRS Parts to fit A-dec Models Cascade 1040; Decade 1010, 1011, 1020 & 1021; Performer I, II & III; P

CABLE ASSY (CTRL SWITCHES) RPI Part #ADC205 0EM Part #61.0624.00 Models: Priority 1005 Chairs (Serial #M1-0001 thru D3-0134) **CABLE ASSY (LIFT LIMIT) RPI Part #ADC206** OEM Part #61.0613.00 Models: Priority 1005 Chairs (Serial #M1-0001 thru H3-0067)

CABLE ASSY (MAIN)

OEM Part #61.0612.00

Models: Priority 1005 Chairs

(Serial #M1-0001 thru D3-0134)

RPI Part #ADC204

CABLE ASSY (STOP PLATE) RPI Part #ADC210 OEM Part #61.0614.00 Models: Priority 1005 Chairs (Serial #M1-0001 thru present)

CABLE (PRE-POSITION BASE)

RPI Part #ADC209 0EM Part #61.0693.00 Models: Priority 1005 Chairs (Serial #H3-0068 thru present)

CABLE ASSY (MAIN)

RPI Part #ADC207 OEM Part #61.0599.00 Models: Priority 1005 Chairs (Serial #D3-0135 thru H3-0067)

CABLE ASSY (MAIN COMPLETE) RPI Part #ADK208 OEM Part #61.0668.00 Models: Priority 1005 Chairs (Serial #H3-0068 thru present)

(3x) RPT398

(2x) RPT083

(1x) SPRING

(1x) FRICTION LINER





ready to ship the day your order is received!

ositioner 1030; & Priority 1005



RPI IS YOUR BEST SOURCE FOR Dental Compressor Air Intake Filters



INTAKE FILTER (AIR) RPI Part #CME074 OEM Part #JA5412500 Models: Jun-Air (For list of models see yellow flyer or www.rpiparts.com) AIR FILTER ELEMENT KIT RPI Part #CMK065 OEM Part #89938 & 89831 Models: Air Techniques (For list of models see yellow flyer or www.rpiparts.com)

RPI carries the best selection of dental compressor Air Intake Filters for a variety of makes and models including Air Techniques, Apollo/Midmark, DentalEZ/Custom Air/RamVac, Jun-Air, Matrx/Midmark, MDT McKesson, Midmark and Tech West Turbine Ind. Plus, introducing two more air intake filters to fit Jun-Air and Air Techniques compressors.

For more information about all of the dental compressor filters RPI has to offer, please see the enclosed yellow flyer or visit www.rpiparts.com.

ADV161 "Duckbill" Given Overhaul For Better Performance

It may be a little part, but the "rubber duckbill" on the RPI Check Valve Cartridge (RPI Part #ADV161) that fits the A-dec Century Plus Handpiece Control Block underwent a tolerance review and manufacturing change.



Improved Duckbill makes for a better part!

Thanks to our customers who gave us feedback that the part was not lasting as long as they had anticipated and that the part had started to leak, critical points of concern relating to the manufacturing process and the tolerances specified on our manufacturing drawings were re-assessed, revised and put into practice.

As a result of all our efforts, we are pleased to offer an improved "duckbill" which means a better Check Valve Cartridge.









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

FROM THE OLD CURMUDGEON (still)

Let me continue with our firsts. I really should call them interesting and unusual rather than firsts. Sherry and I took many of our vacations in our RV. That gave us an opportunity that we would not have had, to visit a few of our customers. All of the visits were wonderful. They gave us a touchy feely sense of our industry that is hard to get in a catalog type business. But a few of the visits were different, and especially interesting.

Sherry and I were taking a trailer trip which would take us through a part of the Rockies and had a customer we wanted to see. I called a few weeks in advance. We had a pleasant conversation and then I asked him if we could meet for breakfast. His response was "do you walk or paddle". Needless to say, I had no idea what he had just asked me. I asked him again for breakfast and he simply repeated his question. I then asked him what his question meant. He told me he was a hiker and a river rafter. Which did Sherry and I want to do with him? I chose river rafting since I could at least sit down. We had never been serious hikers and this guy sounded serious. Although Sherry and I had done river floating but never river rafting it sounded riskier but not as strenuous.

Our new friend picked a 3.5 river. Wow! What a way to start. (By the way, rivers for rafting are judged on a scale of 1 to 5 with 5 being the most turbulent). We met our friend/customer at the appropriate time and place. We had been a little nervous the night before thinking about this, but we really got nervous when they had us get into wet suits and crash helmets. We didn't see anyway out, so we got into our raft and grabbed very tight grips on the ropes. It turned out to be exhilarating and wonderful. It was also somewhat scary, but we didn't fall into the river. When the trip ended, Sherry got out of the raft and asked when we could do this again. I didn't know then that we would do it again many years later with our entire family. Obviously, we didn't talk much about business, but we had a great time together. This made our relationship with him much more personal.

There will be more stories from the Old Curmudgeon. We had a lot of fun in growing this business.

Sherry Lapides Vice President, Customer Relations Replacement Parts Industries, Inc.

here's an old saying, "What goes around, comes around." That can be interpreted in many ways, but in the case of RPI it really is true.

In 1974, in the middle of one of our country's gasoline crunches, we moved the company from its location near downtown Los Angeles to Chatsworth, in the San Fernando Valley, to be closer to our home. We subleased a few hundred square feet in a new industrial building.

When we outgrew that space, we moved to a building at the other end of our two-block-long street, where we remained for several years, eventually taking over a second unit in that same building. Our next move was to a stand-alone building in between our first two locations, still on the same street.

After a number of years, it was time to move again – this time it was a move back to the original building down the street that we had subleased in 1974. We occupied one of the three units of that building, then took over the second unit, and this year, finally, took over the third and

This added space has allowed us to make some significant changes, including a much enlarged QC lab. The additional

final unit.



the three units of department means more test equipment that building then and more efficient lab space.



enlarged QC lab. The Customer Service department gets a new look and more room for processing The additional orders and assisting customers.

continued on the back page



WELCOME TO RPI!

Mellisa Arafat, Anthony Thompson, and Lisa Frazier – the three newest members to the RPI family. Mellisa is our new Customer Service and Purchasing Assistant; Anthony joins the Warehouse team; and, Lisa is our new Accounting Supervisor.

CONGRATULATIONS!

Many congratulations and thanks are in order to Phil Goldstein – the

longeststanding member of our Product Development team. Phil celebrates his 30th year



with RPI this year. Here's to more of that Phil, and thank you!

28 PM KITS FOR TABLE TOP STERILIZERS FROM RPI (Continued from page 1)

water guard, and fill line filter. The kit for the Midmark M7 includes the door gasket and the mesh filter.

Along with reemphasizing our place in the industry as "the table top sterilizer experts", these new sterilizer PM Kits continue our tradition of highlighting planned maintenance on healthcare equipment, and offering convenience, technical support, and savings all at the same time.

The full line of sterilizer PM kits also compliments our set of calibration kits for table top sterilizers, including our kits for working on the Midmark M9 & M11 Ultraclaves, SciCan 2000 & 5000, and the Tuttnauer E series sterilizers. And, of course we have many other technical resources for sterilizers, including troubleshooting guides and parts cross reference tables, as well as our great tech support team, to go along with the more than 725 parts and kits that we sell to fit table top sterilizers!

New and Improved! RPI Double-Ended Spanner Wrench With Remountable Spanner Nuts

We redesigned our Spanner Nut Wrench (RPI Part #RPT501) and the Spanner Nuts (RPI Part #'s ILS014 and RPT384) to create one spectacular tool. So, if you snap a pin, you can unfasten that end, flip it over and remount it to the wrench with a new set of pins ready to go. Or if you happen to snap both sets of pins, just replace the Spanner Nuts and the Wrench is ready to go again. RPI now makes the Spanner Wrench out of Aluminum

to lower the weight of the tool and has added another through hole at its center for more leverage. It's the RPI Advantage! Visit the RPI website for details about this new tool from RPI – simply click "Search for Part" and enter RPT501.

At this end

At this end

lust Ask For

RPI Part #RPT501

RPI Part #RPT384

Pelton & Crane Validator Plus 8 ... That Annoying Little Error Code P2

By Phil Goldstein, RPI Product Development

In this day and age when computers talk to us, cars park themselves and machines have self diagnostics capabilities, you'd think troubleshooting would be a breeze.

But every now and then you run into a situation where that familiar Error Code just isn't enough help. You address every symptom and probable cause listed in the manual and still find yourself at a loss.

Case in point – I was recently working in the RPI lab on a Pelton-Crane Validator Plus-8 with a P2 Error Code. The machine would Fill, go into the Sterilize mode and hit 241kPa at approximately 122°C, which is 13°C below the cross over point (temperature vs pressure). This wasn't the first time I addressed the P2 code with the Validators, so I thought I'd have the machine up and running in no time.

I started with the steam sensor. Upon examining the wire connections in the connection plug, I spotted a small amount of corrosion around the wire and pin. Oh good, problem solved. After replacing the steam sensor, I ran another cycle. No good. P2 came up again.

Up next for review was the bellows solenoid. If it does not open and close properly, the machine will trap cold air. After removing the solenoid and inspecting the internal parts, I simply cleaned the seat, plunger, stop blank, spring, replaced the o-ring, and reassembled the valve. I also took the time to inspect the other solenoid valves since the bellows valve was a bit dirty.

With everything back together, I ran another cycle. And for all my efforts, all I got was another P2. So I turned my attention to the heating aspect of the machine in question and inspected the heating element and the driver board. I could not see any physical damage to the heating element and leads; and the resistance values were correct. The LED on the board reacted as it should during heat up; and the Triac displayed the proper resistance values.

At that point I decided to go back and rebuild all the solenoid valves – but to no avail. By now I can feel a few more hairs turning grey, so I asked Mark (another RPI tech support engineer) to have a look at the machine to see what I was missing.

It wasn't until day three of troubleshooting that Mark noticed I had installed the STOP BLANK on the Bellows Valve (RPI Part #PCK204) upside down. We flipped it, reinstalled the valve kit and ran our first successful cycle.

Something so simple caused me so much grief. The lesson learned is that it doesn't really matter how many times you've done something – the simplest of things can be over looked.



replacement parts industries, i "The Alternate Source"" P.O. Box 5019, Chatsworth, CA 91313-5019

Especially for . . .

PRSRT STD US Postage PAID Van Nuys, CA Permit #2399

8 to 4 NO MORE ... "What Goes Around ..."

(Continued from page 6)

space has allowed Ray Martinez, our Quality Control Manager, for more test equipment and efficient lab space.

By moving my office (and downsizing it), Dora Aguirre, our Customer Service Manager, has more space for the customer service representatives, and our Product Development engineers have more space to set out their parts, prints and other materials. Also added is a new educational training room with access to equipment for "hands-on" experience.

One of the biggest changes is the enlargement of the warehouse and shipping areas, to better handle all of our new and upcoming parts.

This building should last us for some time and then – who knows where we may move to next. I don't think there is any more room on Corisco Street. But that's really Ira's decision. Al and I started RPI, saw it through much of its growth and now it's up to Ira, who seems to be enjoying calling the shots and bossing his parents around.

You know, it's really not too bad being the president's mom.

Best wishes to all of you for a happy, healthy and prosperous new year.



Product Development increases its size to make room for the development of even more new parts in the coming years.



Our new educational training room allows plenty of space for our Techs to conduct "hands-on" training classes.



The RPI Warehouse has tripled in size over the last couple of years making more space to store parts until ready to ship.

FROM THE DESK OF THE PRESIDENT

(Continued from page 2)

ing space significantly, and perhaps allowing us the capability to conduct training classes on-site. More details to come on that.

At the same time, we upgraded our phone system. Our old one was occasionally giving us problems, sometimes making it difficult to hear the caller.

And, somewhere along the way, we found time to release our biggest catalog update ever, along with reformatting and resizing our dental catalog. We also continue to work on the look and content of our website, and plan some nice upgrades in the near future. And, we exhibited at nine trade shows and conferences.

Last year was quite a busy year for us, but I think it's just setting the stage for another busy year in 2011.

We will continue to push hard on our new product development efforts, and continue to look for better ways to serve you. And hopefully, we will continue to grow, and help you grow and be successful. But rest assured, we will never forget the basics of ensuring the quality of our parts, providing excellent customer service, and keeping those parts in stock so that you can have them when and where you need them.

All rights reserved. No part of this newsletter may be reproduced or utilized in any form or by any other means without permission in writing from the Publisher. Inquiries should be addressed to: RPI, Marketing Department, P.O. Box 5019, Chatsworth, California 91313-5019. Additional copies of The Alternate Source® may be obtained by contacting RPI. Please feel free to Cali: (800) 221-9723, Fax: (818) 882-7028, or E-Mail: moreinfo@rpiparts.com your request. Parts mentioned in this newsletter are manufactured by Replacement Parts Industries, Inc. to fit the equipment noted. All product names used in this document are trademarks or registered trademarks of their respective holders. RPI © 2011.

CALL (800) 221-9723 or (818) 882-8611 • FAX (818) 882-7028 • WEBSITE www.rpiparts.com E-MAIL moreinfo@rpiparts.com • E-MAIL order@rpiparts.com • E-MAIL techhelp@rpiparts.com